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## Toward Creating a Regional Monetary Arrangement in East Asia

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# Toward Creating a Regional Monetary Arrangement in East Asia

C. Fred Bergsten and Yung Chul Park

December 2002

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Will East Asian countries establish more elaborate regional financial arrangements as part of their efforts to stabilize markets and prevent another crisis? The diverse interests of countries participating in the Chiang Mai Initiative suggest that this process may face numerous hurdles.

Joint leadership from the key regional economies and greater consultation with the international community as to East Asia's goals and plans for cooperation could go some way to facilitate progress and assuage scepticism.

**ADB Institute  
Research Paper Series  
No. 50**

December 2002

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**Toward Creating a Regional Monetary  
Arrangement in East Asia**

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C. Fred Bergsten and Yung Chul Park

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## PREFACE

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The ADB Institute aims to explore the most appropriate development paradigms for Asia composed of well-balanced combinations of the roles of markets, institutions, and governments in the post-crisis period.

Under this broad research project on development paradigms, the ADB Institute Research Paper Series will contribute to disseminating works-in-progress as a building block of the project and will invite comments and questions.

I trust that this series will provoke constructive discussions among policymakers as well as researchers about where Asian economies should go from the last crisis and recovery.

Masaru Yoshitomi  
Dean  
ADB Institute

## ABSTRACT

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The idea of an Asian Monetary Fund (AMF), which was first raised in 1997, culminated in an agreement among the finance ministers of ASEAN plus PRC, Japan, and Korea (ASEAN+3) to establish a system of swap arrangements among their countries in what is known as the Chiang Mai Initiative (CMI) on May 6, 2000.

Policymakers of the ASEAN+3 have made considerable progress over the past three years in increasing the availability of liquidity as they have succeeded in contracting a number of bilateral swaps and establishing informal mechanisms of policy dialogues and reviews among the ASEAN+3. However, the CMI is in an embryonic stage of development, and as such requires a great deal of expansion and consolidation to serve as an efficient regional liquidity support system.

This paper analyzes possibilities of, and prospects for, constructing a regional financial arrangement in East Asia by augmenting liquidity support and broadening the scope of cooperation through the CMI. Through an evolutionary process of enlargement and consolidation of the CMI, this study envisions creation of a possible Asian Monetary Fund that is complete with financial support facilities, a monitoring and surveillance mechanism, and a regional collective exchange rate system with a view to adopting a common currency as a long-term objective. A detailed proposal for an operational structure of the CMI is presented. Issues related to surveillance and regional exchange rate policy cooperation are also analyzed.

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# **Toward Creating a Regional Monetary Arrangement in East Asia**

C. Fred Bergsten and Yung Chul Park

## **1. Introduction**

After a financial crisis broke out in Thailand in July 1997 and started spreading to other East Asian countries, Japan proposed the creation of an Asian monetary fund (AMF) as a framework of financial cooperation and policy coordination in the region. A regional monetary fund, proponents argued, would provide a means of defence, in addition to the IMF lending facilities, against future financial crises in East Asia. Although the proposal received a positive response from a number of East Asian countries, it was shelved at the objection of the U.S., EU, and the IMF. The AMF idea was revived again when the finance ministers of ASEAN states plus the People's Republic of China (PRC), Japan, and South Korea (ASEAN+3) agreed on May 6, 2000 in Chiang Mai, Thailand to establish a system of swap arrangements within the ASEAN+3 countries in what is known as the Chiang Mai Initiative (CMI).

The CMI swap arrangements are designed to provide liquidity support for the member countries that experience short-run balance of payment deficits in order to prevent an extreme crisis or systemic failure in a country and subsequent regional contagion as occurred in the East Asian financial crisis. Emergency support facilities such as the CMI, similar in nature to other regional and international "lender of last resort" facilities, are primarily for systemic purposes and as such would likely be used very infrequently.

Since the intent of the CMI is to be proactive, there is a need to define a mutually agreed framework for inter-country cooperation among the ASEAN and ASEAN+3, that can quickly and effectively implement emergency assistance at required levels when a need arises. Moreover, a group approach would ensure that any conditionality associated with the financial assistance would be consistent across countries. The structure of financial cooperation conceived by the architects of the CMI covers the basic principles and operational procedures for bilateral swap transactions. To serve as a full-fledged regional financial mechanism comparable to the European Monetary System, for example, further organizational and operational details will have to be worked out.

Policymakers of the ASEAN+3 have made considerable progress over the past three years in increasing the availability of liquidity as they succeed in contracting a number of bilateral swaps (BSAs) and establishing informal mechanisms of policy dialogues and reviews among the ASEAN+3. However, the CMI is in an embryonic stage of development, and as such requires a great deal of expansion and consolidation to serve as an efficient regional liquidity support system. Since one of the objectives of the CMI is to prevent future crises by stabilizing financial and foreign exchange markets, the authorities of the ASEAN+3 are expected to discuss various modalities of monitoring and surveillance and cooperation in exchange rate policy among the participating countries to improve credibility of the initiative.

A regional financial arrangement (RFM) established by a group of countries for economic cooperation and policy coordination in general comprises the following

three institutional components (i) a mechanism of short-term liquidity support for the members experiencing balance of payments deficits; (ii) a mechanism of surveillance for monitoring economic and policy developments in the member countries and for imposing policy conditionality on those countries receiving financial support; and (iii) a regional collective exchange rate system designed to stabilize bilateral exchange rates of the member countries.

The purpose of this paper is to analyze possibilities of, and prospects for constructing a regional financial arrangement in East Asia by augmenting liquidity support of and broadening the scope of cooperation through the CMI. More specifically, the study attempts to draw an institutional design of the three pillars of a regional financial arrangement. Through an evolutionary process of enlargement and consolidation of the CMI, for the purposes of this study we envision the creation of an Asian Monetary Fund that is complete with financial support facilities, a monitoring and surveillance mechanism, and a regional collective exchange rate system with a view to adopting even a common currency as a long-term objective.

As a background of the discussion of the CMI, this study raises questions as to whether regional financial arrangements, whichever forms they may take, are needed in East Asia and, if they are needed, whether they would be effective in safeguarding the region from future financial crises. To answer these questions, section 2 begins with a discussion of traditional criteria for the optimum currency area (OCA) and reviews recent empirical studies on examining whether East Asia qualifies as an optimum currency area. Following up on this discussion, section 3 evaluates the relevance of the traditional criteria when financial integration is taken into consideration. An East Asia that comprises the ASEAN+3 may not constitute a common currency area in a traditional sense. However, this does not mean that creation of an East Asian RFM can not be justified. Depending on how it is structured and managed, an East Asian RFM could help complement global trade and financial liberalization and in so doing contribute to global financial stability. In order to articulate the supporting views, sections 4 and 5 discuss various arguments including trade and security issues for the creation of an East Asian RFM. For balance, these arguments are then countered by some of the opposing views that there is no need for a RFM in East Asia in section 6. A proposal for an operational structure of the bilateral swap arrangements (BSAs) is presented in sections 7 and 8. Issues related to monitoring and surveillance of the BSAs are analysed in section 9 and a regional collective exchange rate system in section 10. This is followed by the prospects for developing the CMI into a full-fledged regional financial arrangement in section 11. Concluding remarks are found in a final section.

## **2. East Asia as a Common Currency Area**

### ***2.1. Overview***

In designing the structure of the CMI, the architects of the initiative did not have in their mind laying the groundwork for a common currency area in East Asia. Nevertheless, formation of regional financial arrangements such as the EMS is motivated by the need to stabilize regional financial and foreign exchange markets. If indeed the policymakers of the ASEAN+3 contemplate possibilities of adopting a single currency in the future as

part of their cooperative efforts, then questions would arise as to whether East Asia qualifies as a common currency area.<sup>1</sup>

Since the early 1990s, there has been a clear trend toward shrinking of independent currencies relative to independent countries. With the advent of the Euro, this trend has become more visible: more and more countries are either joining the existing common currency areas such as the EMU or creating new currency unions. Barro (2001) estimates that 60 countries out of nearly 200 independent countries are members of currency unions or use other currencies such as the U.S. dollar or the Euro.

What are then the developments in the global economies that have induced a large number of countries in particular, smaller ones, to give up their national monies in favor of adopting foreign currencies as their monetary standards? One development has been growing trade and financial integration. With sustained liberalization of trade and opening of domestic financial markets, a growing number of emerging market economies have been integrated or are integrating into regional as well as global markets for goods and services and for financial assets. The global and regional economic integration has increased pecuniary incentives to reduce transaction costs of trade in goods and services and in financial assets.

The second development is that the benefits of independent monetary policy have declined in many countries. There has been a growing awareness that monetary policy cannot be used to take advantage of the trade-off between inflation and unemployment. If monetary policy cannot easily mitigate real disturbances, it follows that monetary authorities should concentrate on stabilizing prices rather than influencing employment or output movements. Reflecting this reevaluation of the role of monetary policy, central banks in many countries including emerging market and developing economies have become much more independent than before. As a result, many smaller countries now find it easier to give up their monetary independence than in the past.

The third development is the “original sin” or the incompleteness in financial markets argument. According to Eichengreen and Hausmann (1999), practically all emerging market economies, not to mention other developing countries (DCs), cannot use their own currencies to borrow abroad or to obtain long-term finance even from domestic financial markets. This inability causes financial fragility because financial institutions and firms are exposed to currency and maturity mismatch problems. As a result, when the currency depreciates, the currency mismatch causes deterioration in the balance sheet that could easily threaten insolvency of financial institutions and firms. If policy authorities defend the fixed exchange rate and as a result a speculative attack ensues, then borrowers are likely to default, on their short-term borrowings. Eichengreen and Hausmann (1999), therefore, argue that countries that are not able to secure foreign loans denominated in local currencies will be better off by joining a currency union or using the currency of a large country.

Since the early 1990s, many of the East Asian countries have made great strides in deregulating and opening domestic markets including financial markets to foreign competition. As a result of trade liberalization and market orientation, East Asia has seen a large increase in intra-regional trade and investment. In terms of the importing country data, intra-regional trade in East Asia (ASEAN+3 and Taipei,China)

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<sup>1</sup> See Yam (1999), Murase (2002) and Sakakibara (2002) for the advocacy of monetary integration in East Asia.

was more than 50 percent of the region's total trade in 1998 when the entire region was in a deep crisis. There is every indication that this trend will continue. The growing integration of intra-regional trade in goods and services has increased the demand by the business community in the region for stabilizing the bilateral exchange rates of East Asian currencies.

Most of the East Asian countries have been reluctant floaters. Policymakers of these countries realize that stabilizing intra East Asian exchange rates will help increase intra-regional trade and capital movements. This interest in regional growth and integration has naturally led to the search for regional cooperative arrangements for exchange policy that could stabilize intra-East Asian bilateral exchange rates.

Finally, the East Asian crisis in 1997 has brought home to the region the need for establishing a region-wide mechanism of defence against future financial crises. One such arrangement is, of course, a possible East Asian Monetary Union. Since creating an EMU equivalent in East Asia is at best a long-term objective, East Asian countries may have to consider other arrangements such as pegging to a common basket (Williamson, 1998), which could stabilize bilateral exchange rates (effective) in East Asia or an exchange rate mechanism similar to the European Monetary System (EMS) as a transitional regime.

Before considering the possibilities of introducing an East Asian Monetary System (AMS) or common basket pegging, however, it may be in order to examine whether the ASEAN+3 as a group satisfy some of the criteria for a CCA or have the potential of doing so in the future. For this examination, the next section surveys the literature on monetary integration in East Asia.

## ***2.2. Traditional Criteria for an East Asian Currency Union***

Does East Asia satisfy all or some of the conditions for an optimum currency area? What would be the benefits and costs of monetary integration in East Asia? The theory of optimum currency area (Mundell, 1961) suggests that the relative share of intra-regional trade, the nature of shocks, flexibility of factor markets, and economic sizes of participating countries are important factors for determining the benefits and costs of monetary integration.

In order to test empirically whether eight East Asian economies (Hong Kong, Indonesia, Korea, Malaysia, Philippines, Singapore, Thailand, and Taipei,China) qualify as an optimum currency area, Eichengreen and Bayoumi (1999) estimate an equation of exchange rate variability between a pair of countries which is a function of symmetric output disturbances, the dissimilarity of the export product composition, the ratio of bilateral exports to GDP, and economic size over the 1976-95 period for Japan and its 19 trading partners. Using the predicted level of exchange rate variability between a pair of countries (the standard deviation of the change in the log of the bilateral exchange rate between two countries), they devise an OCA index in which smaller values suggest that countries are good candidates for an OCA. According to Eichengreen-Bayoumi, the estimated equation shows that "the theory of OCA does a credible job of explaining the exchange rate policies of Japan's principal trading partners and that small open economies like Hong Kong and Singapore could benefit more than other East Asian countries by pegging to other East Asian currencies (p.353)."

Using a structural VAR model, Eichengreen and Bayoumi (E-B) (1999) also analyse time series for prices and output to determine whether disturbances are aggregate demand or supply shocks. They find that compared to Europe, the average magnitude of aggregate demand shocks is less than half in East Asia whereas there is not much difference in aggregate supply shocks over the 1972-89 period. These pieces of empirical evidence suggest that demand and supply shocks in East Asia are smaller and more symmetric than in Europe. In addition, the large increase in intra-regional trade and investment together with the relative flexibility of wages and prices supports the view that East Asia qualifies as an OCA as much as Europe did. In a recent paper, Bayoumi, Eichengreen and Mauro (2000) apply Eichengreen-Bayoumi's empirical model to the ASEAN data. Not surprisingly, they find that in terms of the OCA criteria, ASEAN is as well positioned for forming a currency union as Europe was a few years before its signing the Maastricht Treaty.

Another recent empirical study by Baek and Song (2001) extend the time period and coverage of countries in testing E-B's model for East Asia. They find that the 15 East Asian countries do not share the degree of similarity in the economic structure comparable to that of the EU members. In contrast, the share of intra-regional trade, share of manufactures in exports, and openness (the ratio of trade to GDP) of the 15 East Asian economies are on average close to those of the EMU. A relative measure of intra-regional trade rose to 45 percent in 1999 from about 40 percent in 1990 (Kawai and Urata 2002). Another measure of intra-regional trade development, which is known as trade intensity index, however, shows that trade interdependence among the East Asian countries has not increased very much since the early 1980s (Goto, 2002).

Baek and Song (2001) also show in terms of the output and price data of the 15 East Asian countries that supply shocks are similar across Hong Kong, Korea, Indonesia, Thailand, and Malaysia, whereas demand shocks are correlated at the five percent level among Korea, Indonesia, Thailand, Malaysia, and Taipei,China. The average size of supply disturbances is twice as large as that of the EMU. For demand disturbances, the East Asian average is eight times the European average. Compared to the EMU members, however, the sample East Asian countries show a faster speed adjustment to supply and demand disturbances.

Goto (2002) uses the principal component analysis to measure the degree of synchronization of real disturbances (no distinction between demand and supply) among Asian countries in terms of an investment equation that has the real interest rate, the level of income, and a time trend as explanatory variables. A principal component analysis of the error terms of the sample countries, which are assumed to be proxy variables for real disturbances, show that real disturbances of Indonesia, Korea, Malaysia, Philippines, Singapore, and Thailand are very much synchronized.

There has been a substantial increase in labor mobility in East Asia. According to the International Labor Organization (ILO), for example, intra-Asian migration increased to 6.5 million in 1997 from about one million in the early 1980s. The migration took place mostly from Indonesia and Philippines to Japan, Hong Kong, Singapore, and Taipei,China. In general, however, compared to Europe labor mobility in East Asia is relatively low.<sup>2</sup> These pieces of evidence presented above may be

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<sup>2</sup> Baek and Song (2001), in terms of the labor mobility model developed by Bayoumi and Prasad (1997), show that labor mobility is low in East Asia. In this model, an average growth rate of labour productivity

sufficient to conclude that the nine countries of East Asia that include Japan, Korea, Hong Kong, Indonesia, Malaysia, Thailand, Singapore, Taipei, China, and PRC are as plausible candidates as the EMU members were for an OCA.

Lee, Park, and Shin (2002) extend the analysis of Eichengreen and Bayoumi by improving their methodology. In their study, changes in aggregate output in each country are decomposed into three components: a world common, a region-specific, and a country-specific factor. A dynamic factor model then explains fluctuations in output.<sup>3</sup>

As the Maastricht Treaty of 1991 may have influenced the nature of regional co-movements of output, the entire sample period is divided into two sub-sample periods: 1978-1990 and 1990-1999. Lee, Park, and Shin (2002) then estimate the shares of the variances accounted for by the world, the region and the country-specific factors; volatility of growth rates of output for each country; and volatility of output decomposed into shares of the variances.

In terms of volatility, the size is much larger for the East Asian than European region. In the former period the average volatility of the East Asian countries (3.113) is about 1.75 times higher than that of the European countries (1.770). In the latter period, it increases in both regions, the difference widening in the latter period, so that the average volatility in the East Asian region (3.888) is almost twice as large as that of the European region (1.983). This shows that the East Asian region consists of more volatile countries.

In the East Asian region, the share of the variance in output accounted for by the country-specific factor significantly decreases in the latter period. This decrease is compensated for mostly by the increase in the importance of both the region and the world common factors. The same phenomenon is observed in the European region: however, the decrease in the share of the variance explained by the country-specific factor is absorbed relatively more by the growing significance of the world common factor.

The relative increase in the importance of the world common factor in the latter period reflects globalization of the world economy.<sup>4</sup> The increase in the share of the variance accounted for by the region common factor may explain deepening integration in both Europe and East Asia in the latter period. The surge of the region common factor in the East Asian region in the latter period relative to Europe, however, may be related to the following two developments.

One development is the 1997-98 East Asian crisis, which started in Thailand and then spread to other countries in the region. This crisis contagion obviously has amplified the significance of the region common factor. Another is that East Asia has managed a greater degree of trade and capital account liberalization in the post-crisis

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in a given industry of a country is explained by industry and country dummy variables respectively. If productivity differences among countries are caused by demand and supply shocks with high labor mobility, they tend to be eliminated by migration of labor from countries with higher to lower productivity. Given a high degree of labor mobility, industry-specific factors will dominate country-specific factors in explaining productivity changes.

<sup>3</sup> The dynamic factor model has been used by many studies, as it was popularized by Stock and Watson (1991). Other studies based on the dynamic factor model include Geweke (1977), Geweke and Singleton (1980), Sargent and Sims (1977) and Gregory, Head and Raynauld (1997).

<sup>4</sup> Gregory, Head and Raynauld (1997) and Kose, Otrok and Whiteman (2001) both find that the world common factor is an important source of volatility in output.

period than the European region, which by then had reached a mature stage of integration.

Focusing on the latter period, although it is somewhat exaggerated by the crisis, the East Asian region seems to be better prepared for a currency union than Europe: the share of the region common factor is over .5 on average, indicating that the regional co-movement explains more than a half of the fluctuation in the individual country's output. In Indonesia (.888), Malaysia (.845), Korea (.792), Hong Kong (.738), Thailand (.604), Philippines (.585), which were heavily affected by the crisis, their movements of output are closely linked to the region common factor.

Lee, Park, and Shin (2002) also examine the extent to which business cycles are synchronized across countries in East Asia. They estimate an equation where the fraction of an economy's output change related to regional common shocks is explained by the level of intra-regional trade, similarities of both trade and industry structures, the level as well difference in per capita GDP. In the East Asian group, changes in the shares of intra-regional trade, and similarities of trade and industry structures have no significant effects on output co-movements, but the period dummy for the 1990s is positive and statistically significant, suggesting that shocks that were specific to the 1990's explain most of the variations in output co-movements in East Asia.

### **3. Financial Market Integration and Common Currency Area**

#### ***3.1. Benefits of Financial Liberalization***

Trade liberalization is likely to result in more closely correlated business cycles across countries, more so if the liberalization promotes trade within similar industries. Therefore, countries that establish close economic ties through trade liberalization are likely to be members of a CCA in the sense that the similar business cycles make it easier for them to accommodate a common monetary policy regime.

There is general consensus that economic liberalization in emerging market economies should begin with trade liberalization to be followed by deregulation of domestic financial markets before lifting restrictions on capital account transactions and on entry of foreign financial institutions. This sequencing strategy suggests that countries would go through the process of financial market integration before adopting a common currency: that is, creation of a CCA would take place at the last stage of full economic integration in any region or a group of countries.

However, there is no theory predicting that liberalization of the trade regime would subsequently produce market pressure for liberalization of financial markets and capital account transactions to follow. Indeed East Asian countries started lowering tariffs and non-tariff barriers long before taking steps to liberalize and open their financial markets. Furthermore, the sequencing strategy does not explain whether financial deregulation and opening among a group of countries such as the ASEAN+3 will also pave the way for financial and monetary integration within the group. As will be shown below, countries that establish close financial linkages through financial market liberalization would benefit from joining a common currency area. However, these financially integrated countries do not necessarily satisfy the traditional criteria for potential candidates for a CCA.

Financial market deregulation and opening removes obstacles to migration of real capital in the long-run and cross-border financing of current account imbalances in the short-run, thereby reducing the costs of adjustment to shocks to demand and supply. Financial liberalization also allows extensive sharing of the risks associated with macroeconomic shocks across countries as it broadens the range of portfolio diversification by including foreign bonds and equities in individual portfolios. It follows then that the countries with close financial ties would benefit more from financial liberalization by forming a CCA among them as monetary integration lowers costs of and eliminates exchange rate risks associated with financial transactions. However, the financially integrated countries are likely to be heterogeneous in terms of their economic structures and exposure to asymmetrical shocks.

One important implication of financial liberalization and integration is that contrary to the traditional argument; heterogeneous countries are as well qualified as potential candidates for a CCA as homogeneous countries are.

### **Capital Mobility and External Financing**

An increase in capital mobility (factor migration in general) between countries could relieve a country's external deficit as well as unemployment that reflects its internal imbalance. An adverse demand or supply shock to a given industry of a country may require shifts in labor and capital to other industries. After all adjustments have been made within the country including a fall in factor prices, some factors of production are likely to remain unemployed. In this case, capital account liberalization facilitates migration of capital to other countries, thereby mitigating the burden of adjustment through changes in factor prices and employment. That is, real capital mobility can be a partial substitute for price-wage flexibility.<sup>5</sup>

However, in the short-run, real capital mobility is low and as a result only in the long-run could ease difficulties of adjustment to demand and supply shocks. In the absence of price and wage flexibility, an adverse supply shock such as an oil price increase may result in a deficit on the current account in addition to both an increase in unemployment and decrease in factor prices. Countries with an open financial regime have better access to both regional and global capital markets so that it would be easier and less costly for them to borrow to finance their current account deficits. External borrowing could make the real adjustment smaller or unnecessary if the deficit is transitory and hence reversible.<sup>6</sup>

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<sup>5</sup> Financial market liberalization and opening facilitate real capital mobility as it increases the availability of external financing for trade in both used and new capital goods. Some of the firms in a country that sustains a demand or supply shock may move their production facilities such as machines and equipment to other countries. Alternatively, some of the investment planned by these firms may be relocated in other countries in the form of foreign direct investment as a result of the adverse shock, a possibility that is rather limited in a controlled capital account regime.

<sup>6</sup> If the deficit reflects changes in economic fundamentals instead, external borrowing would simply mask the imbalances that require real sector adjustments.



## **Risk Sharing through International Portfolio Diversification**

With financial market opening, domestic residents can diversify their portfolios in terms of assets issued by firms and financial institutions of other countries in addition to domestic ones. This possibility of enhancing portfolio diversification across a large array of assets means that a country suffering an adverse terms of trade shock could share some of the loss with other countries to the extent that it holds claims on their output. The amount of the loss that could be shared would increase, if this country holds diversified portfolios of bonds and equities of those countries with different structural characteristics that is, with lower business cycle correlations of macroeconomic variables.

The presence of currency risk under free-floating, however, increases the cost of international portfolio diversification in terms of foreign securities: free-floating would inhibit countries from cross-holding of securities, thereby bottling up the cost of the shock more in the country it originated.

### ***3.2. Does Homogeneity Really Matter for CCA?***

Financial liberalization and integration may call into question some of the criteria for a successful CCA focusing on similarity of business cycles. In contrast to the earlier literature on the CCA, the benefits of financial liberalization imply that countries with asymmetric shocks and dissimilar structural characteristics may find it easier to integrate financially with one another and can be potential candidates for a CCA.

Mundell (1973) showed, contradicting his earlier argument, that reserve pooling and international portfolio diversification could mitigate asymmetric shocks because a country suffering an adverse shock could minimize its loss by drawing down on its claims on or borrowing from other countries in the CCA. Portfolio diversification for the risk sharing could then be better served by establishing a CCA that includes a large number of structurally heterogeneous countries.<sup>7</sup>

To elaborate further on this point, consider a group of economies in which business cycles are synchronized across countries. The traditional argument is that the member countries in such a group may readily yield their monetary independence to a supra-national authority, because they are likely to pursue a similar monetary policy. However, once financial integration is taken into consideration, synchronization of business cycles may no longer be a critical criterion for identifying potential CCA candidates as the following example illustrates.

Suppose the group of countries with symmetric shocks is hit by an adverse shock such as an oil price increase. Because of the similarity of their economic structures, all of the countries in the group will suffer from the shock with the consequence of a group-wide slowdown. This group-wide slump then leads to a decrease in intra-group trade, which in turn aggravates further the downturn in each country. That is, the slump in one<sup>8</sup> country amplifies output contraction in other countries through the trade channel. Since all of the member countries suffer from the same shock, they cannot supplement their output and income losses by liquidating their

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<sup>7</sup> A recent analysis on risk sharing through international portfolio diversification, see McKinnon (2001).

<sup>8</sup> The effects of the supply shock in one country could be much more contagious to other countries when they are more homogeneous (Park and Song 2001).

claims on the other countries. Under these circumstances, there is also little room for capital to move between countries.

Most of the countries in the group may also experience deterioration in their current accounts. As a result, the deficit countries may find it difficult to borrow from the other countries in the group. For the group as a whole, the deficit financing to be secured from outside of the group would be larger and hence more costly. This example therefore implies that the impact of the shock would, other things being equal, be much less severe and hence more manageable, if the members of the group have different structural characteristics. That is, heterogeneity of the members of a CCA could reduce the burden of adjustment to external shocks because it increases the scope of factor mobility and also eases financing of current account deficits from the countries unaffected by the shock. The risk sharing through asset diversification also suggests that countries with similar economic structures would not gain from joining a CCA. This is because the adverse supply shock is likely to impinge on most of the firms in the group, and as such market values of securities issued by them will fall at the same time.

From the point of view of portfolio diversification in a liberalized and open financial environment, larger currency unions with more heterogeneous countries are likely to be more successful than smaller ones with homogeneous members: as far as financial integration is concerned, countries with asynchronous macroeconomic shocks would make better candidates for a CCA. In searching for potential partners for a CCA, therefore, emerging market economies (EMEs) would prefer tying themselves up with advanced countries whose bonds and equities are relatively more secure and carry high rates of return adjusted for default and liquidity risks, such as U.S. Treasury bonds. That is, globalization may be a better strategy than regionalization including forming a CCA for a large number of small countries: dollarization, or Eurorization, may make more sense to many emerging market economies than forming a currency union among themselves.

In a recent paper, Heathcote and Perri (2002) argue that the decline in the correlations of output, investment, employment, and consumption between the United States and the rest of the world comprising Europe, Japan, and Canada between the two post Bretton Wood periods—1972-86 and 1986-2000—could in part be explained by a decrease in the correlation of exogenous shocks, but also by financial globalization. Emergence of global financial markets increases opportunities for intertemporal specialization in production that in turn contributes to lowering the correlation of factor supplies as the globalization increases the scope of international portfolio diversification.

In terms of an infinite horizon model, Heathcote and Perri (2002) demonstrate that a decline in the correlation of shocks leads to greater international portfolio diversification, which then further reduces international correlations of macroeconomic variables. Calibrating the model, the authors also show that a combination of the decline in the shock correlation and the resulting endogenous growth in international trade in financial assets jointly account for most of the observed decline in the correlation of international business cycles during the post Bretton Wood period between the United States and the rest of the industrial countries.

One of the implications of the analysis of Heathcote and Perri (2002) is that capital account liberalization—an exogenous development—could reduce the business

cycle correlation of output investment, and employment in East Asia, if it has not already. Another implication is that growing similarity of business cycles among the East Asian countries through trade expansion may encourage global diversification of portfolios including assets issued by corporations and financial institutions of advanced countries and hence integration of East Asian financial markets into global financial markets.

How significant then are the benefits associated with financial market opening such as the international risk sharing quantitatively? There are few empirical studies that shed light on this question. The well-known home bias in asset holding suggests that the benefit would not be as large as the theory would predict. Despite the ongoing financial liberalization stretching over more than two decades, the increase in international diversification in assets, in particular bonds, across countries has been relatively small. McKinnon (2002) points to the principal-agent problem as the main cause of limited global portfolio diversification.

In a recent study, however, Park and Bea (2002) present empirical evidence that since the early 1990s most East Asian countries embarked on deregulation of capital account transactions and entry of foreign financial institutions. East Asian capital markets have been integrating into global financial markets rather than forging clear linkages with one another. This development has become more pronounced after the 1997-98 financial crisis.

#### **4. Economic Rationale for a Regional Financial Arrangement in East Asia**

Empirical studies on the common currency area are not conclusive as to whether East Asia satisfies the criteria for a CCA. It is also not clear whether further trade and financial liberalization in the region would develop conditions necessary for adopting a single currency in East Asia. If the discussion of the CCA does not necessarily justify the construction of a regional financial arrangement, are there other reasons for doing so? We can think of several.

Since the early 1990s, many of the East Asian countries have made sustained efforts to deregulate and open domestic markets including financial markets to foreign competition. As a result of trade liberalization and market orientation, East Asia has seen a large increase in intra-regional trade and investment. In terms of imports, intra-regional trade in East Asia (ASEAN+3 and Taipei,China) was more than 50 percent of the region's total trade (see Table 1A and Table 1B) in 1998 when the entire region was in a deep crisis. There is every indication that this trend will continue.

**Table 1A. Exporting Country Data**

(Unit: %)

Exporting Countries		Importing Countries							
		East Asia	East Asian NIEs	ASEAN4	PRC	Japan	USA	Others	World
East Asia	1990	40.0	19.7	7.3	4.4	8.6	26.6	33.4	100
	1996	48.8	20.0	10.5	9.1	9.2	22.1	29.1	100
	1998	42.6	18.4	7.8	9.1	7.4	24.5	32.9	100
East Asian NIEs* (Korea, Hong Kong, Singapore, Taipei, China)	1990	41.3	12.3	8.7	8.8	11.4	27.9	30.8	100
	1996	49.9	11.4	12.0	16.9	9.6	20.7	29.5	100
	1998	45.4	11.9	9.3	17.0	7.1	22.4	32.2	100
ASEAN4** (Indonesia, Malaysia, Thailand, Philippines, Viet Nam)	1990	52.1	21.8	4.3	2.0	24.0	18.8	29.1	100
	1996	53.3	25.4	6.9	3.0	17.9	18.1	28.6	100
	1998	47.1	22.3	6.9	4.1	13.9	21.4	31.5	100
PRC	1990	65.2	47.6	2.9	-	14.6	8.5	26.4	100
	1996	55.5	31.1	3.9	-	20.4	17.7	26.8	100
	1998	48.4	28.7	3.5	-	16.2	20.7	30.9	100
Japan	1990	29.7	19.7	7.8	2.1	-	31.7	38.7	100
	1996	42.7	24.7	12.7	5.3	-	27.5	29.8	100
	1998	33.5	20.2	8.1	5.2	-	30.9	35.6	100

\* Korea, Hong Kong, Singapore, and Taipei, China

\*\* Indonesia, Malaysia, Thailand, Philippines, and Viet Nam

Source: Direction of Trade Statistics Yearbook, IMF, various issues

**Table 1B. Importing Country Data**

(Unit: %)

Exporting Countries		Importing Countries				
		East Asia	East Asian NIEs	ASEAN 4	PRC	Japan
East Asia	1990	43.3	66.5	51.4	51.4	26.8
	1996	49.4	67.1	52.4	53.5	35.8
	1998	50.3	74.0	55.2	56.4	35.5
East Asian NIEs* (Korea, Hong Kong, Singapore)	1990	14.3	14.2	19.9	33.2	11.1
	1996	15.3	14.5	20.7	28.9	11.7
	1998	15.5	15.3	23.9	30.4	10.2
ASEAN4** (Indonesia, Malaysia, Thailand, Philippines)	1990	7.7	9.1	4.1	4.0	10.7
	1996	9.1	11.4	6.3	3.6	12.5
	1998	9.7	13.1	9.2	5.9	12.0
PRC	1990	7.2	15.3	2.5		5.1
	1996	10.4	18.6	2.5		11.6
	1998	12.1	23.8	3.6		13.2
Japan	1990	14.1	27.9	24.9	14.2	
	1996	14.7	22.5	22.9	21.0	
	1998	13.0	21.8	18.6	20.2	
USA	1990	18.0	21.1	13.5	12.2	22.5
	1996	16.6	18.5	13.6	11.6	22.9
	1998	16.9	19.9	15.3	12.1	24.0
Others	1990	38.7	12.4	35.0	36.3	50.7
	1996	34.0	14.4	34.0	34.9	41.4
	1998	32.8	6.1	29.6	31.5	40.5
World	1990	100	100	100	100	100
	1996	100	100	100	100	100
	1998	100	100	100	100	100

\* Korea, Hong Kong, Singapore, and Taipei, China

\*\* Indonesia, Malaysia, Thailand, Philippines, and Viet Nam

Source: Direction of Trade Statistics Yearbook, IMF, various issues

Financial liberalization and market opening has also contributed to the integration of financial markets in the region and the establishment of closer linkages between East Asian and international financial markets. The growing integration of intra-regional trade in goods, services and financial assets has increased the demand by the business community in the region for stabilizing the exchange rates of East Asian currencies. More than anything else, the Asian crisis in 1997 has galvanized the region into establishing a region-wide mechanism of defence against future financial crises.

As noted in section 3, diversity among the CMI group members is not necessarily an obstacle to forming a CCA. Indeed, if business cycles are divergent across countries, this divergence could provide incentives for both financial and monetary integration. In general, it is difficult to identify a set of criteria for ideal candidates for a CCA; indeed, it appears any group of countries could form a successful CCA.

When the crisis broke out in 1997, many East Asian countries were perceived to have similar economic structures by foreign investors and lenders. Because of this perception, contagion of the crisis was much more severe than otherwise: depreciations and downturns in the crisis countries were transmitted more rapidly and widely to other countries in the region, thereby precipitating the region-wide slump and financial instability. Homogeneity of countries, in contrast to the traditional view, could interfere with financial and monetary integration.

There have been also several developments other than those pertaining to the optimal currency area that have encouraged the formation of a regional financial arrangement in East Asia. This section discusses some of these developments to analyze whether they can maintain the momentum for enhanced regional cooperation and lead to the formation of monetary unification in the long run. One development is the assumed limitation of the ability of the IMF in managing a capital account crisis. Another is the slow progress in reforming the international financial system that makes it difficult to expect the emergence of a global mechanism of defence against future crises. A third is the lack of confidence in the free-floating system.

#### ***4.1. IMF and Capital Account Crisis Management***

Although the jury is still out on whether the 1997-98 crisis was a liquidity or solvency crisis, there is an emerging consensus that East Asia suffered a capital account crisis, which required a management and resolution strategy different from the traditional IMF recipe for crises originating from current account deficits. A large increase in capital inflows into some of the East Asian countries set off an asset market boom and a precipitous increase in the current account deficit, thereby making these countries as a group vulnerable to speculative attacks. The perception of vulnerability of these countries triggered a sharp and large capital outflow, which was further aggravated by the panic and herding behavior of foreign investors. Once the dollar peg became indefensible, the value of the currencies plummeted. Many banks and corporations with balance sheet mismatches could not service their foreign currency denominated debts and eventually became insolvent. A sharp contraction in the level of output then followed.

The crisis resolution strategy of the IMF was twofold. First, it imposed tight monetary and fiscal policy with the aim of stabilizing the exchange rate and generating

current account surpluses by contracting domestic demand. High interest rates together with weak currencies were expected to contribute to luring back foreign investors. Second, the IMF required these crisis countries to undertake a wide range of reform covering the corporate, financial, and public sectors to strengthen the structural foundation of the economy. The reform was to help these countries return to the pre-crisis path of robust growth; it was also viewed critical in restoring the confidence of international lenders in these economies.

Five years have elapsed since the outbreak of the crisis. Among the five crisis countries, Korea stands out as the most successful case of recovering from the crisis, although the after-effects of the crisis still linger. Indonesia has been mired in a deep economic and political crisis; recoveries in other crisis countries have been rather uneven. Most of all, the assessment of the structural reforms remains mixed. A recent World Bank report (2002) still argues that “progress on structural and institutional reforms remain key to retaining confidence and resilience to shocks” in East Asia.

What went wrong with the IMF strategy? Once the crisis broke out, output contraction and the turbulence of the foreign exchange and other financial markets in one country were rapidly transmitted to other economies in the region through trade and financial market linkages. The pronouncements by international financial institutions including the IMF and policymakers of the G-7 countries that the crisis countries had serious structural problems in their financial, corporate, and public sectors did not help inspire confidence in these economies. In some sense, the IMF crisis management program was possibly fueling contagion of the crisis.

The IMF rescue programs mandated structural reforms along the lines of the so-called “Washington consensus” without a careful scrutiny of their appropriateness and in disregard of the reform capacity of these countries. Many of the reforms included in the IMF programs have been ignored, put on the backburner, or at best resulted in cosmetic changes. In retrospect, the IMF’s view that structural problems were the root causes of the crisis was not borne out by subsequent events. In the midst of the crisis, the timing of initiating structural reform was questionable. At the time of the crisis, many Western observers argued that only a major shock like the one that savaged East Asia could force the crisis countries to accept reforms that were in their view badly needed and overdue. Whatever the merit of this argument, was the IMF right in seizing the crisis as an opportunity of encouraging these countries to undertake the reform it recommends?

The experience with the East Asian crisis management suggest that when a crisis in a country originates in the capital account, policy coordination or at least policy dialogues and reviews among neighboring countries is essential in preventing contagion of the crisis. The importance of policy cooperation would grow with the increase in the depth of integration of financial markets at the regional level. Without a constant exchange of information and policy dialogues among close economic partners, individual countries often find it difficult to understand the causes of large changes in capital flows and exchange rates. To ward off speculative attacks, policymakers will have to be on constant alert to monitor and respond to changes in expectations of market participants. With deepening of trade and financial integration, monitoring will not be effective unless an efficient mechanism of policy coordination is constructed at the regional level. Even the smoothing-out of high frequency movements of the nominal exchange rate in individual countries may have to be coordinated at a regional level in order not to send wrong signals to market participants.

When a country in the region experiences severe financial instability, it is critical to diagnose whether the turbulence reflects domestic macroeconomic imbalances or speculative activities of market participants in order to devise a proper crisis management strategy. If the country suffers from currency speculation, the neighboring countries would have incentives to organize liquidity support to contain contagion. Unless the countries in the region maintain close working relationships in coordinating policies and exchanging information they will not be able to make a prompt assessment of the nature of and response to the crisis.

The IMF could monitor capital flows within and between regions and also the behavior of market participants. Given its narrow mandate and its small staff, it is difficult to imagine that the IMF could establish close working relationships with individual member countries and coordinate their policies. Furthermore, as an institution entrusted with monitoring economic developments in the member countries, the IMF may have to maintain an arm's-length relationship with them. The IMF cannot constantly monitor developments in financial markets of individual countries as it is difficult to maintain channels of day-to-day communication with the country authorities. Without understanding the background of policy changes in each country, the IMF will not be in a position to deal effectively with capital account crises. Most of all, to the extent that the IMF cannot serve as a lender of last resort, it cannot serve notice to the international financial markets that it is ready to supply whatever amount of liquidity it takes to thwart an impending speculative attack.

At the time of the crisis, the CMI countries as a whole held about US\$700 billion in foreign reserves. The total amount of financing required restoring financial stability in Indonesia, Korea, and Thailand by the IMF, other international financial institutions, and a number of donor countries amounted to US\$111.7 billion. If the thirteen countries had established a cooperative mechanism in which they could pool their reserves to fend off speculative attacks, they could have managed the Thai crisis and minimized its contagion by supplying a small fraction of their total reserves. In view of the large loss of output and fall in employment in the region, such a cooperative response would indeed have been desirable.

Insofar as East Asia suffered a liquidity crisis compounded by the panic and the herding behavior of foreign investors, a more effective crisis management strategy could have focused on squelching the speculation by supplying a large amount of short-term financing to replenish foreign exchange reserves at the first sign of a speculative attack, instead of tightening monetary and fiscal policy. Such a strategy could have stopped the spread of the crisis and slump throughout the region. At the time of the crisis, there were neither regional nor global lenders of last resort to deal with bank run problems East Asian countries were facing. Perhaps because of the lack of experience and understanding of the nature of liquidity crises, the IMF might have resorted to standard remedies it had relied on for managing current account crises. It was also true that with limited financial resources, the IMF could not manage the Korean crisis by itself; it had to enlist the financial support of the G-7 and other countries. The G-7 support for the rollover of short term foreign loans for Korea is then a testimony that as a global institution, the IMF would be more effective in resolving crises if it establishes cooperative relations with its regional counterparts and hence encourage the development of regional financial mechanisms.



#### ***4.2. Limited and Slow Progress in International Financial Reform***

One of the recent developments that have encouraged regional cooperation in East Asia has been the slow progress in the reform of the international financial system. The urgency of reform in the G-7 countries has receded considerably despite the collapse of Argentina, instability of Brazil, and economic slump in East Asia. The slow progress has been further complicated by the perception that none of the many proposals for a new architecture may be effective in sustaining global financial stability. In particular, as long as the structural problems on the supply side of international capital markets are not addressed, the East Asian countries fear that they will remain as vulnerable to future crises as they are now (Park and Wang, 2002).

Griffith Jones and Ocampo (2002) show that there has been no international reform agenda accepted by both developing and developed countries. The Monterrey consensus has produced a new international agenda, but it is not altogether clear whether the new agenda will be put into action. Some of the progress that has been made is asymmetrical in the sense that the reform has focused on strengthening financial and corporate sectors of emerging market and developing economies instead of rectifying imperfections of international capital markets. Some of the advances in the new architecture have also met the risk of reversal such as the growing opposition of developed countries (DCs) to supporting large IMF financing. Finally, it should be noted that developing countries have been excluded in the key institutions and fora involved in international financial reform.

Faced with the uneven and slow process of the reform, many emerging market economies (EMEs) have begun to develop their own mechanisms of defence against future financial crisis. One such defensive measure was the construction of regional financial arrangements such as the CMI in East Asia. Instead of waiting until the G-7 creates a new architecture, whose effectiveness is at best questionable, it should be in the interest of East Asia to work together to create its own system of defence. For this reason alone, there has been increasing support in East Asia for developing a regional defence mechanism in the form of financial cooperation.

A regional financial cooperative scheme such as the CMI could be structured and managed to be complementary to the IMF. For example, any potential East Asian regional fund could serve as a source of supplementary financing to the IMF facilities. It could support the IMF's global surveillance activities by specializing in regional surveillance. Like the CMI, a regional financial arrangement could rely on the IMF for designing and enforcing policy conditionality to be imposed on borrowing countries.

#### ***4.3. Building a War Chest***

Many EMEs and DCs, in particular those which have experienced financial crises, have taken recourse to amassing their foreign reserves above the level that may be adequate in terms of their transactions requirements as a means of defence against future crises. Before the onset of capital account liberalization in the 1990s developing economies were preoccupied with the management of the current account, and as far as the adequacy of reserves was concerned, the rule of thumb was holding an amount of reserves equivalent to imports of three to four months. This implicit rule appears to be no longer relevant. For instance, Korea has accumulated a large volume of foreign

reserves (US\$96.1 billion as of the end of 2000) equivalent to 21 percent of its GDP, in part because of the increased volume of its capital account transactions, but largely because of the need for building a “war chest” that may one day be needed to stave off speculative attacks. At the end of 2000, the volume of reserves as a percentage of GDP in Korea was more than three times the level of 1996.

A similar development has taken place in other crisis-hit countries in East Asia (Table 2). In Indonesia, the ratio of reserves to GDP almost doubled between 1996 and 2000. The ratio climbed to 27 percent at the end of 2000 from less than 9 percent three years earlier in the Philippines. Reserve accumulation has been relatively modest in both Thailand and Malaysia. Yet these countries have also added more than 10 percentage points to the ratios they had at the end of 1997. By any measure, these levels are excessive, costly, and represents a clear case of misallocation of resources.

In a recent speech at a Tokyo conference, Stiglitz (2002) argued that the existing dollar based reserve system benefits the U.S. whereas developing countries bear a disproportionate burden of holding large amounts of reserves to counter volatility in the currency market. He went on to say that a possible Asian Monetary Fund, which would probably have given a quicker remedy to the Asian financial crisis, could be an alternative model, providing a good basis for a new global regime.

In theory, floating rates and capital account liberalization are supposed to reduce the need for holding a large amount of reserves. Except for Malaysia, all other crisis countries have been on a flexible exchange rate system and deregulated their capital account transactions to a considerable degree after the 1997 crisis. In contrast to the theory, however, the shift to floating rates and participation in international financial markets in these countries for the past five years have not reduced their reserve holdings relative to their output. In fact, liberalization of capital account transactions has increased the demand for reserves largely because capital flows have been unstable and unpredictable in these countries. Furthermore, there is little evidence that capital account liberalization has improved the access of emerging market economies to international capital markets.

For these reasons, the adequacy of reserve holdings is often gauged by the amount of short-term foreign borrowing, and a good benchmark is that the ratio of reserves to short-term foreign debts should be equal to or higher than one. Even when this benchmark is applied, reserve holdings of the crisis-hit countries in East Asia are excessive. In both Korea and Thailand, the ratios have been higher than 2, and even in Indonesia, it has fluctuated between 1.3 and 1.45 (see further Table 3). The excessive holdings of reserves in emerging market economies in East Asia and elsewhere raise a number of questions as to whether these countries should borrow at all from the short end of international capital markets and whether it would be advisable to ask these countries to open their financial markets.

**Table 2. Foreign Exchange Reserves and Current Account Balance****Korea**

	Foreign Exchange Reserves (Million U.S. dollars)		Current Account Balance (Million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	34,037	6.5	-23,005	-4.4
1997	20,368	4.2	-8,167	-1.7
1998	51,975	16.2	40,365	12.6
1999	73,987	17.8	24,477	5.9
2000	96,131	21.0	11,040	2.4
2001(f)	105,191	23.5	6,000	1.3
2002(f)	119,323	23.9	2,000	0.4

**PRC**

	Foreign Exchange Reserves (Million U.S. dollars)		Current Account Balance (Million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	107,039	13.1	7,243	0.9
1997	142,762	15.8	36,963	4.1
1998	149,188	15.8	31,472	3.3
1999	157,728	15.9	15,667	1.6
2000(f)	168,277	15.4	12,000	1.1
2001(f)	178,387	14.9	7,000	0.6
2002(f)	188,152	14.2	4,000	0.3

**Hong Kong**

	Foreign Exchange Reserves (Million U.S. dollars)		Current Account Balance (Million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	63,840	41.4	-3,509	-2.3
1997	92,823	54.3	-6,159	-3.6
1998	89,625	55.0	3,891	2.4
1999	96,255	60.5	10,545	6.6
2000	107,560	65.8	8,806	5.4
2001(f)	-	-	4,000	2.3
2002(f)	-	-	1,000	0.6

### Taipei, China

	Foreign Exchange Reserve (million U.S. dollars)		Current Account Balance (million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	88,038	31.5	10,923	3.9
1997	83,502	32.7	7,051	2.8
1998	90,341	32.6	3,437	1.2
1999	106,200	35.9	8,384	2.8
2000	106,742	36.4	9,316	3.2

### Thailand

	Foreign Exchange Reserve (million U.S. dollars)		Current Account Balance (million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	37,731	20.7	-14,691	-8.1
1997	26,179	17.3	-3,021	-2.0
1998	28,825	25.7	14,243	12.7
1999	34,063	27.5	12,428	10.0
2000	31,947	26.0	9,200	7.5
2001(f)	33,802	28.2	7,000	5.8
2002(f)	35,050	28.0	4,700	3.8

### Indonesia

	Foreign Exchange Reserve (million U.S. dollars)		Current Account Balance (million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	24,024	10.6	-8,532	-3.8
1997	20,609	9.6	-5,790	-2.7
1998	22,713	23.0	4,102	4.2
1999	23,540	16.2	578.3	4.1
2000(f)	27,464	18.5	8,400	5.7
2001(f)	31,164	19.2	7,000	4.3

### Malaysia

	Foreign Exchange Reserve (million U.S. dollars)		Current Account Balance (million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	27,009	26.7	-4,462	-4.4
1997	20,788	20.8	-5,936	-5.6
1998	25,559	35.0	9,529	13.1
1999	30,588	37.7	12,606	15.9
2000	29,075	32.6	8,850	9.9
2000(f)	30,632	32.6	7,300	7.7
2002(f)	32,640	32.0	5,000	4.9

### Philippines

	Foreign Exchange Reserve (million U.S. dollars)		Current Account Balance (million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	10,030	12.1	-3,949	-4.8
1997	7,266	8.8	-4,353	-5.3
1998	9,226	14.9	-1,546	2.4
1999	13,242	17.3	7,911	10.3
2000	13,048	27.4	9,349	19.7
2001(f)	14,452	19.1	8,400	11.1
2002(f)	15,971	20.3	8,000	10.2

### Singapore

	Foreign Exchange Reserve (million U.S. dollars)		Current Account Balance (million U.S. dollars)	
		In Percent of GDP		In Percent of GDP
1996	76,976	83.7	13,898	15.1
1997	71,392	85.2	16,912	20.2
1998	75,028	99.9	21,025	23.3
1999	77,176	89.3	21,254	24.0
2000	80,362	82.2	21,715	22.2

<sup>1</sup> Estimates by the International Institute of Finance

Source: Institute of International Finance, Inc and the Central Bank website

**Table 3. Foreign Reserves/Short-term Debts**

	Indonesia	Korea	Thailand	Taipei, China	PRC	Chile
1998. IV	0.89	1.31	1.15	5.24	4.37	1.68
1999. II	1.45	1.43	1.53	6.46	5.75	1.52
1999. IV	1.33	1.69	2.23	6.24	7.75	2.06
2000. I	1.38	2.19	2.21	6.53	7.45	1.67
2000. II	1.32	2.06	2.32	7.43	7.28	1.63
2000. III	1.35	2.14	2.72	7.33	7.63	1.41

Source: ARIC Indicators, [http://aric.adb.org/user\\_defined\\_indicators.asp](http://aric.adb.org/user_defined_indicators.asp)

If the EMEs have to maintain an amount of reserves equal to their short-term foreign indebtedness, this means that each dollar they borrow from the short end of international financial markets will have to be matched by an equal increase in reserves secured by long-term foreign borrowing or accumulating current account surpluses. Suppose the annual costs of short and long term foreign currency borrowing for an emerging market economy are four and six percent respectively. Then this economy is in effect paying almost ten percent for its short-term foreign loans without including hedging and other costs. This is indeed an expensive insurance premium they have to pay when the LIBOR at the end of 2002 was less than two percent.

Could the EMEs make arrangements with international banking institutions to establish private contingent lines of credits they could draw from in case they come under a speculative attack? The Mexican experience is instructive in this regard: the availability of contingent credit lines does not increase liquidity once a financial crisis breaks out, because the banks which provide contingent credit lines to the central bank withdraw other credits extended to firms and financial institutions to reduce their country exposure (Carstens, 2001).

Given the limited availability of private contingent lines of credit, together with the absence of a global or regional lender of last resort, EMEs may therefore have to hold a larger amount of reserves than otherwise, and to do so they may have to run a sizeable amount of surplus on the current account as the East Asian crisis countries have done since the outbreak of the 1997 crisis. The reserve accumulation in EMEs thus has undesirable implications for the future trade relations among developing and developed countries and for growth of the world economy.

As a growing number of EMEs attempt to increase their holdings of reserves by running current account surpluses, trade relations between developing and developed countries are likely to suffer from tension and unnecessary conflicts. The large accumulation of reserves in EMEs could also be detrimental to global growth as it reduces global aggregate demand. Therefore, both developing and developed countries will find it in their interests to search for other schemes that could reduce EMEs' holdings of foreign exchange 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 short-term liquidity support. Individual countries belonging to the arrangement could then reduce their holdings of reserves as they can borrow from these new credit facilities.

The group of thirteen East Asian countries (ASEAN+3) had command over an amount of foreign currency reserves estimated to be more than one trillion U.S. dollars at the end of 2002. Depending on how these reserves are pooled together and managed, a mere ten percent of the total amount will be sufficient to provide a formidable line of defence against any speculative attacks.

#### ***4.4. Stabilizing Bilateral Exchange Rates of Regional Currencies***

Recent studies by Rose and Engel (2001) show empirically that the formation of a currency union leads to a substantial increase in trade and lowers the volatility of real exchange rates of the countries joining the union. A regional financial arrangement such as the CMI in East Asia could help stabilize bilateral exchange rates in the region by creating a financing mechanism that could provide a cushion for adjustment to external shocks. As Rose (1999) points out, financial crises tend to be more contagious among the countries that are linked by trade. Since trade is regional, financial crises tend to be regional. The regional nature of trade is also likely to grow in importance in East Asia. With this growing trend in regional trade integration, it is clear East Asia is bound to lose disproportionately more from trade disruptions caused by currency crises than otherwise. This means that the East Asian countries have a collective interest in preventing crises in individual countries and more so in stopping contagion. In this regard, the CMI could help carry forward several free trade proposals under negotiation or discussion in East Asia as it reduces some of the impediments to intra-regional trade.

Together with the deepening of trade integration, East Asia has also witnessed growing mobility of capital with the liberalization of capital account transactions in many countries. Although the benefits of capital mobility could be substantial, capital market liberalization has brought with it the danger of making financial crisis much more disruptive than otherwise. There is general consensus that short-term speculative capital flows should be controlled to minimize disruptions they could cause in domestic financial markets. Although such consensus does not exist on the modality of control, some of the means of controlling short-term capital flows would be greatly enhanced if countries with close ties in trade and finance coordinate their policies. A regional financial arrangement such as the CMI could provide a forum for such cooperative efforts.

For a while after the eruption of the East Asian crisis, the flexible exchange system was the accepted norm in the new international financial architecture. The new consensus, however, gave way to a new view that intermediate regimes such as the BBC system are more likely to be appropriate than the corner solutions for many EMEs. If indeed East Asian countries find it desirable to adopt an intermediate regime, then one can make a strong case for creating regional financial cooperative arrangements insofar as they could help sustain such a regime. Although the authorities of the ASEAN+3 have not indicated any interest in promoting monetary integration as one of the objectives of their cooperative efforts, the CMI could serve as an institution managing a mechanism of coordination of exchange rate policies at the regional level during a transition period leading to full monetary integration in East Asia.

## 5. Trade and Security Dimensions

### 5.1. Trade Connections

Regional financial arrangements have traditionally tended to follow the creation, and indeed the substantial implementation, of trading arrangements among the same countries. The most extensive modern case of economic regionalism, that of the European Union, has of course followed this pattern: its initial monetary cooperation program, the “snake in the tunnel,” began in the early 1970s—about fifteen years after the creation of the Common Market and over twenty years after the initial precursors of European trade integration—before evolving from the European Monetary System in 1979 into Economic and Monetary Union with the euro in 1999. Likewise in North America and South America, the trade initiatives of NAFTA and Mercosur have preceded any serious discussion of monetary integration although such discussions have now begun in both regions.

One of the unique features of the current regional economic initiative in East Asia is that it appears to be reversing this traditional pattern. The financial proposals described above are clearly moving faster than any serious contemplation of region-wide trade agreements (although several sub-regional trade ties, such as Japan-Singapore, may be evolving on a roughly comparable timetable and the rapid growth of intra-regional trade, even without any formal liberalization agreements, may be one source of interest in closer financial cooperation). This poses two important questions for the proposed project.

First, why is East Asia pursuing a different sequence than Europe and other regions? Our hypothesis is that the answer lies at least partially with the condition of the global financial system. Europe had no need to pursue its own monetary arrangements in the late 1950s or 1960s because the Bretton Woods system was functioning in a reasonably successful manner. Indeed, Europe was able to proceed with trade integration under the umbrella of financial stability provided by Bretton Woods and the US/dollar leadership. Once the adjustable peg regime of Bretton Woods collapsed in the early 1970s, however, Europe began the search for a regional alternative and, after several false starts, installed its highly successful EMS in 1979 partly to “shield Europe from the global instabilities generated by the United States and the dollar.”

The contemporary East Asian financial initiatives likewise reflect shortcomings in the global system. That system totally failed to anticipate the East Asian financial crisis (or the Mexican crisis before it), then responded in a manner that in the views of some was both financially inadequate (at least in the initial stages) and politically demeaning, and thus left an extremely unpleasant residue throughout the region. The search for a regional alternative in East Asia at the start of the 21<sup>st</sup> century is thus strikingly parallel to the search for a regional alternative in Europe in the 1970s. This study will look carefully at the European experience, and other historical parallels, to compare and contrast them with the evolution that now appears to be developing in East Asia.

The second key question is whether East Asia’s “reverse sequencing” can succeed. There is a clear logic in the installation of financial integration in the wake of trade integration: as in Europe today, “free trade” and “a single market” raise and



highlight the effective costs of currency fluctuations and instability, thus generating both business and political pressures to “complete the process” by moving to a single currency (the euro) or its equivalent (dollarization in Mexico and elsewhere in Latin America in the next 10-20 years?). Financial integration prior to trade integration must therefore be driven by some other imperative, presumably relating directly to financial concerns themselves.

This study will thus assess the extent to which the traditional sequencing explains the success (or lack thereof) of prior regional efforts, not only in Europe but including Latin America and other examples if possible. Our hypothesis is again that *global* systemic conditions may play a central role in determining the feasibility, as well as the desirability of *regional* patterns.

Another key variable in this context is the *degree* of financial integration that is contemplated. As outlined above, there is very little consideration of adopting a common currency at this stage of the East Asian financial cooperation process. The focus is rather on the provision of mutual liquidity support (and perhaps initial steps to coordinate exchange rates and other financial policies). This would in fact replicate to a degree the evolution of regional cooperation in North America, where United States-Mexico swap agreements date back as far as the early 1940s—well before NAFTA was ever contemplated.

We will not investigate the substance of current and prospective regional trade arrangements in East Asia. (An initial econometric investigation of a number of potential trade variants can be found in Robert Scollay and John Gilbert, *New Sub-Regional Trading Arrangements in the Asia Pacific Region*, Institute for International Economics, 2001).

We will, however, discuss the relationship between the trade and financial components of the East Asian regional process. For example, there now appears to be little or no coordination between the trade and financial initiatives: should there be? How could such coordination be achieved, both within the key countries and across the region? What lessons can be learned on this count from the experiences in Europe and elsewhere? These are the important policy questions to be addressed in this study.

## ***5.2. Security Dimensions***

Almost all of the great “international economic policy initiatives” of the postwar period have been driven primarily by broad security concerns. The victorious allies in World War II created the Bretton Woods system, including the GATT, in an effort to help avoid the economic dislocations that were universally viewed as a chief cause of that conflagration. The Europeans created the Common Market and its successors to eliminate the risk of another fratricidal war. The Kennedy Round of trade negotiations, and to some extent the subsequent GATT rounds, were launched to solidify the transatlantic (and, later, transpacific) alliances. NAFTA was created in an effort to obviate a security concern at the southern border of the United States. Mercosur was created to enable Brazil and Argentina to end their nuclear competition. Almost all of these efforts have succeeded spectacularly in reducing the risk of conflict and producing a safer, as well as more prosperous, world. Conversely, failed efforts at regional economic integration, as in South Asia, have permitted or even fueled continued security threats.

Security issues loom at least as large in the contemplation of serious East Asian economic cooperation. PRC and Japan have been traditional regional rivals in East Asia just as France and Germany were traditional rivals in Europe and Brazil and Argentina were rivals in South America. The achievement of effective economic cooperation in East Asia, especially if it were to evolve over time into meaningful “deep integration” as in Europe, could go far to obviate security risks in a region that is perhaps the most potentially volatile in the world today in light of continuing tensions on the Korean peninsula and in the Taipei, China Straits, South China Sea, Indonesia, etc.

The security dimension of economic cooperation efforts looms particularly largely in determining the viewpoint of the United States. The United States has ultimately based its policies toward all such initiatives, especially within Europe but including its own regional compacts (large ones such as NAFTA, small ones like Israel and Jordan), on security considerations. It will almost certainly continue to do so in the case of East Asia: the United States would probably accept ambiguous or even modestly negative economic effects if it believed that the East Asian links would substantially reduce the risks of future conflict (and hence the risk of another American intervention in the region after the three wars of the past half century), while it would probably oppose any arrangements that generated negative (or even ambiguous) economic effects if they were devoid of security benefits.

Illustrative of this issue are the views of two former Secretaries of States as conveyed to the American co-author. George Shultz believes that the United States would derive enormous benefits from a true East Asian economic entity because, in his thinking, such an entity would sharply reduce the risk of future conflict between PRC and Japan (and thus the risk of renewed American military engagement in the region). Henry Kissinger, by contrast, believes that PRC and Japan will never be able to cooperate sufficiently to obviate the fundamental security risk so that the United States’ interests will be better served by a divided East Asia in which the United States can foster bilateral relationships and play the role of an external balancer as Britain did toward continental Europe in the nineteenth century.

The views of the United States and other outside powers will of course play a central role in the evolution of East Asian regionalism. At a minimum, those outsiders will insist that East Asian arrangements (in both finance and trade) be consistent with global rules and institutional arrangements. Judgments will have to be made on how one defines and operationalizes such compatibility, however, and overall foreign policy and security considerations will go far to determine the ultimate views of the United States (and perhaps others). America’s strong political support for European integration was, at the end of the day, decisive in its willingness to accept the trade discrimination (especially in agriculture) that was inherent in the Common Market and even the rivalry with the dollar that will inevitably be posed at some point by the euro.

As with trade, this study will not provide an in-depth analysis of security issues and possible future scenarios in East Asia. It will, however, consider carefully the linkages between the economics of East Asian regional cooperation and its broader political and security implications. The perspectives of the main countries outside the region, especially the United States and Europe, will be given particularly close attention in this regard.

## 6. Is East Asia Ready for a Regional Financial Arrangement?

Any argument supporting regional arrangements must begin by answering the most fundamental question of whether regional groupings, whatever forms they may take, are conducive to multilateral free trade and an orderly globalisation of financial markets. Despite many misgivings about the role of regional economic arrangements that have grown in number in recent years, the experiences of the past decade—in particular, that of the EU—suggest that they have been complementary to multilateral trade and financial liberalization. That is, they have been building blocks rather than stumbling blocks for a more integrated world economy. There is no evidence suggesting that an East Asian financial arrangement will be oriented toward a withdrawal from the global economy and, hence, erect barriers to global financial integration.

Several years ago Lawrence (1996) pointed out that the forces that were driving the wave of regionalism at that time might differ fundamentally from those driving earlier moves toward regionalization in this century and that the regional initiatives represented efforts to encourage their members' participation in the world economy rather than their withdrawal from it. Trade and financial developments since then have not been at odds with this observation. Many developing countries are motivated to join regional groupings as their participation could facilitate implementation of a strategy to liberalize and open their economies. Since most of the East Asian EMEs are pursuing export-cum-foreign investment-led policies, they will gain very little by forming a regional arrangement that is designed to thwart globalisation.

Ever since the proposal for creating an Asian Monetary Fund was made, the idea has been opposed by the United States, EU, and the IMF for a variety of reasons. Although both the U.S. and IMF have softened their opposition to regional financial arrangements recently, they still maintain that the arrangements should be both complementary and supplementary to the IMF financing facilities (Köhler, 2001). The opponents of a regional financial arrangement in East Asia raise two issues. First, they argue that the ASEAN+3 countries have yet to develop economic, social, and political preconditions that could support a regional financial arrangement. Second, there is no need for regional financial arrangements because finance is increasingly globalized.

Many of the countries participating in the CMI have been drawn into numerous territorial and economic disputes with one another, and animosity toward Japan's atrocities during World War II lingers on. For many years, the three Northeast Asian countries have been embroiled in the controversy over historical interpretations of Japan's role in East Asia in the 19<sup>th</sup> and the early 20<sup>th</sup> centuries. As Eichengreen (1999) puts it, East Asia lacks the tradition of integrationist thinking and the web of interlocking diplomatic agreements that could encourage monetary and financial cooperation in Europe. The opponents therefore claim that since East Asian countries are not ready for, and not capable of, creating and managing an efficient regional financial arrangement, their efforts at financial cooperation in an institutionalized setting could produce undesirable consequences to the countries in other parts of the world. Specially, the regional funds, many argue, could aggravate moral hazard problems associated with excessive borrowing and loose macroeconomic policies of participating economies.

What is so unsettling about this argument is that it assumes East Asian policymakers are so inept and undisciplined that they are likely to commit the sins of moral hazard; whereas European counterparts have been able to avoid this problem. At this stage of development, it may be true that 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 the regional fund to impose politically unpopular policies on the member countries and, hence, may pose a serious problem concerning policy discipline.

However, moral hazard is not a problem that will beset only regional arrangements. The IMF is not immune to this problem. The moral hazard concern is so serious that some people even question whether the IMF should continue to play the role of a quasi lender of last resort, and to those critics the creation of regional monetary funds must be anathema (The Meltzer Commission, 2000). The task force report of the Council on Foreign Relations (1999) advises the Fund to adhere consistently to normal lending limits to redress the moral hazard problem. The reasons why East Asian financial arrangements would suffer more from the moral hazard problem than the IMF or any other regional institution have not been made clear. As Sakakibara (2000) puts it, if those countries unaffected by the East Asian crisis do not have any political incentives 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.

For over a half century, European countries have worked to develop a wider web of political and diplomatic agreements that has served as a foundation for cooperation on monetary and financial matters. Certainly, such a web does not exist in East Asia, and as far as East Asia's limited capacity for cooperation is concerned, Eichengreen and Bayoumi (1999) have a point. Indeed, if the European experience is any guide, East Asia may take many years to develop an effective cooperative arrangement for finance, not to mention monetary union.

While the importance of political preconditions for establishing an effective regional financial mechanism cannot be denied, it should also be noted that the ASEAN+3 countries have participated in various regional groupings and in the process have accumulated a great deal of experience in managing cooperative arrangements with other countries. The ASEAN states have more than thirty years' of experience with regional cooperation. Since its inception in 1967, ASEAN has contributed to consolidating unity, promoting free trade, and providing mutual financial assistance among the member states. The ASEAN+3 also have been active members of the APEC. Some of these countries also participate in the Manila framework; and there are other regional cooperative arrangements such as SEACEN and SEANZA that have served as informal fora for policy dialogues.

Recent economic developments in East Asia may suggest that political integration has become less critical to financial and monetary cooperation than in the past largely because many of the East Asia's central banks now enjoy greater independence than before and, more importantly, democratic principles are taking root in the governance of these countries. East Asia is changing and may be on the brink of an historical evolution, as Europe was half a century ago (Bergsten, 2000). Despite the numerous political and economic issues that have alienated many East Asian countries

from others, the ASEAN+3 were able to agree to the CMI. In that respect, the launching of the CMI has been an historic event. It may now be possible to delegate management of some regional financial affairs to the CMI or similar institutions. The East Asian countries could bypass political issues and disputes to build trust for regional cooperation. Having suffered such a painful and costly financial crisis, the East Asian countries appear to have enough incentives to set aside their differences to develop a region-wide mechanism of defence against future crises.

The opponents of the CMI also argue that there may be no need for regional funds and other regional financial arrangements in a world economy where finance has been increasingly globalized. The ongoing revolution in information and communication technology will accelerate financial globalisation. An orderly globalization requires global governance. However, the world economy is far from developing a new system of global governance, which may include a global central bank and global regulatory authorities. In order to exploit the scale economies in finance associated with the development of information technology, the scope of financial governance could encompass the entire world. In theory, public goods, such as the services of lender of last resort and regulatory institutions could be better provided at a global level.

While in theory the creation of such a system of global governance may appear reasonable, in reality it is politically unacceptable and must be dismissed as quixotic (Eichengreen 1999). As a second best alternative to the global governance system, global standards and codes of conduct on banking, accounting, corporate governance, management of monetary and fiscal policies, and many others have been proposed for adoption by emerging market economies and developing countries (EMEs and DCs). However, doubts have been raised as to whether one-size-fit-all codes and standards should be imposed on EMEs and DCs, and if they should, whether they could be enforced. If regional differences matter in devising standards and codes and harmonizing institutions, one could argue that some of the public goods for finance could be more efficiently produced at the regional level.

As noted earlier, the architects of the CMI may have a more ambitious long-term goal of promoting monetary integration in East Asia. If indeed they do, their ambition is likely to be met by more skepticism. Eichengreen (1999), and Eichengreen and Bayoumi (1999), and Bayoumi, Eichengreen and Mauro (2000) argue that while a group of East Asian countries may satisfy requirements for an optimum currency area as much as the EU does, it has not developed political preconditions necessary for a durable regional arrangement, which is not certainly as much as Europe has accomplished in this regard. These authors argue that “any monetary arrangement that seeks to stabilize exchange rates in the absence of the necessary political preconditions will be fragile and crisis prone”.

Drawing on the European experience, these sceptics emphasize the need for an efficient management of a relatively long period of transition to a common currency peg and eventually a common currency in the long run. They argue that East Asian countries would therefore have a better chance of defending themselves against crisis by focusing attention on crucial areas of structural reform and trade policy rather than wasting time and energy on a premature idea such as an East Asian EMS. In this regard, Bayoumi et al. are more constructive in that they suggest a number of objectives

that must be achieved during the transition period such as those emphasized by the Maastricht Treaty.

Few East Asian policymakers could be naive enough to believe that they would be able to work out an agreement on creating an East Asian monetary fund or a common currency area in the near future. At best monetary unification is a long-term objective, and the ASEAN+3 have just taken a first step toward regional integration in financial markets. However, East Asia enjoys the latecomer's advantage in promoting financial and monetary integration as it can learn from the European experience. In the end, the Western countries will have to decide whether the regional financial arrangements in East Asia will contribute to global stability and welfare. And the European experience suggests that they are likely to do so. That is, it would be in the U.S. and European interest to support the expansion and consolidation of the CMI insofar as financial integration in East Asia supports an orderly globalization of the world economy.

## **7. Recent Developments in the Chiang Mai Initiative (CMI)**

### ***7.1. Structure of the CMI***

The CMI has two components: an expanded ASEAN swap arrangement; and a network of bilateral swap and repurchase arrangements among ASEAN+3.

In 1977, the five ASEAN countries—Indonesia, Malaysia, Philippines, Singapore, and Thailand—first agreed to establish an ASEAN swap arrangement (ASA), which was a short-term liquidity support facility for the participating countries suffering balance of payment difficulties. In May 2000, the ASA was expanded to include the five new ASEAN member countries under the CMI and the total amount of the facility was raised to US\$ 1 billion from the initial amount of US\$ 200 million.

The currencies available under the ASA are the U.S. dollar, yen, and euro. The euro, yen and Euro LIBOR interest rates are used as the base rate for swap transactions. Each member is allowed to draw from the facility a maximum of twice its committed amount for a period not exceeding six months, subject to an extension for another period not exceeding six months.

The system of bilateral swap arrangement (BSA) the ASEAN+3 agreed to is a short-term facility for liquidity assistance in the form of swaps of U.S. dollars with the domestic currencies of the thirteen participating countries. The maximum amount of drawing under each of the BSAs is to be determined by bilateral negotiations. However, it is expected that disbursements to a member in need of liquidity assistance will be made in a concerted manner through consultation among the swap providing countries. One of these swap-providing countries will then serve as the coordinator for the consulting process. The BSA agreement allows an automatic disbursement of up to 10 percent of the maximum amount of drawing. However, countries drawing from the facility more than the 10 percent are required to accept an IMF program for macroeconomic and structural adjustments. In this sense, the BSA is complementary to the IMF's financial assistance.

A number of the participating countries though have expressed their reservation on the linkage of the BSA with the IMF conditionality and have proposed to increase gradually the 10 percent automatic drawing and to abolish the IMF linkage after a period of transition. For instance, Malaysia advocates complete independence of

the CMI from the IMF. Severance of the IMF linkage requires creation of a regional surveillance mechanism for the CMI. At the Fifth ASEAN Finance Ministers' meeting in April 2001 in Kuala Lumpur, however, there was consensus that the BSA should remain complementary and supplementary to IMF facilities until a regional surveillance system is brought into existence. The ASEAN ministers also agreed that "the terms and modalities of the BSA should take into account the different economic fundamentals, specific circumstances, and financing needs of individual countries". This agreement implies that the contracting parties of the BSA could deviate from the basic framework on setting terms and conditions of the swap agreements.

Participating countries are able to draw from the BSA for a period of 90 days. The first drawing may be renewed seven times. The interest rate applicable to the drawing is the LIBOR plus a premium of 150 basis points for the first drawing and first renewal drawing. Thereafter, the premium is increased by an additional 50 basis point for every two renewals, but not exceeding 300 basis points.

The Repo (repurchase) agreement is also established to provide short-term liquidity to a participating member through the sale and buyback of appropriate securities. Basic features of Repo agreements are to be finalized through bilateral negotiations between the contracting parties. Securities of the Repo agreement are U.S. Treasury notes or bills with the remaining life of not more than 5 years and government securities of the counterpart country of the Repo.

The period of the Repo agreement is one week, but could be extended on the termination value date by agreement between the contracting parties. The minimum amount for each Repo transaction requested is five percent of the total amount of the Repo agreement. In each Repo transaction, the buyer will be given a margin of 102 percent for U.S. Treasury notes or bills and 105 percent for government securities of the counterpart country.

## ***7.2. Negotiations for the BSAs and Surveillance System***

### **Bilateral Negotiations**

Since the ASEAN+3 summit meeting in November 2000, Japan, PRC, and Korea have been negotiating BSAs with each other and with the ASEAN. Japan has been most active: it has concluded five agreements with PRC, Korea, Malaysia, the Philippines and Thailand, and is negotiating two more agreements with Singapore and Indonesia. Korea also concluded two agreements with PRC and Thailand in addition to the Japan-Korea BSA. Korea is also expected to conclude BSA negotiations with Malaysia and the Philippines (see Table 4).

From the beginning, Singapore and Brunei Darussalam have shown little enthusiasm for the CMI, largely because they believe the BSAs with their neighboring countries will be one-way arrangements in which they will be asked to provide a large amount of liquidity in case of a crisis affecting the ASEAN region. However, Japan has made progress in bringing Singapore to the negotiating table by proposing a BSA that uses local currencies rather than the U.S. dollar. In fact, Japan has concluded a similar local-currency BSA with PRC.

**Table 4. Progress in BSA Negotiations**

(As of June, 2002)

<b>BSA</b>	<b>Currencies</b>	<b>Conclusion Date</b>	<b>Amount</b>
Japan-Korea	USD/Won	July 4, 2001	US\$ 7 billion (a)
Japan-Thailand	USD/Baht	July 30, 2001	US\$ 3 billion
Japan-Philippines	USD/Peso	August 27, 2001	US\$ 3 billion
Japan-Malaysia	USD/Ringgit	October 5, 2001	US\$ 3.5 billion (a)
PRC-Thailand	USD/Baht	December 6, 2001	US\$ 2 billion
Japan-PRC	Yen/Renminbi	March 28, 2002	US\$ 3 billion equivalent
PRC-Korea	Won/Renminbi	June 24, 2002	US\$ 2 billion
Korea-Thailand	USD/Baht	June 25, 2002	US\$ 1 billion
Korea-Malaysia	Under negotiation		
Korea-Philippines	Under negotiation		
Japan-Singapore	Under negotiation		
Japan-Indonesia	Under negotiation		
PRC-Malaysia	To be negotiated in the near future		
PRC-Philippines	To be negotiated in the near future		

Note: (a) The US dollar amounts include the amounts committed under the New Miyazawa Initiative, US\$5 billion for Korea and US\$2.5 billion for Malaysia.

Indonesia has not shown any strong interest in negotiating BSAs with other participating countries because of its preoccupation with domestic economic issues and the need to manage its huge foreign debts, not to mention escalating political instability. Recently, Indonesia has indicated its intention to negotiate a BSA with Japan, though it does not appear to place high priority on entering into additional BSAs with other members of the CMI.

At present, the total amount of BSAs covering all 13 countries is estimated to be around US\$20 billion. The maximum amount of money any individual country can draw varies a great deal. In the case of Thailand, the maximum is about US\$ 6 to 7 billion, 10 percent of which can be drawn automatically.

Given such a relatively small amount of liquidity available through the CMI, doubts have been raised as to whether the BSA system could serve as a credible and effective system of defense against speculative attacks in the future. Participants of international financial markets are not likely to be impressed with the amount of liquidity available: they could ignore the CMI, unless the ASEAN+3 are prepared to increase the number of BSAs and expand the swap amount of each BSA.

### **Monitoring and Surveillance**

From the inception of the CMI, some of the member countries have opposed the idea of linking the CMI with the IMF program. Other members, in particular Japan and PRC, have argued for the importance of forging a cooperative relation with the IMF at an early stage of the CMI development to make it more credible. They have succeeded in persuading Malaysia and other opposing members to accept the linkage of the BSAs



with the IMF conditionality as a temporary arrangement until a formal surveillance mechanism is put in place. Malaysia agreed to the IMF linkage with the condition of establishing a study group to examine the types of monitoring and surveillance system the CMI would require to function as an independent regional financial arrangement.

Most participating countries agree in principle that the CMI needs to be supported by a surveillance system that monitors economic developments in the region, serves as an institutional framework for policy dialogues and coordination among the members, and imposes structural and policy reform on the countries drawing from the BSAs. The ASEAN+3 finance ministers agreed to organize a study group to produce a blue print for an effective mechanism of policy dialogues and economic reviews for the CMI operations at the ADB Annual Meeting in Honolulu on May 9, 2001. Japan and Malaysia were chosen to co-chair the group. The study group met in Kuala Lumpur on November 22, 2001 to discuss the report on possible modalities of surveillance prepared by Bank Negara Malaysia and Japan's Ministry of Finance. However, the member countries could not reach an agreement on the surveillance issues except for institutionalising the ASEAN+3 meetings of deputies for informal policy reviews and dialogues.

## **8. Development of a Regional Financial Arrangement beyond the CMI:**

### **A Proposal** (with Yunjong Wang\*)

#### **8.1. Overview**

More than two and a half years have passed since the inception of the CMI in May 2000. Much progress has been made in realizing the original plan of the CMI by increasing the number of bilateral swaps and establishing regular meetings of monetary and financial officials of the thirteen countries to exchange information and review policies among themselves. Nevertheless, the current structure of and liquidity support available through the CMI have not been accepted as an effective region-wide defense against future crises. Indeed, the CMI has a long way to go before developing into a credible and effective defense mechanism in the eyes of participants in international financial markets. To make the system more reliable as a preventive mechanism it is desirable to increase the number of BSAs and the contract amount of each BSA to a level that is realistic to ward off future speculative attacks. The system of the BSA would be also more effective, if they can be activated simultaneously and automatically if a member country comes under attack.

The expansion of the available liquidity and collective activation would require a more formal organizational structure that includes an independent monitoring and surveillance mechanism. For the purpose of this section, we present a blueprint for developing such a structure with the objective of creating a full-fledged regional monetary fund in East Asia in the long-run. As the title of this study indicates, the proposal made by this study goes beyond the agreed basic framework of the CMI. In order to propose an operational framework for consolidating the existing and proposed bilateral swap arrangements, this study will specifically focus on the issues of how the network of bilateral swap arrangements (NBSA) will be more efficiently and effectively

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managed to achieve the goal of the CMI. Attention will be paid to rationale and need for a decision-making body and extended regional surveillance for better management of the NBSA.

In formulating the NBSA, this study proposes an evolutionary process of financial integration and building requisite institutions at different stages of development. During the first stage, this study recommends that the ASEAN+3 increase the number of bilateral swaps and the amount of each swap to a level that could make the system a credible defense mechanism. The effectiveness of the system would be bolstered, if these swaps can be activated simultaneously in case a member country runs into financial difficulties. Along with these structural changes, an independent system of monitoring and surveillance should be established as an integral part of the NBSA to support its efficient operations. At the second stage of the evolutionary process, a regional borrowing arrangement or a regional scheme of reserve pooling could be established as a forerunner of a possible regional monetary fund. Once the institutionalization and successful management of the borrowing arrangement is completed, then the last stage of the proposed institutionalization of regional financial integration would be devoted to the creation of an AMF in East Asia.

## ***8.2. An Overall Framework for the Network of Bilateral Swap Arrangements***

As noted earlier, the CMI has two components: the ASEAN arrangement (ASA) and BSAs involving the ASEAN+3. This section discusses enlargement and consolidation of these two components with a view for an assumed full-fledged regional monetary fund in the future.

### **ASEAN Swap Arrangement**

The first component of the CMI is to expand the existing ASEAN Swap Arrangement. The five original ASEAN countries, in pursuit of their common objective to promote financial cooperation, established the ASA in August 1977 for a period of one year. Since then, the ASA has been renewed several times in accordance with Article X laid down in the Memorandum of Understanding (MOU) of the ASA. The latest renewal, for an additional five years, was made in Kuala Lumpur on January 27, 1999. However, the ASA has been a very primitive financial arrangement, mainly due to the loose financial cooperation among ASEAN states. Furthermore, given that no meaningful regional lender of last resort exists, the total outstanding amount of U.S. dollars provided by each participant was limited to US\$40 million before the crisis. This amount, however, was far from enough to fend off the volatile capital reversal that occurred during the Asian financial turmoil.

The level of utilization was very low before the crisis: from year 1979 to 1992 only four ASEAN countries activated this facility, viz., 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 ASA was too small in terms of liquidity support to be utilized. Instead, seriously battered economies with the exception of Malaysia had no choice but to seek financial assistance from the IMF.

The ASA has been enlarged to US\$1 billion, effective as of November 17, 2000, and has as its participants all the ASEAN member countries. However, the total

outstanding amount currently available still falls short of the necessary amount in view of the liquidity support needed to have managed the 1997-98 crisis. A major drawback of the existing ASA stems from the “equal partnership” condition, which stipulates that the amount of swap to be granted to a swap-requesting member country shall be provided by the other member countries in equal shares. In addition, a participant may refrain from providing committed lending by merely informing its decision 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 the case where 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. Looking into the future, the ASA would not help much to minimize the disruption of financial markets as long as a massive scale of liquidity provisions are required to finance the external imbalance caused by the liquidity run.

As long as the ASA cannot provide a meaningful amount of credit to an ASEAN member in financial distress, the ASEAN would benefit a great deal by linking the ASA to global liquidity facilities provided by the IMF or other regional liquidity facilities. For a possible linkage or merger, equitable financial obligations regardless of members’ economic strength and voluntary participation where members are allowed to opt out from the contribution commitment at their own discretion may have to be revised in order to enhance its credibility. At present, the future expansion of the ASA will depend on a number of developments taking place in East Asia which include the discussion of converting ASEAN into a possible monetary union, negotiation of free trade agreements with PRC, Japan, and other countries, and the enlargement of the CMI. It is our view that to the extent that the ultimate objective of the CMI is to promote economic integration, both in trade and finance, the ASA should be consolidated into the CMI at a certain stage of its development.

### **Creating a Network of Bilateral Swap Arrangements (NBSA)**

The Bilateral Swap Arrangements under the CMI provided a constructive starting point for developing common principles and standardized modality for bilateral swaps between pairs of ASEAN+3 countries. Building on the main principles of the BSA under the CMI, this study considers a structured NBSA beyond the CMI. By the “structured network,” this study implies there exists much room for improving the current discussions of the CMI by encompassing structured elements into the current version of the CMI, if agreed by the ASEAN+3 countries. The objective of the structured network called NBSA is to consolidate individual bilateral swap contracts into a formal multilateral network of swaps in which each participating country chooses feasible methods among the following options and negotiates specific conditions of the swap arrangements bilaterally with other participating countries.

More specifically, the NBSA shall be designed to:

- develop a mechanism for joint activation (under a multilateral framework) and quick disbursement of swaps;
- establish a coordinating and decision-making process for collective activation and disbursement; and
- create an East Asian system of monitoring and surveillance to support the swap operations and to serve as the NBSA secretariat.

Within the framework of a structured network, overall and individual swap sizes, currencies involved, maturity, interest rates, collateral, and other terms and conditions of the NBSA are to be specified.

### **8.3. *The Structure of the Network***

Participants include three different groups of the Bilateral Swap Arrangements (BSA) by contracting parties:

- BSA between three Northeast Asian countries (PRC, Japan, and Korea)
- BSA between the ASEAN members; and
- BSA between three Northeast Asian countries on one contracting party and the ASEAN members on the other.

The network consists of one-way and two-way swap arrangements:

- One-way swaps where one contracting party is a swap-providing country and the other is a swap-requesting country; and
- Two-way swap contracting parties have both a swap-providing and swap-requesting status.

Each swap arrangement is divided into basically two tranches (or the second tranche could also be disbursed in multiple stages):

- A standing tranche, from which swap-requesting countries can draw automatically as the first line of defense: it is comparable to the reserve tranche *a la* the IMF; and
- A conditional tranche, which requires approval by the decision-making body of the NBSA and serves as the second line of defense: it is comparable to the upper credit tranche *a la* the IMF.

This structure of the NBSA has several merits in both conceptual and operational sense. First, altogether 78 BSAs could be formed among the ASEAN+3 member countries if each member country would seek the BSAs with 12 other members. If bilateral swaps among ASEAN members do not materialize, the CMI should provide for 33 BSAs to be negotiated: 30 agreements between three Northeast Asian countries and the ten ASEAN members in addition to three agreements between the three Northeast Asian countries.

The NBSA structure incorporates a number of features designed to make a multilateral arrangement. First, contracting parties involved would voluntarily determine the placement of the amount in each swap arrangement. If the ASEAN members on the one contracting party and the three Northeast Asian countries on the other party are conceptually treated as a single contracting party, however, the total amount which each country is actually committed to swap would be more easily calculable. Subsequently, the overall size of the credit available under the NBSA could be estimated. Based on the total credit outstanding available, the credit allocation among the participants would be determined by considering various economic conditions such

as gross domestic product, foreign reserves, and so on. For example, one of the ASEAN member countries should decide how much she would commit herself to the BSA with three Northeast Asian countries and with other ASEAN members as well.

Second, this structure of the NBSA considers the actual financing capacity of each participating country. The BSA is, by definition, reciprocal in that contracting parties basically have both swap-providing and swap-requesting status. In practice, however, the swap positions would not be symmetric. This conceptual demarcation would be useful in estimating the actual positions of lending and borrowing, not nominal ones.

Third, in addition to the classification of a one-way vis-à-vis two-way swap arrangement, the classification of a standing vis-à-vis conditional tranche in each swap arrangement is introduced to maintain a balance between automaticity and conditionality. Quick disbursement from a standing tranche is comparable to the automatic drawing from the reserve tranche *a la* the IMF, which does not require approval by the IMF Executive Board. The amount drawn from the standing tranche is equivalent to each participant's contribution made in advance to the operating agency.

In designing the NBSA, it is important to examine the efficacy of the conceptual categorization of different types of the BSAs. Each BSA could be formed on the voluntary and uprightly bilateral basis; a simpler structure of the BSA would be more efficient and effective. However, the NBSA under the CMI will be a first step toward enhanced integrated and structured financial cooperation in East Asia. Further deliberation on other cooperative initiatives would be expected to emerge sooner or later. At the same time, the European experience of monetary cooperation would be a point of reference for policy-makers and economic leaders in East Asia. For these reasons, a more concerted and structured framework would pave the way toward interlocking member countries into various multilateral arrangements.

Given these structures of the NBSA, a decision-making body and a monitoring and surveillance unit to be possibly established should constitute an integral part of the network. These institutional settings would not be costly and bureaucratic. Unlike the proposal for a possible Asian Monetary Fund (AMF), the institutional requirements would be minimal.

The NBSA can be jointly activated with the ASA if an ASEAN member requests such action. In other words, the NBSA shall supplement the ASA. At the same time, the NBSA could be supplementary to the IMF facilities if the requesting member seeks IMF assistance. In this sense, the NBSA initiative would be a complement and supplement to the IMF by strengthening the financial capacity of the international and regional community.

The existing Repo agreements could be operated on a commercial basis without any linkage to the NBSA and ASA.

#### **8.4. Phase-in Drawings: Two Tranche Swaps**

At present, swap drawings under the CMI consist of an initial drawing (standing tranche) which is automatically allowed up to 10% of the committed amount and subsequent drawings (conditional tranches), including the renewal of the initial drawing, which is subject to the IMF conditionality.

The structure of the standing arrangements upon which the initial drawing shall be activated is as follows. This structure is similar to that of the CMI. It is, however, argued here that the automatic drawing should be increased up to 30 percent of the committed amount within the next five years during which an independent surveillance unit for the NBSA is expected to be established.

For the one-way swap, swap-providing countries shall deposit 10% of their total NBSA commitments (swap-providing amount) in U.S. dollars at an NBSA operating agency. Other parties contracting for one-way swaps shall deposit 10% of the committed amount (swap-requesting amount) in their own currencies as collateral at the operating agency. The operating agency will pay interest (minus operation fees) on deposits made by one-way swap providing countries, where local currencies deposited as collateral will not receive any interest.<sup>9</sup>

For the two-way swap, each participating country shall deposit 5% of its total NBSA commitment at the operating agency in U.S. dollars since the country has both a swap-providing and swap-requesting status. On the other hand, each participating country shall deposit 10% of the committed amount (swap-requesting amount) in its own currency at the operating agency. The agency will pay interest (minus operation fees) to the countries depositing U.S. dollars, while local currencies deposited as collateral will not receive any interest.

The purpose of creating an operational fund in terms of U.S. dollars and local currency deposits are two-fold. First, at an early stage of its development, pre-arranged swaps as a portion of the total NBSA commitment will lay a strong foundation for enhancing credibility and effectiveness of the NBSA. This interlocking commitment will also contribute to ensure joint activation and quick disbursement of the initial tranche. Although this study proposes 10 percent of the total NBSA commitment as a predetermined ceiling for the standing arrangements, the proportion of standing vis-à-vis conditional arrangements in the total NBSA commitment could be further increased to 20 percent within two years of inception and to 30 percent eventually.

At the initial stage of NBSA operations one of the existing multilateral institutions in East Asia could serve as the operating agency. To save the operational costs of managing the fund, a swap-providing country could entrust the organization with highly liquid and convertible financial assets in return for U.S. dollars. Any interest earnings from those financial assets in the custody of depository institutions will accrue to the swap-providing country. However, the agreement must include a provision that this institution has authorization to dispose those financial assets when the need for activation arises. In due course, management of the fund will be transferred to the NBSA as it completes its organizational structure.

Subsequent drawings, including the renewal of the initial drawing, which exceed the predetermined ceiling, shall be approved by the decision-making body, delinking the NBSA from the IMF. This is assuming that the participating countries succeed in creating an efficient and credible monitoring and surveillance mechanism.

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<sup>9</sup> By the definition of swap arrangements, currencies involved would be mutually exchanged. However, local currencies exchanged in return for U.S. dollars are inconvertible in most cases and would only play a limited role as good collateral in the event of default, although the operating agency adjusts the deposit value of local currencies periodically.

Conditional swaps subject to approval do not require any precedent currency deposit at the operating agency. However, an appropriate design of policy conditionality can and perhaps should be attached to the second tranche in cooperation with the IMF. The conditional tranche could be jointly activated with the IMF facilities if the requesting member seeks IMF assistance. Constant monitoring and surveillance of the participating members by the NBSA are required to manage bilateral swaps more effectively and efficiently.

For one-way swap arrangements, the swap-providing country is entitled to exercise its veto power if the swap-requesting country refuses policy conditionality attached to the drawing from the second tranche. The swap-requesting country could additionally provide U.S. Treasury Bills as collateral instead of accepting the policy conditionality.

### ***8.5. Drawing Amount and Allocation of Swaps***

Before the specific size of the ASA and actual placement of each BSA are to be determined, the overall size of the swap borrowing available under the NBSA should be sufficient to meet potential needs. In particular, it may be noted that two-way swap arrangements alone will limit the overall amount of financing available. A large amount of one-way swap arrangements will be critical to the effectiveness of the NBSA. In this regard, one-way swap-providing countries will serve as regional quasi lenders of last resort (LOLR). Likewise, in the last episodes of Asian financial crisis, Japan was committed to provide a second line of defense with other industrial countries to crisis-affected countries: US\$ 4 billion to Thailand, US\$ 5 billion to Indonesia, and US\$10 billion to Korea.

For non-IMF Article VIII countries such as Cambodia, Laos PDR, Myanmar, and Viet Nam, the BSA could be replaced by the ODA. What these countries more seriously need will be long-term development assistance rather than any short-term measures to manage the liquidity crisis. When they become more deeply integrated into international capital markets, the source of financing will be more diversified, and thus the role of private capital will be more important. Consequently, they must also seek such preventive measures as the ASA and the BSA to ward off volatile capital movement.

Given the total credit outstanding, sufficient to meet potential needs, the actual placement of the NBSA among the participants would be determined by considering various economic criteria. Some elaborate formula would be needed to calculate swap commitments of participating countries. By using various country data profiles such as the external financing requirement (external debt profile), GDP, and foreign reserves, an elaborate scheme could be developed. Since those data profiles are also changing, however, such a scheme could mostly serve as a benchmark.

During the 1997-98 crisis, international financial institutions including the IMF, World Bank, and ADB along with Japan, and other countries were to provide a total of US\$118.3 billion to Indonesia, Korea, and Thailand to restore financial stability in these economics. This committed financial assistance amounted to about 14 percent

of their combined GDP.<sup>10</sup> Now that many preventive measures have been put in place, it is highly unlikely that these countries will ever suffer such a magnitude in terms of loss of output due to a crisis. Therefore, the crisis experience could serve as a guide for estimating the total size of liquidity support available under the NBSA. Assuming that neither PRC nor Japan will borrow from the NBSA, this study proposes that the ASEAN+3 decide to increase the total availability of liquidity up to 5-7 percent of the combined GDP of the remaining eleven countries within a predetermined period of time, say within five years.

## **8.6. Terms and Conditions for the NBSA**

### **Currencies**

As the 1997-98 Asian financial crisis has shown, liquidity assistance provided by the international financial institutions (IFIs) was made in U.S. dollars. Unlike liquidity facilities under the European Monetary System (EMS), regional currencies, including the Japanese yen, are at present not widely circulated in East Asia. Internationalization of the Japanese yen or other regional currencies would be another exploratory subject for promoting monetary cooperation in East Asia.

Given these practical constraints, it would be more realistic that the BSA has a form of swap transactions between U.S. dollars and local currency. A swap-providing country could provide U.S. dollars in exchange for local currency. However, in principle, a swap-providing country can offer any equivalent amount denominated in the currency the swap-requesting country requests. The swap-requesting country in need of foreign exchange liquidity, purchases U.S. dollars from the counter-party country with a contract of future selling, in exchange for selling its local currency with a contract of future repurchase.

### **Interest Rates**

When a repurchase in any swap transaction is to be made, the swap-requesting country shall repay to the counter-party the original amount and interest. For the standing tranche, the interest rate should be lower than the IMF Supplemental Reserve Facility (SRF) rate. If a swap-requesting country is eligible for the IMF Contingent Credit Lines, a new IMF CCL rate could be applicable.<sup>11</sup> If the swap-requesting country is not eligible for the IMF CCL, LIBOR (currently the one-year U.S. dollar rate is around 6.9 percent) plus 100 basis points will be charged on the swap borrower. Therefore, countries eligible for the CCL could be treated more favorably.

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<sup>10</sup> The actual assistance those three countries have received from various sources amounted to US\$58.4 billion, which is equivalent to 7 percent of their combined dollar GDP.

<sup>11</sup> The IMF Board agreed to reduce the rate of charge and the commitment fee on CCL resources. The initial surcharge (which is currently the same as that on the SRF) will be reduced from 300 basis points to 150 basis points, and the surcharge will then rise with time at the same rate as the surcharge under the SRF, to a ceiling of 350 basis points. Given that the basic rate of charge, which is set as a proportion of the weekly SDR interest rate, is currently around 4.7 percent, the initial CCL rate will be around 6.2 percent.



For the conditional tranche, the interest rate should be in line with the IMF lending rates. If an economic program for financial assistance agreed between the IMF and the swap-requesting country is already in existence, or the swap-requesting country intends to request IMF assistance, any applicable IMF lending rate will be charged. If an arrangement for the CCL between the IMF and the swap-requesting country is already in existence, and the swap-requesting country has made a purchase thereunder or the swap-requesting country is eligible for the CCL and prepares for requesting the CCL, the CCL rate will be charged. On the other hand, if a swap-requesting country does not seek IMF assistance, the interest rate shall be LIBOR plus 150-200 basis points.<sup>12</sup>

### **Maturity**

Each drawing or renewal of drawing by the swap-requesting country under the NBSA shall mature ninety (90) days after the day when such drawing or renewal of drawing takes place. If the swap drawing country wants to renew its initial drawing from the standing tranche, 90 days can be further extended if approved by the decision-making body. However, renewal of the initial drawing will be treated as a drawing from the conditional tranche. If the swap drawing country does not seek IMF assistance, but requests renewal of the initial drawing, the interest rate shall be LIBOR plus 150 basis points for the first renewal, 175 basis points for the second renewal, and 200 basis points for the third renewal. No further extension shall be allowed.

For the conditional tranche, the maturity should be in line with the maturity of similar IMF facilities. If the swap drawing country does not seek IMF assistance, but requests drawing from the conditional tranche, each drawing or renewal of drawing by the swap-requesting country shall mature in 90 days. The interest rate shall be LIBOR plus 150 basis points for the first drawing from the conditional tranche, 175 basis points for the first renewal, and 200 basis points for the second renewal. No further renewal shall be allowed.

### **Collateral**

Swap-requesting countries provide collateral in its own currencies. Maintaining the value of good collateral is critical in this regional lender of last resort.<sup>13</sup> For both the standing and conditional tranche, the operating agency should adjust the deposit value of local currencies periodically (annually or quarterly).

### **Opt-out Clause**

Since the crisis can be contagious to neighboring countries, some of the member countries may decide to opt-out from the NBSA. The decision to opt-out is permissible under the jurisdiction of the decision-making body. It should be noted that the NBSA

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<sup>12</sup> LIBOR plus 150-200 basis points would be most likely higher than the IMF lending rates. In this sense, the interest rate will not be concessional. Nevertheless, some participating countries might enjoy a lower spread than those of their sovereign bonds in the international market during the normal period. To prevent moral hazard on the part of borrowers and habitual use of the NBSA, a higher spread will be charged on renewal of drawing.

<sup>13</sup> The principles governing its lending activities should be reconciled with the classic Bagehot rules of (i) lending freely to a solvent borrower; (ii) against good collateral; and (iii) at a penalty rate.

needs to have a balance between flexibility and commitment. If the decision to opt-out is completely discretionary, a serious coordination (collective action) problem may arise weakening the credibility and effectiveness of the NBSA. If the opt-out clause is to be included, conditions for non-participation should be specified. A regular monitoring and surveillance process to be created should be able to provide promptly relevant information for assessing the economic conditions of the country exercising the opt-out clause.

The economic conditions of the country exercising the opt-out clause could be based on quantitative measures such as the degree of nominal exchange rate depreciation, the depletion of foreign reserves, and the instability of domestic financial markets. However, the NBSA should base its decision on qualitative assessment that would reflect the true state of the member countries' vulnerability to the crisis.

### ***8.7. Functions of the Decision-Making Body***

A ministerial level decision-making body is required to ensure and coordinate joint activation. Simultaneous activation will be a key ingredient for effective containment of the crisis. If a group of potential swap-providing countries are hesitant and postpone the activation immediately, the NBSA would not be a credible instrument to be utilized. Thus, there must be an enforcement mechanism to commit participating countries to this contractual arrangement. The decision-making body shall coordinate joint activation and specify the conditions for exercising the opt-out clause.

Members of the decision-making body are three Northeast Asian countries (PRC, Japan, and Korea) plus three rotating members from the ASEAN. The IMF and other international financial institutions may be invited as observers for consultation. The decision-making process should be consensus-based, but unanimous approval is not required.

Functions of the decision-making body are:

- assessing and supervising regular monitoring and surveillance activities conducted by the two groups (three countries in the Northeast Asian Group and ten in the ASEAN Group) independently;
- conducting performance evaluation of swap-requesting countries;
- imposing and enforcing conditionalities and covenants specified under the framework of the NBSA;
- identifying the sources of systemic risks and causes of individual crises;
- determining conditions under which swap-providing countries can exercise their opt-out clause;
- providing liaison services for ASEAN+3 countries; and
- coordinating the activities of the NBSA with those of the IMF and other IFIs.

### ***8.8. Relationship with the IMF***

If this decision-making body and process is put in place, the proposed NBSA could be independent from the IMF or provide parallel lending with the IMF. Except for the standing arrangements, other liquidity assistance could be arranged in cooperation with the IMF. In particular, conditional arrangements could be supplementary to the IMF facilities if the swap-requesting country seeks IMF assistance. The IMF program could

play a role as a credible guarantor to enhance the swap-requesting country's commitment to policy reform. The NBSA initiative would be a complement and supplement to the IMF by strengthening the financing capacity of the international and regional community. If the NBSA is somehow jointly activated with IMF facilities, however, there must be some potential conflicts between the competing conditionalities of the NBSA and the IMF. Basically, the IMF conditionality could be used but should probably be coordinated by the NBSA secretariat depending on the nature of crises.

### ***8.9. Establishment of the Asian Arrangements to Borrow***

The structure of the NBSA proposed in this study will provide a more effective defense mechanism for preventing future crises beyond the current setup of the CMI. However, the NBSA has many limitations as a regional financial mechanism. Given the opt-out option, some countries may not honor their swap commitments depending upon the economic circumstances they are in and the enforcement mechanism may not work. If these risks are present, then the joint activation of the BSAs, which is the key feature of the NBSA, may not be a reliable system. Even if the system can be made credible, activating simultaneously large members of BSAs would be costly and time consuming to the extent that individual contracts will have to be negotiated bilaterally if swap requesting countries draw more than the 10 percent automatic drawing limit. In order to reduce the cost of managing the NBSA and to make the commitment more durable, the ASEAN+3 may consider restructuring the NBSA in a reserve pooling system, such as the Asian Arrangements to Borrow proposed in this section. This transition could be made to offer the CMI countries an opportunity to manage the NBSA successfully and build trust in coordinating policies.

The NBSA and the ASA could be merged into the Asian Arrangements to Borrow (hereafter AAB). The AAB would not require the raising of quota subscriptions as they are based on the credit arrangements among the members as in the case of the ASA. While the swap size of each BSA is determined through bilateral negotiations, credit commitments to the AAB of the members would be based on a set of allocation criteria. It would be useful to have a fixed formula for calculating the credit commitments of the participating countries. By using a profile of country data including external financing requirements, the size of GDP, and the amount of foreign exchange reserves, an elaborate allocative scheme could be developed. However, since the data profiles are also changing, such a scheme should mostly serve as a benchmark.

The actual amount of borrowing by the three IMF program countries (Indonesia, Korea and Thailand during the East Asian financial crisis) from international financial institutions including the IMF, World Bank, and ADB could serve as a useful benchmark for estimating a potential need for financial assistance under the AAB. In terms of GDP at the end of 1997, Indonesia, Korea and Thailand were assured of amounts of financial support equivalent to 16.7, 11.5 and 11.4 percent of their GDPs respectively from various sources including the second line of defense. However, actual disbursements for the three countries amounted to 5.6, 6.75 and 9.3 of their GDPs respectively. On average, liquidity assistance in the range of the 7 percent of GDP was required to resolve an individual country crisis during the 1997-98 period.

Under the assumption that PRC and Japan would not be potential borrowers from the AAB, the total amount required for financial assistance in a very unrealistic

case in which all eleven countries (ASEAN plus Korea) come under a speculative attack would be US\$72 billion (7 percent of nominal GDP at the end of 2000). This amount is tantamount to 9 percent of total foreign reserves of the ASEAN+3 countries (US\$ 794.4 billion at the end of 2000). However, it is unlikely that all eleven countries would face a liquidity problem at the same time. This means that in general, a smaller amount of financial resources would need to be mobilized under the proposed AAB.

If the amount of credit commitment were set to be too large, however, some countries would not be willing to participate in the AAB. Because the total amount of borrowing from the AAB by an individual participant should be proportional to its own credit commitment, a large credit assignment to each participant could run the risk of defaulting the repayment in case of a crisis. This risk would then threaten stability of the system. On the other hand, the AAB would not be regarded a credible credit facility, if the total amount of liquidity available is not perceived to be enough to prevent currency speculation. As in the IMF, which is in essence like a credit union, the AAB is expected to be operated in partnership with all its members, based on their shared interests. However, unlike a typical credit union, there is likely to be a clear demarcation between net lenders and net borrowers. Among the members, Japan (or possibly PRC, Korea, and Singapore) would constitute the majority of lenders, whereas other ASEAN countries make up practically all of the borrowers of the AAB. If this demarcation were incorporated, the gearing ratio of the AAB would be even greater than that of an arrangement where the ASA is based on equal partnership.

To address the moral hazard problem, a penalty rate could be charged when borrowing from the AAB facility. If the interest rate is too low with no conditionality attached, borrowers may not have sufficient incentive to strengthen their economic fundamentals to avoid future crises. In general there is danger that the countries eligible for borrowing from the AAB may take excessive risks, knowing that there is a cheap source of credit available. The monitoring and surveillance activities could mitigate the moral hazard problem to some extent. However, to prevent the abuse of frequent borrowing from the AAB, the decision-making body should be prepared to impose some stringent conditionality after thoroughly reviewing the track records of recent economic and financial sector performances of the borrowing countries.

#### ***8.10. Establishment of a Possible Asian Monetary Fund***

Once the institutionalization and successful management of the AAB is completed, then creation of a possible regional monetary fund such as the Asian Monetary Fund (AMF) could be the final stage of financial integration. By the time the AAB becomes fully operational, the ASEAN+3 would have created a regional financial mechanism similar to that of the IMF, except that it has no clear ownership structure. Assuming the thirteen countries would emulate the IMF system, they could devise an ownership structure based on quota contributions of the participating countries. In fact, management of the AMF would be less costly if the AAB together with quota contributions from the participating countries serves as means of mobilizing funds necessary for the operation of an AMF. If the AAB is to be managed in a manner similar to the IMF's General Arrangements to Borrow (GAB) or New Arrangements to Borrow (NAB), strict conditionality should be imposed on the borrowing country.

The AAB would be technically an agreement between the AMF and its contributing creditors. The AAB is utilized as a credit facility to be activated in an emergency situation, while the AMF should attach the conditionalities similar to those of the IMF to avoid the issue of moral hazard. Without adequate lending discipline in place, the AMF would easily exhaust its resources, as it could be prone to be lax in the supervision of financial assistance.

## **9. Monitoring and Surveillance** (*with Yunjong Wang\**)

### **9.1. Overview**

A regular monitoring and surveillance process is essential if a regional financial arrangement could serve as a defensive mechanism for the prevention of crises. The collected information will help detect and identify the characteristics of the looming crisis at an early stage so that proper and timely remedial action can be taken.

Economic and financial sector monitoring will keep a close watch over: (i) macroeconomic trends and policy changes; (ii) financial market developments including cross-border capital flows; and (iii) institutional and legal changes. This rather broad coverage of economic monitoring will serve the functions of supporting an effective management of the NBSA, promoting orderly economic integration in the region, and facilitating policy consultation and deepening financial cooperation among its members.

This independent monitoring and surveillance unit is also required to develop a surveillance mechanism to enforce: (i) implementation of common standards agreed upon by the members; (ii) policy changes and reforms required of the swap-drawing countries from the NBSA (including policy conditionality attached to the swap borrowing); and (iii) economic policy coordination or consultation agreed upon by the members. A detailed proposal for the institutional structure and functions of a monitoring unit is discussed in section 9.4.

As part of the institutional structure of the CMI, a regional policy dialogue mechanism is being discussed under the ASEAN+3 framework. This section explores the possibility of this mechanism being used to support the operation of the NBSA. Different institutional settings will require different mechanisms for effective monitoring and surveillance. As the scope of financial cooperation increases and economic integration deepens, different mechanisms and institutions for monitoring and surveillance will evolve along with other pillars of regional financial arrangements—liquidity assistance and exchange rate policy coordination.

One of the major implications of the growing interdependence in the world economy through financial integration is that financial instability in any given country is not likely to be isolated. As the East Asian and other historical experiences of crises have shown, financial shocks impinging on a particular country can be transmitted to other countries through various channels of contagion (Classen, Dornbusch, and Park 2000). Thus, cooperative efforts at both regional and global levels are needed to counter the negative spillovers or externalities of contagion.

In particular, regional cooperation has become critical in preventing contagion because financial crises usually have a regional component (Glick and Rose 1999). That

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is, neighboring countries have a strong incentive to engage in mutual surveillance and to extend to one another assistance in the face of potentially contagious threats to stability. If the channels of contagion cannot be blocked off through multilateral cooperation at an early stage of a crisis, neighboring countries may not be able to fend off the crisis even if they hold a large amount of foreign reserves. Hence, neighbors have an interest in helping put out a fire (a financial crisis) before it spreads to them (Ito, Ogawa and Sasaki, 1999).

At the initial stage of the CMI development, the focus of monitoring and surveillance activity will be placed on broadening and intensifying policy dialogues among the participating countries, which together with the ASEAN regular monitoring and surveillance process could lay the groundwork for an efficient system of monitoring and surveillance. The collected information will help detect and identify the characteristics of the looming crisis at an early stage so that proper remedial action can be taken in a timely manner. Furthermore, a joint exercise based on a region-wide early warning system will facilitate closer examination of financial vulnerabilities in the region. In addition, the regional policy dialogue process will contribute to ensuring effective implementation of collective policy targets through peer pressure.

Another focal point of the present surveillance process would be to stabilize and strengthen East Asian financial systems. East Asian financial systems in general suffer from inadequate economic and legal infrastructure, resulting in inefficient allocation of high savings, inordinately large short-term debt markets, and general absence of arm's length transactions. The regional policy dialogue process should therefore pay particular attention to the root problems of East Asia's weak financial systems. Besides strengthening prudential supervision, risk management, and corporate governance, the financial authorities in the region must also actively promote long-term capital markets. This is a case for financial cooperation to deepen and enhance regional financial markets.<sup>14</sup>

Like private bank loans, official financial assistance needs economic surveillance to ensure that assistance is imperative and effectively used. Like the international financial institutions such as the IMF and World Bank, the CMI requires surveillance for its lending to member countries. Economic surveillance is not merely an observation of economic indicators, but also an assessment of macroeconomic, financial, and structural policies of member countries. Only when creditworthiness of borrowers is warranted on the basis of economic surveillance, a group of lenders will be able to make loans. At the same time, regular surveillance would enable quick disbursements in times of crises. If an assessment process for financial assistance were to begin only after a request from a borrower, then disbursement would be prolonged until a final decision could be made.

As a supporting instrument and mechanism for regional financial arrangements, regional monitoring and surveillance will vary, depending upon given policy objectives and the stage of regional financial and monetary integration. When the region has a more integrated institutional form, more comprehensive and binding policy

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<sup>14</sup> Eichengreen (2002) advocates the establishment of an Asian Financial Institute to promote financial cooperation as the appropriate regional response to the 1997-98 Asian crisis. One of the tasks, which should be undertaken by the ASEAN+3 policy dialogue group, is to strengthen its technical expertise in financial sector regulation and financial market development.

coordination will be required. Therefore, the spectrum of the modality of monitoring and surveillance can be wide, ranging from simple information exchange and informal consultation forums to a supranational entity like the EMU. If common policy objectives were more broadly spelled out, an informal exchange of views and non-binding policy recommendations would be sufficient. If more specific policy objectives were pursued such as the convergence criteria in EMU, tighter coordination and penalties on violations would be required. Thus, the process of monitoring and surveillance only serves the function mandated by the specific body involved.

At one end of the spectrum lies policy independence, in which governments simply take the policies of other governments as given, attempting neither to influence them nor be influenced by them. They merely exchange information and consult multilaterally without any formal pressure. Between independence and integration lies coordination, joint problem identification and pursuit of mutually beneficial policy objectives. Informal consultation, peer pressure, and rule-based penalties may be used for encouraging and enforcing certain common policies (UN ESCAP, 2000).

## ***9.2. Policy Dialogue and Peer Pressure***

The necessity and the structure of the surveillance mechanisms depend on the objectives of the group of countries engaged in policy dialogue. Both intensive and extensive cooperation cannot be carried out in a vacuum unless the expected benefits would be great enough to induce the support of all participating countries. Only rhetoric would prevail in a policy dialogue in the absence of concrete action agendas and visible outcomes. For this reason, an effective surveillance mechanism presupposes well-defined objectives and ensures sufficient benefits for cooperation.

The envisaged objectives of the surveillance mechanism in East Asia are:

- sustaining stability of financial markets and
- promoting economic integration in East Asia

At present, the ASEAN+3 group feels it critical to enhance the policy dialogue process among the participating countries as part of the CMI. Better monitoring and surveillance could help in identifying emerging issues and potential problems, and thus enable countries to take prompt corrective action at the national level or jointly at the regional level if necessary. As often observed in the IMF surveillance process, the symptoms of the crises and economic vulnerabilities have not been effectively captured. Regional initiatives could complement the IMF surveillance process in that the economies in the region have become much more interdependent through trade and financial channels over the last decade. Precisely because spillover effects in the region are insidious, there is a pressing need to engage in regional monitoring and surveillance.

Although regional surveillance initiatives provide a potentially meaningful and substantive value-added contribution to existing multilateral and other mechanisms, East Asian countries do not yet have specified common policy objectives. Crisis prevention or financial stability is rather broad and ambiguous as a policy objective for surveillance. A more sophisticated mechanism of surveillance will come along with intensification of monetary and financial cooperation. As the scope of the ASEAN+3 financial cooperation framework is broadened and other initiatives such as exchange rate coordination emerge, the objectives of a concomitant surveillance mechanism will

be more clearly spelled out. In this regard, the policy dialogue process through peer review will be a good starting point, but it will not operate in a vacuum. The next main issue is then to identify the appropriate modalities and to design the necessary instruments, techniques, and institutions for an effective system of monitoring and surveillance.

The ASEAN+3 group recognizes the importance of establishing an effective system of policy dialogue to complement the CMI operations. An enhanced regional policy dialogue process could promote sound macroeconomic policies and prevent any moral hazard problems that might arise in operating the CMI.<sup>15</sup> Despite this recognition, the ASEAN+3 countries have been cautious, and as a result slow in creating a formal mechanism of surveillance. Since the inception of the CMI, informal economic reviews and policy dialogues have taken place at the ASEAN+3 Finance and Central Bank Deputies' Meeting (AFDM+3) and ASEAN+3 Finance Ministers' Meeting (AFMM+3). In order to enhance the existing process of economic reviews and policy dialogues, this group of countries made the decision to establish the Study Group at their meeting in Honolulu on 9 May 2001. The first meeting of the ASEAN+3 Study Group was held in Kuala Lumpur on 22 November 2001. At this meeting, they agreed to a two-phase approach toward enhancing a regional surveillance mechanism.

During the span of phase one, the ASEAN+3 countries are to move one step forward in formalizing the current process. More specifically, they agreed to hold an informal meeting of the AFDM+3 to focus on economic reviews and policy dialogues in September or October, back to back with the IMF/World Bank annual meeting. This meeting will be informal in the sense that participation would be voluntary. However, it is essential that all of the countries involved in the network of the BSAs (namely the CMI countries) assume the responsibility of participating in the informal meeting and circulate a brief report on their recent economic developments. A common template or format for the report will be developed to ensure the comparability of the reports submitted by countries at the meetings. This format will then serve as a guide and each country would be given some flexibility in preparing the report. In addition, the report may include issues of concern to the participating countries such as economic and policy assessments made by the IMF, World Bank, and Asian Development Bank.

At this stage, it is not clear how long it would take to complete the phase one plan. As the informal process of economic review in phase one proves to be successful, the ASEAN+3 countries are expected to move to phase two in which an enhanced regional policy dialogue mechanism will be established. Under phase two, it is proposed that a group or an institution be designated to undertake high quality and in-depth reviews and assessments. As for the possible candidates for this group or institution, the following have been suggested for further discussion:

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<sup>15</sup> Although the CMI does not need to design its own conditionality at this point, it does need to establish its own surveillance mechanism. Under the CMI framework, 10 percent of the swap arrangements can be disbursed without IMF involvement. But because this 10 percent of swap can be disbursed only with the consent of swap-providing countries, the swap-providing countries need to formulate their own assessments about the swap-requesting country. At present, the current practices under the ASEAN+3 process cannot effectively capture emerging problems.



- developing the ASEAN secretariat;
- using an existing institution such as regional multilateral institutions, think-tanks, or universities; and
- operating through a working group

Whichever option is chosen, however, the proposal makes it clear that the group or institution will not be a substitute for the Fund surveillance process and certainly will not be another bureaucracy. Instead, the assessment by a working group or an institution could be used in negotiations for those countries requesting financial assistance from the IMF or under IMF programs by providing information and possible policy recommendations different from those prescribed by the IMF. The ASEAN+3 countries would also use these assessments, but they would only be used for peer review at the AFDM+3 and would not be available for public use. No concrete decision has been made as to the proposal for surveillance in phase one and two except that Japan would prepare a common template for the economic reports in phase one and Malaysia is expected to prepare a report on the specific modalities of phase two.

### ***9.3. Enforcement Mechanisms: Does Peer Pressure Work?***

A loose and informal policy dialogue framework that the ASEAN+3 countries have agreed to do not necessarily require enforcement mechanisms to impose sanctions and fines on countries that do not comply with agreed policy guidelines and recommendations. In keeping with the ASEAN policy of non-interference, the regional surveillance process in East Asia would be built on the basis of consensus and informality. At this stage of development of the CMI the participating countries are not prepared to negotiate regional agreements that include provisions for sanctions and fines for countries that do not adjust their domestic policies as needed for common policy objectives. This unwillingness would then make it difficult for a regional surveillance process to impose politically unpopular policies on the member countries and, hence, may pose a serious moral hazard problem.<sup>16</sup>

Realizing this difficulty of creating a regional monitoring and surveillance unit as part of the CMI, the ASEAN+3 have chosen to rely on the IMF for imposing and enforcing policy conditionalities for those countries drawing from the BSAs. However, in the long run the participating countries are planning to wean themselves from their reliance on the IMF. If the CMI develops into an independent regional financial arrangement from the IMF, the architect of the CMI will have to decide whether the arrangement could be supported by a surveillance mechanism based on peer reviews and pressure instead of formal policy conditionalities and sanctions. In our view, economic policy dialogues and peer monitoring may not provide an institutional

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<sup>16</sup> The IMF will play the role of an insurance firm that has its own monitoring and surveillance device. However, the presence of a regional fund as a cooperative partnership fund could complicate the welfare consequences, depending on whether the regional fund is in a better position to monitor the effort than the IMF. If the regional fund cannot effectively harness its monitoring capabilities to reduce the moral hazard problem, countries may become less cautious; the IMF will tend to provide less insurance. The regional fund may crowd out the more effective insurance provided by the IMF, thus becoming completely dysfunctional. In this regard, peer monitoring is essential for controlling the moral hazards involved in the partnership, and may even improve social welfare by enhancing the countries' risk-sharing capabilities.

framework that can minimize the moral hazard problem. In this regard, it is worthwhile to distinguish conceptually two different types of moral hazards in conjunction with regional financial arrangements and related surveillance processes. One is related to liquidity assistance, while the other is related to collective actions required for common policy objectives. Peer pressure or review may not be effective in rectifying the former and have to be supplemented by the surveillance and its conditionalities attached to the liquidity provision. If the CMI ever develops into more or less an independent financial arrangement from the IMF, then the regional financial arrangement should be designed to discipline the borrowers to adhere to sound macroeconomic and financial policies by imposing conditionalities and pre-qualification.

Conceptually, three types of surveillance processes can be considered. First, a simple peer review process without a specific enforcement mechanism may be found among various policy dialogue groups. For example, the current ASEAN+3 policy dialogue process, the Manila Framework Group (MFG), and Group of Seven (G7) carry out the economic reviews of the countries involved without enforcement mechanisms. Informal peer pressure is the only tactic used to encourage members to voluntarily implement policy recommendations.

Second, some groups may require strict obligations for membership. For instance, the Organisation for Economic Co-operation and Development (OECD) is often referred to as a club of advanced countries satisfying a list of high qualifications for current and capital account liberalization, labor relations, environment standards and many other economic policies. The OECD conducts annual reviews on its members and goes through a transparent process of drafting and approving reports. Annual country reports include policy recommendations or warnings to encourage member countries to correct unsatisfactory policies and practices. However, those policy recommendations are not necessarily compulsory.

Third, the surveillance process may require strict policy conditionalities and sanctions and fines for countries that do not satisfy the obligations. IMF lending in support of adjustment programs is conditional on the country undertaking certain agreed policy measures. Under Economic and Monetary Union (EMU) in Europe, peer pressure is a means to achieve the objective of economic policy coordination among members. However, budgetary policy surveillance according to the Stability and Growth Pact contains the possibility of pecuniary sanctions, which goes beyond other coordination procedures based on peer pressure.

Under what conditions would peer pressure be likely to work? In the absence of an incentive-compatible mechanism, countries may have an incentive to make less effort for achieving collective objectives. Without an institutional setup, mere peer pressure or a peer review process cannot provide an effective incentive to commit member countries to perform the required collective activities for common policy objectives. To ensure that peer pressure is effective as a motivational device, a set of policy objectives should be clearly defined. To prevent free-rider problems, effective monitoring is also essential to identify which parties do not comply with particular policy efforts. However, policy efforts are not always observable so that moral hazard prevails in this kind of uncertainty.

Kandel and Lazear (1992) note the usefulness of classifying peer pressure as either internal or external. Internal pressure exists when an individual gets disutility

from hurting others, even if others cannot identify the offender. External pressure is created when the disutility depends specifically on identification by others. Internal pressure is like guilt, whereas external pressure is like shame. In the context of surveillance, the important issue is observability. A country feels shame when others can observe its actions. Without observability, only guilt can be an effective form of pressure. The surveillance and monitoring process should exert peer pressure to motivate member countries to perform the required activities. Key observable policy parameters (expected policy efforts) should be developed in order to give a clear message to the offenders. Otherwise, some offenders may feel guilty, but not make the maximum effort required for common policy objectives.

Team spirit and partnership should be based on mutual trust and a sense of responsibility. Those psychological components may be more important than institutional settings or rule-based norms. However, both internal and external pressure will fail when there is neither self-imposed guilt nor a feeling of shame. Then, a group of participants should design a credible ‘punishment’ mechanism. That punishment should not be random, but should be deliberately designed specifying under what conditions penalties or sanctions will be imposed. As long as the enforcement mechanism works as a credible threat, the common policy objectives can be achieved through maximum collective efforts.

The surveillance and policy coordination may have a double-decker structure in policy formation and implementation. Under EMU, only specific common policies such as monetary and exchange rate policies are binding at the Community level, while economic policies such as budgetary and structural policies remain under the national sovereignty of member countries. In the European Union, the framework of broad economic policy guidelines (BEPGs) provides a basis for policy coordination. This structured surveillance process has contributed to assessing the consistency of each member country’s economic policies. The ASEAN+3 countries at the current stage do not seem well prepared for establishing a policy coordination mechanism in the surveillance process. In the case of European integration, a more effective and structured surveillance process started only when the European countries sought monetary integration in the 1990s (see Appendix 1). Thus, it will take more time for the ASEAN+3 countries to agree to establish more comprehensive and structured surveillance systems like the EMU.

#### ***9.4. Construction of a Surveillance Mechanism: A Proposal***

The discussion in the preceding subsections points to the need of establishing an independent monitoring and surveillance unit for the purpose of providing prompt and relevant information to the ASEAN+3 group. Its monitoring activities in general cover (i) macroeconomic trends and policy changes in the region, (ii) financial market developments, and (iii) structural and institutional change. This unit is also required to develop a surveillance mechanism to enforce (i) implementation of common standards agreed among the members, (ii) policy changes and reforms required of those countries in need (particularly swap-receiving countries under the CMI framework), and (iii) economic policy coordination agreed among the members. The ASEAN Surveillance Process and the ASEAN+3 Surveillance Process would complement each other. However, both processes either require more structure or need to be integrated into a

unified process. It is also our view that such a unit should evolve over time as the participating countries build trust among themselves and accumulate experience in policy dialogue.

A surveillance mechanism in East Asia could be constructed in the following three phases.

### **Phase I: Building a Regular Policy Dialogue Framework**

Member countries introduce a system for information sharing and enhancing the transparency of domestic economic policies through a peer review process. No independent surveillance unit is required to serve as a secretariat. Existing multilateral and other regional initiatives will be mutually reinforcing the surveillance function, but common policy objectives need not be specified in detail. It would also be desirable to institutionalize the ASEAN+3 meetings for policy review by requiring all of the CMI countries to participate in the informal monitoring process as well as increasing the frequency of informal meetings at the deputy minister level. This policy dialogue also needs to review the IMF Article IV consultation staff reports of all member countries (including self-assessments) and conditionalities of the program countries. Phase I may be tantamount to phase one proposed by the ASEAN+3 Study Group.

The ASEAN Surveillance Process (ASP) is already in place. Since its formal establishment in early 1999, the ASP has been in operation. The ASEAN Finance Ministers have agreed to conduct a peer review twice a year. However, there is no fact-finding mission to member states like the IMF's Article IV consultation mission. Instead, finance and central bank officials who are focal points for the ASP directly provide information on their latest economic and financial situations to the ASEAN Surveillance Coordinating Unit (ASCU). Based on this informal process of information gathering, the ASCU then performs an analysis of the latest economic and financial development in ASEAN while taking into account global development that could have implications on the region's economies. Outcomes of such analysis are summarized and emerging policy issues, including policy recommendations, are highlighted in a report initially prepared by the ASCU. The report, called the ASEAN Surveillance Report, is considered and finalized by the ASEAN Finance and Central Bank Deputies before it is tabled for the discussion of the ASEAN Finance Ministers during their peer review.

Under the ASEAN+3 framework, the ASP could be expanded to involve three Northeast Asian countries. However, it deems more suitable that three Northeast Asian countries establish its own monitoring and surveillance process, so called the Northeast Asian Surveillance System (NASP), independently along with the ASP. At the initial stage of development of the monitoring system, a two-tier independent monitoring and surveillance process would complement each other.

### **Phase II: Introduction of an Integrated Policy Dialogue Mechanism**

During the second phase, the two monitoring systems (ASP and NASP) are to be consolidated into a single unit. In making this unit independent, various options may be considered. One possibility is to utilize existing private multilateral institutions such as the ASEAN secretariat and the ADB Institute. In order to ensure broad participation of the member countries, a network of research institutions, both private and public, could be established, and the ADB Institute could serve as a coordinating agency for this.

This independent surveillance unit is expected to serve as a warehouse of information and a provider of warning signals for both individual countries and the group as a whole. By conducting extensive early warning exercises at the national and regional levels, this unit identifies the problems and prepares independent surveillance reports to the Group. Following the ASEAN tradition of non-interference into domestic policies, the report focuses on the provision of warning signals. The peer review process would result in specific recommendations later, if needed. In preparing for the surveillance report, the unit may need a fact-finding mission like the Fund surveillance. To avoid the duplication of the IMF's Article IV consultation, the unit may participate in the IMF surveillance jointly with the IMF staff. Combined with country reports submitted by all member countries, this unit's surveillance report will be a *Compendium Report* based on its own assessment.

The unit may also conduct preparatory research on future cooperative issues, such as exchange rate policy coordination and financial market integration.

At the second phase of monitoring development, the CMI goes beyond the supplementary role to the IMF and seeks independent conditionality. In case of liquidity assistance, the NBSA decision-making body would find it necessary to impose its own conditionality on a swap-requesting country. The independent surveillance unit is also expected to provide information based on its previous own surveillance activities.

A proper design of conditionality would be a point of debate. It would be useful to distinguish between technical assistance and financial assistance. There is no reason to discourage competition in the market for technical assistance. Governments should be free to choose the source of technical assistance with the best track record. However, if multiple monetary funds were available, East Asian governments would have an incentive to shop around for the most generous assistance and the least onerous conditionality. If the NBSA does not attach the IMF-like conditionality, the international financial community might raise the issue of moral hazard. In this regard, relevant but binding policy recommendations should be imposed on the borrowing countries. Without an appropriate lending discipline in place, the NBSA would likely be dysfunctional due to the lax supervision of financial assistance.

When the NBSA decision-making body comes to design the conditionality attached to conditional swaps, the nature of the crisis should be thoroughly taken into consideration. Martin Feldstein (1998), Jeffrey Sachs (1998), and many other critics of the IMF program argue that what the crisis countries in East Asia needed (except, perhaps, Indonesia) was coordinated action by exposed foreign financial institutions to restructure their short-term debt by lengthening debt maturity and providing additional credits to help meet interest obligations. On the other hand, IMF officials dismiss these critics' arguments as reflecting ignorance of the real nature of the crisis because the IMF believes the collapse was caused by an accumulation of structural weaknesses rather than by short-run macroeconomic imbalances. To be fair to both sides, it is difficult to determine empirically at this stage whether structural weaknesses made a crisis inevitable or whether foreign investors triggered the crisis when they abruptly altered their expectations about the crisis countries' development (Park 2001).

In either or both cases, to reflect the very nature of a capital account crisis,<sup>17</sup> policy conditionality should be differentiated from those conventional current account crises caused by poor macroeconomic fundamentals in conventional terms (Asian Policy Forum, 2000). A new structure of conditionalities, along with a regional surveillance process that monitors financial markets and other indicators, should be designed in such a way to correspond appropriately to new capital account crises. With a crisis deepening every day and threatening the total collapse of the crisis countries, it is worth noting that even an initial modest depreciation of the exchange rate would contribute to resolving a conventional current account crisis supported by restrictive macroeconomic policies. Whereby in other instances such depreciation would aggravate the balance sheets of enterprises and financial institutions by expanding liabilities in local currency. In this regard, in order to manage the current crisis better and prevent future crises, the NBSA decision-making body must design policy conditionality different from the one designed by the IMF in terms of short-and medium-term policy objectives.

The monitoring unit should be able to determine with the aid of quantitative information generated by warning indicator models whether an impending crisis is caused by expectational changes that provoke a sudden reversal of capital inflows or by an emergence of a large current account deficit symptomatic of structural imbalances. In the former case, immediate liquidity assistance should precede any decision to impose policy reform conditionality on the crisis-affected country. Once the speculative attack is fended off and financial stability is restored so that contagion of the attack is prevented, then in post mortem the decision-making body of the NBSA would decide on appropriate policy reform to be imposed on the country which utilized the NBSA facility. As for the latter case of conventional current account crisis, prompt liquidity support may not be as critical as it is in capital account crisis and hence conditionality and liquidity support could be negotiated simultaneously between the borrowing country and the NBSA decision-making body.

### **Phase III. Monetary Integration and Strengthened Surveillance Process**

East Asians presently appear to pursue financial cooperation in the absence of exchange rate coordination. It is not yet clear whether East Asia will emulate the European experience by adopting some form of monetary integration. However, if East Asia starts monetary integration in the future, the regional surveillance mechanism would have to be structured and managed in order to support the coordinated exchange rate mechanism.

#### **10. Exchange Rate Policy in East Asia**

A large number of recent studies have shown that a nominal exchange rate fixed at an untenable rate was one of the major causes of the 1990s financial crises in Mexico, East Asia, and Russia. For a while after the eruption of the East Asian crisis, the flexible exchange system became the accepted norm in the new international financial

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<sup>17</sup> The East Asian crisis can be characterized as a capital account crisis, the origin of which was large inflows of private capital relative to the underlying current account deficit and of a largely short-term nature, followed by a sudden and massive reversal of capital flows (Asian Policy Forum, 2000).

architecture. For some EMEs, currency unions and currency boards were an alternative regime, but mostly under unusual circumstances. With the collapse of Argentina, the viability of currency boards has waned, and, now, there is general consensus that hard pegs would not be sustainable unless they are supported by a national consensus. Since it would be difficult to obtain such a consensus, currency boards are thought to be overly constraining in many EMEs.

The overwhelming support for flexible rates, however, did not last very long. Williamson (2000) and Frankel (1999) argue that intermediate regimes such as the BBC (Basket, Band, and Crawl) system are more likely to be appropriate than the corner solutions for many EMEs. In particular, Williamson has been a staunch supporter of non-floating regimes for EMEs advocating several intermediate systems with soft edges in his recent book. Fischer (2001) holds that developing countries which are not exposed to capital flows could choose from a wide range of intermediate regimes and that flexible exchange rate systems suitable for EMEs could include crawling bands with wide ranges.

Frankel (1999) argues “no single currency regime is right for all countries at all times.” A recent survey of IMF research on exchange rate regimes by Zettelmeyer (2001) shows that intermediate regimes are not likely to disappear and that they may be suitable to a large number of developing countries that do not actively participate in international financial markets. The IMF view is that the intermediate regimes may serve as temporary systems, but in the long run the choice for these countries comes down to either floats or hard pegs. Williamson (2000), on the other hand, argues that intermediate regimes could be a permanent option to a wide range of EMEs. Underlying this is the belief that flexible rates could be misaligned, making it difficult for EMEs to maintain their export competitiveness and sustain rapid growth.

Reflecting these developments in exchange rate regimes and policies, many countries in East Asia have become reluctant to accept the advice of the IMF and the economic profession in general. Malaysia decided to adopt a fixed exchange rate system in the midst of a crisis. PRC continues to adhere to what they call a managed floating system, and other East Asian countries intervene extensively to stabilize their nominal exchange rates.<sup>18</sup> Baig (2000) and Hernandez and Montiel (2001) show that the currencies of the East Asian crisis countries have been relatively more stable since the early 1999, compared to a representative sample of other floating currencies. Their interpretation of this evidence is that many East Asian countries have reverted back to the old regime of pegging their currencies to the dollar. On the question of intervention, Williamson (2000) is more specific:

Where the authorities of a country do not announce any objectives that would permit a judgment that they had succeeded or failed, but where they nevertheless have views about where the exchange rate ought to be, and are prepared to act on those views. They announce no parity or band, but they typically worry if the rate depreciates a lot, and they intervene, or change interest rates, or sometimes seek to influence the flow of capital, with a view to having an impact on the exchange rate. And they may certainly worry about the exchange rate appreciating so much as to threaten their country’s competitiveness, as has been the case in Korea (pp. 29).

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<sup>18</sup> See Park, Chung, and Wang (1999) for the evidence of intervention in Korea.

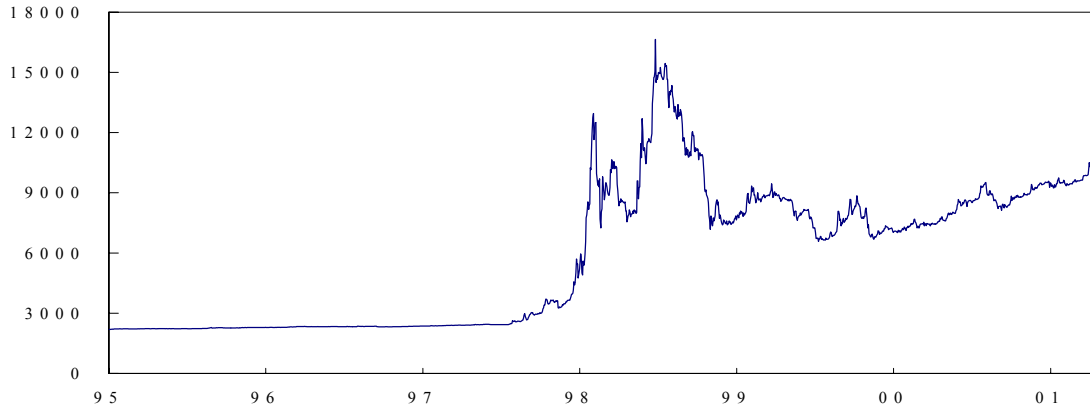
An important question is why these emerging market economies in East Asia have so little confidence in the flexible exchange rate system. It is perhaps too early to assess the effects of the flexible exchange rate system on East Asia's recent recovery. However, judging from the available evidence, contrary to expectations, the free-floating system has not clearly enabled East Asian countries to reduce their vulnerability to future crises or their holdings of reserves.

As part of the IMF conditions for its liquidity support after the financial crisis broke out toward the end of 1997, Korea, Indonesia, and Thailand agreed to eschew a managed floating system in favor of a flexible exchange rate regime. Immediately after the crisis the won-dollar exchange rate jumped up to almost 2000 won per U.S. dollar, clearly overshooting an equilibrium level. Since then the nominal exchange rate gradually appreciated to fluctuate between 1,200 and 1,300 until the end of 2001 before appreciating again in recent months. Similar developments have also taken place in other floating economies (see Figure 1).

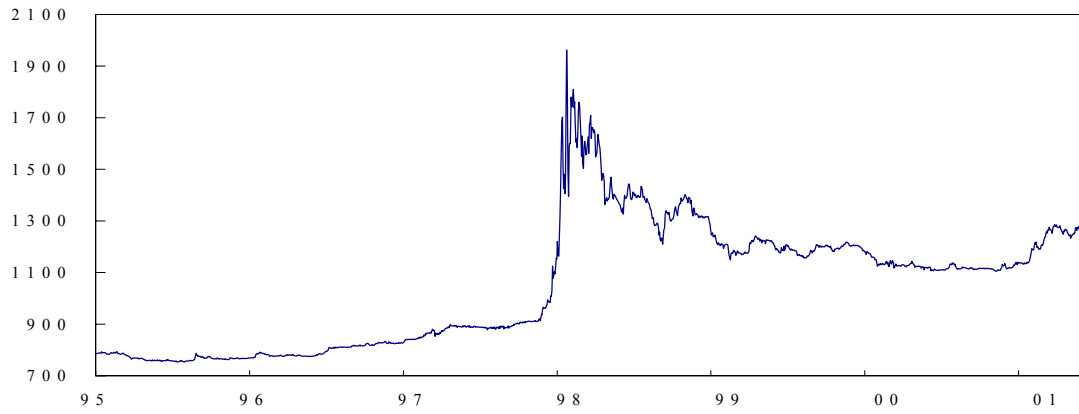


**Figure 1. Daily Exchange Rate Movement**

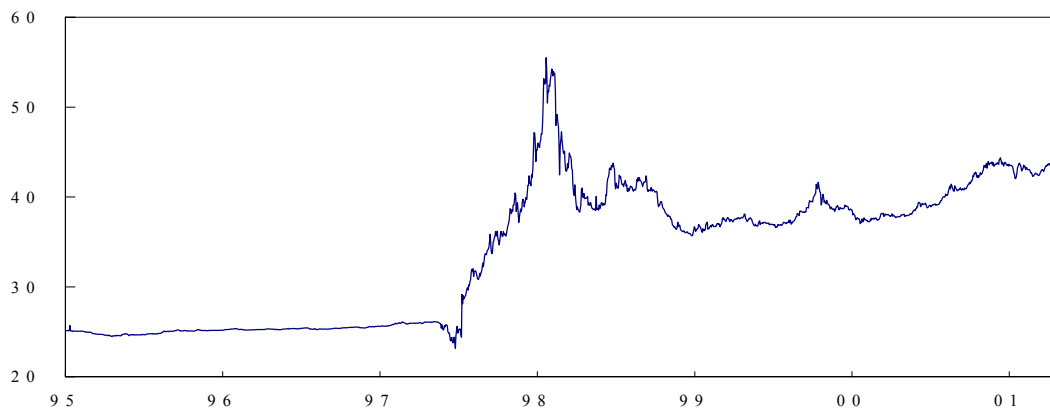
**A. Rupiah/Dollar**



**B. Won/Dollar**



**C. Baht/Dollar**



Source: Bloomberg

A number of recent studies (Williamson, 2000; Baig, 2000; and Hernandez and Montiel, 2001) have shown that as in many other emerging market economies the policy authorities of the four East Asian floaters have intervened in the foreign exchange market. In most of the East Asian countries the intervention in the foreign exchange market has been motivated by the need to smooth out high frequency movements of the nominal exchange rate or to stabilize either nominal or real effective exchange rates (Park and Song, 2002).

Policymakers of East Asian floaters may have legitimate concerns over the workings of the free-floating exchange rate system. They adopted the system with the expectation that it would reduce their vulnerabilities to speculative attacks in the future. It is perhaps too early to assess the macroeconomic performance of the East Asian floaters, in particular whether the free-floating system has speeded up recovery from the crisis or whether it has made these emerging market economies less susceptible to currency crises. The system has not been fully tested, but there is no reliable evidence suggesting that free-floating will be more effective in preventing future crises than other exchange rate regimes in the East Asian EMEs.

In addition to this uncertainty, there is fear that the high degree of volatility of the exchange rate could misalign the real exchange rate and East Asian EMEs with a large foreign indebtedness would continue to expose themselves to the currency mismatch problem. Large swings in the nominal exchange rate observed in East Asia may reduce the usefulness of a macroeconomic model with inflation targeting as the basis for monetary policy. Such a model ignores current account imbalances on the ground that they are automatically adjusted through capital account transactions. In many EMEs, such an automatic mechanism of adjustment does not exist. If fiscal policy is used to correct a large current account deficit, it may conflict with inflation targeting (Park and Song, 2001).

While the available empirical studies admittedly suffer from many limitations, they do not suggest that the East Asian floaters have attained a higher degree of monetary independence: the free-floating exchange rate system does not appear to play a shock-absorber role as it is expected to do. There are many other reasons why EMEs have been reluctant floaters.<sup>19</sup> Do these reasons mean that alternative exchange rate regimes falling in between the two corners may be more appropriate to the emerging market economies in East Asia? Should East Asian countries eschew the floating exchange rate system in favor of other arrangements with less flexibility? Whatever its merits, East Asian countries would not find it practical or politically acceptable to move to a currency board, because the system faces an implementation problem of choosing the currency to peg and it completely lacks a domestic lender of last resort. If indeed one of the objectives of exchange rate policy coordination in the ASEAN+3 group is to form a CCA in the long run, the East Asian floaters will eventually have to revert back to a non-floating intermediate regime.

Intermediate arrangements such as crawling pegs with wider bands or the BBC (Band-Basket-Crawl) have their share of problems. However, as long as policymakers of EMEs do not have confidence in the free-floating regime, it is likely that they will continue to search for an intermediate regime. According to Williamson (2000), the basic rationale for searching for an intermediate regime in East Asia may be “the fear

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<sup>19</sup> On these reasons, see Goldstein (2001).

that freely floating exchange rates are badly behaved, i.e. prone to losing touch with the fundamentals, as to become misaligned.” When the nominal exchange rates fluctuate as widely as they have in many emerging market economies due in part to the prevalence of noise trading, for example, the real exchange rates could stray from equilibrium. When the real exchange rates are misaligned, the East Asian countries fear that they may not be able to keep the competitiveness of their exports and to sustain the rapid growth they were able to achieve for more than a quarter century prior to the East Asian crisis. Assuming that the ASEAN+3 could agree on launching a plan for a long-term integration with the ultimate objective of adopting a single currency, then the plan would require building consensus on a collective exchange rate system acceptable to the participating countries as an interim regime before adopting a single currency. The consensus would require the economies with a free floating regime to shift to an intermediate one despite its deficiencies.

For a BBC system to serve as an effective mechanism for stabilizing the nominal exchange rate, market participants should be persuaded that the authorities are committed to the arrangement. There is also the problem of managing the system when the exchange rate reaches the limits of the band. For example, when the exchange rate is driven to the depreciation limit, speculators begin to test the resolve of the authorities to maintain the band. In such a case, the BBC system runs into the same problems fixed exchange rate systems often do.

In recognition of these weaknesses of managed floating three other non-pure floating regimes for emerging market economies have been proposed. They are: (i) modified BBC regimes (Williamson, 2000), (ii) managed floating with reserve intervention (Dooley, Dornbusch, Park 2001), and (iii) managed floating plus (Goldstein, 2002). Williamson (2000) proposes three modified intermediate regimes which are less prone to crises by relaxing the obligation of intervention when the exchange rate moves out of a predetermined band. These new intermediate regimes include: the reference rate system in which the authorities do not have to defend a parity on an equilibrium exchange rate but are not allowed to push their currencies away from the parity; soft margins in which authorities target a moving or geometric average of current and past market exchange rates to remain within a predetermined band rather than targeting the market exchange rate to remain within a predetermined band at all times; and monitoring bands that require hands-off policy within a pre-announced band, but allow intervention without obligation to intervene once the rate goes out of the band to bring it back within.

Admittedly, the modified versions of an intermediate exchange rate regime may be more effective than old systems in reducing vulnerability to speculative attacks. One problem with the modified BBCs is that they may not be free from the traditional criticism of intermediate regimes in general that a reference rate or an equilibrium exchange rate cannot be easily defined or estimated for actual implementation of exchange rate policy insofar as some of the economic fundamentals that presumably determine the exchange rate are not easily identifiable. Even when a set of fundamentals can be classified, in reality it may not be easy to observe changes in these variables as a whole that may dictate changes in the equilibrium exchange rate around which a soft margin is to be established. This problem has become more complicated with the deregulation of capital account transactions. Another criticism of the modified BBC is

that they may not still be flexible enough to deal with large and unexpected shifts in capital movements and investor sentiments.

A third problem with Williamson's proposal is that their ability to induce stabilizing speculation is yet to be established. On this issue, Goldstein (2002) argues that since the modified versions remove the obligations of the authorities to defend the edges of the zones, their ability to attract stabilizing speculation becomes even more remote.

A fourth problem with the modified BBC is that they do not provide a clear nominal anchor for monetary policy. In the modified intermediate regimes, the band serves as a weak nominal anchor for the exchange rate. Fischer (2001) is questioning whether such an anchor is preferable to inflation targeting. More important, all of the new BBC proposals for an operational intermediate regime have not been tested to determine their viability, and hence there is no way of knowing how serious these problems would be in a real setting.

The managed floating with reserve intervention has no exchange rate target or band: exchange rates are essentially determined by market forces as in pure floating. It has an inflation targeting as a nominal anchor. The major difference between the reserve intervention and pure floating is that the former allows monetary authorities to intervene in the foreign exchange market for smoothing-out operations with foreign currency reserves as an intervention instrument. According to this scheme, policy authorities would intervene in the market if the nominal exchange rate changes in either direction by more than a certain percentage over a predetermined period, say 5 percent over a week. For the intervention purpose, the authorities would buy or sell foreign reserves within a predetermined band of reserve changes, for example, within a range of 15 percent on both sides of an appropriate level of reserves. If reserve losses or gains exceed the limit, then the authorities cease their smoothing out operations with the assumption that the observed changes in the exchange rate are driven by changes in economic fundamentals, not by noise trading or other speculative activities.

Goldstein's managed floating plus has no publicly announced exchange rate target, but the authorities are allowed to engage in smoothing-out operations. The plus refers to an additional component—"an aggressive set of measures to reduce currency mismatch" (Goldstein 2002, p.44). Goldstein argues that unless measures to discourage currency mismatching are put in place, inflation targeting will be dominated by exchange rate considerations simply because large exchange rate movements can and will not be ignored.

Both proposals for managed floating are designed to minimize volatility of the pure floating system with inflation targeting by specifying the objective and modus operandi of market intervention. Goldstein's proposal uses interest rate policy as an intervention instrument whereas Dooley, Dornbusch, and Park (2001) would rely on foreign reserves. Goldstein emphasizes the importance of preventing or limiting currency mismatch and for this purpose proposes a number of measures ranging from "publication of data on indicators of currency mismatch, to regulatory provisions limiting banks net open position in foreign currency, to the development of better hedging mechanisms and deeper capital markets...(p.49)". However, a system of prudential regulation and supervision would normally include all these measures, and in

this sense the major difference between the two proposals rests on the method of intervention.

Up to this point, we have examined various exchange rate arrangements with a view to identifying an appropriate system for individual emerging market economies in East Asia. Within these narrow confines, our conclusion is that managed floating with reserve intervention or managed floating plus may, as Goldstein puts it, be “the least worst of available exchange rate regime options to East Asian emerging market economies”.

## **11. Exchange Rate Policy Cooperation in East Asia: A Proposal**

### ***11.1. Overview: Alternative Collective Exchange Rate Regimes***

Assuming for argument’s sake that the East Asian countries are committed to establishing a currency union as a long-run objective, they will have to lay out a plan for building institutions, developing procedures for policy coordination and surveillance, and manage liquidity support over periods of time divided into several stages before actually adopting a common currency. The plan should also include the choice of a common currency and a collective exchange rate regime during the transition period that could spur monetary integration in the region. For a common currency, they have two alternative choices: they could use one of the currencies of large countries such as the dollar, euro, and yen or they could create their own currency as the EU did.

McKinnon (2001) proposes the dollarization of East Asia. In his view, the world is already on a U.S. dollar standard. Trade in goods and services in East Asia is largely invoiced in terms of the U.S. dollar and so are financial flows. This reality means that by fixing their exchange rates to the U.S. dollar, East Asian countries will have better chances of maintaining price stability as the pegging reduces the degree of pass-through of exchange rate changes into their domestic prices. A dollar peg also lowers the risk involved in foreign payments. McKinnon (2001) argues that the risk element is important in East Asia, because the bulk of the region’s external borrowings are short-term and denominated in U.S. dollars.

Barro (2001) lists a number of criteria for an OCA which includes the history of inflation, patterns of trade, co-movements of output, and variability of relative prices. These criteria suggest that some East Asian countries including the Philippines, Hong Kong, China, Singapore, and Taipei, China belong to a dollar area. There is no yen area beyond Japan and possibly for Indonesia.

As the European experience suggests, monetary integration is essentially a political process. Whatever the economic merits of using another currency as the region’s monetary anchor, few countries, in particular Japan and PRC, will be able to accept the U.S. dollar as their currency. If joining the dollar bloc or for that matter any other currency bloc, is not a realistic option, then East Asia may emulate the European experience of creating a regional common currency. During the period of preparations for introducing a common currency, which is likely to stretch over many years, East Asian planners may begin implementation of their plan by searching for a region-wide common exchange rate system which could lay the foundation for and accelerate monetary integration in the region.

Given the wide divergence of political interests among PRC, Japan, and ASEAN, any unforeseen developments such as possible territorial and trade disputes could easily derail the integration movement in East Asia. Differences in the stages of development and the degree of trade and financial market liberalization, not to mention the extent of the diversity of exchange rate regimes, suggest that it would be almost unthinkable that the ASEAN+3 would be able to negotiate a collective exchange rate regime acceptable to all members. Monetary integration in East Asia is expected to be an evolutionary process, beginning with a system of policy dialogues and review, while maintaining a variety of exchange rate systems in the region and then gradually moving onto deeper stages of integration. Over time, the non-binding policy reviews and dialogues could develop trust and help establish working relationships for policy coordination and financial support among the CMI countries, eventually creating a political and economic environment conducive to introducing a collective exchange rate system. After three years of discussion and negotiations for financial cooperation, the CMI countries may begin their search for a common exchange rate system for the region, as a transition before making the ultimate leap to a common currency.

As far as collective exchange rate systems are concerned, there appear to be three alternative mechanisms East Asia could consider for adoption. The East Asian countries could emulate the European experience by introducing an East Asian version of the EMS that includes Japan as a member. Another alternative is pegging to a common basket of currencies as the reference unit of account as Williamson (1999) suggests. If neither alternative is practical, then they may first agree to stabilize rather loosely to similar baskets consisting of major currencies. With deepening of trade and financial integration, the CMI countries may find it necessary to cooperate in the conduct of exchange rate policy, which may in turn lead to the adoption of a common basket peg.

### ***11.2. East Asian Monetary System (EMS)***

An East Asian exchange rate mechanism (ERM) may appeal to many policymakers in the region simply because they could be guided by the evolution and management of the EMS in taking the steps necessary to replicate the ERM in East Asia. The ERM was a transitional arrangement that eventually led to the advent of the Euro. In a recent paper, Wyplosz (2002) argues that the least costly and most feasible option for a collective exchange rate regime for East Asia is the replication of the EMS for a number of advantages it has compared to other systems. In a counterfactual exercise for the Korean won, for example, Wyplosz shows that an East Asian Monetary System (EMS) is as effective as pegging to a common basket in stabilizing the bilateral exchange rates of the regional currencies.

Wyplosz lists other advantages of the EMS. One advantage is that the members of the EMS could manage common dollar and euro exchange rates. The system also fosters cooperation in monetary policy and other financial matters. Most important of all, the EMS members could make commitments to mutual unlimited support. Without such support, credibility of the system will not be strengthened and it will be difficult to manage realignments of bilateral exchange rates of the participating countries by consensus.

However, it should be noted that the ERM was not a successful arrangement as it was prone to currency crisis especially when demand and supply shocks were asymmetric as was the case in 1987 and 1992-93 and the EU members began taking measures to deregulate capital account transactions. One should also realize that Europe had gone through long periods of debate on and experiments with different exchange rate arrangements from managed floating vis-à-vis the U.S. dollar, to a sequence of collective pegging arrangements, and to the “Snake” before settling on the EMS. By that time, many of the institutions necessary for a successful pegging arrangement such as the surveillance and financing mechanism had been put in place. Nevertheless, it was a system that did not succeed, and the fundamental flaws in the system prompted the EU member countries to speed up the process of full monetary integration in Europe.

In view of the European experience with the EMS, few people would recommend institutionalization of a similar system for East Asia at this stage of the region’s economic integration. Although many of the East Asian countries intervene in their foreign exchange markets, they are at least officially classified as floaters. Moving from quasi floating (or managed floating) to a system in which bilateral exchange rates among the member countries are tightly fixed as in the ERM is not a system which many East Asian countries would be able to manage. In order to support the East Asia Monetary system, the countries in the region should agree on a new monetary unit similar to the ECU whose value will be tied to a basket of specified amounts of Asian currencies. They will also have to establish an East Asian version of the European Monetary Cooperation Fund. There is also the problem of including the yen in the system. Because of the super economy status of Japan, the yen is likely to emerge as the dominant currency as the German mark did in the EMS. The yen’s dominance may result in the other East Asian countries having to fix their currencies to the yen, whereby creating a de facto yen bloc.

The EMS was sustainable because in part it was embedded with unlimited financial support along with capital controls in the weak currency countries (Wyplosz, 2002). In contrast, the limited amount of financing available through the CMI can hardly send a clear message to the market that any speculative attempt at a currency from the others in the region is going to fail because there is no collective commitment to provide unlimited support to fend off the speculation.

### ***11.3. Pegging to Currency Baskets***

If an East Asian version of the ERM is not a practical solution to East Asia’s exchange rate policy coordination, then would pegging to currency baskets be a credible as well as a realistic alternative as many Japan-based economists claim?

Pegging to a currency basket is a collective exchange rate system that may reduce a high degree of volatility in the short run and prevent misalignment of the exchange rate in the long run, which could result from free-floating, for individual countries. For the region as a whole, the system could insulate itself from fluctuations in the value of the U.S. dollar vis-à-vis other major currencies, in particular from the impact of variability of the dollar/yen exchange rate. It is also a system that could lead to the stability of intra-East Asian nominal and real effective exchange rates, moderating large changes in international price competitiveness of the East Asian

countries. Stability of the intra-East Asian exchange rates could then help foster intra-regional trade and integration in East Asia.

Furthermore, exchange rate stability against key international currencies such as the dollar, the yen and the euro is considered of equal importance to exchange rate stability of the regional currencies, which significantly differs from the case of Europe.<sup>20</sup> In Europe, it was of utmost importance to defend regional parities given the high degree of regional trade interdependence. In this regard, despite increasing intra-regional trade dependence in East Asia, a plan to adopt a common basket peg would have in practice more merits than an East Asian version of the ERM.

There are two versions of basket pegging that are claimed to be appropriate to a group of East Asian countries. One version, which is here classified as a soft basket peg and mostly advocated by Japanese economists, is a collective system in which East Asian countries agree to currency baskets consisting of the U.S. dollar, the euro, and the yen and stabilize loosely their exchange rates vis-à-vis such baskets, that is, stabilizing their nominal effective exchange rates (NEER).<sup>21</sup>

The second version of the basket peg is the one advocated by Williamson (2000) where the basket of the dollar, the euro and the yen is chosen as a common peg with almost equal weights. In this scheme, the participating countries essentially use the basket of the three currencies as a common unit of account in their conduct of exchange rate policy. Williamson argues that the nine East Asian countries he examines have reached the stage where they could benefit from the adoption of a common basket peg because they are close competitors in the world markets and their geographic distribution of trade is similar.

Targeting the nominal effective exchange rate (NEER) in either the soft or the common basket peg may mean the use of the exchange rate as a nominal anchor. Hernandez and Montiel (2001) argue that some of the East Asian crisis countries may have legitimate reasons for choosing the NEER as the appropriate variable if they wish to select the exchange rate as a nominal anchor. One reason for this is related to the declining role of the U.S. dollar in East Asia and its instability vis-à-vis other major currencies. Another is their desire to prevent exchange rate overvaluation or undervaluation that could result from tight pegging to the U.S. dollar, assuming, of course, they attempt to stabilize some version of their nominal exchange rates.

The basket peg approach for East Asia has been criticized for a number of reasons. Although Kawai (2002) and Ito (2001) argue that the soft basket peg can ensure stable currencies among the pegging countries, the basket peg does not necessarily ensure the stability of the NEERs of the participating countries. This is because each country is expected to peg its currency to a trade-weighted basket of the three currencies. Since the trade weights of the participating countries differ, the currency baskets would also differ between countries. In McKinnon's view, the Japanese version of the basket peg has in part been motivated by Japan's desire to minimize variability of its real exchange rate against those of the U.S. and its East Asian trading partners.

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<sup>20</sup> East Asia is less economically self-contained than Europe. Many East Asian countries rely as heavily on the United States and Europe for export markets as they do on other Asian countries, including Japan. See further Eichengreen (2002).

<sup>21</sup> See Kawai (2002) and Ito (2001)



The NEER targeting could also expose small open economies to the danger of destabilizing the domestic economy. In the short run, the ratio between domestic and weighted trading-partners' price indices, one of the constituent series of the real effective exchange rate (REER), tend to be stable in most of the East Asian countries. Because of this stability, targeting the NEER is equivalent to minimizing the variance in the REER at least in the short run. In targeting the NEER, policy authorities could use sterilized intervention and capital controls in addition to monetary policy as instruments of adjusting the nominal exchange rate, usually the local currency-dollar exchange rate.

In small economies with an open capital account, both the NEER and inflation targeting in general cannot be pursued simultaneously. Targeting the NEER therefore means that monetary policy cannot be assigned to stabilizing the domestic economy, thereby introducing monetary instability. To the extent that monetary policy is mostly geared to stabilizing the NEER in economies with an open capital account, the domestic real interest rate would vary more than otherwise in response to shocks originating in domestic as well as external sources. This relative instability of the real interest rate then instills instability in the real sector of the economy, resulting in higher variability of output.<sup>22</sup>

In most East Asian countries, monetary policy is by far the most reliable instrument for stabilization of the domestic economy. It is therefore difficult to imagine that the East Asian policy authorities would assign monetary policy solely to stabilizing the nominal effective exchange rates. Only when sustaining domestic price stability is not a serious concern, the interest rate could be adjusted to influence the nominal exchange rate. More importantly, it is shown that the volatility of the nominal exchange rate has been closely related to volatility of capital flows in East Asia (Park and Song 2001). With further liberalization of capital markets, capital account transactions are likely to amplify movements of the nominal exchange rate more than before. The volatility of capital flows could therefore cause a higher degree of volatility of the real interest rates in economies with the NEER targeting.

In a world of capital mobility, the second instrument—sterilized intervention—loses much of its effectiveness and can be expensive as well because the interest rate on local-currency bonds issued for sterilization is higher than that on foreign exchange reserves in many East Asian countries. As Williamson (2000) points out, neither the sterilized intervention nor monetary policy is powerful enough to assure success of stabilizing the NEER. As a result, countries in East Asia may have to turn to capital controls as a means of stabilizing the NEER. The advocates of the basket peg are rather unclear on this issue. If indeed they accept capital controls as the second best instrument, the basket peg opens up a new debate on the modality as well as the effectiveness of capital controls on which there is little agreement in East Asia.<sup>23</sup>

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<sup>22</sup> Kawai and Takagi (2000) argue that an inflation target defined as a weighted average of inflation rates of the U.S., EU and Japan and pegging to a basket of the dollar, the euro, and the yen are one and the same, if purchasing power parity (PPP) holds. However, PPP between those three currencies does not hold in most cases.

<sup>23</sup> In East Asia, capital account liberalization has been achieved prior to exchange rate stability. While an intermediate regime could survive during the period of capital controls in the process of European monetary integration, the East Asian countries now face the difficulty of using soft-pegs as a regional monetary arrangement.

From the perspective of building the ground work for monetary integration in East Asia, the critical defect of the basket system is that the three major currencies, in particular the yen, are not part of the exchange rate arrangement designed to support financial and monetary integration in East Asia. There is not, and will not be in the future, any commitment on the part of the central banks of the three currencies of unlimited interventions for supporting the basket pegging. In the absence of such a commitment, the basket approach with the CMI liquidity support would not be able to withstand determined speculation (Wyplosz, 2002).

Japan is expected to play a key role in steering East Asian financial and monetary integration. However, like the U.S. and EU, Japan will remain outside the East Asian basket arrangement, and it is not clear whether Japan is prepared to intervene to sustain the peg in other East Asian countries. As long as the yen is floating vis-à-vis the currency baskets of other East Asian economies, the basket peg could delay monetary integration between Japan and the rest of East Asia. There is indeed no reason to believe that a region-wide basket peg that excludes Japan would be more acceptable and expeditious in monetary integration of East Asia than the East Asian Monetary System. Furthermore, the Japanese advocates of the basket peg do not articulate under what conditions Japan could fix its bilateral exchange rates vis-à-vis other East Asian currencies without making the yen the dominant currency of the region. The issue of including Japan could be raised after a period of a successful pegging among the non-Japanese East Asian economies.

Finally, Wyplosz (2002) points out that the basket peg with the BSAs may perpetuate Asia's tradition of eschewing institution building. Failure to build regional collective institutions including a financing system may in the end delay the foundation of a currency union in East Asia. Even if the East Asian countries could agree to a single currency in the future, the system will be vulnerable to speculative attacks unless it can be tied down with the expectation that they will succeed in creating a CCA.

Turning to the common basket peg, it should be noted that Williamson (1999) introduces the system as a reference rate or numeraire for exchange rate policies of East Asian countries. He does not necessarily advocate a hard-peg to the common basket, which he considers impractical because the foreign exchange markets in some of the countries are less developed so that effective intervention to defend the cross rates in other participating countries may prove difficult. Furthermore, the diversity of preference with regard to exchange rate regimes and inflation rates may not allow a tight peg to the basket. Differences in patterns of trade would also make the common peg impractical. In the common basket peg scheme, the East Asian countries only have to agree on a common unit of account for their exchange rate policy while maintaining a variety of exchange rate arrangements including intermediate regimes and a currency board. Williamson (1999) argues that this alone would be a very positive development to monetary integration. It is because the common unit of account could create an expectation that variation in the bilateral exchange rates of the dollar, euro, and yen would not affect the relative competitive position of the East Asian countries.

While in theory Williamson's proposal would be appealing, it is highly questionable whether many East Asian floaters may be able to agree on a mechanism that will enforce the adoption of a common reference numeraire in conducting exchange rate policy. The East Asian countries joining in region-wide efforts to integrate

financial markets may agree to switch to a common basket peg in the future. However, unless bound by a multilateral agreement, few countries would be inclined to adopt a common reference rate voluntarily, since they are not likely to be pressured by the market to do so.

As far as Williamson's common pegging is concerned, Eichengreen and Bayoumi (1999) point out that defending a common peg would be much more difficult than introducing it. Success in defense requires an efficient institutional framework which includes (i) policy coordination among the participating member countries, (ii) a financing mechanism that will provide financial resources to the exchange rates of weak-currency members, and (iii) a surveillance mechanism which could impose policy conditionality on the countries receiving financial support. In the absence of these institutional arrangements, the common peg could create an East Asian version of the Snake, not the EMS.

#### ***11.4. A Proposal***

Where does the preceding discussion lead us in developing a collective exchange rate regime for East Asia? If indeed the East Asian countries become committed to taking cooperative action to achieve monetary integration, then they will have to ask whether they are prepared to eschew their current exchange rate regimes in favor of a collective regional exchange rate regime. There are pieces of evidence suggesting that some of the East Asian countries have implicitly adopted unannounced basket pegs for their currencies, although the baskets appear to be different between countries. However, there is little information as to why they attempt to stabilize their NEERs, if indeed they do. Although most of the East Asian floaters are known to intervene in the foreign exchange market, they are not likely to shift to any old or new intermediate regimes at least officially anytime soon.

At this stage of discussion of financial integration, there is little expectation that the members of the CMI could agree on either pegging to a common basket or introducing an East Asian version of the EMS, not to mention dollarization. Nevertheless, to the extent that the ASEAN+3 are serious about negotiating free trade agreements among themselves and that they realize stabilizing bilateral exchange rates of the regional currencies would advance their free trade cause, the ASEAN+3 are expected to discuss and monitor the future enlargement of the CMI by increasing the amounts of bilateral swaps and institutionalizing regional surveillance.

As earlier observed, one important lesson of the European experience with the formation of the EMU is that monetary unification is essentially a political process. The economic criteria for a successful currency union are also endogenous. Creation of a CCA even for a group of countries with diverse economic structures that are exposed to asymmetric shocks will lead to expansion of trade and synchronization of business cycles within the group. If the East Asian countries realize political as well as economic advantages of belonging to a currency union, then the diversity of exchange rate regimes across the region may not pose an obstacle as serious as it is often claimed. As Eichengreen (2002) notes, free-floating is not inconsistent with the regional efforts to establish a currency union in East Asia, provided that these countries could improve efficiency and stability of their financial systems. Deepening and improved efficiency

of financial markets and institutions will certainly help stabilize the foreign exchange market.

Although the criteria for a successful CCA are endogenous, the political process of driving monetary and financial integration will not prevail, unless it is supported by close coordination of financial and exchange rate policies at the policy making level. Taking these opportunities and constraints into consideration, this paper proposes the following evolutionary process of monetary integration over four phases in East Asia.

### **Phase I: Building the Foundation for Monetary Integration**

Only three years after the inception of the CMI, it is simply too early to put the exchange rate issues on the agenda of policy reviews and dialogues among the ASEAN+3. Efforts to introduce a collective regional exchange rate system are likely to be met by indifference and disregard by the CMI members. A better strategy would therefore be to accept the existing variety of exchange rate systems, as it would not necessarily interfere with the integration process. At the same time, the participating countries would be better advised if they focus on constructing an institutional foundation required to nurture the evolution of a currency union. To this end, the first step to take is to affirm the political commitment of the CMI countries to join forces to establish a currency union and on the basis of this commitment to devise a long-term plan for achieving monetary integration.

At the first stage, it is necessary for the CMI members, except for Japan, to agree on a common system of intervention. When the intervention is nonsystematic so that the purpose or the point of intervention is not explicit, it creates uncertainties as to exchange rate policy, inhibiting stabilizing speculation. For the transparency of intervention which will induce stabilizing speculation, either floating with reserve intervention (Dooley, Dornbusch, and Park, 2002) or managed floating plus (Goldstein, 2002) appear to be the most realistic regimes acceptable to a majority of East Asian floaters.

Both systems are transparent enough to inform other countries in East Asia what their partners are doing in terms of exchange rate policy. This transparency together with similar modes of intervention would make it easier for the CMI countries to cooperate on exchange rate policy. Only when the members of the CMI build trust among themselves in regard to policy coordination and learn to cooperate, they will be able to take the next step of introducing a collective exchange rate system.

An in-depth study may be called for to ascertain the objectives of the foreign exchange market intervention reported by a number of recent studies. The observed prevalence of intervention may be motivated by the desire to smooth out fluctuations of the nominal exchange rate or to stabilize a NEER as a nominal anchor. Insofar as maintaining export competitiveness is an important policy objective, the East Asian policymakers may be driven to stabilize their real effective exchange rates.

Once the objectives of the currency market intervention are better understood and articulated, questions would arise as to whether they have for all practical purposes moved to the middle of the spectrum of exchange rate regimes and whether the regime shift can be justifiable in the East Asian context. Answers to these questions will then

help determine what type of intermediate regimes would serve the purposes of their exchange rate policy, if the shift is deemed justifiable.

If indeed the ASEAN+PRC and Korea all decide to adopt a non-floating regime, as they appear to have, then introducing a collective exchange rate regime such as common basket pegging at the second stage of monetary integration would be much easier than it might appear. This is because the common basket pegging is compatible with most of the intermediate regimes.

The discussion of the exchange rate regime should also be carried out in parallel with a region-wide effort directed at reforming financial systems of individual East Asian countries. Financial reform will be a critical prerequisite to monetary integration in that it enables East Asian countries to better cope with financial shocks in the future, as it improves efficiency and stability of both financial markets and institutions. Regional efforts to construct regional capital markets should also be an integral part of East Asia's financial integration, as it will entail building of requisite institutions for integration, harmonizing standards and regulatory and tax systems, and fostering closer policy coordination. Efficiency and stability of regional financial centers and financial markets of individual countries would contribute to stabilizing bilateral exchange rates of regional currencies. This exchange rate stability will then remove many of the constraints on introducing a collective exchange rate system in East Asia.

When joining an EAMS or pegging to a common basket of currencies in the future, East Asian countries would lose much of their monetary independence and be unable to adjust to internal and external shocks to the economy when they maintain an open capital account. This means that few countries would be persuaded to participate in monetary unification unless they are assured of financial support in case they run into balance of payments difficulties. This is the reason why the expansion and consolidation of the CMI is so important and should be carried out at the very first stage of monetary integration. A regional financial arrangement built on the BSAs and strengthened with an effective surveillance mechanism will not only help increase mutual financial assistance, but also facilitate, broaden the scope of, and build trust in policy coordination.

Even when the CMI is expanded to provide a large amount of liquidity to those participating countries experiencing short-run balance of payments difficulties, it is unlikely that the East Asian countries could assign monetary policy to stabilization of a NEER, thereby depriving themselves of the most important instrument for domestic stability. Shifting to an intermediate regime may make it necessary for the East Asian countries to use capital controls as a means of stabilizing the NEER. If this is the case, the East Asian countries would be better off by informing market participants what types of capital controls would be employed and for how long they would be in effect. Adoption of similar measures of capital control within the ASEAN+3 group would also enhance efficiency and transparency of the currency market intervention at the regional level.

## **Phase II: Introduction of a Collective Exchange Rate System**

Assuming that Phase I is successfully completed, the ASEAN+3 may enter Phase II of the monetary integration plan where a collective regional exchange rate mechanism is to

be introduced. As the discussion of the preceding section indicates, it is difficult to assess the relative advantages of either the EAMS or common basket peg. The choice will be dependent on the level of policy coordination, availability of liquidity support, and effectiveness of regional surveillance and monitoring. With this difficulty in mind, this paper proposes the adoption of a soft basket peg to be followed by a common basket peg before moving on to an EAMS in Phase Three.

The first step to be taken in Phase Two is to identify an intermediate regime acceptable to most of the participating countries and then induce them to accept the soft basket peg, that is, choosing similar baskets of the three major currencies and stabilizing their currencies vis-à-vis the baskets.

After a period of successful experimentation with the soft peg, the CMI countries could shift to pegging to a common basket in order to stabilize intra-East Asian effective exchange rates. The common basket peg system for East Asia advocated by Williamson (1999) is consistent with a wide variety of exchange rate regimes with different fixities—it only rules out free-floating. In the East Asian context, the pegging system raises two issues: whether the peg should be fixed or crawling and how wide the band of fluctuation should be. As for the first issue, the East Asian countries would be better off if they choose a crawling band since they are likely to face the Balassa-Samuelson effect. A crawling peg may be more effective in achieving a desired rate of inflation in a discrete manner, but is susceptible to speculative attacks. Therefore, the choice for the East Asian countries is between a wide band and an upward crawling peg (Wyplosz, 2002).

If the East Asian countries decide to choose a band system, a wider band would be a preferred choice. A wider band would be more effective in responding to unexpected changes in capital flows that often display a boom-bust cycle and can be a source of overvaluation as shown among the 1997-98 East Asian crisis. However, with a wider band, the pegging system would undermine its main objective of stabilizing effective exchange rates of regional currencies. Since one cannot determine a priori an optimal band, a better strategy would be to start with a wide band and then gradually move to a narrow one, as confidence of market participants builds up (Wyplosz 2002).

However, as Wyplosz points out, this sequencing may entail serious hazards in that when they are confident, policymakers often fail to detect changes in market sentiment signaling impending danger, thereby making themselves vulnerable to speculative attacks. To avoid these problems, the period of pegging with a narrow band should be relatively short with the clear understanding that the pegging is a temporary regime on the way to monetary union.

### **Phase III: Construction of an EAMS**

If the weight of the Japanese yen in the currency basket increases with the expansion of intra-regional trade, including Japan, the correlation between the East Asian currencies and the yen will also increase. This development would then signal that the economic conditions are ripe for including the yen as an integral part of the collective exchange rate system rather than keeping it outside the system by introducing an exchange rate mechanism like the European ERM. Such a system would have the benefit of reducing the volatility of exchange rates between the yen and other regional currencies.

One might indeed argue that moving from a basket peg to an East Asian Monetary System which includes Japan would be easier than moving from the current system of diverse exchange rate arrangements in East Asia to a common pegging system. However, it is not clear whether and under what conditions Japan could fix its bilateral exchange rates vis-à-vis other East Asian currencies unless the yen plays the role of a dominant currency.

A regime shift from a common basket peg to a system in which bilateral exchange rates among the member countries are tightly fixed as in the ERM is a decision which requires collective action on institution building at the regional level. The operation of an East Asian Monetary system would require creation of a new monetary unit similar to the ECU whose value will be tied to a basket of specified amounts of Asian currencies. The members of the AMS will also have to establish an East Asian version of the European Monetary Cooperation Fund (EMCF). The bilateral swap system under the CMI as it is structured is a far cry from the EMCF (Wyplosz 2002).

The ARM may also be impractical because the foreign exchange markets in some of the countries are less developed so that effective intervention to defend the cross rates in other participating countries may be difficult. Furthermore, differences in patterns of trade and inflation rates may not allow for a system as tight as the ERM.

There is also the vexed problem of including the yen in the system. Because of the super economy status of Japan, the yen is likely to emerge as the dominant currency as the deutsche mark did in the EMS. The yen's dominance may result in other East Asian countries fixing their currencies to the yen, and thus creating a de facto yen bloc. As a result, Japanese monetary policy could drive monetary policy across the region, and other East Asian economies would converge with Japan. It is not difficult to imagine that PRC would probably not agree to such a system where it might have to 'play second fiddle to Japan'.<sup>24</sup> However, if the current trend of rapid growth of the PRC's economy and stagnation or slow growth of the Japanese economy is sustained, then the participation of Japan in any common basket pegging will not necessarily result in a yen bloc. This prospect could make PRC more receptive to the idea of the common pegging system.

#### **Phase IV: On the Way to Full Monetary Integration**

After periods of successful management of an East Asian version of the ERM, during which a plan for adopting a common currency is prepared, the East Asian countries may emulate the European experience with monetary integration by taking a series of steps to build requisite institutions, harmonize policies, and introduce common standards and codes.

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<sup>24</sup> Several impediments hinder the Japanese yen from expanding its role to that of the level of Japan's importance in the East Asian economy. First, the scenario of a yen bloc is not feasible considering the current situation of Japan's persistent stagnation. Second, the historical legacy of East Asian countries with Japan's actions during World War II make them unwilling to adopt a de facto yen peg system. Finally, East Asian countries might face political frictions with the United States because a yen bloc could be seen as a challenge to the U.S. dollar. Despite these potential challenges, Kwan (2001) asserts that a yen bloc is not entirely impossible, indicating that Germany and France in a cooperative manner achieved monetary unification and that the U.S. conceded to the introduction of the euro.

As noted earlier, the creation of a CCA is the most critical economic and political step to take and as such requires careful preparations to mitigate the undesirable consequences of abruptly adopting a common currency. Although the European experience suggests that economic criteria for a successful CCA are not as important as they are claimed to be, the last stage of monetary integration requires a large number of agreements which will erode national sovereignty and monetary policy independence.

To name a few requisite institutions, the final preparations should include harmonization of standards of banking, accounting, and the financial regulatory system, the rules of seigniorage sharing, and the provision of central bank functions. As Wyplosz (2002) points out, creation of a central bank is bound to raise delicate issues of delegation of authority and democratic accountability.

Given the heterogeneous backgrounds of the East Asian countries in terms of political systems and the level of economic development, these issues will be the most serious obstacles that will have to be overcome for monetary integration.

However, the process for regional cooperation and integration has just begun, and these economic environments are fast changing. Convergence in economic development stages is accelerating, and the political will for cooperation is increasing. To many observers the East Asian region is now at the starting point for a long process of regional economic and financial integration, just like Europe was several decades ago.

## **12. Barriers to and Prospects for Financial Cooperation and Integration in East Asia**

### ***12.1. Barriers***

East Asian policymakers who conceived the idea of the CMI would readily concede that the BSA system as it is currently structured has a long way to go before it can be accepted in the eyes of financial market participants as an effective mechanism of defence against financial crises. Although three years have passed since the system was established in May, 2000, the leaders of the CMI group have yet to produce an operational structure of the BSAs, in particular a monitoring and surveillance mechanism. And it is highly unlikely that they will do so any time soon.

In the absence of a clear vision on the scope and modality of financial cooperation through the CMI, many financial industry experts have expressed their doubts as to whether any country facing an incipient crisis could draw from the BSAs they contracted with other members, and if they could, then how much liquidity would be available. Participating countries could refuse any further support exceeding the 10 percent drawing. In particular, unless policy conditionality could be imposed on borrowing countries by a monitoring and surveillance institution, many participating countries are not likely to activate their BSAs for fear of losing what amounts to be their short-term loans. Negotiations for additional BSA contracts and also the surveillance system will continue, but unless the deadlock over some of the pending issues on surveillance is broken, the future prospects of the CMI do not appear to be promising.

There are, of course, many economic, institutional, and political barriers to financial cooperation and integration in East Asia. A large number of empirical studies



have shown that trade and investment liberalization has been the driving force behind much of the increase in intra-regional trade in East Asia. This increase has in turn exerted the effects of synchronizing business cycles across East Asian countries, thereby producing economic conditions favorable for forming a possible currency union in the region.

Against these trade and macroeconomic developments, as shown in section 3, financial deregulation and market opening have drawn East Asia away from regional financial integration. Financial liberalization throughout East Asia has brought many countries to establish closer linkages than before with international financial markets, but not with other neighboring country markets in the region. In contrast, however, financial markets of European countries were much more integrated with one another in the 1970s and 1980s than the markets of East Asian countries are at present. This difference suggests that financial market liberalization and opening may not necessarily speed up economic integration in East Asia.

Financial claims are all denominated in U.S. dollars and the bulk of foreign lending and borrowing is intermediated through international financial markets in New York and London. As far as finance is concerned, therefore, gains from adopting an East Asian common currency in terms of lower transactions costs and foreign exchange risks may not be as large as they could be when regional financial markets are more closely integrated. In particular, Singapore and Hong Kong, China, where a regional financial center is located, could lose a substantial portion of their incomes originating in the financial services industry.

As for institutional and political constraints on further expansion of the CMI, the most serious has been that the thirteen countries have failed to articulate the ultimate objectives of the CMI arrangement, that is, whether the CMI is going to be fostered as a regional liquidity support program or as a building block for a full-fledged regional monetary system in East Asia. If bilateral swap arrangements are activated collectively and supported by an independent surveillance system, then they constitute a *de facto* regional monetary fund. The CMI could then be used as the base on which an elaborate system of financial cooperation and policy coordination is built by following in the footsteps of the European monetary integration. At this stage of development, however, many countries in East Asia are not prepared to accept the idea of, or may feel uneasy about, restructuring the CMI to make it a forerunner of the AMF.

A second institutional reason is related to the need to coordinate the activities of the CMI with other regional arrangements such as the Manila framework supported by the United States, Australia, and New Zealand. Most of the CMI countries also participate in the Manila framework and APEC regional forums. At some point in the future, the leaders of the ASEAN+3 may have to decide on the mode of cooperation and division of labor in promoting regional growth and stability between these institutions and the CMI. All thirteen countries have been engaged in policy review and dialogues through the APEC sub-arrangements and the Manila framework. Unless the CMI is developed into a credible financing mechanism by increasing swap amounts, it will become in its role similar to other regional economic arrangements. This similarity will then weaken the coherence of the group, as it will raise the question of whether the thirteen countries constitute an appropriate grouping for a regional financing arrangement in East Asia.

A third reason is that as the fear of another round of financial crises has receded with the recovery that has been faster than previous crisis episodes would predict the ASEAN+3 countries have become less interested in enlarging and institutionalising the CMI operations. Instead, interests of the ASEAN+3 have recently shifted to creating free trade areas in East Asia. In fact, the region appears to be on the verge of a major proliferation of free-trade agreements involving the thirteen East Asian countries.

The ASEAN states already agreed to establish a free trade area among themselves in 1992 with a plan to reduce intra-regional tariffs and non-tariff barriers over a 15-year period beginning in 1993. Japan has concluded a bilateral free trade agreement with Singapore. On November 5, 2002 Japan and ASEAN signed a joint declaration to negotiate a framework by the end of 2003 for a comprehensive economic partnership that includes a free trade agreement. Japan and Korea have also been discussing the possibility of negotiating a free trade agreement.

PRC has been most active in proposing various free trade arrangements among the ASEAN+3. On November 4, 2002 PRC and ASEAN agreed on a framework to set up a large free trade area that would have a total GDP of nearly US\$2 trillion with negotiations scheduled to begin in 2003. At a Northeast Asian summit meeting at the November ASEAN+3 summit talks, PRC also proposed a study on a three-way free trade agreement among PRC, Japan and Korea. PRC's growing interest in ASEAN where Japan has invested heavily for the past four decades may turn the region into an economic field of competition between the two countries.

This movement is undoubtedly a desirable development, and the CMI could lend impetus to further liberalization of trade by stabilizing bilateral exchange rates of regional currencies and by minimizing the disruptive effects of financial market turbulence. This advantage suggests that the ASEAN+3 may have incentives to broadening the scope of the CMI in parallel with negotiations on establishing free trade areas in the region. In reality, however, it appears free trade discussions have detracted many East Asian countries from their CMI negotiations.

Finally, there is the leadership issue that defies an easy solution. If the thirteen countries have a more ambitious goal of developing a collective exchange rate mechanism similar to the ERM with the long-term objective of adopting a common currency for the CMI group, they will have to increase the number and amounts of the BSAs. As the European experience shows, such an extension requires leadership that could keep the thirteen countries as a coherent group by compromising different interests of different members.

PRC and Japan, which are expected to provide leadership in forging regional support for expanding and consolidating the BSAs as a regional institution, have not yet been able to agree on a number of operational issues including the surveillance mechanism. Except for Japan few potential swap lenders including PRC are prepared to increase the amounts of their bilateral swaps with other contracting parties. Japan could increase its swap amounts with the ASEAN states and Korea (PRC is not expected to borrow from Japan) to make the CMI a more credible financing scheme. However, unless Japanese authorities receive some sort of assurance that their short-term lending will be repaid, they are not likely to lead expansion and institutionalisation of the CMI. As a minimum condition for expansion of the CMI, Japan would demand creation of an

effective surveillance mechanism for the region in which it can exercise influence commensurate with its financial contribution. PRC feels that it cannot play a secondary role to Japan in any regional organization in East Asia. This stalemate appears to be the most serious roadblock to further development of the CMI.

PRC and Japan have different interests in, and hence different strategies to, economic integration in East Asia. As far as PRC is concerned, economic integration with the ASEAN 10, South Asian and Central Asian countries may be more important both economically and geo-politically than, or take precedence over, financial cooperation or free trade with either Japan or Korea. While PRC is a super military power, it is still a developing economy with a huge gap to narrow in terms of technological and industrial sophistication vis-à-vis Japan. Although PRC has been growing rapidly, it has a long way to go before catching up with Japan. These differences in the economic and military status of the two countries suggest that PRC and Japan may, even when they could reconcile their troubled historic past, find it difficult to work together as equal partners for regional integration in East Asia.

PRC borders with Russia and many of the South Asian and Central Asian countries in addition to several ASEAN members. It is natural therefore for PRC to seek expansion and deepening of its trade and financial relations with these neighboring countries. In fact, for this reason, PRC has been courting the ASEAN for a free trade agreement and joined in November of 2001 the Bangkok agreement on a free trade area which includes Russia and the South Asian countries. PRC has also taken a leading role in establishing the Shanghai cooperation organization, a cooperative arrangement among Russia, Kazakhstan, Kyrgyz Republic, Tajikistan, Uzbekistan and PRC.

In contrast, Japan has not been able to articulate its strategic interests in East Asia. Japan has been in the forefront of supporting a greater economic cooperation among the East Asian countries, but the geographical contiguity of East Asia from the Japanese perspective has not been altogether clear. Japan has been promoting integration among the ASEAN+5, but which are the two economies added to the ASEAN+3? At one point, the five countries were PRC, Japan, Korea, Australia, and New Zealand. At another, Australia and New Zealand were replaced by Taipei, China and Hong Kong, China.

There is also the suspicion that Japan is not interested in free trade per se in East Asia; instead Japan is engaged in the discussion of free trade agreements and other financial arrangements with other East Asian countries to maintain its leadership role as the region's largest economy by countering PRC's expansion. That is, many analysts believe that Japan's active involvement in regional economic integration is therefore motivated by its desire to maintain its traditional pole position.<sup>25</sup> On top of this suspicion, Japan is still perceived by many to be a country insensitive to and unwilling to resolve wartime legacies and disputes on historical and territorial claims. Japan has also been gripped with a decade-long recession and unable to restructure its economy in particular its financial sector, making many East Asian countries apprehensive about supporting any regional initiative advanced by Japan. These structural problems have combined with the lack of its strategy to East Asian development to undermine Japan's ability to bring East Asian countries together for regional cooperation and integration.

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<sup>25</sup> See, e.g., David Wall, "Koizumi Trade Pitch Nests," the Japan Times, April 21, 2002.

## *12.2. Prospects*

What then are the likely courses of development of the CMI? How would regional financial integration proceed in East Asia? Answers to these questions will largely depend on future developments of PRC's trade relations with the rest of East Asia.

A recent ADB Institute projection by Roland-Holst (2002) shows that PRC will become East Asia's largest exporter by 2020 and the largest importer by 2005. Obviously, the emergence of PRC as the largest trading nation in the region will bring about significant changes in trade relations among East Asian economies, as PRC will open unprecedented market opportunities for these countries' exports. Indeed, to most of the East Asian economies PRC has become, or will soon be, their largest trading partner.

A simulation of a CGE model used by Roland-Holst forecasts that PRC will develop a large structural trade surplus with Western OECD economies, but a structural deficit with East Asia of the same magnitude, suggesting that the amount of trade created by PRC's trade expansion will be far greater than that of trade diversion in East Asia. This development implies that all of the East Asian countries will be exporting to Western OECD countries and the rest of the world through PRC by exporting capital and intermediate goods to PRC. As far as Japan is concerned, PRC is forecast to be its largest trading partner both in terms of exports and imports by 2020.

In view of these expected changes in trade relations in East Asia, it is quite possible that despite the differences in their strategies both PRC and Japan could come to realize that consolidation of the CMI group would serve their interests in the long run. If indeed it is seen inevitable that East Asian integration will be centered around PRC, then both countries could benefit from and hence work together for deeper financial integration in parallel with trade expansion in the region.

This congruence of interest could soften their positions so that the two countries could compromise on an institutional setting and augmentation of the existing BSAs. For instance, PRC may accept Japan's requirement for its de facto control over the monitoring and surveillance in return for Japan's pledge for a substantial increase in financial assistance in the form of one-way swaps and ODA to ASEAN members. PRC could agree to this scheme, if it is confident about concluding a free trade agreement with the ASEAN members in the near future. PRC's free trade pact with the ASEAN could circumscribe Japan's influence on ASEAN affairs even if Japan is a major provider of finance to the region. However, whatever the long-run advantages of this scenario are, given the intensifying rivalry between the two countries, it is not a realistic one.

Another scenario focuses on the possibility of PRC assuming a more proactive leadership role in regional integration. According to the projection made by Roland-Holst, inclusion of PRC in the ASEAN Free Trade Area (AFTA) could increase ASEAN's real exports by 16 percent in 2020, compared to a base line scenario. Excluding PRC, ASEAN's exports should increase by a mere one percent in 2020. Given such a significant gain, ASEAN should be more positive than before in their FTA negotiations with PRC. Knowing that they have both carrots and sticks PRC may decide to negotiate both the expansion of the BSAs and a free trade pact with the ASEAN at the same time. In this case, the original CMI will become ASEAN+1.

Realizing that financial integration is an integral part of a successful free trade area, PRC may indeed seriously consider this option. However, without Japan, such an ASEAN+1 would not be a viable arrangement for a regional financing scheme simply because PRC at this stage is hardly in a position to commit itself to financing balance of payments deficits of all ASEAN member states. It is also questionable whether ASEAN would be willing to join any regional financial arrangement in which a country like PRC with an underdeveloped and closed financial system and a looming banking crisis is going to be the dominant member.

What would be the options available to both Japan and Korea in case PRC chooses to pursue both trade and financial integration with ASEAN? This question leads to a third scenario, which is the enlargement of the CMI members by including Australia and New Zealand and possibly other countries from South Asia. This is the one favored by Japan; Japan may want to bring in more countries supporting its strategy so that it could increase its leverage in negotiating with PRC the expansion of the CMI. However, many members of the ASEAN+3 believe that at this stage of negotiation forming a critical mass of the CMI should precede any enlargement discussion. Since any enlargement is not likely to increase substantially the availability of short-term financing, the third scenario is not going to be taken seriously by ASEAN. Japan may then turn to Korea as a regional partner for free trade and closer financial linkage. Korea, however, would be cautious in negotiating any bilateral arrangement with Japan that could strain its relations with PRC, which has become its largest export market.

Perhaps the most realistic scenario is that the countries participating in the CMI will muddle through, discussing modalities of policy dialogue, the types of the surveillance system the CMI needs, and also augmentation of swap amounts without making any substantial progress, largely because PRC will be less than enthusiastic about further expansion of the CMI. Given its size and growth prospect, PRC can capture benefits from multilateralism through unilateral liberalization and hence does not have many incentives to join any regional agreements except for a free trade pact with ASEAN.

However, a possible breakthrough may come over the next two years during which economic consequences of European monetary unification will be better understood. The enlargement of the EU in 2004, when eight central and East European countries are expected to be admitted, will also have a large impact on the thinking of East Asian policymakers on regionalization in East Asia. If the members of the European monetary union make a smooth adjustment to the single currency and the EU enlargement proceeds as planned, then these developments will likely give a strong impetus to East Asian integration.

### **13. Concluding Remarks**

There has been an emerging consensus that the time has come for East Asian countries to join forces to establish regional financial arrangements as part of their efforts to help stabilize regional financial markets by preventing financial crises. However, recent economic and political developments in the region cast some doubt as to whether the ASEAN+3 will be able to successfully negotiate the creation of a more elaborate cooperative arrangement beyond the CMI, given the different interests of participating countries. Details of the system of bilateral swap arrangement among the ASEAN+3

countries will have to be worked out to make it a more credible defence mechanism, but two years of discussion and negotiations have yet to produce a scheme acceptable to both ASEAN states and the Northeast Asian three (PRC, Japan, and Korea).

Now that PRC has joined the WTO, its policymakers realize that they have to liberalize and open their financial markets and financial services industries sooner than expected. They also realize that as the country with the largest market, PRC is expected to contribute to, and cooperate with, other countries in order to sustain financial stability in East Asia. Nevertheless, the looming economic rivalry between PRC and Japan has made a comprehensive agreement on financial cooperation in East Asia elusive.

In promoting regional cooperation 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. While Japan and the other East Asian countries cannot, and should not, ignore the wishes of the United States and the European Union, the thirteen East Asian countries will have to decide whether a regional cooperative mechanism will be worth the effort to restore the dynamism and vitality the region was accustomed to before the crisis. With PRC's increasingly active stance on regional economic issues, however, Japan has been retrenching from its earlier advocacy of an East Asian monetary and financial arrangement, at least informally. In order to sustain the momentum of the regional integration movement, Japan is being asked to articulate what its national interests are and what they are prepared to do to support financial integration in East Asia. Unless Japan finds ways in which it could collaborate with PRC on resolving regional economic issues, the prospects for regional financial cooperation are not going to be promising.

East Asia has a long way to go before formalizing and putting into effect the Chiang Mai Initiative and developing it into a full-fledged monetary fund. The speeding up of the process would require that joint leadership be provided by both PRC and Japan in papering over the differences among the East Asian countries that are likely to emerge in the negotiation process. In addition, Japan's willingness to provide a large share of the resources would be critical to advancing regional financial cooperation without dominating the other countries.

Finally, an essential requirement for achieving cooperative evolution with the rest of the world is for East Asians and those outside the region 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 their action plan, and how they believe it fits in with global systems. Those outside will also need to listen carefully and support them, if possible, in an outward-looking direction (Bergsten, 2000).

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## **Appendix 1: European Experiences<sup>26</sup>**

### **Surveillance Systems in the European Payment Union**

The European Payment Union (EPU) was introduced on 1 July 1950 for the restoration of free trade and payments after World War II and existed until 27 December 1958. The EPU was a mechanism to change the bilateral payment system in intra-European trade into a multilateral one.<sup>27</sup> Each country reported all bilateral deficits and surpluses at the end of every month to the Bank for International Settlements (BIS), the EPU's financial agent. These were netted out into one overall net position toward the EPU. The net position of each month was cumulated over time and the net position of each country with the union as a whole had to be settled.

With this system in place, intra-European trade was multilateralized. The regional trade volume expanded significantly, while trade with other countries slightly diminished. The EPU reduced settlement in gold and dollars through multilateral and inter-temporal counterbalancing by more than 75 percent compared to what would have been required under the bilateral payment system (Eichengreen and de Macedo 2001, p.3).

The 18 participating states of the EPU could overcome the dollar shortage and expand trade since EPU membership required the liberalization of trade. The direct benefits of the EPU were easier credit and the further liberalized regional markets. To enjoy these benefits, member countries were obliged to report all the surpluses and deficits in their bilateral trade with other member countries. They also had to accept restrictions on imports from extra-European sources through the use of import licensing, foreign exchange rationing, and other administrative devices associated with inconvertible currencies.

The Managing Board of the EPU was the authority responsible for policy decisions and surveillance. The most important task of the Managing Board was minimizing the scope for exploitation of creditors by debtors. When a member threatened to exhaust its quota, the EPU Managing Board comprised of independent financial experts reporting to the Council of the OEEC gathered to give advice and recommend corrective policies. Discussions were often initiated before the quota was fully exhausted, and it was made clear that the provision of exceptional assistance was contingent on the country's early adoption of adjustment policies (Eichengreen 1993, p.26).

The EPU is said to have facilitated the resolution of balance-of-payments problems. Its Board extended supplementary credits to countries that exhausted their EPU quotas, attached conditions to their provisions, and monitored domestic policy adjustments. Officials of countries receiving exceptional credits were required to appear at the monthly meeting of the EPU Board for questioning and to submit monthly memoranda for the Board's review (Eichengreen 1993, p. 36). The EPU Managing

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<sup>26</sup> This appendix draws in large part on Wang and Yoon (2002).

<sup>27</sup> After World War II almost all the European countries suffered because of the lack of dollars, the only convertible currency at that time. This led to trade with a bilateral payment system. Under the bilateral payment system many countries experienced difficulties because they did not have the currency of their trading partners, even if they had trade surpluses with other countries. This was the reason the EPU was needed in Europe. See details in Eichengreen (1993).

Board achieved authority by its effective implementation of what much later became known as multilateral surveillance (Gros and Thygesen 1998, p.8).

The objective of monetary cooperation in the EPU was securing a payment system, which had been a serious barrier to trade and economic reconstruction. The Managing Board did not only monitor information but also gave directives regarding economic and monetary policy.

### **The Bretton Woods System and the Treaty of Rome**

In the 1960s the Bretton Woods system became operational. This system established fixed exchange rates between all European currencies and the US dollar, which had parity with gold. Under the Bretton Woods system European countries could enjoy a stable exchange rate and a favorable international macroeconomic environment.

The crucial event in Europe after the dissolution of the EPU was the formation of the European Economic Community (EEC). Six European countries signed the Treaty of Rome to build a customs union and adopt the Common Agricultural Policy. To stabilize these two forms of integration, the EEC needed to coordinate economic policy and meet the balance of payments. Paragraphs 103 to 107 of the Treaty of Rome state explicitly that each member country pursues considers economic policy and its exchange rate policy as matters of common concern. However, these provisions of the Treaty did not have any practical meaning because the IMF was in charge of exchange rate policy and balance of payments assistance.

However, the Treaty of Rome established two important monetary institutions. The first institution was the Monetary Committee, which comprises one representative from the central bank and one from the finance ministry of each member country, and two representatives of the EC Commission. This committee provided a useful forum for the exchange of information and to prepare for the meetings of the Council of Ministers of Economics and Finance (ECOFIN). The second institution was the Committee of Governors of the Central Banks of the Member Countries of the European Community. This Committee was established in 1964 and met monthly on the premises of the Bank for International Settlements (BIS) in Basle. Through these institutions, national monetary officials have been meeting regularly for over thirty years to exchange information and experiences and to resolve technical issues.

Another important institute in the general economic sphere was the Council of Ministers for Economic and Financial affairs (ECOFIN). The Council of Ministers was the main decision-making body composed of the relevant ministers, which decides almost all the important resolutions in the economic and financial field and give directives to other institutions. Thus, ECOFIN played the role of headquarters in the process of economic and monetary integration.

The main issue for the Community in the monetary area in 1960s was that the questions of whether exchange rate adjustments could disrupt the functioning of the customs union and the Common Agricultural Policy. The IMF took over this concern and supported securing the system of fixed exchange rates and balance of payments. The European countries did not have much to do in the monetary field. The early 1960s was a period of low employment and relatively stable prices. Capital could not move freely from country to country. In the given economic environment, strong government

intervention was not needed. Active economic cooperation was not necessary either, because the economic integration was not so intensive in those years.<sup>28</sup>

The objective of monetary cooperation in this period was to support economic integration by securing exchange rate stability. The surveillance institutions were merely vehicles for exchanging information. Cooperation and surveillance in the monetary field were organized more actively by the IMF rather than by European institutions. As the European countries did not have problems with the Bretton Woods system, monetary cooperation among European countries remained inactive.

### **The Snake System: 1972-1978**

As the Smithsonian Agreement tripled the margin of fluctuation against the dollar to 2.25% after the Bretton Woods system, the exchange rate between any two EC currencies would have been able to differ by up to 9% for the given period. This would not have been compatible with the functioning of the common market and common agricultural policy. The EC member states agreed to reduce the margin of bilateral fluctuations to 4.5% ( $\pm 2.25\%$ ) and to jointly float against the dollar. This Basle agreement was known as the Snake System. This system, however, did not function well, as each European country faced a different economic situation. Some countries were pressured to devalue, while others were pressured to revalue. Even though Germany intervened several times because of weak currencies, it could not save all the currencies. Many countries repeated to withdraw and come back as well as to realign. The inability to develop a joint response to movements of the dollar was a major source of concern for leading European countries.

The new institution for surveillance in the Snake System was the European Monetary Cooperation Fund (EMCF) set up in April 1973. The fund took the responsibility of monitoring the Community's exchange rate system and maintaining the multilateral nature of net interventions of participating central banks in EC currencies. The Fund was also to take care of the administration of existing very-short-term and short-term facilities. The BIS was appointed as an agent for this task. The legal seat and board meetings were to be in Luxembourg. The governors of the EC national central banks were to constitute the board. The Fund did not play any relevant role until it was integrated into the European Monetary Institute (EMI) in 1994. The Fund met formally just for a few minutes after the meeting of the Committee of Central Bank Governors in Basle.

All issues, however, were discussed in the Committee, not in the Board. The main reason for the weak role of the Board was its formal subordination to the ECOFIN Council. Their authority was explicitly constrained to act in accordance with guidelines and directives adopted by the ministers. Since this was unacceptable to several governors, substantive work remained with their committee. Created prematurely and lacking real authority, the launching of the EMCF resulted in little progress toward the procedure of monetary integration.

With regards to monetary policy, the Committee of Central Bank Governors was asked to establish general guidelines for bank liquidity trends as well as the terms

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<sup>28</sup> The relation of intra-EC trade to GDP stood only at about 6% in 1960. It went up to 12% in 1970 and 15% in the 1990s. See Gros and Thygesen (1998), p. 10.



for supplying credit and the level of interest rates. The Committee of Governors established a Committee of alternate expert groups to monitor exchange market developments and trends in national money supplies and their main determinants. A Working Group on Harmonization of Monetary Policy Instruments was set up by the Committee of Governors and Monetary Committee to follow up on the March 1971 decision. But these new institutions did not really work, although there was an increase in the exchange of information about domestic aspects of monetary policy. The problem of these institutions was that the responsibility of conducting analytical work rested on individual national authorities rather than regional ones. This made it difficult to challenge the interpretation of individual nations who tried to protect its own policies.

The prospects looked better for coordination of budgetary policies. Detailed procedures for the examination of the economic situation in the EC and the adoption of guidelines for public budgets by the ECOFIN Council had been agreed upon in the March 1971 decision. ECOFIN adopted in 1974 the decision on the attainment of a high degree of convergence of the economic policies of member states. The adoption of this decision indicates that both the Council and the Commission had retained their belief in the need for exercising joint and discretionary authority over the stabilization function of national budgetary policies after the oil shock.

In this period, the overall economic environment had deteriorated and economic divergence among European countries became greater. Each country merely sought to solve its own problems without regarding Europe as an entity. The economic policy of each country was made at the national level. Policy coordination was hardly expected.

Policy coordination in the monetary field was realized just on the level of information exchange. The European countries could not accept higher-level cooperation, because each country had to give up its national economic policy in times of need. Surveillance systems could not function well either.

### **European Monetary System (EMS): 1979-1992**

The nine EC member countries were divided into two groups with very different economic performances and exchange rate regimes by 1977. One group had achieved some success in keeping inflation moderate and had maintained the outward appearance of having the intention of participating in the snake system. Germany, the Benelux countries and Denmark with Norway as an associate member belonged to this first group. The other group floated their currencies individually and all experienced high inflation, current-account deficits and substantial depreciation. The currencies in the second group were the British sterling, the French franc, the lira and the Irish punt. It seemed difficult to devise an exchange rate system, which could incorporate both groups of countries.

The EMS was negotiated at first between the President of France and the Chancellor of Germany. With the plan for EMS, Germany offered its western neighbors the possibility of returning to monetary cooperation and France opted for a more thoroughly stability-oriented economic and monetary policy. Germany had three objectives to achieve; first, stabilizing the trading environment for most of Germany's trade; second, protecting Germany against critics of the international society for being

too expansionary; third, increasing the European influence on international policy making.

The EMS has three components—the ecu, an exchange rate mechanism, and credit facilities:

- The ecu: Europe introduced an artificial currency based on the EU currencies as a means of payment for intervention and settlement. It was calculated as the weighted average of all the participating currencies, reflecting their respective economic strengths. The primary function of the ecu was to constitute a unit of payment and account for the exchange rate and intervention mechanism and for the development of credit mechanisms. It was also a limited reserve instrument. European countries are now able to use their own currencies to intervene. This has raised the potential to secure the internal stability of exchange rates and block the influence of dollar instability.
- The exchange rate mechanism: This was the core component of the EMS. A central rate for each EMS currency was set in ecus and the various participating currencies managed a full set of bilateral exchange rates, which could be varied within a given margin. The basic margin was set at  $\pm 2.25\%$  and  $\pm 6\%$  for the UK, Italy and Spain for some time. If rates hit the extremes, the central banks had to immediately intervene by buying or selling foreign exchange to stay within the band. The main advantage of this system was that a country whose currency reached its margin against a Community average had to intervene, regardless of whether that currency was strong or weak. The burden of intervention was to be shared in the EMS, while the burden of adjustment in the Snake System went to the weak currency. This intervention mechanism relieved the countries with weak currencies greatly at the cost of joining the EMS. If the central rates surpassed the upper or lower limit, there needed to be realignment. The realignment was prepared by the Monetary Committee and required a unanimous decision of the ECOFIN. The Basle/Nyborg agreement of September 1987 on the reform of the EMS introduces a safeguard clause to prevent realignments by allowing the central banks to intervene within margins before the extremes are reached.
- Credit facilities: The three existing credit facilities were extended in the EMS. A central bank, which did not have adequate foreign exchange reserves to intervene, could get a very short-term facility of an unlimited amount from the EMCF. Central banks of strong currencies had an obligation not to restrict the amount of their own currency used to defend the existing bilateral margins. The EMS has enlarged the existing short-term monetary support and medium-term facility in volume and in terms of duration and rates.

The EMS could bring European countries to cooperate in the monetary sphere again and became the focus of monetary cooperation policy. The EMS enjoyed stability without realignments and maintained itself in the second half of the 1980's. In the meantime, the EMS did not add any new members. There were several attempts to move on from the EMS to a common currency before the crisis following German unification and worldwide recession in the beginning of the 1990s. After a long period of stability the finance ministers and central bank governors expanded the bands to

±15% in August 1993. The blurred prospect of further monetary integration witnessed a new turn through the Maastricht Treaty.

The EMS followed the objective of internal stability of exchange rates because the economic interaction between European countries became more significant, prompting them to seek political power more appropriate to their economic position in international society. The EMS used the same surveillance institutions but the institutions became more active. The Monetary Committee and the Committee of Central Bank Governors made their consultations on exchange rate matters in March 1977 on the directive of ECOFIN. The Commission submitted, at regular intervals, analytical papers on recent trends and prospects in exchange markets, generating a more intensive exchange of information and views.

### **Economic and Monetary Union (EMU): 1993- present**

#### *Delors Report and the Treaty on European Union*

The Hanover European Council of June 1988 set up a Committee for the Study of Economic and Monetary Union in the European Community, presided over by the president of the EC Commission, Jacques Delors. This is the so-called Delors Committee. In April 1989, the submitted report of this committee proposed to move towards economic and monetary union in three stages. It stressed the need for greater coordination of economic policies, rules on the size and financing of national budget deficits, and a new, completely independent institution which would be responsible for the Union's monetary policy.

On the basis of the Delors report, the Madrid European Council decided in June 1989, to launch the first stage of the EMU: full liberalization of capital movements in eight member states by 1 July 1990. In December 1989 the Strasbourg European Council called for an intergovernmental conference to amend the Treaty for introduction of full economic and monetary union. The work of this intergovernmental conference led to the Treaty on European Union, which was formally adopted by the Heads of State and Government at the Maastricht European Council in December 1991 and signed on 7 February 1992.

The Treaty stated that economic and monetary union be introduced by the end of the century in three successive stages following a precise timetable:

- The first stage began on 1 July 1990. The essential objectives of the first stage were to increase monetary coordination, to bring all member countries into the EMS, to complete the single market and to carry out preparatory work on the Treaty amendments that would later be necessary.
- The second stage started on 1 January 1994. Member states were to make significant progress towards economic policy convergence: precise rules on public financing were adopted and a new type of monitoring was introduced and carried out by the Commission. The most important aspect of the second stage was the setup of a European System of Central Bank—the European Monetary Institute (EMI). The EMI was to strengthen cooperation between the national central banks and to carry out the necessary preparations for the introduction of the single currency.

- The third stage, culminating in monetary union, began on 1 January 1999. The third phase saw the transition of managed exchange rates to a single currency. The EMU was subject to the achievement of a high degree of durable convergence measured against a number of objective criteria laid down by the Treaty.<sup>29</sup> The budgetary rules became binding and member states not complying faced penalties. A single monetary policy was introduced and entrusted to the European System of Central Banks (ESCB), made up of the national central banks and the European Central Bank (ECB), substituting the EMI. The EURO replaced the national currencies in the region.

#### *Transition to the EMU: Convergence Criteria and the EMI*

The negotiations concerning the provisions regarding the transnational phase and the specifics of the second and third stages proved particularly difficult. The decision-making power concerning matters of monetary policy remained with the member countries during the second stage. However, under Article 109(e) of the EC Treaty, the process leading to the independence of their central banks had in fact begun. Institution-wise, the European Monetary Institute was founded on 1 January 1994 as a precursor to the European Central Bank. Three main tasks for the EMI are listed in Article 109 of the Maastricht Treaty and in Article 2 of the Protocol on the Statute of the EMI:

- Strengthening the coordination of monetary policies with a view to ensuring price stability,
- Making the preparations required for the establishment of the ESCB and for the conduct of a single monetary policy and the creation of a single currency in the third stage,
- Overseeing the development of the ecu.

The EMI was better equipped than its predecessor, the Committee of Central Bank Governors, to facilitate and reinforce coordination of national monetary policies during the transition. First, the EMI had become by 1996 a sizeable and professionally highly competent institution with a staff of more than two hundred. This made it possible to centralize analytical functions. Operations were more efficient than before 1994, when the preparation of coordination efforts and analyses of policies in individual countries were performed in a decentralized and often defensive way. Second, Article 8 of the EMI Statute conferred upon the members of the EMI Council a strong degree of autonomy in exercising their collective tasks. They no longer could take any instructions from EU institutions or bodies or from the government of member states. Third, Article 109(f) of the Maastricht Treaty conferred upon the EMI Council the right to formulate by a qualified majority opinions and recommendations not only the overall orientation of monetary policy and the functioning of the EMS, but also on the conduct of policy in member countries. Even if monetary policy in Stage II were fully in national hands, these provisions introduced an element of collective responsibility, which did not previously exist.<sup>30</sup> Its function was to support the efforts of the member

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<sup>29</sup> See Article 109(j) of the Treaty.

<sup>30</sup> See Article 103, 4 of the Treaty.

countries to create the conditions for entry into the third stage. It also developed instruments and procedures for the implementation of a single monetary policy.

A credible stability policy and a high degree of convergence on the part of the economies involved are essential if a common currency is to be stable. All EU countries were allowed to participate in the second stage, but in order to enter the third stage, all the convergence criteria given by Article 109(j) had to be met.

- First, a high degree of price stability: This was achieved when a country's inflation rate exceeded the average inflation in the three best-performing member states by no more than 1.5%.
- Second, the sustainability of the government financial position: this condition was fulfilled when annual government debt was no more than 3% of the GDP and total public debt did not exceed 60% of GDP.
- Third, Exchange rate stability: Currencies were required to remain within the narrow EMS band for at least two years without devaluation against the currency of any other member currency.
- Fourth, the durability of convergence: This condition was measured by nominal long-term interest rate levels, which may not be more than 2% higher than the average of at most, the three countries with the lowest rates of inflation.

The demanding convergence criteria formed the basis for monitoring economic performance throughout the second stage. From 1994 the EC Commission and the EMI prepared regular reports to the ECOFIN Council on convergence progress in terms of the four criteria. Even though the last decision has fallen somewhat politically, through the process of conversion the countries have shown the will and capability to join the EMU.

#### *Policy Dialogue under the EMU: Stability and Growth Pact*

The Stability and Growth Pact clarified the Maastricht Treaty's provision for dealing with "excessive deficits" and provided an institutional framework for its enforcement, in part through strengthened surveillance and coordination of economic policies via the annual review of the national stability program. The Pact also called on participants in the Economic and Monetary Union and those countries with a single monetary policy to adopt budgetary balance as the medium-term objective.

The Pact considered a general government deficit above 3% as excessive unless the European Union judged it to be temporary or was caused by special circumstances. Temporariness implied that according to the projections of the Commission, the deficit falls beneath the 3% threshold in the following year. In the case of an excessive deficit, the Council would on the recommendation of the Commission propose a course of action for the country that should be followed by effective measures within four months. The Council would monitor the measures and if found to be inappropriate, would make further detailed and published proposals. If corrective measures were not to have been implemented within ten months, sanctions would be imposed. These would initially take the form of non-remunerated deposits, with a fixed component equal to 0.2% of GDP and a variable component rising in line with the size of the excessive deficit. Even though such deposits were limited to a maximum of 0.5%

of GDP per year, they would accumulate each year until the excessive deficits were eliminated. Only if the excessive deficit were corrected within two years, the deposits would be returned to the country.

When a country were judged to be in recession, which is defined as an annual fall in real output of at least 0.75%, the Pact would be enforced in a differentiated manner. If economic output in a member country declined by 2% or more and the deficit were temporary, exemption from the procedure would be granted automatically. If GDP fell by between 0.75% and 2%, the Council could grant exemption in special circumstances. The country would need to have convinced the Council that the economic decline was exceptional in terms of its abruptness or in relation to past experience.

### *Policy Coordination under the EMU*

With the deepening of integration, centralized regulatory functions of the EMU increased significantly. However given the diversity in member countries' interests, histories, and institutions, policy preferences still differed. It called for a high degree of policy coordination in the ongoing deepening and widening of the Community. In recent years several initiatives have been aimed at policy coordination by consensus building, exercising peer pressure and sanctions in the Stability and Growth Pact. In this context, the Council issued the Broad Economic Policy Guidelines annually since 1993. The guidelines were a key reference document for the conduct of economic policy as they represent a synthesis of the Community's consensus on economic policies. They covered both macroeconomic and structural policies, outlined Community goals and also gave country-specific recommendations. The EU sometimes used benchmarking as an instrument for cooperation, for instance EU-wide benchmarking of industrial performance and co-ordination of research efforts.

With the increasing degree of integration, national foundations have been transferred to the Community. New institutions were established and the working capacity of the Community expanded considerably. The European System of Central Banks (ESCB) was a representative example in the monetary sphere. Following the increased role, the Community has been increasingly taking on the task of correction besides monitoring and surveillance. Implementing the envisaged correction goals needed more intensive policy coordination in advance, which called for safeguard clauses. The EMU saw itself facing a problem of chasing two rabbits, a region-wide policy as well as a subsidiary principle.

### **Lessons from the European Experience**

Surveillance is an essential tool for the enforcement of community legislation and policy coordination between member countries. Even though the regional community requires member states to take all the appropriate measures to ensure fulfillment of their obligation arising from the treaty, the European experience shows that there are some lessons for effective surveillance.

The first lesson is that clear specified objectives enable effective surveillance. The EPU was able to enjoy the most effective surveillance system in the European experience because each country was able to see the concrete benefit from the partnership.

Second, the regional body should have its own surveillance authority, which ensures technical competence and professional integrity of their personnel, and acts in an independent and non-discriminatory way. The regional authority should be able to produce its own analysis and views to overcome the conflict in interest of national authorities.

Third, the surveillance system should develop with the degree of regional integration. Monitoring or simple information exchange is enough in the lower stages of integration, while the task of implementation and enforcement is needed in the higher stages of integration. If the surveillance system exceeds the degree of integration, the system would not function properly because national bodies would not support it.

Fourth, administrative cooperation is an obligation of member states. National and regional surveillance authorities must provide mutual assistance. National surveillance authorities should make information available spontaneously or on request, according to mutually agreed principles and mechanisms. Administrative cooperation needs infrastructure like committees and/or working groups and access to a national database. Commission and Monetary Committee and Committee of Governors have been stable forms of infrastructure in the surveillance system in Europe.

## Appendix 2: IMF's Global Surveillance

One of the core responsibilities of the International Monetary Fund (IMF) is to maintain a dialogue with its member countries on the national and international repercussions of their economic and financial policies. This process of monitoring and consultation is normally referred to as surveillance. At its inception, the IMF had a mandate under its Articles of Agreement to exercise firm surveillance over exchange rates and current account convertibility in order to oversee the international monetary system and ensure its effective operation.<sup>31</sup> IMF members were obliged to declare par values and to make consultations regarding their adjustment until the Bretton Woods fixed exchange rate regime collapsed in the early 1970s. These obligations were fundamentally oriented toward stabilizing and sustaining international trade rather than international capital flows (Eichengreen, 2001). However, the growing cross-border repercussions of national economic policies, transmitted by unprecedented large capital flows, led to the Second Amendment of the IMF Articles of Agreement empowering the IMF to conduct “firm surveillance” of its members’ macroeconomic policies. A series of emerging market crises in the 1990s further underscored the necessity to expand the scope of surveillance for the purpose of coping with the intensified global integration of financial markets.

The scope of Fund surveillance has been so widened over time that it can no longer be seen as one unified concept. According to Crow et al. (1999), as currently practiced, surveillance reflects a number of overlapping but conceptually distinct purposes. They have identified six such purposes:

- **Policy advice:** The Fund offers advice and proposals and also serves as a sounding board for policy dilemmas facing member countries.
- **Policy coordination and cooperation:** The Fund helps policy consultation among groups of countries by providing inputs such as reliable data, forecasts and analysis and the machinery through which policy coordination can take place.
- **Information gathering and dissemination:** The Fund maintains databases that are useful for policy formulation, and disseminates information, which can benefit private market participants and the general public.
- **Technical assistance and aid:** In many developing countries, surveillance is tantamount to providing technical assistance, owing to the scarcity of expertise in macroeconomic policy-making.
- **Identification of vulnerabilities:** This is an extension of the information and policy advice role that is particularly relevant when a country’s policies are likely to be unsustainable. In this context, early warnings and policy advice given by the Fund to vulnerable countries play a role in formulating prompt corrective policy measures.

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<sup>31</sup> The origin and legal basis of the surveillance function stem from Article IV, section 3(b) of the Articles of Agreement, which states that “the Fund shall exercise firm surveillance over the exchange rate policies of members and shall adopt specific principles for the guidance of all members with respect to those policies. Each member shall provide the Fund with information necessary for such surveillance, and, when requested by the Fund, shall consult with it on the member’s exchange rate policies.



- **Delivering the message:** The Fund provides countries with policy prescriptions on numerous topics, from the advantages of moving toward a system of indirect instruments of monetary control to the need to liberalize labor markets. By doing so, the Fund provides a way by which the prevailing consensus of the economics profession is disseminated to government and policy makers throughout the world.

Traditionally, there have been two levels of surveillance practiced by the Fund: bilateral and multilateral. Bilateral surveillance refers to the Article IV consultations undertaken by the Fund with individual member countries, while multilateral surveillance refers to the systemic analysis and forecasting of the world economy, published in the *World Economic Outlook* and *International Capital Markets Report*. In addition, the IMF and the World Bank have adopted a program of *Reports on the Observance of Standards and Codes* (ROSCs) to enhance incentives of member countries to adopt and improve adherence to internationally recognized standards and codes of good practice.

### **Bilateral Surveillance**

Bilateral surveillance is conducted through Article IV consultation. The IMF holds consultations, normally every year, with each of its members. These consultations focus on the member's exchange rate, fiscal, and monetary policies; its balance of payments and external debt developments; the influence of its policies on the country's external accounts; the international and regional implications of those policies; and on the identification of potential vulnerabilities. These consultations are not limited to macroeconomic policies, but touch on all policies that significantly affect the macroeconomic performance of a country, which, depending upon circumstances, may include labor and environmental policies and the economic aspects of governance. With the intensified global integration of financial markets, the IMF is taking into account more explicitly capital account and financial sector issues (IMF, 2001).

### **Multilateral Surveillance**

Multilateral surveillance is geared more towards analysis of recent world developments, projections of future development, identification of risks of instability in the international economic system and the proposing of the ensuing policy recommendations. The primary vehicle for the Fund's multilateral surveillance is the *World Economic Outlook*, produced twice a year, which provides a comprehensive set of economic forecasts for the world economy. It usually covers the broad areas of the world economic situation, global economic prospects and related policy issues, especially policy stances in industrial countries.

### **Regional Surveillance**

Regular discussions are also held with regional economic institutions, such as those of the Economic and Monetary Union (EMU) in Europe. The Fund has been active in providing inputs to other regional mechanisms for policy consultations. It has been designated as the technical secretariat to the Manila Framework Group. The Fund has

also been invited to present economic briefings for the ASEAN+3 Finance Ministers' meetings. Similarly, the Fund has contributed inputs to the APEC forum. The Fund's main contribution has been the preparation of background papers; however, these papers do not focus much on regional issues but rather are drawn from available materials resulting from bilateral and multilateral consultations. The Fund conducts regular discussions with regional entities of a number of currency unions, such as the West African Economic and Monetary Union, the Central African Economic and Monetary Community and the Eastern Caribbean Currency Board.

As noted in External Evaluation of IMF Surveillance prepared by Crow, Arriazu, and Thygesen (1999), European monetary unification poses special challenges for Fund surveillance, but also new opportunities. For euro area countries, only monetary policy has been centralized (trade policy, of course, has already been centralized for all members of the EU). Budgetary and structural policies continue to be a national responsibility, though the Pact for Stability and Growth subjects such policies to intensive monitoring by the Commission and by the Council of Finance Ministers (ECOFIN). Monitoring of the aggregate performance of the euro area is not yet well developed outside the European Central Bank (ECB), which has to review its monetary stance on the basis of aggregate indicators. This asymmetry in the policy framework implies that it will initially be complex to focus Fund surveillance of the euro area on the aggregate performance. Fund surveillance may, however, gradually be facilitated by an evolution in the policy framework, which is already under way. The Report concludes that Fund surveillance is more likely to have an impact at the euro area level than at the level of individual countries. Consequently, Article IV missions to participants in the euro area should become less frequent, more focused, and leaner. Then, the resources devoted to Fund surveillance could be considerably reduced, because it should be possible for Fund surveillance to rely largely on the work of the European Commission.

### **Transparency and Observance of Standards**

In the wake of the Mexican crisis in 1994-95, and the turmoil in the financial markets of East Asia in 1997, data issues have received increasing prominence in the IMF's work. In aiming to strengthen IMF surveillance, the Executive Board has emphasized the need for provision of timely, reliable, and comprehensive economic and financial data by members. The Fund encourages member countries to introduce greater policy transparency, for instance by providing detailed data on external reserves, related liabilities, and short-term external debt. This is currently done through the IMF's data standard initiatives: the Special Data Dissemination Standard (SDDS) and the General Data Dissemination System (GDDS). The international community has also called upon the IMF and other standard-setting agencies to develop standards or codes of good practice covering a number of economic and financial areas. The IMF and the World Bank have jointly adopted a program of Reports on the Observance of Standards and Codes (ROSCs).<sup>32</sup>

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<sup>32</sup> ROSCs summarize the extent to which countries observe certain internationally recognized standards on a voluntary basis. The IMF has recognized 11 areas and associated standards as useful for the operational work of the Fund and the World Bank. These include data dissemination; monetary and financial policy transparency; fiscal transparency; banking supervision; securities; insurance; payments

*(note cont.)*

### **Appendix 3: Regional or Sub-regional Initiatives among the ASEAN+3 Countries**

Before the Asian financial crisis broke out in 1997, few would have argued for the creation of one or another form of regional arrangement in East Asia. East Asians did not have strong incentives for regional integration through a formal process. Only a market-led integration process was taking place in East Asia. Accordingly, there were few monitoring and surveillance activities at the regional level prior to the crisis. However, the financial crisis that erupted in 1997 was a major financial breakdown that gave East Asians a strong impetus to search for a regional mechanism that could forestall future crises. This search is now gathering momentum, despite the fact that the stage of policy-led integration in East Asia is still rudimentary.

Information exchange and surveillance mechanisms can be carried out at different levels (national, regional and global) and focus on different aspects (macroeconomic, financial and institutional), varying with the mandate of the specific body involved (UN ESCAP, 2000). Specific structures and objectives of different types of surveillance activities need to be duly considered. For instance, it is widely agreed that international standards for sound practices at the national level are an obvious vehicle for addressing challenges for collective stability in a world of sovereign states (Eichengreen, 2001). However, the scope and enforcement mechanisms related to harmonization of standards would vary to the extent that different groups and institutions have different targets. The IMF, BIS, OECD, Manila Framework Group, and ASEAN Surveillance Process all have different perspectives on how to achieve common objectives through different instruments such as peer pressure, conditionality and market discipline. In this appendix, we review and evaluate the existing regional surveillance processes, such as the Manila Framework Group Meeting, and ASEAN+3 Surveillance Process.

Recent regional or sub-regional surveillance-related initiatives will be reviewed and assessed in terms of three criteria. First, the precise content of information exchange—information sets, priorities, targets, models, and rules—will be considered. Second, economic surveillance and the peer review process will be considered in terms of the conduct and methods of surveillance, the substance of surveillance recommendations in the peer review process, and the implementation of surveillance recommendations as well as the impact of the latter on countries' policies. Third, we will discuss the role of those initiatives to improve the regulation, supervision, and integration of financial services markets among the ASEAN+3 countries.

#### **Manila Framework Group**

On 18-19 November 1997, a conference of deputy finance ministers and central bank governors from 14 countries, mainly in the Asia-Pacific region, was held in Manila, and “A New Framework for Enhanced Asian Regional Cooperation to Promote Financial Stability” (the so-called Manila Framework) was agreed upon. The Manila Framework

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systems; corporate governance; accounting; auditing; and insolvency and creditor rights. Reports are used to help sharpen policy discussions with national authorities, by rating agencies in their assessments, and in the private sector for risk assessment.

Group (MFG) centers around four initiatives: (i) regional surveillance; (ii) technical assistance geared towards strengthening the financial sector; (iii) bolstering of the IMF's ability to deal with financial crises; and (iv) a contingent financing arrangement (CFA) for Asian currency stabilization. Although the MFG has no formal status, there are now biannual meetings among 14 countries/areas plus the IMF, World Bank, and Asian Development Bank.<sup>33</sup> The MFG is now seen as the preeminent forum for regional surveillance and peer pressure (Grenville, 2001). The IMF's Regional Office for Asia and the Pacific provides the Technical Secretariat for the Group. An ASEAN and non-ASEAN member occupy the position of Chair alternately. However, the MFG involves only a limited number of the economies in the region (not covering all ASEAN plus three) and its inputs and outputs are not made public, apart from an agreed press release after the meeting.

The MFG has shown only limited success as one of the surveillance mechanisms for the region. The three international financial institutions—the IMF, the World Bank, and the Asian Development Bank, conducted regional surveillance. According to the agenda discussed during the Manila Framework Group meeting in New Zealand, 4-5 December 2001, the IMF focused on global economic outlook and financial sector reforms. The World Bank and the Asian Development Bank presented the issues of structural reforms in the Asia-Pacific region and regional economic outlook and development issues respectively. The three presentations and follow-up discussions took only three hours including a tea break. Furthermore, the participation of the IMF and two multilateral development banks apparently did not add much value-added contribution to region-specific surveillance. In sum, their contributions are readily available from other sources.

The MFG also takes an interest in international financial reforms. It could be the forum for developing regional positions, which are then taken to world forums such as IMFC and G20 (Grenville, 2001). However, this group has not yet developed the formal status to deliver its own position to the world forums. In addition, the MFG discusses issues related to regional financial arrangements. In particular, inputs and concerns from Australia, Canada, Hong Kong, China, New Zealand, and the United States could be a valuable addition to shaping up the regional arrangements. However, any concrete contribution of the MFG to the ASEAN+3 process has not yet been found.

Overall, the MFG does not yet clearly specify the objectives of information exchange and surveillance. Thus, the content of information exchange is based on outside resources such as the IMF and two multilateral development banks. No priorities, targets, models and rules are set for the process of information exchange. In terms of the second criteria, there is no actual peer review process in the MFG. The surveillance process is simply tantamount to a general discussion of the global and regional economic outlook. Any country-specific or region-wide recommendations for policy actions are not seriously pursued at the end of the surveillance process. The issues related to financial sector reforms are briefly touched, and thus it is hard to say that the MFG process has effectively pressed the members to improve the regulation, supervision, and integration of their financial services markets.

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<sup>33</sup> The 14 member economies are Australia, Brunei Darussalam, Canada, PRC, Hong Kong, China,, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and the United States.

## ASEAN and ASEAN+3 Surveillance Process

In October 1998 the ASEAN finance ministers signed a Term of Understanding that established the ASEAN Surveillance Process (ASP). The overall purpose of the ASP is to strengthen policy dialogue based on the principles of peer review and mutual interest among ASEAN member countries. In addition to the usual monitoring of exchange rates and macroeconomic aggregates, the ASP monitors sectoral and social policies. It also includes provisions for capacity building, institutional strengthening, and sharing of information. The ASEAN Finance Ministers meet twice a year for policy coordination under the ASP.

The Asian Development Bank (ADB) supports this process by preparing the *ASEAN Economic Outlook* reports and special issue studies. In addition, the Bank has programmed a number of regional technical assistance projects to be implemented by the Regional Economic Monitoring Unit (REMU) in support of the ASP.<sup>34</sup> These projects will provide inputs to the ASEAN Surveillance Reports, conduct studies on specific topics, and strengthen the capacity of ASEAN officials and institutions on surveillance-related matters. REMU also supports the ASEAN+3 Surveillance Process following a request made by the ASEAN+3 deputies during their meeting in Brunei Darussalam in March 2000.

Capacity building support is provided at three levels through training of officials from ASEAN central banks and finance ministries in methods of economic monitoring and surveillance at ADB; support for the activities of the ASEAN Surveillance Coordination Unit located in the ASEAN Secretariat in Jakarta; and support for the establishment of Surveillance Units in the ministries of finance (so far in Cambodia, Indonesia, Lao PDR, the Philippines, Thailand, and Viet Nam).

A distinguished feature of the ASEAN Surveillance Process is that there is no fact-finding mission to member states like the IMF's Article IV consultation mission. Instead, finance and central bank officials who are the focal points for the ASEAN Surveillance Process directly provide information on their latest economic and financial situations to the ASEAN Surveillance Coordinating Unit (ASCU). Based on this information, ASCU performs an analysis of the latest economic and financial development in ASEAN while taking into account global developments that could have implications on the region's economies. Outcomes of such analyses are highlighted in a report initially prepared by the ASCU. This report, currently called the ASEAN Surveillance Report, is reviewed and finalized by the ASEAN finance and central bank deputies before the ASEAN finance minister's table it for discussion during their peer review.

The ASEAN+3 group was formalized in Manila in November 1999. Monitoring exercises performed under the ASEAN Surveillance Process have been expanded to involve PRC, Japan and Korea. The first peer review meeting under the ASEAN+3 Surveillance Process was held in May 2000 on the sidelines of the ADB's

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<sup>34</sup> The Regional Economic Monitoring Unit (REMU) was established by ADB in early 1999 to allow developing member countries to harness the full benefits of global financial integration while minimizing disruptive effects. REMU's most important activities currently are providing support to the ASEAN and ASEAN+3 surveillance process and housing the Asia Recovery Information Center (ARIC) at [www.aric.adb.org](http://www.aric.adb.org). REMU also supports the Manila Framework Meeting and the Asia-Europe Finance Minister's Meeting by providing monitoring inputs.

annual meeting. Currently, the ASEAN+3 Surveillance Process is similar to the ASEAN Surveillance Process. However, as the CMI develops into a source of financial facilities that are more independent from the IMF, the ASEAN+3 Surveillance Process needs to be strengthened beyond the peer review process. While this may seem to depart from the policy of non-interference in domestic affairs, increasingly ASEAN+3 policy makers have come to grips with the necessity of constructive engagement (UN ESCAP, 2000).

The ASEAN+3 finance ministers made the decision to establish the Study Group at their meeting in Honolulu on 9 May 2001. The task of the Study Group is to examine ways of enhancing the effectiveness of ASEAN+3 economic reviews and policy dialogues to complement the bilateral swap arrangements under the CMI. It was agreed that Japan and Malaysia would co-chair the Study Group and that its membership, which is on a voluntary basis, would consist of finance and central bank officials from the ASEAN+3 countries.

The first meeting of the ASEAN+3 Study Group was held in Kuala Lumpur on 22 November 2001. The main purpose of the meeting was to discuss a joint paper prepared by Bank Negara Malaysia and the Ministry of Finance, Japan, entitled “Possible Modalities to Enhance the Effectiveness of Economic Reviews and Policy Dialogues among the ASEAN+3 Countries.” Two types of recommendations—Phase I and II—were made. The first was about how to further enhance the existing process of economic reviews and policy dialogues among the ASEAN+3 countries, while the other was about how to construct a new enhanced policy dialogue mechanism.

The second meeting of the ASEAN+3 Study Group was held in Myanmar on 2 April 2002. There was more intensive discussion of the possible specific modalities for Phase II proposed by Malaysia. Although there was no consensus, the main issue was clearly defined to be the establishment of a support unit to carry out the surveillance activities and the functions of an expert group.

In terms of the three criteria applied to the MFG, the ASEAN+3 surveillance process needs to specify the precise content of the information to be exchanged. With respect to information exchange, ADB’s Regional Economic Monitoring Unit (REMU) presents updates in its Asia Recovery Report. After the presentation, countries exchange views on macroeconomic and financial developments in their respective countries and other important issues affecting the recovery in the East Asian region. Countries are encouraged to circulate their economic reports at the meetings. However, there has been no common template for the economic reports and the content and format of the reports has been left to the discretion of each country. In order to ensure the comparability of the reports submitted by countries at the meetings, members recently agreed to develop a common template or format. Although the template will only serve as a guide, with the countries maintaining some flexibility in how they prepare their reports, the template should clearly specify the content of information to be shared. Without access to all relevant information, the meetings would not be able to accomplish their objectives. In addition, members agreed to include assessments made by the international financial institutions in their country reports with the hopes that this will facilitate a frank exchange of views as well as enhance the “comfort level” among officials to share opinions and experiences.

Second, the current practices under the ASEAN+3 process cannot effectively signal the early warning of potential risks to facilitate the required individual or collective policy responses. The issues of concern and emerging problems are not sufficiently addressed mainly due to the fact that the discussion at the ASEAN+3 meetings currently tends to focus on recent economic developments of member countries on a voluntary basis. The substance of surveillance recommendations in the peer review process and the actual implementation of surveillance recommendations remain yet to be developed. Accordingly, the ASEAN+3 process cannot be said to contribute greatly to improving the regulation, supervision, and integration of the financial services markets of the member countries.

## **Appendix 4: Surveillance Mechanisms in Other Regional Arrangements**

### **North American Free Trade Agreement (NAFTA)**

NAFTA is a comprehensive rules-based trade agreement between the United States, Canada, and Mexico. It was signed by the three governments on 17 December 1992 and came into force on 1 January 1994. It broadens and supersedes the 1989 Free Trade Agreement (FTA) between the United States and Canada. Its primary objective is to promote free trade in the area and to reduce all tariffs to zero within a 15-year period.

The central institution created by NAFTA, and hence the body ultimately in charge of fulfilling NAFTA's objectives, is the ministerial-level NAFTA Free Trade Commission (FTC) composed of cabinet-level representatives and required to meet at least once a year, in locations rotating among the three countries. The FTC is designed to supervise the implementation of the Agreement and resolve any disputes that may arise regarding its interpretation or application.

The second main institution body of NAFTA is the Secretariat. It has three primary functions: first, to support the FTC and any working groups or committees established by it; second, to act as the administrative assistant for NAFTA's dispute settlement panels and related committees; and finally, to act in a limited capacity as a depository for any investment-related disputes. It is currently composed of three national sections, a mechanism that originated in the Canada-United States Free Trade Agreement of 1989 (CUSFTA) to administer binational procedures for dispute settlement panel reviews.

Both institutions are essential in ensuring full implementation of the agreement. When disputes emerge, the NAFTA directs the government concerned to seek to resolve their differences amicably through the NAFTA's 25 committees and working groups or other consultations. If no mutually acceptable solution is found, the NAFTA provides for expeditious and effective panel procedures. One of the principal elements of the NAFTA is the establishment of a clear set of rules for dealing with the settlements of disputes as in other trade agreements. In practice, the cases referred to government-to-government consultation under NAFTA Chapter 20 are extremely few. This infrequent use of panel procedures reflects the commitment of the three NAFTA governments to reach agreement on areas of dispute, and the strength of the NAFTA's institutions. These include working groups on each of NAFTA's substantive areas, frequent discussions among NAFTA coordinators, and meetings of the NAFTA FTC at both the Deputy and Ministerial levels. When issues have been referred to NAFTA consultations, the consultations and subsequent meetings of the FTC have been able to focus the issues and draw political-level attention where needed, often resulting in a settlement without resort to arbitration.

### **MERCOSUR**

The Common Market of the South (MERCOSUR) is an ambitious economic integration project in which Argentina, Brazil, Paraguay and Uruguay find themselves engaged. Its principle objectives are:



- To improve the economies of their countries by making them more efficient and competitive and by enlarging their markets and accelerating their economic development by means of a more efficient use of available resources;
- To preserve the environment;
- To improve communications;
- To coordinate macroeconomic policies; and
- To harmonize the different sectors of the economies of the member countries.

In the 1970s, Uruguay strengthened its commercial relationship with Brazil by way of the Commercial Expansion Protocol (PEC), and with Argentina by way of the Argentine-Uruguayan Economic Cooperation Agreement (CAUCE). Between 1984 and 1989 Argentina and Brazil signed twenty-four bilateral protocols with the purpose of improving trade. Around the end of 1990, Argentina and Brazil signed, and registered ALADI, an Agreement on Economic Cooperation that institutionalized and deepened pre-existing bilateral commercial agreements. Around mid-1990, representatives of both countries met with authorities of Uruguay and Paraguay. It was then that these two countries expressed their firm aspiration to take part in the bilateral process already underway. At this point it was decided that an agreement among all four countries to create a common market should be signed. On March 26, 1999, the four countries signed the Treaty of Asuncion. This Treaty itself was not the treaty of the Common Market of the South, but served as an instrument, of international character, intended to make the implementation of the Common Market possible.

The Treaty of Asuncion is an economic integration agreement with regional vocation, which remains open to the accession of the other ALADI members. By virtue of what is established in Article 10 of Annex I of the Treaty of Asuncion, on November 29, 1991, the four countries signed an Agreement of Economic Cooperation under the legal framework of ALADI. In December 1994 an additional Protocol to the Asuncion Treaty was signed in relation to the institutional structure of Mercosur and called the Ouro Preto Protocol.

The countries designated representatives who act on their behalf and follow their government's instructions. Regarding its institutional bodies, MERCOSUR has various decision-making levels—presidential, ministerial and technical, which will act according to the nature of a given mandate. During the deliberations, each country follows its national strategy in defense of its own interest but at the same time; make efforts to attain the common goal of developing and strengthening the recently established customs union.

MERCOSUR has various institutional organizations, including Council of the Common Market (CMC), Common Market Group (GMC), Trade Commission of MERCOSUR (CCM), Joint Parliamentary Commission (CPC), Social and Economic Advisory Forum (FCES), and Administrative Secretariat of MERCOSUR (SAM). The Member States have agreed to adopt all the necessary measures to assure, in their respective territories, compliance with the regulations established by the various decision-making bodies such as CMC, GMC, and CCM.

Since its creation, MERCOSUR has gone from a free trade zone to an imperfect customs union, adopting economic obligations in common. In the area of

macroeconomic coordination, MERCOSUR has established formal targets for fiscal deficits, foreign public debt and inflation, although it does not intend to create supranational entity to lead the monetary integration, as has occurred in the European Union. The governments in MERCOSUR also have committed to a review process should a partner fail to comply with the targets.

### **The Andean Community**

The Andean Community is a sub-regional organization endowed with an international legal status, which is made up of Bolivia, Colombia, Ecuador, Peru and Venezuela. The Andean Group metamorphosed into the Andean Community in June 1997 when the Trujillo Protocol modified the Cartagena Agreement, signed in 1969. The new protocol introduced some important changes in the institutional framework of the Andean Group. It created a Presidential Council and a Council of Foreign Ministers and gave them a critical role in the decision-making process. It also replaced the tripartite body that had been in charge of the technical secretariat with a General Secretariat. Finally, the Trujillo Protocol strengthened the internal cohesion of the Andean integration process by placing all its institutions and mechanisms under a new umbrella, the Andean Integration System. Modeled on the European Community, the Andean institutions have traditionally been highly developed. Many of these institutions have supranational powers, which sets the Andean Community apart from other Latin American trade and integration agreements.

Although the original Cartagena Agreement envisaged the establishment of a customs union by 1980, the Andean countries had to wait another decade and a half to achieve this objective. This was made possible by the market-oriented reforms that swept the region in the early 1990s, particularly the unilateral trade liberalization measures that most countries implemented, which set the groundwork for a reactivation of Andean integration efforts. During the 1990s, a common external tariff (CET) has been enforced, and duties and other barriers to international trade have been eliminated. However, the Andean Community is an incomplete customs union, as both the CET and the free trade area are still subject to a number of exceptions. Many of these exceptions are in the process of being phased out, and this will enhance the ability of the Andean Community to operate as a fully functioning customs union.

The efforts to move ahead with the harmonization of macroeconomic policies have stepped up, especially in regard to monetary, fiscal, and financial policy, with a view to the future formation of an Andean Common Market. That harmonization is expected to make it possible to build a more favorable climate for the trade and economic integration of the region by creating a more stable and hence a more promising scenario for increasing trade and investment flows, while reducing distortions that can affect the decisions of economic agents.

This process is not only essential to the deepening of Andean integration, but also directly underpins national objectives by promoting greater economic stability. The sub-region's treasury or finance ministers, presidents of central banks, and economic planning officers, meeting as the Andean Advisory Council, have been working on the matter since 1998. In May 1999, the first criterion for convergence was defined: the reduction of annual inflation to a single digit figure. This made the Andean Community the first integration bloc to define community goals.

Since then, all of the countries have witnessed a slow-down of their inflation and to date three countries (Bolivia, Peru, and Colombia) have achieved single-digit annual inflation rates. Venezuela is very close to doing so and Ecuador has at last embarked on a rapid downward trend.

At its Fourth Meeting, held in June 2000, the Advisory Council defined a mechanism for monitoring the first convergence criterion by submitting biannual reports and committed itself to adopt second convergence criteria in the fiscal area. The Council has adopted two fiscal rules (permanent provisions) and the launching of a Community follow-up mechanism. The first rule specifies that no member country will have fiscal deficits of more than 3% of GDP as of the year 2002; it does, however, incorporate a temporary provision establishing that said deficit may reach up to 4% of GDP during the period 2002-2004. The second rule approved by the Council sets the countries' limit on both domestic and foreign borrowing at 50% of GDP and provides for a transition period in which to make the respective adjustment.

## Appendix 5: Monitoring and Early Warning Systems

A regular monitoring process is essential for the prevention of crises. The collected information will help detect and identify the characteristics of economic and financial vulnerabilities at an early stage so that a proper menu of policy actions can be taken in a timely manner. Economic and financial sector monitoring will keep a close watch over (i) macroeconomic trends and policy changes, (ii) financial market developments including cross-border capital flows, and (iii) institutional and legal changes. This rather broad coverage of economic monitoring will be useful for a better understanding of the economic situations. However, a selection of quantitative indicators would be more convenient though it might entail the risk of omitting important information.

Since the Asian financial crisis, attention has been increasingly directed to preventing the outbreak of crises through devising a warning system that can diagnose early symptoms of crises for administering timely policy responses. The methodology applied to develop an early warning system largely draws on the leading indicator approach commonly found in business cycle literature.<sup>35</sup> Thus, an early warning system consists of leading indicators that signal in advance the onset of a crisis. The development of leading indicators presumes that an economy exhibits consistent and regular patterns of behavior prior to a crisis. Hence, selecting reliable indicators is the crucial step in formulating the early warning system. However, not all crises are alike, and consequently one would not expect the same indicator to be a good signal for each type of crisis. Furthermore, one observation is that banking and currency crises in emerging markets do not typically arrive without any warning (Goldstein, Kaminsky, and Reinhart 2000).

Selected leading indicators considered in recent studies are provided in Table A-1. Some variables are not available in the monthly data. Table 2 and 3 summarize the in-sample performance of the monthly indicators presented in Kaminsky, Lizondo, and Reinhart (1998) and Kaminsky (1998). Table 2 covers banking crises, and Table 3 presents the results for currency crises. For banking crises, for instance, the real exchange rate has the greatest predictive power while imports have the least. According to Goldstein, Kaminsky, and Reinhart (2000), several interesting features stand out from Table A-2 and A-3.<sup>36</sup>

First, the ranking of the indicators appears to be quite robust across sample selections as shown in the last column of Table 2. For currency crises, none of the monthly indicators changes in relative performance by more than one position as the sample is enlarged, and for 10 of the indicators, there is no change at all. For banking crises, the maximum ranking change is two positions and 10 of the monthly indicators show no change in their relative ranking.

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<sup>35</sup> Most recent empirical studies on early warning systems follow one of the three approaches: the signals approach, probit or logit models and regression models.

<sup>36</sup> For detailed explanation, see Goldstein, Kaminsky, and Reinhart (2000).

**Table A-1. Selected Leading Indicators of Banking and Currency Crises**

Indicator	Transformation	Data frequency
Real output	12-month growth rate	Monthly
Equity prices	12-month growth rate	Monthly
International reserves	12-month growth rate	Monthly
Domestic/foreign real interest rate differential	Level	Monthly
Excess real M1 balances	Level	Monthly
M2/international reserves	12-month growth rate	Monthly
Bank deposits	12-month growth rate	Monthly
M2 multiplier	12-month growth rate	Monthly
Domestic credit/GDP	12-month growth rate	Monthly
Real interest rate on deposits	Level	Monthly
Ratio of lending interest rate to deposit interest rate	Level	Monthly
Real exchange rate	Deviation from trend	Monthly
Exports	12-month growth rate	Monthly
Imports	12-month growth rate	Monthly
Terms of trade	12-month growth rate	Monthly
Moody's sovereign credit ratings	1-month change	Monthly
Institutional Investor sovereign credit rating	Semiannual change	Semiannual
General government consumption/GDP	Annual growth rate	Annual
Overall budget deficit/GDP	Level	Annual
Net credit to the public sector/GDP	Level	Annual
Central bank credit to public sector/GDP	Level	Annual
Short-term capital inflows/GDP	Level	Annual
Foreign direct investment/GDP	Level	Annual
Current account imbalance/GDP	Level	Annual
Current account imbalance/investment	Level	Annual

Source: Goldstein, Kaminsky, and Reinhart (2000)

**Table A-2. Ranking the Monthly Indicators: Banking Crises**

Indicator	Noise-to-Signal	Percent of crises accurately called	P(C S)	P(C S) - P(C)	Rank in Kaminsky (1998)	Difference in rank (+ denotes an improvement)
Real exchange rate	0.35	52	24.0	14.1	1	0
Stock prices	0.46	76	23.4	11.2	3	0
M2 multiplier	0.46	63	18.3	9.0	4	0
Output	0.54	90	17.3	7.2	5	0
Exports	0.68	79	14.3	4.7	7	+1
Real interest rate	0.68	96	16.8	4.2	6	-1
Real interest rate differential	0.73	100	15.6	3.7	8	0
Bank deposits	0.73	64	12.9	3.1	9	0
M2/reserves	0.84	72	11.4	1.7	10	0
Excess real M1 balances	0.88	44	11.0	1.2	13	+2
Domestic credit/nominal GDP	0.89	46	10.9	1.1	11	-1
Reserves	0.92	83	10.7	0.8	12	-1
Terms of trade	1.01	92	11.6	-0.1	14	0
Lending-deposit interest rate	1.48	56	8.3	-3.5	15	0
Imports	1.75	64	6.0	-4.1	16	0

Source: Goldstein, Kaminsky and Reinhart (2000)

**Table A-3. Ranking the Monthly Indicators: Currency Crises**

Indicator	Noise-to-signal	Percent of crises accurately called	P(C S)	P(C S) - P(C)	Rank in K&R (1999)	Difference in rank (+ denotes an improvement)
Real exchange rate	0.22	58	62.1	35.2	1	0
Banking crisis	0.32		46.0	17.0	2	0
Stock prices	0.46	66	47.6	18.3	4	+1
Exports	0.51	80	42.4	15.0	3	-1
M2 / reserves	0.51	75	42.3	14.9	5	0
Output	0.57	71	43.0	12.5	6	0
Excess real M1 balances	0.57	57	40.1	12.3	7	0
Reserves	0.58	72	38.9	12.2	8	0
M2 multiplier	0.59	72	39.2	11.6	9	0
Domestic credit/nominal GDP	0.68	57	35.6	8.3	10	0
Terms of trade	0.74	77	35.4	6.5	11	0
Real interest rate	0.77	89	32.0	5.5	12	0
Imports	0.87	59	30.1	2.9	14	+1
Real interest rate Differential	1.00	86	26.1	-0.1	12	-1
Lending-deposit interest rate	0.32	63	24.4	-4.8	16	+1
Bank deposits	1.32	43	22.3	-5.2	15	-1

K&R = Kaminsky and Reinhart (1999)

Source: Goldstein, Kaminsky and Reinhart (2000)

Second, some of the most reliable indicators are the same for banking and currency crises. Deviations of the real exchange rate from trend and stock prices stand out in this regard. Close runners-up are output and exports. A similar statement applies to the least useful indicators; imports and the lending-deposit ratios, for example, do not have any predictive ability for either type of crisis.

Third, there are some important differences in the ranking of indicators between currency and banking crises. This suggests that currency and banking sector vulnerabilities take on different forms. A case in point is the ratio of M2 to foreign exchange reserves, a variable stressed by Calvo and Mendoza (1996) as capturing the extent of implicit government liabilities. It does quite well (ranks fifth) among the 16 indicators of currency crises, but it is far less useful when it comes to anticipating banking crises.

Lastly, banking crises are even more of a challenge to predict than currency crises. For currency crises, the marginal predictive power of 12 of the 16 indicators is 5

percent or higher; for the real exchange rate, marginal predictive power goes as high as 35 percent. Indeed 9 of the 16 indicators have a marginal predictive power in excess of 10 percent. In contrast, for banking crises, 11 of the 15 indicators have a marginal predictive power of less than 5 percent, and even the top-ranked macroeconomic indicators have a marginal predictive power of less than 15 percent.

In our view, the early warning system itself may not have enough credibility from the viewpoint of investors in the sense that it is just a statistical exercise with no credible content, especially when attention is given to the quality and availability of the published data. In fact, the difficulty with constructing an early warning system for developing countries arises from the lack of reliable statistics, which are largely distorted or superimposed with other non-economic factors. In this line, the international community has repeatedly stressed that provision of comprehensive, timely, and accurate economic data by member countries is essential for effective Fund surveillance.<sup>37</sup> The Fund is intensifying its efforts to assist countries to improve data quality.<sup>38</sup>

In addition to data problems, precisely because crises and economies can vary in nature, “one size may not fit all” when it comes to leading indicators. As also pointed out in Goldstein, Kaminsky, and Reinhart (2000), a broader set of indicators should be considered. For example, the share of short-term debt in total external debt, as well as a proxy for capital flight, does quite well in anticipating currency and banking crises.<sup>39</sup> Political and institutional variables also have some predictive power in anticipating a currency crisis.<sup>40</sup> As the contagion effect can be an important cause of crises, early warning models should be extended to incorporate the channels of contagion. In short, accurately forecasting the timing of a crisis is likely to remain an elusive goal for academics and policy makers alike.

For an early warning system to have reliability, it should send a set of signals and pressures on participants in financial markets so that they modify their financial positions. As a result, any misalignment in exchange rates can be corrected before it becomes too late. In this context, even the most desirable early warning system itself cannot function properly without a degree of market discipline such that financial markets provide signals and incentives for borrowers to behave in a manner consistent with their solvency. An early warning system is inherently a surveillance device for preconditions of enhanced market discipline, which include statistical transparency, policy consistency, and a resilient financial system. Thus, it is obvious that an early warning system by itself cannot prevent a crisis if necessary adjustments in the market do not take place in time. Of more importance are the operational aspects of market discipline with credible policy responses, which perform most of the measures to prevent a potential crisis (Goldstein and Calvo, 1996).

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<sup>37</sup> Admittedly, better information is no panacea for avoiding financial crises: in some cases, faulty economic analysis and/or unexpected developments were the driving force. Even with better information, private financial markets will still sometimes be subject to misguided self-fulfilling expectations (Goldstein and Calvo, 1996, p. 258).

<sup>38</sup> See IMF (2000b) for a more detailed discussion on data issues.

<sup>39</sup> Furman and Stiglitz (1998) make a good case for including the ratio of short-term external debt to international reserves as an indicator in future early warning exercises (Goldstein et al. 2000).

<sup>40</sup> The main constraint on making use of the institutional characteristics is that one cannot get high-frequency measurements on them (Goldstein et al. 2000).



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