

A Roadmap for the Asian Exchange Rate Mechanism: A Common Currency Approach

Gongpil Choi

Korea Institute of Finance

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Abstract: Given the increasing importance of capital market development for financial stability and multilateral cooperation for sustained growth, a country's choice of exchange rate regime is hardly trivial. Instead of relying on a series of individually managed floats, it would be better for each country to target its currency against a basket of other currencies. A still much better alternative would be to form a regional block, which would tie Asian currencies together and create a regional currency while allowing them to float against major currencies. Whether the type is an individual peg to a tailored basket or a multilateral peg to a common basket remains to be determined. Under any plausible scenario, some type of regional currency needs to be developed to promote an environment suitable for financial and monetary cooperation that is, in turn, conducive to capital market development. Since conditions in the region are increasingly favorable for an OCA (Optimal Currency Area), such cooperation would be mutually beneficial as well as globally desirable.

The imperatives for regional cooperation to achieve sovereign stability in an interconnected setting are now strong due to (1) markets that are too small and narrow to withstand various shocks, (2) inability of institutions and policies to satisfy certain requirements given different economic backgrounds, and (3) lack of coordination to bring together necessary elements to achieve regional stability. The goals for regional cooperation arise from the desire to promote (1) intra-trade, (2) financial stability, and (3) the long-term capital market. The trade aspect is usually emphasized in the literature, but the financial side is often overlooked. Balance sheet effects are dominant features of the emerging market business cycle: debt servicing capability is directly related with exchange rate changes. Also, the original sin needs to be examined more carefully since the lack of risk sharing capability in the region contributes to the current global imbalance. How do we cope with all these problems? The answer is to consolidate regional efforts via regional currency that are expected to promote the long-term capital market, enhance financial stability, and promote intra-trade.

This paper asserts that the objective can be fulfilled by seeking a coordinated move toward the AERM, a multilateral effort to stabilize exchange rates over the medium term and fulfill the above mentioned requirements in an increasingly globalized environment. The first step is to create a regional currency, the ACU (Asian Currency Unit), a basket of intra-regional currencies. This is essentially the same approach taken by Europe. Even though (1) the ACU is essential to promote the long-term capital market and contributes to intra-trade and (2) common pegging to the ACU is required to preserve intra-trade, there is no guarantee that it would be less susceptible to changes in G-3 fluctuations, suggesting the need for further monitoring by the governing institution. A basket numeraire or common basket is the more realistic option of stepping forward from the current individual peg to a tailored basket of currencies based on trade weights. However, these observations ignore the fundamental sources of exchange rate instability: the original sin or mismatch of institutions and policies of sovereignty with the economic boundaries. Therefore, a move toward an intermediate

regime and a common basket are more suitable for Asian countries.

To put these together, first, it is important that we pool our efforts to create the ACU and use it as a parallel currency. This would help diversify risks regionally and globally, which would facilitate the global adjustment. Second, the ACU can be created by using excess foreign reserves as a special fund that can issue convertible ACUs. Third, the organizing body would monitor and help stabilize the value of the ACU over the intermediate run.

Key Words: OCA, ACU, Exchange Rate Regime

JEL Classification: F36, F02, N25

Gongpil Choi

Korea Institute of Finance

6th FL. KFB BLDG, 4-1, 1 Ga, Myong-Dong, Chung-gu, Seoul, Korea

Ph: 82-02-3705-6320

Fax: 82-02-3705-6345

E-mail: gpchoi@kif.re.kr **Table of Contents**

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1. Introduction

With the latest Chinese revaluation, there is heated discussion on the merits of alternative exchange rate arrangements for the region, ranging from calls for reestablishment of common basket pegs on the one hand to greater exchange rate flexibility on the other. By simple reasoning, given the sizable spillover effects, regional stability is largely an extended version of individual stability in most cases. However, since large countries retain exogeneity in exchange rate determination, there is less room for small countries to change their exchange rates. Even in this context, exchange rate adjustment in large countries should be more prudent than that of other countries. This could really be the beginning of a new exchange rate arrangement in Asia, signaling the era when there are no longer fixed pegs to the US dollar. Malaysia already dropped its peg relative to the US dollar. The latest China move may force Hong Kong to phase out its long-term currency board and US dollar peg. And other Asian currencies will soon start to appreciate following the Chinese move. It is likely that even currencies at the periphery of this Bretton Woods regime will move toward appreciation. The systemic consequences of this currency realignment throughout Asia and the world could be radical and have significant impacts on interest rates and financial markets.

The focus of recent discussions on the exchange rate regime is two-fold: One concerns the future of the Chinese exchange rate regime, and the other is its regional implications for exchange rate coordination. The immediate concerns are whether China can accommodate the expected changes in the exchange rate regime and whether neighboring countries can engineer necessary exchange rate adjustments lest a future exchange rate shock affect growth and stability in a negative manner. At

least from the regional perspective, the significant volatility of the G-3 currencies, partly attributable to limited exchange rate adjustment in the region, makes pegging increasingly difficult while virtually every country in the region needs some kind of anchor to hold on to in order to promote intra-trade and to contain the balance sheet risks. Furthermore, there are so many different exchange arrangements in use in the region that some kind of policy coordination on exchange rate management should be Pareto-improving. Also, the increased importance of intra-trade underscores the imperatives for achieving exchange rate stability among countries in the region. One strategy is to devise a bigger basket to which we can peg with reasonable predictability or to accept more volatility with a looser peg to a given basket with some chance of a coordination-related externality. Also, with the globalized environment, the question can be extended as to whether we need to hang together to pursue a regional exchange rate arrangement so that we reduce exchange rate volatility vis-à-vis the G-3 as well as reduce intra-regional volatility?

Today's discussion on exchange rate regimes is unlike any previous ones in the sense that the global imbalance is the driving force behind the impetus for substantial changes in the exchange rate arrangement in the region. This implies that the mechanics of the exchange rate regime are just part of the solution to the problem we face in a globalized environment. Instead of casting the problem in fixing the current account imbalances through expenditure-switching, the regional situation calls for rethinking the implications of the exchange rate regime in fixing some of the structural problems plaguing the region: underdevelopment of the capital market and excessive reliance on foreign reserves to preserve financial stability. It is motivated by the hard reality that the traditional risk management strategy of accumulating foreign reserves in dollar-denominated assets only serves to increase the potential

risks that can disrupt the international financial system. Further delay in necessary adjustments by many of the new global players, notably China, only aggravates the global imbalances. The dominant position of the dollar as a vehicle currency has been eroded due to the sustained trade and financial imbalances between the two major economic players(<Table 1>). The continued rise of the Chinese and the Asian economy has relied on de facto dollar /yen pegging and strong exports with poor capital market support, and this has resulted in huge global imbalances that cannot be rectified in a smooth manner. Given the need for greater adjustment, we can gain further insight into the required exchange rate arrangements and the future agenda in a regional perspective.

Table 1: Summary of Exchange Rate Characteristics 1994~2004

	April 1994 ~ March 1997	July 2001 ~ June 2004	Change in
	regime between periods		
	Range Fx per USD	Abs. average daily change	Range Fx
	per USD	Abs. average daily change	
China	8.23 ~ 8.70 (5.7%)	0.13	8.27 ~ 8.28 (0.2%)
	0.00	More restrictive	
India	31.1 ~ 37.9 (21.9%)	0.20	43.35 ~ 49.02 (13.1%)
	0.10	More restrictive	
Malaysia	2.44 ~ 2.69 (10.6%)	0.13	3.80 ~ 3.80 (0.1%)
	0.00	More restrictive	
Hong Kong	7.72 ~ 7.77 (0.6%)	0.01	7.71 ~ 7.80 (1.2%)
	0.01	No change	
Philippines	23.55 ~ 27.47 (16.6%)	0.17	49.33 ~ 56.46 (14.5%)
	0.19	No change	
Taiwan	25.15 ~ 27.9 (10.9%)	0.11	32.69 ~ 35.11 (7.4%)
	0.13	No change	
Thailand	24.41 ~ 26.08 (6.8%)	0.11	32.69 ~ 35.11 (7.4%)
	0.13	No change	
Indonesia	2152 ~ 2406 (11.8%)	0.08	8152 ~ 11360 (39.3%)
	0.46	More flexibility	
Korea	756 ~ 897 (18.7%)	0.14	1141 ~ 1331 (16.6%)
	0.33	More flexibility	
Singapore	1.39 ~ 1.57 (13.2%)	0.14	1.67 ~ 1.85 (11.2%)
	0.22	More flexibility	

Source: 『Emerging Asia's Monetary Future』 JP Morgan Chase Bank, 2005

How do we prepare for the adjustment so that Asia does not become saddled with a larger burden in an increasingly interdependent environment? Since so much depends on exports and exchange rate stability against major markets, international efforts are necessary to restore equilibrium. In practice, even though China remains the lynchpin of the global adjustment, Asia as a region needs to respond to these climate changes in a coherent manner. If not, we are bound to suffer from the lack of policy coordination (Williamson 2005(a)). Given the interdependence in the intra-trade, there are also the usual good reasons for mulling over these issues because stable growth in the region clearly hinges on what sort of exchange arrangement this region can accommodate to control the risks associated with Chinese revaluation. As evidenced by numerous studies, the direction of exchange rate changes and volatility are two aspects that affect both financial stability and international trade. Unlike previous discussions on the choice of exchange rate regime, the talk is of a different dimension in terms of magnitudes of adjustment, coordination, and criteria. Ultimately the choice of exchange rate regime in the region boils down to considerations for global adjustment, intra-trade, and financial stability.

Among these, two extra dimensions need to be emphasized in the discussion on the exchange rate regime in comparison with the European experience. First is its implication on financial stability, and the second is related with the need for cooperation among countries without the kind of political leadership that Europe enjoyed. Asian nations should pay more attention to the financial implications of exchange rate vulnerability as well as keeping a balanced view on the importance of intra-trade. Given the susceptibility of an emerging economy with significant external debt denominated in foreign currency, the choice of exchange rate regime is not trivial. The choice invariably depends on several factors that are attributable to the

original sin (Eichengreen and Hausmann 1999). Unlike the typical approach that emphasizes output and financial volatility, the choice of exchange rate regime should involve evaluations on its impact on financial market development, largely to overcome the original sin. Furthermore, the choice is not necessarily of sovereign dimension (Eichengreen and Hausmann 2003). Given the significant increase in cross-border activity, and the possibility of contagion, the choice is also a regional one, which necessarily hinges on financial cooperation toward monetary cooperation. We need to come up with proposals for the choice of exchange rate regime for countries in the region lest contagion become prevalent. And the future efforts start with the creation of a regional currency.

In this vein, we can outline the scope of choices for the exchange rate regime. It cannot be a uniform set of arrangements, but it should be flexible enough to accommodate local needs. In short, we need to come up with a loose form of common encompassing standards so that local considerations need not conflict with regional needs for financial stability. Specifically, the choice of exchange rate regime for the region can be decomposed into various forms of local arrangements, but the choice is also linked with the regional framework with explicit considerations for financial market development and the redemption of the original sin in the region. Also, in a different context, we need to come up with an encompassing exchange rate regime to accommodate the various needs of each country as well as to provide a framework so that a diverse set of arrangements converge to a regional exchange rate regime: the AERM (Asian Exchange Rate Mechanism). Experimentation can be done with some kind of AERM before converging to a more institutionalized form. What specific elements of the proposed exchange rate regime should help ease the repercussions of the original sin? Two aspects of market development are emphasized: financial and

monetary cooperation. For example, the choice of exchange rate regime also needs to be evaluated in the context of prudential regulation, financial stability, as well as output and inflation criteria (Chang and Velasco 1997). The choice is ultimately based on an aggregate index of financial stability as measured by balance sheet conditions as well as output and inflation volatility. And it may well go beyond the discussions on the parity, band, and basket and involves the discussions on the creation of new regional currency.

The need for a regional exchange rate arrangement is real. Asian countries can no longer singularly rely on the US market for exports and growth, so a unitary peg to the dollar needs to be relaxed to a different form, and the importance of intra-trade has become so important that some stabilizing arrangements as well as a kind of shield against G-3 volatility needs to be secured before relying on efforts by individual countries(<Table 2>). The financial aspect of relying so much on the US dollar needs to be addressed, too. Even in its loose form, some common exchange rate regime for the region needs to be identified so that individual adjustments can be coordinated toward sustained growth and financial stability. Accordingly, discussions on exchange rate arrangement need to go beyond those of parity and anchor, and band management. Specifically, there is much discussion on whether exchange rate volatility can be reduced by all countries in the region adopting a common basket peg, or a common basket numeraire (Williamson 2005), whether the swap lines of the Chiang Mai Agreement of ASEAN+3 can be counted on to reinforce fragile currency pegs, whether the ASEAN Surveillance Procedure can be strengthened, and even whether Asian countries should contemplate eventually creating a parallel currency, the ACU (Jang, Kim, Lee and Park 2002), analogous to the euro (Eichengreen 2005). Whatever the final form of arrangement, the intended outcome is to secure the

regional financial stability that would further enhance the financial stability of each country in the region.

Table 2: Shares of Exports by Countries in Asia (2004)

(Unit: %)

	JAPAN EXPORT TO ASIA	CHINA	HONG KONG EXPORT TO ROW	INDONESIA	KOREA	MALAYSIA	SINGAPORE	THAILAND		
JAPAN	-	13.07	6.26	1.61	7.82	2.22	3.18	3.59		
	37.75	62.25								
CHINA	12.27	-	16.01	0.87	4.45	1.33	2.13	0.97		
	38.03	61.97								
HONG KONG	5.33	44.04	-	0.43	2.18	0.88	2.16	1.02		
	56.04	43.96								
INDONESIA	22.31	6.44	1.94	-	6.75	4.22	8.39	2.76		
	52.8	47.2								
KOREA	8.25	22.62	4.84	0.73	-	1.96	2.59	1.34		
	42.32	57.68								
MALAYSIA	10.10	6.69	5.97	2.43	3.50	-	15.01	4.77		
	48.47	51.53								
SINGAPORE	6.45	8.58	9.83	-	4.12	15.20	-	4.32		
	48.50	51.5								
THAILAND	13.86	7.29	5.07	3.30	1.90	5.44	7.20	-		
	44.06	55.94								

Source: IMF, Direction of Trade Statistics

The rest of the paper is organized as follows: The next chapter considers some of the options for countries in the region. Given the sizable global imbalances, various proposals for the exchange rate regime are discussed. Specifically, the choice of the market basket in its relation to pegging is evaluated. In recognition of the fact that countries differ in their background, the feasibility of adopting a common basket is discussed. The choice of a specific market basket as well as the mode of pegging is seen to influence the management of exchange rate regime against individual background. The exchange rate arrangement required in the regional sense when financial fragility especially in terms of original sin (Eichengreen, Hausmann and Panizza 2003) is taken into account should be different from the one without it. In other words, the question can be rephrased as, how do we go about stabilizing the exchange rate when the structural reasons for instability are related with the original

sin? Inflation targeting is also compared with the concept of a common basket as a possible nominal anchor for the exchange rate mechanism. The last chapter concludes with policy implications and suggestions for future studies.

2. Requirements for Regional Financial Stability

Discussion on the requirements for regional financial stability is more appropriate in a globalized environment since individual efforts to secure sustainable stability are hardly realistic when necessary components of the market infrastructures are missing. Regional efforts to achieve financial stability are largely motivated by the trilemma of international finance, which dictates that monetary autonomy, exchange rate stability, and openness of the capital account are incompatible. And the existing exchange rate arrangements of individual countries in the region are inadequate to maintain financial stability both in the sovereign and regional sense. In its present form, the prospects for monetary and exchange-rate cooperation in Asia, including common basket pegs, expanded networks of swap arrangements, and monetary integration are rather mixed. Recently, some review on the possibility of introducing an ERM in the Asian context has been conducted (JP Morgan 2005). The choice is narrowed down to the degree of flexibility of exchange rate arrangement, and empirical investigation can be performed to sort out viable alternatives. However, the choice is essentially a roadmap for Asia's future, not so much on technical details of unrealistic mechanics of an exchange rate regime.

First, some type of pegging is necessary for credibility, even though it is not so much about pegging per se as to which currency is used for the pegs. Pegging can be done either through unitary pegging or basket pegging, and the question also involves the degree of pegging to a reference anchor. Pegging is a sign of credibility

in Asia since volatility is often seen as a sign of trouble, given the pronounced dependence on the US market. Any signs that exports to the US may falter have been regarded as negative. Also, given the sizable liability dollarization, Asia's recent history demonstrates some of the difficulties of employing variable exchange rates in emerging markets. In the emerging market context, depreciations are often contractionary, and the current account adjustments are sharper and more difficult. Credibility and market access, as captured in the behavior of credit ratings and spreads, are adversely affected, not enhanced, by depreciation and devaluation. Exchange rate volatility is more damaging to trade, and the pass-through from exchange rate swings to inflation is higher than in the typical advanced industrial economy. These differences between emerging and developed economies may explain the reluctance of the former to tolerate large exchange rate movements (i.e. Fear of floating: Calvo and Reinhart (2000)).

Table 3: Standard Deviations of East Asian Currencies and Baskets (Williamson 2005) 2000-04

(Unit: percent)

Country	Actual historical Experience	Individual-country peg	Common Basket peg
China	5.78	2.62	1.54
Hong Kong	4.50	4.67	1.54
Indonesia ^a	2.23	2.68	1.54
Malaysia	4.04	3.74	1.54
Philippines	6.53	3.72	1.54
Singapore	2.56	3.52	1.54
South Korea ^b	2.90	4.04	1.54
Taiwan ^a	4.41	4.10	1.54
Thailand ^b	2.59	3.33	1.54

a. Data for Indonesia and Taiwan (end-month) are from Thomson Datastream Series JPMIDNB (Indonesia) and NTDTWER Taiwan.

b. Data for South Korea and Thailand (end-month) real effective exchange rates are from the Citibank CTERI Database.

Note: Standard deviations of period-end monthly nominal effective exchange rate, January 1995=100.

Second, the pegging can be done through the choice of market basket, and the common basket peg proves to be a better choice over individual peg in terms of volatility (Williamson 2005)(Table 3). Alternatively, Asian nations should create a parallel currency, a basket of Asian currencies as distinct with Williamson (2005)'s basket numeraire, whose value is stabilized vis-à-vis major currencies via multilateral pegging. In theory, there can be a choice of a basket for a country or a region that minimizes some weighted combination of intra and inter volatility. For intra-trade, it is best to stick to a common basket of Asian currencies, e.g. a parallel currency. Since this does not determine the degree of volatility vis-à-vis G-3 currencies, however, some kind of ERM is necessary or a common peg to G-3 currencies needs to be further implemented. This two-step approach is different from the current practice of individual country pegging to a common basket of the euro, dollar, and yen, which does not directly deal with intra-volatility. These observations have prompted calls for agreement on the nature and composition of these baskets and pegs, and for an expanded system of currency swaps and even a multilateral lender of last resort to provide emergency financing to countries that might otherwise be forced to abandon their pegs. Ito et al. (1998), Williamson (1999) have earlier argued that East Asian governments should respond by agreeing on a system of collective basket pegs with weights on the dollar, the yen, and the euro. Pegging to a basket will avoid deterioration of export competitiveness due to G3 exchange-rate fluctuations. However, in light of the current global imbalance, this is just part of the concern for Asian nations. Financial vulnerability has to be overcome to avoid major disruptions in trade and financial flows.

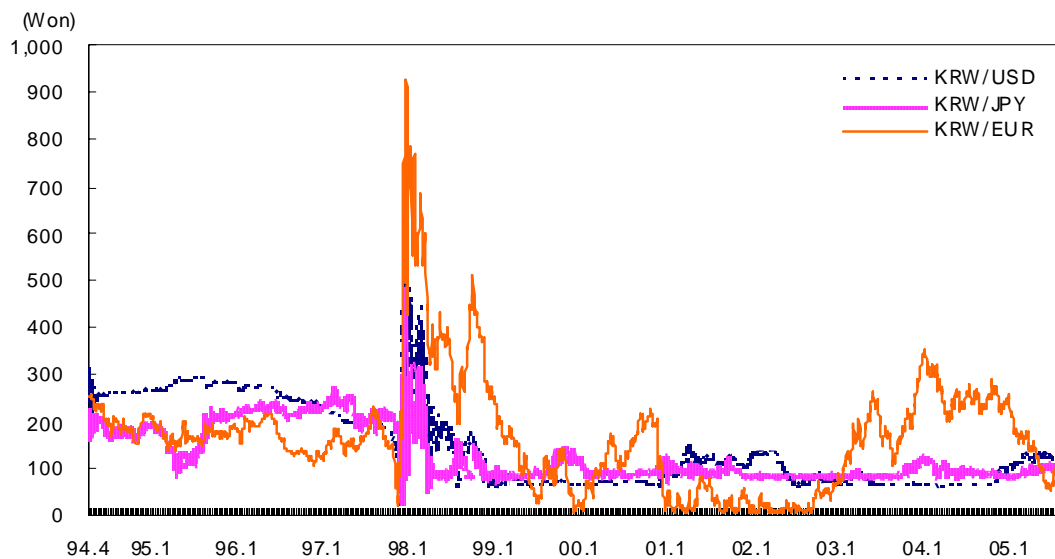
Technically, agreement on the proposed weights will limit intra-regional currency swings. While any currency pegs should reflect the sources of finance as

well as the direction of trade, actually deciding on the relative weights can prove to be difficult. Even when nations agree on the types of common peg, or join in a multilateral exchange rate arrangement, there is chronic reluctance on the part of the authorities to adjust the exchange rate when the equilibrium level has changed. Credibility of a peg can limit the variability of exchange rate movement in practice. The choice boils down to whether the basket matters or the pegging to a specific basket matters more. And there is a tradeoff between the credibility and flexibility of the band. If the authorities engage in frequent realignments before the rate reaches the margins in order to prevent the build-up of speculative pressure, then the monitoring-band regime will in practice differ little from floating. Besides these issues, the effect of collective pegging on financial market development and financial stability is largely tenuous. The question is essentially the degree of pegging and the composition of a basket and which countries adopt it. These two key parameters determine the exchange rate regime.

Third, there is a need for a multilateral exchange rate arrangement for the region. Also, institutional support is important for successful implementation of any proposed exchange rate regime. Given the importance of introduction of a regional currency and its pivotal role in the AERM, the role of a multilateral organization is especially essential. Conflicts from sovereign perspectives can only be effectively resolved in the regional sense. This is the rationale for seeking a regional exchange rate arrangement. The byproduct of agreeing on the regional arrangement is clear: Each country can enjoy the effectiveness of monetary policy to some extent in an environment of free flows of capital and rather stable exchange rate movements. This is due to the possibility that a regional exchange rate arrangement dampens G-3 exchange rate volatility to such an extent that individual responses can be optimal to

preserve both trade in the region and financial stability(<Figure 1>). In short, regional stability is a prerequisite for seeking financial stability in an interdependent environment and the lack of requisite institutions makes financial and monetary cooperation largely circumstantial.

Figure 1: G-3 Exchange Rate Volatility



Note: GARCH(1,1) measure of daily exchange rate.

Source: Bank of Korea

3. Creation of ACU: Parallel Currency or Basket Numeraire

The requirements for regional financial stability call for a multilateral approach to the choice of exchange rate regime. One crucial aspect of the efforts is the need to create a regional currency, a missing link in the effort to realize regional financial stability. Since the choice of exchange rate arrangement needs to be made in light of its impact on financial market development, debt denomination, and financial fragility, given the differences in local conditions, the choice is geared toward a broad set of comprehensive arrangements in the region so that overall regional financial

stability can be better maintained. In this context, it is important to evaluate the idea of multilateral arrangement that allows managed floating based on a properly chosen nominal anchor. It starts with the need for a multilateral arrangement, but the focus of attention is whether to follow the European experience or a different set of arrangements. For instance, we compare the idea of an EM index or ACU or market basket as the core of the AERM. The absence of an anchor currency in the region inherently makes any serious attempts at monetary cooperation unrealistic, so it is reasonable to start with a common vehicle for regional transactions. Also, we discuss the relative operative merits of different multilateral arrangements, e.g. BBC, ERM, inflation-targeting, etc.

Some of the preconditions for monetary cooperation are checked for evaluating feasibility. One crucial aspect on the choice of exchange rate regime in an emerging market context is that prerequisites for choosing an optimal exchange rate regime cannot be well-defined (Calvo and Mishkin 2003). Without due considerations of other elements e.g. market institutions, etc, it is impractical to focus on the exchange rate regime choice. In practice, there is less room for choosing an exchange rate regime since the choice hinges on numerous elements that are taken for granted in advanced economies. If weak institutions would not allow for a flexible exchange rate, exchange rate pegging bears most of the burden of stabilizing the economy. If inflation-targeting monetary institutions can be relied upon, more flexibility can be accommodated and risk management becomes largely a joint effort by various market participants. This consideration implies that the choice of exchange rate regime needs to be refined in several steps so that local considerations need to be valued in choosing the operative aspects of the chosen exchange rate regime. In other words, the choice of exchange rate regime when the capital market is not properly developed

is not complete without extra efforts at market development and infrastructure building.

The talk of a new currency unit arises from the fact that we can achieve only limited stability if we continue to talk about the choice of exchange rate regime from an individual perspective. The infeasibility of using a national currency to achieve both financial stability and sustained growth needs to be analyzed. By adhering to a national currency, coordination becomes difficult, and it is someone else who will benefit from the gridlock situation. There needs to be some middle ground, a regional currency against which we can agree on stabilizing our currencies. The number of national currencies is simply much greater than the prerequisites of economic fundamentals to achieve stability against various shocks. This is why the proposed system has two tiers in the sense that the regional response is determined in terms of a common basket, the ACU, and the accompanying movement on a sovereign level is subsequently determined by the choice of exchange rate regime, the degree of pegging under a multilateral or individual setup. Also, whether to stabilize the value of the ACU against dollar or other regional currencies needs to be decided. In essence, the ACU will be stable against all the constituent currencies assuming that the regional pegging arrangement continues to hold. Eichengreen (2005) points out the problem with the introduction of a parallel currency. When a common basket peg remains a prerequisite for the parallel currency, the participating countries are exposed to a significant risk of currency crises. We need to create a regional unit that maintains its value and is stable against a basket of currencies, and this cannot be expected with US dollar-pegging.

The institutional requirements also call for the creation of a parallel currency or numeraire for real transactions and asset management. It needs to be

emphasized that even though the needs for monetary cooperation is real in the sense that exchange rate stability be maintained against extra-regional pressures, the mode should be different relative to the European case for good reasons: First, there is no pivotal political leadership in the region. Second, a common basket peg is even harder to maintain in a highly volatile capital environment. Recognizing these differences, Eichengreen (2005) recommends the parallel currency approach to monetary integration, which means that Asian countries create the Asian Currency Unit (ACU), an appropriately weighted average of Asian currencies, and circulate it among themselves along with their existing national currencies(<Table 4, 5>).

Table 4 : Asian Currency Unit (ACU) Sample Weights

(2001-03 Averages)

	Nominal GDP		Intra-regional trade		Foreign exchange reserve		
	Overall (1/3 each)						
	(\$ billion)	% share	(\$ billion)	% share	(\$ billion)	% share	
China	1268	37.7	222	20.7	301	30.6	
	29.7						
Hong Kong	160	4.8	248	23.1	114	11.6	
	13.1						
India	531	15.8	22	2.0	74	7.5	
	8.5						
Indonesia	186	5.5	46	4.3	31	3.2	
	4.3						
Korea	545	16.2	129	12.0	127	12.9	
	13.7						
Malaysia	96	2.8	76	7.0	37	3.7	
	4.5						
Philippines	76	2.3	35	3.2	13	1.4	
	2.3						
Singapore	88	2.6	126	11.7	85	8.6	
	7.7						
Taiwan	284	8.4	126	11.7	163	16.6	
	12.3						
Thailand	129	3.8	45	4.2	37	3.8	
	3.9						
Total	3362		1076		982		

Note: The Table assumes an initial membership of 10 currencies, but more or fewer could obviously be included.

Note that the composition of this proposed ACU is similar to JP Morgan's new regional currency index

(ADXY), which is based on measures of international trade and currency turnover (see Ho, Piron and

Herzfeld (2004)). The main difference between this ACU measure and the ADXY is lower weight assigned to

China. Malaysia is excluded from ADXY.

Table 5: Asian Currency Unit (ACU) Sample Components

(Using weights from Table 4)

	Current fx rate per dollar	Implied units per ACU
Chinese yuan	8.28	2.456
Hong Kong dollar	7.80	1.025
Indian rupee	46.3	3.918
Indonesian rupiah	9300	402.9
Korean won	1150	157.7
Malay Ringit	3.80	0.1725
Philippine peso	56.2	1.284
Singapore dollar	1.70	0.1300
Taiwan dollar	33.9	4.159
Thai baht	41.6	1.634
Starting rate for ACU per dollar		1.0000

For transactions and financial allocation purposes, the ACU will gain popularity as integration proceeds in the region. Both intra-regional trade and investment will increase. It will promote the development of the long-term bond markets because use of a common currency helps eliminate currency risks. This is significant in that one of the determinants of the original sin can be overcome over the longer run. From the perspective of each participating country, there remains a risk issue in the sense that economic agents would develop positions and exposures that cannot be properly handled by capital controls and regulation. However, it would be highly desirable to see development of a market in various financial assets denominated in ACUs. We can follow some of the suggestions by Eichengreen and Hausmann (2005).

The next step is the growing acceptance by the private market participants such that private claims denominated in the ACU becomes possible. At this juncture, it is premature for the ACU to be used for legal tenders for the region. However, it is important to create a common unit so that intra-trade can be promoted and financial market instruments can enjoy the benefit of a larger integrated market without significant risks. At the least, without the benefit of a regional currency, whatever the final form might be, we cannot come up with an optimal regional response against

major shocks and most of the adjustment burden becomes exaggerated and asymmetric. In recognition of the reality that Asian countries share the bulk of the burden to ease the global imbalance clearly illustrates this point. There needs to be a share in the regional response that is subsequently channeled through sovereign nations. Since the magnitude of adjustment is not classified as regional vs. sovereign, adjustments are often delayed at the cost of a greater global imbalance. Without some kind of ACU, the sizable burden that falls on the big nations makes the needed adjustment practically impossible due to its sizable impact on itself and its neighbors, and the accumulation of pressure subsequently jeopardizes the stability of its peripheries. The value of the ACU against other major currencies needs to be evaluated constantly so that coordination failure can be minimized. For instance, if the RMB is identified as the cause of strengthening in the ACU, the issuing body can stabilize the value of the latter by adjusting the share of the former in the basket.

The stability of the ACU numeraire needs to be maintained, though not necessarily. By introducing the ACU, the volatility can be analyzed, and the national currency that resulted in lowering the value of ACU vis-à-vis the Euro can be identified for surveillance purposes. Unlike the ERM, a multilateral grid of currency pegs, central rates are not officially defined in terms of ACUs and currencies are not pegged to the values of those of other AERM countries. Some type of institutions can be setup to run an AERM type of operation, and Korea can play the pivotal role here. The real effective rate of the Korean won has been relatively stable over the past several years, and the won can be pegged to an index that mimics the ACU or a specified currency basket and can serve as a numeraire for the region. Or we can concoct some other names so that regional currencies can be stabilized. Institutions for regional exchange rate stability and sustained growth can play an important role in

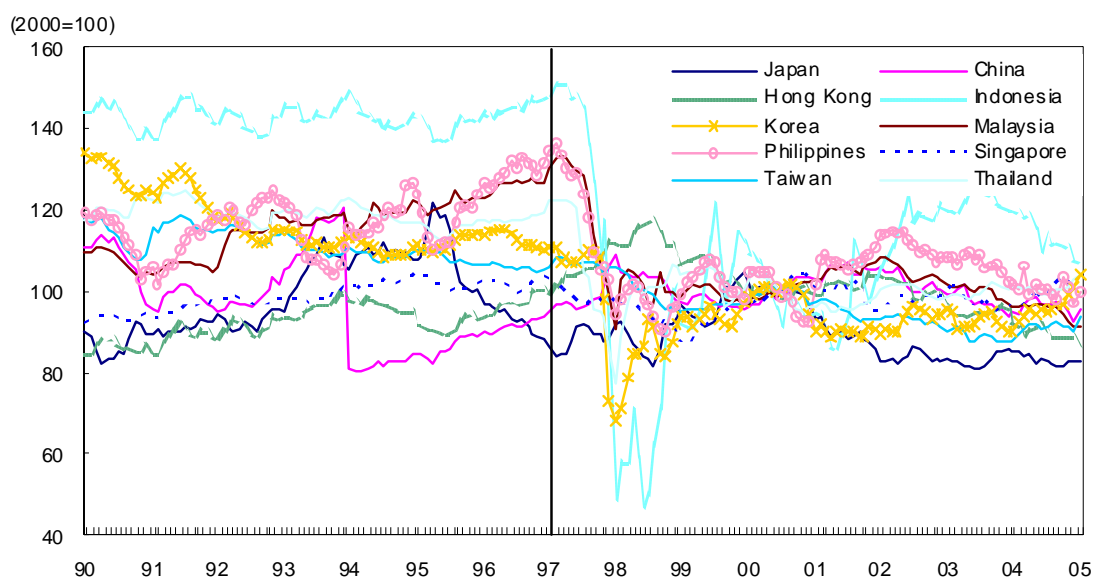
managing a two-tier exchange rate system. In a similar vein, Aggarwala (2003)'s proposal for a parallel currency deserves attention. The creation of the Asia Reserve Fund (ARF), which consists of foreign reserves from central banks, helps issue a new currency that is stable against an extra-regional currency. However, national currencies can be also utilized to make the ACU stable against Asian currencies. For instance, if the ACU depreciates against one or more regional currencies, the ARF purchases ACUs, selling the relevant regional currencies. Creating a secondary market of ACU-denominated bonds is also very important to eliminate the underlying causes of regional financial stability. At least, creation of the ACU or its equivalent would help organize joint efforts by member countries to develop the capital market, which is the most important prerequisite for financial stability in a globalized environment.

4. AERM: Multilateral Exchange Rate Arrangement with the ACU

Post-crisis Asian countries are moving toward a flexible regime, which is more compatible with free flows of capital (<Figure 2>). Misalignment is a common phenomenon and makes speculative attacks a permanent feature of the exchange rate regime. Both the impossible trinity and the original sin hypothesis provide rationales for moving away from fixed and flexible exchange rate regimes. Chronic current account surpluses are incompatible with a flexible exchange rate. The conclusion is a managed floating regime. A fixed exchange rate regime is also incompatible with the existing patterns of flows of capital. A multilateral arrangement like Bretton Woods or EMS seems necessary. Managed floating within the framework of a multilateral arrangement is the transitory choice of the exchange rate regime in the wake of RMB revaluation.

Figure 2: Real Effective Exchange Rate Movements of Asian Countries:

Ex-Ante vs. Ex-Post Crisis of 1997



Source: JP Morgan

In this vein, the establishment of the Asian Monetary System and its Asian Exchange Rate Mechanism would stabilize the intra-Asian exchange rates, and the ACU will remain reasonably stable against its constituent currencies. Later, all participating countries would be required to stabilize their exchange rates against the basket. However, this is not necessary for maintaining the AMS since the viability of the system can be maintained by either convergence criteria or the accession or exit of member countries. Currency positions would be finally settled using the ACU. As suggested by Eichengreen (2005), we can start creating official ACUs by setting up the Asian monetary cooperation fund in exchange for three-month swaps of 20 percent of the gold and dollar reserves of AMS central banks. Central banks can use the ACU as the reserve portfolio and can also use it for transactions among central banks. The proposed ACU at the least can be a basket numeraire or a common basket depending on the individual choice of exchange rate regime, but it is a good starting point to deal with many structural issues in the region, specifically the lack of a well-development capital market and the real exchange rate volatility.

The proposed AMS consists of the ACU, the AERM. A confidence building exercise seems necessary to build a monetary union, and this kind of multilateral arrangement is a first step toward achieving that goal. Even though some of the proposals seem far-fetched, regional considerations create enormous impetus to push forward the regional multilateral arrangements. Since conditions in member countries vary widely, a particular type of exchange rate regime cannot be forced upon them. Whatever is most suitable for each country needs to be allowed because it is consistent with maximum achievable stability. However, the multilateral context and longer-run policy horizon would require a different set of arrangements for exchange rate management. The proposed solution is to make the sovereign choice as close as possible to the regional solution. Some may just involve the degree of flexibility, but others may require a switch to a different exchange rate regime. To the extent that the prospects for political integration are seriously limited in Asia, the European route of a common basket peg leading to a regional currency is infeasible.

The proposed AERM calls for more coordinated exchange rate policy in the region to promote the regional capital markets. A well-developed capital market is essential to achieve macro-financial stability in the face of increasing globalization. The usual considerations for the choice of exchange rate regime would involve the additional factors related with capital market development, and the broad scheme of the AERM is a very loose form of EMS. We should try to seek a regional exchange rate regime that can be adopted by each country in a flexible manner, yet provides a long-term baseline toward which all countries converge. It is a framework where intertemporal inconsistencies as well as internal incompatibilities can be reconciled to the overall benefit of all countries over the longer run. Even though the previous ERM showed mixed results in the European context, it needs to be investigated

further for its potential to be employed as a transitory regime in the Asian context (Yoon, Chung, Cho 2002). Williamson (2000) argues that a BBC regime could provide the basis for the eventual adoption of a common Asian currency. Even with the recent move, China faces a potential challenge in coping with a managed float, since a small revaluation will attract speculative foreign capital in anticipation of future appreciation. This means that recent adjustments of the exchange rate will be followed by successive adjustments of greater magnitude. Thus, the BBC can serve as a basic template for other East Asian economies if requisite institutions can be set up. The BBC is flexible enough to accommodate both local and global needs to maintain export competitiveness and control inflation. The composition of the basket is revised periodically to take into account changes in trade patterns. The policy band is also reviewed regularly to ensure that it remains consistent with the fundamentals with needed adjustments. Given the close link between the exchange rate and interest rates in a small open economy, the authority can conduct monetary policy through the exchange rate instead of directly adjusting interest rates. Maybe this is a feasible choice if the consensus can be reached among countries in the region.

Some of the merits and disadvantages of the ERM need to be reviewed to come up with an updated version for Asia (AERM). As shown, some of the improvements over the original ERM are as follows: With this set of features, the AERM can be implemented in the Asian context to result in a more sustainable and shock-resistant set of exchange rate arrangements. Some of the characteristics of the proposed AERM are as follows: First, it reduces exchange rate volatility associated with G-3 volatility such that it is up to each individual country's decision on the size of the band or the strength of pegging. In its early form, the proposed exchange rate mechanism is a loose form of the ACU numeraire such that various forms of

exchange rate arrangement can be accommodated within a common framework.

Exchange rate stability is sought through an EMS-type arrangement, even though a common peg is fragile even with Williamson's BBC with wide bands. Second, the choice of basket can be either external or regional currencies, but there is nothing that precludes including both currencies. As explained by Williamson (2005), two options are available: One in which each of the nine countries (<Table 3>) uses a basket that includes other regional currencies and one in which it uses a common basket of extra-regional currencies (dollar, euro, and yen).

The real stumbling block toward regional cooperation is the lack of confidence among countries in the region. Building on our crisis experience in 1997-98, a sense of commonality in the area of financial instability needs to be utilized toward economic integration. The bottom-line for regional arrangements is the internal exchange rate stability, and what matters most is the political will (Wyplosz 2001). Given the diverse economic and political backgrounds, the benefits from integration might be overshadowed by the costs. It stands to reason to infer that each country needs to maintain its own set of policy tools to address idiosyncratic shocks without seriously jeopardizing overall economic stability. Spillovers and contagion need to be analyzed to devise optimal adjustments of policy instruments. In this context, the exchange rate regime should be flexible enough to accommodate policy responses to various shocks in a multilateral context. On the surface, it takes the form of dirty floating or managed floating, but essentially this differs from the previous regime in the sense that it is rigged onto a well-defined principle that is well observed among member countries. By continuing this effort further into the future, we can better achieve regional economic stability.

5. Other Considerations

The alternative to currency pegs as an anchor for monetary policy is inflation targeting. Eichengreen (2000) and Choi (2003) analyzed the feasibility of inflation targeting in Asia. Inflation targeting is difficult in emerging markets for three reasons. For one, they are open: their liabilities are often denominated in foreign currencies (liability dollarization) and their policy makers often lack credibility. It makes inflation forecasting more difficult, and it opens additional, exchange-rate related channels linking the central bank's instruments and targets that operate with very different control lags. Inflation targeting is also infeasible in open economies because it is more complicated to manage. Finally, liability dollarization introduces further fundamental complications. Financial institutions and their customers will be saddled with currency mismatches given the difficulty these countries have in borrowing abroad in their own currencies. Under these circumstances, an inflation targeting central bank will be reluctant to let the exchange rate move: It will be unable to benefit from the greater flexibility ostensibly offered by that regime. These observations suggest that inflation targeting will be less attractive the more open the economy. Note the consonance of this argument with a key implication of the theory of optimum currency areas (OCA). Inflation targeting will be less attractive the dimmer the prospects of the central bank in gaining policy credibility. Finally, inflation targeting will be more attractive where liability dollarization is limited and banks and corporations have markets on which to hedge their exposures, so that limited exchange rate fluctuations will not irreparably damage their balance sheets.

In practice, for countries where the adverse balance sheet effects of liability dollarization dominate only when exchange rate movements reach a certain point, conventional inflation targeting will be viable so long as shocks and corresponding

exchange rate movements are small. Such countries will wish to target inflation flexibly by adjusting monetary policy in response to large exchange rate movements while treating small movements with benign neglect. Unfortunately, flexibility can be destabilizing when credibility is lacking. A central bank that temporarily disregards a surge in inflation in order to, say, stabilize the financial system may find its commitment to price stability questioned. Credibility problems will force precisely those emerging markets where a flexible approach to inflation targeting is most valuable to adopt a relatively rigid version, creating a vicious cycle.

However, the need for multilateral efforts for exchange rate stability underscores the importance of flexible inflation targeting as a monetary policy framework. Because price stability is a key determinant for stable real effective exchange rate, confidence-building practices of each country are essential to launch a multilateral exchange rate arrangement that seeks both intra and extra exchange rate stability via introducing a common regional currency.

6. Summary and Conclusion

The proposed AERM calls for creating a common basket or numeraire (or parallel currency of ACU) by which regional currencies can be measured. This ACU can further maintain its stability vis-à-vis dollar, euro, and yen through pegging to a common basket of major currencies. Even though an individual basket with appropriately chosen weights can mimic the performance of a common basket or two-tier approach with a parallel currency, financial market implications call for adopting a regional currency at an early stage of monetary cooperation. The AERM can serve as an operating platform to manage such operations. The central body of the AERM would be responsible for overseeing the value of the ACU against other major

currencies, and the central banks would be jointly responsible for maintaining their currency values against the ACU. The choice of exchange rate regime also has implications for monetary policy, i.e. flexible inflation targeting for most countries in the region. By gradually switching to these set of arrangements, regional financial stability can be enhanced, and the global adjustment can be made more effectively.

By giving regional countries the tools to pursue concordant decisions without unnecessary concerns for neighbors' actions, regional adjustment will be smooth and we can expect conditions to overcome the original sin. The paper differs from other discussions in that it emphasizes the financial factors for exchange rate stability in a global context. By rigging the choices of the regional exchange rate regime in both real and financial respects, the implications are drawn to bear on the direction of the exchange rate regime in the region. To accelerate this change in direction, a common currency unit needs to be created as a parallel currency consisting of regional currencies with appropriate weights. The AERM would be the institutional backbone for maintaining the value of this basket within a certain band, and one way to achieve it is through pegging to a common basket of major currencies.

The previous discussion basically addressed the choice between a common basket peg of some sort, whether it be the ACU or ACU numeraire or a simple version of a weighted mix of regional currencies and common management of the ACU following the ERM type of band and parity or BBC vs. use of parallel currency and individual arrangement until conditions are satisfied to run a more strict version a la the ERM with pre-specified band and parity. Even though no concrete roadmaps can be formulated at present, some of the directions for future monetary cooperation are rather clear: Asian nations should start thinking about a regional currency or numeraire or common basket to start the long process toward monetary cooperation.

Lack of a long-term capital market and similar industrial structure and excessive reliance on the US market make cooperation largely tenuous since sovereign concerns often face the reality that undermines joint efforts to secure regional financial stability.

As mentioned earlier, any meaningful efforts toward monetary cooperation need to start from forming a consensus on a common regional currency or numeraire. In any event, the magnitude of the global imbalances and the limits of sovereign adjustment underscore the importance of creating a regional currency. At least, it helps preserve intra-trade and can help develop the ACU-based capital market so that the world economy does not need to rely on an unbalanced financial system. Even though we are not fully ready to launch the AERM, given our sizable differences and lack of political will, we can expect faster convergence toward the AERM and monetary integration with the introduction of a new regional currency. Some sort of commonality in terms of a basket or numeraire is important to overcome monetary divergence. The role of the IFI is strongly encouraged in this effort, and it is essential for a globalized environment by a Pareto criterion.

To summarize, the evidences increasingly show that exchange rate stability is closely related with the fact that international investors can take long positions in local or regional currencies. Since the efforts need to be jointly made in the region and have clear financial bearings, the future shape of the AERM needs to evolve from the creation of a common regional unit (common basket) and the operation needs to be of regional dimension. Once we can create a unit by which long-term bonds can be issued, there will be positive developments aided by the AERM. The role of the IFI as a market creator needs to be emphasized in this effort. This study redirects attention on the exchange rate arrangement to a broader context in that a regional currency can

serve as a stabilizer as a common basket and help overcome structural impediments of the original sin via strengthening of integration in both real and financial respects.

Given the sizable impact from the third-country exchange rates that disturb the trading relationships among the East Asian countries, it is important to shield the increasingly important intra-trade in the region. The basket numeraire proposal by Williamson (2005) deserves attention since a common basket largely achieves this purpose. The common basket would largely be composed of regional currencies, and if it comprised only these, it would be identical to the ACU as a parallel currency. By adopting the ACU as a common basket, various exchange rate regimes can be accommodated, and the degree of pegging with ACU or the degree of pegging to other basket can be determined by individual country considerations. Among all the considerations toward the AERM, of greatest importance is forming a consensus to create a regional currency, the ACU, irrespective of its incipient form. Since one of the most important regions in the global environment can enjoy a common regional currency, the original sin can be overcome, and the balance sheet vulnerability can be controlled to a greater extent, eliminating one of the underlying causes of exchange rate volatility. Thus, it is expected that this kind of arrangement can also help reduce G-3 volatility by curbing the global imbalances.

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