# The Role of an Asian Currency Unit for Asian Monetary Integration

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#### 1. Introduction: Key Issues

In recent years East Asia has seen rapid advances in market-driven economic integration through cross-border trade, investment and finance. Following the Asian newly industrialized economies (NIEs) and middle-income Association of Southeast Asian Nations (ASEAN) members, China is the most recent participant in this integration process as a result of further opening its economy to international trade and foreign direct investment (FDI). Growing economic integration has strengthened macroeconomic links across those East Asian economies that have also opened financial markets and liberalized capital accounts.

The high and rising degree of economic interdependence in East Asia suggests that it is increasingly important for the region's economies to achieve intraregional exchange rate stability. Some recent key policymakers in East Asia are becoming vocal about the advisability of creating a monetary union in the region (for example, De Ocampo 2004; Kuroda 2004; and Chino 2004). The reason is that they believe that intraregional exchange rate stability is desirable for East Asia and forming a monetary union is the best way to achieve it.

In reality, however, the region remains characterized by diverse, uncoordinated exchange rate arrangements. Japan and China, the two dominant economies in East Asia, respectively adopt a pure float regime and a tightly managed US dollar-based regime. Other economies—except for the small open economies of Hong Kong and Brunei Darussalam—adopt intermediate regimes of managed float with the US dollar as the most important anchor currency.

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<sup>&</sup>lt;sup>1</sup> In this paper, East Asia includes the ten Association of Southeast Asian Nations (ASEAN) member countries (Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam), the newly industriliazed economies (NIEs; Hong Kong, Korea and Taipei, China), China and Japan. The Asian NIEs also include Singapore.

As it is increasingly difficult to maintain intraregional exchange rate stability through the traditional policy of US dollar pegs, a new framework for exchange rate policy coordination should be developed in East Asia. In particular, given the relative decline in the role of the US dollar and the absence of a dominant single East Asian currency, a case can be made for introducing a basket of regional currencies—called the Asian Currency Unit (ACU)—as the region's common reference currency.

This paper is organized as follows. Section 2 tackles the question of whether East Asia is ready for a regional single currency, by examining the validity of optimum currency area (OCA) criteria. Assuming that there is a sound case to establish a regional single currency, even if it were to take a very long time, Section 3 examines which currency—whether the US dollar, yen, or a basket of Asian currencies (such as an ACU)—would likely to become the leader that facilitates regional exchange rate policy coordination. Section 4 explores policy steps to foster monetary and exchange rate policy coordination that could eventually lead to the formation of a monetary union in the region. Section 5 provides concluding remarks while pointing out the importance of addressing fundamental impediments on the way forward.

#### 2. Optimum Currency Areas and Macroeconomic/Structural Convergence

Deep market integration and rising economic interdependence in East Asia suggests that the region is emerging as one that satisfies optimum currency area (OCA) conditions. One of the lessons from European monetary integration leading up to the introduction of the euro in 1999 and the accession of new member states to the European Union (EU) and the euro zone in the subsequent period is that macroeconomic and structural convergence is critical if a group of economies is to form, or join, a common currency area as equal (or symmetric) partners. Macroeconomic convergence criteria were explicitly embedded into the Maastricht Treaty and must be met when a new EU member state joins the euro zone, while the need for structural convergence has been made explicit for countries considering EU accession—well before the decision is made whether they can join the euro zone.

Is East Asia an OCA? According to the theory of "optimum currency areas" developed by Mundell (1961) and McKinnon (1963), a currency area is optimum—that is, the member economies are better off adopting permanently fixed exchange rates with each other, or forming a joint currency area—under the following conditions:

- Openness to the area members;
- Integration of product, factor and financial markets;
- Symmetry of shocks affecting the area members;
- Similarity of preferences over output-inflation tradeoffs; and
- Willingness to coordinate supporting policies such as fiscal policies.

These are often called the OCA criteria.<sup>2</sup> The consensus among experts on the applicability of OCA criteria in East Asia is that this region as a whole may not be an optimum currency

<sup>&</sup>lt;sup>2</sup> Since these criteria can vary across countries and over time, no single exchange rate regime is right for all countries or at all times, as discussed by Frankel (1999).

area, but several sub-groups of the region's economies may form such currency areas (see Watanabe and Ogura, 2006). For example, although China and low-income ASEAN economies are deepening their economic integration with other East Asian economies in terms of trade and FDI, they have yet to open their capital accounts and integrate themselves fully with other East Asian economies.

Nonetheless, several economies in the region are well-integrated with each other in terms of trade, investment, finance and macroeconomic activity. For example, Singapore, Malaysia and Brunei could form a currency area today without much of an economic problem, as, similarly, could Japan and Korea. The view that OCA criteria are endogenous would suggest that once these economies peg the exchange rates with each other or form a monetary union, economic integration will further deepen and the degree of symmetry of supply shocks will rise. But this view is now being challenged by the financial crisis in the euro zone.

Given the long-run trends of rising economic integration in East Asia, more OCA conditions are likely to be satisfied over time. From this perspective, Mundell (2005) argues that there are many benefits from Asian monetary integration, including: greater trade and investment; a wider range of alternatives for countries forced out of the US dollar area; a stronger voice in world affairs; a more effective cushion in crises; a reduction, perhaps even an elimination, of exchange rate conflict; better monetary policy; reduced destabilizing speculation; more cohesive regional decision-making; and a more efficient Asian economy.

Macroeconomic convergence. Strictly speaking, macroeconomic convergence among economies is not part of the OCA criteria; it is not a prerequisite for a single currency area. For example, in the case of a unilateral or asymmetric currency peg, ex-ante macroeconomic convergence is not a prerequisite—although a successful peg would eventually require a certain degree of ex-post macroeconomic convergence.<sup>3</sup>

Nonetheless, a high degree of *ex-ante* macroeconomic convergence is critical to success once countries decide to form or join a single currency area as equal or symmetric partners, as in the case of the formation of the Economic and Monetary Union (EMU) in Europe. The reason is that without macroeconomic convergence, it will be difficult for a group of economies experiencing differential inflation rates and fiscal deficits to gain from a common, non-inflationary monetary policy. This is one important reason why the Maastricht convergence criteria—standards for inflation rates, interest rates, fiscal deficits, public debt and exchange rate stability—were introduced in the early 1990s in order to

<sup>&</sup>lt;sup>3</sup> A country suffering from high inflation can unilaterally peg its exchange rate to the currency of a low, stable inflation country so that the pegging country can import the low and stable inflation policy from the anchor country. This was one of the reasons for a high inflation country—like Italy—to join the Exchange Rate Mechanism (ERM) as this allowed the country to import the Bundesbank's non-inflationary monetary policy through currency pegging to the deutschmark. The reason the ERM (or the earlier Snake) did not require exante macroeconomic convergence was that there was perhaps an implicit assumption that Germany would provide a stable anchor currency and other countries would stabilize their currencies against the deutschmark, thereby importing non-inflationary policy from Germany. This may explain why the ERM functioned as an asymmetric exchange rate system, despite the fact that it was designed initially as a symmetric arrangement.

encourage European Monetary System (EMS) countries to achieve convergence of monetary and fiscal conditions before they became eligible for EMU membership.

Looking at the data on East Asian economies for major macroeconomic indicators—those considered for the Maastricht convergence criteria—it is clear that the region has not achieved sufficient macroeconomic convergence in terms of inflation rates, interest rates, fiscal deficits and fiscal debt. There is no exchange rate stabilization mechanism in the region.

Structural convergence. Structural convergence—in such areas as industrial structure, financial sector development, capital account openness, and the quality of institutional and policy frameworks—is not part of OCA criteria, and it was never part of the Maastricht convergence criteria. So, while a country would not have to have strong economic structures or institutional foundations—and, hence, would most likely be without sound macroeconomic policy institutions such as a credible, independent central bank and a disciplined fiscal authority—before forming or joining a currency area, it could still unilaterally peg its exchange rate to the currency of a country with strong structures and institutions. By so doing that country could rely on, and effectively import, the strong economic infrastructure of the target-currency country.

During the recent negotiations of EU accession of Central and Eastern European countries as well as some former Soviet Republics, these candidate countries have always been required to implement structural reforms and various liberalization measures in order to improve the quality of policy and institutional frameworks. Once admitted to the EU, new member states can be considered as candidates to join the euro zone.<sup>4</sup>

Given that its economies exhibit wide differentials in per-capita incomes, industrial structures, institutional quality and various types of market infrastructure, East Asia has not achieved a high degree of structural convergence. For the developing and emerging economies in East Asia, the first priority toward forming or joining a currency area would be to pursue policy, institutional and structural reforms so as to strengthen domestic economic and structural fundamentals, and improve institutional quality. Without these fundamental efforts, a meaningful structural convergence would not be achieved.

#### 3. East Asia's Exchange Rate Arrangements

Lack of exchange rate policy coordination. The scale of interdependence among East Asian economies has risen to a level almost matching that in Europe, at least Europe in the 1980s-90s. Given the heightened interdependence of economies in the region, East Asian countries should arguably aim to stabilize intraregional exchange rates through policy coordination rather than seek stability through a US dollar peg. The ultimate goal in this plan could be the creation of an Asian common currency.

<sup>&</sup>lt;sup>4</sup> The idea here is that to become a full (and symmetric) member of the euro zone, each candidate country must first improve the quality of economic structures and institutions so that the country becomes similar structurally to those in the EU, and then demonstrate a sufficient degree of macroeconomic convergence visà-vis incumbent countries before it becomes eligible to join the euro zone.

However, the problem is that no exchange rate policy coordination has taken place in East Asia. Even worse, the region's exchange rate regimes are quite diverse and in serious disarray (Kawai 2008). In contrast to the pre-crisis period, where many emerging market economies in East Asia maintained *de jure* or *de facto* US dollar pegged regimes, the post-crisis period exhibits a greater diversity in exchange rate regimes. The two giant economies in the region, Japan and China, adopt different exchange rate regimes—Japan a free float and China a heavily managed, crawling peg regime anchored by the US dollar. Other economies—except for the small open economies of Hong Kong and Brunei—adopt intermediate managed float regimes with the US dollar as the most important anchor currency.

Containing risks arising from large capital inflows. Given the financial crisis and recession in the US, and its continuing large current account deficits, abrupt changes in international investor tolerance (or expectations) could put significant downward pressure on the US dollar. A loss of confidence in the US economy due to the likely stagnant economic conditions and mounting public debt could trigger a portfolio shift away from US dollar assets to other currencies. In the medium-term East Asia will likely face another surge of short-term capital inflows and the consequent upward pressure on currency values, given that East Asia is the first region to recover from the global financial and economic crisis and will likely face rising interest rates—whether policy rates or market rates—in the coming quarters.

These capital inflows are often directed to asset markets—for investment in equities and real property—and hence, if not managed properly, can be a source of macroeconomic and financial sector vulnerabilities. Adopting a policy that would allow currency appreciation is advisable in the presence of domestic inflationary pressure and incipient asset price bubbles, but such a policy could also damage a country's international price competitiveness vis-àvis neighboring countries. So these problems may be difficult for a country to resolve through individual national policies alone. However, in this instance, a most reasonable and effective policy option would be to allow "collective" currency appreciation across the region, which does not differentially affect individual countries' relative price competitiveness.<sup>5</sup>

Any agreement adopting a joint currency appreciation policy would require a convergence of exchange rate regimes in East Asia to promote intraregional exchange rate stability. To achieve this, the existing policy dialogue processes among the region's finance ministers and central bank governors would play a critical role. Clearly the first step toward policy coordination would be to adopt exchange rate regimes that allow greater currency flexibility vis-à-vis the US dollar. China's yuan revaluation in July 2005 and its shift to a

<sup>&</sup>lt;sup>5</sup> A collective currency appreciation policy would spread the adjustment cost across East Asia, thus minimizing individual country costs. A simple calculation would indicate that a 20% collective appreciation of East Asian currencies vis-à-vis the US dollar implies only a 9% effective (or trade-weighted) appreciation against trading partners—given the intra-regional trade share of 55%—even if all other non-East Asian currencies remain stable vis-à-vis the dollar. To the extent that other currencies also appreciate vis-à-vis the dollar, the degree of effective appreciation of the East Asian currencies would be more limited.

managed crawling peg—followed by Malaysia's similar shift to a managed float—marked potentially the beginning of such coordination.

**Dollar, yen, yuan or a currency basket as East Asia's anchor?** Even when a consensus emerges on the advisability of regional exchange rate policy coordination in East Asia, the question of how to achieve such coordination remains. There are at least two ways to achieve similar exchange rate regimes throughout the region and, hence, intraregional exchange rate stability. The first is for each economy to stabilize its currency through a joint reference to a common key currency or a common basket of key (and other) currencies. The second is for these economies to jointly create a regional, cooperative system similar to the Snake or Exchange Rate Mechanism (ERM) in Europe.

The choice between the two would depend on the degree of economic (particularly macroeconomic and structural) and political convergence. Given that economic convergence among the East Asian economies is not sufficiently advanced—and that political relationships are not adequately deep to support the creation of a tightly coordinated regional system—the first approach appears more realistic. Only with sufficient economic convergence—and with strong political consensus—should East Asia move to the stage of joint exchange rate stabilization.

Three options can be considered for the region's target currency for exchange-rate stabilization:

- A single currency, such as the US dollar, the yen or the yuan;
- The Special Drawing Rights (SDR; a currency basket of the US dollar, the euro, the pound sterling, and the yen) or an SDR-plus currency basket (including the SDR as well as emerging East Asian currencies); and
- An Asian Currency Unit (ACU)—an appropriately weighted basket of East Asian currencies, including the yen, yuan, won, baht, ringgit, etc.

Given East Asia's diverse economic relationships with the major countries and areas in the world, the traditional practice of choosing the US dollar as the region's sole monetary anchor is no longer the best policy. An obvious alternative is to choose the yen and/or the yuan as a monetary anchor, given the size and importance of Japan and China in East Asia. However, the yen's power waned in the 1990s—due to Japan's lost decade following the bursting of asset price bubbles—though it still has the potential to play a critical role. With China's strong growth performance, the yuan's international role will rise over time, but the usefulness of the yuan will remain limited for international settlement, clearance, financing and liquidity holding due to the lack of full convertibility. It will take a long time for the yuan to assume an international currency status equivalent to that of the US dollar, the euro, or the yen.

This suggests that no single currency can likely play a monetary anchor role at least in the near future and it is recommended to introduce a regional currency basket, an ACU, for intraregional exchange rate stability (see Kawai 2007). An ACU can also facilitate various types of exchange rate policy coordination in East Asia.

### 4. Steps towards an Asian Monetary Union

To pursue policy coordination, a gradual, step-by-step approach is appropriate and realistic. The first step is to initiate an intensive policy dialogue covering exchange rate movements, regimes and issues as part of the region's economic and surveillance exercise. The second step is to coordinate informally on exchange rate regimes by moving toward greater exchange rate flexibility vis-à-vis the US dollar. The third step is to adopt formal, but loose exchange rate policy coordination to promote intraregional rate stability without rigid coordination of monetary policy. The fourth and fifth steps are to progressively intensify formal exchange rate policy coordination (see Table 1).

Table 1. Steps toward Exchange Rate and Monetary Policy Coordination

Progress	Exchange rate policy	Supporting institutions	Trade-investment
Current State	Uncoordinated exchange rate arrangements	CMI & regional surveillance	Uncoordinated FTAs
1. Intensive policy dialogue on exchange rates	Intensive policy dialogue on exchange rates; use of an ACU index for surveillance	Secretariat for CMI multilateralization & regional surveillance	Coordination of rules & provisions among FTAs
2. Informal coordination (exchange rate regimes)	Greater exchange rate flexibility vs. US dollar; An SDR-plus currency basket as loose reference	Asian Monetary Cooperation Fund	A single East Asia- wide FTA; East Asian Investment Area
3. Formal and loose coordination (exchange rate policy)	SDR-plus currency basket system with clear rules for intraregional rate stability	Very short-term liquidity facility	Asian customs union
4. Tight coordination (monetary policy)	ACU-based system: Asian Snake" or "Asian ERM"	ACU clearing and settlement system	Asian common market
5. Full coordination	Asian monetary union	Asian central bank	Asian single market

Source: Compiled by the author.

Intensive policy dialogue on exchange rate policy. The first step is the introduction of intensive policy discussions on exchange rate policy as a part of the regional economic surveillance process. The objective is to cultivate a culture that views exchange rates as not merely national concerns but also regional matters, and intensify discussions among policymakers in order to reach a consensus regarding the implications of large currency misalignments within East Asia. At this stage, an ACU index could be introduced as a benchmark, a tool to measure the value of East Asian currencies as a whole against external currencies—such as the US dollar and the euro—as well as the degree of divergence of each currency's value from the regional average set by the ACU. Once China moves to a more flexible exchange rate regime, ACU index movements and divergences of component currency values can provide more meaningful information.

*Informal coordination of exchange rate regimes.* The second step is the introduction of informal policy coordination to achieve both greater exchange rate flexibility vis-à-vis the US dollar and improved exchange rate stability within East Asia by using a basket of SDR-

<sup>&</sup>lt;sup>6</sup> The ACU could also be developed for invoicing trade-related transactions and serving as a denomination for Asian bond issues. See Kawai (2009), and several other papers in Chung and Eichengreen (2009).

plus currencies as a loose reference. <sup>7</sup> By adopting a managed float policy targeted at an SDR-plus currency basket—as is currently practiced by Singapore—all emerging East Asian economies could enhance the degree of exchange rate stability with each other. The weights of East Asian currencies in the basket could vary across countries, at least initially. How strictly countries maintain the value of their currency in line with the basket currency could depend in each case on country conditions and preferences. National monetary authorities could maintain most of their autonomous policymaking by combining an appropriately defined inflation target policy and a basket-based managed floating policy (Kawai and Takagi 2005).

Formal exchange rate policy coordination. The third step is the joint adoption of a formal policy of stabilizing intraregional exchange rates using a common basket of SDR-plus currencies as a reference. The basket stabilization policy should be clearly defined with well-defined rules on exchange rate parity against the common basket, a relatively wide exchange rate band (such as a range of  $\pm 10\%$ ) around the central rate, and the ability to adjust both the central rate and the band—along the lines proposed by Williamson (2005). This policy affords the authorities greater exchange rate flexibility vis-à-vis the US dollar at the expense of a lesser degree of national monetary policy autonomy. The ACU index should continue to serve as an important indicator in measuring joint movements and divergences of East Asian currencies, and its use in the financial markets should be encouraged.

The subsequent steps entail the launch of more systematic exchange rate and monetary policy coordination to create a regional monetary anchor. All regional currencies will become fully flexible vis-à-vis external currencies—such as the US dollar and the euro—but maintain intraregional stability through joint stabilization of individual currencies to the ACU. It would be necessary at this stage to create a credible regional monetary anchor within East Asia as well as a fully elaborated short-term liquidity support arrangement that is sufficiently large, flexible and speedy enough for frequent interventions in the region's currency markets. The private use of ACU should be encouraged and an ACU clearance and settlement system must be developed.

The final stage is complete monetary policy integration and a full delegation of monetary policymaking to a regional supra-national authority. In this ultimate phase, a single regional currency may be introduced. But this remains a long-run possibility for the region.

<sup>&</sup>lt;sup>7</sup> Note that an SDR-plus currency basket could be defined as a basket of the US dollar, the euro, the pound and an ACU.

<sup>&</sup>lt;sup>8</sup> Here, two approaches are possible—the "European" approach and the "parallel currency" approach (Eichengreen, 2006). Under the "European" approach, a common basket peg similar to the snake or exchange rate mechanism (ERM) could be introduced.

<sup>&</sup>lt;sup>9</sup> Under the ERM of the European Monetary System, the deutschmark emerged as a *de facto* anchor currency despite the system having been designed as a symmetric exchange rate stabilization scheme. In East Asia, it is also possible for the yen, the yuan, or another currency to play such an asymmetric, monetary anchor role, but the choice of which one emerges will be left to the natural evolution of non-inflationary policymaking and credibility of the region's central banks.

A multi-track, multi-speed approach. A practical path toward policy coordination (and, ultimately, policy integration) is to take a multi-track, multi-speed approach, whereby economies ready for deeper policy coordination begin the process while others prepare to join later. A group or pairing of economies that are sufficiently integrated—Japan and Korea; China and Hong Kong; or Singapore, Malaysia, and Brunei Darussalam—and also possess sufficient political commitment, may wish at this stage to initiate subregional currency stabilization schemes. Each subregional group could intensify exchange rate and monetary policy coordination within the group while allowing the possibility, or even crafting a road map, for others to join them subsequently. Over time these groups may start negotiations to integrate into a larger monetary zone.

#### 5. Conclusion

Judging from the OCA criteria, one can argue that the entire East Asian region—the ASEAN+3 group plus Hong Kong and Taipei, China—is not an optimum currency area. For example, low-income ASEAN economies have yet to develop their basic institutions and policy frameworks, needed prior to becoming legitimate members of the group that embarks on regional monetary policy coordination. Though China is deepening its economic integration with other East Asian economies in terms of trade and FDI, it has yet to open its capital account and internationalize its currency in order to integrate itself fully with other East Asian members.

Nonetheless, several economies in the region—including Japan, Korea, Singapore, Malaysia, Thailand and Brunei Darussalam—are well-integrated with each other in terms of trade, finance and macroeconomic activity. Indonesia and the Philippines are close to joining the level of this league. For example, at least from an economic perspective, Singapore, Malaysia and Brunei could form a currency area today, as, similarly, could Japan and Korea.

The most serious impediments to the formation of an East Asia-wide single currency may include:

- differences in the stages of economic and institutional development, in the quality of governance, and the diversity of economic and political systems;
- reluctance to surrender national sovereignty over economic policymaking; and
- lack of sufficient integrationist tradition, mutual trust, political commitments, and the necessary, regional support institutions.

Sharing a long-term vision for the future of East Asia helps to strengthen regional economic policy coordination and, in this regard, the recent initiative to create an "East Asia Economic Community" will be a positive step. In addition, greater economic integration is expected to promote an Asian identity and trust building, a process that would benefit the creation of regional institutions.

Several cooperative institutions could be set up. First, East Asia does not have a region-wide trade agreement, though it has a series of uncoordinated free trade agreements (FTAs). It is time that the region accelerated coordination in the area of trade and investment

integration by creating an East Asia-wide FTA, an important precondition for the formal institutionalization of financial and macroeconomic integration (Kawai and Wignaraja, 2009)

Second, East Asia does not have an effective institution for regional financial cooperation, though it has undertaken several formal initiatives—such as for regional reserve pooling (the Chiang Mai Initiative, CMI), regional economic surveillance, and Asian bond market development. It is time for the region's finance ministers and central bank governors to work closely to transform the CMI into an Asian monetary cooperation fund—administered by a strong professional secretariat—in order to promote regional financial stability.

Finally, it is time to initiate exchange rate policy coordination. The immediate step would be for the regional economies to discuss exchange rate issues as part of enhanced economic surveillance and policy dialogue, for which an Asian Currency Unit (ACU) index will be a useful instrument. The next step is to enhance convergence of exchange rate regimes in East Asia in order to achieve some degree of intraregional exchange rate stability; the most realistic option is for regional economies to adopt similar managed floating regimes—rather than a pure float or a rigid peg to an external currency. This can be done through, for example, the adoption of a common SDR-plus currency basket system based on the US dollar, the euro, the pound sterling and the ACU. Greater political support for economic policy coordination could eventually lead to more formal mechanisms for intraregional exchange rate stability based on the ACU. But before this should be undertaken substantial convergence will have to be achieved across countries in the region in terms of political, economic, institutional and social conditions.

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