Monetary Cooperation in Europe and East Asia

-How to Cooperate with Currency Basket Methods-

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Introduction

Regionalism rises together with globalization in East Asia. It started to strengthen regional economic cooperation. On trade and investment side, East Asian countries began to form FTAs (Free Trade Agreements) or EPAs (Economic Partnership Agreements) among them or with some Latin American countries like Mexico and Chile. Monetary cooperation also started. In 2000, the ASEAN+3 countries organized bilateral swap arrangements (BSAs) called Chiang Mai Initiative. In May 2005, the ASEAN+3 Finance Ministers' Meeting agreed on the 2nd stage of the CMI where total amount of BSAs is more than US$ 50 billion, though only 10 percent of the bilateral amounts can be drawn without any linkage to IMF facilities. The Meeting also agreed on "roadmap" for the future course of the ABMI (Asian Bond Market Initiative), which started from the agreement of August 2003 in the ASAN+3 Finance Ministers' Meeting.

However, these are very preliminary steps. The central pillar of the monetary cooperation, the CMI, is oriented towards monetary crises as it happened in 1997 and 1998 in East Asia. They were depreciation crises. In view of a depreciation of the US dollar, which is likely to take place in the near future based on the rising current account deficits of the USA, East Asia has to step up their monetary cooperation right now. What should be features of the future regional cooperation at monetary front? They are:

☆ Multilateralization of BSAs,

☆ Enhanced Surveillance, and

☆ Intra-regional Exchange Rate Stability.

This paper will contribute to the 2nd and 3rd item above by designing several kinds of currency basket. Each basket will be examined by simulation whether it will be able to work for monetary cooperation purpose and sustain for a long time.

When we are faced with such tasks, we can learn lessons from the European monetary cooperation that continued from 1970s to today: the snake, the old EMS with the fluctuation band of ±2.25%, the new EMS with the fluctuation band of ± 15% after 1993 and the ERM2. But, experience with the EMS cannot fit to East Asian monetary cooperation totally because situations in both regions are partially quite different. We must make a choice.

The paper proceeds as follows. In Section I, important elements about a choice of a specific foreign exchange (FX) rate regime in East Asia will be discussed. In section II, a currency basket DEY composed of the US dollar, the euro and the yen

will be examined. A DEY will be calculated for each of East Asian country based on its trade composition vis-à-vis the USA, the EU and Japan. Simulations about each DEY will show that DEY regime can be applicable and useful for East Asia. It will be discussed what country will have what kind of difficulty in the DEY regime and how the difficulty will be alleviated. In Section III, an ACU basket will be examined for surveillance of the East Asian macroeconomic situation. In Section IV, a currency basket regime will be justified from several viewpoints and criticism about currency basket regime will be critically examined. In section V, the paper will be concluded.

I. Choice of a Specific Exchange Rate Regime

I. What kind of crisis is East Asia facing?

One of the pillars of the future regional monetary cooperation in East Asia is intra-regional exchange rate stability. What is it for?

The central pillar of East Asian monetary cooperation is the CMI, which is oriented toward monetary crisis as it happened in 1997 and 1998 in East Asia. They were depreciation crisis for heavy foreign debt countries like Thailand, Korea, Indonesia and the Philippines.

To such crisis, every East Asian country is ready. First, they accumulated huge foreign reserves at the beginning of 21st century. Some economist regarded the accumulation of the dollar reserves in East Asia as a form of the "revived Bretton Woods system", where East Asian countries intervene to buy the dollar indefinitely to keep their foreign exchange (FX) rates low vis-à-vis the US dollar. The dollar reserves in East Asia amount to $ 3 trillion and three fourths of the world currency reserves. Second, many East Asian countries have recorded current account surplus in order not to rely on foreign capital. Third, collective preparation like the CMI is set. East Asia is now dressed in armor toward depreciation crisis.

But, coming crisis will be dollar depreciation based on swelling current account deficits of the USA. It will be an appreciation crisis for East Asian currencies based on huge current account surplus mentioned above. East Asian countries will have to intervene to sell their own currency to buy the dollar. It is opposite situation that the CMI presupposes. As the CMI mechanism would not be able to deal with such crisis, the cooperation in East Asia will have to step up.

The second crisis will be disorder in appreciation. One currency would appreciate by 40%, another by 30% and others 15% vis-à-vis the US dollar. Now the share of intra-regional trade is as high as 54% in 2004 and has been rising. The East Asian production network which is reflected in the rising share of intra regional

trade will surely be damaged by such disorderly appreciation of the currencies. An orderly appreciation will be essential element.

As inflation rates of East Asian countries are quite converge to such a level that the EMS countries accomplished in the middle of 1980s, East Asian countries will be able to start a new regime, if they have political will to do so. I am not sure whether they have such political will today. Notwithstanding, they will be obliged to cooperate in their FX rate policy, when a sharp fall of the dollar would happen. The changeover of the Chinese FX rate regime form the US dollar peg system to a currency basket regime on July 21 this year will facilitate a FX cooperation of the ASEAN+3 countries.

I-2 Why currency basket?

This paper proposes a FX rate regime based on currency baskets: DEY. Our DEY is a currency basket composed of the USD, the Euro and the Yen. Each East Asian country has its own DEY. Each DEY should work as a standard of the management of FX rate policy of each country. Another advantage of the DEY is that it can take competitiveness of East Asia into consideration. The key currency, US dollar, and the Euro tend to move oppositely and the yen tend to move in the middle of the two biggest currencies. The DEY is a weighted average of the above three currencies, it tends to move in the middle of the dollar and the euro. As a result, East Asian currencies will be able to keep competitiveness toward the USA or Europe, while usually they will be stable vis-à-vis the yen. Our simulation will show that East Asia will be able to get FX rate stability vis-à-vis the US dollar even in the crisis period, if East Asian countries would make use of their DEY as the standard.

As nationalism in East Asia is much stronger than that of Western Europe in the EMS era, a national currency such as the Yen, which is only one candidate for a key currency in this region, cannot be designed as a formal key currency. Basket currency method is surely a solution to such key currency problem.

I-3 Member Countries

What countries will be members of a DEY forex regime? At present, the "ASEAN (five countries) plus Three" is likely to be an adequate grouping for foreign exchange cooperation in East Asia. Preliminary steps for cooperation have been taken among these countries. The group has already the summit conference and conferences at ministerial level (trade ministers, foreign ministers and finance ministers) arranged the Chiang Mai Initiative (CMI), agreed in May 2000. The

finance minister meeting at the level of the ASEAN+3 will be responsible for the foreign exchange rate cooperation. It is highly hopeful that an administrative office for the cooperation will be established in Tokyo or Seoul or any other appropriate capital. In the office, professionals coming from the member countries analyze economies and economic policies of the members for surveillance and recommendations etc. under a secretary-general.

I-4 Foreign Exchange Rate Movements in East Asia

The inflation rate gap in East Asia is quite small compared to those of the European Community in the 1970s or in the first half of the 1980s. Although we must be cautious about future development of foreign exchange rates in East Asia, it is likely high time to start monetary cooperation. But there are four types of foreign exchange regime there (see Table 1).

As China moved to a managed float based on a currency basket in July this year, monetary cooperation will become easier. Although the appreciation of the Reminbi (Chinese Yuan) has been a little since the changeover, the Yuan will be expected to move more dynamically vis-à-vis the US$. Considering such variety of the forex regimes and eventual diverse price developments among the countries, a crawling band system based on currency baskets (BBC scheme) will be the most hopeful candidate as a specific foreign exchange regime.

I-5 How to cope with the Trinity problem?

The impossible trinity thesis says as follows: it is impossible for a country to keep three monetary policy elements at the same time: free movement of capital, foreign exchange rate stability and monetary independence. In a regional foreign exchange regime, we can see a division of labour between the key currency country and the other countries. In case of the EMS in the 1990s, Germany, the key currency country, kept free movement of capital and monetary independence with no foreign exchange rate stability vis-à-vis the US dollar. The other countries gave up monetary independence to keep free movement of capital and exchange rate stability vis-à-vis the D-Mark. The latter had to follow the German monetary policy. If the volatility of the US dollar rate vis-à-vis the ERM became very high, Germany intervened on its foreign exchange market to defend the ERM from excessive instability.

In East Asia, eight out of the nine countries above keep exchange control. As the experience with the European monetary cooperation shows, exchange controls are

no expedients to start a regional foreign exchange rate regime. When the European countries started the currency snake in 1972 and restarted the EMU in 1979, almost all countries kept strict exchange control. The exchange control conferred protection against currency speculation and contributed to safeguarding the intra-regional fixed exchange rate system. The East Asian countries will be able to keep their exchange controls in the medium term. So, the eight countries will be able to grip, in theory, monetary independence, though limited, and foreign exchange stability.

Concerning the Trinity problem, a country can sometimes have a room for maneuver. For example, Japan keeps free movement of capital and monetary independence with flexible foreign exchange rate. But, Japan kept relative foreign exchange stability vis-à-vis the US dollar with the massive intervention in 2003 and 2004, because the increase of money stock stemming from the intervention did not disturb its monetary policy objective.

II. Currency Baskets for East Asia and Their Modus Operandi

II-1 What currency baskets should be used for the reference rate?

Is it possible for East Asian countries to set fixed central rates with each partner called "parity-grid" which the EMS employed? It shows East Asian political will to be independent from the US dollar. As for Japan, it will be quite impossible mainly because it relies on its security to the US. But, even Japan will have to defend its East Asian production network in face of coming dollar depreciation. Considering the weak political will and strong economic needs of my country, I would like to propose a low level of monetary cooperation as follows:.

1. Each East Asian country will have its own FX reference rate which is calculated from a specific currency basket.
2. Each currency will be able to fluctuate inside a ±10% margin around the reference rate.

Although we can design a trade-weighted currency basket for each of the "ASEAN plus three", taking the most important ten trade partners proportional to their trade weights. In this case, however, the weight of the US dollar may become too heavy. It is very famous that Thailand adopted a currency basket before the crisis, but that the weight of the US dollar was so great that the baht pegged de facto to the US dollar, which caused too heavy capital inflow leading the double mismatch. In order to raise the weight of the euro and the yen in a currency basket, we take only the USA, the EU and Japan as the trade partners for each one of the East Asian countries. The share of these three countries becomes 100%.

We will show a Korean example. If a share of Korean exports to the USA in total Korean exports to the three countries in a standard year is k% and a share of Korean imports from the USA in the same year is j%, the weight of the US dollar in a currency basket, is equal to (k + j)/2, namely an arithmetic average of the export share and the import share of Korea to/from the USA among the big three countries. The weight of the euro and the yen is calculated in the same way.

The arithmetic average of exports and imports of Korea to/from the USA, the EU and Japan was 42.70%, 28.40% and 28.90% respectively (the total share of the three countries was 100.0%) in 1998. We choose the foreign exchange rates of the three currencies on 1st of January 1999 as the standards.

The currency basket is called DEY_{KRW}. Then, we get a DEY_{KRW} basket composed of the US dollar, the euro (E) and the yen (Y) as follows:

$$1\ DEY_{KRW} = 0.42698UD\$ + 0.24327E + 32.72536Y \qquad (1)$$

If we put daily rate of the US dollar (always 1), the US dollar rate of the euro (ECU before 1999) and the US dollar rate of the yen in equation (1), then we can get daily DEY_{KRW} rate expressed in the US dollar. The rate development of the DEY_{KRW} is shown in Figure 1.

= Figure 1 =

The euro depreciated vis-à-vis the US dollar and the yen by about thirty percentage points from its start until the end of 2000. As the weight of the euro in the DEY_{KRW} basket is 29%, the euro pulled the DEY_{KRW} rate down by about ten percentage point from the starting day. From the middle of the year 2002 on, the euro and the yen appreciated vis-à-vis the US dollar. As the share of the two currencies in the DEY_{KRW} basket is about 60%, the rate appreciated remarkably vis-à-vis the US dollar.

Let us compare the Korean Won rate with the DEY_{KRW} rate (here, "rate" means the won rate expressed vis-à-vis the UD dollar) in Figure 1. After 1999, the Won rate was generally stronger than the DEY_{KRW} rate, but both rates moved closer in 2004.

= Table 2 =

The weights and the number of units of each East Asian currency are shown in Table 2 and Table 3. From both Tables, we can get, for example, DEY_{Baht} as follows:

$$1\ DEY_{Baht} = 0.25354UD\$ + 0.18020E + 29.9820Y \qquad (2)$$

After 2000, the Baht rate have been almost always weaker than the DEY_{Baht} rate (Fig. 2).The Philippine Peso and the Indonesian Rupiah rates show the similar movements as the Baht rate (Figure 3 and Figure 4). The Rupiah rate showed very instable movements until 2001, but becomes relatively stable since then. As already

shown, these two countries showed current account deficits in 2002 and 2003.

= Figure 2, 3 and 4 =

On the other hand, the Singapore dollar, which pegs to the trade-weighted currency basket, moved near the DEY$_{S\$}$ (Figure 5).

= Figure 5 =

The three currencies which pegged to the US dollar (the Chinese Yuan, the Hong Kong dollar and the Malaysian Ringgit) show the same rate movement (Figure 6, 7 and 8). When the US dollar was strong relatively to the euro and the yen, the rates of these three currencies rose against each DEY rate and vise versa.

= Figure 6, Figure 7 and Figure 8 =

As DEY rates of each currency moved similarly (Table 9), East Asia will be able to move as a currency block, if each East Asian country will regard its own daily DEY rate as the standard in their foreign exchange managements.

= Figure 9 =

II-2 Fluctuation Band with ±10%

Judging from the past rate movements of the East Asian currencies, maximum fluctuation margin should be is plus minus 10% around the DEY reference rate for each of the currency. The rupiah and the peso showed fluctuation more than 20% in the beginning, they lessened to 20% during the last two years. So, the fluctuation band with 20% is likely to be appropriate.

As many East Asian countries adopt foreign exchange control and the price development comes to converge recently, narrower band will be possible. We calculate the average of exchange rate of each currency vis-à-vis the DEY rate during the 1st of January 1999 and the 30th of April 2004 and the coefficient of variation. It is under 5%with probability of 95%. Excluding the rupiah and the pesos, a band of plus minus 5% around the DEY rate will be possible.

However, if we think of the global imbalance of the current accounts between the USA and East Asia, it may be harmful to choose a narrow fluctuation band. The above band of plus minus 10% for all currencies may be able to last for relatively long period.

The European ERM widened its band from plus minus 2.25% to plus minus 15% around the central rates in August 1993 in order to defend itself against speculation attacks. But the central banks of the core ERM members managed their fluctuation band to keep plus minus 2.25% around the central rates during 1996 and 1998. They distinguished de facto band margin from de jure band margin. When speculations

attack, the band could become wider to 8% or so. East Asia will follow such management behavior.

II-3 Intervention and Change of the Reference Rate

When a currency participating in the cooperation reaches the lowest or highest margin of the fluctuation band, there are two ways to respond. One is intervention and the other is depreciation (appreciation).

If there is no structural reason like accumulating inflation gap, the monetary authority of the country must defend its weak (strong) currency by intervention on its own foreign exchange market using its dollar reserve.

Moon, Rhee and Yoon [2005] proposed an Asian Monetary System (AMS) similar to the EMS with mutual intervention. Regrettably, mutual intervention cannot work in East Asia. For example, there is little or no transactions of Korean won on Tokyo FX market. On Seoul market, they cannot find the yen enough to deal with. More than 95% of the FX transactions against the won is occupied by the US dollar. So, banks on the Seoul market have to sell their won against the US dollar and then sell the dollar against the yen on Tokyo, Singapore or Hong Kong market. As thee is no direct deal between the won and the yen on Seoul or Tokyo market, mutual intervention is totally impossible. So, an EMS system is unrealistic in East Asia. The dollar intervention is only way to defend any East Asian monetary cooperation.

If there is structural reason like inflation gap, the currency which gets down to the margin should depreciate its DEY reference rate. The DEY reference rate is the rate on the starting day of cooperation. It works as the standard of the rate management for each country. It can be changed when a country finds it difficult to keep as the standard. In retrospect of the last two years and a half in our observation period, the peso will be a candidate to devalue its DEY reference rate. This is a characteristic of a crawling band system. How should the reference rate change?

In the ERM, realignments occurred when currency speculations took place in view of divergent development of inflation rates among the participating countries and the related countries found it very difficult to defend their central rates against speculators. When more than three countries were involved in the realignment, finance ministers of the ERM members met in a conference and decided the new central rates. When one or two currencies changed its (their) central rate(s), the government(s) could only tell the other governments to depreciate or appreciate its (their) currency (ies) and how much. The rate of depreciation (or appreciation) was

generally proportional to the inflation gap vis-à-vis the ERM average. Low inflation countries appreciated and high inflation countries depreciate their central rates proportionally to their inflation gaps vis-à-vis the average.

This method can be applied to the East Asian cooperation. When a currency reaches the lowest or highest margin of the band and the movement is caused by inflation gap or other structural reasons, the currency at the highest margin or the lowest margin should change its DEY reference rate.

For example, if the Philippine peso reaches the lowest margin of the band and the inflation development of the Philippines is cumulatively 10% higher than the average of the other countries, the DEY_{Peso} should depreciate by 10%. A simple method is to cut off the number of units in the old DEY basket by 10%.

$$1\ DEY_{Peso}\ (new) = 0.9 \times 1\ DEY_{Peso}\ (old) = 0.9 \times (0.46399UD\$ + 0.20091E + 34.1336Y)$$
$$= 0.41759US\$ + 0.180819E + 24.2854Y \qquad (3)$$

A new fluctuation band of plus minus 10% is set around this new DEY reference rate. Then, the Philippine monetary authority will be able to manage the peso rate more easily than before.

When a currency reaches the upper limit because of relative low inflation, the DEY rate should be appreciated by the percentage points of the inflation gap.

When several currencies would reach the upper limit at the same time because of precipitation of the US dollar, Bank of Japan should intervene to buy the US dollar with other monetary authorities of the countries concerned ("cooperative intervention"). Another way to cope with the "big fall" is cooperative appreciation of the DEY reference rates. The other way is widening the fluctuation band from 10%, say, to 15%. In any case, there will be monetary cooperation among the USA, the Euro area and East Asia. The point for East Asia will be to stabilize their FX rates to defend their production network in the region.

III. Surveillance Mechanism on the basis of an ACU basket

III-1 ECU in the European Monetary system

The European Currency Unit (ECU) was one of the two pillars of the European Monetary System (EMS) along with the Exchange Rate Mechanism (ERM). The ECU was a currency basket composed of the currencies of the European Community in 1979.

The ECU basket was composed as follows:

1 ECU＝0.828DM+0.0885UKL+1.15FF+109LIT+0.286DFL+3.66BF
+0.14LF +0.217DKR+0.00759IP

(DM: German Mark, UKL: British pound, FF: French Franc, LIT: Italian lira, BF : Belgian Franc, LF : Luxembourg Franc, DKR: Danish Crown, IP : Irish pound)

The right-hand side is composed of nine items: each item has number of currency units (0.828 in case of DM) and the name of each currency (DM etc.). Using the US dollar rate of each currency, we can calculate each item. When 1 DM is equal to 0.5455 US dollar on March 25 in 1979 on Frankfurt foreign exchange, the first item is calculated the amount of the first item as 0.4525 US dollar (= 0.828 times 0.5455). In such ways, we can calculate all of the items using the US dollar rate of each currency and get the ECU rate at the moment, for example 1 ECU=1.3042 US dollar. Then, we can get the ECU rate of each composing currency making use of the US dollar rate of each currency.

The number of currency units of each currency like 0.828 was decided to reflect the Gross Domestic Product and the scale of trade of each national economy in the previous year. In other word, the ECU was a weighted average of the foreign exchange rates of each EC currency weighted by the economic scale of each country. For example, the weight of the German Mark was about 33% when the EMS started in March 1979.

The role of the ECU to be played in the EMS was planned to be as :

(1) Numeraire for the ERM,

(2) Foundation for a divergence indicator,

(3) Unit of account for operations in the intervention and credit mechanism, and

(4) Instrument of settlement between the monetary authorities in the EC.

It is very important to recognize that the ECU was used only inside the EMS or the European Community. Many Asian economists point out that East Asia needs ACU (Asian Currency Unit) as the FX rate standard. It is a mistake. As ACU is composed of only East Asian currencies including the Yen, the value of the ACU has nothing to do with competitiveness of East Asia in the world market. The ACU cannot be a standard of the FX rate regime in East Asia. The ACU should be used for surveillance of macroeconomic situations of East Asian countries.

The EMS was kept for about twenty years until the introduction of the euro. During the period, the FX rate of the German Mark tended to rise vis-à-vis the other currencies. In order to evade the over-presence of the Mark, the ECU basket was corrected every five years so that the weights of each currency in the basket were nearly equal to the economic size (GDP and foreign trade amount) of each country. The correction of the basket was done in 1984, 1989 and 1994. Therefore, there were

four ECU baskets in the history of the ECU. In preparing for the monetary integration, the correction was not done any more after 1994.

III-2 Composition of the Asian Currency Unit

An Asian Currency Unit (ACU) is composed of nine East Asian currencies: Japanese Yen, Chinese Yuan, Korean Won, Taiwan dollar, Hong Kong dollar, Singapore dollar, Malaysian Ringgit, Thai Baht and Philippine Pesos. Indonesian Rupiah is excluded because its fluctuation after the East Asian currency crisis was too big until 2002.

As a weight of each currency in the basket, we take the GDP and trade volume expressed in the US Dollar of each country after the fashion of the ECU. For example, the share of the GDP of Japan in the nine countries multiple 1/2 plus the share of the trade volume of Japan in the total trade volume of the nine countries multiple 1/2 become the weight of Japanese Yen in the basket. The weights of each country were calculated, but the ACU a la ECU cannot be used because the weight of the yen is as high as around 70%. The ACU a la ECU rate moves with yen rate, since the yen rate pulls the ACU by 70% to its side. .

In order to correct the deficit of the ACU a la ECU, we take as the weight of each currency the GDP at PPP standard of the above countries. For the sake of simplicity, we take this time only the GDP as the basis of the weight of each currency in the basket. In this case, the weight of the Yen in 1990 gets lowered to about 35% and about 29% in 2000. The weight of the Chinese Yuan is the biggest in the currency basket every year.

= Table 3 =

In the same way as the ACU, we can get ACU* equation based on the PPP. The foreign exchange rate of the ACU* of the starting month (January 1991) is 1 ACU96 = 1 US dollar.

1 ACU*91 = 46.97916JPY+2.12269CNY+42.09842KRW+1.06127TW$ + 0.23124HK$
+ 0.0344SP + 1.26731TLB + 0.73443PLP + 0.05189MLR (2)

We change the ACU* equation based on the GDP at PPP in 1995. From the equation (2), 1 ACU*91 was equal to 0.95542 US$ on January 1, 1996. In order to keep continuity between ACU*91 and ACU*96, we take the forex rate of the US$ rate of the ACU*91 of January 1, 1996 into consideration. Then, we get ACU*96 based on the forex rates of the nine Asian currencies on January 1, 1996 as follows:

1 ACU*96 = 32.0722 JPY+ 3.2685CNY + 44.5512KRW + 0.95609TW$ + 0.30129HK$
+ 0.03692SP$ + 1.26094TLB + 0.57997PLP + 0.05881MLR (3)

For the continuity of the ACU* to take into consideration the exchange rate of 1 ACU* = 0.95542US$ on January 1, 2001, we can calculate the ACU*01 as follows.

1 ACU*01 = 28.35057JPY+3.20948CNY+74.0379KRW + 1.05756TW$ + 0.25032HK$ + 0.03636SP$ + 1.41295TLB + 1.14368PLP + 0.075661MLR (4)

Now, we can compare the foreign exchange rates development of the East Asian currencies and the ACU, the ACU* from 1991 to 2004 (Figure 1, Figure 2). The Figures show that the ACU* rate moved in the middle of the East Asian currencies. During the East Asian Currency Crises in 1997 and 1998, the foreign exchange rates of several South East Asian currencies and Korean Won deviated from the ACU* remarkably. However, the ACU* rate was relatively stable vis-à-vis the US$ and the other currencies, since the FX rate of the two most influential currencies, the JPY and the CNY, was not so much influenced by the East Asian currency crises. In the case of the CNY, the stability was guarantied by its dollar-peg and Chinese government rejected to devaluate the CNY. The ACU* was more stable than the JPY vis-à-vis the US$, since the CNY devalued drastically in January 1994 when the JPY kept appreciating vis-à-vis the US$.

= Insert Figure 10 and Figure 11 here! =

Let us show the ACU* rates of the East Asian currencies, namely the forex rates of the East Asian currencies vis-à-vis the ACU* from 1999 to April 2004 (Figure 12 and Figure 13). The ACU* rates of the East Asian currencies are relatively stable.

= Figure 12 and Figure 13 =

In the 21st century, the inflation rates of the East Asian countries have got down. In the middle of the 1990s, Chinese and Indonesian inflation became double digit and the rates of the other countries were relatively high except Japan, Singapore and Malaysia. But, the rates got down to under 5% in the 21st century except Indonesia. In China, the inflation rate rose to 5% in the latter half of 2004 because of the overheating of the economy. However, the core inflation rate was not so high.

The gap of inflation rates of the countries which participate in an agreement for foreign exchange rate stability was one of the most important problems in the European Community/Union in the 1970s and 1980s. Owing to the growing gap, high inflation countries like Italy, UK or France were obliged to get out of the fluctuation band of the agreement. The inflation gap of the East Asian countries narrowed as little as the EMS countries in the middle of 1980s when the EMS went into stability. The time looks ripe for the East Asian countries for a forex

stability agreement.

III-3 ACU* as an Instrument for East Asian Macroeconomic Policy Coordination

The European Community made use of the ECU divergence indicator for several objects. In East Asia, we can use the ACU* for macroeconomic policy coordination.

We take the first day of 1999, when FX rate stability of the East Asian countries became clear, as the starting day of our observation. The ACU* rate on the day is set as the official ACU* rate. It plays as a standard rate of each currency. We draw margin lines 10% and 5% above and below the official ACU* rate.

The currencies are categorized into three groups shown in Figure 5, Figure 6 and Figure 7. The first group consists of the JPY, KRW and S$ and fluctuate over 5% band many times, though S$ has been relatively stable. The second group consists of the US$-pegged currencies and Taiwan $, which fluctuated inside the 5% band, though they went up or down over the 5% margin line. The third group contains the Baht and Pesos, which went out of the 10% band for long time. Though the Baht went inside the 10% band, the Pesos deviated almost always from the 10% margin.

= Insert Figure 5, Figure 6 and Figure 7 here! =

As the added weight of the US$-pegged currencies is more than 50% in the ACU* basket, the rate of the ACU* is pulled by the currencies, i.e. the US$, by more than 50%. This tends to have the ACU* rate move relatively stable vis-à-vis the US$. The stability of the ACU* rate of the US$-pegged currencies explains this character of the ACU*.

As the ACU* rate movement of the East Asian currencies relatively stable last five years, we can draw 5% margin, if they want to coordinate strictly, or 10% margin, when thy want to coordinate loosely, above and below the promised ACU* rate. The margin can work as a kind of divergence indicator or surveillance instrument. Like the ECU divergence indicator, the monetary authority of the East Asian countries is expected to take following measures: intervention on the forex market, domestic monetary policy, realignment of the currency and other economic policies.

They may say that there is discrimination among the nine currencies, if we set simply, for example, 10 % margin. The Chinese yuan draws the ACU* to its side by about 45%, proportional to its weight in the basket, and the Japanese yen by 29%, yet the Thai baht only by 4%. For the Thai baht can reach its margin much more easily than the Chinese yuan or the Japanese yen. In order to cancel such inequality,

a correction measure can be introduced, which is similar to the correction measure in the case of the ECU divergence indicator. Instead of drawing simple margin line of 10% above and below the official ACU* rate, we can set the line as big as 10% times (1 – weight of the currency). Hence, in the case of the Chinese yuan, the width of the fluctuation band is 10*(1 – 0.45), namely 5.5%. In the case of the Japanese yen, the width becomes 7.1%. In the case of the Thai baht, it is 9.6%.

The Pesos should be advised to devalue its ACU* rate and to take domestic monetary policy and other economic policy. In relation with the other currencies, the monetary authorities should intervene on the EX market using the US$ reserves.
There are several comments: Firstly, in case of the European Community, the monetary authorities and the Ecofins (economic and finance ministries) of the member states cooperated timely and the European Commission advised the member governments in the EMS. The governments and the monetary authorities of the"ASEAN+3"should learn the process. Secondly, the policy coordination between the two most influential countries, Japan and China, will be essential, yet there are remarkable differences between the two: the matured and the young economy, low and high economic growth rate, the difference of the population and even political rivalry. However, the monetary coordination will not proceed well, without the cooperation between the two. It is still to be seen whether monetary and economic cooperation between such partners will be able to go well. ASEAN countries may play a role as mediators or dealmakers between the two, as Benelux countries did between France and Germany.

The ECU was used as numeraire and other measures for policy coordination as mentioned above. The private ECU was also developed. At the last stage, the ECU changed into the Euro at the rate of 1 Euro = 1 ECU based on the market ECU rate of December 31, 1998. The ACU* can be utilized as a denomination currency for the Asian bond market etc. and monetary policy coordination in East Asia.

If such coordination could succeed in the long run, the ACU* will be able to be changed into the single currency in East Asia, namely the Asian Monetary Unit (AMU).

Concluding Remarks

This paper clarifies by simulation how good results the currency basket methods can propose to East Asia. The Asian Development Bank will calculate ACU rate and open it to all. The ACU rate the Bank will calculate may be different from our ACU*. But, the principle is the same. What should come next is political will of

East Asian governments to stabilize their FX rates in order to protect the East Asian production network. In this regard, Europe tell us a precious lesson.

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