An Empirical Consideration of Monetary Cooperation in East Asia
- In View of Experience with the European Monetary Cooperation -

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I Introduction

In the Agenda Session 5, there are eleven questions. Seven of the 11 questions are directly connected with the title of the Session - Optimal exchange rate regime for Asia -, and the other four questions are related to economic integration in East Asia. We will go through all of the questions in view of experience with the European monetary cooperation and economic integration.

The paper proceeds as follows. In section II, we will briefly look at history of the European monetary cooperation. In section III, we will answer the seven questions on optimal foreign exchange rate regime in East Asia. In section IV, we will try to answer the remaining four questions. In section V, we will conclude the paper.

II Experiences with the European Monetary Cooperation

A regional monetary cooperation in Europe continued for a generation from 1972 on until 1998: the currency "snake" in the 1970s and the EMS in the 1980s and 1990s. The snake failed, but the EMS succeeded after all sorts of troubles and difficulties and led to the introduction of the euro in 1999. The EMS comprised the following four institutional components: (1) a regional collective exchange rate system ERM (Exchange Rate Mechanism of the EMS) which was designed to stabilize bilateral exchange rates of the participating countries, (2) a mechanism of very short term liquidity support called the VSTF (Very Short-Term Financing), short-term and middle term financial support mechanism, (3) a currency basket called the European Currency Unit (ECU) which served as a numeraire of the ERM, criteria and indicators capable of policy coordination, and (4) a mechanism of surveillance for monitoring economic and policy developments in the participating countries and for imposing policy conditionality on those countries receiving financial support of short- and medium-term.

The currency snake was a defensive response of the European Community to the Smithsonian Agreement of 1971, which extended the fluctuation band to plus minus 2.25% from plus minus 1% decided in the Breton Woods Agreement. It was a collective foreign exchange cooperation mechanism without surveillance mechanism and the ECU. The participating countries set their central rates with each other and the fluctuation margins of 2.25% above and below the central rates ("parity grid system"). The fluctuation margins were maintained by interventions of the two countries whose currencies reached the upper and lower margin. The snake changed from the "snake in the (Smithsonian) tunnel" into a block float in March 1973 with the worldwide transition to the floating system.

The snake broke down, since the Great Britain, Italy and France got out of it. It became the "mini-snake" (a small Deutsche Mark zone). The snake could not be maintained mainly due to conflicts between Germany's price stabilization policy and the Keynsian policies for economic growth of the other big three which were relatively generous to mild inflation.

In 1979, the EC created the European Monetary System under the Bon-Paris axis to defend the EC economy from the large depreciation of the US dollar. The EMS added the snake called the ERM to the ECU and surveillance mechanism. The supporting mechanism increased its credit facilities. As the inflation rate of Italy was so high, the country was permitted to adopt a wider fluctuation band of 6%. And gaps of inflation rates of participating countries were so big (in 1979, the gap between Germany and France was 6% point), and French socialist government chose Keynsian macro economic policy, realignments of central rates were frequent. During March 1979 when the ERM started to March 1983, realignments occurred 7 times and French franc devalued cumulatively by 26% point vis-à-vis the D-Mark. As inflation gaps among the members were so big and economic policy objectives diverged, the ERM was a kind of crawling band regime..

After France shifted to price stabilization policy in March 1983, convergence of inflation rates of the participants towards the German level was realized step by step and they succeeded in stabilizing the exchange rates at the end of 1980's. The exchange rate stability of the ERM looked so complete that market participants characterized the ERM as "quasi-monetary union".

But a basic systemic factor changed at this period: The foreign exchange rate stability in the ERM was based on capital control of the participating countries until the middle of 1980s (the "old" EMS). The ERM countries liberalized capital movement during 1988 and 1990/92 as part of completing the single market of the

EU. Despite the exchange rate stability like a "quasi-monetary union, there were relatively high inflation and high interest rates in the peripheral countries of the EC. This contrast stimulated world investors to invest massive capital into the peripheral countries. The method of the investment was called "convergence trade" (G10) or "convergence play" (IMF), in which the investors trusted such exchange rate stability between the Deutsche Mark and the peripheral currencies that they made use of the Deutsche Mark as the instrument for proxy hedging. The capital inflow helped the peripheral currencies strengthen in the ERM though most of the countries recorded rising current deficits.

A political instability in France in summer 1992 triggered a currency turmoil, which seemed possible to lead to a collapse of the ERM. The investors began to pull their invested capital out of the peripheral countries. As they sold massively the peripheral currencies to buy back the Deutsche Mark used as the proxy hedging currency, the Mark reached its upper limit of the ERM vis-à-vis the peripheral currencies and the central banks were obliged to sell the Mark massively to buy the peripheral currencies. Open agitations led by George Soros and his fellow hedge funds managers threw fuel in a fire.

Pegged but adjustable exchange rate systems with narrow fluctuation margin are plagued by one-way-bet- problem which has been greatly magnified by the enormous depth of world capital markets. The one way bet refers to very low cost of moving out of liquid positions in a weak currency, and potentially very high return when returning to that currency after devaluation. Weak "fundamentals" of the economy or lack of credibility can make currency speculation one-way and self-fulfilling [Pelkmans (2001), p.333]. Britain and Italy were forced to get out of the ERM on the "Black Wednesday" and the Spanish peseta devalued its central rate in September 1992.

The mechanism of the old EMS was kept despite the globalization of finance and the monetary liberalization in the EC. The old mechanism could not respond to the new monetary and financial situation. In this respect, the ERM crisis in 1992 is quite similar to the East Asian currency and financial crisis in 1997.

As the ERM was attacked again and again by currency speculations after the crisis, the EC widened the fluctuation margin of the ERM from plus minus 2.25% to plus minus 15% in August 1993 to stand against currency speculations (the "new" EMS). This made the ERM resistible to currency speculations and brought stability again.

Interestingly enough, the widening of the fluctuation margin hardly affected

the core-ERM group. After the crises in 1992-93, the core group remained or quickly returned to the "old" (plus minus 2.25%) band. This stabilized interests rates, which facilitated the transition to the European single currency.

II-2 Time to go

Park [2002: p.1] said, "most of the available studies on East Asian monetary integration, which focus on similarities of the economic structure and whether there has been synchronization of business cycles with the expansion of intra-regional trade, conclude that East Asian countries are as well qualified (as an optimum currency area) as European countries were some twenty years before for a CCA (common currency area)".

I am not sure whether East Asia is well qualified as an optimal currency area, but I can say that convergence of price developments of East Asian countries is comparative to the European Community in the middle of 1980s. It means that East Asian countries can start monetary cooperation of relatively high level, if they want. After the currency and economic crisis in 1997-98, East Asian economies returned to normality around 2000 and are contributing to the recover of the world economy. It is likely high time for East Asia to proceed with foreign exchange arrangements.

East Asia and Japan has been belonging to a US dollar zone since the end of the world war two (partly since 1970s). It means that a predominant part of foreign exchange transactions in the region have been made vis-à-vis the US dollar. Since the transition to the floating regime, every East Asian country has been trying to stabilize its US dollar rate separately from one country to another without any cooperation arrangements. The trials proved often to fail.

The currency crisis of 1997-98 was a lesson to Asians. Without cooperation, the region as a whole will become a victim of the financial globalization from one country to another. Conditions for cooperation are put in place. The following factors should be taken into account:

1. Rising interdependence of the intra-regional trade and FDI,
2. Developing FTA building in East Asia, and
3. Growing global imbalances, especially the current account surplus in East Asia and the current account deficit in the United States, and
4. Transition to more flexible foreign exchange regime of the Chinese yuan.

Taking into consideration the global imbalances and rising interdependence of the intra-regional trade and investment and in prospect of the FTA building in this

region, East Asia and Japan (the "ASEAN plus Three") will have to keep more or less stable foreign exchange rates inside the region.

But the huge imbalances growing at the both side of the Pacific Ocean may not be sustainable and would lead to depreciation of the US dollar in the big scale vis-à-vis the East Asian currencies (the "big fall") in the near future. The huge size of the cumulative current account deficits of the USA could make the depreciation remarkable.

A precedent is the depreciation of the US dollar by the Plaza Accord of September 1985. Between March 1985 and December 1987, the yen appreciated from $1=259 yen to 121 yen and the Deutsche Mark did from $1=3.31DM to 1.58DM. The rate of the appreciation of both currencies was about 110%. History does not repeat itself and there seems no exchange rate bubble in the US dollar today. Notwithstanding, the appreciation of the East Asian currencies may be very large. We should start cooperation now.

First of all, East Asian countries will have to support the US dollar rate in a concerted manner to avoid free fall of the US dollar. Secondly, they should revalue their currencies kind of in balance. If Japan would revalue, say, 50%, Korea 30%, Thailand 10% etc. in disorderly manner, East Asian economy would come into turmoil and competitiveness among the countries in the region would be distorted. As economic interdependence has been growing and the share of intra-regional trade in the "ASEAN plus Three" is over 50%, East Asian national economies would take a big hit. Without cooperation, currency speculations would amplify the disaster.

Sooner or later, the Chinese yuan will have to move to a more flexible foreign exchange regime. It will surely have a big effect to East Asian currencies and the yen. We do not know when it will take place. But, if the US dollar would depreciate as mentioned above, the Chinese yuan should not follow the US dollar by the peg. Hopefully, the transition to the new regime of the yuan will be made in the framework of the monetary cooperation in the region.

The appreciation of East Asian currencies vis-à-vis the US dollar should have to be made in an orderly manner. A special setting of a foreign exchange regime in East Asia seems to be inevitable in a medium perspective.

There is another reason for the regime setting: developing FTA building in East Asia. Although many FTAs were concluded or are being negotiated today, the FTAs will be unified into a FTA covering the "ASEAN plus Three". As there are no customs barriers in intra-FTA trade, exchange rate change in an FTA could distort

competitiveness relationship of the members. Non-regime in foreign exchange rates in East Asia should change into a specific regime, which will respond to change of competitiveness of the FTA members. The EMS could realize such an order. In the EMS, there were eleven realignments of the central rates between 1979 and 1987. The ranges of realignments were almost proportional to the inflation gap of each country vis-à-vis the average inflation level. A similar regime will be necessary, if they want the FTAs to be successful in East Asia. The setting of a foreign exchange regime in view of the global imbalances will be a first step.

III Optimal exchange rate regime for East Asia - Questions and answers -

In the following, we will answer the questions put in the Agenda for the Conference.

III-1 Choice of a Specific Exchange Rate Regime

1st question: What factors should be taken into account to decide the choice of a specific exchange rate regime for an emerging Asian economy?

<Level of cooperation>

The EMS covered four areas: (1) a collective foreign exchange system, (2) supporting financial mechanism, (3) surveillance mechanism, and (4) a currency basket for surveillance and unit of account of the system. Not to mention, this is not a sole way of setting a specific foreign exchange regime. We can imagine several levels of foreign exchange cooperation in East Asia.

At present, the "ASEAN (five countries) plus Three" is likely an adequate grouping for foreign exchange cooperation in East Asia. Preliminary steps for cooperation have been taken. The group has already the summit conference and conferences at ministerial level (trade ministers, foreign ministers and finance ministers). The Chiang Mai Initiative (CMI), agreed in May 2000, created bilateral swap agreements worth $40bn. A specific foreign exchange rates regime based on voluntary cooperation should be interlocked with the CMI supporting mechanism. The finance minister meeting at the ASEAN+3 level will be responsible for the foreign exchange rate cooperation. It is highly hopeful that a permanent office for the cooperation will be established in Tokyo or Seoul or any other appropriate capital and professionals from member countries analyze economies and economic policies of the group and members and other related matters for surveillance and recommendations etc. under a secretary-general.

We can imagine such cooperation with a common basket currency ACU (Asian Currency Unit) like the ECU and a strong AMF (Asian Monetary Fund) as an institution for financial support and surveillance. If East Asian countries offer a fifth of their foreign reserves, the Asian Monetary Fund will be equipped with 400 $bn funds (more than the 360 $bn funds of the IMF) to help participating counties (Martin Wolf, FT, May 19, 2004). Such high level of cooperation like the EMS is to come later, if the above cooperation will prove fruitful. And the questions to be put in the Agenda of this conference are mainly concerned with foreign exchange rate regime in Asia to stand against coming dollar depreciation. Anyway, we can presuppose low level of cooperation for foreign exchange rate regime in this paper.

<Price trend and today's foreign exchange regimes in East Asia>

A focus of the currency snake and the EMS was inflation rate differentials among the participating countries. In 1970s, conflicts of monetary policies between Germany towards price stability and Britain, Italy and France towards economic growth tore the snake. The latter three countries got out of it. The snake became a small "Deutsche Mark zone". In contrast, the EMS succeeded in convergence of inflation rates and monetary policies to the German line, which opened prospects to a single currency.

Looking at inflation or deflation rates in East Asia today, inflation gaps are quite small compared to those of the European Community in the 1970s or in the first half of the 1980s. The inflation rate of Indonesia was as high as more than 50% after the monetary and economic crisis in 1997 and 1998. The Philippines also showed double digit inflation rate after the crisis. But, the monthly inflation rate in Indonesia declined from 10% in December 2001 to 5.1% in December 2003. In the Philippines, the inflation rate was about 3% during 2003 and the first three months of 2004 (Table 1). During the same period, Japan, China and Singapore showed slight deflation. As a whole, gaps of price movements are recently very small in the "ASEAN plus of ERM-type.

Table 1

Inflation of Consumer Price % per annum

	Malaysia	Singapore	Indonesia	Japan	China	Thailand	Philippines	Korea	Hongkong
1999.01	5.2	−1.0	71.1	0.2	−1.2	3.5	11.5	1.5	−1.0
1999.02	3.8	−0.7	53.7	−0.1	−1.3	2.9	9.9	0.2	−1.8
1999.03	3.0	−0.5	45.3	−0.4	−1.8	1.5	8.7	0.5	−2.6
1999.04	2.9	−0.3	38.2	−0.1	−1.3	0.4	7.9	0.4	−3.8
1999.05	2.9	0.1	30.7	−0.4	−2.2	−0.5	6.6	0.8	−4.0
1999.06	2.1	0.1	24.5	−0.3	−2.7	−1.2	5.7	0.6	−4.1
1999.07	2.5	0.2	13.5	−0.1	−1.4	−1.1	5.6	0.3	−5.5
1999.08	2.3	0.3	5.8	0.3	−1.7	−1.1	5.4	0.9	−6.1
1999.09	2.1	0.4	1.1	−0.2	−0.8	−0.8	5.6	0.8	−6.0
1999.10	2.1	0.5	1.4	−0.7	−0.6	−0.4	5.4	1.2	−4.1
1999.11	1.6	0.4	1.6	−1.2	−0.9	–	3.9	1.4	−4.3
1999.12	2.5	0.7	1.9	−1.1	−1.0	0.7	4.2	1.4	−4.0
2000.01	1.6	0.9	0.3	−0.7	−0.2	0.6	2.6	1.6	−5.3
2000.02	1.6	1.2	−0.9	−0.6	0.7	0.9	3.0	1.4	−5.0
2000.03	1.6	1.2	−1.1	−0.5	−0.2	1.1	3.3	1.6	−4.8
2000.04	1.5	1.1	0.1	−0.8	−0.3	1.2	3.7	1.0	−4.4
2000.05	1.3	0.6	1.2	−0.7	0.1	1.7	4.1	1.1	−4.5
2000.06	1.4	0.8	2.0	−0.6	0.5	2.0	3.9	2.2	−4.5
2000.07	1.4	1.1	4.4	−0.5	0.5	1.9	4.3	2.9	−3.2
2000.08	1.5	1.7	6.0	−0.5	0.3	2.1	4.6	2.7	−2.7
2000.09	1.5	1.7	6.8	−0.9	0.0	2.4	4.6	3.9	−2.8
2000.10	1.9	1.9	8.0	−1.1	0.0	1.7	4.9	2.8	−3.1
2000.11	1.8	2.0	9.1	−0.8	1.3	1.7	6.0	2.6	−2.3
2000.12	1.2	2.1	9.3	−0.4	0.4	1.4	6.7	3.2	−2.1
2001.01	1.5	2.0	8.3	−0.3	0.9	1.3	6.9	3.2	−1.5
2001.02	1.6	1.3	9.1	−0.3	0.0	1.5	6.7	4.0	−2.4
2001.03	1.5	1.8	10.6	−0.7	−0.6	1.5	6.7	4.5	−2.0
2001.04	1.6	2.0	10.5	−0.7	1.2	2.5	6.7	5.3	−1.4
2001.05	1.6	1.9	10.8	−0.7	0.7	2.8	6.5	5.3	−1.5
2001.06	1.5	1.2	12.1	−0.8	1.4	2.3	6.7	5.1	−1.1
2001.07	1.4	1.3	13.0	−0.8	1.5	2.2	6.8	4.9	−0.9
2001.08	1.3	0.7	12.2	−0.7	1.0	1.5	6.3	4.4	−1.1
2001.09	1.4	0.5	13.0	−0.8	−0.1	1.4	6.1	2.8	−1.1
2001.10	0.9	0.2	12.5	−0.8	0.2	1.4	5.5	3.2	−1.2
2001.11	1.5	−0.2	12.9	−1.0	−0.3	1.1	4.5	3.0	−1.4
2001.12	1.2	−0.6	12.5	−1.2	−0.3	0.8	4.1	2.8	−3.5
2002.01	1.1	−1.1	14.4	−1.4	−1.0	0.8	3.8	3.1	−3.4
2002.02	1.2	−0.6	15.1	−1.6	–	0.3	3.5	2.6	−2.3
2002.03	2.1	−0.9	14.1	−1.2	−0.8	0.6	3.6	2.3	−2.1
2002.04	1.9	−1.1	13.3	−1.1	−1.3	0.4	3.6	2.5	−3.0
2002.05	1.9	−0.4	12.9	−0.9	−1.1	0.1	3.6	3.0	−3.1
2002.06	2.1	0.2	11.5	−0.7	−0.8	0.2	3.0	2.6	−3.4
2002.07	2.1	−0.4	10.0	−0.8	−0.9	0.1	2.6	2.1	−3.5
2002.08	2.1	−0.5	10.6	−0.9	−0.7	0.3	2.9	2.4	−3.3
2002.09	2.1	−0.4	10.5	−0.7	−0.7	0.4	2.9	3.1	−3.7
2002.10	2.1	−0.2	10.3	−0.9	−0.8	1.4	2.7	2.8	−3.6
2002.11	1.6	0.2	10.5	−0.4	−0.7	1.2	2.5	3.5	−3.6
2002.12	1.7	0.4	10.0	−0.3	−0.4	1.6	2.6	3.7	−1.6
2003.01	1.7	0.9	8.7	−0.4	0.4	2.2	2.7	3.8	−1.7
2003.02	1.6	0.4	7.3	−0.2	0.2	1.9	3.1	3.9	−2.1
2003.03	0.7	0.8	7.1	−0.1	0.9	1.7	2.9	4.5	−2.1
2003.04	1.0	0.9	7.5	−0.1	1.0	1.6	2.9	3.7	−1.8
2003.05	1.0	–	6.9	−0.2	0.7	1.9	2.7	3.2	−2.5
2003.06	0.8	−0.3	6.6	−0.4	0.3	1.7	3.4	3.0	−3.1
2003.07	1.0	0.3	5.8	−0.2	0.5	1.8	3.4	3.2	−4.0
2003.08	1.0	0.5	6.4	−0.3	0.9	2.2	3.0	3.0	−3.7
2003.09	1.1	0.7	6.2	−0.2	1.1	1.7	2.9	3.3	−3.2
2003.10	0.9	0.6	6.2	–	1.8	1.2	3.1	3.7	−2.7
2003.11	1.1	0.6	5.3	−0.5	–	1.8	3.3	3.4	−2.3
2003.12	1.2	0.8	5.1	−0.4	–	1.8	3.1	3.4	−1.9
2004.01	1.0	1.3	–	−0.3	–	1.2	3.4	3.4	−1.4
2004.02	0.9	–	–	–	–	2.2	3.4	3.3	–

But, we must be cautious about future development of foreign exchange rates in East Asia. In January 2002 to date, the yen appreciated vis-à-vis the US dollar about 18%, Indonesia rupiah and Korean won did more than 10%, the Thai baht and the Singapore dollar did more than 5%. Such appreciation of the East Asian currencies mitigates rise of the effective exchange rate of the yen. In contrast, the Philippine peso depreciated vis-à-vis the US dollar about 7%. Inflation in China, for example, would come again because of heating of its economy. The current account trend is also various in East Asia and Japan. The sum of the current account surplus of Japan in 2002 and 2003combined was about 250 $bn. The corresponding value of the Chinese and Taiwan's surplus was respectively about 70 $bn and 50$bn. Korea showed also surplus of about 10 $bn. At the opposite side, Hong Kong recorded deficit of about 30 $bn and that of Singapore 20 $bn. Malaysia, Thailand and Indonesia showed deficits less than 10 $bn respectively.

According to the IMF, there are four types of foreign exchange regime in East Asia:

(1) Free Float

Korea: intervention exceptionally (only when the Won/dollar rate fluctuates radically)

The Philippines: exchange control (real demand principle), no intervention

(2) Managed float

Singapore: managed float vis-à-vis a currency basket (US$24%, Euro22%, Yen 20%, others34%). with little intervention. Exchange control of the S$ has been strict. Concerning the real share of the US$ in the currency basket was said to be 58% in November 2003, because three main trade partners of Singapore (China, Malaysia and Hong Kong) pegged to the US dollar.

Taiwan: managed float to stabilize its US$ rate with intervention and exchange control

Thailand: managed float with intervention and exchange control (Holding of the Baht by nonresidents and of foreign currencies by residents is forbidden); recently more control rather than intervention.

Indonesia: managed float with intervention and exchange control

(3) Currency Board

Hong Kong: currency board, interest rates are tied with New York market

(4) Traditional Peg to the US dollar

Malaysia: peg to the US$ with capital control

China: peg to the US$ with strict exchange control (but, a large amount of "errors and omissions" – de facto capital flow - in its balance of payments)

As we think of stability of the foreign exchange rates in East Asia vis-à-vis

the US dollar, the traditional peg or the currency board to the US dollar should stop at the start of the foreign exchange cooperation. The other six currencies will be able to keep their management style to their currencies.

There remains possibility of diverse price developments. In order to cope with such developments, a crawling band system is the most hopeful candidate as a specific foreign exchange regime.

2nd Question: How to cope with the Trinity problem?

In general, it is impossible for a country to keep free movement of capital, foreign exchange stability and monetary independence at the same time. 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, key currency country, kept free movement of capital and monetary independence with no foreign exchange rate stability. The other countries gave up monetary independence to keep free movement of capital and exchange rate stability. 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 speculations 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 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 has kept also relative foreign exchange stability vis-à-vis the US dollar with the massive intervention, because the increase of money stock stemming from the intervention does not disturb its monetary policy objective.

Taking such a situation in East Asia about the Trinity problem, we could imagine following cooperation between Japan, the would-be key currency country,

and the other countries. Each East Asian country will respect its reference rate calculated by a currency basket, but will be able to move their foreign exchange rates inside a fluctuation band of plus minus 5% to 10% around the reference rate.

Although the Japanese yen will not directly participate in the foreign exchange rate bands, it will cooperate with the East Asian countries as follows: Japan will try to intervene in the foreign exchange markets to prevent the US dollar from its free fall or excessive volatility and stabilize the yen rate vis-à-vis the US dollar in the range that the Japan with East Asian countries agreed with the USA. Japan will be able to cooperate with other East Asian countries to manage the depreciation of the US dollar rate vis-à-vis the East Asian foreign exchange bands (cooperative intervention). Secondly, Japan will try to stabilize the yen rate vis-à-vis the East Asian currency bands, which will move hand in hand. In our scheme, the East Asian countries will be able to change their reference rates in response to their competitiveness. Japan will also try to keep stable competitive relationship with the East Asian foreign exchange rate bands.

From a viewpoint of the Trinity problem, there are barriers in this design. It may be difficult to intervene to sell the yen to buy the US dollar massively, if Japan will be in economic boom. In such a case, the intervention will have to be sterilized.

3rd question: What accounts for "fear of float" in Asia?

East Asia belongs to a US dollar zone. The US dollar has been the only predominant international currency in Asia. BIS [2002] tells that more than 95% of all foreign exchange transactions for local currency was made vis-à-vis the US dollar in Indonesia, Hong Kong, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand in April 2001. The data for China is not clear, but the percentage of the US dollar was likely to be as high. Even in Japan, about 92% of the transactions of the yen were made against the US dollar. The very high share of the US dollar in the foreign exchange transactions means that it is used not only as invoicing currency in trade but also as foreign exchange vehicle in the interbank market. Economic agents in East Asia swim in the sea of the US dollar. The openness of the economies (exports plus imports divided by GDP) in East Asia is very high.

These are reasons why East Asian countries have to be sensitive about volatility of the US dollar which may bring turmoil in trade and eventually in the national economy. They are also afraid of misalignments of their foreign exchange rates, which distort allocation of economic resources. The free float vis-à-vis the US

dollar tends to cause volatility and/or misalignment of the East Asian currency against the US dollar. It is natural that the "fear of floating" is prevalent in East Asia.

Without foreign exchange rate cooperation in East Asia, coming "big fall" could throw the East Asian countries into free float situation. A cooperative response would be a sole way to evade such free float situation.

III-2 Currency Baskets for East Asia and Their Modus Operandi

6th question: What currency baskets should be used for the reference rate?

Applying a mathematical method (co-integration analysis) to the ASEAN 5 countries, Korea and China, Ogawa and Fukazawa [2002] drew a conclusion that a common currency basket is more applicable for an anchor currency than the US dollar in forming a common currency area in the region. Their sample period covered from October 1985 to June 1997. Their common currency basket consists of the UD dollar, the DM and the yen, and the weight of each currency in the basket is one third respectively.

As we presuppose low level of cooperation, we cannot introduce such common currency basket. Nor we can imagine to set such an rigid fixed exchange rate system as the EMS. One possible way may be a fluctuation band system. Each East Asian country will have its own reference rate which is calculated from a specific currency basket and each currency will be able to fluctuate in a certain margin around the reference rate.

We can make a trade-weighted currency basket for each of the "ASEAN plus three", taking, say, 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. In the Singapore case mentioned above, the weight of the US dollar was as high as 60% in the currency basket. As the three East Asian countries peg to the US dollar in a traditional way, the weight of the US dollar tend to be very heavy. 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.

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

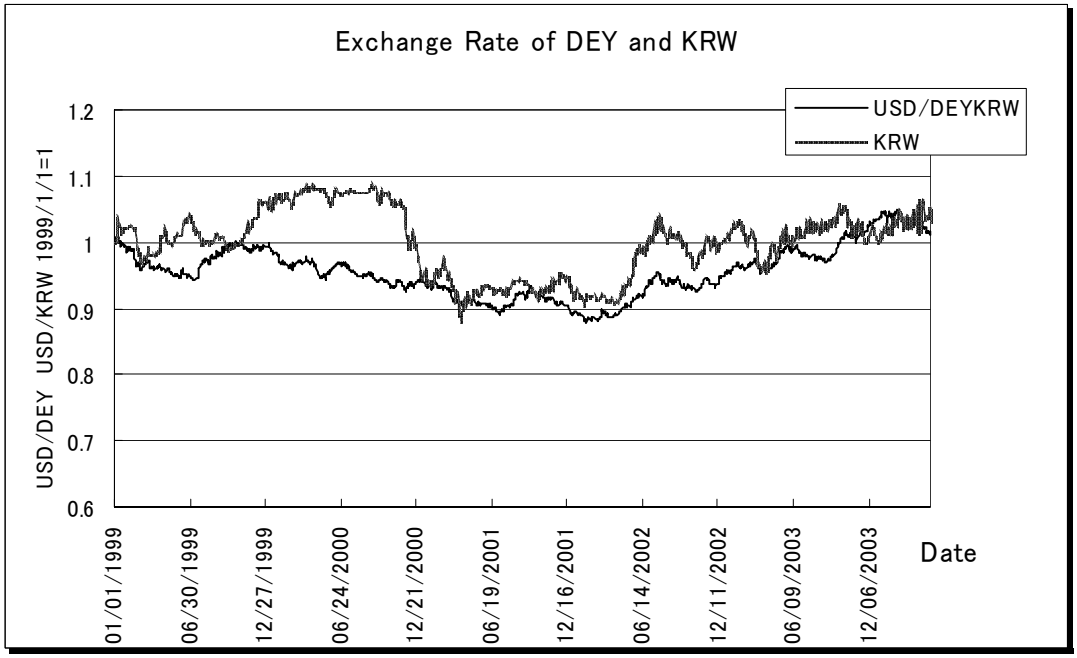
Korean imports from the USA in the same year is j%, the weight of the US dollar in a currency basket, is equal to (k + j)/2, namely an arithmetic average of the export share and the import share of Korea to/from the USA among the big three countries. The weight of the euro and the yen is calculated in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

Let us call a currency basket made in such a way DEY_{KRW}. The DEY_{KRW} can be calculated as follows. We choose the foreign exchange rates of the three currencies on 1st of January 1999 as the standards, and the trade weights of 1998, one year earlier than the year in which the standard day is included. 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. Then, we get a DEY_{KRW} basket composed of the US dollar, the euro and the yen 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.

Figure 1



The rate development of the DEY_{KRW} is shown in 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 basket is 29%, the euro pulled the DEY rate about one third and the DEY_{KRW} rate went

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 basket is about 60%, the DEY_{KRW} rate appreciated 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
Weight of occupies in basket DEY

	USD	EURO	JPY
DEY_{CNY}	32.69%	30.38%	36.93%
DEY_{Bhat}	34.79%	28.87%	36.34%
DEY_{KRW}	42.70%	28.40%	28.90%
$DEY_{S\$}$	42.33%	32.85%	24.82%
$DEY_{Ringgit\cdot}$	41.57%	28.32%	30.11%
DEY_{Rupiah}	27.59%	37.68%	34.73%
DEY_{Pesos}	46.40%	23.45%	30.15%
$DEY_{HK\$}$	38.50%	35.07%	26.43%

Data source: IMF DOTs
Weighted by trade of '98

Table 3
Number of Basket Unit

	USD	EURO	JPY
DEY_{CNY}	0.32687	0.26026	41.81465
DEY_{Bhat}	0.34794	0.24729	41.14378
DEY_{KRW}	0.42698	0.24327	32.72536
$DEY_{S\$}$	0.42332	0.28138	28.10228
$DEY_{Ringgit\cdot}$	0.41572	0.24261	34.08655
DEY_{Rupiah}	0.27593	0.32274	39.32284
DEY_{Pesos}	0.46399	0.20091	34.13360
$DEY_{HK\$}$	0.38505	0.30038	29.92360

Weighted by exchange rate on Jan 1, '98 and trade of '98
Data source: Exchange Rate: OANDA.com
Trade:IMF DOTs

Weights and te 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 Rupiah rates show the similar rate 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

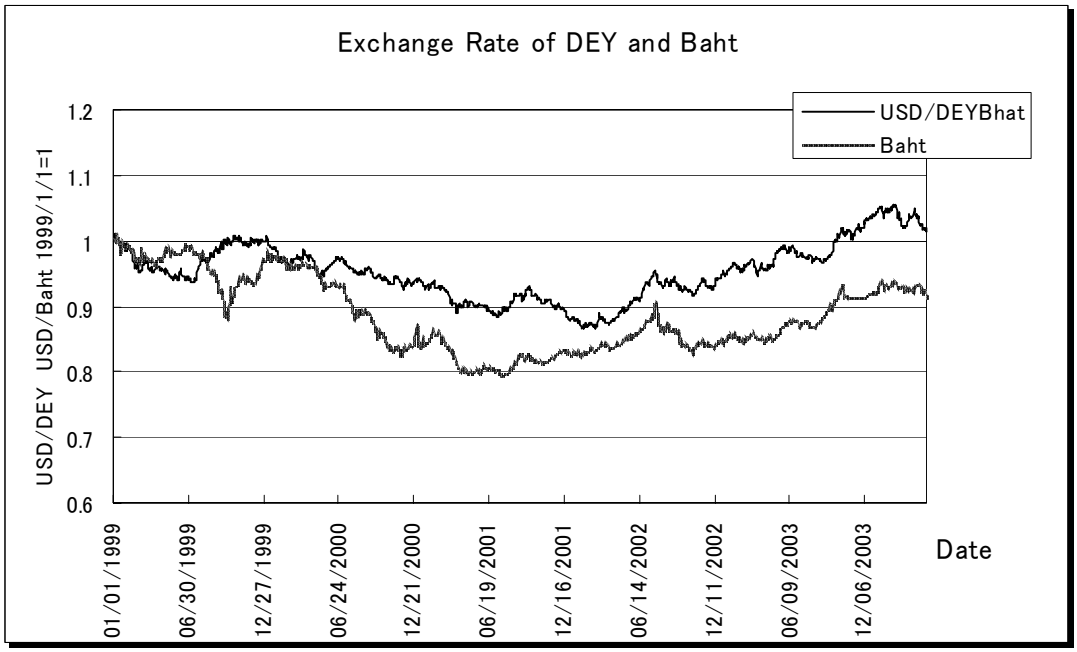


Figure 3

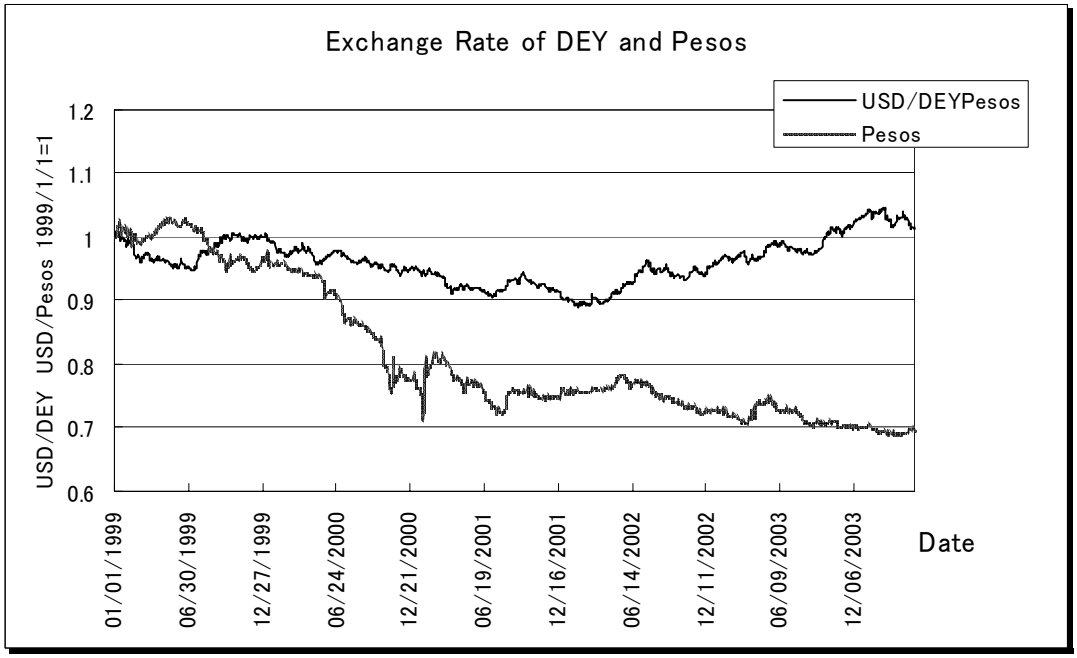
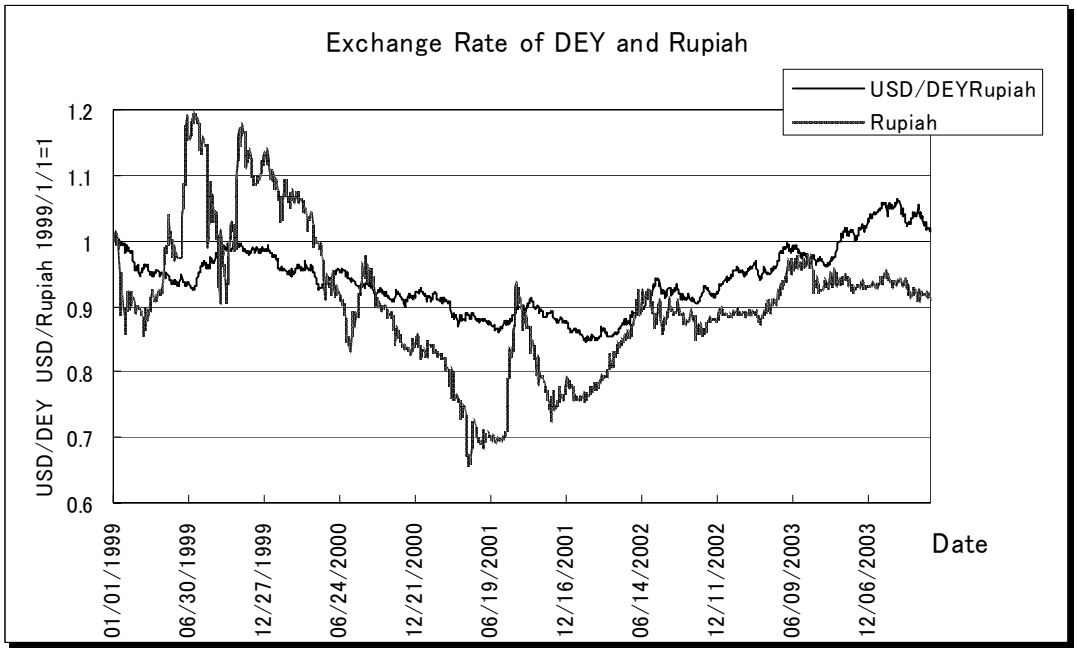
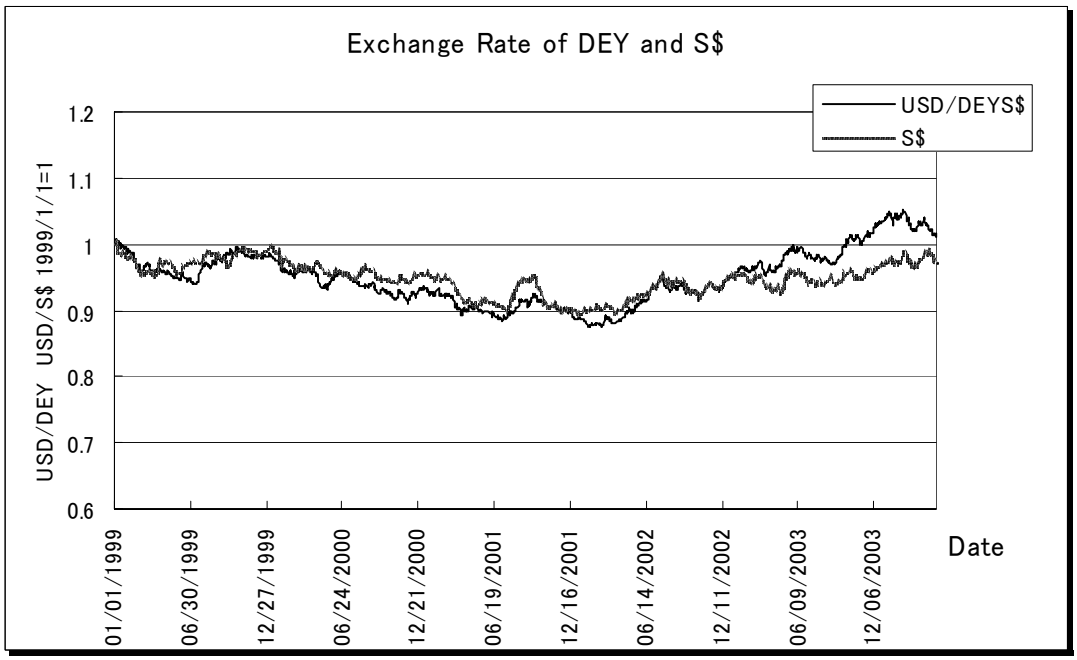


Figure 4



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 peg in a traditional way to the US dollar (the Chinese Yuan, the Hong Kong dollar and the Malaysian Ringgit) show the same

rates development (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. Because of the weak dollar vis-à-vis the other two currencies, each DEY rate of the three currencies becomes stronger recently vis-à-vis the US dollar rates of those currencies.

Figure 6

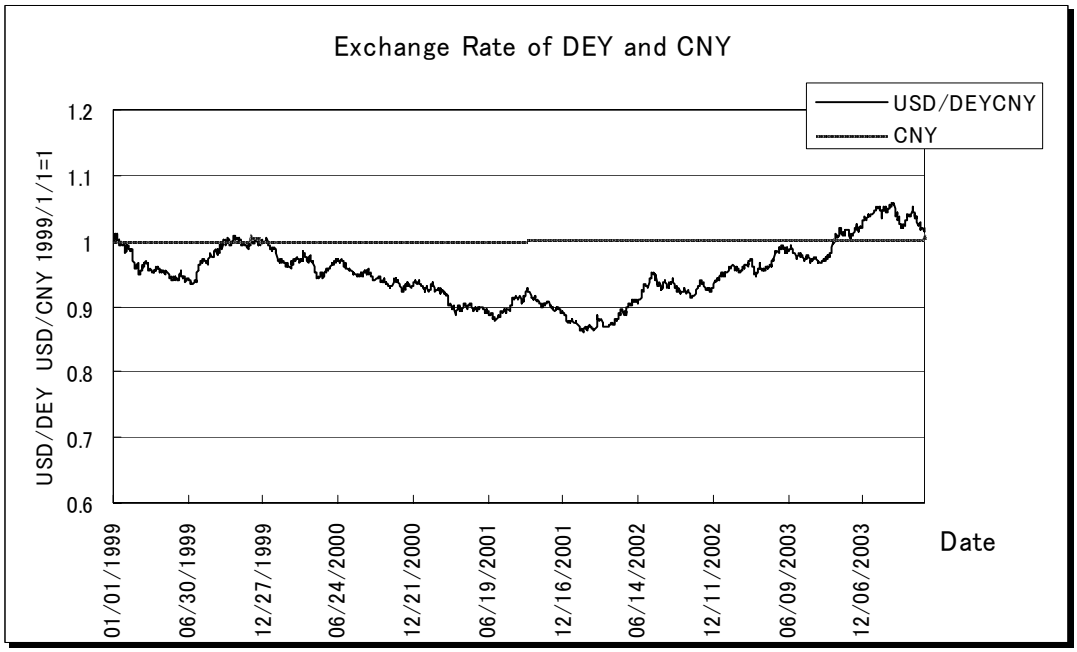


Figure 7

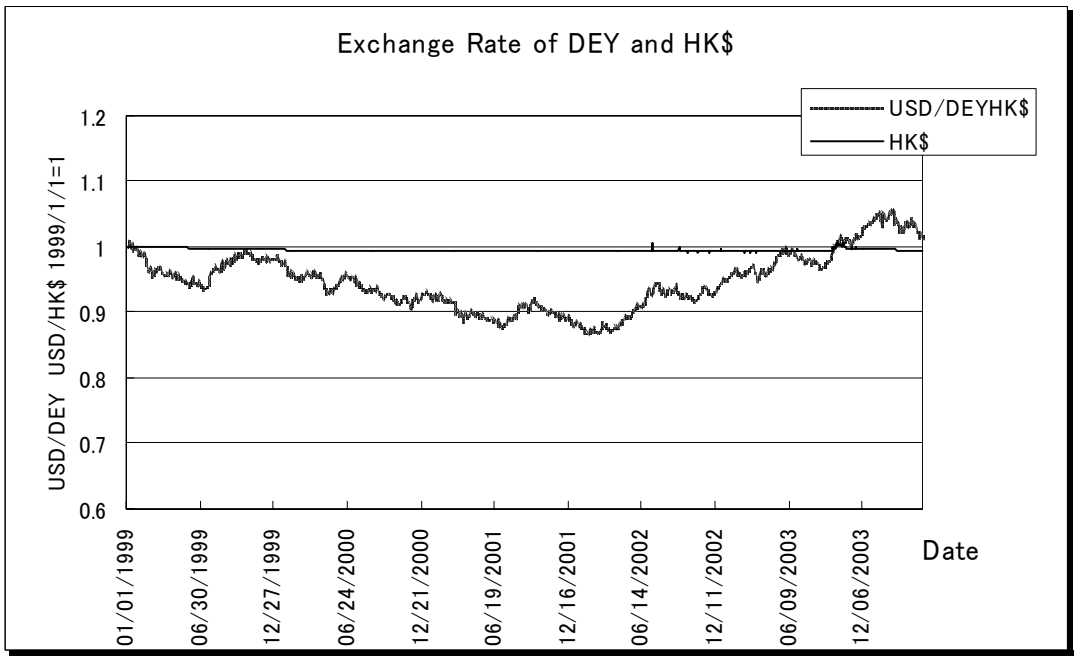
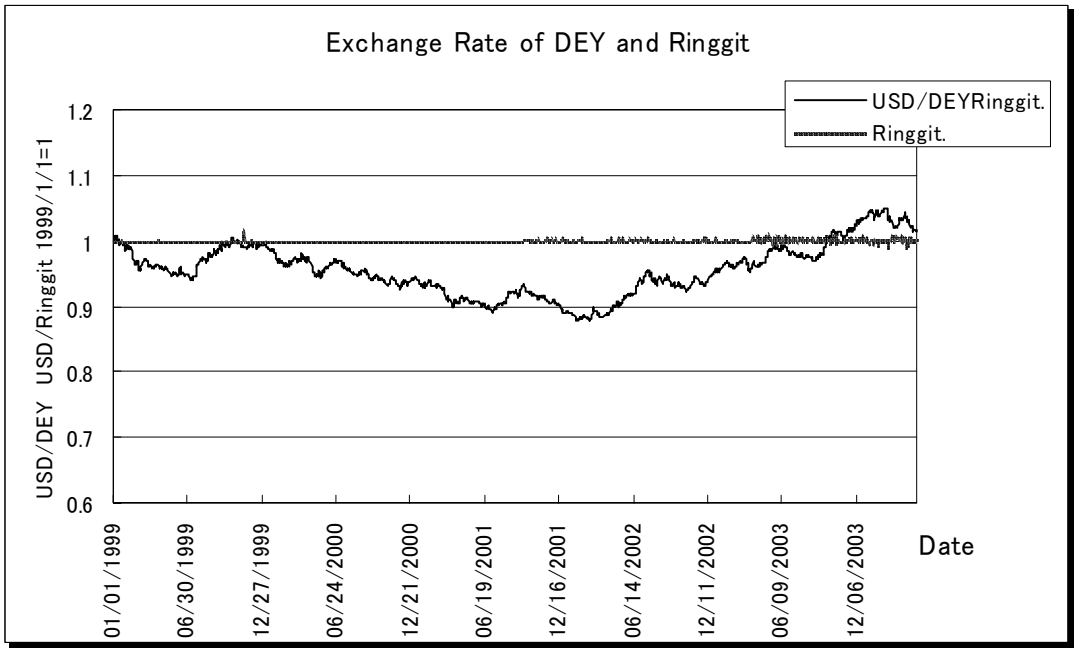


Figure 8



There are two remarkable characteristics in the DEY baskets. One is similarity of rate developments of each DEY rate (Figure 9). Though each DEY basket differs respectively, the differences of the rate developments of each DEY rate are not so big (Figure 9). This fact tells us that East Asia will be able to move as a currency block, if each East Asian country will determine to regard its own daily DEY basket rate as the reference rate in their foreign exchange managements. The second point is that the DEY basket can be an approximate value of the trade-weighted basket in some countries. We compared the DEY_{CNY} with a trade-weighted basket which consist of ten most important trade partners (Figure 10). The ten biggest trade partners for China in 2002 was Japan, the USA, the EU, Hong Kong, ASEAN, Taiwan, Korea, Australia, Russia and Canada in descending order. As ASEAN, we chose the total trade of the big six, namely Thailand, Malaysia, Indonesia, Singapore and the Philippines. The rate of this trade-weighted basket develops similar to that of the DEY_{CNY}. In case of China, the share of the US dollar (the USA, Hong Kong and Malaysia) is not too high, so that the simple DEY basket can be a good substitute for the trade-weighted baskets. However, we should take the Singapore case into consideration.

Figure 9

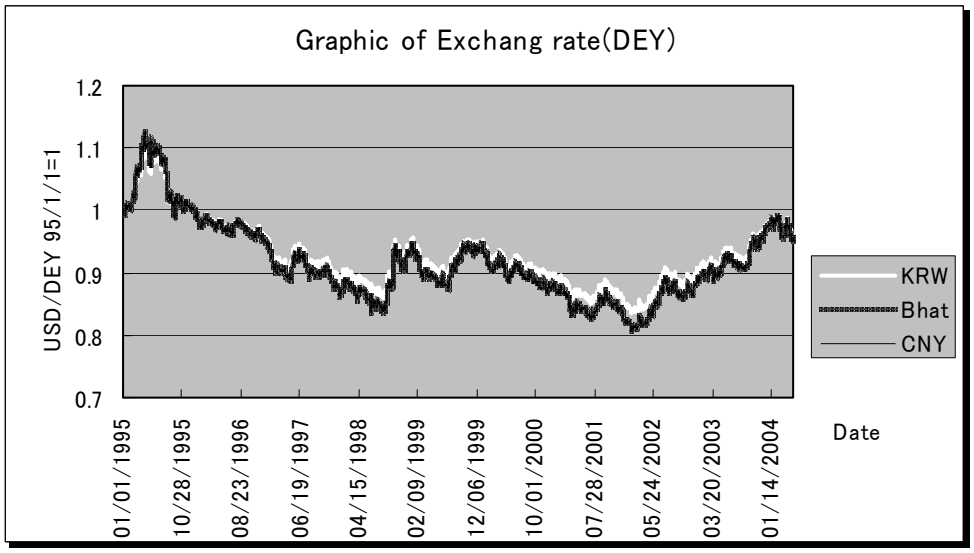
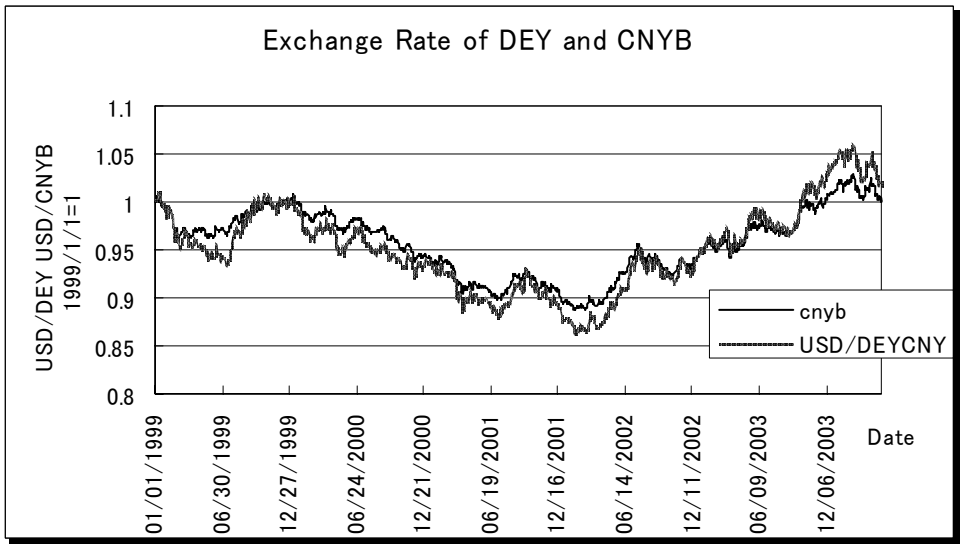


Figure 10



4th question: If crawling band system is chosen, what determine the appropriate width of the crawling band?

We can classify three categories of the East Asian currencies: (1) currencies following their own DEY relatively strictly: Won and Singapore dollar, (2) currencies which are sometimes stronger and sometimes weaker than the DEY: Yuan, Hong Kong dollar and Ringgit, and (3) currencies which are almost always weaker than the DEY: Baht, Rupiah and Peso. These three categories correspond to inflation (deflation) rates and partly to the current account surplus or deficit in

their balance of payments. In the three countries which peg hard to the US dollar, the price rise has been very mild or even minus (deflation) since 1999. In Singapore and Thailand, price trend after 1999 is very similar to the three. In Korea, monthly inflation rate has been between 0% and 5% since 1999. In Indonesia and the Philippines, inflation rate was high, often of double digit, though the Philippines shows stable price rise around 3% after 2002 (Table 4).

Table 4

CHANGES IN CONSUMER PRICES % per annum

	Malaysia	Singapore	Indonesia	Japan	China	Thailand	Philippines	Korea
1990	2.6178	3.4608	7.8127	3.0594	3.0583	5.9494	13.2012	8.5776
1991	4.3583	3.4257	9.4105	3.2401	3.5436	5.7348	18.4923	9.3
1992	4.7672	2.2631	7.5312	1.727	6.3403	4.0678	8.5945	6.3063
1993	3.5366	2.2893	9.6827	1.284	14.5833	3.3659	6.8816	4.8023
1994	3.725	3.1001	8.5206	0.7062	24.2371	5.042	8.3619	6.1995
1995	3.4506	1.7205	9.4334	−0.1267	16.8971	5.8	8.0083	4.4416
1996	3.4886	1.3832	7.9701	0.1354	8.324	5.8129	9.0271	4.9818
1997	2.6625	2.0036	6.7307	1.7319	2.8068	5.6126	5.8524	4.3982
1998	5.2703	−0.2675	57.6439	0.656	−0.8446	8.0702	9.7206	7.5388
1999	2.7446	0.0167	20.3217	−0.3383	−1.4079	0.3131	6.7085	0.8247
2000	1.5347	1.3616	4.5184	−0.6705	0.2553	1.5474	4.3568	2.2495
2001	1.4168	0.9972	12.0157	−0.7334	0.4634	1.6609	6.1064	4.1
2002	1.8079	−0.3917	11.4641	−0.9151	−0.7654	0.6036	3.0941	2.6897
2003	1.0574	−	5.8252	−	−	1.816	3.0512	3.5547

For more than five years since 1999, maximum fluctuation width of these currencies vis-à-vis each DEY rate is as follows:

(1) Category 1 currencies:

Won : plus 10% and minus 3% (maximum fluctuation margin: 13%)

S$: plus 5% and minus 7% (maximum fluctuation margin: 12%)

(2) Category 2 currencies:

Baht: plus 6% and minus 12% (maximum fluctuation margin: 18%)

Rupiah: plus 30% and minus 25% (maximum fluctuation margin: 55%)

Peso: plus 7% and minus 34% (maximum fluctuation margin: 41%)

(3) Category 3 currencies:

Yuan: plus 16% and minus 5% (maximum fluctuation margin: 21%)

Hong Kong $: plus 15% and minus 6% (maximum fluctuation margin: 21%)

Ringgit: plus 14% and minus 6% (maximum fluctuation margin: 20%)

For the five currencies in the category 1 and 3, the maximum fluctuation margin is 20% during the last five years and a half. The two currencies in the category 2 (the rupiah and peso) is also 20% during the last two years. So, each of the nine countries could choose a fluctuation band of plus minus 10% around the

DEY reference rate.

As many East Asian countries adopt foreign exchange control and the price development comes to converge recently, narrower band can 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. As Table 5 shows, the coefficient of variation is under 5%with probability of 95%. The exceptions are the rupiah and the pesos. We can choose a band of plus minus 5% around the DEY rate for the six currencies on Table 5 and a band of plus minus 10% for the rupiah and the pesos.

Table 5
Average of Exchange Rate and Coefficient of variation

	average of Exchange Rate	coefficient of variation
DEY/CNY	0.12745	4.67%
DEY/Baht	0.02556	4.80%
DEY/KRW	0.0008716	3.95%
DEY/S$	0.60435	2.66%
DEY/Ringgit	0.27615	4.11%
DEY/Rupiah	0.0001218	9.45%
DEY/Pesos	0.02185	13.08%
DEY/HK$	0.13595	4.43%

However, if we think of the global imbalances of the current accounts, 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 had a band of plus minus 15% around the central rates from August 1993 to the end of 1998 in order to defend itself against speculation attacks. But the central banks of the core ERM members managed de facto their fluctuation band of plus minus 2.25% around the central rates during 1996 and 1998. They distinguished de facto band and de jure band. When speculations attack, the band could widen to plus minus 15%. Such management is also applicable to East Asia.

The DEY reference rate can be changed when it will be difficult for a currency to hold the 10% or 20% band. In retrospect of the past two years and a half, the Pesos will be a candidate to devalue its DEY reference rate. So a specific exchange rate regime in East Asia will begin with a crawling band system.

When should the reference rate change and how should the width of the change be determined? 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 attacked by 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 devalue or revalue its (their) currency (ies) and how many percentage points There was a general rule about the width of the depreciation (or revaluation) rates. It was generally proportional to the inflation gap vis-à-vis the ERM average. Several low inflation countries revalued their central rates and high inflation countries devalue their central rates proportionally to their inflation gaps vis-à-vis the average.

This method can be applied to the East Asian cooperation, because it is based on competitiveness of the members. When a currency or a group of currencies reaches the lowest or highest margin of the band, reasons of the rate movement have to be analyzed. If the movement is caused by the inflation gap, the currency at the highest margin or the lowest margin should change its DEY reference rate.

In case of depreciation, the DEY reference rate should devalue proportionally to the gap of inflation against the average of the other countries. The inflation gap can be calculated as the weighted average of the East Asian counterparts which do not change their reference rates. 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 "ASEAN plus Two" minus the Philippines), the DEY_{Pesos} should devalue by 10%. There may be several ways of devaluation. A simple method is to cut off the number of units in the old DEY basket by 10%.

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

A new fluctuation band of plus minus 10% is set around this new DEY reference rate. When more than two currencies reach their fluctuation limits, change of the related DEY reference rates have to be made in the same way at the same time.

A currency or a group of currencies can reach the lowest limit with no or very little inflation gap. Then, there is no reason to devalue the DEY rate. The country(ies) must defend its (their) weak currency(ies) by intervention on the foreign exchange market and/or liquidating the CMI swap funds. By the way, the size of the CMI funds should be increased enough to defend East Asian currencies

at any currency crisis.

When a currency reaches the upper limit because of relative low inflation, the DEY rate should be revalued by the percentage points of the inflation gap. If the inflation gap develops very little, the country whose currency reaches the upper fluctuation margin sould intervene to buy the US dollar to defend the current margin. If several currencies would reach the upper limit because of precipitation of the US dollar, Bank of Japan should intervene to buy the US dollar with the monetary authorities of the countries concerned ("cooperative intervention").

The other way to cope with the "big fall" is widening the fluctuation band from 10%, say, to 15%. The ERM succeeded in resisting the currency attacks by widening the fluctuation band from plus minus 2.25% to plus minus 15% in 1993. But, the participating countries returned de facto to the old narrow band in 1996. The wider band is not hopeful in view of stable economic transactions in the region. If inflation gap is small, the East Asian countries should narrow to plus minus 10%, once the crisis period passes away.

5th question: Should the width of a band be widened over time or narrowed down?

The capital control of East Asian countries will get more and more limited in scope. In parallel with the liberalization, the width of a fluctuation band should be widened in order to enhance shock-absorbing function of the foreign exchange rate. If they would adopt a plus minus 5% band, it should be widened to a plus minus 10 %. A 10% band would be enough to be flexible. In the EMS, the members adopted the plus minus 15% bands. Experiences will tell whether a 15% band or a 10% band will be better for East Asia.

8th question: How can Asian currencies attain mutual exchange rate stability while keeping their effective exchange rate competitive vis-à-vis the rest of the world?

The East Asian currencies will be able to attain mutual exchange rate stability by the basket currency regime, in which change of competitiveness among the countries will be reflected in change of the DEY rates explained above.

Another problem will be competitive relations between the Japanese yen and the bands. If the width of each band would be 10%, the exchange rates can be flexible enough to absorb the change of competitiveness. As the recent price movement trends among the "ASEAN+3" will be kept, a plus minus 10% band

would be able to absorb distortions of competitiveness for a long time.

To keep competitiveness of the DEY bands vis-à-vis the rest of the world, especially vis-à-vis the yen, the US dollar and the euro, will be a complicated task. As a DEY rate is a weighted average of the movements of the three main currencies, competitiveness of the DEY countries vis-à-vis the tri-polar world as a whole will be kept. This is an attribute of a currency basket and its advantage.

So far as the three currencies keep PPP (Purchasing Power Parity) relation, no competitive problem would be raised. When capital flow has strong power to move the exchange rates of the three currencies, keeping competitiveness of the DEY currencies may become a complicated task.

IV Questions about East Asian Economic Integration

7th question: Can Japanese yen become an anchor for Asian currencies as Deutsche Mark did in the case of ECU and eventually euro?

<Changeover of the Vehicle Currency in Europe – from the Dollar to the D-Mark>

As is well known, any international currency serves three important functions: a medium of exchange; a numeraire (also referred to as a unit of account or value standard); and a store of value. If we divide three levels of economic agents, we can identify the nine different vehicle currency roles for the US dollar classified by the type of transactions and the functions of the currency (Table 6).

Table 6 Functions of an international currency

Function / Agents	Unit of account	Medium of exchange	Store of value
Trader	Pricing (international commodities like oil etc.)	Invoicing & settlements (trade vehicle)	
Int'l investor			Investment currency
Banks (interbank)	Numeraire of currencies	Foreign exchange vehicle	Balance
Monetary Authority	Peg, anchor	Intervention	Foreign exchange reserve

In Europe, invoicing and settlement currencies have been European currencies since the end of the world war two (we do not know about the pre-war period). But, the US dollar played the other eight roles until the end of the 1970s.

In 1979, the EMS started and the Deutsche Mark became de facto anchor currency at the monetary authority level. But the main foreign exchange reserve currency was the US dollar and the dollar superceded the D Mark as intervention currencies in the first half of the 1980s. At interbank level, the dollar monopolized the vehicle function. But the D-mark became the forex vehicle currency on spot markets in Europe around 1990, expelling the dollar at last.

<Factors promoting the changeover>

The changeover of the vehicle currency depends mainly on transaction costs. The foreign exchange transaction costs, expressed as the bid-ask spread, depend on the two factors. The costs are in general proportional to the volatility of the currency pair traded and inversely proportional to the volume transacted. High volatility widens bid-ask spread, since by so-doing forex dealers want to evade loss arising from the volatile rate fluctuations. On the other hand, the volume-spread relationship probably reflects decreasing order-processing costs, decreasing inventory-carrying costs, and increasing market maker competition as volume increases, as Fleming [1997] pointed out.

In Western Europe, the European Monetary System guaranteed the much lower volatility between the D-Mark, the nominal anchor of the EMS, and other EMS currencies than between these currencies and the dollar from the latter half of the 1980's. On the one hand, there were no realignments in the EMS for more than five years from February 1987 to August 1992. It lowered the volatility among the EMS currencies. On the other hand, the dollar depreciated drastically with high volatility against the European currencies after the Plaza Accord of 1985. This accentuated the low volatility between the DM and other EMS currencies.

The trade volume of the D-Mark rose tremendously in the same period. Between 1989 and 1992, the transactions turnover of the DM rose by 87% from $247 billion to $461 billion a day. The dollar rose by 11% and the yen only by 1%. On interbank spot markets in the world, the turnover of the DM became 77% as high as the dollar. The use of the D-Mark did not increase in merchandise trade in Europe. So, the capital transactions come to the fore. There were two main fields where the use of the D-Mark increased steeply. One was hedging, and the other was financial transactions.

The convergence of foreign exchange rate movements within the EMS was an indispensable precondition of the rising transaction volume of the DM. For example, the US mutual fund firms invested dollar funds into high yielding securities denominated in, say, Italian lira, covering the short dollar exchange rate exposure

by purchasing dollars forward against sales of marks. The D-Mark was used as a proxy hedge because, as the lowest-yielding ERM currency, its forward discount against the dollar was much less than that of the lira. There is another hedging technique to use D-Mark as main hedging currency. The basket hedge is a technique to hedge by creating a "basket" consisting of 2 to 4 different currencies. The investors tended to take a similar technique as a proxy hedge. When a British investor sold sterling against purchase of several peripheral currencies, he covered the short sterling exposure by purchasing sterlings against forward sale of marks on the assumption that the DM moves in the same direction as other European currencies.

The volume of the financial transactions rose drastically from the mid-1980's on in the European Union along with the liberalization of capital transactions in the process of the single market formation. A steep rise occurred in the crossborder transactions of financial securities in Europe. Issues of securities denominated in the dollar diminished on the offshore markets after 1987. Instead, the issues in EC currencies (not only the DM, FF and the sterling, but the ECU and other European currencies in lesser extent) rose year after year and relegated the dollar. Most of the issuers denominated bonds in their own national currency so as to evade foreign exchange risks. Issuing currencies diversified into various European currencies.

In the second half of the 1980's, the new form of international capital flows developed rapidly in Europe. It is foreign transactions in domestic bonds, namely crossborder dealings in bonds (mainly government bonds) by institutional investors located in various European countries. The expansion of aggregate capital transactions was remarkable after 1985. The steep rise after 1992 is due to the financing demands of the German government after the reunification and to the investment boom. In such a way, Europe became a common financial zone, where European investors were main players. According to the Bundesbank, EC12 accounts for 71% of the purchases and 74% of the sales on the German securities market in the year of 1986-1990.

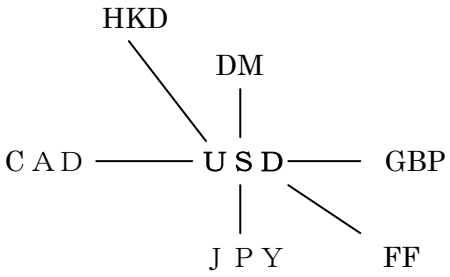
In response to the rise of the D-Mark foreign exchange transactions in customers' dealings (mainly institutional investors' dealings), commercial banks posted dealers who were responsible for mark dealings in financial centers in Europe. For example, many Japanese commercial banks began stationing such foreign exchange dealers at their London affiliates in 1989-1990. This, in turn, raised the DM trading further not only inside but also outside of Europe. For

example, the direct yen/DM trading on the Tokyo spot market began at the beginning of the 1990's, though traditional "dollar against DM" transactions remain.

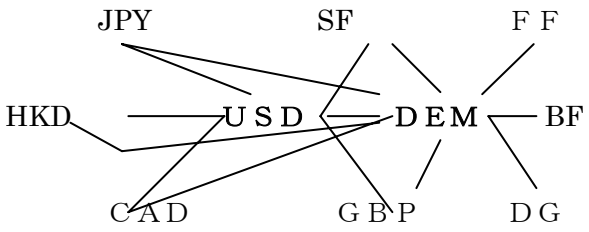
The monetary authorities intervene on interbank markets by selling or buying their own currency against the vehicle currency. The DM became the intervention and reserve currency of the EMS countries. The amount of the foreign exchange market intervention by EMS currencies (mainly the DM) superseded the dollar for the first time in 1986-87. The intervention using the DM (selling the DM to buy own currency) has an effect to mitigate the fall of the dollar and to stabilize the exchange rates in the EMS. After the D-Mark became the foreign exchange vehicle in Europe, independence from the US dollar developed at the monetary authority level, too.

To sum up, the low volatility of the DM against the other European currencies and the steep rise of the turnover of the D-Mark made the transaction cost using the D-mark as a foreign exchange vehicle much cheaper and safer than using the dollar. So the market chose the D-mark as the foreign exchange vehicle on interbank spot markets in Europe. A common financial and monetary space was made in the latter half of the 1980s. The space was not only a product of the Germans, but much more a product of the unconscious cooperation of the European monetary and financial world.

The D-mark became used as the representative of European currencies when they are transacted with currencies outside Europe, as shown in the figure below. So, the turnover of the D-mark, for example, on main East Asian foreign exchange markets (Hong Kong and Singapore) became comparable with that of the yen in the middle of the 1990's.



Spot Interbank Foreign Exchange Markets until 1980s



Spot Interbank Forex Markets in 1990s

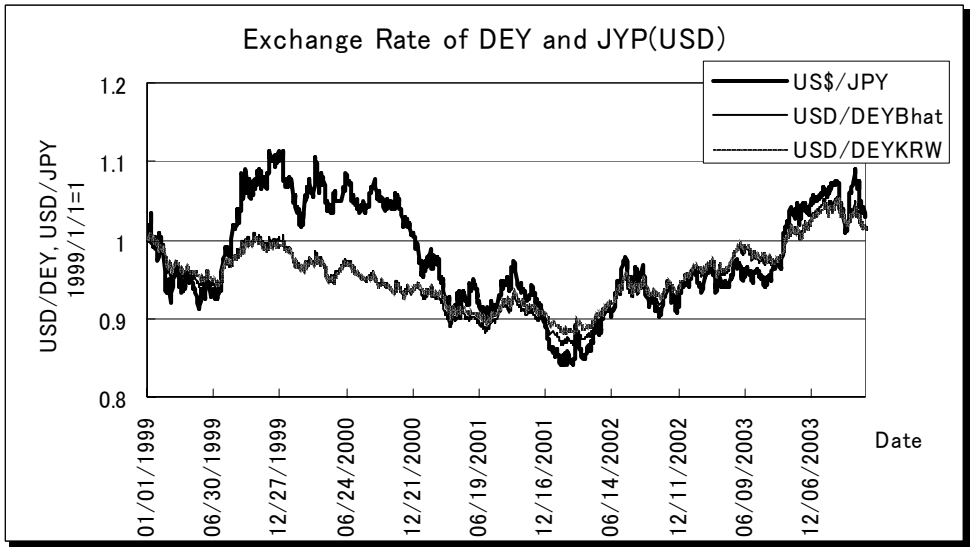
<Japanese yen as an anchor?>

In Asia, the US dollar has been the predominant international currency and it is very difficult for the yen to become an anchor currency. There have been a lot of studies on the "internationalization of the yen" inside and outside Japan. Tavlas and Ozeki [1992] may have been a harbinger. Conclusions of the studies are generally negative or at best mixed. In reality, there has been little progress in the internationalization of the yen since such studies began. We do not refer to such studies in this paper.

We would like only to point out that development of the monetary cooperation and economic integration in East Asia may provide an opportunity to change such critical situation for the yen.

In reference to the European experience, the yen will, first of all, have to keep exchange rate stability with the East Asian currencies. If the East Asian countries will respect their own DEY rates, the yen will be able to keep relative exchange rate stability vis-à-vis the East Asian currencies (Figure 11). A very stable relation of the rates appears since 2001, during which the US dollar has depreciated and the yen and the euro have appreciated. As the appreciation of the euro has much bigger than the yen, the euro has attracted the DEY rate proportional to its weight. As a result, the DEY rates have moved near to the yen rate. Such situation does not always appear. However, compared to the desperately instable yen rate vis-à-vis the East Asian currencies in the 1980s and 1990, such relative stability of the yen will be a news.

Figure 11



The second condition for the yen to go forward to an anchor is to increase its transaction volume in international use in Asia. As experience shows, habits to use a specific currency in invoicing and settlements tend to be relatively stable in the long run. Even if the US dollar would depreciate and be volatile vis-à-vis the East Asian currencies in the "big fall", the dollar will be used as trade invoicing and settlement currency. The European experience suggests that the use of the D-Mark increased in capital transactions and hedging. The East Asian governments want to promote Asian bonds markets, where the bonds will be denominated in the Asian currencies.

The saving of the Japanese people is very big in scale, bonds denominated in the yen or the ACU will become very important for East Asian countries. If the yen rate will be relatively stable to the East Asian currencies, the issue of the Samurai bond (bond issued in the yen by non-residents) would be able to attract more investors in Asia and Japan than ever. The problem in this case is inefficiency of Tokyo financial market. Yoshitomi [2003] points out that the issue of bonds in Tokyo financial market was much more costly and time-consuming than that in London (Euro-yen bond issue). Tokyo market will have to become more competitive.

In the financial integration in Europe, London financial market played a very important role as a very efficient wholesale market in capital and foreign exchange transactions. Tokyo financial market should learn the lesson.

Economic agents in Asia seem to swim in the sea of the US dollar. It is likely very difficult for the yen to become an anchor. There is no easy way to the anchor currency. The foreign exchange rate stability and the increase of international transaction volume are two elements to lower transaction costs of a currency. If a specific foreign exchange regime would start and the Asian bond markets would develop, the yen will have an opportunity. In order to increase the transaction volume of the yen, more open and more efficient Tokyo financial market will be inevitable.

9th question: Can trade integration be endogenized by establishing FTA for ASEAN+3?

According to the Balassa's concept on five stages of economic integration, economic integration starts from FAT, then develops to Customs Union (CU), Common Market (CM), Economic Union and, finally, total economic integration. We interpret the "endogenization" of the trade integration in the Agenda as deepening

of trade integration (from an FTA to a CU) and as a geographical enlargement of an East Asian (ASEAN+3) FTA.

On the deepening: The form of deepening trade integration in East Asia is FTA building today. The FTA being built now is so-called "FTA of the second generation", which covers not only elimination of intra-FTA customs tariffs, but also many other elements like facilitation of customs measures, partly liberalization of services market, TRIPs, TRIMs and dispute settlement procedures etc. Anyway, an FTA eliminates tariffs (and quotas) among FTA members while the latter maintain their trade policy autonomy vis-à-vis third countries. A CU is a "higher" stage, as more autonomy is given up than in an FTA. An FTA and a CU employ different means to prevent trade deflection. A CU eliminates the cause of trade deflection by having a common external tariff (CET) and hence, can afford free intra-CU trade movement of goods. As an FTA has no CET, it is forced to establish a control system of certificates of area origin at intra-FTA borders. All goods moving across intra-FTA borders have to be accompanied by a certificate showing that the (value-added of the) good is (sufficiently) of area origin. In the absence of such a control system, imports from third countries would be trans-shipped via low-tariff FTA member to high-tariff FTA members, given the free trade inside the FTA. This trade deflection would undermine the FTA purpose of promoting area trade via internal removal of barriers. It would also be wasteful. In this respect, an FTA is only a first step of regional trade liberalization and may be recommended to deepen into a CU.

In our view, it is extremely difficult for the ASEAN+3 to develop into a CU in a decade, because differentials of tariff rates are very big between the developed countries in the ASEAN+3 (Japan and Korea) and the other developing countries.

One idea is that Korea and Japan will organize a CU and the other countries will participate in the CU at later stages. In May 2004, eight Central and Eastern European countries participated in the CU of the European Union. Each of the eight countries belonged to a FTA with the EU about ten years under the European Agreement. The East Asian countries may be able to follow this example.

The other idea is a harmonization of rules of origin in the" ASEN+3" FTA. In Europe, they developed in the 1990s the pan-European system of cumulation of origin (PESC), in which about 30 countries took part. The PESC space is not perfectly a single origin area. There are some distinction between the EU, the EEA and the other countries. But, a value-added good in a member country of the PESC is fundamentally recognized as "made in PESC" and can be imported to other

members easily without a special origin check. As the value-added of a good is cumulated in the PESC members, customs measures on the intra-PESC trade is facilitated.

The negotiators responsible for building FTAs in the ASEAN+3, where many FTAs were concluded and are negotiated, will have to study the PESC method and should introduce a similar origin system among each FTA in the region. When many FTAs will be integrated into a single FTA covering all of the ASEAN+3 in the future, the PESC-like system will facilitate the unification of the FTAs.

Concerning the geographical enlargement of the "ASAN+3 FTA" to America or Europe, we are negative. The negotiation among the Americas, Europe and Asia should be made in the WTO round, even if it takes time. As the FTAs in the ASEAN+3 will eliminate trade and economic barriers in East Asia, they will facilitate negotiations with the Americans and Europeans in the Doha round.

10th and 11th questions: How about financial integration in Asia? Can it be encouraged by establishing the single common currency in Asia?

In retrospect of the Asian currency crisis in 1997-98, especially the balance sheet mismatch between the US dollar and own currency, East Asian countries should decrease transactions in the US dollar and increase transactions in their own currencies in domestic bank transactions and on foreign exchange markets. It is very important for each East Asian country to develop its own capital market to finance companies. In parallel, financial integration should be promoted in the region. Such development is already proceeding.

According to McCauley et al [2002], East Asian investors and banks have on average committed half of the funds in bonds underwritten and loans syndicated for borrowers in East Asia since 1999. Between 1999 and 2002, 63% of syndicated credit facilities signed by borrowers in East Asia were arranged by East Asian and Japanese banks. Facilities in Hong Kong dollars, New Taiwan dollars and Korean won, like deals in the borrowers' own currency, attract significantly higher Asian participation, suggesting that a shift away from financing in US dollars stimulates regional financial integration. McCauley et al [2002] says that the finances of East Asia appear more integrated than recent commentary has suggested. And the recent moves toward financial cooperation in the region can be interpreted as a sign that official financial cooperation is catching up with the considerable integration already evident in private markets.

Such trends on private and official level can be strengthened by promoting institutionalization of financial infrastructure like disclosure of issuing companies, accounting standard, accounting audit and settlement system etc. Harmonization of such institutions among East Asian countries will also be necessary.

It is evident that a single common currency will certainly encourage development of Asian financial integration. A single currency eliminates exchange risk and facilitates zone-wide investments. The investors and issuing companies in the currency zone can enjoy more open, more bread and deeper financial market. However, a monetary integration may be more difficult than financial integration. There will be stages of economic integration before unification of currencies. Balassa put monetary integration at the last fifth stage. Before monetary integration, a CU, a single market and an economic community based on a single market will be necessary. A CU needs a common authority which can control a CET (common external tariff). Each country will have to give up competence on tariffs. In a sense, a CU is a kind of political integration. It took ten years and a half for the EC6 to accomplish the CU. A single market is a form of much deeper economic integration where member countries lose competence for NTBs in goods, services and capital market. Taking into consideration divergent economic development levels in East Asia, it seems too early to build a CU covering the "ASEAN+3", not to mention a monetary unification.

V Conclusions

The experience with the European monetary cooperation and economic integration provides East Asian economic cooperation with precious suggestions. In reference to the European examples, we formed DEY currency baskets and certified that it will be able to work in view of coming US dollar depreciation under a cooperation framework in the ASEAN+3. When the monetary cooperation will be promoted further in the future, we will be able to integrate DEY baskets into a common DEY basket for the ASEAN+3. A financial support mechanism (CMI) should be activated in the monetary cooperation. Several improvements will be necessary for the CMI funds to attain its objective to safeguard the monetary stability in the region. Financial cooperation in extensive areas should be strengthened. Foreign exchange rate cooperation and financial cooperation will reinforce each other.

Integration for a CU, single market and economic community presupposes a common authority to make community laws. If the "ASEAN+3" could succeed in

devising foreign exchange regime in parallel with financial integration and stand against coming US dollar depreciation, then there will come an opportunity to go forward further. Without a first step forward, the second step will not be impossible.

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