

## Sovereignty and Seignorage in Monetary Union: Comparing AMU with EMU

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*This paper compares the costs of monetary integration in East Asia with those in Europe in terms of monetary sovereignty losses and seignorage revenue. The cost of monetary sovereignty loss in East Asia will not be as high as estimated a priori. The importance of active monetary policy has been diminished with the expansion of inflation after the Asian crisis. The effectiveness of monetary policy decreased with the liberalization of Asian financial markets. The integration process itself will turn East Asian countries into optimal currency areas due to the endogeneity of OCA criteria. Seignorage revenue in East Asia has been rapidly decreasing since the 1990s, although it is still high compared to Europe. Also, the imbalance between seignorage contributions and seignorage receipts is neither unique in East Asia nor much larger than that of Europe.*

**Keywords:** *Monetary Union, Monetary Sovereignty, Seignorage, Optimum Currency Area*

### 1. INTRODUCTION

Recently, serious discussions on optimal monetary and exchange rate arrangements for the East Asian region have intensified. The current interest in East Asian monetary integration is largely a reaction to the Asian crisis in 1997. There has been a wide perception that the crisis was triggered by a sudden outflow of vagrant short-term capital and many have concluded that East Asian countries should take steps to create a zone of monetary stability better insulated from these extraneous influences (Eichengreen 2001; 2002; Moon et al. 2000). Regional expansionism, such as the EMU, together with globalization has spurred strong attention toward monetary integration in East Asia. Besides these recent trends, East Asian countries which have been recording rapid trade and economic growth on the basis of stable exchange rates have been showing strong interest in maintaining exchange rate stability within the region.

Many ideas of varying scopes and ambition for regional monetary arrangement have been proposed, from pure floating to monetary union and many others in between.<sup>1</sup> Despite differing proposals, a general conclusion asserts that it would be very difficult and almost impossible to realize collective monetary arrangements in East Asia.<sup>2</sup> In terms of the benefits and costs of monetary integration, the costs would far outweigh the benefits in East Asia, especially compared to Europe. The costs that are most frequently mentioned are the

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<sup>1</sup> For various ideas, see Eichengreen (2001, 2002), International Economy (1999), Moon et al. (2000), Rhee and Moon (2002), Williamson (2000), and references there.

<sup>2</sup> For example, see Barro (2001), Eichengreen and Bayoumi (1999), Yoon (1999).

loss of seignorage revenue and the loss of sovereignty in monetary policy. For some emerging market economies in East Asia, seignorage constitutes a substantial fraction of government revenues making it very difficult to give it up to join a monetary union. Also, "Asian governments evince a shared distrust that international bureaucratic structures might become independent of their state sponsors" and "Asian countries have been reluctant to cede significant powers to a transnational body of experts, like the European Coal and Steel Community" (Eichengreen 2002: 16).

However, some contrasts between Europe and East Asia can be made. It seems that the positive factors for EMU are overemphasized while the negative ones for East Asian monetary integration are overemphasized. This paper examines the validity of this stark contrast between Europe and East Asia and the arguments against East Asian monetary integration, comparing sovereignty losses and seignorage in Europe and East Asia.

We begin our discussion by explaining the main benefits and costs of monetary union in Section 2.<sup>3</sup> Section 3 reexamines the costs of monetary sovereignty loss, considering recent changes in monetary policy strategies and the liberalization process of the world economy. Section 4 estimates seignorage revenues in terms of both the annual flow and one-time stock costs of foregoing domestic currencies and joining the monetary union. Section 5 briefly concludes the paper and suggests solutions to overcome the hurdles ahead.

## 2. BENEFITS AND COSTS OF MONETARY UNION<sup>4</sup>

A main benefit that would accrue from entering into monetary union is the enhancement of micro-efficiency through the reduction of exchange rate uncertainties and transaction costs. Elimination of exchange risks through fixed exchange rates will lead to increased efficiency of the price mechanism in both real and financial markets and thereby will reduce the loss of social welfare. This gain can be reaped as long as exchange rates are fixed. Another gain can be made by eliminating transaction costs if one common currency is used in the monetary union.<sup>5</sup> As long as national currencies remain in place, there will continue to be a need to convert one currency into another and transaction costs will not be eliminated. But as countries move toward a common currency, the costs of exchanging one currency to another will disappear.

Another benefit of monetary union is the increased macroeconomic stability. The adoption of anti-inflationary anchor commits member countries to a stable monetary policy. Specifically, if an inflation-prone country adopts the currency of a credible anchor, it eliminates the inflation-bias problem of a discretionary monetary policy that was emphasized by Barro and Gordon (1983). The adoption of another country's currency or the joining of a

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<sup>3</sup> Monetary integration can take various forms including exchange rate unification under which exchange rates are fixed but each country holds its own currency and monetary union under which only one currency is circulated. This paper focuses on monetary union because both issues of seignorage and monetary sovereignty appear at the same time when a country moves to monetary union.

<sup>4</sup> For more detailed explanation of benefits and costs of monetary integration, see Alesina and Barro (2000), Antinolfi and Keister (2001), Barro (2001), Emerson et al. (1992), Fukuda (2002), Mongelli (2002) among others.

<sup>5</sup> National currencies can be replaced by a common currency through the adoption of another country's currency (dollarization) or the introduction of a new currency.

monetary union with a new form of currency provides a much better commitment device than alternative forms of fixed exchange rates. Once a common currency is used, the costs of reverting will be very high that the regime with a common currency is much more credible than customary promises to peg the exchange rate (Barro 2001).

There are various costs which can be attributed to entering into a monetary union. Among those, we will discuss two main costs, loss of sovereignty in monetary policy and loss of seigniorage,<sup>6</sup> which are somewhat straightforward.

An obvious cost of membership in a monetary union is the narrowing of the choices of policy instruments directly available to national governments. In monetary union, the responsibility for setting monetary policy and the exchange rate is transferred to another country or a supranational central bank which causes the national bank to either ceases to exist or have no power. This implies that a member country will not be able to change the exchange rate or determine the quantity of money in the wake of asymmetric disturbances. This may eventually lead to more pronounced short-term output and employment fluctuations. The loss of monetary sovereignty to stabilize the business cycle represents a true cost. The costs of losing an independent monetary policy will be higher, the less correlated the business cycle of a member country is with the anchor. Also, membership in a monetary union would severely limit the ability of a national central bank to act as a lender of last resort when the banking sector is in distress. When there is a domestic currency that can be printed freely, the central bank has the ability to meet this liquidity demand by lending cash to the banking sector. In a monetary union, the central bank would not have unlimited resources to lend and not be able to resolve the distress (Antinolfi and Keister 2001).

Another obvious cost of monetary union is the loss of seigniorage revenue that comes with the power to print fiat currency. This cost is only realized when a single common currency is circulated in a monetary union and a country must give up its own currency. Even under a very hard-peg regime of a currency board, newly printed domestic currency is used to buy interest-bearing foreign reserves. The adoption of a common currency entails losing this interest.

### 3. LOSS OF MONETARY SOVEREIGNTY

The first cost regarding monetary union is related to the loss of monetary sovereignty. There are some reasons why East Asian countries are more sensitive to the loss of sovereignty, compared to European countries. One is that East Asian countries are in huge disparities between each other and need a more active policy tool to stabilize the business cycle than European countries. In other words, since East Asian countries are more heterogeneous and more prone to asymmetric shocks than European countries, the cost of giving up monetary sovereignty would be much larger in East Asia than in Europe. Another reason is the developmental state argument that the states in East Asia have been functioning as development states, using monetary policy as a key industrial policy instrument with heavy intervention in the economy to industrialize and develop their economies. Thus, East Asian countries would be more eager to retain monetary sovereignty than European countries.

However, there are several reasons why this cost would not be as large as estimated a

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<sup>6</sup> Besides these factors, national pride of using an independent currency is often considered as another important factor. For related references, see Cohen (2000), Barro (2001).

priori. The cost that economists and central bankers attribute to the loss of independent monetary policy has diminished as we all learned to value price stability over active macroeconomic stabilization. In the 1960s and 1970s, there was much greater confidence that monetary expansion and inflation - either in general or in the form of well-tailored counter cyclical policy - would benefit in terms of higher economic growth and lower unemployment. Now there is widespread belief that monetary authorities should concentrate on providing a stable nominal framework and otherwise stay out of the way (Barro 2001, p.4). After the Asian crisis, many East Asian countries have adopted inflation targeting policies and inflation rates have been reduced to very low levels,<sup>7</sup> which are almost at the same level as those in Europe before the EMU (Table 1). This implies that the cost derived from divergent inflation rates, which are more likely to arise under independent monetary policies, is diminishing in the region.<sup>8</sup>

**Table 1.** Inflation Rates in East Asia and in Europe

EU15		East Asia	
AU	2.61	CH	0.34
BE	2.26	HK	-2.80
DE	2.07	IN	9.33
FI	2.24	JP	-0.77
FR	2.04	KO	3.03
GE	2.51	MA	1.59
GR	12.06	PH	4.52
IR	2.39	SI	0.66
IT	4.40	TH	1.27
LU	2.38	TW	3.43
NE	2.47		
PO	6.34		
SP	4.43		
SW	3.60		
UK	3.95		

Note: The numbers for East Asia are the averages in the period of 1999-2002 and those for EU are the averages in 1990-1998 before the EMU.

Also, with the onset of the liberalization process, the effectiveness of government intervention has become smaller and smaller. In particular, with the liberalization of capital markets that began at the beginning of the 1990s, East Asian countries have found it very difficult to put independent monetary policy into practice, like European countries did in the 1980s. The European experience teaches us that countries can earn more by giving up their monetary sovereignty. This was especially true in the case of countries like France and Italy, because they were already de facto losers of sovereignty in the face of free capital movement.

<sup>7</sup> Indonesia, whose domestic politics is very unstable, is the exception.

<sup>8</sup> Calvo and Reinhart (2002) and Hausmann et al. (2001) also argue that developing countries show the "fear of floating" and tend to follow pro-cyclical monetary policies by raising interest rates during times of economic distress to maintain the international values of their currencies.

They were able to regain their monetary sovereignties by sharing the decision making power with other European countries, especially with Germany.

For instance, given that a de facto German mark zone was created, the only way in which a country like France could gain some influence over the monetary policy was to create a broader European monetary institution, which would supercede the Bundesbank, and in which would give a voice to each country. The EMU was the solution to this problem. So Germany was asked to sacrifice the Bundesbank, one of its most valued institutions, for the sake of Europe. Naturally, Germany was not readily willing to give it up. What Germany did initially was to exact startup conditions such as institutional changes to safeguard price stability and what was later known as the convergence criteria. Germany thought that these conditions were difficult for other countries to meet that she hoped other countries would retreat from their calls for a Monetary Union. But to Germany's surprise, other countries were already prepared for the loss of sovereignty (Wyplosz 2001).

The same will be true for smaller East Asian countries like Korea. East Asian countries have held pegged or semi-pegged exchange rate regimes before and even since the Asian crisis (McKinnon 1998). This implies that they are not so reluctant to give up monetary sovereignty. But the burden of giving up monetary sovereignty will be far more important for bigger countries like Japan and China. For example, China currently holds monetary sovereignty through capital controls although it maintains the fixed exchange rate system. However, it is imperative that the capital market opens so that China can follow a financial liberalization process like other East Asian countries have done. Then, according to the impossible trinity theorem, China will have to relax monetary sovereignty or exchange rate stability. If China considers exchange rate stability very important to promote trade and economic growth, the only choice would be to give up monetary sovereignty. One way that China could regain some monetary sovereignty is to create a broader regional monetary institution and to share the decision making power with other East Asian countries.

Finally, the theory of endogeneity of OCA criteria<sup>9</sup> also provides a counter argument against the belief that costs of entering monetary union will be great enough to nullify the efforts in East Asia. Frankel and Rose (1998) showed that OCA criteria were endogenous and affected by monetary union itself, and argued that countries do not need to meet many of the criteria before integration, but that the integration process itself will turn the countries into optimal currency areas. Thus the costs of entering into monetary union incurred by the loss of policy tools will be reduced as time goes on and "countries which join (the Asian Monetary Union), no matter what the motivation may be, may satisfy OCA properties ex-post even if they do not ex-ante!" (Frankel and Rose 1998).

#### 4. LOSS OF SEIGNORAGE

As already explained, a cost of monetary union is the loss of privilege derived from formal monetary monopoly, particularly the power of seignorage – the spending power that accrues from the state's ability to create money. The more tightly a currency is pegged, the less room policymakers have to resort to monetary creation that augments public expenditures for pursuing own objectives in the event of unforeseen developments. Thus, the

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<sup>9</sup> For the theory of optimum currency area, see De Grauwe (1997), Kenen (1969), McKinnon (1963), Mundell (1961).

larger a sovereign government's seigniorage is, the higher the cost of joining a monetary union will be. For East Asian countries, however, the cost of giving up the seigniorage gain is not an insurmountable obstacle.

**Table 2.** Seignorage Flow in EMU

(%)

	1973-79			1980-97		
	(1)	(2)	(3)	(1)	(2)	(3)
Austria	0.55	0.52	0.39	0.33	0.47	-0.17
Belgium	0.85	0.78	0.58	0.13	0.61	-0.39
Finland	0.29	----	0.28	0.19	0.27	-0.12
France	0.50	0.62	-0.79	0.16	0.40	-0.00
Germany	0.46	0.33	0.30	0.42	0.42	0.42
Ireland	1.20	1.03	0.35	0.44	0.66	-0.41
Italy	1.10	1.05	1.90	0.51	0.81	0.28
Luxemburg	----	----	----	0.07	0.06	0.03
Netherlands	0.51	0.43	-0.06	0.26	0.44	-0.14
Portugal	3.47	----	3.38	0.79	1.04	-2.14
Spain	1.35	1.06	----	0.93	1.11	-0.79

Note: The numbers are represented as the ratio of seignorage revenue to GDP.

So, (1) =  $(\Delta MB/P)/(Y/P) = \Delta MB/Y$  (nominal income), (2) =  $(rMB/P)/(Y/P) = rMB/Y$ ,

(3) =  $(\Delta DC/P)/(Y/P) = \Delta DC/Y$ .

Luxemburg data are for 1984-1997, Portugal data for 1976-1997 and Spain data for 1986-1997.

**Table 3.** Seignorage Flow in East Asia

(%)

	1973-79			1980-2000		
	(1)	(2)	(3)	(1)	(2)	(3)
China	----	----	----	6.10	2.82	4.00
Hong Kong	----	----	----	1.55	0.52	-4.56
Indonesia	1.84	0.94	0.25	1.21	1.21	-0.31
Japan	1.15	0.77	1.34	0.59	0.40	0.28
Korea	2.89	2.14	1.76	0.63	0.86	-0.76
Malaysia	1.78	0.43	-1.25	2.13	1.02	-0.81
Philippines	1.12	0.72	0.38	1.67	1.97	1.74
Singapore	2.48	1.17	-4.74	1.20	0.84	-6.49
Thailand	1.12	0.95	-0.13	1.09	0.92	-0.48

Note: (1) =  $\Delta MB/Y$ , (2) =  $rMB/Y$ , (3) =  $\Delta DC/Y$ .

China data are for 1986-2000 and Hong Kong data for 1991-2001.

Table 2 and 3 compare the ratio of seignorage revenue to GDP per year in Europe and East Asia respectively. In the tables, column (1) defines seignorage as inflation tax,

$\Delta MB(\text{monetary base})/P(\text{price level})$ , while column (2) illustrates the opportunity cost of holding money,  $rMB/P$  where  $r$  is the interest rate.<sup>10</sup> In Europe except Portugal, seignorage revenue had remained below 2% of GDP before the EMS and decreased below 1% in all countries after the EMS and capital market liberalization. Since MB can be altered by changes in both domestic credit (DC) and net foreign assets (NFA), seignorage as the sovereign power of monetary monopoly can be better represented by the seignorage from MB corresponding to domestic credit than total MB.<sup>11</sup> Column (3) replicates column (1) but uses domestic credit instead of total MB. Almost all European countries have not had seignorage profit but instead losses in the post-EMS period, which was created through domestic credit by MB shares, have decreased.

According to Table 3, seignorage revenue is larger in East Asia than in Europe. For China, seignorage revenue from MB is 6.10% of GDP (or 2.82% in terms of opportunity cost) and 4.00% from DC. A reason for this relatively high seignorage is due to East Asian countries not having well developed banking sectors and advanced payment habits.

Two things are noteworthy here. First, seignorage rapidly declined in the 1990s. In particular, seignorage from DC has become very low as East Asian countries continuously accumulate foreign reserves and their domestic financial markets are liberalized. In fact, most countries's seignorage from DC has turned negative since the 1990s. Second, although seignorage in East Asia is still high compared to Europe during the 1990s, it (especially seignorage from DC) is as low as Europe in the late 1970s just before EMS was launched. Given that seignorage revenue is not as important, as the source of government revenue before and with many countries de facto importing the monetary policy of major-currency countries due to the fear of floating and some even showing interest in dollarization, seignorage itself may not be a hindrance to monetary integration.<sup>12</sup>

Another issue related to seignorage is the distribution of seignorage revenue from the pooled monetary stock after monetary union. To countries participating in a monetary union, it is one thing to see benefits created from the union and another to see the benefits of distribution among the participants. Monetary union may have a significant impact on the distribution of seignorage revenues among member countries. This would depend on how the disposition of seignorage revenue is agreed. Although there is no perfect rule for this, we can examine the issue using the rule adopted in the EMU, where seignorage from the pooled monetary base is distributed by estimating a country's population and GDP shares rather than by per contribution to the pooled monetary base (Sinn and Feist 2000).

Table 4 shows how much each country contributes (column 1 and 2)<sup>13</sup> and how much it receives (column 3-5). Column 6-8 compare the gains and losses of the different countries. The pooled monetary base of eleven EMU countries totals \$363.65 billion, among which

<sup>10</sup> For more explanation of the definition, see Hochreiter et al. (1996).

<sup>11</sup> If the government is only concerned with seignorage revenue, it can collect revenue even in a fixed exchange rate regime where money supply is determined by balance of payment and monetary policy is not independent (Fisher 1982).

<sup>12</sup> Also, the amount of seignorage loss may overestimate the true revenue loss from monetary integration. If a more stable economic environment is created after monetary integration, it will encourage investment and growth and therefore increase tax revenues, which should partially offset the loss of seignorage revenue.

<sup>13</sup> To calculate a country's future seignorage revenue yielded to the pooled monetary base, the opportunity concept of seignorage is used. Since the present value of future revenue is equal to today's market value of the asset, a country's outstanding stock of monetary base is defined here as her contribution to the pool.

Germany's contribution is the highest with 40.96%, followed by Italy (16.8%) and Spain (14.6%). But Germany receives 30.82% and France 21.28%, followed by Italy (19.11%) and Spain (10.95%). Obviously, France is the big winner while Germany is the big loser. In per capita terms, Luxemburg is the largest winner by gaining \$1407.40 per capita, followed by Finland (\$723.84) and France (\$530.94), while Germany (-\$449.06) is again the largest loser and Austria (-\$316.83) the next.

**Table 4.** Seignorage Contribution and Redistribution in EMU

	MB		GDP+Population			Seignorage Gain/Loss		
	\$billion	share(1) (%)	GDP (\$billion)	population (million)	share(2) (%)	(1)-(2)	total (\$bill)	per capita(\$)
AU	13.51	3.71	198.97	8.07	3.01	-0.70	-2.56	-316.83
BE	12.76	3.51	237.59	10.18	3.69	0.18	0.66	64.50
FI	2.97	0.82	117.16	5.14	1.84	1.02	3.72	723.84
FR	46.25	12.72	1372.24	58.61	21.28	8.56	31.12	530.94
GE	148.94	40.96	2048.04	82.06	30.82	-10.13	-36.85	-449.06
IR	1.55	0.43	36.36	3.67	0.93	0.50	1.82	496.65
IT	61.32	16.86	1129.55	57.52	19.11	2.25	8.17	142.04
LU	0.14	0.04	15.63	0.42	0.20	0.16	0.59	1407.40
NE	20.60	5.66	365.17	15.60	5.66	0.00	-0.01	-0.33
PO	4.49	1.24	97.42	9.94	2.51	1.27	4.62	464.56
SP	51.12	14.06	513.49	39.32	10.95	-3.10	-11.29	-287.01
Total	363.65	100	6131.65	290.53	100	0.00	0.00	---

Note: Each country's MB is the average of 1994-97.

Table 5 replicates the above table for East Asia. When nine East Asian countries are assumed to join monetary union, the total amount of pooled MB will be \$1145.80 billion. Two rivaling countries, Japan and China, account for the lion's share of the contribution, 54.93% and 36.01% respectively. But China receives the largest share of seignorage revenue with 42.91%, while Japan is the second with 37.21%, followed by Indonesia (6.79%) and Korea (4.39%). According to the table, China and Indonesia are the big winners while Japan is the big loser. In per capita terms, Japan (-\$2108.30) is still the largest loser followed by Hong Kong (-\$813.77) and Singapore (-\$552.91), while Korea (\$852.15) is the largest gainer followed by Indonesia (\$426.98) and the Philippines (\$383.86).

From Table 4 and Table 5, we can see that both in Europe and in East Asia, the country's (Germany in Europe or Japan in East Asia) currency which has the most important international transaction currency in the region are the biggest losers. In contrast, the second largest economy, France in Europe or China in East Asia, gains the most. Although the imbalance between seignorage contribution and seignorage receipt is neither unique in East Asia nor bigger in Europe, the large imbalance still suggests that distributional considerations should be carefully addressed by prior agreements to monetary integration.

**Table 5.** Seignorage Contribution and Redistribution in East Asia



	MB		GDP+Population			Seignorage Gain/Loss		
	\$billion	share(1) (%)	GDP (\$billion)	population (million)	share(2) (%)	(1)-(2)	total (\$bill)	per capita(\$)
CH	412.61	36.01	1081.02	1266.84	42.91	6.90	104.14	82.21
HK	20.45	1.78	162.64	6.80	1.42	-0.37	-5.53	-813.77
IN	9.56	0.83	134.52	210.49	6.79	5.95	89.87	426.98
JA	629.40	54.93	4454.31	126.87	37.21	-17.72	-267.48	-2108.30
KO	19.77	1.73	409.10	47.27	4.39	2.67	40.28	852.15
MA	21.16	1.85	89.21	23.26	1.31	-0.53	-8.05	-346.15
PH	7.41	0.65	66.17	76.32	2.59	1.95	29.37	383.86
SI	10.92	0.95	91.91	4.02	0.81	-0.15	-2.22	-552.91
TH	14.52	1.27	113.43	62.32	2.57	1.30	19.62	314.79
Total	1145.80	100	6602.30	1824.19	100	0.00	0.00	---

Note: Each country's MB is the average of 1994-97.

## 5. CONCLUSION

We have examined the costs of joining a monetary union, seignorage losses and monetary sovereignty losses, in East Asia and in Europe. From the discussion above, we found that the costs of monetary union in East Asia are not much larger than those of Europe. We can then conclude that East Asian countries seem to be plausible candidates for a regional collective monetary arrangement as members of the EMU were. Conditions will likely improve with the process of monetary integration in that region.

Because East Asia is not Europe, there are of course more obstacles in East Asia that will make it difficult to put the project of the AMU into action. One of the most serious obstacles that will stand in the way is the lack of vision on Asian regionalism. For instance, a problem of the AMF idea (Shinohara 1999) was its narrow perspective on an agenda such as the prevention of the recurrence of a crisis. But, judging from the current economic interdependency in the region, the more important factor will be the sustainability of economic growth, which East Asian countries have enjoyed thus far. It is clear that the achievement of this goal necessitates the stability of exchange rates among them, because volatile exchange rate movement will hurt the prosperity of the region as a whole.<sup>14</sup> Moreover, in order to maintain the growth without depending too much on outside economies like the U.S. and Europe, East Asia needs to create its own growth pole. Even though this still raises politically sensitive feelings, this issue cannot be avoided. East Asian countries will have to face the reality that monetary integration is the most important way for co-prosperity. It must be noted that a common currency is not the final stage to be realized only after free movement of goods, capital and people, but rather the regional monetary integration can accelerate such movements. The final goal must be the free movement of

<sup>14</sup> For further discussion of the effect of exchange rate stability on trade and economic growth, see Emerson, et al. (1992), Rose (2000) among others.

people, together with free trade in goods and capital, as it was for Europe.

Another potentially big obstacle will be the absence of a core group that is really eager to promote the Asian regionalism. In that respect, cooperation among three Northeast Asian countries, Korea, Japan, and China, will be the most essential. In fact, without their participation, the initiative for any regional monetary agreement will hardly survive. This is especially true, given their economic importance, common cultural heritage and geographical vicinity. Moreover, the three countries have increasingly become aware of the importance of exchange rate stability among their currencies. Actually, China is more sensitive to exchange rate movements between their yuan and the Japanese yen. Korea is also interested in exchange rate stability between the Korean won and Japanese yen because its industrial structure is competitive with Japan. Thus, it can be said that the need for regional trade and monetary cooperation among these three countries is the greatest. Why then do they show more interest in cooperation with ASEAN countries rather than among themselves? A main reason might be that direct cooperation between Japan and China is considered implausible not only by people in the region but also by outside observers. No matter what the reason may be, it is clear that Japan will not successfully achieve a regional monetary arrangement without the participation of China, and, likewise, China will not do so without the collaboration of Japan.

Economically speaking, Japan is a natural initiator; but because of past hostilities and Japan's ambiguous attitude to itself, Japan does not enjoy the necessary trust from possible partner countries. In particular, it makes it difficult to collect regional support when Japan is not clear about her position, as Yu (2001) remarked: "Finally, the Japanese government's attitude toward its own initiation did not help in convincing China of the virtue of the proposed AMF. The Japanese government is not very firm on its own proposal. Whenever the U.S. government raises an objection or reservation, the Japanese government backtracks" (Yu 2001: 338). In that respect, Korea may be able to hold a strategic key to help realize this idea. For Korea can be a natural mediator, given the current rivalry between Japan and China, its geographical location, its economic development stage, and close economic links with China and Japan.

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