Yen or Yuan?
China's Role in the Future of Asian Monetary Integration

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ABSTRACT

Most proposals for Asian monetary cooperation assign a special role to the Japanese yen as an anchor currency. We focus instead on the potential role of the Chinese renminbi. It becomes increasingly clear that China will assume the role of the dominant economy in the region, and that it will become a more important destination for Asian products than Japan in as little as five years. This development should assign a special role to the Chinese currency and its exchange rate to the other Asian currencies. It is rather unlikely that the renminbi will assume a dominant role immediately but by drawing comparisons with the European monetary integration process, it seems possible to design a system in which most of the present currencies have a role, but where the relative weights shift over time. The evolution of the ERM is a model for the process of Asian monetary integration.

JEL Classification: F 3, F 4.
Keywords: China, Asia, Monetary Integration, Exchange Rate Regimes.

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1. Introduction

There are many reasons why the Asian currency crises of 1997 occurred, but one main reason has been identified in the fixed exchange rates that these countries operated. It has been argued that this created the shallow impression that there did no longer exist a currency risk when investing into Asia or that it would be without risk if one assumed debt in foreign currency, respectively. Both impressions have been proved wrong with the advent of the attacks on many of the Asian currencies.

The conclusion drawn from this (and similar) experiences is that a fixed exchange rate is always prone to attack and that therefore the only reliable regimes are "really" fixed rates, or hard pegs, such as currency boards or a full monetary union. The viable alternative, it is claimed, is the free float.\(^1\) Because of many reasons that oppose the adoption of a free float, this option has been dismissed in most countries, including the Asian ones. Consequently, talk has started about some kind of monetary cooperation in Asia. There are many proposals floating around on this issue, but often a special role is assigned to the Japanese yen. In this paper, we focus on a different aspect of the debate, namely the potential role that the Chinese economy plays in the talks of regional integration. China obviously is the most important economy in the future of the region, and it is set to take over the leading position from the Japanese economy in the future. Moreover, it now takes serious steps of integrating into the world economy and to transform into a market-based system. This also should assign a special role to the Chinese currency and its exchange rate to the other Asian currencies. However, this will undoubtedly take some time, but since most observers do not expect a full blown monetary integration in the near future in Asia and adopt a longer time perspective, the Chinese option looks more realistic.

In this paper we review the debate on monetary integration in Asia, concluding that freely floating rates are more or less out of question but there is no obvious anchor currency. We find problems with suggestions that favor the yen as well as those that favor the dollar. It seems more adequate to look at proposals, which suggest some form of a basket peg. We particularly focus on the potential role of the Chinese renminbi (RMB) to play a leading role in such an arrangement. There are at present many obstacles which make it rather unlikely that the RMB will assume such a role immediately. However, by drawing comparisons with

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\(^1\) This is variously known as the „hollowing out hypothesis“, or the „bipolar view“. For an recent statement that intermediate regimes are no longer viable in a world of free capital
the European experience of monetary integration, as well a process that took considerable time, it seems possible that a more flexible system could be designed in which most of the present currencies have a role, but where the relative weights shift over time. The evolution of the Exchange Rate Mechanism (ERM) under the European Monetary System (EMS) is an example that could provide guidance on the process of Asian monetary integration.

We draw a comparison to the ERM because, unlike many other authors (see, e.g. Dieter 2000), we do not think that a full monetary union in Asia is desirable or politically possible. One of our main conclusions is that any monetary system in Asia would need a considerable degree of flexibility for the foreseeable future. Therefore, discussions whether Asia should move towards a monetary union is premature and so are any comparisons drawn with contemporary Europe. Asia is much too diverse in the present situation to be compared to monetary union in Europe. This also implies that the discussion which countries should be members of such a system is less important than in the case of a full monetary union. Consequently, we will not go into a detailed discussion which of the smaller countries should join.

The paper is structured as follows: The next section discusses the reasons that speak for and against monetary integration in Asia. Section 3 discusses the degree of economic integration among Asian countries and with the rest of the world. It also addresses the choice of the anchor currency, once the preference for fixed rates has been established. For various reasons, we consider neither the Japanese yen nor the US dollar as realistic anchor currencies. Therefore, section 4 turns to the Chinese role in this process, arguing that it will probably, at least in the medium to longer term, become more important for the Asian countries. Since this point is still in the future, if a fixed rate system is created, it has to allow for evolution. Drawing on the European experience, we discuss in Section 5 arrangements that allow for the Chinese RMB to gradually assume a more important role in the regional process and to become an anchor currency over time. Such a system has to be designed in a way that minimizes the dangers of speculative attacks. The concluding section tries to assess the prospects of monetary integration in Asia with a stronger role for the Chinese economy and its currency.

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mobility, see Eichengreen (2001). For the opposite view, see Frankel (1999). A nuanced view is taken by Fischer (2001).
2. Why Fixed Exchange Rates in Asia?

2.1 Trade and Investment

There are two great classes of benefits that a country expects from the introduction of fixed exchange rates: First, making trade and investment less risky, increasing both and thereby increasing welfare; and second, anchoring monetary policy. The costs of fixed rates are to give up monetary autonomy and the danger of speculative attacks if the credibility of the peg is in doubt. We review these arguments briefly in the following section with a special focus on Asia.

The main argument for adopting fixed exchange rates is the traditional case for reducing uncertainty in trade and investment. Fixed rates make planning easier because one does not have to calculate with floating and variable rates, which would increase the risk of doing international business. With floating rates the domestic return of exports is uncertain if immediate payment is not forthcoming. The negative effect is compounded the longer the time horizon is. This implies that investments are even more affected by this insecurity.

While this argument seems obvious, the evidence on the negative effects of variable exchange rates is usually weak if not even of the opposite sign than expected (Coleman 1999). One reason why it has proved to be difficult to find evidence is that most analyses are conducted on the basis of high frequency data. Short-time horizons are only one aspect of exchange rate uncertainty, and arguably, the less relevant. These are usually periods that can easily be covered by hedging instruments that reduce risk. This is less possible for longer time horizon. There is consequently more evidence that exchange rate uncertainty matters for longer time horizons. Recent research by Frankel and Rose (1996) and Froot and Rogoff (1995) provides evidence on long exchange rate cycles which imply shifts in competitiveness, and Pozzo (1992) finds adverse effects of exchange rate cycles on trade.²³

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² There are several reasons why this may be the case (see Krugman 1989, Dixit 1989). First, traders might simply be risk-averse and therefore trade less if exchange rate fluctuate. Second, depending on the type of good being traded, exporters might be force to price-to-market, i.e. fix the price of their good in local currency. In this case, exchange rate changes directly translate into profit changes. This may induce firms to build capacities in foreign countries in order to be no longer as exposed to currency fluctuations which might be inefficient. Finally, currency fluctuations carry an option value of waiting. Being uncertain how the exchange rate changes in the future, there is an incentive for firms to adopt a wait and see attitude.

³ In addition, there is research which establishes the importance of a border effect on trade, which is presumably due to exchange rates as well (Coleman 1999), and research by
A last argument for fixed rates is of a political-economic nature. Large swings in real exchange rates (which are highly correlated with nominal exchange rates) imply large shifts in relative competitiveness of national industries. This is likely to trigger protectionist pressures, as experience shows. Thus, fixed rates might not only foster trade; they might be necessary to have free trade at all. Some authors have even argued that without exchange rate stability any attempts at real integration are endangered (Mc Kinnon 1998, Ogawa and Ito 2000, Wyplosz 2001).

Therefore, it has been argued in the wake of the Asian crisis that competitive devaluations among the currencies of the region have devastating effects and will create policy conflicts (Mc Kinnon 1998, Rose 1998). Being strong competitors in foreign markets, it is clear that a strong devaluation of one of the currencies will be an incentive for the others to follow to ensure their market shares.

These negative effects of floating rates are by definition more important for small open economies than they are for large closed economies. It has been argued by several authors that the strategy of the East Asian economies to peg their currencies has been pivotal for their rapid development up to the crisis. Recent years have seen a concentration of trading patterns within East Asia (see section 3 below), so that regional exchange rate stability has become more important. In addition, as reported by Kwan (2001), many of the Asian countries are close competitors, so that the danger of competitive devaluations and retaliatory measures should not be taken too lightly. He consequently points out a strong correlation between movements of exchange rates and growth developments in East Asian economies. A 1 percent appreciation of the yen against the US-dollar raises the growth rate in the rest of Asian economies by 0.109 percent.

2.2 Monetary Policy Strategy

The second main advantage mentioned in favor of fixed rates is that they serve as a monetary policy strategy. Fixing the rates to a currency that is more stable than the own currency should help to reduce the rate of inflation towards the rate of the anchor currency. This is the standard reason mentioned why high inflation countries adopt fixed rates. If a central bank is capable of defending the fixed rate it has to adjust its monetary policy toward that of the

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见Eichengreen (2001) for the debate and references.

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Rose (2000) who reports the trade increasing effect of common currencies. This effect goes beyond the effect derived for fixed rates.

4 See Eichengreen (2001) for the debate and references.
anchor currency. This strategy has worked for many countries in different regions of the world for some time, but not without costs. It has worked in Europe where France, Italy and other European countries have, by fixing their rate against the deutsche mark, imported a monetary policy that they were not able to credibly follow themselves. The same strategy has worked less well in many other regions where the same has been tried, but failed over longer time horizons (Obstfeld and Rogoff 1995).

The main problem with such a peg is, of course, that it can become economically and politically costly to defend. If the peg comes under doubt, the only way to defend it is to raise the domestic interest rates, something that is often politically not opportune. After many failed attempts to defend fixed rates, the consensus has turned to arguing that only very hard pegs are not subject to such credibility problems.

A currency board, such as operated by Estonia, Bulgaria, Hong Kong, and until recently Argentina, makes the commitment to the fixed rate more credible because the costs of abandoning it are higher. But it also makes the costs of fixed rates more visible. Fixed rates, by design, imply that monetary autonomy is given up. This is, at least from the credibility point of view, the main reason for having them. But it is as well the main problem because situations might arise in which monetary autonomy is needed. That means, any situation where monetary autonomy would be useful will undermine the credibility of fixed rates. By making the fix more credible, the potential costs of the fix are increased as well.

Thus, the pegging of the rate does invariably imply that sooner or later major economic problems arise as the need for a different monetary course than that of the anchor country comes along. This creates the problem of getting rid of the peg without losing all credibility and invoking currency crises. This is also known as the exit problem (see Eichengreen and Masson 1998).

What the exit problem makes clear is that to fix the currency "only" on the basis of the credibility problem might not be enough, because credibility of monetary policy will sooner or later come under pressure. The trust of the private sector concerning the peg will sooner or later erode because either the need for monetary autonomy becomes too large or if the need for stabilization seems no longer paramount. At that point, the peg will appear dubious to observers and they might begin speculating against it.

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5 Technically, it has been argued, it is always possible to defend a fixed rate. This is not the case politically (see Obstfeld and Rogoff 1995).
We would argue that a peg could be hold only if there is more than just the credibility problem to support. If it, instead, is based on trade and investment, there are stronger reasons to defend it. But more important, this will also gradually lead to more symmetric business cycles (Frankel and Rose 1998) which will make the problem of monetary autonomy less pressing and lower the danger of speculative attacks less severe. Hence, one might argue that this is the main reason why the European experience has been a relatively happy one, with only a limited number of crises, with relatively minor negative consequences, and a quick return to fixed rates (at least since the second half of the 1980’s). 6 This also distinguishes Europe from, say, Argentina where the currency peg has not been as solidly grounded.

3. What Peg?

If the decision is to peg to another currency, the question is to which one. This issue has been addressed in the theory of optimum currency areas, where criteria have been developed that countries on a common currency (or with fixed rates) should fulfill. Consequently, most of the literature addressing the question of fixed exchange rates has used some variants of the Optimum Currency Area (OCA) theory, such as Eichengreen and Bayoumi (1999).

Nevertheless, most authors also conclude that the OCA theory does not seem to play an important role in the actual decisions of policy makers concerning monetary integration (Bayoumi and Mauro 1999). The standard conclusion is that politics matters more than economics, but another interpretation would be that the whole approach neglects that OCA criteria are likely to be endogenous (Frankel and Rose 1998). The decision to adopt fixed rates, accordingly, should not be made on some static criteria that are measured before such a project is launched. Countries endogenously over time fulfill these criteria exactly because of monetary integration. 7 As monetary integration fosters trade, more intra-industry trade make economic structures more similar and countries consequently converge in their position in the business cycle.

The experience with the European integration process at least seems to support this view. Over time, European trade structures have become more concentrated, which is probably not independent of the process of monetary integration. For most European

6 Notice that this has been the period of unrestricted capital flows, which according to Wyplosz (2001) should have brought more rather than fewer crises.
countries intra-EU trade (as share of total trade) is above 50 percent (for the large countries) or even higher (for smaller ones). For France, for instance, it increased from 30 percent in the 1950’s to more than 60 percent in the 1990’s, and even for the UK it increased from little more than 20 percent to more than 50 percent in the same time. In turn, the desire to reach more and more stable currencies relations has become stronger over time. While in the early years of the ERM realignments have been relatively frequent there have been none between 1987 and the large crisis in 1992 and full monetary union has been reached in 1999. This evidence is suggestive of a reinforcing process of trade integration and monetary integration.

Whatever one thinks about the relation between trade and monetary integration (and thus the choice of member countries to any regional integration project), the alternative suggested to more stable currency relations is more flexibility. But this is something most countries are not willing to contemplate. Even countries that claim to have flexible rates place more or less value on fixed rates and intervene to stabilize their exchange rates. This has become known as the "fear of floating" (Calvo and Reinhart 2000). Thus, while there are good arguments to argue in favor of more flexible rates (Larrain and Velasco 2001), it seems that most countries are simply not willing to go down this road. There are in fact only a limited number of countries willing to let their currencies float, and few if any of them are small open economies, greatly exposed to international trade. The fact that the flexibility between some of the Asian countries has increased post-1997 (Eichengreen 2002) is no proof that the Asian economies have given up fixed rates for good. Baig (2001) observes that East Asian currencies show some flexibility, but argues that they continue to smooth their exchange rates against the dollar. Fabella (2002) supports this observation.

To find if it would make sense for the Asian economies to aim for stable currency relations, the trade pattern is the obvious starting point. Another important argument is the

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7 Dieter (2001) even argues that monetary union should come before trade integration in Asia, albeit for a different reason.
8 Interestingly, the share of intra-EU trade fell for Denmark and stayed nearly constant for Sweden and Finland.
9 One reason for the increase in trade concentration in Europe is certainly due to the enlargement from 6 to 15 members. While the enlargement process has been viewed as a danger to monetary integration it could also be interpreted as being supportive of it.
10 Baig distinguishes, however, between the observed countries. While the still crisis-hit Indonesia shows most volatile exchange and interest rates, his regression results for Korea indicate a return to a level of pre-crisis weight to the dollar. The Philippines' and Thai rates are stabilizing but more flexible than in the pre-crisis period. Malaysia chose to peg in the aftermath of the crisis.
pattern of financial flows. For both, it is important to consider explicitly the development over time to capture possible dynamic effects.

### 3.1 Trading Pattern

Looking at bilateral trade flows, Wyplosz (2001) concludes that Asia is at least as well integrated as Europe. He uses a gravity approach to see what the "normal level" of trade among Asian and European economies would be to compare it with the actual levels. The results are quite surprising. It appears that Europe is less integrated than one would expect on the basis of the gravity approach, while Asia is more integrated (this comprises as well Oceania). Given this surprising result, robustness tests (mainly different specifications) have been implemented which confirm the result. This result would imply that the positive effects from a common currency would be lower than they could be expected for Europe.

Bayoumi and Mauro (1999) report that intra-regional trade among ASEAN countries (thus excluding the big 3) as a share of GDP is already similar to that of the euro-area (and higher than that of other regions such as NAFTA or Mercosur).\(^\text{11}\) This mainly reflects the high degree of openness of Asian economies, which compensates for the lower degree of intra-regional trade as a share of total trade. There has been a particular increase in recent years (see table 1). Their conclusion is that none of the major currencies (yen, dollar, and euro) that are considered as potential pegs suggest themselves based on the trading pattern. They advise against such an external peg and would prefer a common currency among the ASEAN countries without fixing to any of the three major currencies.

Gilbert, Scollay and Bora (2001) support this finding by looking at natural trading areas in East Asia based on gravity models. They conclude that there seems to be a natural free trade area in Asia that comprises China as well. Turning to welfare considerations, they argue that welfare is increased most if a free trade area would not only comprise ASEAN countries, but Japan, Korea and China as well (ASEAN+3).

\(^{11}\) Anderson and Steinherr (2000) argue instead that the European economies were already more highly integrated in the 1970’s when they launched the snake than the Asian economies are today.
Table 1: Regional Trade Patterns, 1980 – 2000 (selected years)

( percent of total regional GDP )

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<td>Imports</td>
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<tr>
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<td>4.8</td>
<td>5.5</td>
<td>4.7</td>
<td>7.9</td>
</tr>
<tr>
<td>With Japan</td>
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<td>7.7</td>
<td>7.2</td>
<td>5.9</td>
<td>7.8</td>
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<tr>
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<td>6.1</td>
<td>4.4</td>
<td>8.4</td>
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<tr>
<td>With Euro Area</td>
<td>3.9</td>
<td>3.1</td>
<td>2.5</td>
<td>2.7</td>
<td>4.6</td>
</tr>
<tr>
<td>With Other Countries</td>
<td>2.3</td>
<td>3.3</td>
<td>1.9</td>
<td>2.6</td>
<td>3.1</td>
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<tr>
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<td>7.2</td>
<td>8.0</td>
<td>10.9</td>
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<td>Euro Area 2</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Within Euro Area</td>
<td>11.7</td>
<td>11.6</td>
<td>12.9</td>
<td>12.6</td>
<td>13.2</td>
</tr>
<tr>
<td>With Japan</td>
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<td>0.7</td>
<td>0.4</td>
<td>1.1</td>
<td>0.6</td>
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<td>3.1</td>
<td>2.4</td>
<td>3.4</td>
</tr>
<tr>
<td>With Other Countries</td>
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<td>5.1</td>
<td>7.0</td>
<td>6.0</td>
<td>6.1</td>
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<tr>
<td>With Other Developing Countries</td>
<td>9.5</td>
<td>12.3</td>
<td>10.0</td>
<td>11.2</td>
<td>7.3</td>
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<td>Within Mercosur</td>
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<td>2.6</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>With Euro Area</td>
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<td>2.2</td>
<td>2.6</td>
<td>1.1</td>
<td>2.2</td>
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<tr>
<td>With Other Countries</td>
<td>0.3</td>
<td>0.7</td>
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<td>4.6</td>
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<tr>
<td>NAFTA 4</td>
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<tr>
<td>Within NAFTA</td>
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<tr>
<td>With Japan</td>
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<td>1.1</td>
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<td>With Euro Area</td>
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<td>4.1</td>
<td>1.8</td>
<td>2.7</td>
<td>2.1</td>
</tr>
</tbody>
</table>

1 ASEAN: Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam (brunei data are not available).
2 Euro Area: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Portugal, and Spain.
3 Mercosur: Argentina, Brazil, Paraguay, Uruguay, and associate members Bolivia, and Chile.
4 NAFTA: Canada, Mexico, and the United States.

3.2 Correlation of Shocks

Closely related to the trade pattern is the question of symmetry or correlation of shocks that hit the economies. The more countries trade with each other, the more correlated shocks should be, either because they have the same origin or they are transmitted via the trade channel. In contrast to the above evidence on the amount of trade, Wyplosz (2001) finds that shocks in Europe are more correlated than in Asia, undermining the argument that trade and
shocks are two sides of the same coin a bit. He also finds that Korea, Thailand and Malaysia seem to constitute a subgroup with some correlation with Japan. The correlation with China is negative but small.

However, this evidence is not robust to method used or sample period. Eichengreen and Bayoumi (1999) who use a different method and a different time span find little difference between Europe and Asia and group countries differently, depending on whether demand or supply shocks are considered. Bayoumi and Mauro (1999) in addition report that the Asian economies respond quicker to disturbances and thus have a higher potential to adjust to shocks than the Europeans. They conclude instead that the Asian countries are not much less prepared for a common currency than the Europeans were 10 years after the ERM had been introduced.

### 3.3 Capital Flows and Investment

Parallel to trade, Asia shows a high integration in terms of capital flows. Moon and Rhee (1999) show that the ratio of intra-regional Foreign Direct Investment (FDI) to the regional GDP is higher in Asia than in the EU and in the NAFTA. Moreover, 64.9 percent of all Asian FDI flow into the region (see table 2). This implies that the degree of capital mobility among Asian countries is at least as high as in the EU.

| Table 2: Intra-regional outward FDI, 1996 |
|---|---|---|
| | Asia | EU | NAFTA |
| Intra-regional FDI (A) | 70.8 | 62.6 | 14.0 |
| Regional GDP (B) | 6968 | 7603 | 7967 |
| Total FDI Outflow (C) | 109.1 | 121.2 | 96.5 |
| A/B | 1.02 | 0.82 | 0.18 |
| A/C | 64.9 | 51.7 | 14.5 |

Source: Moon and Rhee (1999) ¹ASEAN5, Japan, China, Korea, Taiwan

Dobson (2001) reports that FDI flows to emerging economies originating within the region (including Japan) range from as high as 80% of the total in China to as little as 30% in the Philippines. Even excluding FDI inflows from Taiwan and the financial hub of the region, Hong Kong, inflows from ASEAN+3 member countries are still significantly higher than those from the EU or the US (see table 3). Given the demonstrated trend towards more intra-
Asian direct investment, one should expect that financial relations would stand to benefit from fixed exchange rates as well.

Table 3: Inward FDI stocks, 1990 and 1996  
(percent of total)

<table>
<thead>
<tr>
<th>Host Economy</th>
<th>EU</th>
<th>US</th>
<th>Japan</th>
<th>Hong Kong</th>
<th>ASEAN</th>
<th>ASEAN+3</th>
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<td>1990</td>
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<td>2.7</td>
<td>11.0</td>
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<td>1996</td>
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<td>1996</td>
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<td>16.8</td>
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<tr>
<td>1990</td>
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<td>16.3</td>
<td>29.1</td>
<td>14.9</td>
<td>9.6</td>
<td>39.5</td>
<td>19.2</td>
</tr>
</tbody>
</table>

Source: UN World Investment Directory

3.4 Asia and the US-dollar

Many of the East Asian countries had pegged to the US-dollar. Traditionally, this made sense because much of the trade of these countries was directed to the US. In addition, the dollar is still the major vehicle currency in international trade and many developing and emerging countries have adopted the dollar as their anchor currency. As the preceding section has demonstrated, however, intra-regional trade in East Asia is increasing. Therefore, while the dollar might have been the natural choice as an anchor in the past, it is less likely to retain this role in the future. Although the US is likely to continue to be one important destination of trade, it will lose some of its former importance. As has been the case with European trade, one might expect that trade in East Asia would become more regionally concentrated. This has consequences for the choice of an anchor currency.

Still, however, many observers assign an important, if not dominant role to the US-dollar. Williamson (1999) for instance has suggested that countries peg to a common basket consisting of the dollar, the yen and the euro. This and similar proposals can be criticized
because they are centered on the fact that intra-regional trade is growing and that this scheme favors goods flows over capital flows, whereas the Asian economies are as much affected by capital flows as by trade. Another criticism is that such a peg is not a defense against speculation, given the tendency of governments to not adjust pegs early enough. In this case, the problem of destabilizing speculation returns (see Eichengreen 2001).

One of these points could be overcome, argues Mckinnon (2001), if the dollar is chosen as a single anchor currency. Pegging to the dollar instead of a basket (including Japan) would give more prominence to capital flows, based on the fact that the dollar continues to be the dominant invoicing currency. Thus it would make sense to collectively tie to the dollar as an anchor currency. In addition, it is argued that peg would take the fear of deflation (in Japan) or inflation (in debtor countries).12

While there is certainly something going for this suggestion, it does not seem very likely that all these countries, especially Japan, are willing to accept such a scheme. Thus, while this argument has worked for the smaller economies in the past it will probably not work for Japan, which will be reluctant to peg the yen to the dollar. But a dollar peg without Japan would bring back the problem of fluctuating currency relations within Asia.

3.5 Asia and the Yen

Kwan (2001) instead has suggested that the yen should take the lead role and that the economies peg to it. This does not solve the problem above, concerning the trade patterns, unless one assumes that trade will increasingly be directed to Japan. To allow for this gradual process to work, he proposes a peg to a basket of currencies whose relative weight is adjusted over time reflecting the increase in the relative importance of Japan. However, the prospects of Japan becoming a more important trading partner for the East Asian economies, as Kwan expects, do not look very bright. The country is in a deep recession, making it not exactly a desirable and promising place for exporting to. In addition, Japan has always been a traditional net-exporter.

Moreover, structural problems of the industry and financial institutions, unsolved since at least ten years, cannot be expected to be resolved in the near future. Forbearance of further important social reform programs increases uncertainty of customers and affects domestic demand negatively. Sovereign debt of currently 140% of GDP is expected to rise further. In

12 Mckinnon is one of the few who discusses China. In a another paper (1998) he argues that China should also continue to peg to the dollar.
addition, the demographic development of an aging and decreasing population is expected to decrease the economic power significantly.

Another if not the most serious problem is the deflation that accompanies the Japanese depression. Pegging to the yen only makes sense if a constant devaluation against the yen is foreseen. Otherwise, pegging countries would adopt as well the deflationary course of the Japanese currency, something that is not very attractive. Should Japan on the other hand finally be able to counter the deflationary trend the reverse would happen. The yen would probably begin to depreciate against the other currencies, creating problems as well. Should instead the rates be kept fixed, irrespective of the difference in price developments between Japan and the other countries, this would either imply a real depreciation or a real appreciation of the yen. Both would involve competitiveness problems either for Japan or the other countries.

In other words, the Japanese yen does not look as a particularly attractive anchor currency at the moment and it is unlikely that this will change in the future. On the contrary, there are signs that Japan changes its role as the regional economic powerhouse with China as soon as in the first half of this century.

4. The Role of China: Current Role and Prospects

Obviously, China is gradually integrating into the world economy. This process has been boosted by its accession to the WTO, and China is pushing towards a free trade area within East Asia in the next ten years. Several observers expect the Chinese economy to grow faster than the rest of the region during the first two decades of this century. In fact, with Japan in deep and long-lasting recession, it is natural that the other economies turn to look for different options. Richardson (2002) reports estimates that if China keeps growing at an average of more than 7% a year, while Japan’s economy continues to languish in recession, China will become a more important destination for Asian products than Japan in as little as five years. 13 China, then, seems to be the natural outlet for products of Asian economies.

13 Lardy (1998) is much more skeptical and argues that China's performance is grossly overstated.
4.1 Trade

China enjoys already important and rapidly growing trade and investment relations with its Asian neighbors (see table 4). In 2000, ASEAN-China trade totaled 39.5 billion US-dollar, up from only 7.9 billion US-dollar in 1991. China’s exports to ASEAN grew from 4.1 billion in 1991 to 17.3 billion US-dollar in 2000, while its imports from ASEAN countries grew from 3.8 billion to 22.2 billion US-dollar during the same period. In 2001, China was already among the top four fastest growing export markets for South Korea, Taiwan, Malaysia, the Philippines, Singapore and Japan.

The trade structure between ASEAN and China is characterized by intra-industry trade. Computers, machinery and electrical equipment make up 38.2% of ASEAN’s exports to China and 46.6% of ASEAN’s imports from China (see tables 5, 6). High intra-industry trade implies a high degree of economic convergence of business cycles and is a favorable condition for monetary cooperation. Monetary cooperation in turn may help to reduce foreign exchange risks among traders and to foster economic integration even more.

Economic integration is expected to grow further through the proposed free trade area of China and the 10 member countries of ASEAN, which would create one of the world’s major free trade zones. The FTA would create a combined market of more than 1.7 billion people, a gross domestic product of more than 2 trillion US-dollar and total trade of over 1.2 trillion US-dollar. The ASEAN-China Expert Group on Economic Cooperation (2001) has estimated that a free trade area could raise ASEAN’s exports to China by 13 billion US-dollar, or 48%, while China’s exports to ASEAN could rise by nearly 11 billion US-dollar, or more than 55%.

However, the bulk of ASEAN and China’s exports are still largely focused on the major markets of the US, EU and Japan, where they compete with their products. To the US, ASEAN and China are major exporters of textiles and apparel and machinery and electrical appliances. In the Japanese market, ASEAN and China compete with machinery and electrical appliances. In this context, monetary cooperation between the ASEAN+3 could help to stabilize their relative trade competitiveness and avoid conflicts among them.
Table 4: Main Economies’ shares of exports to and imports from China

(in percent, percent points)

<table>
<thead>
<tr>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>China's share of total</td>
</tr>
<tr>
<td>Japan</td>
<td>5.2</td>
</tr>
<tr>
<td>U.S.</td>
<td>1.9</td>
</tr>
<tr>
<td>EU</td>
<td>0.9</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>34.9</td>
</tr>
<tr>
<td>East Asia (excl. Hong Kong)</td>
<td>4.1</td>
</tr>
<tr>
<td>Asia NIEs (excl. Hong Kong)</td>
<td>4.8</td>
</tr>
<tr>
<td>Taiwan</td>
<td>0.5</td>
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<tr>
<td>R.O.K.</td>
<td>10.0</td>
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<td>Singapore</td>
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<td>ASEAN4</td>
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<tr>
<td>Thailand</td>
<td>3.0</td>
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<tr>
<td>Malaysia</td>
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</tr>
<tr>
<td>Philippines</td>
<td>1.0</td>
</tr>
<tr>
<td>India</td>
<td>1.9</td>
</tr>
<tr>
<td>Vietnam</td>
<td>5.2</td>
</tr>
<tr>
<td>Russia</td>
<td>4.7</td>
</tr>
<tr>
<td>Latin America (4 countries)</td>
<td>1.2</td>
</tr>
<tr>
<td>Argentina</td>
<td>3.4</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.0</td>
</tr>
<tr>
<td>Chile</td>
<td>2.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.0</td>
</tr>
<tr>
<td>Africa</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Note: “Contribution” is China’s percentage-point contribution to the growth rate of exports to (or imports from) the world.

Source: Jetro White Paper on International Trade 2001; prepared by Jetro from Direction of Trade Statistics (IMF) and national statistics.
Table 5: Structure of ASEAN exports to China, 1993, 1999
(in billion US-dollar)

<table>
<thead>
<tr>
<th>1993 Products</th>
<th>Exports</th>
<th>Share</th>
<th>1999 Products</th>
<th>Exports</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricants/Fuels/Oil</td>
<td>1.46</td>
<td>32.3%</td>
<td>Computer/Machinery</td>
<td>1.94</td>
<td>20.3%</td>
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<tr>
<td>Wood</td>
<td>1.03</td>
<td>22.6%</td>
<td>Electrical Equipment</td>
<td>1.71</td>
<td>17.9%</td>
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<tr>
<td>Fats and Oils</td>
<td>0.38</td>
<td>8.4%</td>
<td>Lubricants/Fuels/Oil</td>
<td>1.09</td>
<td>11.4%</td>
</tr>
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<td>Computer/Machinery</td>
<td>0.29</td>
<td>6.4%</td>
<td>Fats and Oils</td>
<td>0.52</td>
<td>5.4%</td>
</tr>
<tr>
<td>Electrical Equipment</td>
<td>0.29</td>
<td>6.0%</td>
<td>Wood</td>
<td>0.51</td>
<td>5.1%</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td>3.43</td>
<td>75.7%</td>
<td>SUB-TOTAL</td>
<td>5.77</td>
<td>60.3%</td>
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</tbody>
</table>

Source: ASEAN Secretariat

Table 6: Structure of ASEAN imports from China, 1993, 1999
(in billion US-dollar)

<table>
<thead>
<tr>
<th>1993 Products</th>
<th>Imports</th>
<th>Share</th>
<th>1999 Products</th>
<th>Imports</th>
<th>Share</th>
</tr>
</thead>
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<td>Electrical Equipment</td>
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<td>11.1%</td>
<td>Electrical Equipment</td>
<td>3.24</td>
<td>26.6%</td>
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<tr>
<td>Computer/Machinery</td>
<td>0.42</td>
<td>9.7%</td>
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<td>2.44</td>
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<tr>
<td>Lubricants/Fuels/Oil</td>
<td>0.39</td>
<td>9.0%</td>
<td>Cereals</td>
<td>0.52</td>
<td>4.3%</td>
</tr>
<tr>
<td>Cotton</td>
<td>0.24</td>
<td>5.6%</td>
<td>Lubricants/Fuels/Oil</td>
<td>0.43</td>
<td>3.6%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>0.18</td>
<td>4.2%</td>
<td>Ships/Boats</td>
<td>0.30</td>
<td>2.5%</td>
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<tr>
<td>SUB-TOTAL</td>
<td>1.72</td>
<td>39.6%</td>
<td>SUB-TOTAL</td>
<td>6.9</td>
<td>57.0%</td>
</tr>
</tbody>
</table>

Source: ASEAN Secretariat

4.2 Foreign Direct Investment

Considering the developmental stage of China, the flow of Foreign Direct Investments is still a one-way direction into China. In 1997, FDI of 9,456 million US-dollar or 21 percent of total FDI inflow poured in from ASEAN countries, Japan and Korea into the country, more than the combined FDI inflow from the U.S and the EU (7,410 million US-dollar). More important than those were FDI from Taiwan and Hong Kong (3,289 and 20,632 million US-dollar). Chinese investments to ASEAN, Japan and Korea amount to not more than 170 million US-dollar a year. This picture might change however with the development of the Chinese economy and if a closer economic relationship between China and the region could be established, especially because intra-industrial trade induces trade-related investments.
4.3 Politics

China, Japan and Korea are eager for trade integration with ASEAN, as they fear to find themselves excluded from the world’s major free trade areas. Competition among them, especially between China and Japan, for integration and the leading role in such a regional arrangement could accelerate the process of regional economic integration even more.

The agreement between China and ASEAN to establish a FTA within 10 years increased the role of China in the region and spurred China’s integration in the regional network not only economically but also politically, to the expense of Japan. This should increase mutual confidence between China and its neighbors and therefore stabilize bilateral relations and monetary cooperation.

Also, China pursued the ASEAN-China agreement much stronger than Japan. The ASEAN-China Expert Group on Economic Cooperation characterized an ASEAN-China FTA already as a model for a broader integration including Japan and Korea. Tokyo instead has failed to take any initiative in regional economic integration, such as a free trade agreement with ASEAN, because farmers and the lawmakers they support are vehemently opposed to further liberalization of agricultural and forestry markets. For this reason, the FTA agreement with Singapore cannot easily serve as a model for similar agreements with other ASEAN members. China, on the other hand, indicated to be willing to include agriculture in the agreement despite its potential disadvantage against some ASEAN countries in this area and convinced ASEAN members that a FTA would benefit both sides.

Further, although Japanese prime minister Junichiro Koizumi proposed a "Japan-ASEAN Comprehensive Economic Partnership" on his trip to ASEAN countries in April 2002, ASEAN countries understand Japan still as being oriented to the US, Australia and New Zealand, rather than to continental Asia. Some Asian countries oppose Koizumi’s proposal to include Australia and New Zealand in his proposed partnership, emphasizing the two countries belong more to Europe than to Asia.

On the contrary, China committed itself as an Asian country. To ASEAN members looking for export markets, the Chinese emphasized the potential of the vast domestic markets. To Indo-Chinese countries that joined ASEAN in recent years, Beijing offered economic assistance. China told ASEAN members that a free trade area would never come into being in East Asia if they wait for Japan and South Korea to join.

Besides, China shares with its Asian neighbors some sentiment against Japan as a hegemonic power and manages to play this card intensively. Indeed, unlike Germany in
Europe, Japan sticks to its role as a leading economy in Asia and performed East Asian monetary integration mainly as a means of internationalizing the yen. Japan has always considered East Asia as its "backyard" and tried to take influence on these countries.

4.4 Some caveats
The whole discussion hinges on the assumption that China will not change its economic course, and that it will sooner or later be able to provide the stability that is also required from the anchor currency. Although history suggests that even the anchor currency can be on a modestly inflationary course it is also clear that a rate of inflation considerably above that of the US-dollar or the euro would not be acceptable. That requires some changes in the Chinese monetary system and its monetary policy course. Most important of all would be that convertibility of the RMB is finally reached; it is hard to imagine to have a market-based basket peg with one currency being inconvertible.

Moreover, the integration of China into the WTO implies that the industrial structure in China will face significant changes in future years. This would require that the exchange rate is flexible to account for those changes. Income differentials among Asian countries, which are huge with respect to China, as well imply that the exchange rate will have to be able to adjust. Therefore, it is obvious that the Chinese peg to the US-dollar will not be held indefinitely, despite the amount of Chinese currency reserves.

Another challenge resulting from the WTO entry is rising unemployment, which might trigger not only shrinking private demand, but even social unrest with budgetary and monetary implications. The government has to shift the high amount of surplus labor from inefficient sectors (mainly in the countryside) to growth industries (mainly in cities). OECD (2002) estimates suggest that nearly 70 million workers will exit agriculture between 2000 and 2010. In urban areas, about half of the working force is employed in state companies, which operate also highly inefficient and need restructuring during the next years. However, a functioning labor market to allocate the surplus labor force has yet to be established.

The most striking argument against integrating China into a common monetary system in Asia is the vulnerability of the Chinese banking system for crisis. China’s financial markets are still underdeveloped (or not existing) and the banking system is in a precarious situation. China is still a financially repressed economy. Almost all banks are still state owned. Due to government pressure, most funds of this banks flow to state owned enterprises that lack strong governance and efficient structures. This induces even more non-performing loans in the banking sector.
In addition, there are neither developed money, bond and stock markets nor are interest rates liberalized. Moreover, the central bank, which is proposed to handle the world’s largest reserve currencies and supervise one of the world’s largest banking systems, still lacks independence from the government.

This implies that not only should banks be privatized and a competitive financial market be developed but that the books of the banks should have to be cleaned up as well. The People’s Bank of China needs to improve its proficiency in handling and supervising an open financial market. Otherwise, banking crises might be happening which would also impact the exchange rate system.

Weakening macroeconomic performance, rising unemployment and a vulnerable banking system pose a challenge the government budget. The OECD (2002) reports a still manageable government debt-GDP ratio of 32 per cent for 2000, but cautions against future commitments, mainly a bailout of the banking sector and pension obligations. Rising government debts could result in higher inflation rates than acceptable. This, of course, would clearly make it difficult to have China as a member in a regional monetary system. But provided that these problems can be solved without negative implications for monetary policy, it need not imply that China can not become part of an Asian monetary system. At least the experience of Europe suggests that countries that are unevenly developed and liberalized can be members of a workable common system.

5. Lessons from Europe?

Any discussion about a fixed rate system or even more far-reaching attempts at monetary integration will be likely to draw comparisons to the European integration process. Asian monetary cooperation is no exception (see e.g. Bayoumi and Mauro 1999, Kwan 2001, Eichengreen 2001, Wyplosz 2001).

Although the European example is informative, many differences between Europe and Asia remain that should be kept in mind, it is frequently argued. First, an important difference that separates Europe and Asia is that Asia lacks the political integration process that is unique to Europe (Eichengreen 2002). Many observers argue the European monetary integration project is more driven by political considerations than by economic ones. While one might get this impression when looking at the last ten years, this is less obvious in a long-time perspective. The process of European integration has been kick-started by the US influence more than by a deep desire of European countries to form a political union. And
even the then adopted Treaty of Rome has been far less ambitious than what has later become of the integration project.

Likewise, monetary union is much more grounded in economic reasons than one might think when reading part of the literature, where the European Monetary Union (EMU) is seen as part of a deal in which France "got" EMU from Germany in return for accepting German unification. This generously neglects the fact that attempts at European monetary integration go back to the 1960’s at least and that the proposal leading to the Werner-report in 1970 goes back to an initiative of then German chancellor Willy Brandt at the summit in the Hague in 1969 (Gros and Thygesen 1998). For several reasons, not much came of this, but it clearly demonstrates that particularly German interest in monetary union has been longstanding. The fact, moreover, that the European Central Bank is a copy of the Bundesbank as well makes it dubious to argue that EMU has been forced on the Germans.

Hence, while politics certainly has an important role to play in the European integration process it is not a prerequisite for monetary integration (Hefeker 1997). This does not mean that economic integration can be achieved against political will, but that the will to reach a political union is not necessary to have a stable and workable fixed exchange rate system. In our view, Asian monetary integration is too easily dismissed by implicitly setting equal the goals of the European integration process and Asian monetary integration. Hence, the political difference might be less relevant than is often argued, particularly when not talking about full monetary union.

Even disregarding political integration, one has to note that Asia and Europe are still worlds apart in many other aspects as well. While Europe has had more divergence in income levels as it has today, it is also clear that GDP per capita differences are still quite high among Asian countries seen in a European mirror. In fact, the standard deviation is the highest in comparison with Europe, Oceania, and the accession countries to the EU (Wyplosz 2001). But not only does per capita income vary widely, so does the structure of markets range from very concentrated (in South Korea) to atomistic (Taiwan) and the amount of regulation in the economic and financial system, comprising issues such as transparency and shareholder rights. Also, the share of openness differs widely as well, from more than 100 percent for the city-states to a tenth of this (for Japan), as Eichengreen (2002) reports.

This would suggest that there will remain considerable need for real exchange rate variability, to account for the Balassa-Samuelson effect and the wide divergence in income, or the lack of real convergence. This would advise against any attempt to reach full monetary union in the near future. It does not rule out a fixed but adjustable arrangement, however.
Europe has been (and to a certain extent still is today) quite diverse as well concerning the economic and financial system, the openness (in particular the difference between small and large countries), the labor market system and so on. While a larger degree of convergence might be achieved in the current EU, this has certainly taken quite a long time to reach. Thus, while we would agree that a full monetary union is not advisable in Asia, this does not necessarily mean that the process of monetary integration in Europe is not informative.

5.1 An Asian ERM

We would suggest that the Asian economies adopt a mechanism similar to the ERM in which there is a multilateral grid to which the countries peg their currencies. The ERM had been designed in such a way that individual countries received a certain weight in a basket currency, the ecu, whose value was determined by the sum of the individual currencies. Countries defined a peg against this basket that should be kept constant. A band around the target value was defined in which the currency could float. If individual currencies hit the bands, intervention of the individual country was needed, but others should intervene as well.

The attractive feature of the ERM is that the relative weights of the currencies could change over time, implying in this case that the weight of the German mark increased. In addition, the system acquired new members over time, since the UK, Spain, Portugal and Greece joined later. Moreover, countries could have different corridors around their target values; the majority had defined that to be at $\pm 2.25$ percent, some countries had $\pm 6$ percent. The system has obviously been sufficiently flexible to account for these changes and differences. Still, a common objection against a system like this is that the ERM has indeed been subject to occasional crises (most notably in the aftermath of German unification). Eichengreen (2002) argues that the ERM only gained credibility when it became clear that it was a stepping stone to full monetary union. While it is certainly true that a system is strengthened if there is a clear political will to reach a more ambitious goal, like monetary union, one should not overlook that the ERM has existed more than 10 years without a fixed time-table for EMU.

The main problems of the "early" ERM have been large and only slowly converging inflation differentials (Gros and Thygesen 1998). Germany (followed by Belgium and the Netherlands) had relatively low rates while other members took considerable time to reach these. The ERM clearly increased its role over time as it became more and more a coordination mechanism and a nominal anchor for member states. Realignments were nevertheless necessary from time to time to account for real overvaluations due to higher rates.
of inflation. Thus, the ERM served the function of nominal anchor by also keeping an eye on competitiveness issues.\textsuperscript{14} Only after convergence had been more or less completed, realignments stopped. Between 1987 and 1992 there were no more realignments, i.e. even before the ratification of the Maastricht treaty with its fixed time-table for EMU this could be achieved. This last period also saw an extension of the mutual financial support agreements for defending individual pegs. More generous financial support lines were probably connected to the convergence and thus a lower chance of actually being forced to use them.

A comparison between the early ERM years and the current situation in Asia at least would suggest that there is less pressure on exchange rates due to inflation differentials. In this perspective, Asia is likely to experience less problems than ERM members were during the first eight years (see table 7; see also Moon and Rhee (1999)).

Table 7: Inflation rates in Asia and the Euro Area in selected years

<table>
<thead>
<tr>
<th>Year</th>
<th>ASEAN5\textsuperscript{1}</th>
<th>ASEAN5 +3\textsuperscript{2}</th>
<th>Euro Area\textsuperscript{3}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Standard Deviation</td>
<td>Average</td>
</tr>
<tr>
<td>1985</td>
<td>6.56</td>
<td>9.26</td>
<td>1985</td>
</tr>
<tr>
<td>1986</td>
<td>1.56</td>
<td>2.37</td>
<td>1986</td>
</tr>
<tr>
<td>1988</td>
<td>4.84</td>
<td>3.04</td>
<td>1988</td>
</tr>
<tr>
<td>1990</td>
<td>5.30</td>
<td>1.96</td>
<td>1990</td>
</tr>
<tr>
<td>1992</td>
<td>5.47</td>
<td>2.32</td>
<td>1992</td>
</tr>
<tr>
<td>1993</td>
<td>5.14</td>
<td>2.74</td>
<td>1993</td>
</tr>
<tr>
<td>1994</td>
<td>5.77</td>
<td>2.29</td>
<td>1994</td>
</tr>
<tr>
<td>1995</td>
<td>5.67</td>
<td>2.83</td>
<td>1995</td>
</tr>
<tr>
<td>1996</td>
<td>5.55</td>
<td>2.83</td>
<td>1996</td>
</tr>
<tr>
<td>1997</td>
<td>4.48</td>
<td>1.78</td>
<td>1997</td>
</tr>
<tr>
<td>1999</td>
<td>6.77</td>
<td>8.97</td>
<td>1999</td>
</tr>
<tr>
<td>2000</td>
<td>2.51</td>
<td>1.27</td>
<td>2000</td>
</tr>
</tbody>
</table>

Average 1990-97 | 5.71 | 2.78 | Average 1990-97 | 5.85 | 3.77 | Average 1979-86 | 10.06 | 6.21 |

Source: IMF International Financial Statistics

\textsuperscript{1} ASEAN5: Indonesia, Malaysia, Philippines, Singapore, and Thailand.

\textsuperscript{2} ASEAN5 + China, Korea, and Japan.

\textsuperscript{3} Euro Area: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain.

\textsuperscript{14} Even in comparative perspective the ERM fares well. Convergence in inflation rates
All this of course does not imply that there will not be speculative attacks on the fixed exchange rates of such a system. There have been attacks on the EMS currencies and there is certainly the danger that there will be attacks on the Asian currencies. This is why we, like Williamson (1999), argue for some flexibility in the set up of such a system. Trying to defend misaligned exchange rates for too long is certainly inviting speculative pressure.15

The collapse of the ERM in 1992 finally was to a large extent due to German unification. What brought down the system there, we would argue, was the lack of will to account for this large asymmetric shock by having realignments.16 The fact that necessary action was taken much too late undermined the credibility of the ERM and lead to speculative attacks as markets became aware of its unsustainability. The ERM crisis is a clear case where action being taken too late only further undermines the credibility of the arrangement (Drazen and Masson 1994). Seen in this light, it only supports the notion that a viable monetary system needs flexibility. While too much flexibility undermines any credibility, it is also clear that too little flexibility has the same effect. That is why we would argue that enough flexibility should be incorporated in such a system. It would be important that the Asian ERM would allow countries to join later, that some of them might even prefer to have wider margins of fluctuation and that, at least initially, the band would not be too narrow. Therefore, our idea would be something of a corridor of ±5-10 percent that could be tightened over time.

A functioning regional monetary system will therefore be characterized by some pressures and some need of adjustment mechanism to account for asymmetries. But this is well compatible with our idea of making the system flexible enough to be able to account for was larger within the ERM than outside of it (Gros and Thygesen 1998).

15 Expectations of some exchange rate flexibility or the possibility of exchange rate adjustments would also increase incentives for agents to apply appropriate measures against foreign exchange risk and decrease the moral hazard to rely excessively on the peg. Simultaneously, this might reduce the inflow of short-term speculative capital inflows (World Bank 1999).

16 The problem was heightened by the fact that some countries had moved to the tighter bands only shortly before.

17 Expectations of some exchange rate flexibility or the possibility of exchange rate adjustments would also increase incentives for agents to apply appropriate measures against foreign exchange risk and decrease the moral hazard to rely excessively on the peg.
changing relative weights of the currencies involved. This would be necessary to include the
Chinese RMB in the system as well. Instead, the Asian monetary cooperation would most
likely imply a float against the US dollar and the euro.

Thus, we would argue that the ERM could be a model for the Asian economies. Especially the post-1992 ERM has been an exchange rate system that has combined stability
with enough room for mild fluctuations of the exchange rate. In this respect, Braga de Macedo
et al. (2002) stress the positive influence of the mutual surveillance framework which has
guaranteed policies were pursued compatible with the stability of exchange rates. In fact,
some coordination mechanism might greatly help to increase the credibility of such pegs.
Such mechanism might be in line with former experiences of ASEAN member countries with
joint committees and regional forums, such as the Manila-group, although they would need to
get more binding force against national decisions. An Asian monetary system might provide
for some degree of cooperation to begin with and provide enough flexibility for more
elaborate and ambitious cooperation in the future. In addition, there should be a mechanism
for financial support, it has been argued (Eichengreen 2002).

5.2 Chiang Mai and the ERM

A first step into the direction of financial support and a coordination mechanism has been
taken with the Chiang Mai initiative. The Chiang Mai Initiative consists of a network of
bilateral swap arrangements to be established among ASEAN countries, Japan, China and
Korea. The initiative is slowly taking shape as Japan has signed currency-swap contracts with
South Korea, Thailand, the Philippines, Malaysia and China. China and Thailand have
concluded a similar contract. Under these agreements, Japan is expected to provide 1 to 3
billion US-dollar to the other countries’ central banks in the case of speculative attacks
against their currencies. Only to China, which has large holdings of the US currency, Japan is
expected to supply yen worth of up to 3 billion US-dollar if Beijing needs to defend the local
currency by selling yen for RMB (for details see Chiapravat 2001).

Potentially more serious is the fact that the amount of intervention is currently restricted
to a rather small sum (Moon and Rhee 1999). It is obvious that such a limited amount cannot
defend a peg against destabilizing speculation. In addition, the decision to activate the sum is
in the discretion of the lender, which could further erode the trust in this mechanism.

Simultaneously, this might reduce the inflow of short-term speculative capital inflows (World
Bank 1999).
However, one should keep in mind that Chiang Mai can be seen as a first step and that more might be mobilized if agreement about this exists (Eichengreen 2002). Moreover, one should not forget that the ERM as well began with rather limited swap provisions that were only extended in the course of the Basel-Nyborg agreement in 1987 (see Gros and Thygesen 1998). A more serious difference could be that the ERM foresaw an unlimited intervention requirement for all countries to support currencies that threatened to leaven their bands. Intervention was not only demanded of the "weak" currencies but also the "strong".

Despite this formal requirement, one can doubt how seriously the obligation to intervene has been taken by the participants of the ERM. The EMS experience has shown that it worked although it has been asymmetric, despite the original symmetric design of the system. The German Bundesbank in particular intervened less than it would have had to do if the system were really symmetric. Instead, it was left to the weak currencies’ central banks to intervene to defend their exchange rates against the deutsche mark. The Bundesbank almost exclusively intervened in the dollar (Gros and Thygesen 1998). Thus, it is unlikely that any observer of the ERM experience would expect unlimited intervention by the usually strong Bundesbank to support weaker currencies. Therefore, an Asian ERM might also be workable without formally declared "unlimited" intervention of monetary authorities. Such an unlimited intervention requirement is at moment rather unlikely to be politically acceptable in Asia, in particular for potential main supporters of the system, such as Japan, which fear that they might end up in a situation where they would have to carry the main burden of intervention.

5.3 Is there Need of Capital Controls?
Comparing to Europe, some observers see Asia at a disadvantage because largely liberalized capital markets are more vulnerable to speculative attacks and currency crises. The main reason Wyplosz (2001) makes out for the stability of the ERM is the existence of capital controls. In his view, most European countries have operated some kind of internal or external

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18 There is the famous argument about the so-called Emminger letter in which the German government promised the then Bundesbank president that the obligation of unlimited intervention would be suspended if German monetary stability was in danger (Emminger 1986).

19 There is the famous argument about the so-called Emminger letter in which the German government promised the then Bundesbank president that the obligation of unlimited intervention would be suspended if German monetary stability was in danger (Emminger 1986).
repression until the early 1990’s. Only the common market required countries to give up these controls, with grace periods being granted to Greece, Portugal and Spain. Therefore, he concludes that integration in Europe has worked so smoothly because the integration of capital markets has not been the main aim of European politicians.

While it is certainly true that underdeveloped capital markets and controls make it easier to defend fixed exchange rates, one should not attribute too much power to capital controls. The effectiveness of these controls has not gone uncontested. Gros and Thygesen (1998) devote some space to that question and conclude that these controls have largely been ineffective. They show that most of the time the on-shore and off-shore interest rates have been very close together, indicating that in normal times there has been no effect of capital controls. Around times of realignment in the EMS there have indeed been differentials, indicating that over the very short-run such controls can be effective.

This would be supportive of capital controls as they could give some breathing space to authorities to prepare for an orderly realignment and avoiding crisis. However, this is not unproblematic either because, as Gros and Thygesen argue, the very existence of these controls might trigger crisis. This is because the presence of capital controls delays outflow of capital if there is an interest rate differential between the home and the foreign country (or because a risk premium on domestic assets is required). That means that the authorities can delay corrective actions in their monetary policy. Therefore in the end the corrective measure taken by the domestic authority is larger than it had been necessary without capital controls. If markets know that these corrections are politically costly for the home government (probably the reasons for the existence of capital controls), the ultimate defense of the fixed rate becomes even more doubtful, which might trigger a speculative attack.

Thus, while capital controls might help, the European experience would suggest that they are not essential. The European experience, especially after 1993, suggests that fixed rates with a certain corridor can survive very well even without tight capital controls.

\[^{20}\text{Similar evidence is presented by Edwards (1999).}\]

\[^{21}\text{A related argument has been made by Bartolini and Drazen (1997) who argue that the absence of capital controls signals that governments will pursue a „good“ policy.}\]
6. Conclusion
The prospects for an immediate full monetary integration among the Asian currencies are, at the moment, not very bright. However, flexible rates are obviously neither the choice of most of the Asian countries. But whereas the Asian currencies have been pegged to the dollar in the past, this is no longer a solution for the future. The dollar is losing ground because trade shift away from the US towards more regionally concentrated trade. The yen is also not likely to assume the role of the dollar. Apart from political reasons, the Japanese economy is likely to lose relative weight against the Chinese economy. Although China is not yet the regional dominant economic power, it is very likely to grow into that role. The gradual opening of the Chinese economy to the outside world suggests this. This prospect must be taken into consideration when planning such a long-term project as monetary cooperation.

Given that flexible rates are no alternative and that neither the dollar nor the yen are appropriate to serve as anchor currencies, the alternative is a more symmetric monetary system, such as proposed in a common basket peg with sufficiently wide margins of fluctuations. Drawing on experiences within Europe, we consider something like an Asian monetary system as workable alternative that would build on the experiences with the EMS. The comparison with Europe should not be taken too far, however. The main difference is that in Asia nothing like a full monetary union is seriously debated, nor should it be. We agree with most observers that a full monetary union is neither advisable nor politically possible for the foreseeable future. This is a clear difference to the European case.

Still, what the European case makes very clear is that the process of monetary integration is a very long one, in the European case taking half a century. But along the way the system has already provided a significant and substantial degree of integration and, overall, stability among the European economies and currencies. Such a regional integration seems to be more adequate for the Asian economies than any suggestions that focus on outside currencies (such as the dollar) or one particular currency of the region (the yen). A common peg would be more adequate economically and much easier to implement politically.

We leave it open whether such a peg should from the very beginning include all ASEAN+3 currencies. Their relative weight should be open to adjustment to account for changes in the relative weight of the economy concerned and for further members of the system. This would allow in particular China to assume a gradually increasing importance, reflecting its growing role in international and Asian trade and investment. This, however, would imply a decreasing weight of the Japanese yen in this basket. It is open to speculation whether that would be an agreeable option for Japan, perhaps with the optimism to maintain
its economic importance in the region, or whether Japan would prefer to stand apart of such an arrangement, similar to the UK in Europe. In any case, it seems clear that Japan could not be the anchor of such a system, nor could the RMB take this role immediately. The Chinese currency can only grow into this role through an evolutionary process. In that perspective, an Asian ERM would be a much more symmetric system than the European ERM.
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