Exchange Rate Cooperation in East Asia
A European View and a Simple Solution

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Abstract

Most East Asian countries are actively pursuing economic integration within the world economy. They do so at two levels: regional and global. Is this strategy possible? Europe, for instance, has clearly first worked toward regional integration, but then it moved towards global integration. East Asia is embracing a dual approach in which both regional and global integration are pursued simultaneously. This is sometimes seen as undermining exchange rate cooperation.

This paper examines the evolution of integrative efforts within East Asia and notes that one stumbling block is the issue of exchange rate cooperation and stabilization. Various proposals have been presented by they are seen as too much of a constraint. The paper notes that effective exchange rates can be stabilized without advanced cooperation. It would be enough that each interested country adopts its own basket peg vis à vis its non-regional trade partners.

1. Introduction

Ever since the 1997-8 crisis, the East Asian countries have taken a number of initiatives designed to provide collective support in the face of adverse financial market conditions. In particular, the Chiang Mai and Asian Bond Market initiatives represent significant efforts. The Chiang Mai Initiative (CMI) is meant to provide a collective line of defense against currency turbulence. It sets a reserve pooling arrangement that member countries could tap in case of necessity. The Asian Bond Market Initiative (ABMI) aims at reducing currency mismatches and at building deep and resilient markets, which should reduce both the frequency and impact of financial disturbances.

Yet, neither initiative directly promotes monetary cooperation. The CMI is a network of bilateral swap agreements, not a collective undertaking. Furthermore, activation of these agreements is subject to the lender's approval, which implies some form of surveillance. Mutual surveillance could become a forum for some degree of monetary policy cooperation, yet no criteria or procedures have been agreed upon so far. The ABMI concerns the financial markets. Central banks do cooperate as good-will investors, but not in the area of monetary policy.

The East Asian approach stands in contrast with Europe's. The CMI bears some resemblance to the European Monetary Cooperation Fund (EMCF) established in the 1970s, but this arrangement proved to be largely useless. In fact, it is the failure of the EMCF to develop into a cooperative arrangement that triggered a change of approach. By 1979, many European countries had joined the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS), which instituted fixed exchange rates and an elaborate system of unlimited mutual support. The success of the ERM, as well as its shortcomings, subsequently prompted the adoption of a common currency. Thus, if there any lesson to be drawn from the European experience, it is that monetary cooperation must be anchored around the exchange rate. Put differently, monetary cooperation starts and ends with exchange rate cooperation. In many ways, the Asian countries have focused on treating the symptoms, not the cause of currency instability.

Aware of this limitation, the ASEAN+3 countries agreed in 2006 to explore steps to create regional currency units (RCU), whose contents remain to be specified. This agreement was

preceded by a proposal for the creation of an Asian Currency Unit (ACU). The proposal was developed by the Asian Development Bank and a number of Japanese economists, among them Mori, Kinukawa, Nukaya and Hashimoto (2002), Ogawa (2006), and Ogawa and Shimizu (2006). The proposal echoes the European Currency Unit (ECU), which was established at the same time as the EMS. Here again, even though there has been some private market use of the ECU, the experiment was not successful in the sense that it never played any role in fostering monetary policy cooperation.

It may be surprising that the East Asian countries adopt approaches that were previously tried in Europe and failed to deliver on their promises, while they do not consider those approaches that worked. Part of the reason is that the ERM could only survive for two decades because it was underpinned first by exchange controls. It underwent a severe crisis when the controls were collectively removed in 1990. Quite plausibly, the ERM only survived because it was underpinned by the formal commitment to adopt a common currency by the end of the decade.[1] Another difference concerns the politics of exchange rate cooperation. Europe's largest countries were keen to stabilize their exchange rates to buttress the Common Market. East Asia's two largest countries, China and Japan, are strongly opposed to any regional currency agreement. The remaining countries wonder what good it would do to enter into politically difficult arrangements if China and Japan are not part of it.

This paper suggests a simple way of developing soft monetary policy cooperation. It elaborates on the basket peg proposal advanced by Williamson (1999) by showing that there is no need to adopt a common basket to achieve much of its stabilization effects. Using counterfactuals, we show that own-basket pegs deliver approximately the same outcomes. Of course, own-basket pegs do not encourage exchange rate cooperation. Yet, pretty much as the adoption of the euro hardly reduced national monetary policy autonomy among ERM members, the adoption of own-basket pegs would lead to monetary policies that are sufficiently enough similar that further cooperation would not entail much of a loss of autonomy. In that sense, own-basket pegs can be seen as a confidence-building exercise.

Basket-pegging lies at the heart of the Asian Currency Unit (ACU) proposal advanced by the Asian Development Bank. There are important differences, however. They are largely

[1] The removal of capital controls was predictably followed by a currency crisis in 1992-3.

symbolic, but not only. We start by briefly reviewing the ACU proposal. Then, in Section 3, we present our counterfactuals of own-basket pegs. The last section presents our conclusions.

2. The ACU Proposal

2.1. ACU Arithmetic

Both the ADB and Ogawa (2006) define the ACU or Asian Monetary Unit (AMU) as a basket of the thirteen currencies of the ASEAN+3 member countries weighted by their relative importance in terms of GDP, trade volume, population, and the degree of capital account liberalization.[2] These definitions are directly borrowed from the European Currency Unit (ECU).

In Ogawa (2006), the 13 ASEAN+3 currencies are weighted by their relative GDPs valued at purchasing power parity (PPP) and by total trade volumes (the sum of exports and imports). In order to reflect the most recent trade relationships and economic trends, Ogawa uses the averages of these variables for the most recent three years for which data are available. The value of the AMU is then quoted in terms of a weighted average of the two major international currencies – the US dollar and the euro. The weights are the shares of the US and the Euro area in total trade of the ASEAN+3 countries, 65% and 35%, respectively. The benchmark period of the ACU exchange rate of the dollar-euro, for which the ACU exchange rate is set at unity, is chosen for a period (2000-2001) when the total trade balance of the thirteen countries with the rest of the world and the total trade balance of ASEAN+2 (excluding Japan) with Japan was close to zero.

Formally, the "euro and dollar value" of AMU is:

$$E^{(\$,€)/AMU} = a\, E^{\$/AMU} + b\, E^{\$/AMU},$$

where a = 0.65 and b = 0.35, and the dollar and euro exchange rates are:

$$E_t^{\$/AMU} = \sum_{i=1}^{n} w_i E_t^{\$/i} \text{ and } E_t^{€/AMU} = \sum_{i=1}^{n} w_i E_t^{€/i},$$

where w_i is the weight of Asian currency i and $E_t^{\$/i}$ and $E_t^{€/i}$ are the dollar and euro exchange rates of currency i at time t, respectively. This, in turn, defines the dollar-euro exchange rate

[2] The unit of account is variously referred to as ACU or AMU. We use these denominations interchangeably.

or currency *i* as $E_t^{(\$,€)/i} = a\, E_t^{\$/i} + b\, E_t^{€/i}$. The ACU exchange rate of the currency *i* is then:

$$E_t^{i/AMU} = \frac{E_t^{(\$,€)/AMU}}{E_t^{(\$,€)/i}} = \sum_{j=1}^{n} w_i \frac{E_t^{(\$,€)/j}}{E_t^{(\$,€)/i}}.$$

Still following the ERM divergence indicator, Ogawa defines the AMU Nominal Deviation Indicator (NDI) for currency *i* at time *t* as:

$$NDI = \frac{E_t^{(\$,€)/i} - E_0^{(\$,€)/i}}{E_0^{(\$,€)/i}} \times 100,$$

which measures the percent discrepancy from the benchmark rate $E_o^{(\$,€)/i}$ observed in 2000-1.

2.2. Uses of the ACU and Europe's Experience

The ACU is initially presented as a unit of account. Much as was the case for the ECU. However, (Kuroda, 2006a, 2006b) also suggests that it could assist ASEAN+3 policy authorities in the conduct of their exchange rate policies by serving as a surveillance indicator for regional exchange rate policy coordination in East Asia. Several proposals go further. Ogawa and Shimizu (2006) note that the ACU may serve as a common currency basket to which the ASEAN + 3 members, except Japan, could link their currencies. Kuroda further notes that it could facilitate the creation of a regional market for basket bonds denominated in the ACU. It has also been suggested that the ACU could be the first step to making the yen as the anchor currency for the member states of ASEAN + 3.

Europe's ECU was used as an internal accounting unit for all official transactions and accounts of the EU, an option not open to East Asia. The central banks did not use it in their transactions. For some advocates, the ECU was a political gesture towards monetary union. In that sense, the ECU was symbolic, just as the SDR is a symbol for a future world currency. There was no such official commitment, however. In practice, the ECU played no particular role in stabilizing the ERM currency exchange rates, which were defined on a strictly bilateral basis. Although, initially, the ECU divergence indicator was expected to impose a symmetric intervention burden on weak and strong currencies to intervene, it was never really used. Market interventions were mostly carried out by the weak currency countries well before the limits of the system were reached, so that the burden was largely asymmetric. The only real lasting effect of the ECU is that when the euro became the European Monetary Union's new unit of account, its conversion rate was €1 = ECU 1, as

stipulated in the Maastricht Treaty.[3]

2.3. ACU-Denominated Asian Basket Bonds

The view that ACU could become the "currency" of choice for Asian bonds seemingly challenges the lessons drawn from the European experience. It is true that, as bilateral exchange rates became increasingly stable within the ERM in the late 1980s, private borrowers started to issue ECU-denominated bonds. Some governments followed suite and the ECU occupied a modest but nontrivial place among the main currencies used for international bond issues. Technically, it never was a currency on its own, but a basket. It is this feature that was deemed attractive: as an average of several exchange rates, the value of the ECU was generally more stable than that most of its constituent currencies, as was its rate of return.[4] The Deutsche Mark, one of the world's strongest currencies, could have offered even more stability but, as argued by Dammers and McCauley (2006), ECU instruments benefited from active restrictions on its internationalization by the Bundesbank, which (mistakenly) feared inflationary consequences. The EU did little to encourage or otherwise supported the development of the ECU bond market, which shrunk after the 1992-3 ERM crisis.[5]

An important difference, though, is that the advocates of Asian basket bonds, including ACU bonds, envision an active role of the public sector. Indeed, governments could issue ACU-denominated debt as could the ABF. The question is whether there exists sufficient demand for such a product. *A priori*, we would expect that if such a demand existed, private institutions would have exploited the market opportunity. Indeed, it is not difficult for investment banks or other securities firms to create and market ACU-denominated bonds, or for that matter in any currency basket. The fact it has not happened so far casts doubt on the viability of this proposal.

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[3] The reason is that many private and public contractual arrangements were denominated in ECUs. The stipulation was meant to allow for a smooth continuation of these contracts, which were all redenominated from ECUs to euros.

[4] The launch in 2004 of the Bloomberg-JPMorgan Asia Currency Index is remindful of the ECU. Like the ECU it is a basket of Asian currencies, not a currency on its own. Much like the ECU assumed a life of its own as a privately created basket of European currencies, this index may develop a niche market.

[5] It can be noted that the European Investment Bank and several governments have issued ECU-denominated bonds.

It may seem strange that investors do not seem to demand such instruments, which provide some desirable stability properties. In fact, they do, but they do not need synthetic currencies. They can easily hold a portfolio consisting of bonds in different currencies. Self-made diversified portfolios allow each investor greater flexibility than a basket-denominated bond. For the ACU to capture a significant market share, it should provide some advantages. The most obvious one is transaction cost saving. The weakness of basket-denominated bonds, which affected ECU bonds, is that it requires numerous currency conversion costs. To overcome this disadvantage, the ACU should become a quasi-currency, which would require a commitment by the monetary authorities. This would come close to the adoption of a common currency in Asia, a step that is currently ruled out.

Another hurdle is the weakness of regulatory controls and of market infrastructure in many Asian countries. The proponents of ACU bonds must identify these restrictions and spell out how they could be mitigated before proposing a public sector involvement in the development of such a market.

2.4. The ACU as a Common Basket of Internal Currencies for ASEAN+3

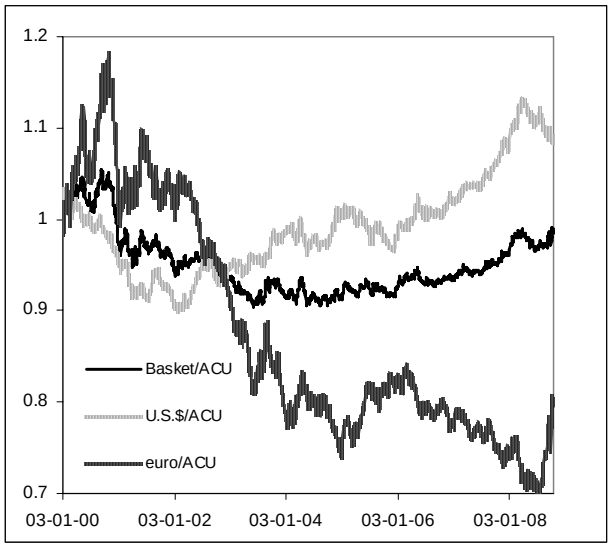
Williamson (2005) has argued that monetary policy coordination would be easier, and beneficial, if the East Asian countries were to adopt a common basket of external currencies including the dollar, the euro and the yen, rather than carrying on with different baskets.[6] This view is shared by Ogawa and Shimizu (2006) as they propose that the ACU be used as a common basket. In their mind, however, Japan would not peg to the common basket and the yen would remain a free floating currency. Obviously, the yen would still play a dominant role in the evolution of the ACU (especially if the weights are calculated in terms of the nominal GDP instead of PPP-adjusted GDP, as the ADB currently does). With the yen in the basket, a great deal of variations of the ACU vis-à-vis the dollar and euro would result from changes in the dollar-yen or the euro-yen exchange rates. Most of the changes in the ACU exchange rates of the twelve countries of ASEAN+3 will also be caused by changes in their bilateral exchange rates against the yen.

6 Kawai and Takagi (2000) and Kawai (2002) have also advocated similar arrangements for East Asia's emerging economies.

This is illustrated by the recent evolution of the ACU, depicted in Figure 1. Since early 2005 and until mid-2008, the ACU has appreciated against the dollar while losing in value vis-à-vis the euro, with an overall appreciation vis–à-vis the dollar-euro basket. The depreciation vis–à-vis the euro is largely explained by a weakening of the yen and by the inflexibility of the dollar-renminbi exchange rate at a time when the dollar has sharply depreciated. With sizeable external surpluses, the group of ASEAN+3 countries had no reason to let their currencies follow the dollar in depreciating vis–à-vis the euro. The reversal of the dollar and euro exchange rates has brought opposite movements, although the basket value of ACU keeps rising, again due to the large weight of the yen.

Figure 1 ACU Exchange Rates

Jan.3, 2000-October 13, 2008 - Index January 2000 = 1



Source: RIETI (http://www.rieti.go.jp/users/amu/csv/exchange_rate.csv)

The two currencies with the heaviest weights in the ACU are the yen and the renminbi. This means that if the other currencies were to peg to the ACU, they would have to follow monetary policies that, loosely speaking, are the averages of those carried out by China and Japan. Since the renminbi is closely linked to the dollar, they would be *de facto* on a yen-dollar standard. If Japan cannot or does not want to give up its free floating status, the ACU would have to be based on the currencies of the ASEAN+2. Given the size of China, such an

ACU would be dominated by the renminbi. The renminbi would then become the regional anchor currency and the common currency peg would be *de facto* a renminbi bloc. Given China's relatively restricted financial markets and heavy currency management, a renminbi bloc is unlikely to meet the economic needs of the other member countries. In addition, the ASEAN plus Korea will find it politically unacceptable to join a renminbi bloc.

This discussion suggests that the ACU cannot be used for regional monetary policy coordination. Nor can ACU provide any useful guidelines to individual members of ASEAN+3 in formulating their exchange rate policies. The similarity with Europe is simply missing. By itself, the ECU did not play any coordinating role even though, excluding Sterling, all major country currencies were subject to the tight ERM agreements. Quite to the contrary, the European experience indicates that, even in the unlikely case where the three largest countries – China, Japan and Korea – were to agree to stabilize the ACU exchange rates in term of the US dollar or euro, they would have to agree beforehand to a set of rules governing intra-group exchange rate adjustments. In Europe, the ECU did not matter, ERM rules did.

3. Own-Basket Pegs

Monetary policy coordination in Europe was based on explicit commitments (bilateral parity pegs, automatic and theoretically unlimited mutual support, consensus on realignments) that significantly reduced the margin for maneuver of national central banks. If this is beyond reach in East Asia and if there is a shared desire to stabilize regional exchange rates, a basket peg is an attractive alternative, but which basket. The previous section is meant to point to the political sensitivities and technical difficulties of adopting a common basket, like the ACU.

If agreeing to a common basket is challenging, it is natural to ask what would be lost of adopting own-basket pegs. The agreement would be to peg, but the choice of the peg could be left to each country. A priori, one suspects that such an approach would fail to provide any stabilization at all. This is incorrect as we now illustrate.

3.1. Own-Basket Arithmetic

We look at a set I of n countries i (in practice the East Asian countries, except Japan that lets

its currency float) and $n + p$ countries j, adding the set K of countries that have significant trade volumes with the first group. Set K includes Japan, the US, the euro area and other countries. Let e_i^j be the (log of) nominal exchange rate of currency i vis a vis currency j (units for currency j for one unit of currency i). When looking at the stability property of an exchange rate regime, we need to examine the evolution of the currency's effective exchange rate. The (log of the) effective nominal exchange rate of currency i is:

$$(1) \qquad e_i^{eff} = \sum_{j \neq i} w_{i,j} e_i^j$$

where $w_{i,j}$ is the weight of country j in country's i trade ($\sum_{j \neq i} w_{i,j} = 1$). Note that $e_i^j = e_i^{\$} - e_j^{\$}$ where $e_j^{\$}$ is the (log of) dollar exchange rate of currency j (dollars per unit of currency j).[7] Therefore:

$$(2) \qquad e_i^{eff} = \sum_{j \neq i} w_{i,j} (e_i^{\$} - e_j^{\$}) = e_i^{\$} - \sum_{j \neq i} w_{i,j} e_j^{\$} .$$

Then we compute $E_i^{eff} = \exp e_i^{eff}$ and $\overline{E}_i^{eff} = \frac{E_i^{eff}}{E_{i,0}^{eff}}$, where the denominator corresponds to a base period.

We now consider own-basket pegs, linking currency i to the three major currencies, the dollar, the euro and the yen. Evaluated in dollars, the value of country i's basket is:

$$(3) \qquad h_i^{\$} = h_{i,\$} \ln 1 + h_{i,€} e_€^{\$} + h_{i,Y} e_Y^{\$} = h_{i,€} e_€^{\$} + h_{i,Y} e_Y^{\$} = \sum_{z \in Z} h_{i,z} e_z^{\$}$$

for $i \in I$ and Z = (\$, €, Y). Note that $\sum_{z \in Z} h_{i,z} = 1$. Here $e_€$ and e_Y are the dollar values (in logs) of the euro and the yen. Importantly, $h_{i,z}$ are country i's own weights so that $h_{i,z} \neq h_{j,z}$.

For comparison purposes, we imagine common baskets adopted by all countries of set I.

[7] Obviously the log exchange rate of the US is zero.

Expressed in dollars, they are the same for all these countries, so we can omit the subscript *i*:

$$c^{\$} = c_{\$} \ln 1 + c_{€} e_{€}^{\$} + c_{Y} e_{Y}^{\$} = c_{€} e_{€}^{\$} + h_{Y} e_{Y}^{\$} = \sum_{z \in Z} c_z e_z^{\$} \quad (4)$$

where c_z are the common weights, which reflect the trade patterns of set *I* with the rest of the world. As before, $\sum_{z \in Z} c_z = 1$

Following the definition of the effective exchange rate in (1), we define the (log of the) effective own-basket rate for all countries in set *I* as:

$$h_i^{eff} = \sum_{j \in I, j \neq i} w_{i,j} h_i^j + \sum_{k \in K} w_{i,k} h_i^k \quad (5)$$

where we define $h_i^j = h_i^{\$} - h_j^{\$}$ and $h_i^k = h_i^{\$} - e_k^{\$}$.

This effective exchange rate is a counterfactual which assumes that all countries in set *I* peg their currencies to their own baskets. Note that we have $\sum_{j \in I, j \neq i} w_{i,j} + \sum_k w_{i,k} = 1$. This implies that the effective value of the own-basket of country *i* can be rewritten as:

$$h_i^{eff} = h_i^{\$} - \sum_{j \in I, j \neq i} w_{i,j} h_j^{\$} - \sum_{k \in K} w_{i,k} e_k^{\$} \quad (6)$$

The same approach can be applied to the (log of the) country *i*'s effective exchange rate of the common basket:

$$c_i^{eff} = \sum_{j \in I, j \neq i} w_{i,j} c_i^j + \sum_{k \in K} w_{i,k} c_i^k \quad (7)$$

where we define $c_i^j = c_i^{\$} - c_j^{\$}$ and $c_k^i = c_i^{\$} - e_k^{\$}$. As before, this can be calculated as:

(8) $$c_i^{eff} = c_i^{\$} - \sum_{j \in I, j \neq i} w_{i,j} c_j^{\$} - \sum_{k \in K} w_{i,k} e_k^{\$}$$

Using (6) and (8), we see that the difference between own and common basket pegs is:

$$h_i^{eff} - c_i^{eff} = (h_i^{\$} - c_i^{\$}) - \sum_{j \in I, j \neq i} w_{i,j} (h_i^{\$} - c_i^{\$})$$

which can be expressed as follows:

(9) $$h_i^{eff} - c_i^{eff} = \left(\sum_{z \in Z} (h_{i,z} - c_z) e_z^{\$} \right) - \sum_{j \in I, j \neq i} \left(w_{i,j} \sum_z (h_{j,z} - c_z) e_z^{\$} \right)$$

This shows that the difference between the two baskets can be decomposed into two parts, both of which only involve movements among the exchange rates of the currencies that make up the baskets. This is normal since both own-basket and common-basket rates are linear combination of the anchor currencies.

The first term involves difference in the weights of the home currency own and common baskets. If the weights are based on trade patterns, it is a measure of how this country's trade vis-à-vis the anchor currency countries differs from the average trade of countries in set *I*. This term can be small if the countries have similar trade patterns. More importantly, it can be written as:

$$\sum_{z \in Z} (h_{i,z} - c_z) e_z^{\$} = \text{cov}(h_i - c, e^{\$})$$

This term will be small if the covariance between these trade differences and the movements of the anchor currencies *vis-à-vis* each other is small, which is a natural presumption.

The second term can likewise be written as:

$$\sum_{j \in I, j \neq i} \left(w_{i,j} \sum_z (h_{j,z} - c_z) e_z^{\$} \right) = \sum_{j \in I, j \neq i} w_{i,j} \, \text{cov}(h_j - c, e^{\$})$$

which is a weighted sum of the same covariances of the other countries of set *I*. These covariances too are likely to be small. Note also that the weights $w_{i,j}$ do not add up to unity

since $\sum_{j \in I,\, j \neq i} w_{i,j} = 1 - \sum_{k} w_{i,k}$. Quite intuitively, this sum is smaller the less the countries trade with each other.

3.2. Counterfactuals

We now use the history of exchange rate fluctuations between the dollar, the euro and the yen to imagine what would have been the evolution of East Asian exchange rates had the countries in the region adopted either own-basket pegs or common-basket pegs. This is done by applying either (6) or (8) and then taking the exponentials of the log effective rates $H_i^{eff} = \exp h_i^{eff}$ and $C_i^{eff} = \exp c_i^{eff}$. We then rebase these indices to be equal to 100 over the entire period: $\overline{H}_i^{eff} = \frac{H_i^{eff}}{H_{i,0}^{eff}}$ and $\overline{C}_i^{eff} = \frac{C_i^{eff}}{C_{i,0}^{eff}}$, where 0 refers to the average of monthly data over the reference period.

Because of data availability, set *I* includes only some of the ASEAN+3 countries: China, Indonesia, Malaysia, Philippines, Korea, Singapore and Thailand. Obviously, Japan whose currency serves the role of anchor is excluded. We also add Taiwan.

The weights are computed from trade statistics over 2000-2 (from the IMF's *Direction of Trade*). The set *K* includes 49 countries with which trade is considered, plus the three anchor currency countries. The simulations are conducted over the period January 2000-April 2008.

Figure 2 presents the results. Several interesting observations emerge. First, there is hardly any discernable difference between own and common-basket pegs. We look into this in more detail below in Figure 3. Second, either peg would have considerably stabilized the exchange rates relative to their actual evolution over the sample period. In so doing, it would also have stabilized bilateral exchange rates within the region. This assumes that the pegs could have been maintained during the 1997-8 crisis, which is an issue that goes beyond the present paper. Third, with the exception of Indonesia, we see that the basket pegs would have avoided the sharp appreciation that followed the crisis, and which seems to be currently undoing in the case of Korea.

It is not clear whether the stability of the baskets – an issue that is different of the pairwise

stability – is a welcome effect. The countries of the region are catching up and therefore potentially subject to the Balassa-Samuelson effect. A trend appreciation could therefore be a desirable equilibrium effect, not an overvaluation. A complete study of this question would require looking at real effective exchange rates and is beyond the scope of the present paper. Yet this possibility points to a possibly important shortcoming of basket pegs. We return to this issue in the next section.

3.3. Choice of a basket peg

Turning to the main issue, Figure 3 provides greater detail about the relative evolution of the two basket pegs. They are clearly not identical, but the differences never exceed two percentage points.[8] The key result is that, for all practical purposes, difficult negotiations about what the common peg are pointless. The same outcome can be reached by allowing each country to adopt its own basket. The result is not surprising. As noted above, the presumption from (9) is that differences between the two types of pegs should be small.

A basket peg means that the exchange rate is fixed and that monetary policy autonomy is lost. Independently of the type of peg adopted, the countries effectively follow the same monetary policy strategy. This means that even own-basket pegs already imply a considerable degree of monetary policy coordination. In fact, this approach would resemble the ERM strategy in Europe, even though the pegs are not explicitly bilateral.

By normalizing the index to 100 over the sample period, we conceal an important issue: at which level should the pegs initially be set? It might seem that a coordinated policy would have to achieve an agreement on this issue, and this might be perceived as a lethal topic. The issue is less formidable than it seems. Indeed, assume that a country seeks to buttress competitiveness by adopting an undervalued exchange rate. This would be its last monetary policy decision, since afterwards the exchange rate would simply be driven along the path of its basket. Since the real exchange rate cannot permanently deviate from its equilibrium value, the consequence of an initial undervaluation would be a temporarily higher inflation rate, which would eventually erase the competitive advantage. Much the same happened in Europe when the final euro conversion rates were set at the time of the launch of the

[8] Note that the indices are computed to be 100 over the sample period so, by construction, they are the same on average.

common currency. Ireland started off with an undervalued exchange rate and underwent higher inflation; Germany was in the opposite situation and recovered competitiveness through lower inflation. In both cases, the process took less than ten years. The incentives are to pick the “right” level, although these incentives may not be clearly felt by policymakers.

More delicate is the possibility of a Balassa-Samuelson effect. Since the East Asian countries are at different stage of development, the real appreciation implied by the effect will be different. Ideally, the countries would jointly monitor the situation and agree on realignments, as was the case in the ERM. The virtue of basket pegs is that they are *de facto* monetary policy coordination. They would therefore naturally encourage mutual surveillance. Surveillance is an important objective of the CMI, but it does not come by easily for a good reason. Under the CMI, surveillance aims at determining whether national policies are of a good enough quality to justify emergency loans. Judging policy qualities is subjective and therefore potentially divisive, especially as it implies reviewing a broad array of policies. Under a collective basket pegs, surveillance would be limited to estimating the equilibrium exchange rate. Although our knowledge and instruments are too imperfect do allow for precise estimates of the equilibrium exchange rate, the issue is narrow and technical, therefore less divisive. Anyway, if realignments are banned or postponed, the Balassa-Samuelson effect will spontaneously materialize in the form of different inflation rates. The risk of not agreeing, therefore, carries relatively limited costs.

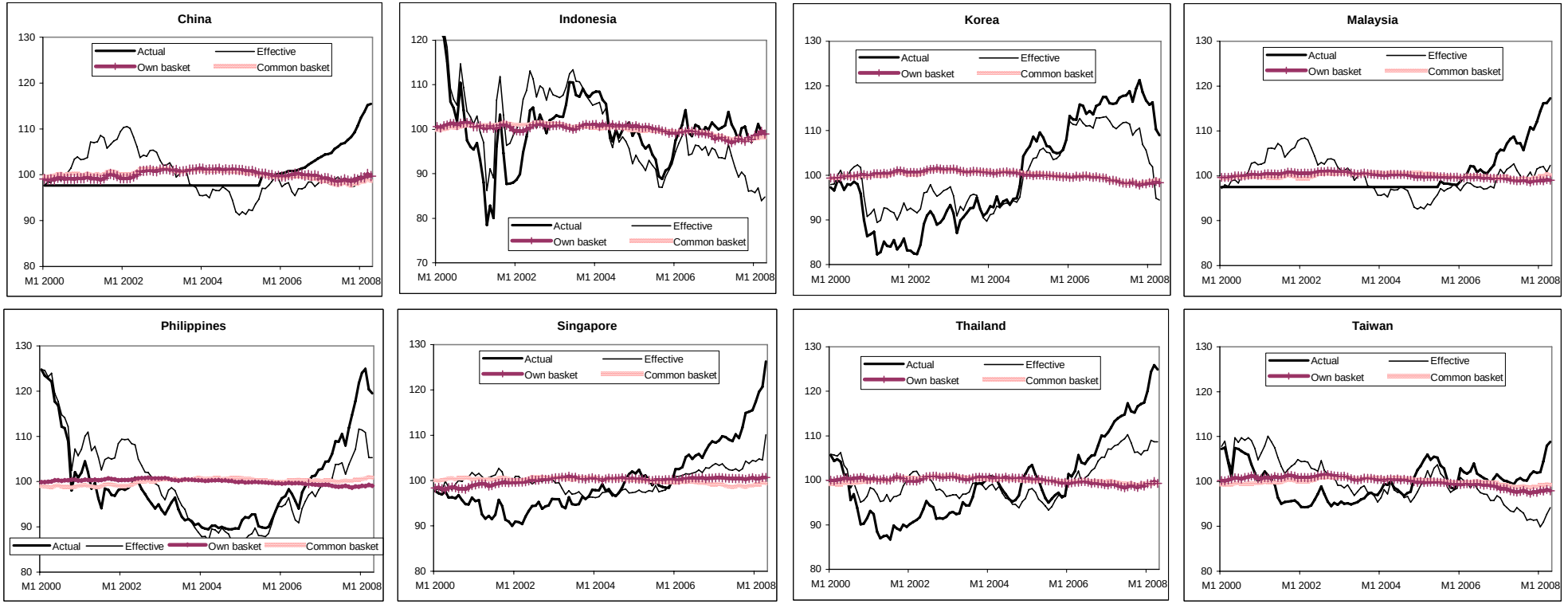


Figure 2 Actual and counterfactual exchange rates (Index =100 over sample period)

Notes: 'Actual' is the historical dollar exchange rate; 'Effective' is the historical effective exchange rate computed using trade weights; 'Own' and common-basket rates' are the counterfactuals computed with (6) and (8), respectively. An increase in the indices represents a nominal appreciation.

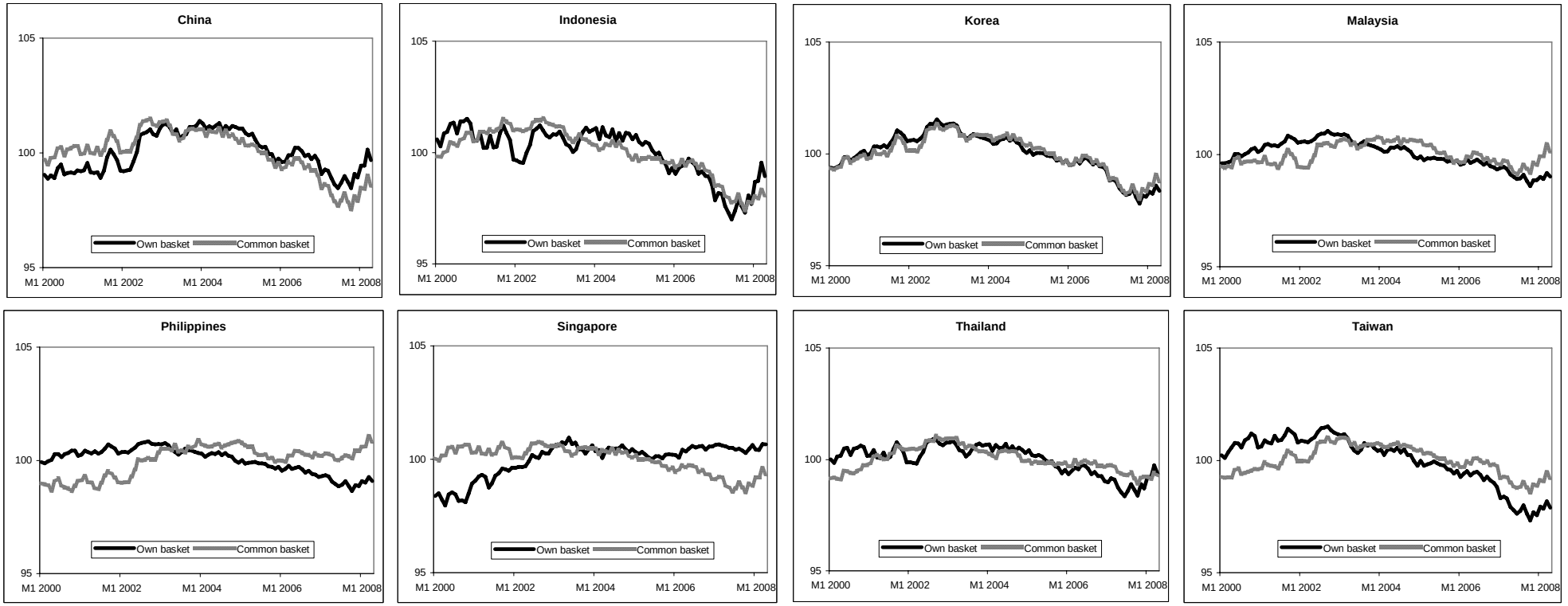


Figure 3 Differences between Own-Basket and Common Basket Pegs (Index =100 over sample period)

4. Conclusion

European policymakers have long considered that intra-European trade cannot flourish if internal exchange rates are volatile. In that sense, European monetary integration is inward-looking. In Asia, the aim has long been outward-looking. Officially, ASEAN+3 members too intend to stabilize bilateral exchange rates while collectively floating against the dollar and euro. In this sense they are trying to emulate the European model of monetary integration as reflected in their interest in introducing the ACU. Yet, at least until recently, the export promotion strategy has long focused East Asian policymakers on trade with the rest of the world chiefly the US and Europe. Thus, while they share the European view that exchange rate stability is important for trade, Asian policymakers have thought of stability vis-à-vis the dollar first, and the euro next.

As long as they mostly worry about each other's exchange rate mostly because of competition for access to markets outside the region, the inward-looking approach followed in Europe is ill-adapted to their strategic vision. Things may be changing, though. As they catch-up to the technology frontier, the Asian countries will become less dependent on export promotion; the evolution of Japan is a point in case. As their income levels grow, intra-regional trade will become more intense. In fact, they now trade nearly as intensively among themselves as the EU countries do. Crucially, China has become the largest export market for all East Asian economies and it is only a matter of time until this is the case for Japan as well. As the world's fastest growing region, the Asian market is already attracting increasing attention in the rest of the world. The proximity advantage – strongly captured by gravity trade equations – suggests that intra-East Asia trade is likely to become increasingly important. The reduced link to the dollar (or the euro) – China is the only country rigidly pegging to outside currencies – is an indication that, indeed, things are changing.

Stabilizing regional exchange rates requires a high degree of monetary policy coordination if this is done directly the European way. But it can be done indirectly by pegging to third currencies. This issue has been prominent around the AMU proposal. Difficulties have arisen regarding the composition of the basket. The main message from this paper is that these difficulties can be circumvented at no cost by simply letting each interested country to adopt its own basket. If that strategy were adopted – and provided that the pegs can be upheld –

East Asian countries would be de facto coordinating their monetary policy and indirectly stabilizing their effective and bilateral exchange rates. As important, maybe, is that such a strategy builds in incentives for mutual surveillance that is not intrusive.

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