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# Financial Integration in Asia

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# 1 Introduction

This note explores the progress of financial integration in Asia by comparison with the EU. In the process of development the Asian countries have focused more on access to the main markets of the world than to each other. Only more recently after the experience of unwelcome contagion in the crises of 1997–1998 has there been a concerted effort to develop instruments to promote greater financial stability in the face of external shocks. Many initiatives are currently underway to improve regional financial integration and there is a movement to achieve monetary integration. However, the region is very heterogenous and inequalities in size and development will make full integration difficult. The process is thus likely to be drawn out but there is a clear direction.

The Asian countries discovered how heavily they were financially integrated in the crises of 1997.[1] The countries in the region have in general been very open to capital flows but had not spent a great deal of effort on regional integration. The regional initiatives had been dominated by trade and cooperation, and, in general, financial integration had occurred through the market rather than through determined political action. If anything the 1997 experience caused the countries to step back from increasing financial openness, both in imposing more extensive capital controls as in the case of Malaysia and in trying to set up regional cooperation among the central banks in a form that would enable them to isolate their economies better from financial shocks to one or other of their members.[2]

Regional integration has not been driven by the strong sense of political and non-economic purpose that has characterised its European counterpart but the Asian countries have observed that European integration has been a source of regional strength and stability and looked to see what might be developed for their own benefit. Most of the interest in the financial field has focused on monetary integration, not simply because that is technically much easier to achieve than financial integration but because the Asian crises were primarily foreign exchange crises, although these spilled over into banking crises, particularly in Indo-

[1] For the purposes of this discussion, south Asia in the form of India, Pakistan, Bangladesh and Sri Lanka is omitted, as these countries are not included in many of the regional initiatives. In the same way the wider definition of Asia-Pacific is not included even though that group does have some common initiatives particularly for example through EMEAP (the Executives Meeting of East Asia and Pacific central banks). (See *Table 1* on groupings of countries in the region.) Thus the analysis includes the 10 East Asian Nations: China, Hong Kong, Indonesia, Japan, South Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand, with some limited discussion of the rest of ASEAN; Brunei, Cambodia, Laos, Myanmar and Vietnam. This total grouping is normally referred to as ASEAN + 3 and the grouping of ASEAN countries within our list of 10: Indonesia, Malaysia, Philippines, Singapore and Thailand, the ASEAN-5.

[2] Chinn and Ito (2007) compute an index which shows how much the rate of increase of financial openness among the Asian countries has slowed since the crises.

nesia. The focus of action has been on trying to develop bond markets, particularly through what is labelled the Chiang Mai initiative in 2000, which enables a network of currency swaps to be activated among the member countries. The concern (Sa and Guérin, 2006) is that much of the problem in the Asian crisis occurred because countries had difficulties matching both currencies and maturities in the period of turbulence. If bond markets had been deeper then they might have been able to recover much more rapidly.

*Table 1* **Membership of Organisations Related to Financial Integration in Asia**

| **Country** | **ASEAN** Association of South East Asia Nations | **ASEAN + 3** | **EMEAP** Executives Meeting of East Asia Pacific Central Banks | **APEC** Asia Pacific Economic Cooperation | **SEACEN** South East Asian Central Banks* | **SEANZA** South East Asia, New Zealand, Australia† |
|---|---|---|---|---|---|---|
| Australia | | | ✓ | ✓ | | ✓ |
| Brunei | ✓ | ✓ | | ✓ | ✓ | |
| Cambodia | ✓ | ✓ | | | | |
| China | | ✓ | ✓ | ✓ | | ✓ |
| Hong Kong | | | ✓ | ✓ | | ✓ |
| Indonesia | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Japan | | ✓ | ✓ | ✓ | | ✓ |
| Laos | ✓ | ✓ | | | | |
| Malaysia | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Myanmar | ✓ | ✓ | | | ✓ | |
| New Zealand | | | ✓ | ✓ | | ✓ |
| Papua New Guinea | | | | ✓ | | ✓ |
| Philippines | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Russia | | | | ✓ | | |
| Singapore | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| South Korea | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Taiwan | | | | ✓ | ✓ | |
| Thailand | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Vietnam | ✓ | ✓ | | | | |

*Also Fiji, Mongolia, Nepal and Sri Lanka
†Also Bangladesh, India, Iran, Nepal, Pakistan and Sri Lanka

A second concern, identified very clearly in Gernberg et al. (2005), is that the lack of development of financial markets in the Asian region is contributing to global imbalances and is inhibiting both future growth and stability. The high savings rates in the region are not entirely soaked up domestically and it is argued that some of the build up of foreign assets is not simply because of the imbalance in trade and artificially low exchange rates but because there is a lack of domestic instruments of a quality approaching those in the US, Europe and elsewhere among the advanced countries.

The growth strategy of the Asian countries has meant that their first objective has been access to the major markets round the world and they have therefore acted internationally rather than regionally. Hence measures of openness can be misleading as they reflect this internationalisation. Having developed substantially but separately they have been turning increasing attention to their own region as it has become an important market in its own right.

# 2 A preliminary

Asia is a heterogenous region (see *Table 2*), not simply in terms of size, with China larger than all the other countries added together in terms of population and larger in terms of GDP than all the rest together except Japan but also in terms of level of development. Hong Kong, Japan, Singapore, South Korea and Taiwan are all comparable with the rest of the developed world in terms of GDP per head in purchasing power parity terms.[3] South Korea, the lowest ranked of these five at 28$^{th}$ in the world tabulation, is only five places below New Zealand and is above Portugal, while Japan is higher than Germany. Brunei is in the same league in financial terms but this derives from oil wealth and does not reflect a similar level of development across much of the country. These countries have a similar range of GDP per capita to the current euro area. There is then a wide gap in levels, with Malaysia next in line having half the GDP per head of South Korea. There is then another gap to the Philippines, with the rest of the countries going right on down to Laos and Myanmar, which are only a tenth of the South Korean level, itself 30% lower than Singapore.

This is a major diversity and clearly the process of integration in such a region will itself be a much more diverse process, with barriers that bear little relation to economic development coming down first. However, generalised integration, even in financial markets, is unlikely to be rapid even though the countries may be converging – very rapidly in some

[3] These figures all come from the IMF but differences in calculation depending upon the PPPs used can change both the absolute levels and the rankings quite considerably but the general pattern remains for these countries whichever of the well-known sources are used. GDP figures are much more volatile than GDP per head especially for large countries.

cases. Deeper integration is thus more likely among subgroups, as is reflected in the various groupings that have been formed (*Table 1* above).

*Table 2* **Basic statistics**

| | Population millions | GDP US$bn | GDP/head – PPP US$ |
|---|---|---|---|
| ***Hong Kong*** | *7* | *190* | *41,614* |
| ***Singapore*** | *4* | *132* | *36,289* |
| ***Japan*** | *128* | *4,366* | *34,024* |
| ***Taiwan*** | *23* | *365* | *32,490* |
| ***Brunei*** | *0.4* | *12* | *26,411* |
| ***South Korea*** | *48* | *888* | *25,840* |
| ***Malaysia*** | *28* | *148* | *12,754* |
| ***Thailand*** | *63* | *206* | *9,714* |
| ***China*** | *1,323* | *2,645* | *8,788* |
| ***Philippines*** | *89* | *118* | *5,738* |
| ***Indonesia*** | *232* | *364* | *4,684* |
| ***Cambodia*** | *14* | *7* | *3,743* |
| ***Vietnam*** | *87* | *61* | *3,716* |
| ***Laos*** | *6* | *3* | *2,518* |
| ***Myanmar*** | *49* | *13* | *2,432* |

***Source:*** *IMF*

# 3 Institutional linkages

Up until the crisis there were two main institutional routes to the expansion of regional integration, other than the normal bilateral contacts: the central banks and governmental (see *Table 1*). The central banking organisations are the older. SEANZA was formed in 1956, primarily as a means of providing training throughout the region – very widely defined.[4] This was developed into a much more substantial training and research institution SEACEN, beginning in 1972. It has developed a centre in Kuala Lumpur (separate from the Bank Negara) but courses are put on in various of the member countries each year. However, most relevant to the development of financial integration has been EMEAP, the somewhat curiously named Executives Meeting of East Asia and Pacific Central Banks, set up in 1991 and supported by the Bank of Japan. This has enabled practical working level cooperation. A number of working groups have been set up on specific issues over time, including recently: banking supervision, financial markets, and payment and settlement systems.

[4] Every other year the members take it in turns to put on a focused training course for promising younger staff. However, the organisation of this provides an opportunity for meetings and exchange of views at a more senior level.

The oldest intergovernmental institution is ASEAN, set up in 1967 by Indonesia, Malaysia, the Philippines, Singapore and Thailand, and since expanded to cover all 10 of the South East Asian countries and in 1999 to include China, Japan and South Korea in the annual financial discussions (ASEAN+3). The original grouping of 5 is usually now labelled ASEAN-5. Financial matters form only a small part of the organisation's activities, which include most aspects of economic cooperation. The secretariat is in Jakarta. Since the effective economic region was rather wider and the main countries excluded a much wider Asia Pacific Economic Cooperation (APEC) was set up in 1989 and expanded to include monetary and financial issues in 1994. Most of the main countries with a claim to have a Pacific coastline are members, with a secretariat in Singapore.

Since the crises most of the main international organisations have sought to encourage regional financial and monetary integration, particularly the Asian Development Bank[5] and the IMF, but also the BIS and the World Bank.[6] The relationship with the EU through ASEM (the Asia Europe Meeting) was formalised just beforehand in 1996 and provides a direct opportunity to discuss aspects of the European experience relevant for steps towards regional integration in Asia. At the developmental stage it is probably an advantage to have such a range of competing organisations trying to move the countries of Asia closer, generally as well as financially. More political commitment is needed before a dedicated organisation like the European Commission becomes appropriate.

# 4 Progress in integration

Inter-regional trade in Asia is smaller than in the EU. In ASEAN inter-regional trade comprises a little less than a quarter of the total but once China, Japan and South Korea are added (ASEAN+3) the share is close to 40% (2004 figures) compared to nearer 60% in the euro area. However, while euro area shares are falling inter-regional trade in Asia is rising. Intra-regional trade growth is primarily intra-industry, largely occurring because of vertical specialisation and output relocation within the region. Much of the growth has occurred in exports of intermediate goods (Cowen et al, 2006). However, aggregate numbers are dominated by China (Zhang et al., 2005). Intra-area exports in the ASEAN-5 fell between 1992-8 and 1999-2005 in all countries except Indonesia.

[5] See ADB (2004) for example.
[6] Of course regional integration is only a part of the agenda and the IMF/World Bank has sought to improve financial development and stability in all of the Asian countries by a variety of means including FSAPs (financial sector assessment programs) but thus far only a few countries have had one.

Discussions of Asian integration in the 1980s were affected by worries of Japanese dominance. However these fears have been replaced by concerns over Chinese dominance. Because of the disparity in size of the economies, continuing growth in China at anything like recent rates will lead to considerable convergence in the economies to the Chinese economic cycle.

Financial integration does not match the degree of integration through trade. Although nearly half of outward FDI from ASEAN+3 goes elsewhere in the region it only forms 20% of inward FDI. The distinction is to quite some extent between ASEAN and the '+3'. Nearly three quarters of ASEAN FDI goes to the ASEAN+3, while 60% of FDI into ASEAN comes from ASEAN+3. The discrepancy in economic size matters. China is acting as an increasing focus for investment both from outside and within the region. China is no longer simply a production base but an important market in its own right. By comparison the shares of the EU in its own inward and outward FDI are fairly similar, forming 60%-70% of total FDI in each direction.

Against this background, the region received roughly half the global supply of net private capital flows during 2003-2004, with their outstanding portfolio of US$ 1.9 trillion forming some 8% of the world total and 19% of these countries' GDP. However, by contrast, the Asian countries foreign assets had reached US$2.8 trillion by the end of 2004 – 29% of GDP. The shares in both the assets and liabilities are equally divided between North America and the EU(15), with the intra-Asian region assets and liabilities forming only around 10% of the total.

Banking activity is even less regional. The main foreign players are European (particularly the UK) and from the US with Japanese banks only following in third place (South Korea excepted, where they have an important share). Financial activity is increasing rapidly, with claims doubling between 1999 and 2005. But of these claims only 10% are on intra-regional banks and this share is falling not rising. However, it is important not to overlook the importance of transactions by Asian investors in overseas markets (IMF, 2005; BIS, 2002). Moreover cross-border acquisitions are taking place, particularly from Singapore.

There is some debate over whether it is the lack of financial integration that is contributing to the lack of intra-regional trade or whether the causation is the other way round. Eichengreen and Park (2004) subscribe to the former view and Fukao et al. (2003) and Ronci (2004) to the latter. However, these authors use different data, with Eichengreen and Park focusing on banks, Fukao et al. on FDI and Ronci on short-term credits. Simple correlations of trade and financial flows among the East Asia countries (China and Taiwan excluded through lack of data) undertaken by Cowen et al. (2006) for the period 2001-2004 suggest that correlations are positive but relatively small (compared to OECD countries). One year lags or leads have little effect so it is not possible to judge any causal impact.

All this suggests that East Asian financial and economic integration is likely to increase over the future, as it is lower than in regions where the barriers are lower, and the general trend is towards a reduction in barriers. Furthermore, as Asia becomes more of a market in itself, rather than a production location for addressing other markets, the existing pattern that has been rather distorted by the direction of the process of growth will tend to move towards that more common elsewhere. To quite some extent the speed will depend on the rate of removal of barriers and the degree of political encouragement.

# 5 Steps to integrate financial markets

Since the Asian crises there have been several concrete intergovernmental actions to achieve greater financial integration that will be a help to the financial stability of the countries in the region. The best known, the Chiang Mai initiative in 2000, among the ASEAN+3, is an attempt to create a range of swap arrangements that would be sufficient for a member country to protect itself against speculative attacks when its fundamental position is sustainable. Most of the swap arrangements enable a country under attack to obtain US dollars from the other countries provided that it is taking adequate counter measures, such as an IMF endorsed programme.[7] It is thus couched in terms that should reduce any credit risk to a minimum. Furthermore it is likely to form part of the recovery package rather than provide immediate help except as an assurance to foreign investors for countries that are basically sound but have liquidity problems in the event of a sudden loss of confidence.

It is thus not immediately apparent how far this addresses the problem of the slowness and size of the IMF response to the 1997/1998 crises (ADB, 2004).[8] However, the scale is substantial. By early 2006 some 74bn US$ of swap arrangements were in place and Sa and Guérin (2006) suggest that the 6bn US$ swap arranged between Indonesia and Japan in August 2005 did help stabilise the Indonesia rupiah market. Nevertheless the funds available shown in *Table 3* represent only 18%, 36% and 38% of the funds arranged for the crisis in 1998 by Indonesia, South Korea and Thailand, respectively.

[7] The arrangements with China and Japan allow the swap to be in those countries' currencies.
[8] This of course has no implication for what the IMF might do in the event of a new crisis as the IMF's approach has itself evolved over the last decade in the light of experience.

There is thus pressure to expand the pool of resources available and to ensure that funds can be accessed rapidly to head off an attack. For both parties to the swap to be agreeable to activate the arrangement rapidly some form of surveillance has to be in place such that the country under threat can be deemed creditworthy. ADB (2004) contains a plan for implementing such an adequate pool over a period of 15 years. Under the Asian Bond Market Initiative launched by the ADB, bonds have been issued by the international organisations (IFC, World Bank and ADB) in some of the local currencies, while under the Asian Bond Fund Initiatives lunched by EMEAP, the countries have pooled reserves and launched two funds (a Pan-Asian bond index fund, PAIF, and a Fund of Bond Funds, FoFB) investing in the sovereign and quasi-sovereign bonds in the region.[9] At 3bn US$ these funds are small compared with the 1.5trillion US$ bonds outstanding in the region.

*Table 3* **Revised Chiang Mai Agreement Swap Arrangements (US$bn)**

| | ***Borrower*** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Lender*** | ***China*** | ***Indonesia*** | ***Japan*** | ***Malaysia*** | ***Philippines*** | ***Singapore*** | ***S Korea*** | ***Thailand*** | ***Total*** |
| ***China*** | | *2* | *3* | *1.5* | *1* | | *4* | *2* | ***13.5*** |
| ***Indonesia*** | | | | | | | *1* | | ***1*** |
| ***Japan*** | *3* | *6* | | *3.5* | *3* | *3* | *13* | *3* | ***34.5*** |
| ***Malaysia*** | | | | | | | *1.5* | | ***1.5*** |
| ***Philippines*** | | | | | | | *1.5* | | ***1.5*** |
| ***Singapore*** | | | *1* | | | | | | ***1*** |
| ***S Korea*** | *4* | *1* | *8* | *1.5* | *1.5* | | | *1* | ***17*** |
| ***Thailand*** | | | *3* | | | | *1* | | ***4*** |
| ***Total*** | ***7*** | ***9*** | ***15*** | ***6.5*** | ***5.5*** | ***3*** | ***22*** | ***6*** | ***74*** |

*Source:* Sa and Guérin (2004)

[9] Only China, Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, South Korea and Thailand are involved.

# 6 The extent of current financial integration

East Asia is noticeably less financially integrated than Europe. Furthermore, as long as the crisis period is omitted, stock market movements in the East Asian countries are more correlated with movements in the US stock market than they are with the region as a whole (Chai and Rhee, 2005). Moreover, both correlations have increased since the crisis (1999-2003 compared with 1991-1997) but the gap between them has widened, particularly if China is excluded. Thus the relative importance of the US has increased.[10] However, exactly the same pattern is observable for the euro area. Stock market movements of the EU[11] countries are more closely connected with the US in the period since 1999 than they are with each other. Furthermore, their correlation with each other, 0.7, is clearly higher than in East Asia at 0.5. Nevertheless, Europe is not necessarily a yardstick for what could be achieved in East Asia if financial markets were to be equally open, just in the same way that the degree of integration in the US is only an indication of what might be the case in the EU when the single market becomes the reality that was planned. It is the differences in underlying behaviour and structure in the constituent countries and in the shocks that affect them that determines the degree of financial integration in an open market.

The period to period raw correlations among stock markets will be affected by the source of shocks affecting them. The East Asian countries' stock markets were much more correlated in the crisis than they were with the US and the EU countries were much less correlated during their own crisis in 1992/1993, when many countries were forced to devalue with respect to Germany. In an analysis of market returns, Chai and Rhee (2005) show that since the crisis all of the East Asian countries have been more affected by regional shocks than they have been by US shocks. Exactly the reverse was true in the pre-crisis period (from 1991 on). However, Moon (2001) finds that the influence of movements in the US index on the Asian countries increased both during and after the crises.

In Europe the break comes earlier. As soon as the aftermath of the 1992/1993 currency crises is past, the EU countries are much more affected by European shocks than by

[10] Hashmi and Liu (2001), in their study of correlations among the stock markets in Indonesia, Malaysia, the Philippines, Singapore and Thailand over the period 1994-2000, have similar findings. Correlations have increased since the crisis but the stock markets are much more closely related to movements in the US than they are to those in Japan.
[11] EU15 excluding Luxembourg.

US shocks (with the exception of Austria).[12] Perhaps more important for the possible future progress of integration is the further finding that pricing is far less efficient in East Asian stock markets than in the EU. In the EU it is the unexpected that shifts markets compared to one another, whereas in East Asia, information from the past in the same market still has an important impact on current prices.

There is also some evidence from the covariance of excess returns in Hong Kong, Indonesia, Malaysia, the Philippines, South Korea, Singapore, Taiwan and Thailand over the period 1980-98 (Phylaktis and Ravazzolo, 2002). The Korean, Taiwanese and Japanese stock markets are clearly related on this measure as is Thailand with the US. Perhaps more interesting is the strong co-movement in stock market prices and output growth. This would imply that increasing real convergence would lead to greater financial integration in this respect. Of course consumption smoothing through international capital flows would imply that a lack of convergence would also encourage financial integration (de Brouwer, 1999).

# 7 The future path

East Asia has a long way to go in achieving financial integration and there is no shortage of advice to the East Asia countries about how they should develop and integrate their financial markets; see Cowen et al. (2006) for example. The international organisations have been encouraging this as a means of increasing the financial stability of the region.[13] The actions recommended can be placed in 7 categories:

1. Removal of capital controls
2. Removal of internal controls such as the direction of lending for all purposes other than prudential regulation, anti-competitive practices and consumer protection
3. Adoption of harmonised non-discriminatory international standards
4. Creation of a cross-border infrastructure enabling the easy flow of payments, settlement and securities transactions
5. Mutual recognition to allow cross-border operation of financial institutions, local establishment and the interchange of skilled staff.

[12] The Austrian case is sufficiently different that there must be some explicit cause in the data.

[13] The Cowen et al. (2006) paper was written for a Monetary Authority of Singapore and IMF conference on Asian Integration. The Asian Development Bank has been particularly active (ADB, 2004).

6. Harmonisation of detailed requirements
7. Development of financial institutions

However, there is also a set of general preconditions for successful financial integration. Not only must there be a clear legal framework concerning property rights and contracts but the rule of law must apply – such contracts must be demonstrably enforceable through the courts. The system needs to be transparent, with clear legal codes of conduct, restrictions on anticompetitive behaviour, without bribery and corruption, good corporate governance practices, a clear internationally recognised set of accounting standards and so on. The FSAPs and other international assessments are helping in this regard. Again this is an area where the EU experience is helpful in the pre-accession programmes for the new member states – not that they were perfect but they do give good pointers to what can be achieved and the areas where compliance may be difficult to assess.

The first two sets of the recommended actions above are essentially negative integration in the sense of removing deliberate barriers. The other five all require positive measures and hence the changing of established domestic procedures. These are much harder to achieve. Steps 5 and 6 are perhaps the most difficult, as mutual recognition entails accepting that other countries are enforcing equivalent standards to those being enforced domestically – at a level the group determines satisfactory. In a unitary state there is a single set of regulations. In federal states some variation may be permitted but in practice, if there are not to be considerable extra costs, the degree of harmonisation across countries needs to be considerable – a task the EU is finding very time-consuming and slow to achieve despite fast-track authority under the Lamfalussy process. It is already more than 20 years since creating the single market for financial services in the EU began in earnest and much remains to be achieved. East Asia has not yet reached even that starting point and is probably in a similar position to the EU in the early 1970s before the ideas of monetary union were extensively developed.

The lack of financial integration can be measured in three different ways. One is to list the differences in regulations and the outright barriers that exist. However, such simple listing does not give a good indication of impact, although an assessment can be made. A second is to ask practitioners which barriers are important to them in impeding market entry – this proved very effective in the run up to the single European market (Cecchini, 1986). The last is to look at the structure of prices and quantities and judge how far away these are from what would prevail in an integrated market.

Cowen et al. (2006, Appendix II.2) provides a helpful summary of the current extent of restrictions on cross-border investment, distinguishing between the money, bond and equity markets. This therefore gives a good starting point for a simple listing approach to setting out the barriers that need to be removed.

There is very little recent quantitative work to draw on despite a careful survey by Cavoli et al. (2004) and some of results are perverse. As a result they develop some measures of their own for our basic group of 10 countries (listed in fn 1) for the period 1995 to 2002. This gives an opportunity to see the periods before and after the crises (and of course during although this is rather short.

Taking the price approach first, in all periods, uncovered interest differentials indicate the existence of unexploited opportunities for arbitrage profits, which gives the implication that effective restraints were in place. During the crises differentials were generally positive with respect to the more stable economies of China, Hong Kong and Singapore. Since then differentials have narrowed and were negative for Thailand, mainly negative for the Philippines and South Korea. Once the interest differences are expressed in real terms – i.e. after eliminating relative price inflation – Japan, Malaysia and Taiwan show little differential with the US.

However, the existence of differentials is not itself explanation. It may be imperfect capital mobility, imperfect asset substitution, monetary policy or actions by the banks – Bird and Rajan (2001) and Rajan et al. (2002) subscribe to this last view. It is in any case probably more productive to look at differentials in individual sectors rather than at aggregates.

Assessments based on quantitative measures do not fare any better and none of the studies relate to the last decade since the crises.[14] However, such univariate studies do not really reflect the full extent of financial integration – exchange rate fluctuations and uncovered interest deviations both matter, after allowing for differences in consumption cycles, trade and inflation (Takagi and Hiroshi, 2002).

Cowen et al. (2006) place a lot of importance on the lack of vehicles for mobilising savings within the Asian region. Their principal argument is in favour of pension funds and indeed of pension reform that makes people more concerned to establish pensions. However, it is not clear that this addresses the principal problem. In the main there is no problem in persuading people in East Asia to save in order to provide adequate resources for their

[14] Work by Le (2000) covering 1976-96 shows that savings and investment are highly correlated in China and Indonesia implying lack of capital mobility but the next greatest correlations are for Hong Kong and Singapore, which are clearly towards the open end of the spectrum. Thus the results lack credibility (Cavoli et al., 2004). Work by de Brouwer (1999) suggests that there was some consumption smoothing in Hong Kong, Japan and Singapore in the decade up to 1992.

own old age and for family capital to transfer to future generations. The problem is suitable regional vehicles in which to hold these savings and instruments in which they can invest.

# 8 Completing the picture: monetary integration

Before the Asian crises, most of the countries had pegged their currencies to the US dollar, so adoption of monetary union might have appeared relatively more feasible. Since then many of the exchange rate regimes have become more flexible as the rigidity itself proved a serious problem. Thailand and South Korea are inflation targeting and the Japanese and Philippine regimes can be interpreted in a similar light. Indonesia has been trying to move to the same regime but in practice like most of the region it is running a managed float. Only Brunei has an outright currency board but Hong Kong has a fixed peg with the US dollar and the Chinese regime has a very tight peg. Nevertheless, the fluctuations, particularly in real rates, are sufficiently small that a joint regime might not represent a major change in practice. Instituting it however is a different matter altogether.

Monetary union has been actively promoted by a number of groups, most notably the Asian Development Bank, who sees it coming in five stages (ADB, 2004), the first involving 'surveillance' as the countries see how well they perform under the current regimes and develop cooperation.[15] The second step would be similar to the European EMS and would involve pegging to a common currency basket, perhaps labelling this aggregate the ACU to match the ECU. In the second phase this would be a loose peg before moving to a tighter peg in stage 3, with a prescribed band for permissible fluctuations. Stage 4 would an Asian Monetary System, with a stabilisation fund and the ACU becoming a monetary unit in its own right. Stage 5 would be the full monetary union with a common currency.[16]

There is no timetable and the report ends with describing this as a 'long process'. The various contributors to ADB (2004) raise a range of difficulties. These relate both to the preferable ordering of the process of convergence and to the degree to which the countries

[15] A number of surveillance processes are already in place: the ASEAN Surveillance Process (ASP) set up in 1998 and then extended to the ASEAN+3 with the Economic review and Policy Dialogue Process in 1999; and the less formal Manila Framework Group, set up in 1997 under APEC. ADB also has a Regional Economic Monitoring Unit itself.

[16] Running through the various proposals that have been made: for an expanded EMEAP (Rajan, 1999), for an Asian BIS (RBA, 1999), an Asian Monetary Fund (ADBI, 2000), and Asian Financial Institute (Eichengreen, 2001), would require an article of its own but there is clearly no accepted plan for what the institutional framework should be. Institutions normally lie at the heart of the process and its success.

match the accepted criteria for an optimal currency area either now or in the future. However, they all skirt over the crucial governance issues for such an area. When one country is larger than the others put together, how is it possible to have a union where hegemony is not exerted? (Korhonen and Mayes, 2007). China is set to become the largest economic entity in the world and can already determine its own monetary policy. It will be a difficult task for the rest of the region to sort out what sort of economic relationship it wishes to have with it. The current phase of integration in removing the economic barriers to permit access and strengthening the regional ability to withstand shocks are of benefit to all whatever the particular political arrangements. Monetary union is more fundamental. Among larger countries it is a very deliberate decision about political interdependence. For smaller countries it is usually an admission of existing economic linkage and the benefits of a firm anchor that removes the risk premium.

*Table 4* **Convergence of Asian Countries According to the Maastricht Criteria**

| | Inflation rate | Interest rate | Deficit ratio | Debt ratio |
|---|---|---|---|---|
| Cambodia | 5.8 | na | -3.1 | 41.4 |
| China | 1.8 | 2.8 | -1.3 | 19.3 |
| Hong Kong | 1.1 | 3.6 | 0.3 | 1.9 |
| Indonesia | 10.5 | 13.0 | 0.4 | 47.7 |
| Japan | -0.3 | 1.4 | -5.8 | 175.5 |
| Malaysia | 3.0 | 3.6 | *-3.6* | 45.4 |
| Philippines | 7.6 | 10.9 | *-1.9* | 66.9 |
| Singapore | 0.5 | *3.4* | 6.0 | na |
| South Korea | 2.7 | *3.5* | -0.8 | 32.0 |
| Thailand | 4.5 | 5.0 | 0.1 | 47.4 |
| Vietnam | 8.7 | 8.0 | -6.4 | 43.7 |

*Source:* Cowen et al. (2006)
*Notes:* Shading denotes that the convergence criterion is met. Inflation criterion: average of lowest 3 + 1.5%; interest rate criterion: + 2% on the average rate for the lowest 3 inflation countries; deficit criterion: not below -3% of GDP; debt criterion: not to exceed 60%. Australia, India and New Zealand are in the Cowen et al. calculations but since none of these one of the lowest 3 inflation countries they are simply omitted. Exchange rate criterion not computed in original.

It is possible, however, simply to assess the state of de facto integration, for example by comparing the region to the standards set for monetary integration in the EU under the Maastricht Treaty. Cowen et al. (2006) calculate Maastricht style criteria for 14 countries in Asia-Pacific (shown in *Table 4*).[17] On these criteria China, Hong Kong and Singapore qualify

[17] They omit the exchange rate criterion, but since most of the countries are managing their exchange rates it is difficult to know quite how this criterion might be applied.

on all counts and South Korea is within 0.1 of a percentage point of qualifying on inflation[18] but all other countries fail on at least 2 of the 4 criteria (inflation, interest rates, fiscal deficit, debt ratio). Of these Japan is clearly a special case. It has had no trouble avoiding inflation over the last 15 years and indeed has been fighting the threat of deflation. Its very high debt and deficit ratios have been deliberate policies to combat its enduring crisis. Markets do not view these policies as unsustainable and the high savings rates are likely to mean that it will be straightforward to wind down the excesses, although this will take decades. On European experience of the ability to qualify, Malaysia and probably Thailand would be able to meet the criteria shortly if they wished but the position for the Philippines and particularly Indonesia looks much more difficult. Cambodia, Vietnam and the other ASEAN countries not included in the Table are a step back in the process of development. Taiwan, of course, which is also not included, would not have much of an economic problem in converging, the political problem is something else.

One clear difference between the prospects for monetary integration in East Asia and the expansion of monetary integration in Europe is that the Asian countries tend to be running surpluses and their European counterparts deficits. This has implications for exchange rate stabilisation, as this is not a symmetric phenomenon. This in turn reflects the wider problem of 'excess' savings and world imbalances. For those wishing to join the euro area, their partners represent their major markets and hence closer integration appears a key component to maintaining rapid growth. In East Asia by contrast, with the main markets largely being outside the region, integration has until recently been of secondary importance. Their own success is helping increase the regional focus. That in turn may alter the nature of the imbalances.

[18] I have followed the euro area's practice of excluding deflating countries, in this case, Japan, from the calculation of the average for the 3 countries with the lowest inflation rates. If it were not included, the qualifying standard would be 1.9% inflation or less, which would not alter Table 2 but would make South Korea somewhat further off qualification in that period.

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