Asian Financial and Monetary Integration

Challenges and Prospects

Monetary Authority of Singapore

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Economic Policy and Macroeconomic Surveillance Departments
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ISBN 978-981-05-9300-1

Published in December 2007

Economic Policy and Macroeconomic
Surveillance Departments
Monetary Authority of Singapore

http://www.mas.gov.sg

This volume is a product of the staff of the Monetary Authority of Singapore and other external contributors. The views expressed are those of the authors, and not necessarily those of the Monetary Authority of Singapore.

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Printed by Oxford Graphic Printers Pte Ltd

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FOREWORD

This booklet brings together analyses and insights from academics and policymakers on the theme of financial and monetary integration in Asia. This subject featured heavily in the discussions and speeches during the 2006 Annual Meetings of the Boards of Governors of the International Monetary Fund and the World Bank Group, which Singapore had the great honour of hosting.

Indeed, economic integration has become a topic of growing prominence. For individuals, economic integration promises widespread benefits—from enhanced job mobility to a greater variety of products and services at lower prices. For businesses, integration offers not just a wider market, but also facilitates the expansion of production networks across the region to make the most of labour divisions, specialisations and economies of scale. Policymakers and governments are also interested in integration, not merely for its potential to enhance welfare gains for their populations, but also because it could help foster macroeconomic and financial stability.

The time is now ripe for accelerating our efforts towards even deeper integration. Trade and production integration have thus far flourished largely through a market-driven process. It is now time to take this a step further and to deepen this process. The region has learnt important lessons from the Asian Financial Crisis and has built up the resilience of our economies and financial systems. We can now move beyond recuperation, towards proactively developing and integrating our financial markets. This will entail deepening our capital markets, embracing greater financial openness and developing infrastructure to facilitate financial exchange.

The growing significance of financial and monetary integration for Asia makes this a fitting time for this booklet. We hope that it will shed some light on the way forward, on the prospects and the processes for deeper monetary and financial integration in the region.

This booklet begins with an introduction by Professor Andrew Rose, which succinctly gathers together various themes arising throughout the booklet. This is followed by the thought-provoking lecture "Asian Monetary Integration: Will it Ever Happen?", by Mr Tharman Shanmugaratnam, Singapore's Minister for Finance and Minister for Education, originally delivered under the auspices of the Per Jacobsson Foundation during the IMF-World Bank meetings.

In Chapter 3, Professor Barry Eichengreen cogently discusses the case for "The Parallel Currency Approach to Asian Monetary Integration", while Chapter 4, "Asia's Road to Success—From Trade to Financial Integration", is a compilation based on a discussion convening senior policymakers, also held during the IMF-World Bank meetings.

The volume closes with Chapter 5, "Evolving Trade and Financial Integration in Asia". This chapter is based on background research by MAS economists in preparation for a high-level seminar on Asian regional financial integration, jointly organised by the IMF and MAS in 2006.

I would like to extend my deepest appreciation to the contributors to this publication and the seminar discussants, for enriching this work with their knowledge and insights. Finally, I would like to thank Associate Professor Peter Wilson for his expert editing of this publication.

Heng Swee Keat
Managing Director
Monetary Authority of Singapore
December 2007

1. INTRODUCTION

Andrew K. Rose[1]

This volume was inspired by a series of discussions, held largely by central bankers, about the future of Asian financial and monetary integration. The backdrop to the deliberations was the Annual Meetings of the International Monetary Fund (IMF) and the World Bank Group, held in Singapore in September 2006. During the run-up to, and the actual holding of, these meetings, the Monetary Authority of Singapore (MAS) was involved in conducting two seminars attended by high-level policy authorities from Asian and Pacific countries and the international financial institutions. Given the quality and importance of these discussions, MAS is pleased to share them with the public. This booklet utilises the transcript of one of these discussions, reproduces a closely-related lecture delivered by Singapore's Minister for Finance and Minister for Education, Mr Tharman Shanmugaratnam, and provides a variety of background supporting materials.

The issues under discussion are of tremendous importance to economic welfare, both in Asia and abroad. The Asian Financial Crisis, which began in the summer of 1997, had a devastating effect throughout the region. Was it the consequence of excessive or faulty financial liberalisation? Or did it indicate insufficient Asian financial integration? Both viewpoints have been supported by distinguished thinkers. More importantly, what should be done to further improve the Asian economies? Does the successful launch of the euro in 1999 indicate that Asia should imitate Europe and begin a forced march towards monetary

[1] Andrew K. Rose is B.T. Rocca Jr. Professor of International Trade and Professor of Economic Analysis and Policy in the Haas School of Business at the University of California, Berkeley. This introduction was written while he was visiting the National University of Singapore and the Monetary Authority of Singapore from August 2006 to July 2007.

integration? If so, how should Asian countries begin the process of converging towards monetary union? If not, how should they engineer monetary and financial policies to continue growth without disrupting the obvious benefits of enhanced international trade?

The answers to such questions spark profound disagreement among academics, policymakers and informed citizens worldwide. Yet the opinions expressed in the following chapters exhibit a rather remarkable amount of agreement on key issues. While there are certainly disagreements about a variety of issues, these tend to be relatively minor, and are often technical. Let me elaborate on three areas of profound agreement on critical issues of relevance.

First, there is virtually unanimous agreement that the integration of trade and investment across the region has been beneficial for the Asian economies. While already strong—trade between Asian countries accounts for half of all the trade of Asian countries—there is also agreement that it should be deepened further.[2] Much of the recent increase in trade has been driven by China's remarkable entry into the world economy, and the accompanying creation of supply chains stretching across much of Asia. As Japan continues to recover and India begins to open up, this process is likely to accelerate. Still, almost all participants agree that financial integration is probably an effective way to enhance real integration of goods and services markets further. That is, real integration is aided by financial integration.

Second, there is also (again, essentially unanimous) agreement that while considerable progress has been made over the last decade, Asian financial integration is still imperfect. This is especially true once one goes beyond the more advanced economies of the region, particularly Japan. It is also particularly true of bond markets, which are noticeably underdeveloped compared with their counterparts in the

[2] There is essentially no trace of the anti-globalisation sentiment that has been influential in other parts of the world, especially in Latin America.

West, and with regional equity markets and banking systems. Indeed, bond market development is of sufficient concern that the ASEAN+3 (ASEAN, Japan, China and Korea) have developed a much-discussed policy roadmap. Participants believe not only that further financial integration may spur trade integration, but that it will also have a number of auxiliary benefits. Financial integration is thought to enhance growth, diversify risk, and improve economic performance in a host of other ways. Asian savings are enormous, and yet are often channelled outside the region. So, much remains to be done, mostly on the policy side. Effective capital markets require a number of public goods that can only be developed with official support, including accounting standards, payments systems, prudential supervision, and a number of other policy issues discussed at length. Further, such support must be based on international standards if it is to facilitate international integration. Here, Asia is at a disadvantage to Europe, given the latter's extensive policy mechanism at the regional level. The ability of the European Union to hammer out policies on such issues of relevance is essentially absent in Asia. A number of participants also stressed the role of restrictions on international capital flows in stunting financial development. Financial integration requires public sector support; private capital markets (unlike private markets on the real side of the economy) simply do not prosper in a modern economy without the visible hand of government.

Third, essentially no one thinks that Asian monetary integration along the lines of Europe's Economic and Monetary Union (EMU) is either desirable or imminent. Neither the economic nor political pre-conditions exist in Asia, nor are they likely to in the foreseeable future. Asian countries are more heterogeneous than were the participants of the drive to European monetary union, and lack both an "anchor country" comparable to Germany, and a common commitment to integrate so as to avoid conflict. The Per Jacobsson Lecture by Minister

Shanmugaratnam makes these arguments in a clear and persuasive manner.

If not monetary union in Asia, what then? The evolution of Asian monetary regimes is a great unresolved question. While some participants explore the idea of pegging to a common currency basket, such discussions always seem tentative and hypothetical, lacking any real enthusiasm. In Chapter 3, Barry Eichengreen—a lone academic in the sea of central bankers—proposes the creation of a parallel currency, in particular, a basket of Asian currencies to be known as the Asian Currency Unit (ACU). Still, he is the first to admit that its European counterpart met with little success even during the transition to the euro, so that success for an ACU seems even less likely. There is no political agreement inside Asia to proceed towards monetary union. So it seems likely that Asian monetary arrangements, like those in the rest of the world, will continue to be set at the national level. Still, one should not underestimate how different the Asian consensus is compared to that of a decade ago. Indonesia, Korea, the Philippines and Thailand—all hit hard by the financial crisis of 1997—have all adopted domestic inflation targets and accordingly flexible exchange rates.

Central bankers are famously conservative, and for good reason. The issues they deal with are important and difficult to understand even with hindsight. Perhaps most importantly, the world changes slowly; frequent changes of policy are unnecessary and undesirable. But change it does, especially in the critical policy areas discussed in this volume. If this booklet improves our understanding of financial and monetary integration even a little, it will have succeeded.

2. ASIAN MONETARY INTEGRATION: WILL IT EVER HAPPEN?

Tharman Shanmugaratnam[1]

2.1 Introduction: The changing premises of the debate

The last Per Jacobsson Lecture in Asia was in 1997. Mr Joseph Yam, Chief Executive of the Hong Kong Monetary Authority, spoke on a topic broadly similar to what I am speaking on today, which is Asian monetary integration or, as he put it at the time, Asian monetary cooperation. September 1997 was at the onset of the Asian crisis. Since then, there have been major changes and considerable evolution in the debate on Asian monetary integration.

The Asian crisis proved deeper than anyone could have foreseen in September 1997. It has left a scar on the minds of Asian policymakers. But the recovery from the Asian crisis has also been robust, a recovery that is founded on structural reforms that were put in train as a result of the Asian crisis. Exchange rate regimes have evolved. They are by and large more flexible. Capital controls and restrictions—some had been in place for a long time, some were put in place during the crisis—have been eased. And trade and investment are proceeding apace. The region is increasingly integrated in trade and investment and, to a lesser extent, in financial flows.

So Asia today is a very different place from 10 years ago.

[1] Tharman Shanmugaratnam is Singapore's Minister for Finance and Minister for Education. This chapter was first delivered as the Per Jacobsson Lecture by Mr Shanmugaratnam on 17 September 2006 in Singapore. The Lecture was jointly organised by the Per Jacobsson Foundation and the Association of Banks in Singapore. The Per Jacobsson Foundation has granted their kind permission to reproduce the Lecture in this booklet.

The original motivation for proposals for Asian monetary integration—which started off as proposals for an Asian monetary fund and a parallel set of proposals for an Asian currency, that is, a common currency or monetary union—had to do with a desire to reduce Asia's susceptibility to shocks, particularly financial shocks. There was also a broader sense that Asia had to be more self-reliant and gain fuller control over its destiny. And this broader sense reflected, in part, a discomfort at the time with what was known as the Washington Consensus, and a particular discomfort over the role of the IMF in the Asian crisis. Monetary union was in some ways a metaphor for Asia wanting to manage its own affairs.

But Asia has evolved. Asia has recovered. While the crisis remains in our minds, we are no longer in crisis. The Washington Consensus, although of course never a fixed or clearly identified set of views, has also been refined over the years. The conventional wisdom, whether at the IMF or in academia or in policymaking circles in the West, has evolved. There is greater circumspection with regard to optimal exchange rate regimes, greater recognition of the merits of intermediate solutions—as distinct from corner solutions—in exchange rate policy. There is a more nuanced view on the merits of capital controls and restrictions in specific circumstances. And there is a much sharper recognition of the need for financial market stability during periods of structural reform and, in particular, of the need to avoid precipitating financial panic.

Not surprisingly, the objectives and motivations behind the continuing debate for Asian monetary integration have also evolved. The objectives are no longer defensive, no longer preoccupied with crisis prevention or resolution. They are now more forward looking. The objectives are about growth, about greater trade integration, about spurring greater cross-border flows of investment within Asia, and about promoting the integration and deepening of financial markets.

It will be useful, before I address directly the issues involved in Asian monetary integration, for us to take stock of how we are faring in trade integration and financial integration, respectively, because these are the ultimate objectives of the proposals that we have before us on monetary integration. Whether what is proposed is a common currency or a parallel currency or managing Asian currencies against a common basket of currencies, the objective is to promote trade and financial integration so as to enhance economic welfare.

2.2 Asian trade integration is driven by Asia's integration with the world

First, let us take a look at trade.[2] Intra-regional trade in Asia is already rather high. No one expected it to get to this point so quickly. In 1980, intra-regional exports were about 34 per cent of total Asian exports. That proportion is now 50 per cent—not so different from among the member countries of the North America Free Trade Agreement (NAFTA), although still below Europe, where it is about 62 per cent or so.

At 50 per cent, a big chunk of Asia's trade is now already intra-regional. But it is fundamentally different in nature from Europe in a number of respects. Intra-regional trade in Asia has been driven from bottom up, by the activities of firms involved in cross-border production processes. It is basically a supply-driven process.

One indication of this is in the composition of intra-Asian trade, which is quite different from that of intra-European trade. Intra-Asian trade consists principally of intermediate goods—raw material inputs and components of one form or another—rather than final goods, which is what has characterised much of intra-regional trade in Europe.

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[2] See Sections 5.2.1-3 for further discussion of trade integration in Asia.

It has been about vertical integration, with China playing a key part in this. The surge in intra-regional trade in Asia has in fact been shaped by China's integration into the world economy. Around China has been built a whole set of supply chains in different industries that extend across Asia, including Japan, Korea, and Southeast Asia.

This means also that rising intra-regional trade in Asia has not been a process of Asia increasingly looking inward. It has been part and parcel of Asia's integration with the rest of the world economy. If you look at the last 10 years, 1995–2005, intra-regional trade within Asia doubled in volume, which is a very substantial expansion by any standard. But, at the same time, there was no change in the share of Asia's intra-regional trade to its total trade, because trade with the rest of the world expanded equally rapidly. So, over the past 10 years, the share has remained at 50 per cent—despite the doubling in the volume of intra-regional trade.

So it has been a bottom-up, supply-driven process, linked to the manufacturing supply chain, which is increasingly centred on China.

What next? How will this evolve?

I think we are about to enter a whole new phase of growth of intra-regional trade in Asia, and, 20 years from now, it is a fair guess that we will have reached a position not very different from Europe today. There are three reasons why I say this.

2.2.1 Three factors driving a new phase of trade integration in Asia

First, we are seeing now the start of a *new phase of foreign direct investment* (FDI) *inflows within Asia*. There are several factors behind this.

I start with Japan, which is still the largest Asian economy: at market exchange rates, which is what matters for international trade and investment, Japan has the largest GDP in Asia by far, twice as large as that of China. Japan has seen a recovery of corporate profitability and a recovery in the financial position of its banks. It is a healthier economy. And the fundamental transformation in Japan that took place in the 1990s, which was halted for some years, is now likely to pick up pace: the shift from manufacturing to research, and design-driven production, and to services. This will mean a decanting of manufacturing operations, particularly many forms of mass manufacturing that are still located within Japan, out of the country, with major implications for Asia. Take Japan today and compare it with the United States. Twenty-four per cent of Japan's GDP is still in manufacturing, whereas for the United States, the proportion has fallen to 14 per cent. Japan has 18 per cent of employment in manufacturing, compared with 10 per cent for the United States. In both countries, these shares have declined over time, with Japan typically about 15 years behind the United States. And I think Japan is going to continue to move in that direction. It may not reach US levels, but it is going to continue to decant manufacturing offshore. The numbers that we are talking about are very large.

The Economist Intelligence Unit (EIU) estimates that the stock of Japanese FDI abroad will increase by 65 per cent in the next five years. Historically, about one-third of Japanese investment abroad has gone to other countries in Asia. We can expect at least one-third of the increase in the stock of Japanese investment in the next five years and beyond going to the rest of Asia. But it will not be only a China story. Japanese firms have already significantly stocked up on their investments in China. They had been underinvested in China. Their subsequent investments in China have corrected for this, and they are now no longer underinvested in China. So, going forward, for fresh flows of Japanese FDI, we can expect to see a more diversified set of locations—not just China, but Southeast Asia and India as well, that is, a more diversified approach covering the whole of Asia. And with that will emerge new supply chains like what we have seen in the motor industry in Southeast Asia, but extending to a whole set of other industries.

Next, besides Japan, we are now seeing the start of a wave of outbound FDI from other Asian countries that we have not seen before: in particular, from China and India, which will be the major new players in the next 20 years. Chinese and Indian firms are substantial players that are now looking across Asia for new markets as well as new sites for production, much as the Western and Japanese multinationals did in an earlier era. And this, too—whether it is Tata Steel or Hua Wei, or a whole new set of firms coming out of these two large megaplayers—this too is going to lead to increased intra-regional trade.

The *second* factor that is propitious to the growth of intra-regional trade is the fact that the *middle class* is now coming into its own in Asia. It is already large, but it is now growing much faster than GDP. By some estimates, by 2010, we will have a middle class of about 650 million people in China, India, and Southeast Asia. That is about 75 per cent growth in five years, which will mean a tremendous escalation of demand for things that you cannot obtain at home. They will want imported products, which differentiate themselves from the others. This is going to spur a whole new growth of imports, not just from within Asia. There will be an expansion of Asia's demand for the world's exports. The Asian supply chain will increasingly be oriented not just to the United States and Europe but also to Asian final demand as well. This is a new phase in intra-regional trade.

The *third* factor is *the broadening of free trade agreements* (FTAs). The momentum of FTAs in Asia is growing. The Association of Southeast Asian Nations (ASEAN) was a leader, and ASEAN has now set itself a more ambitious target of achieving an ASEAN Economic Community by 2015—with a free flow of goods, services, investments, and skilled people within the Community. ASEAN is also negotiating with China and India to have FTAs with those two megaeconomies.

What started as bilateral deals have cascaded into regional FTAs and can eventually support multilateral trade liberalisation. It is a cascading process which tends to be a little messy and some say carries the risk of having a "spaghetti bowl" or "noodle bowl" effect. But I would say, better a bowl full of noodles than an empty bowl. Better that we create the momentum and the political economy that favour reform in each of these economies through bilateral and regional FTAs. That can only be propitious to multilateral trade liberalisation.

So this process of FTAs, starting with bilaterals, moving on to regionals and then cross-regional FTAs, is itself going to spur intra-regional trade in Asia. This is another reason why I say we are very likely to get to at least 60 per cent of Asian trade being intra-regional within 10 years.

A resurgence of intra-regional investment and the growing domestic demand spurred by a rapidly expanding middle class will lead to an expansion of intra-regional trade, aided and abetted by FTAs that reduce barriers to trade within the region. It is essentially a bottom-up process, aided top-down. With or without monetary union, we are likely to get heightened intra-regional trade.

2.3 Urgency of Asian financial integration

Next, I shall talk about financial market integration—because this too is an important reason behind proposals for a common currency. This is where Asia has lagged, as we all know. Financial market integration has lagged substantially behind trade integration, and this is why Asian saving surpluses are intermediated largely through financial markets outside Asia.

The reasons are also well known. Asian financial markets outside Tokyo are mostly small and illiquid. Bond markets are especially underdeveloped, although government bond markets across the region are now in better shape than they were five or six years ago. However, by and large, the secondary markets for government bonds with maturities beyond five years are not liquid, so there is a lot more work to be done. The corporate bond market is at a fledgling stage. It is more developed in countries like Malaysia and Singapore, where it represents over 30 per cent of GDP but, otherwise, in Asia at large, this is the big opportunity for reform and development in financial markets. My colleagues and I have been speaking about this at other fora, so I will not elaborate here.[3]

Equity markets are more developed but they also are fragmented and less liquid than those in the industrial countries. Market turnover or velocity ratios are generally lower than in the United States or Europe. As a result, Asian equity investors, by and large, have looked elsewhere. They have looked outside Asia to invest surplus funds and to diversify their portfolios. In fact, only 18 per cent of the foreign portfolios of Asian investors are invested within Asia itself. Compare that with the European Union, where about two-thirds of the foreign portfolios of European investors are invested within the EU.

The situation will evolve. It will evolve especially as exchange rates become more flexible so that surplus savings in Asia are not principally held in the form of official foreign reserves but, increasingly, in the form of private holdings of foreign assets.

It will also evolve through collaborative efforts to develop the capital markets in Asia. This is something that cannot be left to the markets alone, because capital market development requires public goods to be in place. It requires governments to act, first, to adopt

[3] See Section 4.5.

international standards of disclosure and international accounting standards, and, second, to provide harmonised rules and regulations across Asia to increase access and reduce costs for investors. We are working on these issues in several fora, including the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP), ASEAN, and ASEAN+3 (ASEAN plus Japan, China, and Korea). There is clearly a lot more work to be done.

We also have to set in place the infrastructure that is required for capital markets to be integrated. There is presently no working cross-border clearing or settlement system in Asia for either the fixed-income or equity markets. It is virtually non-existent. This is again something which all of us are working on—the Asian Development Bank and various regional fora. We need some urgency in this process of putting in place the infrastructure as well as the rules and regulations to encourage greater cross-border flow of funds.

2.3.1 Easing capital restrictions

It will also require an easing of capital controls and restrictions in Asia. We know that sequencing is important. We know that the pace at which you ease capital controls and lift them has to be shaped by prudential considerations and linked to financial stability, particularly of the banking system. But the direction has to be clear and we cannot afford to be too slow in this process.

Asian policymakers have to address the trade-off that we have always faced: the trade-off between wanting to avoid the volatility that comes with freer capital mobility, on the one hand, and wanting and needing greater liquidity in our markets, on the other. We will not have more liquid markets without a freer flow of capital, both from within the region and from global markets. And everyone wants liquidity—not just short-term investors or alternative fund managers but also long-term investors, who prefer more liquid markets so that they can exit without paying a high price. So what is in the interests of short-term investors is also by and large in the interests of long-term investors.

We have to pay careful attention to sequencing. But we cannot be too slow in lifting capital controls and restrictions in the region if we want to develop healthier and deeper financial markets.

We should aim for a seamless flow of trading, clearing, and settlement across the debt and equity markets in Asia. But the outcome of this will not, I think, be what you see happening in Europe, where you have an extremely heavy concentration of financial activity in one financial centre, that is, London, with a number of smaller, satellite financial centres outside London. In Asia, I can see, for a long time to come, vibrancy in several centres: Tokyo, by virtue of the enormous hinterland around it provided by the Japanese economy; Shanghai too, increasingly servicing a large domestic hinterland; Mumbai coming up and eventually occupying the same place; the international financial centres, namely, Hong Kong and Singapore, each having distinct niches, competing with each other, but also complementing each other; and other domestic financial centres—Kuala Lumpur, Bangkok, Jakarta—some of which will also have international niches, like Kuala Lumpur in Islamic finance.

Therefore, I see competition and complementarity in this emerging set of financial centres across Asia—not the London effect.

2.4 Asian monetary integration: A way forward

What do these developments mean for Asian monetary integration?

The debate over Asian monetary integration is now about whether a common currency or some system of coordination of exchange rate policy across Asia can foster enhanced intra-regional trade, investment, and financial flows. There is a decent economic case for expecting that it would. Most of the economic studies of such currency unions provide evidence that either a common currency or some formal arrangement to link currencies with each other will be advantageous to intra-regional trade and financial flows. In the European case especially, it is clear that the development of financial markets and cross-Europe financial flows have been spurred by the introduction of the euro.

Put simply, the European experience involved a schema where economic integration started principally with trade, then moved on to monetary integration. A single currency, in turn, spurred greater financial integration and reinforced trade integration. The question is whether this European schema is relevant or appropriate for Asia. I would argue that it is not.[4]

2.4.1 Why the European schema is not appropriate for Asia

The fundamental issue for policymakers concerns the trade-off between the benefits of having a common currency, which arise principally from enhanced trade and financial integration, and the costs of losing autonomy over domestic monetary policy—that is, losing the ability to adjust either your exchange rate or domestic interest rates in response to your own economic cycle. This is the basic trade-off that Asian policymakers inevitably face when they ask themselves if a single currency, or any other form of monetary integration, will enhance economic growth and the welfare of their citizens.

Are Asian countries prepared to lose their ability to use the exchange rate as a shock absorber in certain circumstances? Are they willing to lose the ability to adjust interest rates to respond to economic cycles? And is nominal convergence a necessary pre-requisite in Asia for real economic convergence—for achieving a greater commonality of

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[4] See Section 4.3 for further discussion on the relevance of Europe's experience for Asian integration.

economic cycles in countries across the region and achieving over time a convergence in real incomes?

Even in Europe, this question is still being played out. These are still early days in the experience of the euro zone, but the evidence so far is that nominal convergence has not led to a narrowing of real economic differences. Some argue that nominal convergence has accentuated real economic divergences because of the loss of flexibility on the part of national policymakers to use monetary policy as a buffer or mechanism for adjustment in response to economic shocks.

Asia will face a more challenging task than Europe in ensuring that the costs of monetary integration do not outweigh its benefits. *First*, because *economic disparities* in Asia are wider than in Europe—far wider. In Europe, disparities in per capita income across countries are something in the order of 3 or 4 to 1; meaning that the richest economy, in terms of per capita income, is about three to four times as rich as the poorest within the group. In Asia, the ratio is about 50–100 to 1.

What this also means is that we are likely to see, for a very long time to come, a large difference in growth rates between Asian economies with low per capita GDPs that are catching up and transforming themselves, like China and some of the ASEAN economies, and the more mature, higher-income, slower-growing Asian economies. This will likely mean different paths for their real effective exchange rates as well.

Second, economic structures in Asia are very different. We have economies that are governed by advanced technology and services, economies that are largely agrarian, and economies where mass manufacturing is the driver of growth. So these are very *different economic structures*, even with a high overall degree of intra-regional trade. The shocks that Asian economies face and their response to shocks will therefore often be asymmetric. This makes exchange rate coordination a tricky task, even under favourable conditions.

Third, there is a lack of a suitable *anchor player*. In the 40 years of transition to a common currency in the euro zone, the first 15 years involved pegging to the US dollar while the last 25 years really involved *de facto* pegging to the deutsche mark. How this became possible can only be explained by events and experiences specific to European history—a history that brought a Germany that had gone through hyperinflation to be totally committed to low and stable inflation, and whose post-war social compact gave the Bundesbank the independence to pursue monetary policy with that singular objective. Further, because Germany was by far the largest economy in the Europe of the last quarter century and the divergences between Germany's circumstances and the rest were not so wide, most European countries were willing to commit themselves to following the Bundesbank. That is how they made this transition to a single currency, over 25 years—and even then with considerable stresses and strains in the union along the way.

Asia does not have the equivalent of a Germany to anchor the transition. Japan, currently the largest economy, has the low inflation preferences required of an anchor country. But Japan is very different from the other economies for reasons I have mentioned—different growth profile, different economic structure, different shocks affecting it, different responses to shocks. And Asia lacks, very obviously, the political history that brought the leading European countries together to decide that as a matter of political imperative, a union was preferable to any other outcome. Asia lacks that.

Will China—which will eventually be the largest Asian economy—play the role of a Germany? This is hard to envisage. China, for the next 20 or 30 years, will be an economy going through major transformation. It is still a principally agrarian society. No one can predict exactly how China will unfold. But an economy going through major structural transformations cannot play the role of anchor. Further, it will take some time before China itself can have an efficient monetary policy transmission mechanism.

So we do not have the advantage that Europe had in making the difficult transition from having different national currencies to a common currency by following a *de facto* leader in the deutsche mark.

Asia's strength lies in its diversity. This diversity is what makes intra-regional trade an attractive and compelling economic proposition. This diversity can also help in the diversification of financial portfolios across Asia. But, it is this same diversity that militates against monetary integration, because it raises its costs, including the risks of destabilisation arising from monetary union.[5]

2.4.2 Intermediate proposals for Asian monetary integration

If a common currency or monetary union is therefore not viable, are there alternative intermediate proposals that are worth considering? Several proposals have been made.[6] Broadly speaking, they fall into two sets.

The first is the idea of a currency basket—for Asian countries to manage their own currencies against a common basket through some form of a coordinated, managed float system. This common currency basket system would serve to constrain monetary policy and exchange rate policy independence among the member countries. Each of us would use the same currency basket as the benchmark, and adopt some form of a peg or managed float against this basket: possibly a band with a centre point, with some flexibility in terms of the crawl of this band, but essentially *de facto* fixing against a common currency basket.

This is an appealing idea, but it would face great challenges of transition. With freer capital movements—which are essential if we

[5] See Sections 4.4 and 5.4.3 for related discussions.

[6] See Chapter 3 and Section 5.4.4.

want trade and financial integration—and our divergent economic circumstances in Asia, it would be especially challenging to sustain a system equivalent to the exchange rate mechanism (ERM) or the snake in Europe for a period of years. Even the ERM faced tremendous stresses along the way, requiring great political commitment to the eventual goal of achieving monetary union, to see them through. Asia does not have the same political imperative. So the strains and stresses arising from a coordinated system of pegs or managed floats against a common currency basket will not only risk destabilising monetary integration but could also erode confidence in the larger game of Asian integration in trade and finance.

The second set of proposals involves establishing a parallel currency—an ACU or Asian Currency Unit, just like the former European Currency Unit (ECU). Some of the proponents of an ACU will make it very clear that this is not a transition to a common currency: the proposal is merely for the setting up of a parallel currency, that is, a unit of account that could be used in the settlement of cross-border trade, or by financial institutions as a currency of denomination for bonds and other financial instruments. It will be a market-driven process with no obligation on the part of the national monetary authorities to peg their currencies to the ACU. It is a parallel benchmark of sorts.

I think this is worth considering, particularly if it can promote the debt market in Asia and help develop the regional capital market. It is not in any sense a scheme for *monetary* integration: there would remain national currencies with national monetary policies. I see it as a scheme for *financial* integration. It would be useful to have a currency of denomination that is widely accepted across Asia for bonds and other instruments: this is something we can explore.

But most proponents, like Barry Eichengreen, also agree that it will be a very slow process for an ACU, or any parallel currency, to be accepted by the market. Even in Europe, before the advent of the euro, the ECU never really took off as a currency of denomination, whether for financial assets and instruments or for trade. It never really displaced national currencies before the euro actually came into being.

If that was the case in Europe, it is all the more likely to be true in Asia. I would say that we can explore this idea, particularly if we can use a parallel currency to spur the development of financial markets, but it is not a scheme that takes us in the direction of monetary integration as such. And, as some have pointed out, too, prudential supervisors will also want to make sure that financial institutions, particularly banks, when using an ACU as a currency of denomination for loans or other assets, will not face currency mismatches *vis-à-vis* their national currencies, which have typically been the currencies of denomination of banks' liabilities. So prudential supervision is also likely to hinder the advancement of an ACU.

So an ACU is not a bad idea, but it is not intrinsic to the larger argument of whether we need Asian monetary integration or some form of coordination of national currency movements.

2.4.3 Toward de facto *monetary policy coordination*[7]

What, then, is the alternative? I think the alternative is what we are already seeing unfold before us. First, Asian exchange rates have now become a lot more flexible, compared with the period before the Asian crisis. To be sure, we are not all rushing toward freely floating exchange rates; in fact, apart from the yen, I do not think there is any other truly freely floating exchange rate in Asia today. But the majority of Asian currencies are now in some form of a managed float, with varying degrees of fixity or flexibility. We are all mostly operating a managed float system, that is, an intermediate solution. That is the first development.

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[7] See Sections 5.4.1-2 for related discussions.

Second, there has been increasing adherence to inflation targeting, or commitments to low and stable inflation as the objective of monetary policy. We see this across the region. Although the inflation thresholds may differ, the thresholds are all coming down. There is increasing clarity and conviction that the objective of monetary policy is to maintain low and stable inflation.

The combination of these two developments—the shift toward managed floats and the shift in the objective of monetary policy toward low and stable inflation—has brought about, *de facto*, a certain degree of coordination in monetary policy across Asia. Indeed, if you look at the correlation of Asian exchange rates over the past six years, that is, 2000–06, compared to the years before the crisis, 1990–96, the correlation for the recent period has been much higher despite the move toward greater currency flexibility.

I think this *de facto* monetary policy coordination—not top-down, but obtained because national authorities find it in their own interests to move in this direction—is not a bad way to go. It preserves flexibility when required. It allows secular trends in effective exchange rates to diverge over time to reflect the very different rates of productivity growth and the different transformations we are going to see among economies in Asia.

And it retains the agenda for change as a national agenda. Any top-down process, any process that is overly coordinated in Asia—by a committee or body outside of the national authorities—will not incentivise politicians to take ownership of change. The future of Asia is about change and reform in almost every sphere, requiring great political effort to convince populations, convince banks, convince firms, to move, to open up, to shake out the inertia. And unless national politicians and authorities feel that they own the agenda, change is going to be difficult.

This process that we are seeing—market-driven, national authorities responding to their own economic circumstances—leading, *de facto*, to increased monetary coordination is, I think, the best way to go.

2.5 Conclusion: Keeping the geometry open

Let me conclude.

Intra-Asian trade has come a long way and has more potential yet. The FTAs that we are working on now across the region will foster its growth, but it is essentially a market-driven process. Market forces are going to take it further. Financial market integration has been progressing more slowly, and there is a lot more work to be done—it deserves greater urgency.

These are the big projects, the welfare-enhancing projects—trade integration and financial integration. These are the projects that will deepen liquidity and lower the cost of capital, spur investment, raise growth, and lower unemployment, which are the objectives of Asian policymakers. And they are founded, ultimately, on the diversity that we see in Asia. This same diversity is what will constrain monetary integration, and even the transition to any form of monetary integration.

The present path toward *de facto* monetary coordination is therefore, in my opinion, superior to any scheme of formal coordination.

Will it be necessary to have a scheme of formal coordination at some point in the future? I don't know. We need not rule it out, but the case is not compelling as it stands. The case is not compelling to move from *de facto* coordination toward a more formalised arrangement of exchange rate coordination.

We will only know in 20 years' time what the new Asia will look like. We will only know what happens to China, India, Japan, and

Southeast Asia, and what the interactions will be between them, as we go along. This is a continent in transformation, and that means that we should not fix the geometry too early, whether in trade or in finance or in monetary integration. And monetary integration sends very strong signals on what the geometry is. We should keep the geometry fluid, keep it open, keep it looking outward. That is what has gotten us to where we are today, and remains crucially relevant for tomorrow.

Japanese economists such as Kojima used the metaphor of "flying wild geese" ("*ganko keitai*") to describe the phenomenon of Asian industrial development through regional economic integration. Japan, at that time a leader, passed down technology and know-how to the NIEs (newly industrialised economies), which in turn passed it on to the Southeast Asian countries in a process of collective catch-up. It was a scheme that described the links and interdependencies between the Asian countries and how we ride on each other's strengths. It was a good description of Asia in the '70s and '80s. It may be too structured, too hierarchical to describe the Asia that is now evolving. But it is not a bad way to look at Asia going forward, if we see flexibility in the arrangement and constant leap-frogging, yet all countries moving up in tandem.

Asia need not be defensive about not following the European path of top-down integration. We should celebrate the fact that Asia has got where it is through bottom-up, market-driven efforts. Keep it open, keep it fluid, and avoid doing anything that leads to a tripolar world.

Thank you very much.

2.6 Questions and answers

QUESTION: *You made a persuasive case, that countries should have flexibility to pursue the exchange rate and interest rate policies that best suit their circumstances. How significant do you think the danger is that, in doing so, you may create tensions with other trading partner countries, perhaps within the region, or maybe even especially if the region is coordinated, that you may create a pattern of payments imbalances that provokes reactions from abroad? I am thinking, of course, of the situation now where many Asian countries semi-coordinate their exchange rate policies but generate very substantial surpluses, which lead, at least at the political level, to a certain amount of noise from the rest of the world.*

MINISTER THARMAN: I think that's a very important question. It is one of the weaknesses of the present situation that there is no immediate check on countries that want to run exchange rate policies that are effectively "beggar thy neighbour" policies aimed at short-term competitive gain.

But the situation is not one where these policies can be sustained for long, because each economy that runs, say, an undervalued exchange rate, faces its own problems within a matter of time—typically, the problems of excess liquidity, leading to distortions in their own economy. I believe too that policymakers are increasingly aware, through multilateral surveillance, through the advice we get from the ADB, the IMF, and others—they are increasingly aware of these problems.

There is a much stronger consensus in Asia now on good policy, good monetary and exchange rate policy, than there used to be before the Crisis. So, I would argue that Asian countries will realise that it is in their self-interest not to pursue currency policies aimed at the short term but to pursue currency policies that are aimed at a secular path that reflects the underlying fundamentals of their economies.

The current imbalances are not satisfactory for Asia—not just for the United States and others.

QUESTION: *My question is related to the accumulation of huge foreign exchange reserves in Asia. How do you view this huge accumulation of foreign exchange reserves, with a huge portion in US dollars, in relation to the exchange rate policies and respective economic interests of the countries concerned?*

MINISTER THARMAN: Well, that's a very large question that in fact has been discussed at several fora during these IMF and World Bank Meetings. Let me say very briefly that it is not just a question of exchange rate policy but fundamentally a question of savings and investment imbalances. And if we look at the sources of savings-investment imbalances in Asia—in China, in Southeast Asia—they suggest that a very complex set of structural issues are in play, such as Chinese consumption, with savings rates high and consumption low, being shaped by social security systems that are not fully developed. Why are Southeast Asian investment rates not as high as we would like? Again, the issues are structural—uncertain labour laws, the need for further reforms in the business environment and in financial supervision—these are some of the concerns that policymakers are working at.

I would say we should look past the external imbalances, look at the causes in savings and investment flows, and address solutions to those causes.

QUESTION: *You argue for an endogenous monetary integration process. What prospects do you give for a formalised top-down* *economic and monetary integration process for Asia and other parts of the world? Do you rule out success for such a process?*

MINISTER THARMAN: Well, that is my whole talk, but as I concluded, we should always stay pragmatic in Asia. Never rule out a solution. The case is now not compelling, and I think the *de facto* evolution of Asian monetary regimes has been one that will allow us to get quite far in achieving our real objectives. We should always remember that our objective is not monetary integration. Our objective is trade and financial market integration.

NAFTA is a very interesting parallel for us to look at—Canada, the United States, and Mexico—all with floating exchange rates. They don't fix their exchange rates. There is a very high degree of trade integration, a high degree of financial integration, a high degree of cross-border FDI. Economic growth there has gone up by most measures. It has not required currency fixity.

I think that Asia will require more management of its exchange rates—we cannot let them be completely free floating—but the experience of NAFTA is, I think, more instructive than the experience of the EU for Asia.

QUESTION: *Singapore has the highest-value circulating banknote in the world—the 10,000 dollar note, which shows a woman scientist at her computer. Some 40 years ago, a film was made, I think with Gregory Peck, on his amusing efforts to spend or get change from a million pound note. Regarding Asian monetary integration or* de facto *cooperation, is there any plan to film a distinguished actress going around to banks and exchange offices in Tokyo, Shanghai, Mumbai, and Jakarta to demonstrate how rich Asians already are, without the need to introduce a common Asian million dollar note?*

MINISTER THARMAN: Well, we will add this to the list of proposals for Asian monetary integration.

QUESTION: *At what pace and by what method do you think India should move toward greater convertibility of its own currency?*

MINISTER THARMAN: Well, that is a very dangerous question to ask a minister in another government, and I would not want to comment on India's priorities. There is, however, increasing sense among financial market players in India, and indeed the Prime Minister himself, that there is an opportunity for India to make Mumbai a true financial centre, and that this will only occur if they go through a process of gradual removal of capital controls and restrictions. I doubt it will happen quickly, judging from the debate that is taking place right now, but if you take a 20-year view, whether it is about India or China, I think all countries, large and small, will see it in their own interests to try to achieve a freer flow of capital.

We are not purists, we are not ideologues, and we should never be. Let's do what is in our interests, and if it means moving toward freer capital mobility, let's do it intelligently, in steps.

QUESTION: *I think your comparison of the evolution of integration in Europe and Asia provided a number of insights, which certainly made a compelling case for your conclusion that perhaps* de facto *financial coordination is probably the best outcome. But in terms of having a completeness in terms of the analysis, I wonder whether it would be instructive to look at the US economy—not NAFTA, but just the US economy. Historically, convergence or lack of it has been a problem for the United States as well, but there have been two stabilising phenomena. One has been the high level of mobility of labour from the lagging areas to the more dynamic areas and the second has been the political will for large-scale fiscal transfers, again from the dynamic* *areas to the really lagging areas. So there can be stabilisers that can change the prior conditions. If there is a political will to move to Asian integration and if one comes to the conclusion that one can reduce the trade-offs through these two measures, you can make the objective of moving more quickly to monetary integration more realisable.*

MINISTER THARMAN: I think that is a relevant economic comparison, but I don't see how Asia, with independent sovereign states, will ever be able to contemplate that. The European and NAFTA examples are very useful ones for us to study. In Europe, there was a political imperative, which doesn't exist in Asia. And I think we should avoid thinking that we need to do something dramatically different from what is already happening in our markets and through our own actions so far in order to achieve our objectives of higher growth, lower unemployment, and low inflation.

The current situation is already moving in that direction—the current situation of *de facto* monetary coordination.

QUESTION: *You seemed to suggest in your speech that a combination of floating and some kind of domestic anchor like inflation targeting was an effective framework for Asian countries, both for macroeconomic stabilisation and for development. And I guess my question is: do you see any downside to this? I am thinking particularly of the case of the Reserve Bank of New Zealand, which actually invented the framework and which itself is actually questioning this framework.*

MINISTER THARMAN: I would simply say that it is the lowest-risk and lowest-cost alternative that we have. It is not optimal in every sense. In particular, it will not help to spur the development of an Asian financial market—a common, unified bond market, for instance—the way that it happened in Europe. But given the diversity of Asia, given the costs of surrendering monetary policy autonomy of national economies, I see it as the lowest-risk path that we have.

QUESTION: *With regard to the intermediate regime option, my impression is that you raised three options. Singapore takes a sort of a mixture of all three options. Singapore has a monetary policy based on a managed float—an exchange-rate-based monetary policy—while paying some attention to inflation, but not formal, rigid, inflation targeting. The managed float is against a basket of currencies, and the basket includes not only major global currencies but regional currencies as well. In a sense, my impression is that what you are proposing for other Asian currencies is something like Singapore's exchange rate arrangement. I'm not sure if I understand your presentation perfectly.*

MINISTER THARMAN: Well, that is not the way I would put it. But it is the way it is happening, quite independently of Singapore's designs. In fact, I think this *de facto* solution that is happening before us will increasingly converge on what some of the proponents of monetary integration want, because with increasing trade integration in the region, increasing commonalities of interest, us increasingly facing the same economic cycles as a result of trade integration, the weights in each of our baskets that we use for a managed float will tend to converge. They will never be identical, but they will converge. And Asian currencies' weights in each other's baskets will also go up. So by virtue of that, I think we will get an increasing degree of stability among Asian currencies. But it will still preserve the flexibility needed when a shock does happen: both the markets and the authorities will have that ability to adjust the currency, and I think that's a very useful adjustment mechanism to preserve.

QUESTION: *One school of thought is in favour of monetary integration without reference to the political and social context. As we saw in*

Argentina, that can create chaos. But what can we learn from that for the euro? The euro is still a very young phenomenon. How can we ensure that social diversification in Europe cannot derail that?

MINISTER THARMAN: I think there are some things to be learned from Europe, particularly about financial market integration. The procedures they have set in place for cross-border supervision, the procedures they have set in place to harmonise rules and regulations for the capital markets, the greater institutionalisation of what in Asia is still a very informal process of consultation and surveillance—these are important lessons that Asia can learn from Europe.

QUESTION: *Until now, the European monetary union has consisted, with one or two exceptions, of well-run, mature economies. But there are now waiting on the eastern wing of Europe somewhere approaching ten emerging market economies, standing in line for what looks to many observing it to be a very difficult process indeed of coming into membership. On the one hand, they are emerging markets which, as you have said, have extremely low costs, into which there is vast FDI, generating very large booms which may need quite different monetary restraint from core Europe. On the other hand, there is increasing financial integration, which is leading to cross-border borrowing, especially by households, which in some countries is alarming.*

I went to a seminar in Frankfurt given by the head of the central bank in Hungary who gave a fascinating presentation at which I stood up and said this sounded to me rather like Thailand between 1994 and 1997—not to the amusement of many people in the room. I wonder if you think that the point in Asia is that there are more emerging market economies with very great structural changes yet to come than in the monetary union of core Europe, and that this means that monetary union could not be sustained?

MINISTER THARMAN: Yes, I think you have expressed that point better than I did. I would add that we also want to preserve competition between social models. I think that is one of Asia's strengths; that is part of Asia's vibrancy—the fact that there will be competition between social models, and not an attempt to impose a common social model on all Asian players.

Appendix: Supporting Data

Table 2.1: Asia11's* Exports

	Intra-regional	Total	Intra-regional exports as a share of total exports
	US$ billion		Per cent
1980	97	281	34
1990	287	721	40
2000	794	1,703	47
2005	1,397	2,813	50

Note: * Asia11 comprises China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.

Sources: IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

Table 2.2: Exports of Various Trading Blocs, 2005
Per cent share

	Total exports	Export destinations		
		Asia11	NAFTA	EU15
Asia11	100	50	20	15
NAFTA	100	17	56	14
EU15	100	7	10	62

Sources: Calculations based on data from IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

Table 2.3: Standard Deviations of Monthly Percentage Fluctuations Against the US Dollar

	Pre-crisis Jan 1990-Jun 1997	Post-crisis Jan 2000-Aug 2006
Indonesian rupiah	0.45	4.04
Thai baht	0.72	1.78
Japanese yen	3.22	2.75
Korean won	0.93	2.19
Malaysian ringgit	1.32	0.33
Philippines peso	2.18	1.99
Singapore dollar	0.86	1.25
New Taiwan dollar	1.11	1.27

Sources: Bloomberg; and Monetary Authority of Singapore.

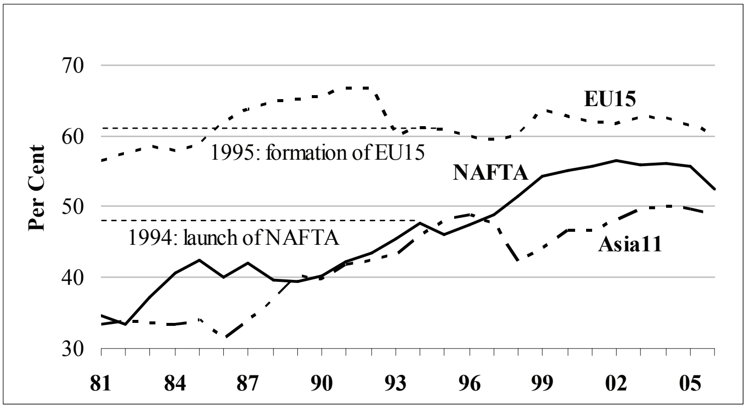
Table 2.4: Average Correlations of Currencies with Increasing Flexibility

	Pre-crisis Jan 1990-Jun 1997	Post-crisis Jan 2000-Aug 2006
New Asian flexible currencies*	0.10	0.40

Note: * Philippines peso, Thai baht, Korean won, Indonesian rupiah and New Taiwan dollar.

Sources: Bloomberg; and Monetary Authority of Singapore.

Figure 2.1: Intra-regional Exports
Per cent share of region's total exports



Sources: Calculations based on data from IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

3. THE PARALLEL CURRENCY APPROACH TO ASIAN MONETARY INTEGRATION

Barry Eichengreen[1]

Since the crisis of 1997-98, there has been a proliferation of proposals for fostering Asian monetary integration. Asian countries, it is suggested, should collectively peg their currencies to the dollar, the yen, or a dollar-yen-euro basket or establish a multilateral currency grid like the European Monetary System. The resulting exchange rate stability would promote intra-regional trade, simplify investment planning, and encourage cross-border participation in local bond markets. Experience with establishing and maintaining a system of stable exchange rates would help to ready the region for the introduction of a single currency. Asia, in this view, should emulate Europe's approach to regional monetary integration.

But, along with the attractions of the European example, there are also dangers. Defending a system of currency pegs in the presence of high capital mobility requires the close convergence of policies and the maintenance of confidence.[2] If either pre-condition is disturbed, a country will require extensive financial support in order to defend its peg or to undertake an orderly realignment. In practice, Asian countries

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[1] Barry Eichengreen is George C. Pardee and Helen N. Pardee Professor of Economics and Political Science in the University of California, Berkeley. This paper was published in *The American Economic Review*, Vol. 96, No. 2, May 2006. It is reproduced in this booklet with the kind permission of Professor Eichengreen and the American Economic Association. Professor Eichengreen was a visiting scholar to the Economic Policy Department, MAS, in June 2003 and was commissioned by the Department to speak at the Programme of Seminars (POS), during the 2006 IMF-World Bank meetings. (See Chapter 4.)

[2] That these are the two basic pre-conditions for the maintenance of currency pegs are the lessons of the so-called first and second generation of balance-of-payments crisis models.

possess neither the willingness to subordinate other policies to these imperatives nor the solidarity needed to offer extensive financial supports.[3] Absent an appetite for political integration, there is little readiness to create a regional central bank like the European Central Bank, since there is no counterpart to the European Parliament to hold it accountable for its actions. Hence, there is little prospect of early monetary union to tie down expectations. A system of Asian currency pegs would consequently be fragile and crisis prone. As a road to monetary unification it would be a dead end.

Better would be for governments to create an Asian Currency Unit, or ACU, constituted as a weighted average of Asian currencies, and allow it to circulate alongside their national currencies.[4] This would have three advantages. First, it would not be necessary to stabilise exchange rates between the currencies comprising the basket; hence, fragility would be less. Second, the parallel currency would be more stable than any one national currency in terms of aggregate Asian production and exports; it would thus be a vehicle for encouraging intra-regional trade and investment. Third, the decision to move to a single currency could be driven by economics rather than politics. Only when a critical mass of producers, exporters and investors had adopted the parallel currency would it be clear that Asian economies were ready for monetary unification.

3.1 Lessons from Europe

This approach resembles another European precedent: efforts starting in the 1970s to use the European Currency Unit, or ECU, as a

[3] The Chiang Mai Initiative announced in 2000 is just such a system of swap lines and credits but, revealingly, Asian countries have been reluctant to actually utilise it.

[4] I am not the first to develop this idea. Mori *et al.* (2002) have proposed the creation of an Asian Currency Unit as a way of creating an environment in which the private sector can participate in the discussion of monetary integration. Agarwala (2003) has proposed the creation of a parallel currency as an initial step toward a single currency for South Asia.

steppingstone to monetary unification.[5] The ECU was defined in 1974 as a basket of currencies of the members of the European Community (EC) for purposes of EC accounting. It was adopted in 1975 as the unit of account for the European Development Fund and then for the European Investment Bank and the EC budget. With the establishment of the European Monetary System (EMS) in 1979, participating countries were supposed to stabilise their exchange rates against the ECU basket. Currency positions acquired as a result of interventions were similarly to be settled in ECU.

But in practice the ECU never acquired a significant role in the business of the European Community and the EMS in particular. Although credits within the EMS were denominated in ECU, they were extended in national currencies. Rather than actually basing EMS parities on an ECU central rate, that central rate was only used to compute bilateral rates, which became the focus for central banks and the markets.

If the ECU was to gain popularity, this would have to be because importers, exporters and financial market participants took it up. There was some movement in this direction. European banks began dealing in ECUs in order to handle the deposits of EC institutions and governments. In turn, this facilitated the growth of interbank and other private ECU deposits. Banks seeing this as a promising line of business invested in a multilateral clearing system for ECU deposits. With the spread of ECU deposits, it became more attractive to issue ECU bonds.[6] Medium-term ECU notes appeared at the beginning of 1988. There also developed a market in ECU commercial paper.

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5 The first mention of the parallel currency approach was in a report by the Federal Trust in 1972 (Magnifico and Williamson, 1972). The idea was then taken up in *The Economist* (1975). In 1990 the UK government presented a draft treaty embodying these ideas as a contribution to the debate over the Delors Report (UK Treasury 1990).

6 The growth of the ECU bond market will be a comforting observation for Asian policymakers for whom promoting the development of regional bond markets is a priority.

But, notwithstanding these positive signs, the vast majority of Europe's transactions continued to be conducted in national currencies. The ECU's unit of account role was limited to the financial accounts of EC institutions and a few European corporations engaging in extensive cross-border business. In the 1990s, only about one per cent of trade within the Community was invoiced in ECUs. At their height, ECU-denominated claims still amounted to less than 10 per cent of the non-dollar foreign currency claims of banks reporting to the Bank for International Settlements. ECU bonds never accounted for much more than 20 per cent of all non-dollar Eurobonds. Medium-term ECU notes accounted for barely 15 per cent of the non-US dollar market in such notes, ECU commercial paper for only about 10 per cent of all euro-commercial paper. As the EC grew more integrated, it was at least conceivable that Europe's residents would have conducted more of their transactions in ECUs. The question is why this was not the case.

One answer is that it was unattractive for any one resident to move in this direction in the absence of evidence that others were prepared to do likewise. It was unattractive for individual European producers to set prices in ECU unless other European producers did so, limiting transactions costs. It was unattractive for individual financial institutions to float bonds denominated in ECU unless other financial institutions did likewise, creating the critical mass needed for the creation of a deep and liquid secondary market. It was unattractive to quote product prices in ECU so long as wages and other domestically-sourced inputs were priced in the national currency. Money is characterised by network externalities; it pays to use the same medium of exchange and unit of account as other market participants (Dowd and Greenaway, 1993). As with any network, there is a tendency for the status quo to be locked in. Governments can attempt to make the parallel currency more attractive by giving it legal tender status alongside the national currency. But the incentive to continue relying on the national currency will remain strong. Efforts to promote use of the parallel currency may have to overcome considerable historical inertia.

Another obstacle was the international role of the dollar. A substantial fraction of European countries' commercial and financial transactions with one another and with the rest of the world was invoiced and settled in dollars. As a currency in which to denominate financial instruments, the dollar continued to dominate the Eurobond market. The dollar thus provided many of the same advantages as a parallel European currency and in addition had the advantage of incumbency. In Asia, where it is also widely used in international transactions, one can similarly question whether an ACU could out-compete the dollar.

3.2 Mechanics

Building on experience with the ECU, the ACU would be defined as a fixed number of units of each constituent currency—including, for example, the 10 ASEAN currencies plus the Japanese yen, Chinese yuan, and South Korean won. While the quantity of each component currency would remain fixed, its contribution to the value of the ACU thus would vary with its exchange rate; as currencies depreciated, their weight in the ACU would decline. The composition of the basket might be revised periodically to reflect the changing weights of the participating countries. Weights could be determined by the share of the country in regional GDP or exports.

Official ACUs would be created in exchange for swaps of a fraction of the international reserves of participating central banks. The amount of these swaps could change periodically to reflect changes in the quantity and value of those gold and dollar reserves. Participating central banks would agree to accept ACUs in transactions among themselves. Governments would agree to experiment with the issuance of ACU-denominated bonds.

The existence of these benchmarks would make it more attractive for financial and non-financial firms to issue and accept ACU-denominated liabilities and assets, subject to standard prudential regulations. Bond or deposit documentation would specify that when the composition of the official ACU basket changed, the value of private ACU assets and liabilities would change accordingly. The value of the private ACU would be guaranteed by the commitment of the issuer (such as a bank accepting a deposit) to convert the instrument into its underlying components. Arbitrage would in any case prevent significant divergences from opening up between the value of the private ACU and the constituent currencies.

3.3 Dangers

By design, this parallel currency scheme is intended to encourage banks, firms and households to take on ACU-denominated claims. But if some end up with more ACU liabilities than assets, they will then be subject to currency-mismatch problems and heightened financial fragility. If banks match their ACU liabilities and loans, the currency risk will simply be transferred to their corporate customers, saddling the banking system with heightened credit risk. Liquidity risk can also result if depositors are aware of these vulnerabilities and run on the banking system.

These risks can be contained by tightening prudential supervision and regulation to ensure that banks hold sufficient liquid ACU assets and constituent foreign currency assets to avert a run. The central bank should hold additional foreign reserves in ACU or constituent foreign currencies in order to be able to replenish the ACU reserves of the banking system. The authorities should consider a managed float to encourage banks and firms to hedge their ACU exposures.

But forcing banks and governments to hold additional foreign currency reserves would have a significant opportunity cost. Limiting their ability to incur liabilities in ACU would prevent them from issuing additional ACU-denominated bonds and thereby enhancing the liquidity of secondary markets. Forcing banks to hold additional foreign currency reserves would limit the growth of intermediation. And, given the gap between the promulgation and enforcement of prudential regulations, it is not clear that tighter supervision would ultimately succeed in containing the risk to stability. The conclusion of much of the literature is that partially dollarised economies should urgently move forward to full dollarisation or back toward a predominantly domestic currency basis.[7] This suggests that an extended period when the parallel currency circulates alongside national currencies could be one of heightened financial fragility.

Moreover, limiting the freedom of banks to accept ACU deposits in excess of their ability to make ACU loans and otherwise restraining the growth of transactions in ACU claims would slow the spread of the parallel currency. Inevitably, then, the parallel currency route to monetary integration could be a lengthy one.

In Europe, there was also discussion of whether establishing a parallel currency would threaten price stability. The worry was that as commercial banks created claims in ECU, there would be more money and credit chasing the same goods and services. Here, subsequent experience with foreign-currency-denominated assets and liabilities has refined discussion of these issues. Banks in Asian countries can already access foreign funding subject to the standard prudential regulations. They can make foreign-currency-denominated loans subject to those same regulatory provisions. ACU transactions would be no different from the other foreign currency transactions of the banking system in

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[7] This is the conclusion of di Nicolo *et al.* (2003).

this regard. There is no intrinsic difference between a Thai bank accepting dollar deposits and making dollar loans and it accepting ACU deposits and making ACU loans. The literature on partially dollarised banking systems does not suggest that these jeopardise price stability. (See Reinhart *et al.*, 2003.) If the central bank uses its standard instruments to limit the growth of aggregate bank assets and liabilities, there is no reason why development of the parallel currency should threaten price stability.

3.4 Pegs and dollars

There exist at least two motivations for monetary cooperation in Asia. One is to limit exchange rate variability within the region in order to promote intra-regional trade and investment. The other, manifest in calls for a common basket peg against the dollar and the euro, is to buttress exchange rate stability *vis-à-vis* the rest of the world. But, as Williamson (2005) notes, there is no incompatibility between the two objectives. Nothing prevents a group of countries adopting a basket of outside currencies as their peg from also basing a parallel regional currency on a basket of their own currencies.

But not only is the rationale for the two strategies different, the effects are different as well. Pegging Asian currencies to the dollar, the euro or a basket of which they comprise a part would heighten the attractions of these outside currencies for transactions within Asia. In contrast, allowing Asian currencies to float against the euro and the dollar would make it more attractive to transact in a stable regional composite.

To gain widespread use, the ACU must out-compete not just existing Asian currencies but also the dollar, which is widely used for cross-border transactions in the region, as noted above. This observation has led authors like Mundell (2002) to advocate that Asian countries should adopt the dollar as a “common parallel currency”—that is, as an officially-recognised currency for use in invoicing and settling trade. But, as intra-Asian trade continues to grow, invoicing and settling in a common Asian currency will become more attractive relative to invoicing and settling in dollars. In any case, Asian countries are reluctant to give the currency of an outside power legal tender status for domestic transactions. As a result, the residents of an Asian country must still convert dollars into the national currency when making tax payments or engaging in other domestic transactions requiring a unit with legal tender status. Under the parallel currency approach, Asian governments would give the ACU full legal tender status for domestic use, which would make it more attractive. There are also reasons to think that the dollar will grow more volatile relative to Asian currencies as Asian countries relax and abandon their pegs to the greenback in the interest of greater flexibility and to the extent that America's twin deficits lead to a weaker dollar. This will make using ACUs rather than dollars more attractive. Finally, the hold of network externalities and therefore the advantages of incumbency may be less in our financially-sophisticated age than was the case in the past. Given the proliferation of instruments in financial markets and the decline in bid-ask spreads, it is easier for market participants to contemplate alternatives.

3.5 Conclusion

This chapter considered the parallel currency approach to Asian monetary integration. The appeal of this approach is that the pace of progress would be dictated by economics rather than politics. This is consistent with the emphasis of Asian governments on market-led rather than politically-led growth since the crisis of 1997-98. It accommodates the fact that the context is different than in Europe, where the transition to monetary union was supported by a commitment to political integration. That this commitment is less in Asia renders it questionable that a politically-led process could lead smoothly to monetary union.

Under this chapter's approach, in contrast, the pace of regional economic integration and the market's take-up of the parallel regional currency would dictate the pace of the transition. Only when producers and consumers had adopted the parallel currency in large numbers would it be clear that market structure and behaviour had adapted to the imperatives of a single currency. It would still be necessary to then take a political decision to create an Asian Central Bank. But under the scheme envisaged here, this step would have to wait on a market test.

Officials can help to prepare the way for the parallel currency. Constructing a true free trade area and promoting the further expansion of supply-chain networks in Asia can make it attractive for the private sector to transact using the parallel currency. By issuing debt denominated in the parallel currency, governments can help to create a benchmark asset and more liquid secondary markets, encouraging ACU issuance by banks and firms. They can make markets in the parallel currency more attractive by investing in the establishment of an efficient regional clearing and settlement system.

Even if regional integration heightens the attractions of the parallel currency as a unit of account, store of value, and medium of exchange, the inertia favouring national currencies is strong. History suggests that they will not be quickly out-competed by a parallel regional currency. Prudential policies to limit the risks to financial stability created by currency mismatches will also slow adoption of the parallel currency. But if this means that the process culminating in a single Asian currency will take time to unfold, this is not necessarily a bad thing, especially since years will have to pass before the entire range of supportive conditions is in place for Asian monetary unification.

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4. ASIA'S ROAD TO SUCCESS— FROM TRADE TO FINANCIAL INTEGRATION

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4.1 Introduction

This chapter was compiled from a discussion on Asian financial integration among senior policymakers [1] as part of the Programme of Seminars (POS), "Asia in the World, the World in Asia", convened during the annual IMF-World Bank meetings held in Singapore in 2006.

A few major themes were distilled from the discussion. These include the case for deeper financial integration within Asia, the relevance of the European experience for Asia, the monetary implications of deepening Asian financial integration and the agenda for institutional reform and cooperation. In this chapter, we highlight the salient points raised during the discussion.[2]

4.2 The case for deeper Asian financial integration

There was broad agreement among participants that deeper intra-regional financial integration could yield significant benefits for Asia. Financial integration—including the development of a regional bond market—promotes a more efficient allocation of resources, contributes to the efficient price discovery process for financial products, improves access to financial services, and lowers the cost for such

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1 See p. 94 for the list of participants of this discussion.

2 The views in this chapter should not be attributed specifically to any of the POS participants, nor to the IMF or the World Bank.

services. In addition, there is enhanced scope for diversifying savings, both geographically as well as across different asset classes. Indeed, through these various channels of influence, financial integration facilitates trade and investment flows within the region in a mutually reinforcing process, thereby increasing both the growth potential and general welfare of the economies concerned. Furthermore, by helping to deploy Asia's excess savings more efficiently within the region, integration could potentially enhance financial stability by reducing currency and maturity mismatches, which were notable areas of vulnerability during the Asian Financial Crisis.

A number of discussants expressed the view that Asian financial integration could produce benefits beyond the region. Asia already accounts for a third of global output, more than one-fifth of world trade and almost two-thirds of the world's international reserves. Given Asia's significance in the global economy, it has great potential to expand its role in supporting stable global growth. As financial integration enhances Asia's own development and stability, the region could act as an engine of growth for the global economy, and thereby contribute towards the rebalancing of growth and the adjustment of the global imbalances.

It was further observed that the globalisation of financial systems is an opportunity and not a threat, and that future prosperity lies with openness and not protectionism. Hence, intra-regional financial integration should accompany, rather than preclude, broader integration with the international financial system. Participants also noted that the opportunities presented by being tapped into global financial markets are predicated on a number of important pre-conditions, including the ability of the monetary policy framework to deliver price stability, and having in place adequate financial supervision and other prudential safeguards.

4.3 The relevance of Europe's experience for Asian integration

The participants agreed that Europe's experience in integration—a mammoth enterprise extending over the last 60 years and involving 25 countries[3] and more than 450 million people—could shed some light on the way forward for Asia.

In the case of Europe, financial integration was initially propelled by a customs union, which stimulated internal trade. In the mid-1980s, steps were taken to promote further integration through the creation of an internal market with free movement of goods, services, capital and persons. This objective of creating an internal market as the basis for trade integration opened the way for the introduction of a single currency, which in turn accelerated the pace of regional financial integration. In Asia as well, closer integration in the real sector—in trade and production—has preceded further deepening of financial integration.

Although both Europe and Asia began with closer trade integration, Asia's approach to financial integration will likely take a different path from the European experience. There are important drivers of financial integration that are unique to Europe. First and foremost is the introduction of the euro as a single currency. The euro removed exchange rate risk for the bulk of financial flows within the euro area. In the absence of exchange rate risk, investor demand for cross-border financial services has increased dramatically, providing a catalyst for financial integration. In Asia's case, however, a common currency is not likely in the foreseeable future (for reasons discussed below), removing what might be an important factor in facilitating deeper financial integration.

[3] On 1 January 2007, Bulgaria and Romania joined the European Union (EU), bringing the number of EU countries to 27.

A second driver unique to Europe is the strong political will to overcome national interests and cede some degree of national sovereignty to newly created supranational institutions such as the European Central Bank. Considerable efforts have also been made to establish a common regulatory framework for financial markets, with the objective of enhancing financial sector functions through integration. The blueprint for this framework was the Financial Services Action Plan, adopted at the end of the 1990s. This plan contains more than 40 separate measures, including the facilitation of the national clearing and settlement payments, common rules for securities and derivative markets, and common standards for financial reporting, to promote investor confidence in market integrity and facilitate cross-border retail payments. For Asia, in comparison, it was felt that divergent economic imperatives and political sensitivities would hinder the creation of strong and effective pan-regional institutions. Concomitantly, Asia has not been able to undertake the ambitious task of establishing a common regulatory framework, as Europe has.

The above-mentioned drivers have generated significant progress in European financial integration in recent years. The euro area now has a unified market for interbank deposits and largely homogeneous government and corporate bond markets. Furthermore, cross-border investments have become increasingly important in European equity markets. More recently, there has been a trend towards consolidation among financial intermediaries and infrastructures. Consolidation has occurred within member states and across national borders. This trend has been reflected in the convergence of interest rates towards lower levels, more liquid and deeper markets, and the proliferation of new financial instruments and services.

While Europe's integration story is characterised by unique elements that might not be entirely applicable to Asia, it was felt that Europe's success and experience could still hold some important lessons for this region. First, Europe's integration has demonstrated that the benefits of financial integration are real and tangible—financial integration has helped to enhance capital productivity and output growth, and has served as a powerful instrument of economic reform, particularly by facilitating corporate restructuring and fostering innovation.

Second, Europe has shown that financial integration is a complex and multifaceted affair. In order to link the different sectors and activities in a modern financial system, the blueprint for integration must be both comprehensive and detailed. Europe's experience has illustrated that financial integration poses major technical challenges and requires careful preparation and consistent implementation.

Third, Europe has demonstrated that the process of financial integration needs to take into account the particular characteristics and requirements of the member countries. European national financial systems have typically evolved over time to reflect specific socio-economic preferences. Hence, any effort to integrate these various national systems has important social and cultural implications. It is thus evident that successful financial integration requires sufficient political will to reach often difficult compromises among the countries concerned. Without this political will and the relevant institutions to translate such will into practice, the process of integration may encounter formidable roadblocks.

Finally, Europe has recognised that the interests of ordinary citizens should be upheld as a key objective of financial integration. The efficiency gained in financial integration comes mainly through measures to improve the supply-side functioning of institutions and markets. However, these measures will not be fully reflected in economic performance unless the benefits filter down to the end-users of financial services. To this end, it is important to ensure that integration enhances, rather than diminishes, competition in the financial system, and that investor and consumer interests are adequately protected. Further, the authorities should recognise that financial markets function not just for the benefit of industry, but also for households and individuals.

In comparing Europe's and Asia's approaches to integration, there was agreement that Asian financial integration is likely to evolve as a bottom-up, market-driven process through the collective interactions of individual market participants. The process in Asia is likely to be propelled less by politics than has been the case in Europe, where integration was thrust forward via government directives and overarching institutions. In other words, the Asian process could be better characterised as "evolutionary", while the European model, especially in its later stages, could be described as "revolutionary". Asia's path is likely to proceed from the integration of trade, to the development of multinational production networks, to the integration of finance, and finally, perhaps, to monetary integration.

4.4 Monetary implications of financial integration[4]

A key concern expressed during the discussion was how to strike an optimal balance, amidst globalised capital flows, between the two conflicting objectives of exchange rate stability and monetary policy adaptability and flexibility. Participants were generally of the opinion that at this current stage, policy adaptability and flexibility are far more important considerations for the regional economies. In particular, they concurred that Asia has still not advanced to the point where a common exchange rate framework is feasible. Hence, Asia should continue the process of integrating its goods and financial markets whilst maintaining independent and flexible exchange rates.

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4 See Sections 2.4.1 and 5.4.3 for related discussions.

Participants agreed that despite increased trade integration, Asian economies remain very diverse. The economies differ, *inter alia*, in their dependence on the US market and other external markets, in their level of economic development, and in their scope for utilising fiscal policy to deal with asymmetric shocks. The region's economies have differing policy imperatives and their domestic money markets are at various stages of development. There has not been sufficient convergence of important nominal variables, including factor prices, interest rates and exchange rates. These considerations underline why a "one-size-fits-all" exchange rate policy is currently ill-suited to the region. Each country must pursue a pace of market reform that is best suited to its own macroeconomic and financial market circumstances, without being tied down by a common monetary regime; the role of market forces is crucial in dictating the pace and acceptance of monetary integration among private sector agents.

The discussion also noted that exchange rate flexibility may help to accommodate efforts to develop an integrated regional bond market in Asia, which is a priority for the region. This is because efforts to create an integrated bond market often entail the removal of statutory and regulatory obstacles to cross-border investment and capital flows. In doing so, the higher level of capital mobility within the region could cause significant pressure on exchange rates, and may require extensive official interventions to maintain currency parities. Hence, any premature attempt to tie down regional currencies—or to restrict their movements—via some form of regional exchange rate arrangement might conflict with greater capital mobility associated with the development of an integrated bond market.[5]

[5] Of course, once pre-conditions for a common currency area are met, the creation of a common currency actually helps to foster greater regional bond market integration, as intra-regional exchange rate risks are eliminated (e.g. in the euro zone).

4.5 The agenda for institutional reform

The discussion next turned to the agenda for institutional reform.

Participants agreed that deeper financial integration is probably needed to support the rapid growth of intra-regional trade and investment. Asia still exhibits a heavy dependence on financing from outside the region, not only for investment, but also for international and intra-regional trade. Effective financial linkages between lenders and borrowers appear to be lacking within the region. To illustrate, one participant pointed out that even today, swaps between certain Asian currencies cannot be carried out directly, thus raising transaction costs for businesses and investors. Business costs could be lowered if there was a more effective intermediation infrastructure directly linking borrowers and lenders across countries.

One option considered was for Asia to develop its own infrastructure for the payment and settlement of regional financial flows, or some form of an Asian dollar clearing system. The trade-financing business would benefit from this move. Regionally-active banks already provide US dollar trade-financing on a regular basis, but most of the secondary trading of trade-finance instruments remains outside Asia. An efficient payment and settlement system would attract banks to do more business in this region and help to foster a more active secondary market for the discounting of trade-finance paper. Over time, the market for trade-finance instruments denominated in major regional currencies could also grow.

Another area discussed was the promotion of cross-border investment and strategic partnerships among Asian financial institutions, as exemplified by the activities of Singaporean banks in other Asian financial markets. This could enable Asian banks to carve out their niche in financing the region's multinational corporations or small- and medium-sized enterprises, and help improve Asian businesses' access to financial services.

Besides bank funding, regional capital markets and portfolio investment flows could also play a greater role in financing regional production and trade. Cross-border capital flows have not benefited fully from the expanding economic linkages in the region; the development of domestic and regional capital markets needs to be expedited to provide more channels for long-term funding through equity and debt instruments. Participants concurred that Asian economies should aim to create a deeper and more efficient secondary market for bonds in the region, and that more needs to be done to create deeper linkages between the banking and securities sectors. It was also acknowledged that the emphasis should lie in broadening the demand and supply of debt and equity instruments, building up infrastructure, and reducing cross-country restrictions to capital flows.

Participants noted that a number of initiatives to boost financial exchanges and deepen integration within the region have already been implemented. For example, the Chiang Mai Initiative was established to provide emergency liquidity through swap agreements, and efforts have been made to catalyse the development of a regional bond market, including the Asian Bond Market Initiative and the Asian Bond Fund. (See Box A.)

The discussion next turned to the measures required to promote regional financial liberalisation and integration. First is to have in place adequate legal, regulatory, and institutional arrangements. This might include, for example, regional rating agencies, regional credit guarantee mechanisms, and a regional settlement framework to facilitate cross-border transactions. This, in turn, should be reinforced by tax reforms and other regulatory enhancements that would strengthen corporate governance and transparency standards.

Second is the progressive removal of impediments to cross-border financial transactions. Some measure of progress has been achieved through the ASEAN Roadmap on capital account liberalisation.

Third is the harmonisation of rules, and making them consistent with international best practices. If tax regulations, for example, are not coordinated, there could be biases or unintentional shifts in capital flows (regulatory arbitrage). There is thus a need for more regional policy coordination as countries modernise and enhance their tax and regulatory systems.

One inevitable consequence of financial integration is the increased risk of cross-border spillovers and contagion. Therefore, in deepening financial integration, reforms of the financial system, such as the adoption of risk-based assessment and supervision, are needed to maintain financial stability.

The integration of Asian financial markets will likely be an evolutionary process and the sequencing of necessary reforms needs to be properly determined. While participants agreed that all the above-mentioned measures are essential, there was greater uncertainty as to how best to sequence specific reforms. Nevertheless, unlike trade and production integration, which has been largely driven by the private sector, financial integration will require the authorities to play an important role, to provide the required public goods and foster the necessary conditions for financial integration to proceed. The public sector's role will be especially important in areas such as the development of financial market infrastructure and the creation of the mechanisms and institutional arrangements for crisis prevention, management, and resolution.

4.6 Conclusion

There was broad agreement that Asia has achieved significant trade integration, but made less progress in the area of financial integration. Deeper financial integration is now seen as a useful development that would strengthen regional financial stability and augment the growth process. Indeed, promoting financial integration and cooperation has become a priority on Asia's agenda.

For deeper financial integration to be viable—for combined markets to be meaningfully large and to meet the high costs of regional financial infrastructure—a certain threshold volume of transactions is required. Asia may be reaching that stage now. Furthermore, progress in regional policy cooperation has accelerated, motivated largely by the objective of promoting financial stability in the region. These developments suggest that Asian financial integration may be reaching a "tipping-point" and that advancements could gather pace in the years ahead.

Box A
Developing an Asian Bond Market

Introduction

The abrupt reversal of capital flows amid concerns about the currency and maturity mismatches of the corporate and banking sectors during the Asian Financial Crisis highlighted the need for a well-functioning market for long-term funds. It is widely recognised that regional financial stability would be enhanced by the creation of a deep and liquid bond market in Asia. However, outside of Japan, the bond markets in many Asian economies have tended to be small, illiquid and fragmented. This gave rise to a number of government-led initiatives to pool resources and collaboratively overcome various hurdles hindering the creation of a vibrant Asian bond market.

This box takes stock of two major initiatives underway in Asia to drive the development of an active Asian bond market: the Asian Bond Market Initiative, spearheaded by the ASEAN+3 economies, and the Asian Bond Fund, established by the 11 members of the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP). The objectives of these initiatives include encouraging convergence in financial and capital market policies, accelerating improvements in financial market infrastructures, reducing supply-side constraints (e.g. through the introduction of low-cost products), and broadening the investor base on the demand-side (e.g. through raising investor awareness).

Asian Bond Market Initiative

The Asian Bond Market Initiative (ABMI) was endorsed at the ASEAN+3 Finance Ministers Meeting in August 2003. Its activities are focused on two areas: broadening the range of bond issuers and products, and enhancing market infrastructure to foster the region's bond markets. With respect to the first area, ABMI aims to encourage several outcomes, including (i) sovereign bond issuance to establish benchmarks, (ii) the creation of asset-backed securities markets, (iii) bond issuance to fund foreign direct investment within the region, (iv) the expansion of local-currency-denominated bond issuances, (v) the introduction of currency-basket bonds, and (vi) bond issuances by Asian government financial institutions and multilateral development banks. With respect to the second area, ABMI aims to enhance (i) the provision of credit guarantees, (ii) regional bond rating systems, (iii) the dissemination of information on issuers and credit rating agencies, (iv) foreign exchange transactions and settlement of cross-border transactions, (v) capacity building through research, technical assistance and dialogue, and to (vi) streamline relevant laws and institutions. To address these key aspects of bond market development, several working groups have been established.

Asian Bond Fund

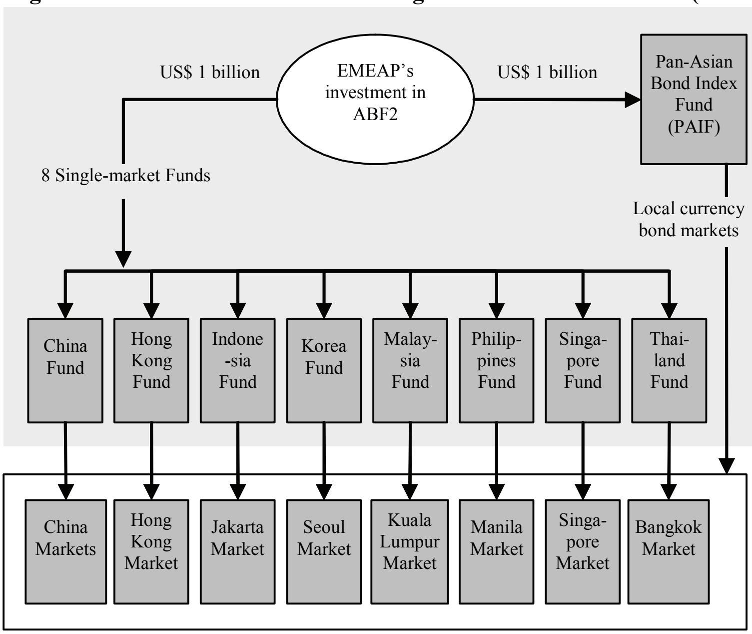
The Asian Bond Fund (ABF) was established in June 2003. In the first stage of ABF (ABF1), member countries contributed a portion of their reserves to create a US$1 billion fund dedicated to investing in US dollar-denominated sovereign and semi-sovereign bonds in eight of the 11 EMEAP member economies (i.e. excluding Australia, Japan and New Zealand). The fund has been passively managed by the investment management unit of the Bank for International Settlements.

Following the success of ABF1, ABF2 was established in December 2004. ABF2 comprises nine funds: a Pan-Asian Bond Index Fund (PAIF) and eight Single-market Funds. (Figure A1) ABF2 went further than ABF1 in several ways. First, the initial investment by EMEAP member economies in ABF2 was US$2 billion, double the quantum in ABF1, with US$1 billion allocated to PAIF, and the other US$1 billion distributed across the eight Single-market Funds. Second, while ABF1 is invested solely in US dollar-denominated instruments, ABF2 is invested in local-currency-denominated sovereign and semi-sovereign bonds in the eight EMEAP economies. Third, ABF2 funds were opened to retail and institutional investors, following an initial phase in which EMEAP was the only investor. Finally, the private sector was heavily involved in the design, execution and offering of ABF2; local private sector fund managers were appointed to manage the respective Single-market Funds and State Street Global Advisors was selected to manage the PAIF.

In order to keep costs low, ABF2 funds are passively managed against benchmark indices. A passive style is also favoured because it is not appropriate for EMEAP to be investing in funds that make active bets on the direction of their economies' monetary policies. The benchmark indices, called the iBoxx ABF Index Family, were developed by the International Index Company, an independent, Frankfurt-based index provider, working with leading market players in the region. The market weights of the indices are reviewed annually and are determined based on four factors: (i) the size of the local currency bond market, (ii) the turnover ratio in that market, (iii) its sovereign credit rating, and (iv) a market openness factor, which bears particular importance in determining the weights. As the benchmarks are transparent and representative, they could also be adopted by the private sector as benchmarks for their fixed income or derivative products.

ABF2 has seen some measure of success. As of end-April 2006, six ABF2 funds were offered successfully to the public, raising about US$400 million from non-EMEAP investors. The assets of the listed Single-market Funds grew by between 24 per cent and 50 per cent, while PAIF grew by 19 per cent (up to end-April 2006). ABF2 has helped encourage broader investor participation in Asian bond markets, through its introduction of a low-cost asset class with low participation barriers, and has served as a catalyst for regulatory and tax reforms, and improvements in market infrastructure.

Figure A1: Structure of the Second Stage of the Asian Bond Fund (ABF2)



Source: Ma and Remolona (2005).

Sum-up

Both the ABMI and ABF initiatives are timely and useful in the quest to develop an integrated Asian bond market. These initiatives complement a number of steps to enhance regional policy dialogue, surveillance and information gathering, such as the ASEAN+3 Economic Review and Policy Dialogue Process, as well as other measures to enhance regional financial and economic cooperation. Nonetheless, much remains to be done. While these initiatives are a good start, the impact on the region's economies has been fairly limited. As the ABF is limited to investing in the region's small stock of high-quality sovereign and semi-sovereign bonds, commentators have argued that it does not effectively address the fundamental problems of insufficient supply of investment grade corporate securities and the limited demand for speculative grade issues (Eichengreen, 2004). Tackling these problems will entail concerted efforts in a range of areas including improving accounting standards and corporate governance, tax and regulatory reform, provision of credit guarantees and enhancing the role of local rating agencies.

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5. EVOLVING TRADE AND FINANCIAL INTEGRATION IN ASIA

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5.1 Introduction

In this chapter, we present a literature survey of some of the salient issues pertaining to financial and monetary integration.[1] Section 5.2 explores the globalisation of production and financial integration in Asia. Section 5.3 considers the role of institutions and markets in fostering financial integration and economic stability, while Section 5.4 examines monetary policy and exchange rate frameworks in the evolving context of closer regional economic integration.

5.2 Globalisation of production and financial integration in Asia

5.2.1 Growth and integration in Asian trade

Asia has made significant progress in trade and production integration in recent years. Between 1991 and 2006, intra-regional exports among the 11 Asian economies of China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand (Asia11) expanded more than fourfold, from US$287 billion to US$1.6 trillion. (Table 5.1) This represents annual growth averaging 12 per cent, exceeding that for the European Union (EU15;[2] 6

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[1] This chapter draws on background research by economists of the Monetary Authority of Singapore (MAS), in preparation for a seminar on Asian regional financial integration, held in Singapore in May 2006. The seminar was jointly organised by the International Monetary Fund and MAS, and brought together high-level policymakers from Asian and Pacific economies. (See p. 95 for the list of seminar participants.)

[2] This grouping includes the initial 15 members of the European Union.

per cent) and the North American Free Trade Agreement economies (NAFTA; 9 per cent). Intra-Asia11 exports as a share of the region's total exports also rose from 40 per cent in 1990 to 49 per cent in 2006.

Asia's trade integration has not merely focused on lowering internal barriers to trade and investment but has proceeded alongside an enhancement of the region's links with the rest of the world. Thus, the growth in Asian intra-regional trade has not come at the expense of trade with the rest of the world. Asia11 has enlarged its share of global trade and now accounts for 27 per cent of the world's total exports, up from 22 per cent in 1990. Significantly, Asia11's exports to economies outside the region quadrupled over the period 1991 to 2006, rising from US$434 billion to US$1.7 trillion, or 14 per cent of the world's exports. (Table 5.2) Hence, whilst intra-regional trade flourished in Asia, trade with the rest of the world has also grown rapidly; over the last 15 years, the ratio of the growth in extra-regional exports to the growth in intra-regional exports has been about 0.6 for Asia11 and 0.9 for ASEAN5.[3] (Table 5.3)

Within the ASEAN5 grouping, trade has also risen dramatically. Intra-ASEAN5 exports grew at an average rate of 12 per cent annually between 1991 and 2006. (Table 5.1) Furthermore, the intra-regional trade intensity[4] for ASEAN5 far exceeds that for the EU15 and NAFTA. (Table 5.4) Over the last decade, intra-ASEAN5 exports almost doubled in value terms, from US$70 billion in 1995 to US$137 billion in 2006. (Table 5.1) However, the share of intra-regional exports in ASEAN5's total exports has remained stable at around 20 per cent over the last five years, as the region's exports have gained an increasing foothold in the global marketplace.

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[3] ASEAN5 comprises Indonesia, Malaysia, the Philippines, Singapore and Thailand.

[4] This is defined as the ratio of intra-regional trade to the region's total trade, normalised by the region's share of global trading activity.

In addition, although Singapore and Malaysia have tended in the past to dominate intra-ASEAN5 trade, there is evidence that integration has become more broad-based, as country shares in intra-ASEAN5 exports have become more evenly distributed. (Table 5.5)

While intra-regional trade in Asia has grown rapidly, comparisons with Europe and NAFTA suggest that there is room for even further expansion. Intra-regional exports as a share of total exports for both Asia11 and ASEAN5 are still lower, at 49 per cent and 20 per cent in 2006 respectively, than in the EU15 (60 per cent) and NAFTA (52 per cent).

5.2.2 Trade integration driven by production networks

The emergence of cross-border production networks has played a crucial role in forging trade linkages among the Asian countries, although a large portion of final demand (for instance, for electronics products) resides outside the region. These networks take advantage of countries' specialisations within industries, weaving together greater economic interdependence among countries with complementary capabilities. Competitive forces have thus spurred an increase in intra-industry trade around specific industry clusters, notably, electronics, automobiles and oil.

Increased complementarity among countries follows from the shift in organisational focus from the firm to the "contractual network of firms tied together by mutual long-term interest" (Stopford, 1994). The prevalence of these networks is demonstrated by the growing trend towards the outsourcing of core manufacturing functions—not just to subsidiaries based in foreign countries, but also to third party contractual suppliers indigenous to those countries. In sectors such as electronics and automobiles, firms are becoming linked by a complex architecture of networks that extend outside the firm to span across the entire value chain: from logistics, to components, to final products.

The establishment of production networks in the region has, in turn, significantly boosted trade flows in intermediate parts and components, and led to a deepening of the trade links among Asian countries. Further, the proliferation of these networks highlights the importance of tariff and non-tariff barriers to trade in intermediate goods; as a product advances along the regional production chain, the multiple tariffs (and other barriers to trade) levied by the different economies at each stage of processing cascade down, and could add significantly to the overall cost of the final good. Conversely, removing intra-regional tariffs and other barriers should have a multiplier effect on trade by lowering the cost of intermediate goods exports, and thus, final exports from Asia become more competitive in world markets.

Unequivocally, there are significant gains from trade (in final products), as consumers get to enjoy more types of goods in greater quantity. Yet, trade in intermediate goods forms a substantial portion of intra-Asian trade, and recent research findings suggest that intermediate goods trade could yield significant additional gains; it makes intermediate production processes more efficient, improves the allocation of productive inputs and lowers the prices of final goods. For example, Feltenstein and Plassmann (2005) find that liberalising trade in intermediate goods increases the value of imports and generates significant welfare gains within the region. In particular, they estimate that the admission of China and Korea into the ASEAN Free Trade Area, and the corresponding removal of all mutual tariffs among the economies involved (China, Korea and ASEAN5), will raise the values of Chinese and Korean imports of final goods by about 74 per cent and 13 per cent respectively, and by between 1.1 per cent for Malaysia and 3.7 per cent for the Philippines among ASEAN5. Furthermore, ASEAN5 could see welfare gains of about US$0.7 billion initially, extending to about US$36 billion over 75 years. The welfare gains for China and Korea are even greater, at about US$365 billion over 75 years.

5.2.3 China plays a major role in trade integration

In the last two decades, China has been the principal catalyst of regional production and trade integration. China's share of Asia11's intra-regional exports surged from just 14 per cent in 1990 to 24 per cent in 2006. At the same time, China has become an increasingly important destination for Asia's exports, as the share bound for the developed markets fell. Between 1990 and 2006, the proportion of Asian (Asia11 excluding China) exports bound for China rose from less than 5 per cent to 19 per cent, while the combined proportion of goods exported directly to the US and the EU15 fell from 46 per cent to 30 per cent over the same period. (Figure 5.1) China has also been the major contributor to Asia's enlarged share of global trade. China alone accounted for a third of the increase in Asia11's exports to the world between 1990 and 2006. Not surprisingly, China's share of Asia11's total exports tripled, from just 9 per cent to 29 per cent, over this period.

The region's trade with China is underpinned by industry-specific production networks, notably in electronics. China's growing share of Asia's exports is largely attributed to the shifting dynamics of manufacturing within the region and China's increased importance as a regional processing hub for products finally exported to developed markets. Hence, despite the G3's (the US, the EU and Japan) falling share of Asia's direct exports, these developed markets remain important locations of end-demand. For example, the Asian Development Bank (2007) estimates that the G3 ultimately accounts for 61 per cent of total final demand underlying exports from East Asia.[5]

While the G3 markets remain important for Asia, China has also become an important source of end-demand for the region. MAS (2003) estimates that some two-thirds of China's imports from East

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[5] For this estimate, East Asia comprises Cambodia, China, Hong Kong, Indonesia, Korea, Laos, Malaysia, Mongolia, Myanmar, the Philippines, Singapore, Taiwan, Thailand and Vietnam.

Asian economies are destined for domestic consumption.[6] Over the longer term, as the Chinese economy grows, the strength and importance of its domestic demand is expected to increase.

China has become a key factor when considering trade dynamics in the region. The rapid growth of manufacturing capacity in China at all levels of the production chain is likely to have a significant impact on the development of the production networks in Asia, as countries adjust to the challenges and opportunities posed by China's development. As China further industrialises, Asia could continue to benefit by participating in the evolving production network as producers of complementary goods. At the same time, resource-rich Asian countries could export primary commodities to the booming Chinese market. For ASEAN5 in particular, two promising areas of growth are the export of intermediate electronics products and downstream oil products (polymers) to China.

5.2.4 Financial integration in Asia is still at a relatively low level

Compared to trade integration, financial integration is still limited in Asia (excluding Japan). To begin with, Asia's financial markets are shallow relative to developed economies; Asia's bond markets, for example, constitute only 115 per cent of GDP, compared to 203 per cent in the US and 170 per cent in the EU. Excluding Japan, Asia's percentage falls to only 56 per cent (IMF, 2007). Further, the region exhibits a higher degree of financial integration with developed country markets than within itself. In banking, for example, major foreign lenders comprise mainly American and European institutions, while cross-border banking flows among Asian economies are relatively limited (Cowen *et al.*, 2006). Regional stock markets show little

[6] For this estimate, the exporters comprise Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.

participation from investors in other Asian economies, and foreign shareholding, while significant, is dominated by non-Asian advanced economies. For example, although foreigners account for 41 per cent of trading activity on the Hong Kong Stock Exchange, only one-fifth of this is accounted for by other Asian economies (Hong Kong Exchanges and Clearing Limited, 2006).

The developed markets of Europe and the US account for significant shares of portfolio investment in Asia. In 2005, the EU15 and the US accounted for 32 and 38 per cent respectively of the foreign portfolio assets invested in 10 Asian economies, while Asian economies accounted for only 15 per cent. (Table 5.6a) Likewise, the bulk of Asia's foreign portfolio assets is invested in the developed markets; in 2005, 30 per cent of Asian source economies' foreign portfolio assets was invested in the EU15, compared to 20 per cent invested within the region. (Table 5.6b)

Compared to Europe, the lesser degree of financial integration within Asia could be partly attributed to the generally lower level of economic development and other pre-determined factors reflecting regional circumstances, such as relatively greater distances between countries, the lack of a common language and fewer shared land borders (Eichengreen and Park, 2004). Eichengreen and Park also argue that financial integration is less advanced in Asia than in Europe because Asia has not gone as far in promoting intra-regional trade—Europe has a fully-fledged single market in goods and services, but the formation of an Asian free trade area is incomplete. Financial integration in Asia has also been hindered by restrictions on capital mobility and relatively underdeveloped capital markets and institutions.[7]

[7] See Section 4.3 for related discussions.

5.2.5 Linkages between trade and financial integration

Empirical research provides some support for the view that greater trade integration could lead to increased financial integration (Eichengreen and Park, 2004; Lane and Milesi-Ferretti, 2003). Increased intra-regional trade and investment can generate greater demand for cross-border trade-financing activities and capital flows. Greater trade openness also increases the effective cost of restrictions on capital flows, creating the impetus for further financial openness and integration. For example, trade openness may encourage capital flight through over-invoicing of imports and under-invoicing of exports, thus undermining capital controls (Aizenman, 2003).

Conversely, financial integration may also enhance trade integration and growth. Deeper financial integration should help to channel Asia's large pool of savings towards financing investment within the region. The pooling of liquidity could reduce financing costs for Asian firms and encourage investment, the expansion of regional production networks, and, therefore, trade integration.

Financial integration could bring other benefits as well. The deepening and integration of regional capital markets could help to reduce excessive dependence on bank financing, short-term borrowing and financing from outside the region. This could reduce the volatility of capital flows and the vulnerability of Asian economies to capital reversals. Increased competition resulting from financial integration could also improve the efficiency by which financial resources are allocated, raise the incentives for transparency and better corporate governance, and impose greater market discipline on macroeconomic policies. Enhanced competition would also catalyse market development and innovation, thus creating the potential to lower the cost of capital further and stimulate more investment. Further, financial integration provides opportunities for risk-sharing and diversification within the region.

Increased investment due to financial deepening and integration could also help to reduce Asia's saving glut, which is especially important as Asia's current account surpluses are likely to persist, led by China's growing trade surpluses. China's current account surplus, for example, is expected to reach US$274 billion, or 6.2 per cent of GDP, in 2011 (IMF, 2006b).

Further, a more developed financial sector in Asia could encourage capital flow from rich to less wealthy economies in the region. This appears to be the case in Europe, where increasing financial integration corresponds with capital flowing "downhill" from rich to poor (or less rich) countries within the Union, with poorer countries that are financially integrated running larger current account deficits, and the richer countries running surpluses (Abiad *et al.*, 2007). Likewise, deeper financial integration among Asian countries could induce a similar reversal of the Lucas paradox[8] and faster income convergence within the region.

The linkages between trade and financial integration imply that Asia's increasing trade integration with China and India could facilitate more progress in regional financial integration. For example, China's largest trading partners and foreign direct investors, particularly Hong Kong, Japan and the US, have the largest number of bank branches in the country as well. (Table 5.7) The majority of foreign banks' business in China is related to multinational corporations from the same home country, with a significant proportion in trade-financing. As Chinese and Indian corporations expand, they could turn increasingly to regional capital markets for financing, for example, by listing on regional stock exchanges, especially those of Hong Kong and Singapore. Already, over 40 per cent of all foreign companies listed on the

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[8] This refers to Robert Lucas' (1990) observation that capital flows from rich to poor countries remain limited despite the higher marginal product of capital in poorer countries.

Singapore Exchange are from China (Singapore Exchange Limited, 2007).

While trade integration is important for deeper financial integration, it is not the only driving factor. Financial integration could be deepened through the removal of capital controls and other administrative barriers to cross-border capital flows. While a country may open up to trade, it may still choose to restrict capital flows due to concern about the volatility of capital flows or strong opposition from local financial institutions and industry incumbents. China, for example, is deeply integrated via trade links with global and regional markets, but its financial sector remains relatively closed to external participants. As Eichengreen and Park (2004) point out, the removal of controls on capital account transactions is linked to deeper financial integration. China and India's progressive capital account liberalisation should thus expand the region's pool of liquidity and contribute even further to regional financial integration.

5.2.6 Vulnerabilities associated with financial integration

Although financial integration brings numerous benefits, there are attendant risks. In particular, capital account liberalisation could induce destabilising capital flows. While integration could facilitate the flow of capital to capital-scarce economies with positive output effects, integration could also induce capital outflow from capital-scarce economies with weaker institutions and policies to capital-abundant economies with stronger institutions.

Some studies have found that free capital mobility invites speculative "hot" money and increases the likelihood of financial crises, with no discernible positive effects on investment and output (Rodrik, 1998; Stiglitz, 2002). Thus, the benefits of further financial sector reforms and deeper regional integration may not be evenly distributed. Greater integration could leave economies more vulnerable to abrupt changes in capital flows and heighten the transmission of regional shocks through contagion effects. Moreover, as Kaminsky *et al.* (2004) point out, capital flows tend to be pro-cyclical. Periods of capital inflows are associated with expansionary macroeconomic policies, while periods of capital outflows are associated with contractionary policies. This means that the direction of capital flows can exacerbate economic or financial distress—"when it rains, it pours".

Financial integration is also likely to affect the structure of the financial system, which in turn, may have implications for financial stability. For example, the development of cross-border infrastructure to facilitate trading, payments, clearing and settlement could form the channels for, and increase the risk of, cross-border contagion. Furthermore, the proliferation of cross-border ownership, mergers and acquisitions, and the entry of foreign financial institutions could create vulnerabilities for domestic financial sectors. The international nature of capital movements also makes it difficult to exercise prudential regulation and put in place other safeguards, such as deposit insurance and lender-of-last-resort facilities, for imparting stability to domestic credit markets. Given these risks, regulatory frameworks and domestic institutions would need to be strengthened in tandem with liberalisation measures.

5.3 Role of institutions and markets in fostering financial integration and economic stability

5.3.1 Financial liberalisation and reform

Since the 1997-98 Asian Financial Crisis, a number of countries in the region have implemented various financial sector reform and liberalisation measures. Some countries have eased their restrictions on foreign ownership of financial assets, particularly in banking. Further, regional economies now recognise that the development of competitive capital markets could be an important way of increasing the efficiency of the overall financial system, which, prior to 1997, had been dominated by banks.

It is important, however, that the pace and sequence of financial liberalisation and reform be contingent on having in place sound macroeconomic policies, good governance and strong financial supervision as key underlying supports. Following the Asian Financial Crisis, there is now greater recognition in the region that a sound institutional framework is critical to maintaining a robust financial system. As countries liberalise their financial sectors, they have strengthened financial supervision and put in place more prudential safeguards. Some countries have also made efforts to improve their legal infrastructure and establish more effective corporate governance frameworks, albeit with varying degrees of success.

5.3.2 The need for official coordination and cooperation

The progress made in European integration has much to do with explicit governmental initiatives that complement private sector development, through a top-down approach. [9] In contrast, Asian integration has largely been driven by the private sector, especially global multinational corporations. The European experience suggests that there is scope for greater policy coordination and political impetus to propel the integration process in Asia forward.

Closer economic integration is not simply the assimilation of markets and economic systems; it is also increased cooperation and coordination among economies in the region. Given Asia's growing economic weight, deeper integration provides a means for the region to project its voice in the global arena. Coordination among economies is also necessary to address issues that transcend national borders. These

[9] For some background on the relevance of European integration to Asia, see Wyplosz (2002), Wilson (2006), and Eichengreen and Park (2004). See also Section 4.3 in this volume for related discussions.

include the orderly adjustment of international savings-investment imbalances, the development of a regional safety net to minimise or even pre-empt financial crises and contagion, the mutual recognition and harmonisation of regulations, and the development of cross-border financial infrastructure.

5.3.3 Some progress in financial integration

Some of the progress made in Asian financial integration over the past few years may be attributed to concerted efforts by governments in the region to develop markets and build regional financial infrastructure. Such initiatives include the Asian Bond Market Initiative and the Asian Bond Fund.[10]

These efforts have borne some results. Although developed markets still account for a larger share of Asia's foreign portfolio investments and the share due to intra-regional investments continue to lag that observed in Europe, the proportion has shown encouraging growth over the last few years. (Table 5.6b) Furthermore, cross-border mergers and acquisitions in the financial sector have increased, in line with growing intra-regional foreign direct investment (FDI) flows in the financial sector. For example, between 2002 and 2006, the value of financial sector cross-border mergers and acquisitions within the region reached US$16 billion, twice the amount during the preceding five-year period. These FDI flows represent an important development that complements the rising importance of intra-industry trade flows in the region.

[10] See Box A on p. 57.

5.4 Monetary policy and exchange rate frameworks in an evolving context

5.4.1 Post-crisis exchange rate regimes

Significant changes to the monetary and exchange rate frameworks in Asia have occurred since the Asian Financial Crisis of 1997-98, as countries searched for a new nominal anchor in place of informal tight exchange rate pegs to the US dollar. Paradoxically, the Crisis increased economic disparities in the region, thus making monetary integration more difficult, but rekindled political interest in Asian monetary and exchange rate cooperation. The crisis demonstrated, amongst other things, that unilateral exchange rate regimes (including *de facto* dollar pegging) did not cope very well in the early 1990s when confronted with massive capital inflows into the region. Some countries eventually succumbed to Mundell's "Impossible Trinity", namely the difficulty, if not impossibility, of juggling three economic policy objectives in the air at once: managing the currency (in effect dollar pegging), retaining some autonomy in domestic monetary policy, and being integrated with international capital markets (free capital mobility).

In the aftermath of the Asian Financial Crisis, a number of commentators suggested that perhaps a "corner" solution might be better, i.e. either keep convertibility and a stable currency but abandon monetary independence and fix the currency, preferably backed by a currency board, or keep monetary policy and convertibility but abandon currency management and adopt a free float. However, as Wilson (2006) observes, a hard peg is perceived to be too rigid for most countries in Asia; with the notable exception of Hong Kong, Asian economies have not been in a hurry to give up monetary policy independence. In comparison, the potential costs of a clean float are seen to be too great for emerging economies with weak financial infrastructure. There would be a risk of serious currency misalignment with real consequences for exports and inflation targets, and continued volatility in capital flows and foreign exchange markets, characterised by manipulation and herd behaviour, could heighten the risk of destabilising speculation.

5.4.2 The return of the middle way[11]

Recognition that the "corner" solutions may be unattractive or unfeasible for many countries in Asia, therefore, puts the emphasis back on intermediate exchange rate regimes, such as managed floating, some mixture of inflation targeting and exchange rate management, and unilateral basket regimes. In the post-crisis period, average currency volatility, both in effective terms and bilaterally against the US dollar, dropped substantially compared to the crisis period, but was still higher than in the pre-crisis period. To some extent, this has been a consequence of the move towards greater exchange rate flexibility, which is likely to be increasingly important as the saving-investment imbalances in the region are projected to be sustained, and exchange rate adjustments would eventually be required to restore equilibria.

A number of countries in the region are now more comfortable with intermediate managed floating arrangements. (Table 5.8) Singapore, for example, has long been a practitioner of a managed floating regime, which has performed well to date, especially in its ability to cope with increased volatility in international markets, as well as external demand shocks in recent years (Khor *et al.*, 2004). As Asia deepens its financial infrastructure and strengthens its supporting institutions, the scope for increased exchange rate flexibility will grow.

Meanwhile, a number of countries, such as Indonesia, Korea, the Philippines and Thailand, have adopted explicit inflation targeting as their monetary policy framework. (Table 5.8) It is unclear how consistent inflation targeting would be, in practice, with exchange rate

[11] See Chapter 2 for a policymaker's perspective on this issue.

management. The IMF (2006c) points out that inflation targeting "does not mean ignoring the exchange rate but rather that the entire operating strategy for monetary policy is not organised around a target level (or range) for that rate". In principle, some monetary autonomy could be combined with exchange rate management in the "middle zone" (of the trilemma) but this may be difficult if the exchange rate is afforded a high priority in the face of significant currency fluctuations, as one would expect for small and open emerging economies (Wilson 2006). While there has been greater tolerance of exchange rate flexibility in the region than before the Crisis, central banks have continued to intervene to moderate excessive short-term fluctuations. Ho and McCauley (2003) further observe that even for the new Asian inflation targeters, exchange rates have not exhibited the same degree of flexibility as those in other parts of the world, such as in Latin America. Nevertheless, Ho and McCauley conclude that while emerging market economies have responded more to exchange rate changes than would be required for inflation targeting, they have not been pre-occupied with exchange rate stabilisation to the extent that inflation targeting has been compromised.

The progress towards deeper financial integration in the region is likely to have implications for its monetary and exchange rate policies.[12] Impediments to capital flows would have to be reduced to encourage greater financial integration. Concomitantly, increased capital mobility must mean, over time, either reduced monetary policy autonomy or more flexible exchange rates. To be sure, this is not an immediate problem, but rather, a longer-term issue that policymakers will have to eventually confront.

5.4.3 Asia is not an optimum currency area

It has been suggested that Asian economies should consider moving towards a common exchange rate framework. Among others,

[12] See Section 4.4.

an underlying problem is that the diversity of exchange rate regimes in the region transmits fluctuations in major currencies into fluctuations in bilateral regional exchange rates, thus affecting relative competitiveness. In particular, a country with a tighter *de facto* peg with the US dollar compared to its export competitors might find itself unable to compete when the dollar appreciates strongly against the yen and the euro.

Rose (2000) finds that a currency union has a large, positive impact on international trade; he estimates that two countries that share the same currency trade three times as much as they would with different currencies. Rose postulates a few possible reasons for such a phenomenon—a common currency signals a serious commitment by governments to long-term integration, facilitates trade by conferring greater price transparency, and helps to overcome foreign exchange hedging costs in the absence of derivatives markets. A common currency could also lead to deeper financial integration, which in turn spurs trade in goods and services.

These benefits of a common currency naturally raise the question of whether Asia constitutes an optimum currency area (OCA). A group of economies may form an OCA if they are closely linked by factor mobility and trade in goods and services, or if there is evidence of convergence in the levels and behaviour of key macroeconomic indicators relevant to a common monetary policy, such as inflation, unemployment, budget deficits (indicating fiscal sustainability), interest rates and exchange rates. Other OCA criteria include evidence of small and synchronised supply and demand shocks among the potential members, common business cycles, flexibility to adjust quickly to shocks, and a system of non-distortionary fiscal transfers to redistribute gains within the region.

Empirical work on whether Asia constitutes an OCA has largely revolved around *ad hoc* application of single OCA criteria, as well as more formal modelling of the magnitude and characteristics of the supply and demand shocks affecting countries over time. This includes analysing the intensity of intra-regional trade, the speed of adjustment to shocks, and whether supply and demand disturbances are correlated. Earlier work by Bayoumi and Eichengreen (1994), Bayoumi and Mauro (1999) and Eichengreen and Bayoumi (1996) indicate that Asian economies satisfy various economic conditions for forming an OCA. Later empirical work, however, has been less supportive (Chow and Kim, 2000; Zhang *et al.*, 2004).

Nevertheless, OCA criteria may not be strictly necessary as pre-conditions for monetary integration as these criteria could be endogenous (Frankel and Rose, 1996). Countries could satisfy the OCA criteria *ex-post* and historical extrapolation could therefore be misleading. High inflation countries, for example, may be more willing to join a monetary union precisely because it will enable them to bypass domestic political constraints and gain the credibility of the common central bank.

The potential endogeneity of the OCA criteria led Eichengreen (2004) to modify the original criteria for a successful monetary union to the following: (i) the capacity to delegate monetary policy to an international institution; (ii) a culture of monetary transparency; (iii) open capital accounts; and (iv) a common transmission mechanism. Eichengreen believes that Asia could fulfil these criteria over the medium-term. At the moment, however, Asia is still some way from satisfying them.

Hence, notwithstanding some evidence that Asia satisfies *economic* criteria for forming an OCA, it is broadly recognised that Asia lacks the requisite *institutions* and *socio-political* forces to meet the modified OCA criteria, and to achieve the same level of integration that was achieved in Europe prior to the creation of the euro.

Further, notwithstanding Rose's (2000) finding, other empirical studies have questioned the link between the reduction of exchange rate volatility and the boosting of trade between partner economies. For comprehensive surveys, see Côté (1994), McKenzie (1999) and Clark *et al.* (2004). In her survey, Côté reports that while many studies have found that exchange rate volatility has a negative impact on trade, the magnitude tends to be small. Likewise, Clark *et al.* (2004) found no robust negative relationship between exchange rate volatility and trade flows in their empirical analysis. Various reasons have been proffered for the weak link between exchange rate volatility and trade. For example, the proliferation of derivative instruments could have lowered the costs of hedging against exchange rate fluctuations. Furthermore, exchange rate movements across various currencies could provide offsetting effects on the profitability of multinational firms, or even create profitable opportunities for trade and investment.

Indeed, the benefits of a common currency must be weighed against the considerable costs and difficulties of implementing one, especially in the absence of strong political will and less than complete fulfilment of the OCA conditions. Pushing ahead with a common currency when the OCA criteria are not satisfied could raise the risks of financial and exchange rate instability. A common currency also implies sacrificing independent monetary policy, which could be undesirable if individual countries face asymmetric shocks or confront different internal balance considerations. This is especially important where capital and labour are not completely mobile, and prices and wages are not fully flexible. Further, a common currency entails the loss of national sovereignty in other areas, which includes limits to public debts, the harmonisation of banking regulation and supervision, seigniorage sharing rules and provision for lender-of-last-resort operations (Wyplosz, 2002).

5.4.4 A regional currency arrangement[13]

Despite uncertainty about Asia's suitability as an OCA and ambiguity over the effects of currency volatility on trade, there are those—such as Ogawa and Ito (2002) and Williamson (1998, 2005)—who argue for establishing a regional common currency basket arrangement. Using both common weights and a basket would minimise the effects of fluctuations in major currencies on Asian currencies, and, at the same time, reduce intra-Asian exchange rate instability.

Others, in particular McKinnon, have argued that Asia is already a *de facto* dollar bloc (McKinnon, 2001; McKinnon and Schnabl, 2004). Asian economies could thus consider pegging unilaterally or collectively to the dollar, or attach a large weight to it in their currency baskets. This could help stabilise intra-bloc exchange rates and long-run exchange rate expectations, as well as to anchor regional price levels and gain the benefits of a larger dollar-trading zone among close trading partners. The appeal of such a proposal depends on whether there is sufficient evidence of a natural "dollar area" in the Asian region. Notwithstanding the US dollar's predominance in the invoicing of Asia's trade, the suspicion remains that Asia, with its diversified trade patterns, does not constitute a "*sufficiently* optimum" currency area with respect to the US, in the way that many Latin American countries may be, by virtue of their strong bilateral trade and investment links. The emergence of China as a major regional trade partner, and the expected increase in the flexibility of the yuan in currency markets, may also weaken Asia's link with the dollar (Wilson, 2006).

In terms of the evolution towards a common currency area, one can envisage a process whereby exchange rates in the region are first managed on a consistent basis, for example, by potential OCA members unilaterally shifting to a managed float regime based on a basket of

[13] See Chapter 3 for a discussion of an alternative regional currency arrangement—a proposal for an Asian Currency Unit.

currencies. Initially the composition of the basket and its currency weights could differ among countries according to each country's trade pattern and capital movements. Currency regimes that are presently either tightly pegged to the US dollar or floating freely could be shifted gradually towards a basket-based managed floating system. Over time, the composition and weights of the currencies in the unilateral baskets could be standardised in preparation for a common currency.

A variant on the common currency area is a multi-speed approach based on a "2+X" formula. Countries that are ready could proceed to integrate their currencies without waiting for other countries. However, this approach does not guarantee the acceleration of large-scale coordination, and the resultant gains from trade amongst a smaller subset of economies is correspondingly less. Furthermore, where the "2+X" formula has been advocated and several "natural" candidates proposed, including pairings such as Singapore-Malaysia and China-Hong Kong, trade and financial linkages are already quite extensive, and additional gains from monetary cooperation are thus likely to be significantly less.

5.5 Sum-up

This chapter explored various issues related to trade, financial and monetary integration in Asia. Trade integration has progressed significantly in Asia, driven mainly by market forces, the emergence of cross-border production networks and China's rise as a manufacturing and export base. In contrast, financial integration in Asia remains relatively weak, with Asian economies developing closer linkages with developed financial markets, rather than among themselves. There is hence scope for deepening financial integration to better reap its various benefits. In this respect, national authorities and multilateral institutions have important roles to play, not just in strengthening domestic financial markets and liberalising capital flows, but also in developing intra-regional financial infrastructure, harmonising regulations and taking steps to mitigate the vulnerabilities that might arise from greater cross-border capital flows.

As integration within Asia deepens, it has been suggested that the region's economies move towards a common exchange rate framework. However, current conditions suggest that Asia could not yet be considered an optimum currency area (OCA), and it is hence premature for the region to embrace a common exchange rate framework, or monetary union. In particular, political factors inhibit such a development. Nonetheless, alternative variations of a regional currency arrangement have been proposed. These include a scheme whereby potential OCA members unilaterally shift to a managed float regime based on a basket of currencies, with the composition and weights of the baskets gradually standardised over time. Alternatively, a multi-speed approach could be considered, whereby countries that are ready move to integrate their currencies first.

Appendix: Supporting Data

Table 5.1: Intra-regional Exports
US$ billion

	1990	1995	2000	2006	Average annual growth, 1991-2006
					Per cent
Asia11	287	648	794	1,605	12
ASEAN5	25	70	87	137	12
EU15	985	1,260	1,415	2,458	6
NAFTA	226	394	676	881	9

Sources: IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

Table 5.2: Exports of Selected Asian Economies
US$ billion

	1990	1995	2000	2006
Asia11	721	1,345	1,703	3,289
of which extra-regional	434	697	909	1,684
China	62	149	249	969
India	18	31	42	121
Japan	288	443	479	647
ASEAN5	139	312	406	686
of which extra-regional	114	242	319	549

Sources: IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

Table 5.3: Growth in Extra-regional Exports to Growth in Intra-regional Exports
Ratio

	1991-2000	2001-2006	1991-2006
Asia11	0.6	0.8	0.6
ASEAN5	0.7	1.2	0.9
EU15	1.4	1.3	1.4
NAFTA	0.3	1.5	0.5

Sources: Calculations based on data from IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

Table 5.4: Intra-regional Trade Intensity*

	1990	1995	2000	2006
Asia11	2.0	1.9	2.0	2.0
ASEAN5	3.7	3.0	3.6	3.8
EU15	1.4	1.5	1.7	1.7
NAFTA	2.0	2.3	2.1	2.4

Note: * Defined as the ratio of intra-regional trade to the region's total trade, normalised by the region's share of global trading activity.

Sources: Calculations based on data from IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

Table 5.5: Share of Intra-ASEAN5 Exports
Per cent share

	1990	1995	2000	2006
Indonesia	10	9	12	13
Malaysia	34	28	29	29
Philippines	2	3	7	6
Singapore	44	45	39	38
Thailand	10	15	13	15
Total	100	100	100	100

Sources: Calculations based on data from IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

Table 5.6a: Foreign Portfolio Investment in Asia10[1]
Per cent share

Source	2001	2002	2003	2004	2005
Asia8[2]	14	17	16	17	15
EU15	35	27	33	33	32
US	37	38	37	35	38
Japan	6	6	4	4	4
Others	8	12	11	10	11
Total	100	100	100	100	100

Table 5.6b: Asia8's[2] Foreign Portfolio Investment
Per cent share

Destination	2001	2002	2003	2004	2005
Asia10[1]	15	14	17	18	20
EU15	27	32	31	31	30
US	20	18	17	17	16
Japan	6	3	3	3	4
Others	32	33	32	31	30
Total	100	100	100	100	100

Notes: [1] Asia10 comprises China, Hong Kong, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand; [2] Asia8 excludes China and Taiwan due to data unavailability.

Source: IMF, *Coordinated Portfolio Investment Survey*, July 2007.

Table 5.7: Foreign Business Activity in China, 2005

	No. of bank branches	Volume of trade* with China	Direct investment in China
		US$ billion	
Hong Kong	94	137	20.2
Japan	75	185	4.6
US	42	212	2.9
UK	27	25	0.7
France	23	21	0.4
Germany	23	63	2.0
Korea	23	112	3.9
Singapore	18	33	2.3
Italy	18	19	0.3
Netherlands	15	29	0.8

Note: * Exports plus imports.

Sources: *Almanac of China's Finance and Banking*, 2006; and CEIC.

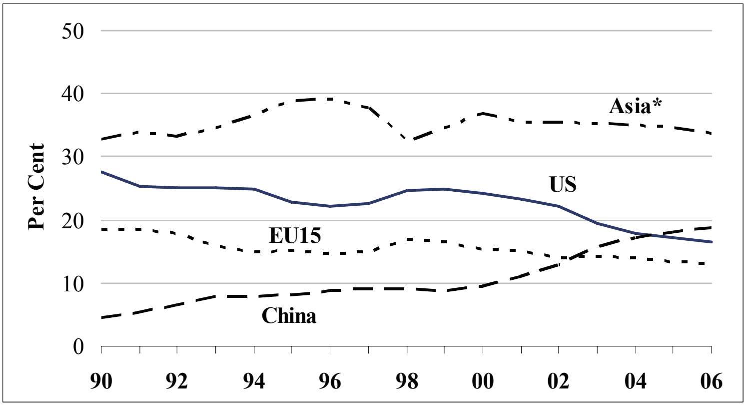
Table 5.8: *De facto* Exchange Rate Arrangements and Monetary Policy Anchors for Selected Asian Countries
As of 31 July 2006

Exchange Rate Regime	Monetary Policy Framework				
	Exchange rate anchor	Monetary aggregate target	Inflation targeting framework	IMF-supported or other monetary programme	Other[1]
Exchange arrangements with no separate legal tender					
Currency board arrangements	Brunei Darussalam Hong Kong				
Other conventional fixed peg arrangements	*Against a single currency* China[2] Vietnam[3]	China[2]			
Pegged exchange rates within horizontal bands					
Crawling pegs					
Managed floating with no pre-determined path for the exchange path			Thailand		India Malaysia Singapore
Independently floating			Indonesia[4] Korea Philippines		Japan

Notes: [1] Includes countries that have no explicitly stated nominal anchor but monitor various indicators; [2] on July 21 2005, China announced a 2.1 per cent revaluation of the renminbi-US dollar exchange rate and a change in its exchange rate arrangement to allow the renminbi to fluctuate in response to market supply and demand with reference to an undisclosed basket of currencies. From end-July 2005 to end-July 2006, the renminbi exchange rate was more flexible, but the fluctuation in the renminbi-US dollar exchange rate was less than the 2 per cent range (for a three-month period) used in the IMF's *de facto* exchange rate classification system for a conventional fixed peg. China also adopts more than one nominal anchor in conducting monetary policy; [3] the *de facto* regime is different from its *de jure* regime; [4] classification updated as of September 2007.

Source: IMF, *Classification of Exchange Rate Arrangements and Monetary Frameworks*, 2006.

Figure 5.1: Major Markets of Asia's* Exports
Per cent share of total Asian exports



Note: * Comprises Hong Kong, India, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.

Sources: Calculations based on data from IMF, *Direction of Trade*; IMF, *International Financial Statistics*; and CEIC.

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ISBN 978-981-05-9300-1