

MONETARY INTEGRATION IN EAST ASIA

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This paper is the draft of a chapter for a book on *Regional Monetary Integration* that is now nearing completion and will be published by Cambridge University Press.

The list of references contains only those pertaining to this chapter, but the list and the corresponding citations in the text have not been edited. You will thus find references such as “Padoa-Schioppa (2004b)” without a corresponding entry for “Padoa-Schioppa (2004a)” which refers to a work cited in another chapter.

We welcome comments on this draft. Please send them to pkenen@cfr.org, and we thank you in advance for your advice.

Monetary Integration in East Asia

Why East Asia Is Different and Why That Matters

Some of the country groups examined in previous chapters are more homogeneous than East Asia. That is certainly true of the EU. East Asia, indeed, is hugely heterogeneous, economically and politically. Peace prevails within the ten-country ASEAN group,¹ and ASEAN itself has helped to resolve dangerous disputes between some of its members. Yet four of its members fall far short of being democracies – Myanmar, Cambodia, Laos, and Vietnam – and others, such as Indonesia and Thailand, are struggling to contain ethnic tensions. Beyond ASEAN itself, moreover, tensions abound. There is the chronic threat of conflict in the Taiwan Straits, and there is still the smoldering legacy of past Japanese aggression against China and Korea – a legacy inflamed periodically by unresolved territorial claims. To the south, Australia and New Zealand have not decided wholeheartedly whether they belong to East Asia or to a larger Pacific community symbolized by the Asia Pacific Economic Cooperation (APEC) forum – a body so loosely organized that the last word of its name is not even capitalized.

And then there is Japan, the only Asian member of the G-7. It has the largest East Asian economy, accounting for more than half of East Asia's gross national product, even on the broadest definition of the region. Its economic preeminence, however, is threatened by its own demographic dynamics; its population will shrink sharply in the next few decades. And its preeminence is also threatened by China's rapid growth – the growth of trade even more than the growth of output.

Consider, finally, the differences among East Asian polities. Myanmar and China, while totally different, are both autocratic – the one run by generals, the other by the self-perpetuating leadership of the Communist Party. Yet most of the region's other countries are democracies, where elections are contested freely and fairly, including, of course, Japan and South Korea, and others are now moving in that same direction.

These and other differences among the East Asian countries – differences in economic size as well as differences in domestic governance – are apt to limit the extent

¹ ASEAN was founded in 1967 and had five members initially (Indonesia, Malaysia, the Philippines, Singapore, and Thailand); it now has five more members (Brunei-Darussalam, Myanmar, Cambodia, Laos, and Vietnam).

of monetary integration. It is rather hard to believe that the Chinese leadership will move soon to grant operational independence to the People's Bank of China, let alone delegate the making of monetary policy to an Asian version of the ECB. And there are no Asian institutions similar in form or function to those of the EU – those needed to produce the legislation required to integrate financial markets and set common standards for the supervision of financial institutions. It would be very difficult, moreover, to devise an acceptable distribution of seats on the governing body of an Asian counterpart to the ECB. The forthcoming enlargement of EMU has posed problems for the future governance of the ECB, and the solution devised by the ECB has itself been criticized.² It would be far harder for the East Asian countries to set up a governing board that gave appropriate voice and vote to the largest countries – China, Japan, Korea, and Indonesia – while likewise recognizing the key role of Singapore as a financial center.

There may, in the end, be an Asian monetary union, but it is unlikely to span the whole region. China and Japan are likely to keep their own national currencies, whereas the ASEAN countries or a subset of its members could form a monetary union of their own. Yet there are other ways in which the East Asian countries might undertake monetary cooperation, and this chapter will examine them closely, along with the longer-term prospects for a monetary union encompassing some or all of the East Asian countries.

Although East Asia is heterogeneous in many respects, intra-regional trade has grown rapidly in Asia, especially trade between China and Japan, on the one hand, and the middle-income ASEAN countries, on the other hand. Trade started to grow rapidly in the early 1990s, when Japanese firms began to promote an intra-regional division of labor within their own companies by setting up affiliates in low-cost countries to supply them with parts and components and to export to third markets, such as the United States.

Here is how Peter Katzenstein describes the result:

Japan's growing economic and political enmeshment in East and Southeast Asia has thus helped create an integrated Asian regional economy. It has also reinforced a triangular trade structure in which Japanese exports to and investments in Southeast Asia led to a rapid expansion of southeast Asian exports to Western markets, primarily the United States. Backed by a surge in foreign

² See, e.g., Meade (2003).

investment, trade, and the largest aid disbursements in the region, the Japanese government also sought to influence business and government abroad by exporting with minor modifications, more or less successfully, its prized system of administrative guidance.³

But China has also contributed strongly to East Asian integration. There was, first, the unifying influence of the Chinese diaspora and its family-owned firms, which have played a very important role in the growth and integration of the Southeast Asian countries. There was, next, the remarkably rapid growth and transformation of the Chinese economy, a process that may soon make China the world's largest exporter.⁴

Even in its trade dimension, however, East Asian integration is different from European integration, and the difference is stressed strongly in the growing literature contrasting the two regions.⁵ European integration was fostered strongly by the region's governments and accompanied by the creation of strong supranational institutions. By contrast, Asian integration has been in large measure a market-led process. There is, indeed, an 'institutional deficit' in East Asia. Although there are many regional entities that aim at promoting economic, financial, and monetary cooperation, they do not have the prominence or powers of the EU institutions.

There are, of course, many trade agreements within Asia, such as the ASEAN Free Trade Agreement, which is aimed at dismantling barriers to intra-ASEAN trade, and the number of agreements is growing rapidly as China and Japan become involved. In 2002, for instance, China entered into a framework agreement with ASEAN, which includes an "early harvest" of reductions in trade barriers. In 2003, moreover, Japan entered into another agreement with ASEAN looking to the creation of a free trade area, and Japan is also forging a network of bilateral agreements with individual ASEAN countries.⁶ All of these free trade agreements, however, including the ASEAN agreement itself, contain exemptions and exclusions, and they also require the use of "rules of origin," as each participating country retains its own national tariffs on imports from the

³ Katzenstein (2000), pp. 7-8.

⁴ See OECD (2005).

⁵ See, e.g., Hamilton-Hart (2000) and Katzenstein (2000); also Padoa-Schioppa (2004b) and Wyplosz (2001, 2004), who focus on differences especially relevant to monetary integration.

⁶ For an overview of trade liberalization in Asia, see, e.g., Lincoln (2004); also the inventory of free trade agreements in Sakakibara and Yamakawa (2004).

outside world. Furthermore, they are not managed by rule-making bodies like the EU institutions.

Most Asian economists and officials writing on monetary cooperation are fully aware of the institutional deficit in Asia. Nevertheless, they rarely stress its implications for the feasibility of a full-fledged monetary union. They focus the various economic benefits of having a single currency but rarely tell their readers that you can't have a single currency without having a single central bank to issue and then manage it.⁷

The Antecedents of Monetary Cooperation

Monetary cooperation in East Asia began paradoxically, with a unilateral decision by Japan. At the start of the 1990s, the Japanese government decided to promote the international use of the yen,⁸ a task soon taken up by others, notably Chi Hung Kwan, who proposed the formation of a yen bloc in Asia.⁹

The advent of monetary union in Europe at the start of 1999 also attracted attention in Asia, not only from academics, many of whose writings are cited below, but in the Asian business community as well.¹⁰ In 1998, moreover, the ASEAN governments agreed to study the feasibility of a common currency system,¹¹ and the Asia-Europe

⁷ Although Ito and Park (2004) are well aware of the institutional deficit, they make no mention whatsoever of the need for a single central bank, while Kuroda (2004) concludes his description of the path to monetary union by saying that a move to a single currency would force the national central banks to give up making independent monetary policies and subject them to a "single central authority," he does not say anything more about it.

⁸ On subsequent Japanese efforts to promote the international use of the yen, see Castellano (2000) and de Brouwer (2002).

⁹ See Kwan (2001), p. xiv, where he explains that his proposal was inspired by the shift in Japanese policy, although he is content to propose that other Asian countries, such as Korea and Taiwan, adopt basket pegs heavily weighted with yen. He gave two reasons for that proposal: achieving greater exchange-rate stability within East Asia and constraining the policy autonomy of the United States. In the longer run, he argued, the yen could become the common currency of East Asia, with the Bank of Japan setting monetary policy for the whole region (pp. 167-70). Other Japanese economists have likewise proposed basket pegs heavily weighted with yen – more heavily than those proposed by most other advocates of basket pegs. Yet Barro (2004), who finds strong empirical evidence of well-defined dollar and euro areas, finds no such evidence of a yen area.

¹⁰ A 2002 poll of corporate executives found that 43 percent of the respondents favored eventual monetary union; Lincoln (2004), p. 325.

¹¹ See Bird and Rajan (2002), p. 27.

Meeting of finance ministers organized a very ambitious study, the Kobe Research Project, on the feasibility and merits of an Asian monetary union.¹²

It is widely agreed, however, that the Asian financial crisis was the main driver of monetary cooperation. The crisis began in the summer of 1997, when Thailand suffered a massive capital outflow, exhausted its foreign-currency reserves, and had to abandon the baht peg to the dollar, allowing the baht to depreciate hugely. The crisis spread rapidly to other ASEAN countries, most notably Indonesia, and was then deflected northward to Hong Kong and Korea when Taiwan devalued its currency in a pre-emptive move to ward off the effects of the crisis.¹³

Asian governments and drew numerous lessons from the nature and virulence of the crisis and from the ways in which the international community responded to it. There was dissatisfaction with the size and speed of the response by the International Monetary Fund and with the failure of the United States to offer financial support comparable to the support it had offered Mexico in 1995, when that country suffered a grave crisis of its own. The United States declined to participate in multilateral financing for Thailand, an effort organized by Japan, and when it agreed thereafter to furnish financing for Korea, it restricted the use of its money to serve as a “second line of defense” rather than making it available up front to replenish Korea’s dwindling reserves.¹⁴

Asian dissatisfaction with the IMF focused largely on the number and nature of the policy conditions attached to IMF financing during the Asian crisis, and some Asian critics of the IMF believe that it was acting at the behest of the United States, which they accused of seeking to supplant an indigenous Asian model of economic development

¹² See the overview by the Regional Economic Monitoring Unit (REMU) of the Asian Development Bank (ADB 2002a).

¹³ For an account of the crisis, see, e.g., Kenen (2001), pp. 26-43, and the sources cited there.

¹⁴ The failure of the United States to provide funding for Thailand is often ascribed to the so-called D’Amato Amendment – legislation adopted after the Mexican crisis limiting the freedom of the U.S. Treasury to use the Exchange Stabilization Fund (ESF) as it had in the Mexican case. Yet Robert Rubin, the Treasury Secretary at the time, while citing the D’Amato Amendment and concerns about a possible tightening of Congressional restrictions on the future use of the ESF, gives other reasons for deciding against U.S. financing for Thailand; see Rubin and Weisberg (2003), pp. 218-220. On Asian criticism of the U.S. role in the Korean crisis, see Nemoto (2003); on the common assertion that the United States has provided or endorsed ample financing for countries of special importance to Washington but not for the Asian countries, see, e.g., Chang and Rajan (2001).

with an Anglo-American model.¹⁵ Yet Asians are not alone in criticizing the large number and nature of the policy conditions imposed by the IMF, especially those that called for structural reforms that were of dubious relevance to the resolution of the Asian crisis. The Fund's own Independent Evaluation Office has done that too. The reforms required in the Indonesian case were, it says, aimed at restoring confidence by committing the government of President Suharto to a "radical change in its way of doing business," but they fell short of that objective. And the list of reforms required in the Korean case "was broader than seemed necessary, covering not only financial sector reforms but also trade liberalization, corporate governance, and labor market reform."¹⁶

Having taken the lead in mobilizing financial support for Thailand, the Japanese government went even further. In September 1997, even before the IMF had called for far-reaching structural reforms in Indonesia and Korea, Tokyo proposed the creation of an Asian Monetary Fund (AMF). The proposal, however, was strongly opposed by the United States and the IMF, failed to win Chinese support, and died very quickly.¹⁷

The Chiang Mai Initiative

Two years, later, however, China adopted a "proactive stance" toward regional monetary cooperation.¹⁸ It began to involve itself in efforts to develop regional debt and capital markets, and it suggested what was to become the first annual meeting of the finance ministers of the ASEAN+3 countries.¹⁹ The meeting took place in 2000, at Chiang Mai in Thailand, where the finance ministers agreed to exchange data on capital flows, a step toward the development of an early warning system as a safeguard against future crises,

¹⁵ Chang and Rajan (2001) suggest that this view influenced Japanese policy, including Tokyo's decision to furnish large-scale financing to Thailand and other Asian countries caught up in the crisis, (the so-called New Miyazawa Initiative). It also explains Japan's decision, discussed below, to propose the creation of an Asian Monetary Fund.

¹⁶ IEO (2003), p. 42.

¹⁷ Amyx (2005) suggests that China was reluctant to antagonize the United States while China was seeking accession to the World Trade Organization; she also suggests that the Japanese blundered diplomatically by using the Hong Kong Monetary Authority to elicit Chinese support; only later did they seek support directly from the People's Bank of China. Eichengreen (2001, 2002) and Keijzer (2001) suggest that China also feared Japanese dominance of an AMF – as did the United States, which also feared that competition between the AMF and IMF would degrade the quality of conditionality.

¹⁸ Amyx (2005) p. 2.

¹⁹ They had met in Manila in 1999 at the invitation of the ASEAN countries, where they declared that monetary and financial cooperation had become "priority areas of shared interest and concern" and thus agreed to a Chinese suggestion that they hold regular meetings thereafter; see Nemoto (2003).

and Japan proposed the development of the bilateral credit arrangements now known as the Chiang Mai Initiative (CMI). Hugh Patrick describes the meeting as the “start of meaningful East Asian regional cooperation.”²⁰

Earlier, in 1977, the ASEAN countries had agreed to create a network of short-term bilateral swap agreements under which each ASEAN country could obtain U.S. dollars in exchange for its own national currency. A swap could last for no more than three months but could be renewed for three more months.²¹ As the amounts involved were small, however, the swaps were rarely activated and were not used at all during the Asian crisis.

At Chiang Mai, China, Japan, and Korea agreed in principle to negotiate bilateral swap agreements with each ASEAN country, as well as bilateral swap agreements between themselves. Most of the agreements put in place thereafter are patterned after the earlier ASEAN swap agreements; a country seeking financial support uses its national currency to buy U.S. dollars. The agreement between China and Japan, by contrast, allows China to purchase yen with renminbi and Japan to purchase renminbi with yen.²²

These agreements involve much larger amounts of money than the earlier ASEAN agreements; some of those signed by Japan allow bilateral dollar purchases as large as \$3 billion. But they contain two provisions that may limit the amount of financing actually available. First, the potential provider of dollars can opt out at its discretion. Second, a country cannot draw more than 10 percent of the total amount potentially available unless it has reached or is close to reaching an IMF agreement. This provision served to allay the concerns produced by the Japanese proposal for an Asian Monetary Fund – that it could impair the ability of the IMF to influence the national

²⁰ Patrick (2005), p. 18.

²¹ For details, see Henning (2002), pp. 14-15. Shortly after the Chiang Mai agreement, the ASEAN swaps were enlarged, raising the overall size of the ASEAN swap network to \$1 billion. Furthermore, the duration of a drawing was raised from three to six months, as was the duration of the renewal period.

²² The agreements involving Korea also permit two-way swaps; Korea can buy dollars from others, and they can buy dollars from Korea; see Henning (2002), p. 18.

policies of the Asian countries.²³ Furthermore, it allowed the participants to adhere to a basic ASEAN tenet – non-interference in the internal affairs of other ASEAN countries.²⁴

Although no country has sought yet to draw on the bilateral swap agreements, the participating governments have already decided to make several changes in the existing regime. At the Istanbul meeting of the Asian Development Bank in 2005, they agreed on four objectives: (1) integrating economic surveillance into the CMI with the aim of developing effective regional surveillance capabilities complementary to those of the IMF; (2) clarifying the activation process and adopting a collective decision-making mechanism as a first step toward multilateralization; (3) increasing the sizes of the bilateral swap agreements; and (4) raising from 10 to 20 percent the amount that a country can draw without having an IMF program.²⁵

Others have gone further than the finance ministers, proposing the conversion of the CMI into a full-fledged AMF, although some are fully aware of the problems that an AMF would face in conducting intrusive surveillance, let alone imposing policy conditions analogous to those imposed by the IMF.²⁶

There have been other efforts to foster cooperation in Asia, and some have already borne fruit. The Executives' Meeting of East Asia and Pacific Central Banks (EMEAP) has sponsored the creation of two bond funds. The first, created in 2003, was a \$1 billion fund to be used for buying dollar-denominated bonds issued by Asian governments. The second, created in 2004, aims at financing a set of bond funds to invest and trade in local-currency bonds (a Pan-Asian Bond Index Fund and eight single-

²³ Henning (2004, p. 3) attaches particular importance to this provision. It shows, he says, that the CMI was not a manifestation of Asian objections to IMF policies during the Asian crisis; it was instead a response to the view then prevalent in the U.S. Congress that the IMF should not provide large-scale financing in the event of future crises.

²⁴ Nemoto (2003, p. 23) emphasizes this particular feature; it was not meant mainly to avoid conflict with the IMF but rather to protect the potential creditors from the need to design and impose onerous policy conditions of their own.

²⁵ *Joint Ministerial Statement of the 8th ASEAN+3 Finance Ministers' Meeting* (May 4 2005).

²⁶ See, e.g., Bergsten and Park (2002), who suggest that an AMF could provide financial support for a common currency (by which they really seem to mean a common currency *basket* of the sort discussed later in this chapter). See also Bird and Rajan (2002), Montiel (2004, p. 24), and especially de Brouwer (2004a); he discusses the idea at length and appears to endorse it as a way to compensate partially for the underrepresentation of Asia in the IMF. In 1999, moreover, before the advent of the CMI, the ADB had also urged the creation of an AMF, because it could serve as a complement to the IMF in providing funds to crisis-stricken countries and could develop an early warning system to ward off future crises; see Chang and Rajan, 2001), p. 12.

country index funds). Both initiatives were meant in part as learning exercises, aimed at detecting and removing obstacles to the integration of Asia's bond markets.²⁷

Although the two bond funds may make only a modest contribution, in and of themselves, they are part of a more ambitious effort to strengthen financial markets and financial systems in the East Asian countries, and Barry Eichengreen argues strongly that this task is more urgent and apt to be more fruitful than any effort to promote monetary integration.²⁸ He is surely right about the need for the reform and development of the financial sector, and he may be equally right to question the likelihood and benefits of monetary integration. Yet others have been less skeptical and have therefore devoted much attention to monetary integration and to the various forms it might take.

Squaring an Obdurate Circle

Before assessing the benefits and costs of monetary integration, we need first to confront a difficult problem: squaring the reluctance of Asian governments to criticize each other – the principle of non-intervention – with the need for intensive surveillance of national policies when countries adopt a single currency or undertake looser forms of cooperation in monetary matters.²⁹

The need for some sort of surveillance was recognized speedily during the Asian crisis, and it focused at first on the need to devise an early warning system to forestall future crises and, failing that, to limit the sort of cross-country contagion that occurred in the wake of the Thai crisis.

The earliest effort began in 1997, during the crisis itself, when APEC sponsored the creation of the Manila Framework Group (MFG). Its membership, however, was too

²⁷ On the creation of the bond funds and the lessons learned, see Ma and Remolona (2005). For a skeptical assessment, see Eichengreen and Luengnaruemitchai (2004), who find that Asian bond markets are not abnormally small, given the sizes of the Asian economies and some of their other characteristics; see also Eichengreen and Park (2005), who ascribe the faster integration of European bond markets to the earlier abolition of capital controls. On the possible merits of using a common currency unit, analogous to the ECU, to promote bond-market integration, see Plummer and Click (2005) and Eichengreen (2005a).

²⁸ See Eichengreen (2001, 2002), where he proposes the creation of an Asian Financial Institute to foster and oversee financial-sector reform in Asia.

²⁹ The principle of non-intervention in other countries' affairs is not unique to ASEAN. It permeates relations among all Asian countries. See Girardin (2004), who suggests that the principle is grounded in "Asian values." Citing Kahler (2000), he argues that Asians are less concerned with demonstrating right and wrong than with avoiding conflict, and he concludes that Asian surveillance cannot be effective unless it is based on ownership of the resulting recommendations. Manzano (2000) makes the same point.

broad to foster candid dialogue among East Asian governments; it included only the larger East Asian countries while also including Australia, Canada, New Zealand, the United States, and the main multilateral institutions. In fact, some Asians viewed the MFG as a foreign body – an agent of the IMF and U.S. government that they would use to foster reform in Asia, when what Asia truly needed was a forum in which the Asian countries could grapple with intra-regional issues.³⁰

In 1998, the ASEAN responded to this need by organizing its own surveillance process with technical assistance from the Regional Economic Monitoring Unit (REMU) of the ADB.³¹ That process begins with the preparation of a confidential staff report, which is then reviewed and finalized by a meeting of senior officials from the finance ministries and central banks of the ASEAN countries. It is then discussed at a finance ministers' meeting meant to be a forum for peer review, and it finds its final expression in an agreed ministerial statement. In 2000, moreover, China, Japan, and Korea began to participate in a similar process now known as the ASEAN+3 Economic Policy Review and Dialogue Process.

The ASEAN and ASEAN+3 processes differ substantially from the sort of surveillance conducted by the IMF. Both begin with staff work. In the case of the IMF, however, a staff mission is sent annually to each member country. Furthermore, the Fund encourages the publication of the voluminous report prepared by the staff mission, and a large number of IMF members now consent to publication of the staff report.³² At the end of the process, moreover, the IMF issues a Public Information Notice summarizing the views of the Fund's Executive Board about the findings and recommendations in the staff report. There is no attempt, however, to obtain agreement between the staff and the government concerned regarding those recommendations, whereas the ASEAN+3 process ends with publication of an agreed communiqué by the finance ministers.

³⁰ See de Brouwer (2004b), p. 46.

³¹ The description that follows draws heavily on Girardin (2004) and on Wang and Woo (2004). REMU is now called the Office of Regional Economic Integration.

³² At an early stage in East Asian surveillance, these IMF staff reports were used extensively as the most readily available source of information on recent economic developments in the Asian countries, because they were available to the Asian governments, even those that were not published; see ADB (2002b).

Here is a recent critique of the ASEAN+3 process:³³ First, it needs to specify the precise content of the information to be provided by individual governments, rather than giving them wide discretion; absent such standardization, it is hard to draw comparisons between countries' situations. Second, the ASEAN process cannot provide an early warning of potential risks, because the discussion at the ASEAN+3 meetings tends to focus only on recent developments and only on the information each country elects to provide. The substance of the policy recommendations and their subsequent implementation remain to be developed.

Clearly, more must be done for regional surveillance to have any appreciable impact on the policy-making processes of the East Asian governments. The present approach, even if based on standardized data and aimed explicitly at drawing attention to potential problems, would still be inadequate. A draft prepared by staff in the expectation that it will be vetted by deputy ministers and then passed on to ministers, seems doomed to yield an anodyne document, and a reading of the ministers' recent statements strongly supports that supposition. No such document can be expected to name and blame, not even to generate a polite discussion about incipient risks.

It is probably unrealistic to envision the early adoption of a more confrontational approach, in which the finance ministers would offer candid criticism of their colleagues' policies. There is, however, another *modus operandi*, akin to the one used in the OECD. There, each government confronts the analysis and recommendations of the staff and has to respond to them. There is thus 'peer pressure' whenever a member's own forecasts or policies are criticized by the staff and other governments support that criticism. Governments do not quarrel with each other, although they can quarrel with a government's objections to the staff's recommendations.³⁴ And though the final version of the staff's analysis takes note of the government's objections, there is no attempt to negotiate a communiqué papering over disagreements among the governments involved. A similar process prevails in the Council of Ministers of the European Union, where the analyses and recommendations of the European Commission provide the focus for debate.

³³ This is a summary of the critique offered by Wang and Woo (2004), p. 444. That critique, taken together with the comments made in the next paragraph, call into question Amyx's assertion that the ASEAN+3 has "an institutionalized program of policy dialogue and information exchange that surpasses in frequency and depth that found in any other forum" (Amyx, 2005, p. 2).

³⁴ We owe this analogy to Grenville (2004); see also Wang (2002, 2004).

If and when some of the Asian countries cooperate more closely in matters involving exchange-rate management and the associated national policies, let alone a full-fledged monetary union, they must adopt a more intrusive process. They must come to distinguish between constructive criticism, aimed at improving the functioning of their exchange-rate arrangements, and breaching the Asian tradition of non-intervention in their neighbors' internal affairs. An exchange rate is, by definition, a shared variable. It is not the property of a single government. And the same can be said about the exchange rates that link Asian currencies to outsiders' currencies. The renminbi-dollar rate is not Chinese property; it is 'owned' jointly by Beijing and Washington.

Some Asian economists go even further. It is essential, they say, that policy recommendations agreed by the Asian governments should be made public, to reinforce peer pressure by market pressure. Furthermore, governments failing to implement the recommendation to which they have themselves agreed should be barred from access to short-term financing of the sort available *via* the CMI.³⁵

The Evolution of Exchange-Rate Arrangements in Asia

Let's recall the range of exchange-rate arrangements prevailing in Asia before the Asian crisis. At one extreme, Japan had a floating exchange rate, although it engaged in substantial intervention to influence the path and rate of change of the yen-dollar rate. At the other extreme, China had a rigidly fixed rate *vis-à-vis* the U.S. dollar, while Hong Kong and Brunei had even stricter currency-board regimes, based on the U.S. dollar and Singapore dollar, respectively. As for the other ASEAN countries and Korea, most of them described themselves officially as having flexible exchange rates, though numerous studies have shown that most of them pegged their currencies more or less firmly to the U.S. dollar, partaking of what Ronald McKinnon described as the Asian dollar standard.³⁶ (Singapore's regime was and remains exceptional, and it is described below.)

During and after the Asian crisis, however, most of the ASEAN countries began to do what they had claimed to do before – letting their exchange rates fluctuate more

³⁵ Wang and Woo (2004), p. 453.

³⁶ McKinnon (2000a,b), (2004), and (2005); on the very large weights they attached to the dollar when managing their currencies, see, e.g., Frankel and Wei (1994).

freely. Malaysia was the clear exception, as it switched to a strict dollar peg backed by the imposition of new capital controls. In July 2005, however, Malaysia loosened its tie to the U.S. dollar on the same day that China revalued the renminbi by 2.1 percent *vis-à-vis* the dollar and announced that its exchange-rate policy would henceforth be guided by the behavior of a multi-currency basket.

The move to more flexible rates in Asia was roundly condemned by McKinnon, who continues to call for resurrection of the Asian dollar standard. The widespread use of the dollar for pricing tradable goods, he argues, allows a country that pegs to the dollar to ‘import’ price stability. He now concedes, however, that the Asian dollar standard cannot survive unless Tokyo and Washington agree to stabilize the yen-dollar rate. That rate, he says, was the “loose cannon” that undermined the dollar standard and was in part responsible for the Asian crisis. As Tokyo and Washington are hardly likely to take his advice, his case for the dollar standard is gravely weakened, along with the case for any other single-currency peg.³⁷ What, then, are the options available to the Asian countries? Consider first two single-country options, then two multi-country options.

Two Single-Country Options

There is still a strong aversion to exchange-rate flexibility in East Asia, but not for the reason most often adduced, that uncertainty depresses trade. There is by now some evidence supporting that assertion, but the adverse effects on trade and capital formation appear to be quite small³⁸ The aversion derives instead from Asia’s long-standing reliance on export promotion as a way to foster economic development. It is, in effect, an aversion to real appreciation rather than exchange-rate flexibility *per se*. That aversion,

³⁷ We do not mean to imply that currency boards are inappropriate for Hong Kong or Brunei, although it is worth considering other options. There has been some discussion of a ‘Greater China’ monetary union involving the Chinese mainland, Hong Kong, Macau and, politics permitting, Taiwan as well. It cannot be formed, however, until the renminbi has become fully convertible; see, e.g., Cheung and Yuen (2005) and Genberg *et al.* (2005), p. 58. Brunei could replace its strict link to the Singapore dollar by linking itself to a single ASEAN currency, if and when that currency is introduced; alternatively, it could become a full member of a future ASEAN monetary union, one of the options discussed later in this chapter.

³⁸ See Frankel and Wei (1994) and the papers cited by Kawai and Takagi (2005), and Rajan (2002); see also the suggestion by Eichengreen (2001, p. 12) that exchange-rate fluctuations may discourage foreign direct investment by vertically integrated firms. It must be noted, however, that the same uncertainty about future exchange rates that inhibits trade and direct investment also helps to inhibit unhedged foreign-currency borrowing by a country’s banks and firms, and that was one of the proximate causes of the Thai crisis and of the grave damage suffered by Indonesian firms when the crisis spread and the rupiah depreciated hugely.

moreover, was reinforced by the Asian crisis, when some Asian countries lost out to others in their major export markets, not only Asian markets but other markets too, when their competitors' currencies depreciated sharply. A depreciation of the Thai baht or Indonesian rupiah was, in effect, an appreciation of the Malaysian ringgit and Korean won, even if there was no change in their U.S. dollar values.

Some say that East Asia has outgrown the need for export-oriented growth. Barry Eichengreen concedes that it played a major role in Asian development strategies during the second half of the 20th century, but he argues that it will not be essential to their development strategies in the current century.³⁹ Elsewhere, moreover, he draws attention to the efforts of some Asian countries to stimulate consumption, although he concedes that “the traditional model may have some way to run,” especially in China and other lower-income countries.⁴⁰ Even in China, however, there is awareness of the need to stimulate consumption, rather than rely for growth on exports and investment. Yet other economists in Asia and elsewhere, including Takatoshi Ito and John Williamson,⁴¹ still favor exchange-rate regimes aimed at achieving stable exchange rates, although there are very few advocates of strict single-currency pegs.⁴²

A Floating Exchange Rates Combined with Inflation Targeting

Those who believe that Asia has outgrown the need to manage exchange rates intensively recommend that Asian countries move to floating exchange rates. They do not say that governments should forego *any* intervention in foreign-exchange markets to limit the size or speed of exchange-rate movements. Barry Eichengreen makes that very clear: “Leaning against the wind in foreign exchange-markets is integral to the operation of

³⁹ Eichengreen (2001b), p. 5.

⁴⁰ Eichengreen (2002), p. 30.

⁴¹ See Ito (2002) and Williamson (1999, 2001); also Dornbusch and Park (1999), Ito and Park (2004), and Kuroda (2004); some of these authors go further, proposing the adoption of a common basket to reinforce intra-regional exchange-rate stability. That option is examined in the final section of this chapter.

⁴² McKinnon, cited above, and Robert Mundell are the leading advocates, although Mundell approaches the issue obliquely. He begins by proposing that Asian countries peg their national currencies to a common currency unit defined by a basket containing the dollar, euro, and yen, but he then adduces reasons for dropping the euro and yen, which leaves him with a dollar peg; see Mundell (2002, 2003). On the several merits of the dollar peg in the pre-crisis era, see Kawai (2004), who argues that it lost its luster when the yen depreciated in the mid-1990s.

inflation targeting in open economies,”⁴³ and it does not imply benign neglect of the exchange rate. It merely means that monetary policy should cease to be driven by a rigid reaction function linking exchange rates and interest rates or by some target value for a country’s currency.⁴⁴

When the exchange rate floats, of course, it cannot anchor the price level. Therefore, many countries with floating exchange rates use inflation targeting as their guide to making monetary policy. They do not try to keep the inflation rate constant at each point in time. Rather, they seek to contain it within a range consistent with price stability over the medium term. To do that, of course, they have to forecast future inflation, using econometric models of their own, forecasts made by others, and, when available, forecasts implied by the difference between market interest rates on ordinary bonds and market interest rates on inflation-indexed bonds. Inflation forecasts are required, because monetary policy cannot affect inflation today; it can only affect future inflation. By publishing their forecasts, moreover, central banks can convey information, not only about future inflation but, more importantly, about the future paths of their monetary policies. A number of industrial countries have adopted this regime, including New Zealand (the first to do so), Australia, Canada, Switzerland, and the United Kingdom,⁴⁵ and central banks in 13 emerging-market countries have likewise adopted inflation targeting, including three East Asian countries (Korea, the Philippines, and Thailand).⁴⁶

Critics of this regime often claim that inflation targeting forces a central bank to ignore other important dimensions of economic performance, such as real output or the exchange rate. This is not necessarily true. In some situations, a monetary policy that

⁴³ Eichengreen (2002), p. 33.

⁴⁴ *Ibid.*, p. 35; see also Goldstein (2002) and Eichengreen (2004).

⁴⁵ Although price stability is the primary objective of the ECB, it is not classified as an inflation-targeting central bank, largely because it has an asymmetric policy target – keeping inflation below but close to 2 percent – rather than seeking to keep inflation within a pre-announced range. Furthermore, as was noted in Chapter 3, it uses a second target, the growth rate of a broad monetary aggregate, in the formulation of its monetary policy.

⁴⁶ See IMF (2005b, ch. iv), which provides a review of experience with inflation targeting and of the relevant literature. It also compares two groups of emerging-market countries, 13 inflation-targeting countries and 29 other emerging-market countries, and its findings are quite striking. Although both groups of countries reduced their inflation rates during the period under study, the inflation-targeting countries reduced them further, and they did so without suffering more output volatility. See also Ito (2004) on inflation targeting by Asian central banks.

stabilizes output or the exchange rate is consistent with meeting an inflation target. Consider three cases in which an economy starts at full employment:

(1) A spontaneous fall in aggregate domestic demand will depress output and imports, and the fall in imports will cause the domestic currency to appreciate under a floating exchange rate. With output below its potential level and an appreciation of the domestic currency, inflation can be expected to fall. If, then, the central bank believes that fall in domestic demand is not merely temporary, it will reduce short-term interest rates by enough to take the economy back to full employment. The interest-rate cut will induce a net capital outflow, which will tend to reverse the appreciation of the domestic currency. In this case, then, an inflation-targeting monetary policy will serve to stabilize output, inflation and the exchange rate.

(2) A spontaneous change in investors' preference that raises the demand for domestic assets will attract a net capital inflow and thus cause the domestic currency to appreciate. The appreciation will worsen the trade balance by raising imports and reducing exports and will therefore reduce domestic output, as in the previous case. Furthermore, it will lead to lower expected inflation, directly and by way of its impact on domestic output. If the central bank expects the capital inflow to continue, it may again reduce short-term interest rates. By doing that, the central bank will reduce the capital inflow, the appreciation of the domestic currency, and the deterioration of the trade balance. Once again, the monetary-policy response will tend to stabilize output, the exchange rate, and inflation.

(3) A spontaneous fall in foreign demand will cause a reduction in exports, a deterioration of the trade balance, and a depreciation of the domestic currency. The fall in domestic output resulting from the reduction in exports will work to reduce expected inflation, but the depreciation of the domestic currency will have the opposite effect. The central bank's response will therefore depend on its judgment about the relative sizes of the two effects. If it expects inflation to fall, it will reduce interest rates; that will induce additional depreciation and higher expected inflation, and it will also stimulate output. If it expects inflation to rise, it

will raise interest rates; that will limit or reverse the depreciation and stabilize inflation, but it will cause a larger output loss.⁴⁷

One can surely concoct cases in which inflation targeting, with or without a floating exchange rate, will lead to reductions in output and employment, but they are fewer than the cases in which the combination of inflation targeting with a floating exchange rate will tend to stabilize output and employment, as well as achieving its primary aim – maintaining price stability.

A Single-Country Basket Peg

At the opposite extreme, a country can anchor its currency explicitly to a basket of foreign currencies, typically those of its main trading partners, and then intervene in the foreign-exchange market to keep the actual basket value within the boundaries of a band around the targeted path of the basket value. It does not have to intervene in each and every currency entering its basket. If, for example, it pegs to a basket comprising the dollar, euro, and yen, and the yen appreciates *vis-à-vis* the domestic currency, it can stabilize the value of its currency basket by selling dollars instead of yen.

Three reasons are usually adduced for adopting a fairly wide band around the target value of a currency basket: (i) the need to limit the size and frequency of intervention; (ii) the need to create a modest amount of exchange-rate uncertainty in order to deter speculation by market participants and a build-up of currency mismatches on the books of domestic banks and firms; and (iii) the freedom to devalue or revalue the target value of the basket without forcing market exchange rates to jump between non-overlapping bands – a result that would unduly enhance the profitability of speculation.⁴⁸

⁴⁷ Ogawa, Ito, and Sasaki (2004) come to a similar conclusion.

⁴⁸ One advocate of this regime, John Williamson, while favoring wide bands, would let a country using a currency basket allow the market value of its basket to breach the limit of its band when it is confronted by strong speculative pressures. In fact, he describes the boundaries of the band as “reference values” rather than fixed limits. He also suggests that a country using this regime allow the target value of its currency basket to rise or fall gradually so as to offset a gradual change in its country’s competitive position. That’s why this regime is often called the BBC regime – for basket, band, and crawl in the target value. For his full-fledged treatment of the BBC regime, see Williamson (2000); on his case for using it in East Asia, see Williamson (1999), where he argues that the BBC regime can be combined successfully with inflation targeting. In Williamson (2000), incidentally, he explains that his use of the term ‘common’ in the title of his previous paper was not meant to suggest that the Asian countries should adopt identical basket pegs of the sort discussed in the next section of this paper. He meant merely to suggest that each Asian country adopt its own basket, then use it in a fashion appropriate to its particular needs.

How should a country choose the currencies and weights for its own currency basket? Clearly, it should include the currencies of its main trading partners and weight them according to their importance in its foreign trade. Yet simple trade weights cannot be optimal; they cannot allow for the ways in which trade flows respond to price changes and, therefore, exchange-rate changes. And when you compare theoretical papers on the choice of optimal trade weights, you find that the authors' results depend on their definitions of optimality; some aim to stabilize the trade balance while others aim to minimize the variance of domestic output.⁴⁹

Advocates of currency baskets see them as a way to achieve exchange-rate stability without incurring the rigidity and risks of defending a single-currency peg – including the risk that the single currency chosen for that purpose fluctuates in terms of third countries' currencies, conferring less stability than it seems to promise. Some countries, however, use currency baskets for a different purpose. In July 2005, China announced that it would use a currency basket to influence its future exchange-rate decisions. And Singapore uses a currency basket as a policy instrument to maintain price stability. The Monetary Authority of Singapore has an inflation target but does not rely on interest-rate changes to achieve that target. There are two reasons. First, its financial markets are tightly integrated with international markets, and it has very little control over short-term interest rates. Second, its goods markets are likewise integrated with international markets. In fact, its exports exceed its gross national product. For that same reason, moreover, changes in the value of the Singapore dollar affect domestic prices strongly, and Singapore can influence domestic prices to maintain price stability by intervening in the foreign-exchange market rather than the money market.⁵⁰

⁴⁹ There is a large literature on this subject; see, e.g., Ito, Ogawa, and Sasaki (1998), Ogawa and Ito (2002), and Yoshino, Kaji, and Suzuki (2002). It is often suggested that trade weights be adjusted to take account of another complication – the extent to which a country's trade is not invoiced in the currency of its trading partners but rather in the currency of some third country, such as the U.S. dollar; see, e.g., Eichengreen (2001b), p. 19. It is easy to show, however, that the relevant exchange rates are those of the country's trading partners, regardless of the currency in which its trade is invoiced. Suppose that a Korean firm exports electric motors to Japan but prices them in dollars. Suppose further that the dollar appreciates by 10 percent *vis-à-vis* the won and yen. The Korean exporter can afford to lower its dollar price by 10 per cent, as it will still receive the same number of won for its dollar earnings. If it does that, moreover, the Japanese importer can buy the same number of electric motors for the same number of yen. When, as here, each party measures its profitability in its own national currency, it is the yen-won exchange rate that matters, and it has not changed.

⁵⁰ On Singapore's experience, see Khor, Ho Ee, Edward Robinson, and Jason Lee (2004).

Singapore does not disclose the composition of its currency basket, although it does publish a time-series chart, showing the path of the basket value. China, by contrast, has listed publicly some of the currencies that enter importantly into its currency basket, but it has not yet published the weights of those currencies, nor any time-series chart on the basket value of the renminbi. It has also confounded observers by deciding to retain a very narrow daily trading band for the renminbi-dollar rate, which would seem to deprive the currency basket of any operational influence over China's exchange-rate policy.⁵¹

Critics of basket pegs sometimes say that they lack credibility because they are not sufficiently transparent.⁵² Credibility is important, not only for the viability of a basket peg but also for the conduct of monetary policy. Transparency *per se*, however, is far less important than consistency – a point illustrated by the regimes described in the previous paragraph. The Monetary Authority of Singapore enjoys credibility, although it declines to disclose the composition of its currency basket, because it behaves consistently.⁵³ The Peoples' Bank of China falls far short on that score, because its exchange-rate regime appears to contain an internal inconsistency and because it is not the final arbiter of exchange-rate policy – nor, for that matter, of monetary policy.

Two Multi-Country Options

There are two quite different ways for a group of countries to manage exchange rates collectively: adopting a common currency basket to limit exchange-rate fluctuations, or forming a full-fledged monetary union and thus adopting a single currency and single monetary policy. The first can be regarded as a permanent arrangement or as a way-station on the road to monetary union.⁵⁴ The second requires the creation of a single central bank, the institutions needed for its governance, safeguards for its independence,

⁵¹ The initial description of China's exchange-rate reform appeared to say that the position of the renminbi-dollar band would be adjusted daily in light of the previous day's behavior of the renminbi-dollar rate. That procedure, however, would not guarantee close consistency between the evolution of the renminbi-dollar rate and of the multi-currency basket unless the target value of the basket was likewise adjusted daily. No firm judgment on these matters can be made, however, without knowing the weights used in the basket, especially the dollar weight, as well as the target value of the basket, and the width of the band around it.

⁵² See, for example, the critique in Bayoumi, Eichengreen, and Mauro (2000).

⁵³ Rajan (2002, p. 158) makes the same point, likewise citing Singapore, and de Brouwer (2002) takes it further; an excess of transparency, he argues, may expose a basket peg to speculative pressures.

⁵⁴ It should be noted, however, that the Europeans set up the European Monetary System (EMS) in 1979, a full decade before they took the first steps toward full-fledged monetary union. They saw it as a way to fashion a "zone of monetary stability" within Europe, not as a precursor to monetary union.

and ways to render it accountable for its decisions and performance. It also requires the integration of its members' money markets and their banking systems, though it need not necessarily require the lifting of all capital controls. A monetary union can be created without the unification of prudential supervision but does require strict adherence to common standards by those responsible for prudential supervision.⁵⁵ Finally, it requires a well-defined way to manage the common external exchange rate of the monetary union.

Having just discussed the principal problems involved in designing a currency basket for a single country, we look first at the problems involved in designing a common currency basket, then turn to the harder task of setting up and managing a monetary union.

Designing a Common Basket Peg

When a single country decides to adopt a currency basket, it has merely to decide which foreign currencies it wants to put into the basket and what weights to give them. For reasons already mentioned, no simple set of trade weights will give optimal results; optimality itself is a multi-dimensional notion, and no one really knows enough about the relevant parameters to modify the trade weights in a satisfactory way. The task is doubly difficult, however, when a group of countries have agreed in principle to adopt a common basket. Even if they choose to use trade weights, they are apt to disagree about the sizes of those weights, because their trade patterns are quite likely to differ. Consider the East Asian case. Korea trades far more heavily with Japan than do most ASEAN countries. Within ASEAN itself, moreover, Indonesia and Thailand trade more heavily with Japan than with the United States, while Singapore trades more heavily with the United States.⁵⁶

The governments must also make a fundamental choice between two types of basket: an *external* basket containing the currencies of outsiders, such as the dollar, euro,

⁵⁵ In Europe, for example, the ECB plays no significant role in bank supervision, but the national agencies responsible for supervision in each EU country must adhere to the common standards embodied in EU legislation. That legislation is proposed by the European Commission and must then be adopted by the Council of Ministers and European Parliament. See the discussion in Chapter 3, however, which suggests that the decentralization of bank supervision may deprive the ECB of prompt access to the information it requires to cope with a banking crisis.

⁵⁶ For more on these asymmetries, see de Brouwer (2002).

and yen, and an *internal* basket containing the currencies of the participating countries.⁵⁷ The need for the choice does not arise when a single country decides to adopt a currency basket. All of the currencies in that basket are, by definition, external currencies. It arises acutely, however, when a group of countries decides to adopt a common basket and has extensive implications.

If countries agree to adopt an external basket and thus undertake thereafter to stabilize their national currencies within a band surrounding the target value of that basket, each participating country will then limit fluctuations in its domestic-currency value of the common basket. But they will also achieve another objective. When they limit fluctuations in the domestic-currency values of an external basket, they will also limit fluctuations in the relative values of their own national currencies. In other words, adherence to an external basket will confer a degree of exchange-rate stability between the participants' national currencies and the set of currencies entering the basket, but it will also confer a degree of stability on the cross-rates between their own national currencies. If Thailand and Malaysia adopt a common external basket, they will limit fluctuations in the exchange rates connecting the baht and ringgit to the dollar, euro, and yen. In the process, however, they will also limit fluctuations in the cross rate between the baht and ringgit and thus preclude large changes in intra-ASEAN exchange rates like those that were so damaging during the Asian crisis.

To honor their obligations under this regime, each participating country must hold or be able to borrow enough dollars, euros, or yen to honor their obligations – to keep their currencies sufficiently close to the target values defined by the common external basket.⁵⁸ That might, of course, be done by greatly increasing the size of the bilateral swap lines set up by the CMI, but it might also require the multilateralization of those swap lines, curtailing the right of potential creditors to opt out of their obligations, and

⁵⁷ Too many economists writing on this subject fail draw this distinction clearly, and it is often hard to know which one they have in mind. Montiel (2004) provides a good discussion of the differences between them, although he fails to make a point emphasized below: an external basket limits the variability of the participants' currencies relative to the currencies in the basket, but it also limits the variability of the participants' bilateral exchange rates. Note that the three-currency external basket discussed in the text is based on the implicit but plausible supposition that Japan will not want to peg the yen to an external basket. Note further that the three-currency external basket might soon become a four-currency basket, because the renminbi might be included even before it becomes a fully convertible currency.

⁵⁸ Recall, however, that the basket value of a country's currency can be stabilized by intervening in just one of the component currencies; there is no need for intervention in every one of them.

loosening the link between the CMI and IMF. Alternatively, countries such as China and Japan might agree to use or lend some of their very large dollar reserves to set up a new facility for making short-term dollar loans when other Asian countries need them to keep their countries' currencies close to the target values set by the external basket.

By adopting instead an internal basket, the participating countries will achieve one of the objectives served by an external basket – stabilizing within limits the values of their currencies *vis-a-vis* the currencies in the internal basket. But they will not achieve the other objective, stabilizing the values of their currencies in terms the dollar, euro, and yen (unless, of course, the yen is included in the internal basket). Instead, their currencies will float jointly against those three key currencies.

There will, of course, be need for intervention to stabilize the participants' currencies *vis-à-vis* the internal basket, and there are two ways to finance it: using dollars, euros, and yen, as in the case of an external basket, or using the national currencies of the other participating countries.⁵⁹

Both sorts of intervention were used by European countries in the EMS. Countries wanting to keep their currencies well within the bilateral limits (so-called intra-marginal intervention) often intervened in dollars. When one exchange rate reached the limit of its band, however, the rules of the EMS required that both countries – the strong one and the weak one – intervene together. Alternatively, the strong-currency country, usually Germany, had to make open-ended short-term loans to the weak-currency country. There were two reasons for this practice. Intervening in dollars was not a very efficient way to influence directly the exchange rate between the German mark and French franc. Furthermore, France did not always have enough dollar reserves to do the whole job by itself. When Germany lent marks to France, however, it necessarily raised the German money supply, and the Bundesbank was fearful of the impact on its monetary policy. Therefore, it reserved the right to limit its lending, and when it invoked that right in 1992, Italy had to devalue the lira, and that is what triggered the crisis that drove both Italy and Britain out of the EMS.

⁵⁹ Note in this connection a point made by Padoa-Schioppa (2004b); intervention in the participants' own currencies requires a liquid foreign-exchange market for each currency pair involved.

Note finally another important difference between the two types of baskets. When a group of countries adopt a common external basket, they import to some degree the monetary policies of the United States, the Eurozone, and Japan – the countries whose currencies comprise the external basket. When, instead, a group of countries adopt an internal basket, they have no obvious anchor for their monetary policies. They can, of course, adhere to inflation targeting, but some of them may fail to pursue it faithfully or in a manner consistent with their partners' practices.. In the EMS, of course, the monetary policy of the Bundesbank constrained and thereby anchored the monetary policies of the other member countries. The Bundesbank, however, has no Asian counterpart.⁶⁰

The three distinguishing features of an internal basket – its inability to stabilize its member countries' currencies vis-à-vis the dollar, euro, and yen, and the absence of an anchor for monetary policy – combine strongly to suggest that a common external basket would be far superior to a common internal basket if some of the mid-sized Asian countries decide to adopt a common basket.

Designing a Monetary Union

Should some or all of the East Asian countries plan instead to form a monetary union? The theory of optimum currency areas, discussed in Chapter 2, cannot answer that question decisively. Nevertheless, empirical work inspired by that theory can shed some light on two key questions: Does a particular country group come as close or closer to being an optimum currency area? Does a particular subset of countries within a region like East Asia look to be a better group for a monetary union than some other subset?

More than a decade ago, Tamim Bayoumi and Barry Eichengreen compared European countries with U.S. regions, and their results were summarized in Table 2-1. Soon thereafter, moreover, the same two authors published a monograph extending their previous work on Europe by asking whether other country groups, one of them in Asia, came as close as Europe to being an optimum currency area.

⁶⁰ Genberg *et al.* (2005, p. 59) stress this point but fail to note that it applies with particular force to an internal basket; see also Bayoumi and Mauro (1999), pp. 12-13. Hefeker and Nabor (2005) suggest that China could play that role in Asia, but they confuse two phenomena. China may soon be dominant in Asia and by a larger margin than Germany was in Europe. Yet the People's Bank of China is far from being the dominant central bank in Asia in the way that the Bundesbank was the dominant central bank in the EMS.

They began, as before, by using econometric methods to extract and quantify two types of shocks – demand shocks and supply shocks – affecting each country’s economy in a particular region. Next, they asked how closely the shocks affecting one such country were correlated with the shocks affecting the rest of the countries in the same region. The higher the correlation between the shocks affecting a particular country pair, the stronger the case for forming a monetary union between that country pair. They also asked how rapidly each country individually adjusted to each type of shock. Their results for Europe and East Asia are reproduced in Table 6-1, which deals with demand shocks.⁶¹ (Their results for supply shocks are summarized in Table 6-2, below, where they are compared with those obtained from another study.)

There are fewer large positive correlations in the East Asian section of Table 6-1 than in the EU section, but that is because there are fewer countries in the East Asian section. When, as in Table 6-2, the number of large positive correlations is expressed as a percentage of the country pairs appearing in Table 6-1, we find that they exceed the corresponding percentage in the EU section of the table. (33.3 percent of the East Asian cases, compared with 24.4 percent of the EU cases). The same result obtains, moreover, in respect of supply shocks. Bayoumi and Eichengreen also showed that the East Asian countries adjusted more rapidly to both sorts of shocks than did the EU countries.⁶² Accordingly, they concluded that East Asia came as close as the EU to being an optimum currency area.⁶³

[Insert Table 6-1, attached]

⁶¹ Table 6-1 omits two European countries (Norway and Switzerland) that were included in their study, as they are not EU countries, and it omits two EU countries (Greece and Luxembourg) that were not included in their study. In addition, the table omits Australia and New Zealand, which were included in their study, and it omits China, which was not included in their study for want of reliable time-series data when the study was conducted.

⁶² On the more rapid adjustment of the Asian countries, see Ngiam and Yuen (2001), who suggest that it may reflect the role played by high cross-border labor mobility.

⁶³ They also noted, however, that there seemed to be two subsets of Asian countries that came even closer to being optimum currency areas: a Northeast Asian bloc comprising Japan, Korea, and Taiwan, and a Southeast Asian bloc comprising Hong Kong, Indonesia, Malaysia, Singapore and, possibly, Thailand.

Several other studies have reached similar conclusions,⁶⁴ and the most recent study reinforces them. Conducted by Masahiro Kawai and Taizo Motonishi, the study used two methods for extracting shocks and, unlike most other studies, it included China.⁶⁵ The results are summarized in Table 6-2, where they can be compared with those obtained much earlier by Bayoumi and Eichengreen.⁶⁶ There is not much difference between the results produced by the two methods used for extracting shocks – the Blanchard-Quah technique⁶⁷ and the Clarida-Gali technique.⁶⁸ When Kawai and Motonishi used the Blanchard-Quah technique, they obtained 25 large positive correlations between countries' supply shocks; when they used the Clarida-Gali technique, they obtained 23 large positive correlations between countries' output shocks. There is a bigger difference, however, between the results of the Bayoumi- Eichengreen study and the results of the Kawai-Motonishi study. When both studies used the Blanchard-Quah technique, the Kawai-Motonishi study found fewer large positive correlations between countries' demand shocks but more numerous correlations between countries' supply shocks,⁶⁹ and a similar difference arose when the Claridi-Gali technique was used instead. The most striking result of the Kawai-Motonishi study, however, pertains to China. There were only two large positive correlations between the shocks affecting China and those affecting other countries (and those two involved Vietnam and Cambodia rather than the principal East Asian countries).

[Insert Table 6-2, attached]

⁶⁴ See Bayoumi and Mauro (1999), who used the same techniques but more recent data, and Eichengreen and Bayoumi (1999) who used a wholly different method but were still able to conclude that East Asia is nearly as good a candidate as the EU for an internationally harmonized monetary policy. See also Kawai and Tagaki (2005) and Lee, Park, and Shin (2004). Contrast their results, however, with those of Brandão de Brito (2004), who worked with a subset of Asian countries, used another ways of extracting shocks, and found that the number of strong positive cross-country correlations was much higher in his Asian subset.

⁶⁵ Kawai and Motonishi (2005).

⁶⁶ The summary in Table 6-2 omits eight countries that were included in the Kawai-Motonishi study (the United States, Australia, New Zealand, India, Viet Nam, Cambodia, Laos, and Myanmar) as well as a 15-country EU composite. It does include two countries, Brunei and China, that were not included in the Bayoumi-Eichengreen study.

⁶⁷ See Blanchard and Quah (1989).

⁶⁸ See Clarida and Gali (1994).

⁶⁹ The much larger number of positive supply shocks may reflect the difference in time periods involved. The Bayoumi-Eichengreen study was concluded before the Asian crisis of the late 1990s; the Kawai-Motonishi study includes the crisis period. This difference, however, does not fully explain why the Kawai-Motonishi study found fewer strong positive correlations between countries' demand shocks.

There are other compelling reasons for wondering whether China should belong to an Asian monetary union, assuming for the moment that some of its neighbors want to move in that direction. China is growing and changing faster than its Asian neighbors. There may therefore be need for significant changes in the real exchange rates of most other Asian countries *vis-à-vis* the renminbi. Such changes can, of course, be made within a monetary union *via* endogenous changes in labor costs and product prices. It may be far easier, however, to make them by changing the nominal exchange rate between the renminbi and other Asian currencies.

Even today, moreover, the Chinese currency is one of the world's principal currencies. It is not a key currency in the conventional sense, and it cannot become one until it is fully convertible. Even today, however, the renminbi-dollar exchange rate may be more important for the proper functioning of the international monetary system than the dollar-euro rate or dollar-yen rate. There is, in other words, a need to replace the present G-7 with a new G-4, to oversee the macroeconomic management of the world economy. It would comprise China, the Euro Area, Japan, and the United States.⁷⁰

Finally, there is the matter of size. The difference in size between China and any ASEAN country is far larger than the difference in size between Germany and the next largest country in the euro area, and that difference will grow bigger in the years ahead. It would therefore be difficult to reach agreement on the composition of the policy-making body of an Asian central bank. Furthermore, the data on which that body would base its policy decisions would be dominated by the Chinese data, with the result that China would have far more influence over the monetary policy of an Asian central bank. In other words, a monetary union involving China would resemble an Asian equivalent of unilateral dollarization rather than a true monetary union. Economic conditions in China would determine the policy stance of an Asian central bank to a much greater degree than economic conditions in Germany determine the policy stance of the ECB.⁷¹ Similar problems would arise if Japan joined an Asian monetary union but China declined to do so, although the internal asymmetries might be less pronounced.

⁷⁰ See Kenen *et al.* (2004), ch. 4.

⁷¹ The same problem was raised in Chapter 2, where we noted that a monetary union between a very large country and a much smaller country would not be very different from the small country's viewpoint than the unilateral adoption of the large country's currency. We encountered the same problem in Chapter 5, when discussing the possibility of a monetary union between Canada, Mexico, and the United States.

For other reasons, however, an Asian monetary union could not readily include Japan without including China and could not readily include China without including Japan. Few other countries in East Asia would want to tie themselves tightly to one of those countries at the potential expense of its relations with the other. It may therefore be far better to contemplate a smaller monetary union comprising the six original ASEAN countries and, perhaps, Korea, but it would be open eventually to the other ASEAN countries and to Taiwan as well.⁷² Such a union might also include Australia and New Zealand, should they care to join.

There are, of course, large differences among the ASEAN countries. Income per capita in Singapore was \$24,220 in 2004, compared to \$4,650 in Malaysia and \$2,540 in Thailand, and it was only half as high in Indonesia and the Philippines as it was in Thailand.⁷³ And it was much lower in Cambodia, Laos, and Vietnam, but they are far from ready for a monetary union, because their monetary and financial systems are far less developed. Bilateral trade between the ten ASEAN countries accounts for only a quarter of those countries' total trade, a fraction smaller than the one for the euro area, but it is still substantial; see Table 1-1.

How long might it take to form this sort of monetary union? It may not be necessary for the member countries to achieve complete free trade – a single market in goods and services – though that was the path that Europe took and the one that would fully exploit the efficiency gains conferred by the adoption of a single currency.⁷⁴ It would be important, however, to unify their financial markets; otherwise, the union's central bank could not conduct a single monetary policy. But the major ASEAN countries are now working on that task and could perhaps achieve enough financial integration in fewer than ten years. Remember, moreover, that the move to EMU began in 1988 and was not completed for another decade.

⁷² See, however, Eichengreen (2005b), who believes that a monetary union that did not include China would have very little appeal to other Asian countries. Furthermore, there might be political problems if some of the ASEAN countries formed a monetary union that excluded even temporarily some of the ten ASEAN countries.

⁷³ Data from World Bank, *World Development Indicators*; data are converted to U.S. dollars using the World Bank Atlas method and divided by mid-year population. Comparable data for Brunei and Myanmar are not available, but the former is thought to be in the neighborhood of \$10,000 and the latter in the neighborhood of \$800. In the same year, the gap between high and low incomes per capita was smaller in the euro area.

⁷⁴ On the possibility of moving to monetary union before moving to free trade, see Shin and Wang (2004).

It could take much longer, however, to solve the fundamental problem – closing the institutional deficit that stands in the way of deeper economic integration, even among the ASEAN countries. It would not be necessary to create supranational institutions resembling those of the EU. Recall the suggestion made before, that special-purpose entities might be created to take on the various tasks performed by the EU institutions during and after the transition to EMU. It would be necessary, however, to grant them the authority they would need to perform those tasks, and this could take longer than Europe took to move from the Treaty of Rome to the start of EMU. The institutional deficit is deeper in East Asia than it was in Europe fifty years ago. Asia has just begun to develop intergovernmental institutions. It has not even begun to contemplate supranational institutions. Indeed, the whole notion of supranationality is alien to Asian thought and history.⁷⁵

What, then, might be done more quickly? Several authors have suggested that some or all of the East Asian countries adopt the less ambitious option proposed at the start of this section, a common currency basket, until they are ready to move to monetary union. Some favor the use of an internal basket, resembling the ECU.⁷⁶ Haruhiko Kuroda suggests that the principal ASEAN countries start with an external basket but that they be joined later by China, Japan, and Korea (and would then adopt instead an internal basket).⁷⁷ Much time would be needed, however, to get to monetary union, even for a subset of the ASEAN countries, and the outcome of the process would assuredly depend on the evolution of relations between Beijing and Tokyo. Political dynamics are thus likely to determine whether a group of middle-sized ASEAN countries will move to monetary union or will instead coalesce under the leadership and possible dominance of China or Japan.

⁷⁵ Eichengreen and Bayoumi (1999, pp. 360-364) make this point with eloquence and elegance.

⁷⁶ See, e.g., Kuroda and Kawai (2004), Latter (2005), and Wyplosz (2001).

⁷⁷ Kuroda (2004).

Table 6-1 Cross-Country Correlations of Demand Shocks in EU and East Asian Countries (Blanchard-Quah Shock Extraction)

<i>EU Countries</i>													
	Ger	Fra	Net	Bel	Den	Aus	Ita	UK	Spa	Por	Ire	Swe	Fin
Germany	1.00												
France	0.30	1.00											
Netherlands	0.21	0.34	1.00										
Belgium	0.36	0.53	0.52	1.00									
Denmark	0.35	0.32	0.20	0.30	1.00								
Austria	0.32	0.50	0.29	0.56	0.30	1.00							
Italy	0.22	0.62	0.24	0.49	0.06	0.44	1.00						
UK	0.09	0.20	-0.05	-0.03	0.00	-0.08	0.05	1.00					
Spain	-0.10	0.53	0.11	0.26	0.25	0.30	0.43	0.23	1.00				
Portugal	0.24	0.47	0.05	0.45	0.30	0.60	0.63	0.24	0.32	1.00			
Ireland	0.06	0.09	0.39	0.00	0.34	-0.12	-0.08	0.25	0.02	-0.01	1.00		
Sweden	0.10	0.18	0.29	0.36	0.18	0.02	0.25	0.18	-0.01	0.08	0.30	1.00	
Finland	0.10	0.47	0.32	0.60	0.36	0.53	0.65	0.16	0.40	0.54	0.17	0.33	1.00

<i>East Asian Countries</i>									
	Jap	Tai	Kor	Tha	HK	Sin	Mal	Ind	Phi
Japan	1.00								
Taiwan	-0.01	1.00							
Korea	0.19	0.33	1.00						
Thailand	-0.04	0.54	0.32	1.00					
Hong Kong	0.23	0.22	0.05	0.43	1.00				
Singapore	-0.09	0.44	0.27	0.70	0.37	1.00			
Malaysia	0.12	0.41	0.43	0.58	0.54	0.67	1.00		
Indonesia	0.16	0.17	0.17	0.36	0.62	0.64	0.58	1.00	
Philippines	0.29	0.09	0.16	0.15	-0.19	-0.05	-0.11	0.04	1.00

Source: Tamim Bayoumi and Barry Eichengreen (1994), "One Money or Many? Analyzing the Prospects For Monetary Unification in Various Parts of the World," *Princeton Studies in International Finance* 76, Princeton: International Finance Section, Princeton University, Table 6.

All correlations no lower than 0.40 are shown in bold type, as they approach or exceed levels commonly accepted as being statistically significant.

Table 6-2 Summary of Cross-Country Correlations in EU and East Asian Countries

Source, Country Group, and Methodology	Summary Statistics	
	Number of Outcomes	Percentage of Country Pairs
<i>Bayoumi-Eichengreen:</i>		
Using Blanchard-Quah Shock Extraction:		
EU Countries (78 country pairs):		
Large correlations of demand shocks	19	24.4
Large correlations of supply shocks	17	21.8
East Asian Countries (36 country pairs):		
Large correlations of demand shocks	12	33.3
Large correlations of supply shocks	10	27.8
<i>Kawai-Motonishi</i>		
Using Blanchard-Quah Shock Extraction:		
East Asian Countries (55 country pairs):		
Large correlations of demand shocks	8	14.5
Large correlations of supply shocks	25	45.5
Using Clarida-Gali Shock Extraction:		
East Asian Countries (55 country pairs):		
Large correlations of nominal shocks	9	16.4
Large correlations of output shocks	23	41.8

Sources: Based on data in Table 6-1 and in Mashihiko Kawai and Taizo Motonishi (2005), "Macroeconomic Interdependence in East Asia: Empirical Evidence and Issues," in *Asian Economic Cooperation and Integration: Progress, Prospects, and Challenges*. Manila: Asian Development Bank, pp. 213-268.

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