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**Integration Strategies for ASEAN:
Alone, Together, or Together with
Neighbors?**

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ABSTRACT

ASEAN has been deepening intra-regional integration at the same time that it has been forming various cooperative arrangements with its partners, and its Member Countries have been pursuing individual trade accords. Which would be the optimal configuration for ASEAN? In this paper, we evaluate various economic scenarios for the region in terms of real-sector, financial, and macroeconomic cooperation with a view to gauge the best unit of integration. We review the current evolution of trade and financial accords in the region and survey the literature on the economic viability of these accords, including some fresh CGE simulations on the correlation of business cycles and the economic effects of potential trade groupings being considered. In general, the paper suggests that the economic potential for closer economic integration is strong. In terms of trade, we note that there would be positive gains from ASEAN integration and the current wave of bilateral free-trade areas, but that these gains are much less significant for ASEAN than would be the case of other scenarios, such as the ASEAN+3 or the Free Trade Area of the Asia-Pacific. We also argue that the case for deepening financial and monetary integration in Asia is convincing, even though the political underpinnings of such an accord are not yet in place.

Integration Strategies for ASEAN: Alone, Together, or Together with Neighbors?

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I. Introduction

Internationalization of the ASEAN economies has been proceeding at a rapid pace. Moreover, the direction of this internationalization is clearly in favor of East Asia. To complement and facilitate regional integration, ASEAN has been pursuing a multi-pronged approach, from deeper economic integration in ASEAN itself to bilateral and regional free-trade areas (FTAs) and national policy reform. While the subject of monetary union continues to be a popular topic, in practical terms little has been done in the direction of its realization. There have been a number of initiatives (discussed below) in terms of financial cooperation but to date the most important accords have been in the real sector. In fact, although there were few formal free-trade areas (FTAs) in place in East Asia outside of the ASEAN Free-trade Area (AFTA) at the turn of the century, today there are many at fairly advanced stages of implementation, with numerous others being either negotiated or awaiting ratification. The latest FTA estimates from the ADB ARIC (www.aric.adb.org); they show that, as of end-June 2007, there were 101 FTAs at different stages of development, including 36 concluded FTAs, 41 under negotiation and 24 proposed.

Is there a case for wider FTAs and closer financial and monetary integration, perhaps even monetary union? This paper attempts to address these questions through institutional, theoretical, and empirical analysis. Section II considers the trade side of ASEAN integration, including a review of the motivations behind the rapid rise in the number of FTAs and a survey of the *status quo* and emerging initiatives. In addition, the paper uses a computational general equilibrium model to estimate the welfare implications of various FTA scenarios. We find that, while the current wave of integration accords will generate positive results, the region would gain more from a wider “ASEAN+3” (the ten ASEAN countries plus Japan, China, and South Korea) or, for

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some Member Countries, an APEC-wide FTA, which has come to be known as the “Free Trade Area of the Asia-Pacific” (FTAAP). Next, in Section III we analyze financial/monetary integration, including recent initiatives and their prospects. This is followed in Section IV by an in-depth investigation as to whether or not closer monetary integration, e.g., through monetary union, would make sense from an economic perspective in the long-run. We conclude that, while there are no easy answers to this question, the ASEAN+3 does meet the criteria of Optimum Currency Area (OCA) as well as Europe did before its monetary union; in fact, the ASEAN+3 is exhibiting increasing convergence and growing symmetry since the Asian Crisis. Nevertheless, the political momentum to create a monetary union, which is an essential variable in the equation, does not exist at present in Asia. In addition, we consider possible policy convergence issues, using the EU’s Maastricht Treaty as a benchmark. While we conclude that ASEAN and the ASEAN+3 actually come pretty close to meeting the European criteria in most cases, these criteria are insufficient given the institutional differences that exist across the region. We propose instead some additional considerations that would be required beyond mere policy indicators should ASEAN or the ASEAN+3 decide to deepen monetary integration. Section V concludes.

II. ASEAN Trade Integration in the Asian Regional Context

In the first decade following its creation with the Bangkok Declaration in 1967, ASEAN as an organization did precious little in terms of economic cooperation. Perhaps that was all for the better, as several of its member-countries were pursuing inward-looking industrialization plans at the national level. More aggressive action may have put ASEAN on a very different track (and maybe it would have met the same sordid fate of the Latin American Free-Trade Area, whose members also were fond of import substitution).

Today, things could hardly be different; ASEAN has doubled in size from five to ten and almost all of its member-countries would be counted among the champion reformers in the developing world. Its approach to formal economic integration changed drastically in the early 1990s with the creation of the AFTA and has built up momentum ever since. In this section, we consider the motivations behind the deeper economic cooperation programs in ASEAN and the ASEAN+3 contexts, followed by a (brief) review of ASEAN, ASEAN+3, and extra-regional initiatives. Finally, we survey the literature regarding the (*ex-ante*) economic effects of various integration accords and estimate the welfare gains that would accrue from several scenarios of regional configurations. We conclude that the existing initiatives would yield generally positive effects on the member-countries and on global welfare, but that it is inferior to an ASEAN+3 or APEC-wide FTAAP approach. Indeed, for the ASEAN member-countries, the gains from the ASEAN+3 or FTAAP are on par with that of global free trade.

i. Motivations for the New Regionalism in Asia

There are a number of factors behind the regionalism trend in Southeast Asia and the rest of the region. These would include:

1. ***The Asian Crisis.*** The potential for “contagion” in which a crisis in one country could quickly be transmitted to another was revealed to be an important reality of closer integration and dynamic economic growth in ASEAN, where a perceived “regional identity” on the part of economic actors has been increasingly prominent. It is also the

case that the real-sector-related contagion causes of the Asian Crisis continue to exist and in most cases have accentuated over time. Clearly, the “policy externalities” that emerged in the region are higher than ever before and this enhances the case to “internalize” them through greater cooperation at the regional level in both macroeconomic and microeconomic areas.

2. *Increased Discrimination in Key Markets.* At the turn of this century, essentially all developed countries were embracing discriminatory trading arrangement with potential trade- and investment- diverting implications for Asia. Europe had been implementing regional cooperative measures between its member-states and former colonies for about a half century; however, the “deepening” of integration increased substantially in the 1990s (from the Single Market to monetary union between twelve of its members, with Slovenia’s adoption of the euro in January 1, 2007 bringing the count to 13) and its membership expanded to include transitional economies that could potentially compete with ASEAN in terms of trade and investment. The United States had few preferential trading arrangements before 2000 but then bilateral FTAs become an important part of its commercial policy in subsequent years and continue to be a major force today.

Particularly with a WTO that has not been able to reach a multilateral agreement in the Doha Development Agenda negotiations, discriminatory trading arrangements giving preferential treatment to Asia’s competitors increased the need to use regional integration to enhance efficiency in order to prevent loss of market share (“defensive” FTAs).

Another effect of this trend regards the perceived success of deeper integration, particularly “behind the border” liberalization and facilitation that can improve competitiveness and reduce transaction costs associated with production fragmentation. This was especially evident in the case of the EU Single Market but also in the case of NAFTA, which was only an FTA but had extensive “new age” aspects, including national treatment for investment.

3. *Bilateral FTAs by ASEAN Member-countries.* As ASEAN itself is only an FTA, individual members have the right to pursue their own FTAs with non-ASEAN partners. This poses a threat to ASEAN “solidarity” and even integration, since some of these FTAs are even deeper than existing accords in the ASEAN framework. Arguably, this need to prevent a “dilution” of ASEAN integration becomes even more important in the context of greater East Asian integration, e.g., through various “ASEAN+3” initiatives. If ASEAN can act increasingly as a bloc in ASEAN+3 initiatives, it can influence the evolution of such accords, which currently include mainly “soft” financial initiatives but with aspirations for much deeper cooperation, perhaps even in the form of an East Asian FTA, East Asian Economic Community, or a Free-Trade Area of the Asia-Pacific (FTAAP). Moreover, through deeper integration it can ensure the integrity of ASEAN even in the face of deeper East Asian integration.

In addition, the political economy of FTAs is such that ASEAN will create better outcomes in negotiations as a group rather than individually. But to negotiate as a group, deep integration is necessary.

4. *China.* China has become a formidable competitor with ASEAN for FDI and its exports are competing increasingly with the region in third markets. Concerns associated with the emergence of China—and other major economies such as India--

have become increasingly acute since the Asian Crisis. In fact, a motivation for creating an ASEAN Economic Community (AEC) by 2015 is to compete with China: by creating one market it will be less at a disadvantage in terms of size, allowing it to enjoy economies of scale in production fragmentation, a more efficient regional division of labor, and other “dynamic” features of integration that will enhance the attractiveness of ASEAN to foreign investors and its competitiveness in local and third markets. After all, the business environment in China is no more attractive—and, in some cases, significantly less--than it is in most of the ASEAN countries.²

5. *Doha once again.* An incentive for FTAs in Asia is the need for the type of “deep integration” that the WTO has yet to be able to deliver (and probably won’t be able to do so in the short-medium term). In order to facilitate the construction of production networks and profit from the process of production fragmentation, it is critical to remove as many obstacles to trade and investment as possible, and FTAs between two (or a small group) of like-minded countries is easier to achieve than in the context of a 150-member WTO. While a successful Doha would reduce the potential negative effects of regionalism (at the margin), generate important welfare benefits, and would help to knit the global economy together, it would not stem the growth in the FTA movement, especially in Asia. The economic-development strategy of Asia is predicated on outward-orientation, and the deep integration measures associated with FTAs appear to be a more effective means of advancing globalization.

ii. Overview of ASEAN Initiatives

Table 1 gives a brief review of the evolution of regional trading agreements in Asia, focusing on ASEAN and ASEAN+3 initiatives. An in-depth review of these accords would be behind the scope of this paper as well as being somewhat redundant, given that many excellent surveys already exist³ and the ADB ARIC website gives real-time updates of the bilateral and regional FTA agreements and news (www.adb.aric.org). But note that the pace of ASEAN integration has quickened considerably over the past decade, as AFTA was being implemented and member-countries began to establish their own FTAs. The culmination of this process has been the AEC, which endeavors to create a region of free trade in goods and services, and freer capital and skilled-labor flows. As noted in Table 1, the deadline to establish the AEC has been pushed up to 2015 (for the original ASEAN countries and Brunei), which, given the diversity of the ASEAN, is highly ambitious. The reasons behind the decision to create the AEC are many, including: (a) a desire to create a post-AFTA agenda that would be comprehensive; (b) a perceived need to deepen economic integration in ASEAN in light of the new international commercial environment, especially the dominance of FTAs; (c) as noted above, the possibility that bilateral FTAs could actually jeopardize ASEAN integration since all member-states were free to pursue their own commercial-policy agenda; and (d) the recognition since the Asian Crisis that cooperation in the real and financial sectors must be extended concomitantly, and that free flows of skilled-labor will be necessary to do this.⁴

² Plummer (2007).

³ For example, ADB 2006, Feridhanusatyawan 2005, and Kawai 2005, but there are many.

⁴ The free flow of all labor, including unskilled labor, was deemed too politically difficult to consider in the AEC.

Moreover, given that ASEAN's initiatives are explicitly or implicitly outward-oriented in nature, it is only natural that attempts to integrate these accords at the regional level, as well as to adopt best practices in regional trading agreements, would emerge. We consider extra-ASEAN accords in the next subsection, but in Table 1 we include the fledgling ASEAN+3 meetings and the East Asian Summits. While little concrete progress has been made, the fact that these forums are being established is significant. Such initiatives may even extend outside of Asia to include the Asia-Pacific as a whole, either under the rubric of APEC or independently. Indeed, there have been recent proposals to establish an FTAA, a concept that is being advocated by the APEC Business Advisory Council (ABAC), the voice of the private sector in APEC.

These initiatives are designed to advance globalization, rather than to build "fortresses". Arguably, Asian accords—particularly ASEAN-related—are somewhat unique in that open regionalism and/or non-discrimination is actually codified in the agreement. For example, the ASEAN Investment Area (AIA) has three pillars: investment liberalization, facilitation and promotion. With respect to the first pillar, the goal is national treatment, which is to be accorded to ASEAN investors by 2010 and to non-ASEAN investors by 2020. In other words, any discrimination that would emerge from the process would only be transitional. Moreover, as countries reform their national investment policies to conform with AIA exigencies, they are often erecting non-discriminatory measures from the start. Singapore, for example, does not discriminate between ASEAN and non-ASEAN investors.

Table 1
Chronology of Major Decisions of ASEAN and ASEAN+3 Summits

ASEAN Summit Main Points	APT Summit –Main Points
<u>1st - Bali 1976</u> ASEAN Concord 1. Established ASEAN Secretariat 2. Treaty of Amity: Mutual Respect for independence, sovereignty, equality, territorial integrity and identity of nations, i.e. non inference 3. Establishment of Zone of Peace, freedom, and neutrality	
<u>2nd- Kuala Lumpur 1977</u> -ASEAN Industrial Project agreed upon -Preferential Trading Agreement (PTA)	
<u>3rd- Manila 1987</u> -Accelerate PTA -Accelerate and make more flexible ASEAN Industrial Joint Venture (AIJV)	
<u>4th- Singapore 1992</u> -ASEAN Free Trade Area (AFTA) -Common Effective Preferential Tariff (CEPT)	
<u>5th- Bangkok 1995</u>	

ASEAN Summit Main Points	APT Summit –Main Points
Pledge to actively participate in ASEAN-Europe Meeting (ASEM) in 1996	
<u>1st Informal- Jakarta, 1996</u> -Proposal for ASEAN Vision 2020	
<u>2nd Informal- Kuala Lumpur, 1997</u> -ASEAN 2020 presented, a broad long term vision for ASEAN in 2020 (with ASEAN Economic Community, AEC, in mind)	<u>1st- Kuala Lumpur 1997</u> 1 st ASEAN+3 (China, Korea and Japan)
<u>6th Hanoi- 1998</u> Hanoi Plan of Action adopted to move towards Vision 2020: 1. Advance AFTA to 2002, 90% intra-trade subject to 0-5% tariff 2. ASEAN Investment Area (AIA)-goal investment liberalization within by ASEAN 2010, outside ASEAN by 2020 3. Increase Secretariat Staff from 64 to 99 4. ASEAN Surveillance (Revolutionary Idea) 5. Eminent Persons Group (EPG) proposed to come up with plan for ASEAN Vision 2020	<u>2nd Hanoi- 1998</u> -East Asian Vision Group (EAVG) proposed by Kim Dae Jung, President of Korea to look into East Asian Integration
<u>3rd Informal- Manila 1999</u> EPG develops plan for Vision 2020: -Concern that ASEAN not effective in responding to Asian Crisis, so proposed financial cooperation. - Speed up AFTA -Accelerate AIA -To respond to surge of China, need to become more competitive, attract investment, faster integration, and promote IT	<u>3rd- Manila 1999</u>
<u>4th Informal- Singapore 2000</u> Adopted Initiative for ASEAN Integration (IAI): -Framework for more developed ASEAN members to assist those less-developed members in need -Focus on factors to enhance competitiveness for new economy: education, skills development, and work training	<u>4th Singapore- 2000</u> -East Asian Study Group (EASG) to consider East Asian Free Trade Area (EAFTA) and agree to hold East Asian Summit -Two big ideas: 1) Development of institutional link between Southeast Asia and East Asia 2) Study group for merit of an EAFTA and investment area -Begin financial cooperation, ex. Chiang Mai Initiative May 2000 (Swap Arrangements) -Propose Expert Group Study on ASEAN-China FTA

ASEAN Summit Main Points	APT Summit –Main Points
<p><u>7th- Brunei 2001</u> -Challenges facing ASEAN: Declining FDI, erosion of competitiveness. -Road map for Integration for ASEAN to achieve 2020 -Go beyond AFTA and AIA by deepening market liberalization for both trade and investment</p>	<p><u>5th- Brunei 2001</u> -Endorse EAVG recommendation for EAFTA but overshadowed by China-ASEAN Free Trade Agreement proposal within 10 years, with the adoption Early Harvest Provision to speed up FTA -Prompted by China-ASEAN FTA proposal, Prime Minister Koizumi proposed Japan-ASEAN Economic Partnership in reaction to China-ASEAN proposal -Japan-Singapore Agreement for a New Age Partnership signed January 2002 and enforced Summer 2002</p>
<p><u>8th Phnom Penh- 2002</u> -AEC end goal of Vision 2020 -Japan-Singapore FTA effective in November</p>	<p><u>6th- Phnom Penh 2002</u> Adopt EASG recommendations of deepening and broadening of East Asian integration</p>
<p><u>9th Bali- 2003</u></p>	<p><u>7th Bali- 2003</u> -Japan-ASEAN FTA study undertaken -Korea-ASEAN FTA study undertaken</p>
<p><u>10th- Vientiane 2004</u> Vientiane Action Plan which in part: 1. Accelerates complete implementation of AFTA from 2010 to 2007, though excludes some sensitive sectors, such as rice. 2. Began discussion on effective dispute settlement mechanism for AFTA</p>	<p><u>8th Vientiane- 2004</u> -Australia, New Zealand and India also attended along with original APT countries. -Extra-regional deals dominated proceedings -China after only two years of negotiation over Early Harvest Agreements, signed FTA with ASEAN to become completed by 2010, but excludes number of sensitive goods, i.e.- iron, steel, automobiles and sugar. It also lacks agreement on services and dispute settlement mechanism. -Japan and Philippines agreed in principle on FTA that will cover some services sectors and Japan will open up labor market to Filipino nurses and caregivers. -ASEAN-Japan FTA will commence negotiation from 2006 with completion date set for 2012. -FTA plans with South Korea, India, Australia and New Zealand unveiled; India by 2016, Australia/New Zealand by 2017 -ASEAN set plans to improve institutional capacity to negotiate FTA with external partners. -This summit reflected China’s desire to expedite trade liberalization with ASEAN</p>

ASEAN Summit Main Points	APT Summit –Main Points
	<p>and its East Asian partners towards the formation of an East Asian Trading Bloc, like EU and NAFTA.</p> <p>-Malaysia proposed to host first East Asia Summit</p>
	<p><u>Meeting of Asian Foreign Minister in Cebu-April 2005</u></p> <p>China and Malaysia come to agreement with Vietnam, Indonesia and Singapore to include outside participants to attend East Asian Summit, provided they agree to the Treaty of Amity and Cooperation and 2 other conditions. These participants will include India, Australia and New Zealand.</p>

<p><u>11th- Kuala Lumpur 2005</u></p> <p>-Major agreement is “KL Declaration” establishes charter to make ASEAN a legal institutional framework and strengthen competitiveness and will deepen and broaden economic integration.</p> <p>-Transfer ASEAN from loosely associated organization into rule-based legal regime.</p> <p>-Created high level Eminent Persons Group and is assigned to prepare charter documents</p>	<p><u>9th- ASEAN+3</u></p> <p>-Signed the “KL Declaration on the ASEAN Plus Three Summit” reaffirming annual meetings in conjunction with ASEAN Summit</p> <p><u>First East Asian Summit (EAS)- December 2005</u></p> <p>-Members- ASEAN+3, Australia, New Zealand and India</p> <p>-Discussion focused on strategic dialogue and promoting cooperation in security, energy security, financial stability, economic integration, eradication of poverty, and narrowing of development gaps, promoted deeper cultural understanding.</p> <p>-Little concrete discussion of East Asian integration; therefore, objectives, agenda and modalities of East Asian Summit are difficult to assess</p> <p>-EAS is a development of, not a successor to, ASEAN+3</p> <p>-East Asian Summit will be held annually in conjunction with ASEAN summit at same location, chaired by ASEAN country chairs ASEAN summit. This assures ASEAN as the driving force.</p>
<p><u>12th- Cebu 2007</u></p> <p>-Signed the Cebu Declaration on the Establishment of the ASEAN Economic Community by 2015</p> <p>-Directed the High Level Task Force to</p>	<p><u>10th- ASEAN+3</u></p> <p>-Agreed to putting ASEAN community-building at the center, according priority to the successful implementation of the Vientiane Action Programme (VAP),</p>

<p>complete the drafting of the ASEAN Charter in time for the 13th Summit in Singapore in 2007</p> <ul style="list-style-type: none"> -Issued the ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers -Adopted the Third ASEAN Work Program on HIV and AIDS (AWP III) for 2006-2010 -Signed the ASEAN Convention on Counter Terrorism 	<p>narrowing the development gap and facilitating ASEAN integration</p> <p><u>2nd- EAS</u></p> <ul style="list-style-type: none"> -Signed the Cebu Declaration on East Asian Energy Security -Stressed openness of EAS and close coordination with ASEAN
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Source: Updated from Naya and Plummer (2005).

iii. Extra-regional accords of ASEAN and Its Member Countries

Table 2 summarizes the FTAs that ASEAN member-countries have concluded, are negotiating, or have been proposed. These agreements are separated into intra-regional (within the Asia-Pacific) and cross-regional categories. Moreover, it considers the same units of analysis for ASEAN as a regional organization, i.e., “ASEAN+1” initiatives.

Clearly, by every reasonable measure ASEAN member-countries have been extremely active in the regionalism movement; almost none of these agreements were in existence prior to 2000. Singapore has been the most active, with 13 agreements at various phases of implementation, followed by Thailand with eight. In addition, Singapore has by far the most FTAs with extra-regional countries (five), whereas Brunei, Indonesia and Malaysia each have one and the others do not have any. ASEAN itself has three accords in place (all within the Asia-Pacific) and four are under negotiation.

One reason why the more developed ASEAN members, such as Singapore and Thailand, are more active in negotiating these FTAs no doubt is linked to their superior trade-negotiation capacity and pressures from relatively well-developed domestic industrial lobbies. Less-developed ASEAN members, especially the transitional members (CLMV) tend to rely on AFTA and ASEAN-negotiated FTAs (e.g., the ASEAN-China or ASEAN-Korea FTAs).

In sum, Table 2 shows us that: (1) bilateral FTAs have become increasingly popular in the region and ASEAN itself has started to become active, with more accords under negotiation than it has finished; and (2) there is an obvious “revealed preference” for Asia-Pacific-centered FTAs.

What would be the economic costs of these “fragmented” FTAs? Which would be the optimal configuration for ASEAN? We turn to these and associated questions in the next subsection.

iv. FTA Scenarios

The ultimate implications of formal trade accords for the welfare of participating countries are complicated, including the “static” effects of integration (i.e., trade creation and diversion), dynamic effects (e.g., FDI creation and diversion, productivity effects, economies of scale) and various political-economy implications of preferential trading arrangements. To the extent that FTAs change intra-regional real-sector integration,

ceteris paribus the FTA movement will be important in determining whether or not the FTA trend is consistent with the ultimate goal of outward-oriented policy reform.

Even before the many FTAs in Asia have been able to have any discernable effect, the process of real integration in Asia is increasing the potential gains from monetary union (discussed below) and appears to be driving at least in part the symmetry of economic structure in the region (Rana 2006). To the extent that FTAs serve to reinforce this process (“flag following trade”), benefits will be magnified. In the remainder of this section, we consider the aggregate economic effects of a series of possible scenarios in the region. In sum, we find that the ASEAN+3 and FTAAP scenarios would generate a far better outcome for the region than the existing mix of bilateral FTAs.

There is increasing academic interest in examining the economic effects of East Asian FTAs using global computable general equilibrium (GCGE) models. This interest stems from advances in GCGE model development and computing power as well as strong international policy attention on the implications of an East Asia FTA. Policy makers are particularly interested in understanding the magnitude of the benefits of an East Asian FTA for member countries, the possible losses to non-members, and sector-level gains and losses for members and non-members alike. But they are also important to the analysis of the future of economic integration in the region, including proposals related to the “Asian Economic Community” and, of course, Asian monetary union, discussed later in the paper.

By relying on a simulation approach to analyze the economic effects of policy changes due to the formation of an East Asia FTA, GCGE models can shed light on these issues. The GCGE models used in empirical studies have varied somewhat in their underlying economic structure, behavior of agents and focus but commonly use the Global Trade Analysis Project (GTAP) database to examine an ASEAN+3 policy scenario or a FTAAP policy scenario. The primary focus of such policy scenarios is on the removal of price distortions against imports that arise from existing trade barriers and other sources. Most studies have used the standard GTAP model⁵ with constant returns to scale in production, perfect competition, and the Armington assumption (or some variant of GTAP) while a few have adopted GCGE models with firm-level imperfect competition.

⁵ See Hertel (1997). For more details about the current standard GTAP model see www.gtap.agecon.purdue.edu

Table 2: ASEAN's FTA Status, June 2007

Country	A			B			C		
	Total			Within Asia-Pacific			Cross-Regional		
	Concluded	Under Negotiation	Proposed	Concluded	Under Negotiation	Proposed	Concluded	Under Negotiation	Proposed
Brunei Darussalam	5	4	2	4	3	1	1	1	1
Cambodia	3	4	1	3	3	1	0	1	0
Indonesia	4	6	4	3	5	2	1	1	2
Lao PDR	5	4	1	5	3	1	0	1	0
Malaysia	5	10	3	4	6	3	1	4	0
Myanmar	3	5	1	3	4	1	0	1	0
Philippines	4	4	3	4	3	1	0	1	2
Singapore	13	12	2	8	5	2	5	7	0
Thailand	8	10	5	8	5	3	0	5	2
Viet Nam	3	5	1	3	4	1	0	1	0
ASEAN	3	4	1	3	3	1	0	1	0

Notes:

Cross-regional = where one member of the FTA is outside Asia-Pacific.

Proposed = parties are considering a free trade agreement, establishing joint study groups or joint task force, and conducting feasibility studies to determine the desirability of entering into an FTA.

Concluded FTAs = signed FTAs and/or under implementation;

FTAs under negotiation = those under negotiation with or without a signed Framework Agreement.

Source: ARIC FTA database (www.aric.adb.org)

Four major findings from the formation of an East Asian FTA are indicated by GCGE studies (see Ballard and Cheong, 1997; Urata and Kyota, 2003; Gilbert *et al.* 2004; and Lee *et al.*, 2004):

- 1) all the countries involved would collect welfare gains;
- 2) the countries that are excluded are much more likely to suffer welfare losses;
- 3) production in sectors with a comparative advantage increases;
- 4) an East Asian FTA is a step toward multilateral liberalization.

Depending on the GCGE model used and data sources, studies, however, differ in their estimates of welfare gains to members and losses to non-members from an East Asia FTA. For example, Urata and Kyota (2003) estimate from GTAP simulations that an ASEAN+3 FTA will generate welfare gains for members from the highest of 12.5% of GDP for Thailand and 6.6% for Vietnam to the lowest of 0.19% for Japan and 0.64% for the PRC. They find modest welfare losses for non-members of -0.02% for the EU, -0.09% for the USA and -0.29% for Australia/New Zealand. Also using GTAP, Gilbert *et al.* (2004) find that an ASEAN+3 FTA will produce higher welfare gains for members than a PRC-Japan-Korea FTA indicating that broadening FTAs brings benefits. They report lower welfare gains from an ASEAN+3 FTA for Vietnam (3.1%) and Thailand (1.6%) than Urata and Kyota (2003). From their LINKAGE CGE model, Lee *et al.* (2004) show significantly higher welfare gains from an ASEAN+3 FTA for PRC+Hong Kong (4%) and Japan (1.6%), notable gains for Korea (3.7%) and ASEAN as a group (4%) and welfare losses for the rest of the world of under -0.2%. GTAP simulations by Zhang, et. al. (2006) estimate an ASEAN+3 FTA to increase the overall GDP of East Asian countries by 1.2% and economic welfare by \$104.6 billion. With the exception of Japan, all members witness increases in GDP in excess of 1.7%. Finally, using a GCGE model with firm-level imperfect competition, Ballard and Cheong (1997) indicate that both an APEC FTA and an East Asian FTA would generate gains for all members even without the participation of the United States and Japan. They show that developing nations of Asia are expected to gain more when the United States joins the FTA than when Japan joins.

Furthermore, some studies point to how regional trade and country specializations could evolve in the future. One might expect, for example, that an East Asia FTA would increase the share of intra-regional trade as well as the degree of specialization of each country according to comparative advantage. In part this effect might arise from an enlarged regional market resulting from elimination of trade barriers that gives more scope for differentiated products. Nonetheless, the available CGE simulation studies indicate a mixed and inconclusive picture of the likely effects of an East Asia FTA on regional trade and country specializations. For instance, Urata and Kyota (2003) suggest that such effects may be small in the case of an ASEAN+3 FTA. They argue that “the results show that the impact of an East Asia FTA are not large enough to change the composition of each country’s exports and imports substantially” (2003, pp. 12-13). They suggest that 5% changes in exports are indicated for a few sectors like mining and textiles in Vietnam and food and beverages in Korea and Thailand. For other sectors

and countries the changes in exports are found to be mostly less than 1% (with some are less than 5%). Likewise, Urata and Kyota argue that an ASEAN+3 FTA may not significantly expand intra-industry trade. In contrast, Gilbert *et al.* (2004) looking at production effects (rather than exports) of an ASEAN+3 FTA find large changes in value added including declines of between 13% to 42% in the automobile sector in most member countries, rises in the textile sector of between 5-10% in many member countries, and increases in electronics of between 2% to 8% in some member countries. If the changes in value added indicated by Gilbert *et al.* (2004) mirror changes in exports, then it is likely that an ASEAN+3 FTA may have notable impacts on intra-industry trade and country specialization. Further work is needed on this important issue using a combination of CGE analysis and industry-level studies. Such an exercise is beyond the scope of the current study.

Bchir and Fouquin (2006) use the CEPII *Mirage* model to create several scenarios of economic integration based on hub-and-spoke (ASEAN+1 agreements) and Asian regional approaches, as well as whether or not the agreements will be all-inclusive or would exclude sensitive products. They find that ASEAN, for example, would be better off with a series of bilateral agreements than with an Asian-inclusive approach, as this would allow them better to exploit their comparative advantage in agriculture, which is characterized by much higher levels of protection in the region than manufactures.

Previous GCGE studies provide valuable insights on the likely economic effects of an ASEAN+3 FTA and an APEC FTA. There is a need to build on this literature and adopt a more comprehensive approach that incorporates the new reality of multiple FTA initiatives in East Asia, new data sources and recent modeling developments. Accordingly, the following four policy scenarios are considered in the GCGE modeling exercise:

- 1) a fragmentation scenario: a continuation of the current wave of bilateralism, including AFTA, where the region is fragmented by several bilateral or small regional FTAs;
- 2) An ASEAN+3 FTA scenario: free trade among ASEAN countries, PRC+Hong Kong, Japan and Korea;
- 3) An APEC FTA: free trade among all APEC members;
- 4) A global trade liberalization scenario: complete abolition of import tariffs and export subsidies.

Some comments on these scenarios are appropriate. Scenario 1 represents the current reality of multiple and overlapping bilateral/regional FTAs involving East Asian countries in general and ASEAN in particular. Scenario 2 is included because this seems to be gradually taking shape with ASEAN having signed liberalization of goods agreements with both PRC and Korea⁶ while negotiations with Japan are still on-going. Scenario 3 is provided to represent the discussions among APEC economic ministers on ways to improve trade relations and has received considerable attention on the part of the private sector and academics. Scenario 4 is included to enable comparisons of gains and losses relative to global free trade (our benchmark).

⁶ However, negotiations on services with PRC and Korea are still on-going.

The estimates of the economic impacts of FTA scenarios were prepared using the Asian Development Bank's General Equilibrium Model for Asia's Trade (GEMAT). GEMAT-- which is an applied general equilibrium model of the global economy with a focus on Asia--extends the *LINKAGE* model developed at the World Bank (see ADB 2006 for details of GEMAT). It has strong micro-foundations and captures detailed interactions among industries, consumers and governments, across the global economy. It is ideally suited for the analysis of structural changes over periods that are sufficiently long to allow markets to adjust and rigidities to work themselves out. Among other assumptions, GEMAT incorporates firm heterogeneity, fixed trade costs and imperfect competition.

Table 3 summarizes the results for GDP and welfare in terms of equivalent variation for the four policy scenarios. It comes as little surprise that scenario 1--a fragmented reality of multiple bilateral and regional FTAs--is the least attractive for regions and most countries. Among others, this scenario may give rise to the famous "spaghetti" or "noodle bowl" effect which refers to higher transactions costs from multiple rules of origin and standards in the growing number of FTAs in East Asia. Global free trade (scenario 4) is the most attractive for most countries but unrealistic bearing in mind that even the WTO process has been beset by uncertainties on the timing and depth of multilateral agreement to reduce trade barriers.

The FTAAP brings gains to Northeast Asia and the United States but ASEAN witnesses less gains compared to scenario 1, with the exceptions of Malaysia and Vietnam. The rest of Asia and Europe, which would be outside an FTAAP, also lose relative to scenario 1.

Under the ASEAN+3 Scenario (scenario 2), the welfare of members increases with Northeast Asia and ASEAN witnessing gains of 0.37% and 2.02%, respectively. In fact, for ASEAN there is very little difference between the ASEAN+3 scenario and global free-trade (0.18% of GDP). The difference between the ASEAN+3 scenario and the FTAAP is slightly more (0.40%) but global gains from the FTAAP are (slightly) greater than the ASEAN+3 (0.16 percent of global GDP).⁷

Note that GCGE simulation studies are useful in indicating the channels by which the formation of an FTA translates into changes in the economy. Existing studies have focused on liberalization of import tariffs on goods trade. A major shortcoming of such studies is their inability to incorporate rules of origin and non-tariff measures (e.g. SPS and TBT), which are likely to afford more protection for domestic industries than tariffs. In addition, there are no GCGE studies on liberalization of barriers to services trade. Furthermore, in these approaches, it is unclear whether the members of an FTA ultimately realize potential effects. Thus, GCGE studies are best when used in conjunction with other empirical tools -- notably analysis of the complex structure of FTAs and enterprise perception studies of the benefits of FTAs (Francois, McQueen and Wignaraja, 2005).

⁷ Kawai and Wignaraja (2007) focus on various configurations of FTAs in East Asia as well, and conclude that an East Asian FTA, combined with either an East-Asian FTA with NAFTA or an Asia-Pacific FTA, would be the most advantageous for East Asia as a whole.

Table 3: Impact of 4 FTA Scenarios, Real Income (Equivalent Variation)

	(1) Fragmentation Scenario	(2) ASEAN+3 FTA	(3) FTAAP (APEC)	(4) Global Free Trade
<i>In US\$ Mn 2001 prices</i>				
ASEAN	8,869	10,375	8,341	11,319
Indonesia	712	523	702	1,206
Malaysia	1,753	3,941	3,084	3,712
Philippines	481	350	-5	-136
Singapore	1,833	1,240	747	1,409
Thailand	3,545	3,305	2,707	3,866
Vietnam	564	1,016	1,106	1,263
Northeast Asia	-1,219	21,724	56,734	72,944
Rest of Asia	-101	-425	-1,560	4,288
USA	-1,371	-2,362	12,035	22,884
Europe	-1,021	-904	-3,047	25,325
ROW	-555	-464	280	14,861
World	4,401	27,546	74,689	153,718
<i>In % of GDP</i>				
ASEAN	1.72	2.02	1.62	2.20
Indonesia	0.51	0.38	0.50	0.87
Malaysia	2.04	4.62	3.62	4.36
Philippines	0.71	0.52	-0.01	-0.20
Singapore	2.25	1.52	0.92	1.73
Thailand	3.22	3.00	2.46	3.51
Vietnam	1.81	3.27	3.55	4.06
NortheastAsia	-0.02	0.37	0.96	1.23
Rest of Asia	-0.01	-0.06	-0.22	0.61
USA	-0.01	-0.02	0.12	0.24
Europe	-0.01	-0.01	-0.04	0.30
ROW	-0.01	-0.01	0.01	0.34
World	0.01	0.09	0.25	0.51

Source: ADB Staff Estimates Using GEMAT.

III. Financial and Monetary Cooperation

Initiatives related to trade have by far the longest tradition in ASEAN and have been much more comprehensive relative to cooperation in financial and monetary matters. Moreover, economists have much better tools in analyzing the welfare implications of trade accords. Hence, the bias in the literature has heretofore been in the direction of trade analysis. However, as argued above, since the Asian Crisis the need to move forward on financial and monetary matters has moved up the ladder of policy priorities. The *Ministerial Understanding on ASEAN Cooperation in Finance* (March 1997) sets out the broad goals of cooperation in diverse areas of finance and macroeconomics, including banking, capital markets, insurance matters, taxation and public finance, as well as in exchanging information on developments affecting ASEAN countries in various multilateral and regional organizations. Realizing the importance of developing capital markets in the region, the ASEAN Finance Ministers endorsed a Finance Work Programme designed to deepen capital markets in ASEAN. In the Joint Ministerial Statement of the Fourth ASEAN Finance Ministers Meeting (25-26 March 2000), the ministers agreed that ASEAN should "...further strengthen corporate governance practices, including transparency and disclosure, and establish a regional framework for the development of the ASEAN bond market. Our aim is to develop and deepen ASEAN's capital markets, particularly bond markets." In December 1999, the ASEAN heads-of-government focused on the need to move towards greater regional cohesion and economic integration, as expressed in the ASEAN Vision 2020 statement. In this document, they pledge, among other things, to maintain regional macroeconomic and financial stability through closer cooperation in terms of monetary and financial policies. The next year in Vietnam they agreed to the "Ha Noi Plan of Action," which calls for: (1) maintenance of financial and macroeconomic stability; (2) strengthening of the financial systems; (3) liberalization of financial services; (4) intensification of cooperative efforts in monetary, tax, and insurance matters; and (5) developing ASEAN capital markets.

As ASEAN countries endeavor to deepen their national capital markets, they have been using both ASEAN-based and ASEAN+3 approaches. In effect, most significant financial initiatives have been thus far at the ASEAN+3 level. Hence, in what follows, we consider exchange-rate management and financial and monetary cooperation mainly from an ASEAN+3 perspective. Section IV considers whether or not the region would be a good candidate for very deep integration in the area (i.e., monetary union) in the long-run.

A. Exchange-rate Management

Exchange-rate regimes in Asia differ widely, from various degrees of managed floats (e.g., most ASEAN countries, Japan, and South Korea) to hard pegs (e.g., China and Hong Kong). There are many excellent reviews of exchange-rate regimes in the region (see, for example, ADB 2006). However, they all have one common characteristic: the US dollar as the (explicit or implicit) reference currency or anchor. In reviewing the evolution of the roles of the US dollar, yen, and euro in East Asia, Kawai (2002) notes that the US dollar was either the *de facto* or *de jure* anchor in the region's economies prior to the 1997-98 Asia Crisis. During the Crisis the role of the US dollar declined but in its aftermath the US dollar generally assumed its traditional role as anchor. Still, its importance diminished in certain countries (e.g., Indonesia) and there has been greater flexibility in exchange-rate management. As of early 2007, the role of the US dollar

continues to be prevalent, but there are some indications of certain strains and a desire to diversify is in evidence. Weakness in the US dollar appears to have led some countries (e.g., China) to announce explicit reserve diversification strategies. Thailand in December 2006 even (briefly) imposed capital controls in order to prevent further *appreciation* of the *baht* against the dollar, reflecting problems associated with continued sterilization of foreign exchange interventions over a long period of time (holdings of US dollars by the region's central banks are at historical highs).

Numerous studies in the literature evaluate alternative exchange-rate regimes in the ASEAN+3. Kwan (2001), for example, considers from an institutional/political-economy perspective the case for closer exchange-rate management in Asia, with a focus on the potential role of the Japanese yen in future arrangements. McKibbin (2004) evaluates the performance of several potential Asian exchange-rate arrangements with respect to their effects on output and inflation variability in the presence of various shocks, and finds that no regime dominates in the presence of all shocks but the regimes of floating and a basket peg to the US dollar, euro and yen generally perform better than an Asian currency union or yen-zone regime.

There continues to be a strong appetite in the region for various proposals regarding future exchange-rate management and cooperation, even if there has been little or no concrete progress in this regard at the policy level (as will be discussed below, various forms of monetary union in Asia have been tabled by academics but these have not been considered seriously in policy discussion). Arguably, this desire relates to the problems associated with the Asia Crisis. This "contagion" effect of the Crisis, which began in Thailand on July 2, 1997 and quickly spread to Malaysia, Indonesia, the Philippines, and ultimately South Korea and even Hong Kong, took the region by surprise, particularly since the potential for "real contagion" was thought to be small given the relatively-low levels of trade integration between the affected economies at the time. However, the contagion effect was devastating. Kim, et. al. (2002) separate contagion into several separate categories, with bilateral real integration just being one (and a small part of it).⁸ The others would include competition in third markets⁹; "financial contagion," which relates to international investor's behavior during a crisis; and "pure contagion," which could be "herd behavior," informational cascades, and the like. Kim, et. al. (2002) argue that all these channels played a role in the Crisis and survey the relevant literature.

For Asian policymakers, this contagion effect clearly underscored the "policy externalities" associated with macroeconomic and financial policies in an increasingly-integrated region, which in turn has given birth to a variety of approaches geared to endogenize at least in part these externalities. We discuss these initiatives below. Suffice it to note that the presence of contagion at higher levels of integration (see, for

⁸ Glick and Rose (1999), for example, examine five currency crisis episodes and find that countries affected by crisis have strong trade relations with the country that was the first victim of the crisis episode. But this effect is not important relative to other channels. Moreover, in the case of the Asian Crisis, Thailand accounted for only between 1 percent and 4.5 percent of the exports of the affected Asian economies.

⁹ That is, if a crisis hits Thailand and Malaysia and Thailand compete significantly in the US market, a strong devaluation of the baht would impact the competitiveness of Malaysia, which would lead investors to sell short Malaysian *ringgit*. For analysis of this type of competitiveness effect in the Asian Crisis context, see Kochar, Loungani and Stone (1998), who find that this type of trade channel played an important role in the Crisis.

example, Candelon, Piplack and Straetmans 2006 and Dungey, et. al. 2004) reinforces arguments in favor of monetary union.

B. Financial/Monetary Integration

One might trace the first initiative in favor of monetary/financial cooperation in the ASEAN+3 to be the original “Miyazawa Plan,” which was initiated by Japan during the Asian Crisis to create an Asian Monetary Fund to supplement the IMF. It was opposed by the IMF and the United States, but eventually led to the establishment of currency swap arrangements among East Asian countries (basically bilateral swaps between Japan and individual countries) during the annual meeting of the Asian Development Bank in May 2000 (the “Chiang Mai Agreement”). These swaps have grown in terms of nominal values to approximately \$75 billion (May 2006).

There have also been proposals to integrate capital markets in the region, from modest proposals to coordinate more closely existing national capital markets, to more ambitious proposals such as the creation of supranational regional bond and stock exchanges. The main issues relate to integration as opposed to capital market development more generally, although one motivation for integration is typically to foster development of the market.

Interest in stock market integration arises primarily because financial theory suggests that an integrated regional stock market is more efficient than segmented national capital markets. Capital market efficiency in Southeast Asia has become even more important after the Asian financial crisis. Southeast Asian countries are specifically seeking to reduce the traditional dependence of firms on bank loans rather than bond and stock issuances, and at the same time are seeking new capital from outside the region.

With an integrated regional stock market, investors from all member countries will be able to allocate capital to the locations in the region where it is the most productive. With more cross-border flows of funds, additional trading in individual securities will improve the liquidity of the stock markets, which will in turn lower the cost of capital for firms seeking capital and lower the transaction costs investors incur. These suggest a more efficient allocation of capital within the region.

From the perspective of a portfolio investor outside the region, stock market integration suggests that separate markets move together and have high correlations, so there is less benefit from portfolio diversification across countries. However, an integrated regional stock exchange will be more appealing to investors from outside the region who would find investment in the region easier or more justifiable. As shares become more liquid and transaction costs fall, fund managers become increasingly willing to take positions in the stocks. In addition, outside investors may take notice of the regional stock exchange instead of dismissing a collection of small national exchanges: the whole (one regional stock exchange) might be greater than the sum of the parts (individual country exchanges). Click and Plummer (2005) find evidence of co-integration of the original ASEAN-5 stock markets, which would bode well for the creation of a regional market. Candelon, Piplack and Straetmans 2006 come to the same conclusion; they consider five different Asian economies (Malaysia, Thailand, Chinese Taipei, Singapore and South Korea) and find an increased co-movement of

these stockmarkets during periods of boom and bust, with a common break in 1997 (which can only be interpreted as an “Asian Flu” effect).

With respect to fixed-income markets, the need to finance emerging government deficits in the region, robust demand for infrastructural projects, and ambitious business plans of many private-sector companies make the development of bond markets a natural priority, though a major challenge. Fixed-income instruments are important not only as an additional financial vehicle but also as a complement to equity markets. Firms may wish to raise medium- and long-term financial capital without relinquishing more control of the firm, or possibly as a complement to equity issuances (or *vice versa*; major corporate bond issues are often accompanied by warrants). Moreover, ASEAN governments in particular have recognized that a stronger and more extensive local bond market can be strong protection against maturity and currency “mismatches.” While ASEAN launched a study on the possibility of creating an ASEAN bond market in 2002-2003, the idea was essentially put on a back-burner in favor of an ASEAN+3 framework, which would include the major financial players in Asia. For example, the December 2002 “Asian Bond Markets Initiative” established a (small but growing) bond pool under the auspices of the Bank for International Settlements.

Nevertheless, financial and monetary cooperation in Asia continues to be at a conceptual stage. Even its most successful cooperative effect, the Chiang Mai Initiative, relatively lacks ambition if one considers that its swaps totaling \$75 billion (May 2006) will be drawn from reserves that are currently at about \$2.5 *trillion*. But the economics seem to support such initiatives.

IV. Do Macroeconomic and Policy Trends in Asia Support Monetary Union?

Ever since the World Bank’s publication of the *East Asian Miracle* (World Bank 1993), the successful, export-oriented approach to economic development has been a model for developing countries. Of course, the region’s remarkable trade performance has been made possible by general political stability, stable macroeconomic policies, and market-oriented microeconomic reforms (see, for example, World Bank 1993, World Bank 2006, and ADB 2006). While an exhaustive review of the determinants of the “East Asian Miracle” would go beyond the scope of this paper, suffice it to note that more than any other region in the developing world, Asia has been able to exploit to its advantage the global marketplace and globalization.

As has been well-documented¹⁰, over the past 20 years the region has been highly successful in raising living standards (and, with it, reducing poverty significantly) and in maintaining healthy macroeconomic indicators. Moreover, it exhibits a classic process of structural change as the economic development proceeds apace, with agricultural falling in importance while services (and, usually, manufactures) rise.¹¹

¹⁰ ADB (2006) and World Bank (2006) each give excellent reviews of these processes, but the literature is large.

¹¹ The exception in terms of services is Thailand, whose share actually falls slightly. However, this reflects a problem with collection of services data in Thailand: in short, laborers who work only part time in agriculture are included as agricultural workers, even if they generally rely on employment in services as their most important source of income.

There has also been a process of convergence at work. As Barro and Sala-i-Martin (2004) show, while the hypothesis of global economic convergence (“beta” convergence) can be rejected with reasonable degrees of confidence, there is evidence of “conditional convergence”¹². But East Asia is the only region where economies are catching up unambiguously with each other and the OECD (World Bank 2006). For example, while the *per capita* incomes of Singapore and Taipei, China were about half that of Japan in 1985, by 2004 they had almost caught up to Japan...and Hong Kong actually surpassed it.¹³ South Korea’s *per capita* GDP was still one-third lower than that of Japan in 2004 but its catching-up process has been impressive, with *per capita* GDP virtually quadrupling since 1985.¹⁴ Most ASEAN countries also exhibited notable catch-up relative to Japan (and other OECD countries). The most remarkable story, however, is that of China, which has been transformed from a poor, isolated, autarkic economy into an economic powerhouse in a generation. This dramatic transformation is attributable to a major overhaul of economic policy that has embraced (and, in some ways, is now leading) globalization, rather than resisting it as in the past.

This outward-oriented approach to economic development, which has been a key engine of growth in Asia, has made it a natural candidate for regional economic integration initiatives in a world that is increasingly eschewing a multilateral approach to trade policy in favor of bilateralism and regionalism. In addition to the need to reclaim most-favored nation status in key markets (“defensive” regionalism), FTAs in Asia are being used as a means to address key areas that have been hitherto excluded in the WTO talks.

A. The Economics of Monetary Union: Is Asia an Optimum Currency Area?

There exist several studies in the literature that attempt to address the question of whether or not some sort of Asian currency area would make sense, often using the experience of monetary union in Europe as a yardstick. Such comparisons are only natural. The theory of OCAs does not provide us with an optimal “threshold”; however, if it is assumed that the EU makes sense as a currency area, comparisons of indicators between what the EU was like prior to monetary union and what Asia is now would be appropriate.

Perhaps the most comprehensive works on the subject thus were undertaken by Bayoumi and Eichengreen (1999) and Bayoumi, Eichengreen and Mauro (1999). They use a variety of indicators consistent with the OCA literature, from analysis of intra-regional trade to correlations of aggregate supply shocks, to compare the EU prior to Maastricht and Asia/ASEAN today.¹⁵ They find that, in general, Asia comes as close to meeting OCA criteria as Europe did. However, they note that historically the essential preconditions for a durable regional monetary arrangement depend critically on politics

¹² In calculating “conditional convergence,” the authors only include countries that meet certain criteria, that is, countries with hyper-inflation, political instability, and the like are excluded from the database.

¹³ World Bank Development Indicators database; CEIC database.

¹⁴ *Ibid.*

¹⁵ One problem with the Bayoumi, Eichengreen, and Mauro (1999) paper is that they define ASEAN to include all of its official member states, including the most recent members, i.e., Vietnam, Laos, Cambodia, and Myanmar. None of these countries would be a candidate for monetary integration of various sorts in the short- or medium run, given their low level of economic and financial development, closed financial markets, and unconvertible currencies.

rather than economics. In this sense, Asia looks much less like an OCA. Nicolas (1999) essentially comes to the same conclusion in terms of political limitations but is less sanguine with respect to the economics of a currency area in ASEAN. Tang (2006) focuses on symmetry of supply and demand shocks and speed of adjustment in evaluating possible configurations of monetary union across major Asian economies. He finds that smaller sub-groupings of economies in Asia (e.g., Malaysia and Singapore; ASEAN more generally; Hong Kong and Taiwan) fit the OCA criteria better than a general Asian monetary union.

One way to evaluate the OCA symmetry criterion is to estimate correlations of macroeconomic variables between members of a proposed currency group over time using high frequency data. The more highly correlated these variables are throughout the business cycle, the greater the implied symmetry of economic structures of the component members of the group, and the more likely the group would constitute an OCA. Kose, et.al. (2003) use overall output (real GDP) as the key macroeconomic variable for the ASEAN-5, Korea, and Taiwan. The results show fairly high (positive) cross-correlations of output between most ASEAN countries and between individual countries and the Asian aggregates. For example, correlations between the ASEAN-5 countries and the Asia Cycle 2 aggregate fall in the range of .36 (Philippines) and .49 (Singapore). Moreover, with the exception of Indonesia, correlation coefficients have generally been rising over time. Excluding Indonesia, they increased over time in all cases except that of Malaysia-Philippines. The highest correlations in period 2 were found between Malaysia and Indonesia (.73); Singapore and Thailand (.63); and Singapore and Malaysia (.58). In general, correlations between ASEAN countries are often higher than with the general Asia group aggregates.

In short, it would be difficult to state unequivocally that East Asia constitutes an OCA. However, macroeconomic trends and symmetry analysis would suggest that at least it is moving in that direction, and if the EU is used as the benchmark, it already may be there. Moreover, the “endogeneity” process noted by Frankel and Rose (1998) would suggest that, should Asia join in monetary union, the convergence indicators would be reinforced. Nevertheless, the political *status quo*, particularly in Northeast Asia, would preclude such an arrangement...at least in the short-run. But the confluence of closer trade integration and the emergence of an “Asian identity” could well enhance the potential for a removal of existing political obstacles.

The Maastricht Treaty created considerable excitement in the discipline of international economics regarding the economic logic behind monetary union. Since then, there have been hundreds of studies estimating the economic effects of monetary union. Grubel (2006) gives an excellent survey of the economics of monetary union, using a framework that is highly relevant to the Asian case. In this section, we review both the convergence of financial indicators and survey the literature on monetary union in Asia, with a focus on studies related to symmetry of economic structure.

Figure 1 shows GDP growth rates for the ASEAN+3, both individually and as a group. Figure 1a is based on annual data for the period 1980-2005, whereas Figure 1b employs quarterly data for the period 1994-2006Q3.¹⁶ Clearly, the ASEAN+3 economic

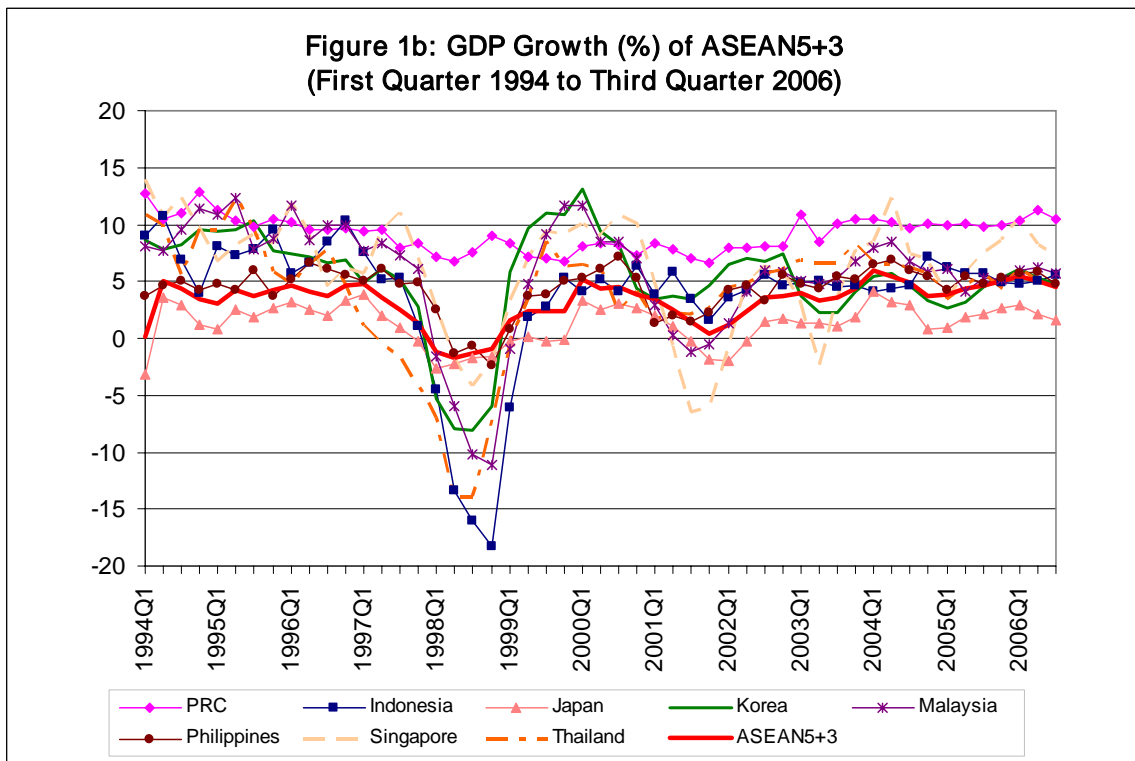
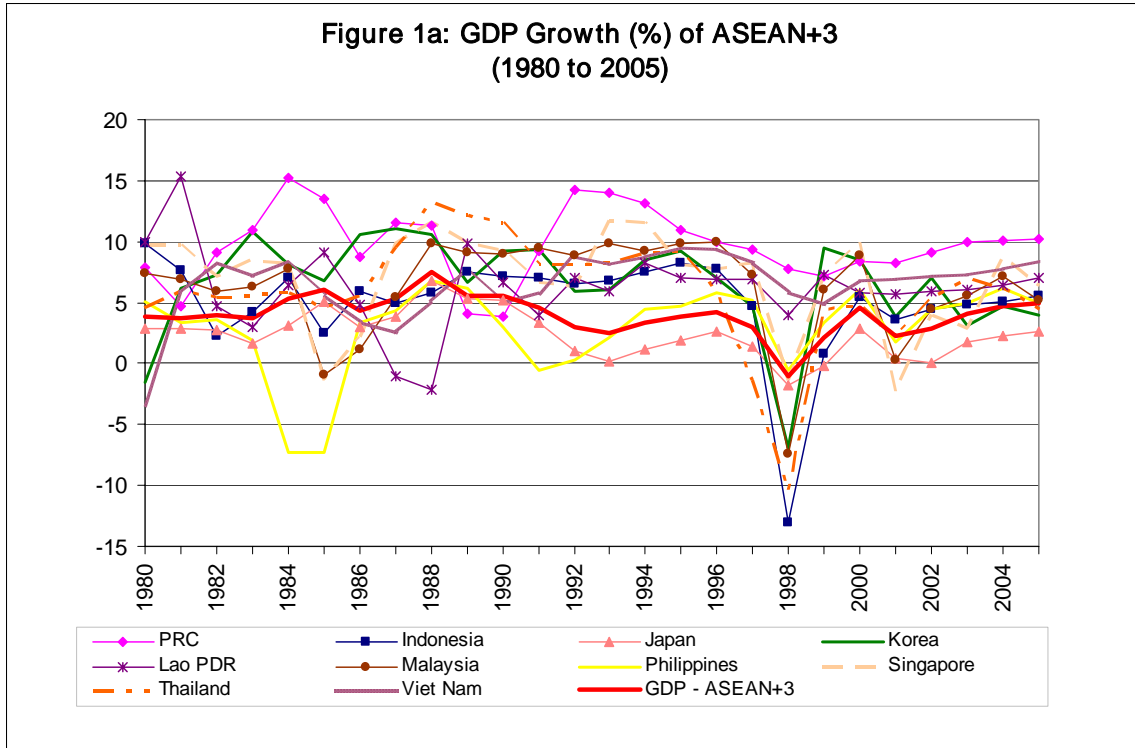
¹⁶ Data for Brunei, Myanmar and Cambodia were not available for the annual data calculations; data for Brunei, Myanmar, Cambodia, and Laos were unavailable for the quarterly-based calculations.

performance has been impressive; growth has been strong for just about all countries (Japan and the Philippines are an exceptions) outside the 1997Q3-1998Q4 Asian Crisis period.

A process of convergence also appears to be in evidence. In order to capture this process, we calculate correlation coefficients between individual-country growth and the ASEAN+3 for pre- and post-Crisis periods using annual (1980-2006, Table 4a) and quarterly (1994Q1 to 2007Q1, Table 4b) data. The results are illuminating. Table 4a shows that while in the pre-crisis period not one correlation coefficient was statistically significant (and many were negative), in the post-Crisis period all but two (China, Korea) were, and the magnitudes are positive and high (i.e., in the range of 0.7 to 0.97 for the statistically-significant coefficients). The same results generally obtain using quarterly data (Table 4b), with lower estimated coefficients (range: 0.52-0.85) but all estimated coefficients are statistically-significant.

In combination with the existing literature summarized above, these results give strong support to the view that, while we do not know if East Asia constitute an OCA, we can be confident that symmetry in the region is increasing and is high for just about every country. But the literature points to two other possible criteria: factor flows and degree of interdependence. With respect to the former, the prognosis is less optimistic: intra-regional labor flows are very small even by international standards (World Bank 2006b) and intra-regional flows of foreign direct investment are relatively low¹⁷. On the other hand, intra-regional trade shares are relatively high and growing. As can be seen from Figure 2, while the share of sub-regional trade in ASEAN is relatively low for most countries except the transitional economies (Figure 2a), ASEAN+3 is becoming increasingly important in the trade of just about all regional economies since 2001, though the trend is not generally monotonic. In fact, no economy in the region undertakes less than 40 percent of its trade with other East Asian partners, and for most the share is 60 percent or more. This is especially impressive when one remembers from the above discussion that, unlike the EU, no preferential trading arrangements were really in place to influence these trade shares with the (theoretical) exception of AFTA.

¹⁷ UNCTAD, FDI Statistics on-line. For example, intra-regional FDI in ASEAN comes to only 13 percent of the total. Singapore is an FDI hub in ASEAN (accounting for two-thirds of FDI in the region) but its major sources are from outside the region, particularly the EU and the United States. Japan and South Korea only account for about 1 percent of global flows of FDI each. Only China really stands out as a major recipient of FDI flows from the region (mainly from Hong Kong, Japan, and Taipei, China).



Sources: CEIC, IMF World Economic Outlook Database, and World Bank World Development Indicators Online.

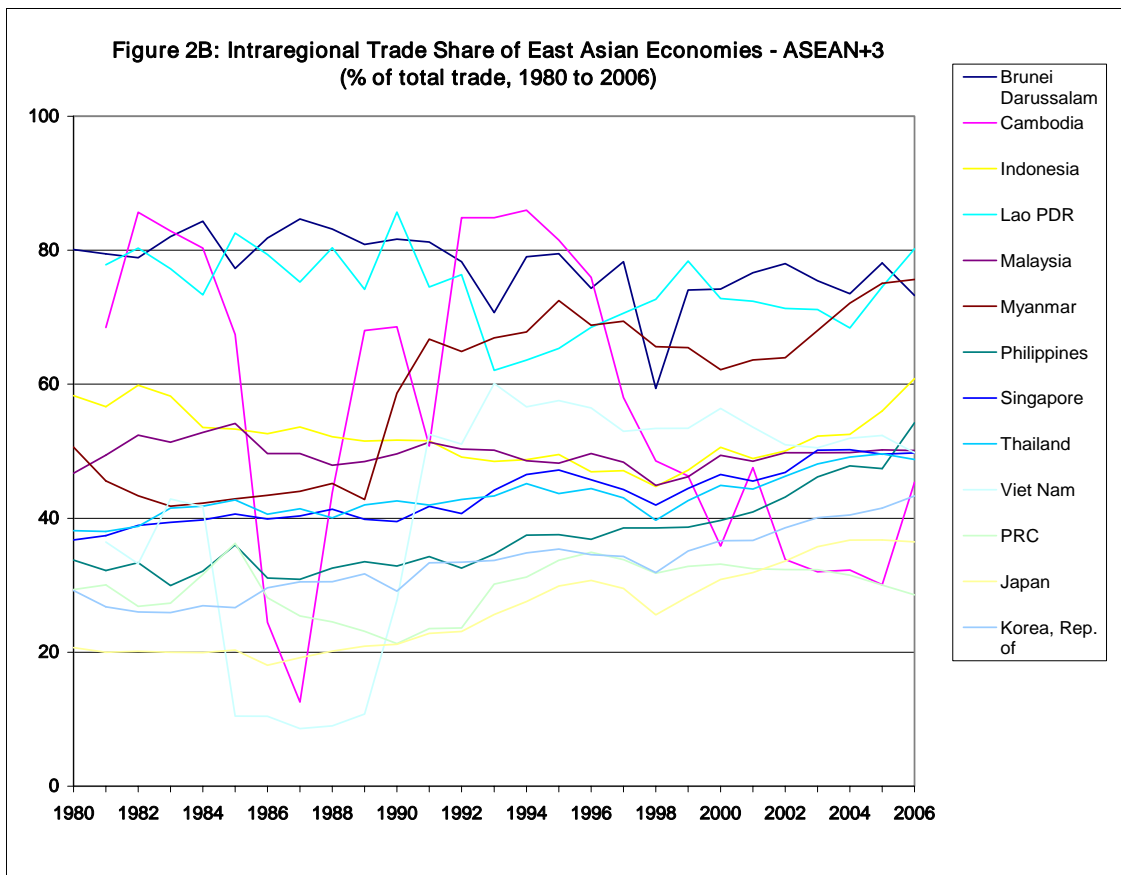
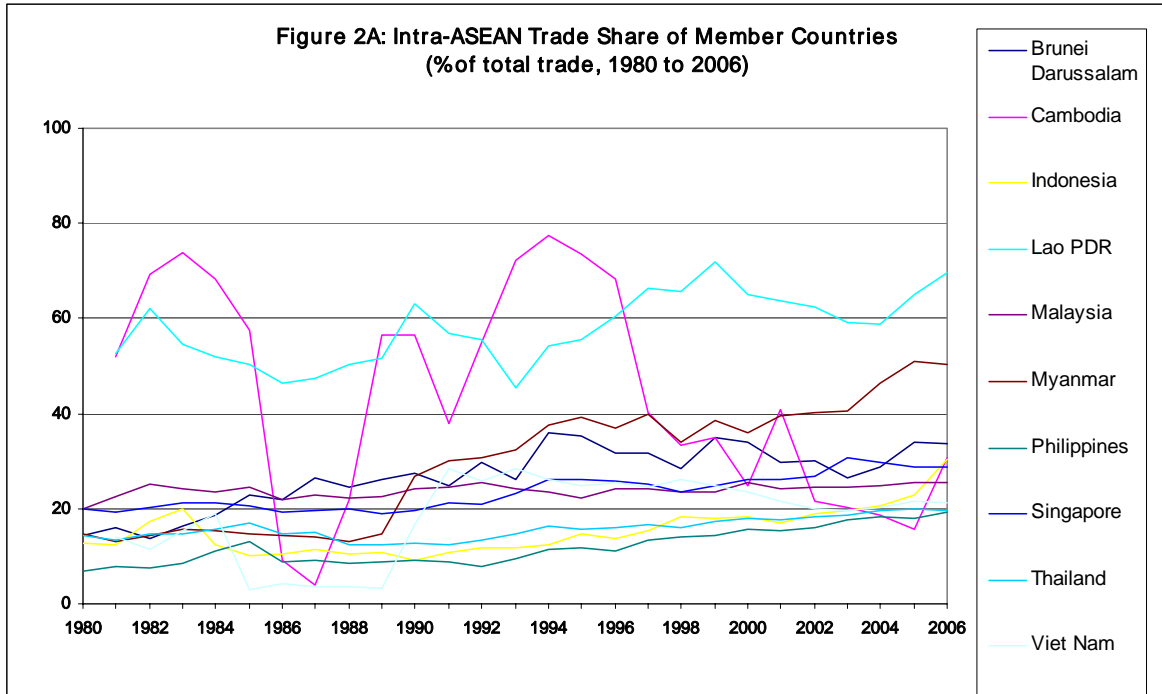


Table 4a - Correlation of GDP Growth Rates between Individual Countries and ASEAN+3: 1980 - 2006 ^{1/}

	1980 to 1997	1998 – 2006
PRC	-0,42	0,61
Indonesia	-0,22	0.9035*
Japan	-0,16	0.8469*
Korea	0,25	0,57
Lao PDR	-0,38	0.7338*
Malaysia	-0,20	0.8985*
Philippines	-0,17	0.9663*
Singapore	-0,16	0.7543*
Thailand	0,44	0.8669*
Viet Nam	-0,27	0.7033*

* Significant at 5% level.

^{1/} ASEAN+3 excludes Brunei, Cambodia, and Myanmar. Regional GDP growth is weighted by gross national income (atlas method, current US\$).

Sources: IMF World Economic Outlook Database, World Bank Bank, Development Indicators Online.

Table 4b - Correlation of GDP Growth Rates between Individual Countries and ASEAN5 +3: First Quarter 1994 to First Quarter 2007 ^{1/}

	Q11994 - Q41997	Q11998 - Q12007
PRC	-0,16	0.5240*
Indonesia	0,33	0.7690*
Japan	-0,08	0.7729*
Korea	0,08	0.5169*
Malaysia	0,35	0.7918*
Philippines	0,33	0.8532*
Singapore	-0,31	0.7294*
Thailand	0,06	0.7868*

* Significant at 5% level.

^{1/} Regional GDP growth is weighted by gross national income (atlas method, current US\$)

Sources: CEIC Database and World Bank World Development Indicators Online.

As Rana (2006) argues, this process of rising intra-regional trade is being led by intra-industry trade. He uses a gravity model to show that the rise in economic symmetry in the region *derives* from this increase in intra-regional trade. The literature would suggest that this process would bode well for a continuing “endogenous” process of increasing symmetry.

B. Macroeconomic Policy Diversity in East Asia: Would Maastricht Criteria Be Possible?

As part of the monetary union process in Europe, it became clear that some policy harmonization was necessary in order to ensure a stable regime. The famous “Maastricht Criteria,” later reinforced by the Stability and Growth Pact, had four principal requirements: (1) debt/GDP should be no greater than 60 percent (though this indicator was downplayed given the greater than 100 percent shares in Belgium and Italy); (2) any deficit/GDP should be no more than three percent; (3) the inflation rate and nominal interest rate of a country should be no greater than 1.5 percent higher than the average of the lowest three countries; and (4) there should be no realignment of a country’s exchange-rate peg in the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS) for two years prior to acceding to monetary union. Thus, the main goal was macroeconomic policy harmonization and stability.

There has been considerable debate on the economic logic of the Maastricht criteria in general, and the actual numeric criteria in particular. But if we were to subject East Asia to the same test, how would it fare?

First, fiscal policy would generally receive high marks, especially relative to the EU. The share of government spending in GDP in the NIEs (less than 25 percent), ASEAN (11-30 percent range, save the peculiar cases of Brunei and Myanmar), and China (18 percent) are low relative to the EU average, even though as developing countries this is not a surprising outcome.¹⁸, ¹⁹ Japan’s share is somewhat higher (37 percent) but this is among the lowest in the OECD (though, of course, its debt/GDP ratio of over 165 percent is the highest in the OECD). With respect to budget deficits, Table 5 shows that there is a good deal of variability across East Asia. Deficit/GDP ratios of the ASEAN countries were less than three percent for all original ASEAN countries save Malaysia (3.8 percent), but only Vietnam among the transitional economies would meet the Maastricht inflation criterion. Singapore actually had a surplus of 8 percent of GDP. It is interesting to note that the Crisis-affected ASEAN countries had surpluses or essentially balanced budgets on the eve of the Crisis. Since then, they have tended to have modest deficits, with the occasional exception of Thailand. The deficits of China and Taipei, China (2004) came to approximately 1-2 percent, while South Korea and Hong Kong had surpluses. Only Japan, which currently has a deficit/GDP of about 5 percent and has not met the Maastricht criteria since 1993, would fail the test outright. Hence, with the exception of Japan and a few of the smaller, transitional ASEAN economies, reaching a 3 percent target would not be particularly difficult for East Asia.

¹⁸ With a smaller tax base, potential fiscal burdens are less.

¹⁹ All data for this section not included in Table 5 are taken from the IMF World Economic Outlook Database; World Bank Development Indicators Database; ADB Key Economic Indicators; or the OECD Statistics Database.

By developing-country standards, East Asia has been characterized by conservative monetary policies and price stability. Inflation rates in the ASEAN countries are in the 0-10.5 percent range (with Indonesia defining the upper bound); China and the NIEs have

Table 5: Divergence in East Asian Macroeconomic Indicators (2005)

	Public Sector Debt (% of GDP) ^{1/}	Fiscal Balance of Central Government (% of GDP)	Inflation Rate (%)	Interest Rate (%) ^{2/}
Japan	...	-5,2	-0,3	0,1
People's Republic of China	19,2	-1,6	1,8	2,5
NIEs-3				
Hong Kong, China	...	0,3	1,1	3,2
Republic of Korea	22,0	0,8	2,7	3,7
Taipei,China	30,3	-1,0	2,3	1,5
ASEAN				
Brunei Darussalam	0.9 ^{3/}	...
Cambodia	...	-3,1	5,8	...
Indonesia	58,3	-0,5	10,5	10,3
Lao PDR	...	-6,0	7,2	...
Malaysia	68,9	-3,8	3	2,9
Myanmar	...	-6.0 ^{3/}	4.5 ^{3/}	...
Philippines	101,3	-2,7	7,6	7,0
Singapore	...	8,0	0,4	2,3
Thailand	49,4	0,1	4,5	3,3
Viet Nam	40,8	-2,3	8,3	...

^{1/} Refers to consolidated government debt except for Indonesia, Korea, and Taipei,China which refer to central government debt while Philippines refer to nonfinancial public sector debt.

^{2/} Money market rate.

^{3/} As of 2004.

Sources: Asia Economic Monitor (December 2006), Asian Development Outlook (2006), and Bloomberg.

inflation rates of less than 3 percent; and Japan continued to be in a deflationary state in 2005 (-0.3 percent). Thus, while inflation in the region is generally under control, there exists considerable disparity in terms of inflation rates. It is worth noting, however, that the inflation criterion for Maastricht has been a source of major disagreement: for example, if Luxembourg, the Netherlands, and Sweden were experiencing deflation, would it make sense to use their average as a reference point, given their relative sizes and falling prices? If we did the same for East Asia, we would calculate an average 0.3 percent (Singapore, Japan, and Brunei), meaning that all countries with inflation rates above 1.8 percent would be ineligible. While this would seem normal to the European Central Bank, whose inflation target is 2 percent or less, it would mean that 12 out of 15 countries would fail to meet the criteria. In any event, it would take some effort to force relative convergence of inflation rates, though this would not be a task that would be much more difficult than it was in Europe. The same story generally applies to interest

rates, though divergence is much less than for inflation. However, as most East Asia countries have underdeveloped bond markets, it is unclear if economy-wide interest rates reflect the true price of risk in the economy, due to, *inter alia*, lack of liquidity in the market. In addition, there is no doubt a far greater spread of risk across bonds in East Asia than there was in the case of the EU.

Finally, regarding exchange rates, Japan and the NIEs have been characterized by high trend volatility relative to each other and, particularly, compared to the ASEAN countries. This is a reflection of both institutional arrangements (e.g., pegs, managed float, and float) and underlying macroeconomic variables. ASEAN exchange rates, however, pretty much seem to move in step with each other since the early 1990s, reflecting in large part the implicit or explicit peg to the US dollar. In any event, these regimes have been developed in an independent context; certainly, prior to any movement toward monetary union the regime would require an exchange-rate mechanism (such as the ERM/EMS prior to monetary union).

In short, while there is no magic number that one could assign to the degree of economic symmetry across these countries in terms of basic macroeconomic variables, empirical assessments would support the view that ASEAN+3 countries are increasingly symmetric, and the share of intra-regional trade in total trade is relatively high and rising. This process is being bolstered by increasing shares of intra-industry trade. Moreover, with respect to policy harmonization, the conclusion is mixed: fiscal policies could be fairly easily harmonized, whereas the monetary variables might take some doing. In any event, any policy decision to move toward monetary union in Asia would require a transitional period, as was the case in Europe.

C. Towards an Asian Maastricht

The Maastricht criteria were set up for a group of developed countries whose “core countries” had among the most sophisticated economic and financial superstructure in the world. Given that institutional “best practices” were generally already in place in the countries determining the framework for monetary union, the choice for convergence criteria based on policy variables alone is understandable. However, this is not at all the case in the ASEAN+3; while there are a few economies with sophisticated infrastructure, the region is highly-diverse in terms of its financial and monetary-related institutions, including some countries with only elementary infrastructure and institutions. Hence, before moving in the direction of closer monetary integration, it will be necessary to come up with a set of both *policy*, *institutional*, and *governance* criteria, which we might call the “Manila Criteria”.

V. Concluding Remarks

In this paper, we evaluated, *inter alia*, the economic prospects of economic integration in Asia. We reviewed the current evolution of trade and financial accords in the region and surveyed the literature on the economic viability of these accords, including some fresh simulations on the correlation of business cycles and the economic effects of potential trade groupings being considered. In general, the paper suggests that the economic potential for closer economic integration is strong. In terms of trade, we noted that there would be positive gains from ASEAN integration and the current wave of bilaterals, but that these gains are much less significant for ASEAN than would be the case of other scenarios, such as the ASEAN+3 or FTAAP. We also argued that the case for

deepening financial and monetary integration in Asia is convincing, even though the political underpinnings of such an accord are not yet in place.

In a related study (Plummer and Wignaraja 2006), we argue that real integration has been taking place at the bilateral, plurilateral, and regional levels, and note that the economic implications of these emerging agreements will actually reinforce the economic case for monetary union in Asia, in a similar way that real-sector integration did so in Europe. Hence, we conclude that, at present, the post-sequencing of economic integration in Asia is developing such that trade agreements, which are dominating the formal accords in Asia, will ultimately complement the movement toward financial and monetary integration, which will take a great deal more time and political will.

As a final point, we should note that the process of creating FTAs at various levels has an important political effect on cementing a regional “identity” and in bringing the region closer together. The proliferation of superficial FTAs in the world testifies to the political usefulness of such agreements. Indeed, it would be impossible to understand the unfolding of regionalism in Asia (or in Europe, for that matter) from a merely economic perspective: there exist strong political and strategic motivations behind this movement. Given that many see the chief problem of monetary union in Asia as being political (unlike in Europe), the “endogeneity” effect noted by Frankel and Rose (1998) could very well have its counterpart in the political realm. In this sense, the FTAs are serving as a political, as well as economic, complement, to monetary union.

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Appendix Table 1: Correlation of GDP Growth Rates of East Asian Economies: 1980 – 2005 ^{1/}

A. 1980 - 1997

	Brunei Darussalam	Cambodia	PRC	Hong Kong, China	India	Indonesia	Japan	Korea, Rep of	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Taipei,China	Thailand	Vietnam
Brunei Darussalam	1.0															
Cambodia	0.2	1.0														
PRC	-0.1	0.4	1.0													
Hong Kong, China	-0.1	0.6260*	0.1	1.0												
India	-0.1	-0.2	-0.1	-0.2	1.0											
Indonesia	0.3	-0.5	-0.2	0.3	0.1	1.0										
Japan	-0.1	0.1	-0.4	-0.1	0.3	-0.1	1.0									
Korea, Rep of	0.1	0.4	0.1	0.1	0.3	-0.4	0.2	1.0								
Lao PDR	-0.2	-0.6715*	-0.4	-0.3	0.0	0.4	-0.2	-0.6025*	1.0							
Malaysia	0.6202*	-0.2	-0.1	-0.1	0.2	0.6049*	-0.2	-0.1	-0.1	1.0						
Myanmar	0.0	-0.4	0.0	-0.3	-0.2	0.3	-0.6934*	-0.5778*	0.7255*	0.1	1.0					
Philippines	0.2	0.1	-0.4984*	0.1	0.4	0.3	0.0	-0.1	-0.1	0.4	-0.1	1.0				
Singapore	0.5	0.2	-0.1	0.2	0.3	0.4953*	-0.1	-0.1	-0.1	0.8015*	0.0	0.5699*	1.0			
Taipei,China	-0.2	0.6258*	0.2	0.7984*	-0.1	0.1	0.0	0.4	-0.4	-0.2	-0.4	0.0	0.1	1.0		
Thailand	0.0	0.1	-0.1	0.0	0.4	0.3	0.4762*	0.4	-0.3	0.4	-0.4	0.2	0.4	0.1	1.0	
Vietnam	0.2	-0.4	0.3	-0.5405*	0.4	-0.2	-0.3	0.4	0.1	0.3	0.3	-0.1	0.0	-0.3	0.0	1.0

*Significant at 5% level.

B. 1998 - 2005

	Brunei Darussalam	Cambodia	PRC	Hong Kong, China	India	Indonesia	Japan	Korea, Rep of	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Taipei,China	Thailand	Vietnam
Brunei Darussalam	1.0															
Cambodia	0.3	1.0														
PRC	0.4	-0.4	1.0													
Hong Kong, China	0.7	0.5	0.4	1.0												
India	0.0	0.4	0.4	0.4	1.0											
Indonesia	0.9466*	0.2	0.5	0.7985*	0.1	1.0										
Japan	0.7	0.2	0.7	0.9133*	0.4	0.8066*	1.0									
Korea, Rep of	0.8267*	0.6	0.0	0.7260*	-0.1	0.8013*	0.5	1.0								
Lao PDR	0.7667*	0.7	0.2	0.7	0.5	0.7292*	0.5	0.7807*	1.0							
Malaysia	0.8131*	0.6	0.4	0.9249*	0.3	0.8738*	0.8034*	0.8829*	0.7776*	1.0						
Myanmar	0.5	0.2	-0.3	0.0	-0.6	0.3	0.0	0.4	0.0	0.3	1.0					
Philippines	0.7155*	0.3	0.6	0.9410*	0.4	0.8562*	0.8865*	0.7312*	0.7	0.9503*	0.1	1.0				
Singapore	0.4	0.6	0.2	0.8867*	0.5	0.5	0.7	0.7	0.6	0.8493*	-0.1	0.8528*	1.0			
Taipei,China	-0.2	0.5	0.1	0.4	0.5	-0.1	0.2	0.2	0.2	0.4	-0.2	0.4	0.7554*	1.0		
Thailand	0.9393*	0.4	0.5	0.7763*	0.2	0.9564*	0.7298*	0.8450*	0.7948*	0.9227*	0.3	0.8703*	0.6	0.1	1.0	
Vietnam	0.4	-0.5	0.9213*	0.4	0.1	0.6	0.7	0.0	0.1	0.3	-0.2	0.5	0.1	-0.2	0.4	1.0

*Significant at 5% level.

1/ Annual data are used in the computation.

Source: IMF World Economic Outlook Database.