

EDITED BY BRUNO JETIN AND MIA MIKIC

# ASEAN ECONOMIC COMMUNITY

*A Model for Asia-wide  
Regional Integration?*



# ASEAN Economic Community

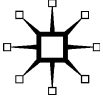


ASEAN Economic Community  
A Model for Asia-wide Regional Integration?

*Edited by Bruno Jetin and Mia Mikic*

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ASEAN ECONOMIC COMMUNITY

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# Introduction

*Bruno Jetin and Mia Mikic*

Much research and media attention is focused on the progress of regional integration among Southeast Asian countries.<sup>1</sup> Back in 1967, five of them formed the Association of Southeast Nations (ASEAN), and by 1999 the group was complete with ten ASEAN member states (AMS): Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, Singapore, and Viet Nam. Only one country from this subregion is currently not a member of ASEAN; however, Timor-Leste formally applied to accede in 2011.

While ASEAN had been labeled as a political association at the time of its founding, it slowly but certainly developed interest in economic aspects of integration. Most prominently, since the establishment of ASEAN Free Trade Area (AFTA) back in 1992, much of the integration process revolved around economic and trade issues. ASEAN's financial crisis and its impact on Asian countries contributed to AMS's realization of the need for a tighter regional entity to allow for the building of more resilient economies. Thus it was not surprising to see the proclamation of ASEAN 2020, which was announced in 1997. Likewise, political and economic dynamics in the region and globally were aligned with the ideas of ASEAN leaders meeting at the ninth summit in 2003 to call for the creation of an ASEAN community. Ultimately, this goal was advanced to be implemented in 2015 through the establishment of the ASEAN Economic Community (AEC) at the twelfth ASEAN summit in 2007. The other two communities—ASEAN Political-Security Community and ASEAN Socio-Cultural Community—are still planned for full implementation at a later stage.

The AEC Blueprint was developed in 2007 to provide a roadmap for government entities involved in AEC implementation. It has four pillars driving the transformation of ASEAN into a single market and production base, a highly competitive economic region of equitable economic development, and a region that is fully integrated into the global economy by the end of 2015. Each of the four pillars presents a demanding set of challenges—with numerous individual actions to be taken by AMS by the end of December 2015 and for the full realization of the AEC. In order to

assist AMS in monitoring progress along the way, ASEAN has introduced the so-called AEC scorecard, a self-assessment mechanism that tracks the progress of each AMS in each pillar. The original unwillingness to publicly reveal individual AMS scores has weakened but not disappeared, and thus the public still has no access to the most recent status. Based on the data available in the 2012 scorecard, ASEAN will be able to attain only 82 percent of its final target in early 2015, and so a big push will be necessary to improve this by the end of 2015. While some AMS are better positioned than others in terms of ticking items off the scorecard,<sup>2</sup> the actual progress will occur only when there is a critical mass of institutions to enforce these legal and regulative measures. At present, many challenges still remain at the implementation level of each pillar.

This book, *ASEAN Economic Community: A Model for Asia-wide Regional Integration?*, brings together scholars and researchers who have been studying ASEAN from close quarters or from a distance to provide their assessment of the AEC process and progress from a perspective of wider regional integration. While it was not possible to obtain a contribution for every aspect of the AEC process, we have tried to cover the most important areas or those that are most relevant for the rest of Asia and globally, either in terms of impacts or in terms of valuable lessons and practices that could be used by those who are pursuing any type of regional integration. In what follows we provide the brief summary of the chapters. As AEC pillars themselves are not perfectly balanced in terms of areas they cover and policies they refer to in the blueprint, while not being fully independent of each other, this book is also slightly asymmetric with a bit more focus on pillars 1, 3, and 4. Chapters, however, often provide the opportunity to a reader to make connections between the pillars and also over time of integration process. A summary of chapters, under the three part headings for ease of reference, is provided here.

## Part I: ASEAN Economic Integration in the Context of East Asian Regionalism

All reliable indicators show that the ASEAN Economic Community will not be fully completed by its 2015 deadline. David Martin Jones in chapter 1 asks if this outcome does not test the limit of ASEAN's guiding propositions and cooperative practices—noninterference principle and consensus building, and nonconfrontational bargaining—and their efficacy in integrating AMS's economies and facilitating its wider regional economic integration. In the past, these principles and practices were sufficient to achieve the main outcome to be credited to ASEAN: the achievement, until recently, of regional security and political stability. This was a necessary condition for the success of export-oriented growth and attraction of foreign investment. But a single market and production base requires that all AMS have a common interest and accept a higher degree of cooperation. This is probably

what is lacking because the political elite of each AMS grants the monopoly of decisive domestic sectors to the economic elite, and their interests are so intertwined that they do not accept easily the direct competition from neighboring firms. Jones also discusses what he calls the “sinification of the ASEAN way” and how it has also profoundly changed the capacity of ASEAN to deepen its integration. ASEAN’s connectivity master plan will be funded in great part, directly or indirectly, by China to the extent that these new infrastructures serve Chinese interests, which are not necessarily those of ASEAN. Worse, ASEAN’s capacity to provide regional security may be endangered by China’s attempt to establish its domination over the South China Sea. The rise of China and the response of the other big powers in the region—the United States, Japan, India, and Australia—raise far more critical issues than the AEC can resolve. These issues are analyzed in deeper detail in the following chapters of the book.

Jean-Raphaël Chaponnière and Marc Lautier also question the nature of ASEAN regional economic integration process in chapter 2. They recall the creation of ASEAN in 1967, after several failed attempts, to be associated with the perception of rising communist threat. Twenty-five years later, ASEAN launched AFTA, whose objective was not to promote intraregional trade but to enhance ASEAN countries’ attractiveness for FDI. ASEAN countries have reduced trade barriers and made significant progress toward a *de jure* integration, while the process of *de facto* integration launched by the relocation of Japanese manufacturing firms in the mid-1980s continued. If one excludes intrafirm transactions and exports from free trade zones, AFTA would explain only one-fifth of the intraregional trade. ASEAN members are now involved in two mega regional agreements—one with a potential to protect ASEAN centrality, ASEAN+6 or Regional Comprehensive Economic Partnership (RCEP); and another, the US-led Trans-Pacific-Partnership Agreement.

In chapter 3 Mia Mikic addresses the issues stipulated under AEC pillar 4 seeking deeper integration of ASEAN into the global economy with emphasis on ASEAN centrality and improved coherence of various agreements that may impact the operation of AEC. As of now, it appears that RCEP might be the chosen path toward seeking a necessary consolidation of all existing trade agreements of ASEAN. This will succeed only if RCEP evolves into a high-standard trade agreement and allows for rationalization of existing deals. Upon providing current FTA landscape in Asia, this chapter examines the possible effects of the RCEP on trade not only of ASEAN+6 but also other Asian countries, taking into account the fact that all of the negotiating countries of the RCEP are already participants in other trade agreements that are either under implementation or under active negotiations.

Chapter 4 by Prema-chandra Athukorala examines emerging global production sharing (GPS) and trade patterns in light of the experiences of ASEAN countries that have been major and successful participants in GPS. “Network products” (parts and components, and final assembly traded

within production networks) constitute almost two-thirds of the merchandise exports of Singapore, Malaysia, and the Philippines; almost half those of Thailand; and a smaller but still significant share for Indonesia. GPS has certainly strengthened economic interdependence among ASEAN countries, and between them and China and the other major economies in East Asia, but this has not lessened the dependence on the global economy. The operation of the regional cross-border production networks depends inexorably on trade in final goods with the rest of the world. There is no evidence to suggest that forming RCEP would help them to enhance gains from the ongoing process of GPS fragmentation while reducing the dependence on the Western markets. GPS strengthens the case for unilateral and/or multi-lateral approach to trade reforms.

The ASEAN countries have experimented contrasted exchange rate regimes since the 1990s. The financial crisis of 2008 has given new interest to the question of monetary cooperation at the regional level. In chapter 5, Jacques Mazier, Myoung Keun On, and Nabil Aflouk use a fundamental equilibrium exchange rate (FEER) approach to estimate exchange rate misalignments and link them to the external performances and growth of East Asian countries. They find that exchange rate misalignments are more limited in the current period than in the 1990s, in clear contrast with what is observed between European Union countries. The economic consequences of alternative exchange rate regimes in East Asia are examined using a four-country stock flow consistent model of East Asia. The configuration of the 1990s and 2010s can be compared and alternative scenarios for the future of ASEAN integration are discussed.

Exploring further the exchange rates issues, Witada Anukoonwattaka connects those with the presence of global value chains (GVCs) in chapter 6. The growing GVCs has changed ASEAN from exporting final goods to intermediates, and from exporting directly to advanced markets to exporting via downstream countries, particularly China. This chapter looks at how an analytical framework for evaluating the impacts of exchange rates on export competitiveness has been changed by the GVC phenomenon. Findings imply that entering to GVCs make a country prone to a change in the exchange rate of other countries even if they are not their direct trading partners. There seems to be compensating impacts on trade volume and trade product range. The net impact then becomes ambiguous and sector- and country- specific. For instance, a currency depreciation of the yuan might reduce export product range from ASEAN, but export volume of each product that remains might increase.

The final chapter under part I, chapter 7 by Yann Duval and Emilie Feyler, takes stock of the progress made by ASEAN countries in reducing intra- and extraregional trade costs using various cross-country indicators of trade facilitation performance and a new bilateral trade cost dataset developed by ESCAP and the World Bank. Despite significant improvements over time, trade costs other than tariffs among ASEAN members remain relatively high, with a wide performance gap between



Cambodia-Lao PDR-Myanmar and other ASEAN members, in particular. ASEAN has lower trade costs with Northeast Asia than with itself. Southeast Asian economies under the ASEAN Economic Community would benefit from further intensifying trade facilitation reform, among themselves but also with other Asian regions, keeping in mind that emphasis may best be placed on completing implementation of the many signed but often delayed intra-ASEAN agreements.

## **Part II: Impact of Regional Integration on Structural Change, Employment, and Inequalities**

Using the fact that trade integration is a cornerstone of the ASEAN Economic Community, Kee Beom Kim, Fan Zhai, and Phu Huynh review the structural changes that have taken place in the past decades in ASEAN member states in chapter 8. They use an innovative computable general equilibrium model to assess the impact of ASEAN trade integration on labor markets. The results show that trade liberalization contributes to sizeable increases in output and employment in ASEAN member states, but that the benefits tend to vary by country, sectors, and gender. The mixed distributional effects point to the need for concerted employment and labor market policies, including improving access to education and training for vulnerable groups; strengthening the quality, coverage, and sustainability of social protection systems; and monitoring and managing the gender impacts of ASEAN trade integration

Francis Cripps and Naret Khurasee in turn use a macro model based on historical series for the past four decades in chapter 9 to project trade and GDP of ASEAN countries up to 2030 and confront the outcomes with trends in population structure and employment under different assumptions about policies in member countries. The projections imply that gaps in living standards will remain wide but suggest that exchange rate management, competition policy, agricultural policy, and targeted government services and infrastructure could promote more inclusive growth and provide wider opportunities for provincial and rural populations left behind by export-led industrialization and services concentrated in large cities. In the context of the ASEAN Economic Community such policies may require closer coordination than exists at present.

Outsourcing can be loosely defined as the extent to which production activities are contracted out at arm's length, as opposed to being performed in-house. In the context of ASEAN, outsourcing has by and large been a catalyst of impressive economic growth, yet the thorough understanding of this issue remains limited. In chapter 10 Aekapol Chongvilaivan explores the implications of burgeoning outsourcing activities in ASEAN on labor market development, namely, the effects on labor productivity and skill premium. The findings from this analysis yield policy implications regarding how to utilize regional production networks as the impetus for labor development.

Chapter 11 by Teemu Puutio draws attention to the importance of creative economy for ASEAN. ASEAN has adopted a soft-regionalism approach to its regional integration efforts, preferring flexibility, noninterventionism, and consensus-based decision-making over sovereignty transfers. As a result, the regional creative economy persists to resemble a loosely knit patchwork of disparate national regimes for creativity and innovation that interact only sporadically through non-ASEAN led developments such as supply chains. Without decisive and centralized actions to harmonize institutions and bridge the resource and capability gaps, the creative economies of members with weak creative capacities and institutions will be foreshadowed by those of which have more sophisticated labor forces, stronger enabling legal frameworks, and a more comprehensive network of supportive institutions. Consequently, weaker members may find themselves in “low-technology and creativity traps” with diminishing prospects of taking the next step upward.

### **Part III: Impact of Regional Integration on Poverty, Inequalities, and Social Cohesion**

Turning to addressing issues under AEC pillar 3, Marc Lautier’s chapter 12 examines social cohesion, economic resilience, and prospects for long-term growth. While structural change has been the main engine of long-term catching-up processes, it increases the vulnerability of an economy to shocks. The domestic aptitude to adjust to shocks and to minimize growth losses is a major factor of development performance. Economic resilience depends mainly on social cohesion and on a state’s effectiveness. Specific indicators for these two notions are provided for a large sample of developing countries. The comparative analysis demonstrates that while Southeast Asian economies are a diverse group, most of them have a strong ability to sustain growth for long periods of time. As for development institutions and growth performances, the proximity between Southeast and East Asia is much stronger than between Southeast Asia and the rest of the developing world.

Bruno Jetin reminds us that the AEC is committed to poverty reduction and to the well-being of its people thanks to inclusive growth and equitable access to opportunity for human development. He assesses such a claim in chapter 13 through the lens of social cohesion. A society is socially cohesive when it combines three components: a low social exclusion and a high level of trust and mobility. After a review of the long-term evolution of between- and within-country inequality, he examines the recent evolution of absolute and relative poverty in ASEAN countries. He then maps social cohesion in ASEAN according to its three components, namely, exclusion, social capital, and social mobility. It appears that convergence between ASEAN countries is recent and limited and that within-country inequality is high and sometimes growing. Relative poverty has substituted absolute poverty

in some countries putting social cohesion at risk. His chapter concludes by delineating some country member profiles of social cohesion.

Nathalie Fau in turn examines the role of infrastructural investment in reducing inequalities. According to ASEAN leaders, improved connectivity, especially through transport links, is an essential condition for economic growth in Southeast Asia. Furthermore, the upgrading and the construction of infrastructure and the harmonization of the regulatory framework would significantly narrow the development gap within ASEAN. It is precisely this hypothesis that chapter 14 is questioning, by focusing especially on the Master Plan on ASEAN Connectivity (MPAC) development projects for land (road and rail) and sea transport infrastructures. After presenting the main directions taken by the MPAC and the tools used to decrease territorial inequalities regarding provision of infrastructures, this chapter attempts to assess on different scales (regional, subregional, and local) the regions that have gained or lost since the MPAC was implemented and to explain the reasons for these disparities.

The last chapter of part III, by Christine Cabasset, focuses on the relationship between local governance and inequality. Indonesia has considerably improved its economic and socioeconomic performance at the national level, especially since the 1997 Asian financial crisis. However, some internal weaknesses have proved to be obstacles for the country to achieve real leadership in Southeast Asia and beyond. Spatial and social inequality not only subsists, but it has increased since 2003, particularly within provinces, within districts, and within urban as rural areas. This rise exposes the archipelago to social risk at all administrative levels, including in the “wealthiest” provinces. Chapter 15 highlights some of the main factors explaining the difficulties that national and local governance face in tackling poverty and inequality issues.

The concluding chapter proposes that the 2015 deadline for the establishment of AEC should only be seen as one more milestone in the long journey toward an objective of deep economic integration not commonly found among developing countries in Asia. It definitely should not be seen as a final destination, because numerous challenges remain. Enforcement of the AEC accord will require changes to domestic laws or even national constitutions. These would be considerable challenges for ASEAN member states beyond 2015. One of them is to maintain the purpose and centrality of ASEAN in Asia. During decades ASEAN has been the sole purely Asian regional institution where not only Southeast Asia countries but also the other big Asian players of the region (Japan, China, India, and South Korea) could meet, agree, and take initiatives in the fields of trade and finance. These big powers could not often engage directly due to political discontent and rivalry, and ASEAN was the place where they could meet and negotiate. ASEAN, a shallow institution, was for want of anything better pivotal for Asia-wide integration. With the new round of negotiation of the RCEP and the one for the Free Trade Area of the Asia-Pacific (FTAAP) initiated in November 2014 at the APEC summit in Beijing, the big powers

start negotiating directly calling into question the centrality of ASEAN and its future *raison d'être*.

## Notes

1. Google reports about 1,330,000 results for the term “ASEAN Economic Community” as on April 14, 2015.
2. For instance, recent political changes in Thailand resulted in a much smoother and faster process of transforming AEC policies and measures into domestic laws, as a first but necessary step of implementing AEC.

Part I

ASEAN Economic Integration  
in the Context of East Asian  
Regionalism

# ASEAN's Imitation Economic Community: The Primacy of Domestic Political Economy

David Martin Jones

## Introduction

In 1997, the thirtieth anniversary of the Association of South East Asian Nations (ASEAN), the organization enunciated a vision of where it would be in 2020. An integral part of that *ASEAN Vision 2020* required the creation of an ASEAN Economic Community (AEC), a single market and production base affording a free flow of goods, services, investments, capital, and skilled labor. Six years later, in Bali, the Declaration of ASEAN Concord 11 reaffirmed the commitment to the AEC and recognized it as one of the three pillars of an evolving economic, security, and cultural community. In 2007, the Cebu Declaration brought the formation of the AEC forward to January 2015 and introduced the AEC Blueprint (2008), which developed into a roadmap in 2009, to drive the implementation of the AEC. To track its progress, ASEAN also introduced regular “scorecards” from 2011 to assess implementation rates for the following parameters: establishing a single market; achieving a competitive market; promoting equitable economic development; and facilitating integration into the global economy. Moreover, the first two scorecards ASEAN published indicated that it “appeared to be on track” to achieve its 2015 goal (ASEAN, 2012a; Ji, 2014, p 2). However, by December 2014 it was apparent that while ASEAN had achieved some success in reducing intra-ASEAN tariff barriers, nontariff barriers had actually grown, and the economic disparity between the richest and poorest ASEAN states had also increased (Balboa and Wignaraja, 2014; Das, 2015). Given that the AEC is unlikely to be either a single market or production base by December 2015, what does this tell us about the character of ASEAN as an economic and political association?

In August 2015, the Association of Southeast Asian Nations celebrated its forty-eighth anniversary as a regional security arrangement. Over this period it has enjoyed a somewhat checkered history. In its first decade, its founding members rarely met. In its second, it played a diplomatic role in the resolution of the Indochinese conflict. In its third, it widened its embrace to include the grouping's former protagonist, Viet Nam, as well as Laos, Cambodia, and Burma-Myanmar, and extended its diplomatic style into Northeast Asia via an ASEAN Regional Forum (ARF). Its fourth decade witnessed ASEAN extending its institutional reach. After 1997, ASEAN held regular summits with China, Japan, and South Korea in an arrangement termed "ASEAN Plus Three" (APT). This mechanism incubated an embryonic East Asian Community that met annually from December 2005 onward.

This incremental evolution earned plaudits both from the region's political leaders, and from a wider scholarly community that had, through second track fora, become increasingly involved in ASEAN's self-definition. More particularly, from a political economy perspective, the 1997 Asian Financial Crisis (AFC) spurred the arrangement into both deepening its economic integration into an AEC and projecting its socialization processes into Northeast Asia.

Yet, it was not entirely clear whether this greater ASEAN-inspired community would constitute an "open region" that embraced a wide variety of states in its vicinity, including Australia, New Zealand, and India as well as, potentially, Canada, Russia, and the United States, or a more exclusively East Asian arrangement—a caucus without Caucasians. This ambiguity concerning the geographical extent of the proposed community reflected a deeper, less-advertised ambivalence about the nature of ASEAN itself. *The Report of the Eminent Person's Group on the ASEAN Charter*, published in December 2006, emphasized the fact that ASEAN's traditional principles and objectives had to adapt to "the new realities confronting ASEAN," if it wished to remain in the "driving seat" of greater regional relations.

Indeed, given the generally positive evaluations of an expanded ASEAN "to socialize the [East Asian] region with the same norms and values that have proved successful in Southeast Asia" (ASEAN Secretariat, 2006), it comes as something of a disappointment to find that both official statements and the scholarship it generated after 1997 have exaggerated what the association actually has achieved both in the area of intra-ASEAN trade, development, and connectivity and in terms of ASEAN's role in driving wider East Asian economic integration, the precursor to any future political integration. Having established ASEAN's guiding propositions and the cooperative practices they seek to instantiate, we shall, therefore, test their efficacy in facilitating both ASEAN and wider regional economic integration. The Asian Financial Crisis (1997) and ASEAN's economic response to it illustrate the strengths and weaknesses of its process. ASEAN's conduct in this case, we shall argue, reveals that the absence of a supranational authority to implement agreed rules together with its conflict avoidance

formula rather than facilitating a single economic market, in fact, lends itself to more powerful actors in the Asia Pacific shaping ASEAN's economic destiny.

## Norms, Processes, and the ASEAN Way

The defining ASEAN norm, identified in the Treaty of Amity and Cooperation (TAC), requires noninterference in the affairs of member states. All who conform to the ASEAN process, therefore, accept the nonnegotiable inviolability of national sovereignty.<sup>1</sup> Second, ASEAN eschews the use of force. The organization resolves disputes peacefully. In 1971, ASEAN declared itself a Zone of Peace, Freedom and Neutrality (ZOPFAN) and subsequently a Nuclear Weapons Free Zone (NWFZ). These norms are by no means unique. The United Nations Charter (1949) and the Non-Aligned Movement at its Bandung meeting in 1955 had expounded them prior to ASEAN's formation. Nonintervention represented the core principle of the Chinese Communist Party's five principles of peaceful coexistence. The language of both the ASEAN Declaration and the TAC, thus, reflects the internationalist and postcolonial values of the postwar era.

What, in fact, distinguishes ASEAN's norms is not their content, but their implementation in a framework of regional interaction. The ASEAN way, as Acharya (1997, p. 329) tells it, is "about the *process* through which such interactions are carried out" (emphasis in the original). This process requires the cultivation of certain habits, notably discreetness, informality, expediency, consensus building, and nonconfrontational bargaining. Consequently, the ASEAN way contrasts vividly with the "adversarial posturing" and "legalistic decision making procedures" found in multilateral negotiations conducted according to "western" diplomatic criteria. A preoccupation with expediency and discreetness, itself a reflection of member state weakness and insecurity, requires the practice of nonconfrontation and sensitivity to the "comfort level" experienced by participants. The effort to raise the comfort level entails the avoidance of open disagreement between participants (*ibid.*).

The comfort process, therefore, means either evading the discussion of bilateral disputes between member states, or addressing them obliquely in nonbinding "workshops," second track fora, and dialogue sessions. For Michael Leifer (1998, p. 4), the cultivation of nonconfrontation defined the ASEAN process, making it a "conflict avoidance and management" tool rather than a conflict resolution mechanism. As Rudolfo Severino, a former ASEAN secretary-general, explained: "When ASEAN cannot solve a problem what does it do? First, it may put the problem under the carpet and not highlight it. What is a problem today may cease to be so in the future" (cited in Acharya, 1998, p. 62). Rather than formal or legally binding rules, the ASEAN process promotes instead the practice of consultation and consensus. For ASEAN scholar diplomat Kishore Mahbubani consensus



building represents the key to ASEAN's "unique corporate culture" (*ibid.*, p. 55; Mahbubani, 2008, p. 12).

Given the nonbinding character of ASEAN agreements, those who dissent are rarely discomfited. The ASEAN process "is about agreeing to disagree rather than allowing disagreement to cloud and undermine the spirit of regionalism" (Acharya, 1998, p. 62). This apparent informality further entails that close interpersonal ties between leaders and senior governmental figures trump official rules and bureaucratic mechanisms. As Acharya explains: "whilst ASEAN is not lacking regularized ministerial and bureaucratic consultations, it has not embraced the idea of a centralized permanent bureaucracy with decision making authority" (p. 63). Indeed, ASEAN possesses no clear format for decision-making and meetings "often lack a formal agenda" (p. 59). The cumulative effect of these processes is ASEAN's weak or "soft" institutionalism.

Nevertheless, a structure of a distinctively intergovernmental kind has evolved incrementally over time. Since the fourth ASEAN summit held in Singapore in 1992, and given additional momentum by the APT, ASEAN has developed a complicated framework of meetings and formal and informal summits both to discuss and agree on policy. As one analyst notes, "Since 1992 the ASEAN Heads of Government meetings have been regularized," meeting initially biennially with "informal" summits occurring in between and since 2008 annually as part of wider discussions with a variety of dialogue partners culminating in the East Asian summit (Chin, 2003, p. 36). Below this level, the annual ASEAN ministers' meeting of foreign ministers constitutes the intergovernmental "receptacle" of the "political sovereignties of the regional arrangement" (*ibid.*). The annual meetings of ASEAN economic and finance ministers evolved to complement this format, which dates from ASEAN's founding. Since 1977, the ASEAN economic ministers (AEM) and, in the aftermath of the AFC, the ASEAN finance ministers have also met annually. The ASEAN Standing Committee coordinates the work of the association between these annual meetings, while the ASEAN chair and vice chair rotate on an annual basis between member states. The ASEAN Secretariat, headed by the secretary-general of ASEAN, manages this increasingly complex arrangement of formal and informal summits, dialogues, meetings, and standing committee (ASEAN Secretariat, 2013a). From 2013 the secretary-general holds office for a five-year nonrenewable term and is chosen from candidates proposed by member states. In order to improve the organization's efficiency in the aftermath of the financial crisis and implement the postcrisis Hanoi Plan of Action (1998), Vientiane Action Program (2003), and the roadmap for the AEC (2009), the ASEAN secretary-general received "an enlarged mandate to initiate, advise, coordinate and implement ASEAN activities" (ASEAN Secretariat, 2009).

This enlarged mandate responded to the fact that ASEAN policymaking accelerated dramatically after the AFC. After 1997, ASEAN summits

agreed on a plethora of protocols and plans designed both to increase Southeast Asian integration and to establish a regional leadership role for the organization. By 2012 the Table of ASEAN Treaties, Agreements and Ratification ran to 98 pages and 359 treaties or agreements.<sup>2</sup> They embrace a prospectus ranging from relatively technical sectoral protocols to declarations that refine and develop the character of the organization like the Declaration of ASEAN Concord 11 (Bali Concord 11) that established a framework to achieve an integrated ASEAN Economic Community, along with the two other pillars of ASEAN community in the security and cultural realms, and the Kuala Lumpur Declaration on the Establishment of the ASEAN Charter (2007) that endowed the organization with a legal personality. They also cover Framework Agreements, like those establishing an ASEAN Investment Area (AIA) (1998) and an ASEAN Development Fund (2005), that sought to give substance to the organization's *Vision 2020* (1997), revealed at the informal Kuala Lumpur Summit 1997 (ASEAN Secretariat, 1997). Both the Hanoi Plan of Action and Vientiane Action Program sought to strengthen macroeconomic and financial cooperation, enhance greater economic integration, and promote the development of science and technology. Subsequently the decision to bring forward the completion of the AEC to 2015 and the various scorecards and roadmaps after 2009 to measure its implantation together with the Master Plan for ASEAN Connectivity (MPAC 2010) to connect ASEAN's economies "to each other and the world" reinforced the vision (ADB, 2009).

After 1997, the ASEAN process also established a structure governing ASEAN's external trade via Framework Agreements on economic partnership with Japan and India and a Strategic Partnership for Peace and Prosperity with China (2003). By 2012, ASEAN had concluded trade agreements, covering goods and services, with Japan, China, Australia, and New Zealand (2008), the Republic of Korea (2009), and a comprehensive India-ASEAN FTA in 2014.

In this context of constructing a normative order via the process of dialogue and trust building, ASEAN scholars consider particularly influential the role that Track Two meetings and workshops—involving both diplomats and scholars—play an important role in clarifying the evolving character of the organization and extending its processes into the ARF and the APT. Acharya (1998, p. 75) considers, "An important feature of regional security debates in ASEAN is the role of think tanks specializing in international relations and security studies in sponsoring what has (*sic*) been called second track dialogues and discussions on regional security issues."

Thus, ASEAN's *Vision 2020* foresees Southeast Asia "bound by a common regional identity" (ASEAN Secretariat 1997). Meanwhile, the Kuala Lumpur Declaration on the Establishment of the ASEAN Charter, December 2005, desired "to realize an ASEAN Community, as envisaged in the Declaration of ASEAN Concord 11 . . . and the ASEAN Vision 2020 which envision ASEAN as 'a concert of Southeast Asian nations; outward

looking; living together in peace, stability and prosperity, bonded together in partnership in . . . a community of caring societies” (ASEAN Secretariat, 2005).

However, discursive constructivism notwithstanding, words are not deeds. Central to the case for ASEAN transforming both its member states and the wider region is the contention that the process of meeting and dialogue in an atmosphere of unstructured informality over time promotes trust, creates shared norms, and induces a shared identity. This should be observable both in the changing practice of the organization and in its manner of addressing a range of regional economic, political, and security problems. In the economic arena in particular, the publication of scorecards after 2011 assessing the implementation of an ASEAN single market, common production base, and the extent of the free flow in goods, services, investments, capital, and skilled labor afforded a tool for measuring compliance and effecting the connectivity central to an integrated market (Balboa and Wignaraja, 2014; Larkin, 2015(b), p. 5).

One difficulty with this transformation appears almost immediately, when we examine the actual administrative practice of the organization, which despite the enhanced mandate of the ASEAN secretariat, under the 2007 ASEAN charter, lacks any supranational capacity (Ji, 2014, p. 3). In other words, despite the proliferation of meetings, declarations, protocols, blueprints, scorecards, and master plans the structure of ASEAN remains determinedly intergovernmental.

This pattern of state-driven interaction is evident in the areas of economic cooperation within ASEAN. In fact, it is the staff of each member state’s ASEAN National Secretariat (ANS), housed in their respective foreign ministries, that proposes and, once accepted at a Heads of Government meeting, disposes policy. As Zakaria Haji Ahmad (1986, pp. 192–212; Ji, 2014) explains, it is the ANS that “coordinates” each country’s position at ASEAN meetings. Eighty percent of ASEAN business conducted by the ANS machinery concerns fairly mundane technical and economic matters. The press and ASEAN scholarship, by contrast, glamorize ASEAN’s political role. The ANS forms the actual bureaucracy of ASEAN. Moreover, at this level, what distinguishes the ASEAN process is not informality, but a high degree of formality and hierarchy. In fact, the actual implementation of ASEAN policy across member states is “structured in terms of collaboration not cooperation” (Ahmad, 1986, p. 212).

The dissonance between an official declaratory intent of deepening ASEAN integration and extending its nonbinding processes to the wider region, and the actual intra-ASEAN policy practice that remains intergovernmental and bureaucratic has important implications not only for how ASEAN functions, but also the extent to which its aspiration to build a common regional identity based on shared norms can be realized. In order to explore this dissonance, let us examine ASEAN’s rhetorical and practical response to its first economic crisis.

## Explaining the 1997 Financial Crisis and Its Strategic Implications

Prior to the financial crisis of 1997, those enamored of the region at the expense of the state envisaged polymorphous economic and security arrangements, like ASEAN, together with the economic and security arrangements it spawned, like the ARF, ASEAN Free Trade Area (AFTA), and ASEAN Plus Three, as the necessary mechanisms for building what many, at that time, considered to be a new, multilateral, regional order. Yet ASEAN, as a regional economic grouping, was far from integrated. The structure of the more dynamic ASEAN economies was export oriented. They competed among themselves both for foreign direct investment (FDI) and as low-cost manufacturing bases for Northeast Asian, European, or North American multinational corporations. Only in 1989 did some ASEAN states establish cross-border economic growth zones.<sup>3</sup> These growth triangles relied upon FDI from Northeast Asia, and with the onset of the financial crisis, fell into desuetude.

Unlike increasingly economically integrated regions such as the European Union (EU) where intra-European trade, among the core economies, accounted for over 60 percent of total EU trade by the mid-1990s, intra-ASEAN trade represented a mere 20 percent of total ASEAN trade at the time of AFTA's formation in 1992 (Herschede, 1991, pp. 181–2). Indeed, continuing dependence on external markets made the notion of a “customs union unacceptable to ASEAN members” (Bowles, 1997, p. 222). As Andrew MacIntyre (1997, p. 239) observed in 1997, despite the rhetoric of ASEAN economic cooperation, “the bound tariff levels of the ASEAN countries are among the very highest in the world.”

The financial meltdown of 1997 subsequently devastated the individual economies of a number of ASEAN states. Moving from the boundless optimism of the Asian miracle to financial crisis within a year constituted a shock to the Asian model of economic development, undermining previous certainties, and leaving both regional politicians and academics floundering for explanations and solutions. In this context, the ASEAN orthodoxy holds that even if attempts at economic integration had been largely rhetorical prior to the crisis, its consequence encouraged both a deepening of ASEAN integration and a widening of its processes to embrace Northeast Asia (Higgott, 1998, p. 6). The 1997 financial crisis thus offers an excellent case for testing claims about the role of ASEAN and its capacity to build an integrated economic community, one of the pillars of the enhanced Declaration of ASEAN Concord (2003).

The crisis, which began in Thailand in June 1997, spawned two contested understandings. The prevailing economic orthodoxy maintained that the structural features of the Asian economic model comprised the efficient cause of meltdown. By contrast, the market unfriendly school, led by then Malaysian premier Mahathir Mohammad, and abetted by a curious group

of cheerleaders that ranged from Paul Krugman to Jeffrey Sachs, Joseph Stiglitz, and President Suharto, maintained that the crisis was an effect of deregulated global capitalism.

Ultimately the crisis stimulated the desire to do something collectively to counter regional vulnerability. Here, Mahathir's diagnosis achieved increasing traction. As the meltdown spread from Southeast Asia to Northeast Asia, most notably South Korea, it induced a sense of regional humiliation. Shame induced resentment as Western institutions like the IMF appeared to punish East Asia (Lewis, 1999, p. 1).

Consequently, designing Asian solutions for Asian problems would engender both a greater sense of East Asian independence and strengthen regional economies against further externally induced shocks. The years following the crisis therefore witnessed an upsurge in the rhetoric of pan-Asian economic renewal (Koh, 2001, p. 1). The Sixth ASEAN summit in Hanoi, in December 1998, committed its members to "a higher plane of regional cooperation in order to strengthen ASEAN's effectiveness in dealing with the challenges of growing interdependence within ASEAN and of its integration into the global economy" (ASEAN Secretariat Point 5, 1998).

The years following the crisis therefore witnessed an upsurge in the rhetoric of pan-Asian economic renewal. Thus, Singapore ambassador-at-large Tommy Koh (2001, p. 1) argued that the economic crisis had "stimulated a new sense of East Asian regionalism and brought the countries closer together." A feeling of shared destiny and a commitment to renewal galvanized ASEAN. In the months following the outbreak of the economic crisis ASEAN sought to institute a dialogue partnership with the Northeast Asian states, China, South Korea, and Japan, through an East Asian Summit (EAS), the first of which met in Kuala Lumpur in December 1997. The Sixth ASEAN summit in Hanoi, in December 1998, committed its members to "a higher plane of regional cooperation in order to strengthen ASEAN's effectiveness in dealing with the challenges of growing interdependence within ASEAN and of its integration into the global economy" (ASEAN Secretariat, 1998).

The same summit further agreed to formalize these meetings into the arrangement known as ASEAN Plus Three, subsequently extended further into a nebulous East Asian Community, including Australia, New Zealand, and India, in a subsidiary "Asian" category after 2007, and by 2013 including both Russia and the United States. The push for greater East Asian institutionalization also produced a number of "visions" to reinforce economic cooperation. South Korean president Kim Dae-jung proposed an "East Asia Vision Group" that would report on proposals to deepen long-term cooperation among members of the APT grouping (Korea Institute for Economic Policy, 2001, p. 1). Not to be outdone, the Japanese suggested creating an Asian Monetary Fund specifically to address regional needs in a more effective and sensitive manner than the IMF (Johnstone, 1999, p. 125). Even more grandiose visions were floated including an Asian

free trade area and a monetary union (Soesastro, 2001, pp. 7–9), while Wanandi (1999) speculated that one day East Asia might develop into “a community” on similar lines to the European Union.

The crisis, therefore, inspired numerous official declarations of regional solidarity and identity. It was the AEC, the APT, and subsequently the East Asian Summit (EAS) mechanism that constituted its lasting institutional fruit, constituting the “embryo of an East Asian regional organization” (Soesastro, 2001, p. 1). Even more clearly, the arrangement was intended as a vehicle to regenerate ASEAN. Moves toward a more developed sense of East Asian regionalism thereby entailed a new and enhanced role for the association. As one of its proponents, ex-Indonesian foreign minister Ali Alatas averred, the APT, like the practice informing the ARF, “should, at least during the initial phase, continue to be ASEAN driven” (Alatas, 2001, p. 4). Following the ASEAN way the process informing future summits would be gradual, consensual, and nonbinding (Soesastro, 2001, p. 2).

Perhaps the most distinctive feature of the APT/EAS arrangement was that it represented an exclusive understanding of regional cooperation. Unlike more open regional forums like APEC (Asia-Pacific Economic Cooperation), the APT implicitly set the boundaries of “East Asia” in a way that excluded those countries on the Asian periphery that were, *ipso facto*, deemed “external” to the region. Those most obviously designated outsiders were the United States, Australia, and New Zealand. In this respect, the arrangement bore a resemblance to the East Asian Economic Caucus (EAEC), a putative group comprising the ASEAN states along with a number of Northeast Asian states like China, South Korea, Japan, and Taiwan proposed by Prime Minister Mahathir in the early 1990s as a counterweight to US influence in APEC (Wanandi, 2000; Alatas, 2001, p. 2).<sup>4</sup> If EAEC was the avatar of East Asian collaboration, its later manifestation in the APT framework represented for both regional officials and analysts alike the primary mechanism for constructing an integrated East Asian region linked into the EAC through what the Asia Development Bank 2009 saw as the need for a massive (US\$ 8 trillion) and coordinated investment in national and regional infrastructure (ADB, 2009).

Declarations of regional solidarity, however, are frequently made for demonstrative effect. Despite the widely advertised official enthusiasm, we should, nevertheless, exercise caution in assuming the emergence of a coherent regional economic project. In fact, trans-Pacific economic and trade practice since ASEAN launched its deepening and widening initiatives reveals a rather different economic story than the official version of strengthening regional economic resilience conveys. This requires a brief account of the ambiguous, but transformative, role that China plays in the wider region’s economic and financial and infrastructural integration. For it is clear that China’s rapid and continuing growth since 1997 is the economic fount of the latest source of pan-Asian enthusiasm. This renewed sense of a profound and irreversible economic shift to the Asia-Pacific

hemisphere has paradoxically been adumbrated by the deep financial crisis that engulfed both Europe and North America after 2008.

By 2003, the OECD reported that of \$62 billion in global foreign direct investment, China accounted for \$52 billion. China's heavy industries, power, steel, and petrochemicals, consume resources voraciously (Callick, 2004, p. 10).<sup>5</sup> Its demand for automobiles, industrial parks, and apartments and its emergence as the globe's low-cost manufacturing base for everything from baseball caps and footwear to computers and televisions revived growth across Northeast Asia after 2002. This growth, however, has not been an unmixed blessing, especially for the ASEAN economies. While China's growth has revived the high technology economies of Japan, South Korea, and Taiwan, it has simultaneously sucked investment out of the largely technologyless economies of Southeast Asia. The rise of China after 1998, and its attraction for foreign investors actually affected growth negatively in Southeast Asia, particularly during the recession from 1997 to 2003. Even here, low-tech manufacturing industries depend on foreign direct investment. In zero-sum terms, ASEAN's deteriorating investment attractiveness for low-cost manufacturing reflected the rapid growth of the Chinese "titan." After the AFC, ASEAN attracted only 16 percent of Asian FDI compared with China's 66 percent—the exact reverse of the position in 1990 (Grenville, 2004, p. 11). By 2004, Chinese competition had devastated the Indonesian and Filipino garment and footwear industries. Global brands like Nike and Gap increasingly source China and Viet Nam, where "wages are lower and productivity higher" (Das, 2013, p. 12; Napoli, 2014, p. 245), for new supplies. As the IMF (2003, p. 63) announced, somewhat euphemistically, "countries whose factor endowments are similar to China and which . . . compete with it in world markets will need to undertake sizable adjustments and display flexibility in product and labor markets."

Flexibility has not been a feature of the ASEAN way in trade policy. Significantly, the creation of an ASEAN Free Trade Area, which officially came into existence in 2002, has failed to transform the trade practice of ASEAN. Neither has it revived FDI flows or established an integrated ASEAN Economic Community. Although the six longest standing members—Thailand, Brunei, the Philippines, Singapore, Malaysia, and Indonesia—agreed in 1998 to reduce tariffs on one another's goods to a maximum 5 percent, nontariff barriers and excise duties remain in place. An examination of the protocols and framework agreements establishing common trade and customs practice across ASEAN reveals that very few are signed by all member states, which illustrates the effectiveness of nonbinding consensus, but has done little to integrate the regional economy.

The fact that AFTA and the ASEAN Investment Area (AIA) have had little impact on regional integration receives further confirmation from the ASEAN Secretariat's home page devoted to trade. It observes that "while trade with traditional industrial markets remained robust, [the] share of intra-ASEAN trade remained low with intra ASEAN exports constituting

22.75 per cent in 2001.” The share was 21.4 percent in 1993 when AFTA was formed (ASEAN Secretariat, 2002).

By 2010, intra-ASEAN trade had expanded slightly, but only to 24 percent of total trade (USTC, 2010, pp. 2–11). The problem is that despite all its memoranda and action plans, scorecards and blueprints, ASEAN remains “not a single country, but a group of countries with differing languages, legal systems and political risks. These differences erode the comparative advantage of the bloc,” especially vis-à-vis China (Napoli, 2014, p. 246).

To the extent that the ASEAN economies have grown since 2002, it has been a result both of its diminished role as a low-cost base for manufacturing goods assembled in Southeast Asia for export to the United States and Europe, and its emerging role as a supplier of commodities to China. Thus, while ASEAN’s exports to the EU were “the same as China’s in 2000... by 2012, China’s exports to the EU were more than triple ASEANs” (Napoli, 2014, p. 348). Moreover, although trade with China rose by 18 percent in 2002, this reflected China’s insatiable appetite for the region’s raw materials. ASEAN, unlike Northeast Asia, has had little success in exporting higher value added products to China.

Unlike intra-ASEAN trade, or ASEAN trade with Western markets, China-ASEAN trade grew impressively (Napoli, 2014, p. 350). Over the decade, since 2003, China-ASEAN trade has increased 24 percent year on year from \$78 billion to \$444 billion (Lo, 2014, p. 5). Since 2009, China has been ASEANs third largest trading partner (*ibid.*). Moreover, the return of FDI to Southeast Asia after 2003 reflects Chinese rather than Western or Japanese and South Korean investment in Southeast Asia. “Chinese FDI into ASEAN increased 11 times” between 2003 and 2008 (Napoli, 2014, p. 358). Ultimately, ASEAN exports to China have effectively offset losses in Western market share.

However, the period since 2002 has not witnessed any significant evolution toward an integrated ASEAN economic community. Certainly in areas like tourism, where the Cebu Plan for Cooperation promoting ASEAN as a collective tourism destination and the ASEAN Tourism Strategic Plan (2011–2015) saw visitors to ASEAN increase by 50 percent between 2003 and 2013, some progress has been made (ASEAN Secretariat, 2013(b)). However elsewhere, the slow adoption of economic and financial reforms means that ASEAN had not achieved a single market by 2015. Indeed, the ASEAN Secretariat observed in 2013 that ASEAN members had adopted less than 50 percent of single market policy provisions (Napoli, 2014, p. 358).

At the same time, the more market-oriented states in the region increasingly act autonomously of AFTA, evolving a pattern of overlapping, preferential trade deals both within and beyond the region (ASEAN-China Expert Group, 2001, p. 91). As John Ravenhill (2002, p. 182) argues, the Japan-Singapore Economic Partnership Agreement in January 2003 constituted a “dramatic...turn in East Asia to preferential trade” (ASEAN Secretariat, 2012(a); Das, 2015, pp. 8–9). The conclusion of bilateral trade



deals between Singapore and New Zealand, and Singapore and Australia, as well as between Thailand and Australia, and Australia and Malaysia (2012) followed. Such bilateralism has altered both the direction and pattern of trade in the region and illustrates that “ASEAN’s most developed economies, Thailand and Singapore, are concentrating on their own markets and depriving ASEAN of its best integrators in the process” (*The Economist*, July 31, 2004).

In other words, despite the widely advertised aspiration among regional elites for an “ASEAN Incorporated” model, the regional aspiration sits at variance with state-led development that the member states of ASEAN continue to practice. As Joe Studwell (2007, p. xii) demonstrated, the ASEAN economy “is a product” at the state level of “a relationship between economic and political power” where political elites “grant members of an economic elite monopoly concerns, mainly in domestic service industries that enable the latter to control vast amounts of wealth.” A relatively small group of tycoons form an economic aristocracy that works “hand in glove” with local political elites at the state level. State and market are so intertwined that one commentator describes the relationship as “nomenklatura capitalism” (Jayasuriya, 2003, p. 34).

At the same time that the political and economic structure at the state level remains an essentially crony one, meltdown and recession dramatically altered the economic landscape of Southeast Asia after 2003. Prior to the crisis, it was plausible to speak of shared developmental commonalities such as export-oriented growth, dependent on Japanese, Korean, Taiwanese, or US and European foreign direct investment, technocratic planning, single-party rule, and a governed labor and domestic market. Since 1997, the strategies adopted to deal with the meltdown and recovery, particularly in Southeast Asia, have created distinctive differences among the ASEAN political economies that presage not greater integration but growing economic disparity. With a number of its core components undermined by the crisis of 1997, and by the economic crisis in Europe and North America after 2008, the direction in which the wider Asian economic model moves can no longer be as smoothly interdependent or as export oriented as it was before the financial crisis era. Southeast Asia, in particular, is less dependent on traditional sources of Northeast Asian investment and increasingly reliant upon Western and increasingly Chinese FDI. Since the ASEAN China FTA came into effect in 2010, the ASEAN states have therefore become collectively more dependent on exports to and foreign investment from a rising China (Napoli, 2014, pp. 358–9).

Any attempt to broaden East Asian economic and financial integration has to take into account that, since 2001, economic growth in Asia remains dependent on US and European consumption together with Chinese growth. East Asia’s high savings rates and budget surpluses, after 1998, together with central bank interventions in the foreign exchange markets to keep currencies cheap, supported both the US current account deficit and the greenback.

For the still primarily export-led growth model, East Asia requires accommodating markets and willing inward investors. The United States is the most accommodating final market and, before the US banking crisis of 2008–2012, the most willing inward investor. In a Faustian bargain, the Asian economies financed the US twin deficits, as well as the European currency as a form of collateral against the direct investments they receive from multinational conglomerate (Dooley et al., 2006, p. 3).

At the same time, ASEANs recovery from the Asian Financial Crisis and continued growth during the Northern Financial Crisis relied upon its growing bilateral trade with China. Significantly, however, ASEAN runs a trade deficit with China, which has created difficulty for small and medium-sized enterprises (Lo, 2014, p. 5).

In other words, despite the post-financial crisis enthusiasm for deeper regional integration, there is little to sustain a “stable, prosperous and highly competitive ASEAN region in which there is a free flow of goods, services [and] investment” (ASEAN Secretariat, 2003). As Razeen Sally observed (2014, p. 8) the “AEC is well behind its targets to produce and abolish non-tariff and regulatory barriers in goods services and investment” (Balboa and Wignaraja, 2014). Instead, the rise of China and to a lesser extent India together with Japan’s dominance in high technology and its aversion to technology transfer leaves ASEAN increasingly dependent on Asian investment and export markets.

To address this, since 2012, ASEAN and China have promoted an extension of their bilateral FTA to include Australia, India, Japan, and South Korea. This would constitute the basis of what China envisages as “the maritime silk road” through the formation of an ostensibly ASEAN-led Regional Comprehensive Economic Partnership (RCEP). Reflecting and informing this partnership is China’s proposed Asian Infrastructure Investment Bank (AIIB) with 50, primarily Asian, members, but including the United Kingdom and Germany, and with assets of more than \$1 billion to invest in regional infrastructure, which would be a significant boon to the integration of ASEAN as a single market facilitating a free flow of goods. Even so, ASEAN countries will require infrastructure investments amounting to US\$ 1.08 trillion between 2010 and 2020 (Larkin, 2015(a), p. 6). Nevertheless, the AIIB initiative complements China’s bold “Belt and Road” development initiative that seeks to build land transportation corridors that connect China to Europe, and South Asia as well as with Southeast Asia, while the Maritime Silk Road promotes port development to enhance trade with Southeast Asia (Larkin, 2015(b), p. 4).

However, as Sunita Basu Das (2015, p. 7) argues, although the “Belt and Road” model enhances China’s connectivity regionally and globally, and supports ASEAN’s MPAC, it also promotes China’s strategic interests in the region. Paradoxically, this could ultimately integrate the smaller ASEAN economies more fully into “China-centric regional production networks.” In other words, although infrastructure, as ASEAN’s MPAC (2010) intimates, is crucial for an integrated AEC market, the AIIB

potentially facilitates inter-ASEAN competition for infrastructure funding rather than enhancing cooperation. In fact, China's increasingly proactive economic diplomacy in Southeast Asia is part of a broader strategy that seeks to bind its neighbors in "a web of incentives that increase their reliance on China and raise the cost to them of adopting a confrontational policy towards China on either territorial or economic disputes" (Glaser and Lal, 2014, p. 2).

Significantly, the RCEP and the Belt and Road model sits at variance with the US proposal for a Trans Pacific Partnership (TPP), a cornerstone of the Obama pivot to Asia after 2008. In 2015 this partnership involved twelve countries, but only four from ASEAN together with Japan, New Zealand, Australia, the United States, and Canada and three South American states.<sup>6</sup> While Australian Trade Minister Craig Emerson asserted, in 2012, that this meant two pathways to the same destination, this was somewhat disingenuous.<sup>7</sup> China promotes the former, the United States the latter. China belongs to the former and not the latter, and the United States, vice versa. The ASEAN-led RCEP actually brings under one umbrella the various bi- and trilateral preferential trade deals concluded between ASEAN and a number of regional states. However, the "free" in these trade agreements is notional. Key agricultural and manufacturing sectors remain protected. The TPP, by contrast, envisages a far more comprehensive and rule-binding trade agreement, which a number of ASEAN states, as well as China, resist. In fact, belonging to both groups looks at best like hedging, or worse like schizophrenia.

## ASEAN and the Sinification of the ASEAN Way Political Economy

After 1997, the response to the Asian economic crisis notably sharpened Sino-Japanese rivalry for Southeast Asian influence. This was for two reasons. First, the conduct of Japanese financial institutions and *sogosha* during the crisis damaged Japan's standing in Southeast Asia. Japanese financial institutions took flight as the currency turmoil struck and has returned only reluctantly. These circumstances presented China with an opportunity to "strengthen its influence over ASEAN members in order to challenge Japan's leadership in the region" (NIDS, 2015, p. 209). The refusal to devalue the renminbi, which might have exacerbated Southeast Asia's financial crisis, indicated China's responsibility and regional leadership. It reassured the ASEAN states that China would not exploit the crisis for self-aggrandizing purposes. Over the same period (1998–2008), China acted with analogous self-restraint over the South China Sea dispute, and promoted a good neighborliness policy to reinforce its enhanced regional credentials.

Closer ties between ASEAN and China necessarily affected Japan. China's rise and its increasing assertiveness over a number of unresolved

historical issues had already impacted negatively on Japan's regional image. Accordingly, the fact that China had increased its leverage over Southeast Asia in the aftermath of the crisis elicited a countervailing response. This assumed the form of the New Miyazawa Initiative of 1998 and subsequently the Obuchi-ASEAN plan to provide large-scale financial assistance to facilitate regional recovery (Ministry of Foreign Affairs, 1998).

Mounting Sino-Japanese competition for regional influence explains their interest in the APT/EAS process. Both the APT and the East Asian Community summit of 2005 constituted a stage upon which the major powers of Northeast Asia might play for the economic and political leadership of Southeast Asia. Indeed, Japan had few illusions that, without the US, Indian, and Australian participation in the regional process, China had "an ideal framework within which it can exercise its influence, making it easier for China to play a leading role in forming a free-trade area in East Asia" (NIDS, 2015, p. 210). Japan thus views China's participation in the APT, and its promotion of the RCEP as a regional free trade agreement, not as a prelude to deeper integration and community building, but as a strategy to diminish Japanese influence in Southeast Asia. In order to preempt this outcome Japan sought to reignite its influence "cooperating with ASEAN members" in terms of investment, technology, human resources, and security because only "through such measures, can Japan match the growing influence of China" (p. 215). In this context, former Japanese prime minister Koizumi's doctrine, promoting "an expanded East Asian community," was not an idealist attempt to forge regional identity but a tactic to balance China's regional ascendancy by involving Australia, New Zealand, India, and ultimately, after the Obama pivot, the United States in the process. Indeed, "using ASEAN as their stage, it appears that Japan and China are jockeying for a leadership role in East Asia" (p. 215).

Additionally, rivalry for influence in ASEAN Plus Three is not a game that only China and Japan can play. ASEAN aficionados can observe it elsewhere in inter-ASEAN rivalries and posturing, evidenced, for example, in Malaysia's proposal in mid-2002 to fund the establishment of an ASEAN Plus Three secretariat in Kuala Lumpur, which incurred the suspicion of other member states who "neutralized" the idea (Adullah and Mahavera, 2002, p. 15). However, it is in the regional diplomacy of Asia's two most powerful states that we can see the operation of foreign policy imperatives coming to the fore. So, if we reverse the dialectic of the APT and thereby unpack the rhetoric of regional community building, it becomes clear that the APT and the AES have little to do with constructing a shared East Asian identity and a lot to do with the realist pursuit of state economic and political interests via the East Asian summit mechanism, while putting ASEAN's rhetorical ambition to complete the EAC in 2015 on semipermanent hold, as the states of Southeast Asia compete for Chinese and Japanese investment.

Examining the discourse of contemporary East Asian regionalism consequently reveals a self-justifying and self-reinforcing framework. This is

evident in the way the prevailing constructivist idiom replaces the requirement to question ruling assumptions with a policy-procedural description of the “institutionalization of the ASEAN + 3 process” (Asia-Europe Foundation, 2000, 2). Thus, despite empirical evidence to the contrary, commentators assert that “ASEAN is not as weak as it may seem” because it makes “an important contribution the normative environment of the region by reinforcing the fundamental principles of international society” (Narine, 1998, p. 45). The problem here is that the only “institutional principle” to which ASEAN is formally committed is that of noninterference. Therefore, the only fundamental principle of international society it has reinforced is a realist commitment to the inviolable sovereignty of the nation-state.

It is, moreover, this strange conjunction between the normativist character of both academic commentary and recent ASEAN Declarations of unity and harmony, with the essentially realist practice of interstate diplomacy, that ultimately accounts for the largely aspirational discourse of East Asian community building. The felt need to transcend entrenched interests is apparent in both the AEC, APT, and EAS processes. Here, statements of regional solidarity are often made for declaratory effect. They also disguise very different understandings of “East Asia.” Thus while Prime Minister Junichiro Koizumi’s East Asian community envisaged the framework broadening to include countries like Australia and New Zealand in a wider free trade area, Rafidah Aziz, the Malaysian trade minister, bluntly observed, “They are [not part] of the region” (cited in Nabers, 2003, p. 136).

At the first East Asian Community summit held in Kuala Lumpur in December 2005, these differences became manifest. In a predictable ASEAN compromise, the organization extended an invitation to Australia, New Zealand, and India to attend the meeting, but resolved that the APT would “lead” the community, thus consigning Australia, New Zealand, and India to a secondary role. This ambiguous relationship between the ASEAN Plus Three and the ASEAN Plus Three Plus Three remains unresolved almost a decade after the first EAC meeting even though East Asian summitry now also includes the United States and Russia. What we observe over time, therefore, is the continual recasting of the regionalist project in ever more implausible directions, but—Japan’s failed attempt to forcibly incorporate an East Asian sphere during World War II notwithstanding—anything solid quickly melts into air. Rather than asking why this might be the case, regional enthusiasts fix their attention instead on the latest incarnation of pan-Asian or Southeast Asian solidarity.

## Conclusion: Norms Are What Strong States Make of Them

Both regional scholars and diplomats maintain that ASEAN represents an evolving economic and security community. They further contend the

norms that the distinctive ASEAN process implemented over time transformed Southeast Asia and is in the process of building a shared East Asian regional identity. ASEAN's deeper integration into a cultural, economic, political, and security community and its extension into the ASEAN-driven APT process after 1997 offer an interesting test case of the dominant assumptions in both ASEAN scholarship and liberal and idealist accounts of international relations theory. A process of discourse would transform, it was argued, state interests into shared norms creating the ideational basis of a shared identity. Nation speaking unto nation would see nations evolving progressively into postnational constellations like the frequently applauded, but increasingly discredited European Union model. This idealist and historicist teleology that came to influence, if not dominate, the discipline of international relations after the Cold War found its quotidian exemplification in the evolution of ASEAN and its purported mutation into an East Asian Community. This collocation of weak states seemed in the course of its incremental evolution over 48 years to epitomize the transfiguration that norms could achieve, first in Southeast Asia's identity, then in the wider region.

However, actual intra- and extra-ASEAN economic practices reveal that its crucial norm of noninterference and its practice of nonbinding consensus inhibit deeper integration either within ASEAN or the wider East Asian region. Despite its slow progress toward a single market, an AEC will not emerge in 2015. Instead the ASEAN economies, as Sunita Basu Das (2014, p. 9) avers, continue to "compete rather than cooperate" to attract funding. Ultimately, the norms and economic practices that ASEAN promotes can only sustain a pattern of limited intergovernmental and bureaucratically rigidified interaction. Norms, even ASEAN ones, cannot cultivate a regional sense of "we-ness" if states continue to act within the paradigm of the nation-state.

Thus, while the official view of ASEAN emphasizes its political role and the informal, unstructured, cooperative, and consensus-oriented character of the organization, at the quotidian level of policy formulation and implementation, the organization remains an essentially intergovernmental one, dealing primarily with trade and economic issues and dominated by member-state bureaucracies, rather than one that possesses the institutional infrastructure to develop into a "mature" security community or establish a common identity or an integrated single market and production base. The intergovernmental practice that the community norms paradoxically reinforce undermines the official rhetoric of community and regional identity building.

Following the essentially intergovernmental practice of the ASEAN regime, states pursue bilateral or trilateral arrangements rather than building a supranational practice. This is evident in the political economy of the ASEAN states, where the attempt to incrementally achieve an ASEAN economic community masks an actual practice of growing bilateralism and the fragmentation rather than integration of the ASEAN political economy.

Meanwhile, extending conflict avoidance strategies to a wider East Asian Community has not altered the strategic reality of the economic fragility and economic diversity of the Southeast Asian states individually and collectively. In fact, what seems to be a Japanese and Chinese acculturation to ASEAN norms is far from it. Instead, these dominant powers manipulate ASEAN's shared norms and nonbinding processes for their own strategic advantage given that a more aggressive posture on either side would have countervailing effects—Japan would invoke memories of 1942, while China is still regarded with a certain amount of regional suspicion. Whatever strategic mutation ASEAN assumes in terms of its wider community building, it can only mask the fact that weaker states cannot shape the economic or strategic fate of stronger ones.

## Notes

1. The Treaty was amended in 1987 and again in 1998 to provide “that States outside Southeast Asia may accede to the Treaty with the consent of all the States in Southeast Asia.” *Protocol Amending the Treaty of Amity and Cooperation in Southeast Asia* Philippines, December 15, 1987.
2. The *Table of ASEAN Treaties Agreements and Ratifications* as of March 2012 reveals that of the 359 agreements, declarations, memorandums of understanding, protocols, and treaties governing inter-ASEAN conduct or made between the organization and states external to it, over 250 have been codified, ratified, or declared since 1997. <http://www.asean.org/archive/document/Table%20of%20Agreement%20and%20Ratification%20as%20of%20March%202012.pdf>.
3. Singapore, Johor in Malaysia, and Batam in Indonesia formed a regional growth triangle in 1989. This was followed in 1991 by a northern growth triangle embracing Northern Sumatra, Southern Thailand, and Northern Malaysia.
4. Proponents of ASEAN Plus Three denied that the framework had any correspondence to EAEC. Even so, in the sense that ASEAN Plus Three arose from the perceived mistreatment of Asian states by Western countries and their financial institutions, there is no doubt that EAEC bears a family resemblance to ASEAN Plus Three.
5. As of 2003, China consumed 31 percent of the world's coal, 30 percent of its iron ore, 40 percent of its cement, and 17 percent of its oil.
6. The four ASEAN states are Singapore, Brunei, Malaysia, and Viet Nam. The three South American states are Mexico, Peru, and Chile.
7. See [trademinister.gov.au/releases/2012/ce\\_mr\\_121120.html](http://trademinister.gov.au/releases/2012/ce_mr_121120.html).

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## By Chance or by Virtue? The Regional Economic Integration Process in Southeast Asia

*Jean-Raphaël Chaponnière and Marc Lautier*

### Introduction

The Southeast Asian regional integration process, which started in 1967 with Indonesia, Malaysia, Philippines, Singapore, and Thailand, was enlarged in 1984 to Brunei (ASEAN 6) and in the 1990s to Viet Nam, Laos, Myanmar, and Cambodia (ASEAN 10). In 2003, ASEAN proposed the establishment of the ASEAN Economic Community (AEC) and of a single market by 2015.

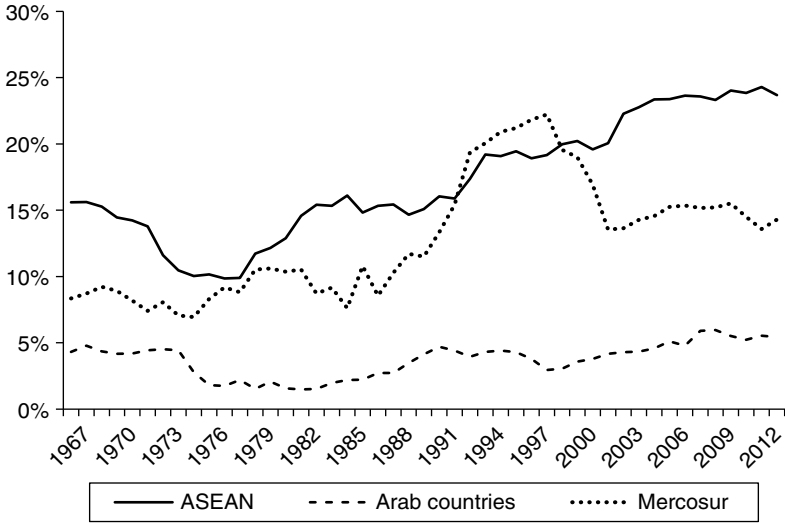
Having brought together medium-sized countries whose initial conditions—income levels, interventionist and protectionist policies, heterogeneity, and rivalries—were similar to those of other developing countries, this process is often presented as a model for South-South integration. Indeed Southeast Asian countries have been more successful in expanding intraregional trade than other regional schemes such as Mercosur in South America or the Agadir integration scheme between South-Mediterranean countries (figure 2.1).

This chapter analyzes the engine of ASEAN progress at the intergovernmental and market levels. An overview of the historical and economic background is followed by an analysis of trade integration measures and of the institutional dimension of the process. Then, a discussion of the regional integration trends is followed by the conclusion to the chapter.

### Historical Background

#### *The Heterogeneity of Southeast Asia*

Regional organizations are usually made of countries sharing a common language, religion, or history. This is not the case for the Association of



**Figure 2.1** Intraregional trade as percent of total trade.

Source: Authors' calculations with data from Chelem, Cepii.

South East Asian Nations (ASEAN), which, moreover, has limited geographical relevance. Southeast Asia, a geographical concept developed by the US Army during World War II, includes two subgroups:

*The archipelago subgroup:* Brunei, Malaysia, Indonesia, and Philippines belong to the Malay world. They were populated by immigrants from the Pacific and influenced by Indian culture. The Indian traders introduced Islam, which replaced Hinduism in the fifteenth century as the dominant religion in Brunei, Indonesia, Malaysia, and the Southern Philippines.

*The continental subgroup:* Myanmar, Thailand, Cambodia, Laos, and Viet Nam populated by migrants from China. India has influenced religion (Buddhism) as well as political organizations with the exception of Viet Nam ruled by China until the tenth century.

Starting in the sixteenth century, Southeast Asian countries were progressively absorbed into the rival Western empire. After the Portuguese, the Dutch, and the Spanish, the British stepped in Myanmar and Malaysia in the late eighteenth century followed a century later by the French in Indochina (Viet Nam, Cambodia, and Laos). Occupying a pivotal position between British and French colonies, Siam (Thailand) maintained its independence.

These transformations modified the geography of Southeast Asian trade. Historically, China and India had been Southeast Asia's main trading partners: their relative importance diminished over time and the reorientation of their trade toward Europe strengthened the role of Singapore. In the late nineteenth century, as Japan renewed its links with Southeast Asia, intra-Asian trade (India, Southeast Asia, and East Asia) intensified, and during the interwar period, according to Sugihara (2005), it grew faster than the

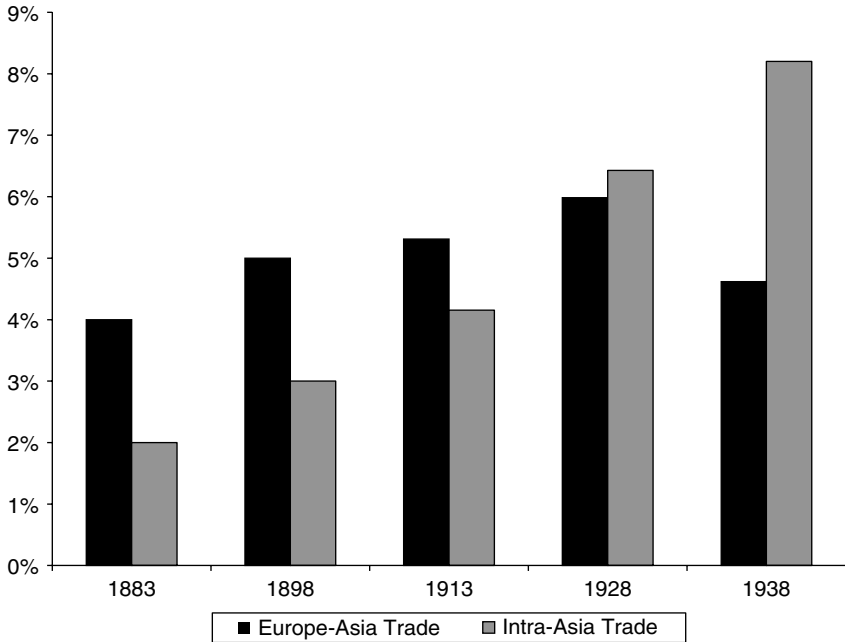


Figure 2.2 Europe-Asia and Intra-Asia trade before World War II as a percent of world trade.

Source: Adapted from Sugihara (2005).

West Asian trade and its share of world trade reached 8 percent by 1938 (figure 2.2). By 1967, it had decreased to 3 percent, but it increased to 8 percent in 1990 and to 13 percent in 2012.

### *Economic Development in Southeast Asia*

If it were a single country, ASEAN would rank as the world's seventh largest economy, with a population of 607 million and a gross domestic product of \$2,650 billion in 2015. However, differences in population sizes and income levels are very large (from 1 to 10) within ASEAN (10) and less so within ASEAN (6). In addition, a common characteristic of Southeast Asian countries has been their high degree of economic openness.

While East Asian economies—excluding China—were slightly open to foreign direct investment (FDI), they played a major role in Southeast Asia (table 2.1). With the exception of Singapore, which following its separation from the Federation of Malaysia opted early for international integration, Southeast Asian countries pursued a strategy combining natural resource development and import substitution behind tariff and nontariff barriers (NTB). They attracted foreign investors, in particular Japanese investors, in joint ventures oriented toward domestic markets and manufactured product exports were fairly limited.

**Table 2.1** ASEAN economies in 2015

	<i>Population</i> (millions)	<i>Per capita</i> <i>income</i> (USD ppp)	<i>GDP</i> (billion dollars)	<i>Manuf VA</i> (% of GDP)	<i>Openness</i> (X+M)/ GDP (%)	<i>FDI</i> <i>Stock/</i> GDP (%)
Brunei*	0.4	50800	18	na	94	103
Cambodia	15.3	2570	19	na	95	57
Indonesia*	257.6	4813	938	26	43	26
Laos	7.0	2989	12	na	62	42
Malaysia*	30.8	16229	351	29	173	54
Myanmar	56.0	1959	70	na	61	32
Philippines*	102.4	4289	321	25	68	15
Singapore*	5.6	56228	307	24	210	276
Thailand*	67.7	9521	453	38	114	47
Vietnam	91.6	3552	186	21	143	69
ASEAN (6)*	464.4	141880	2386	ns	97	63
ASEAN (10)	634.4	152950	2674	ns	99	63

Source: Chelem Cepii, World Bank, Unctad.

In the early 1980s, ASEAN countries were hit by the oil counter shock, and balance-of-payment difficulties led them to adopt adjustment programs and export promotion strategies. These changes coincided with the appreciation of the Yen (“endaka”) imposed by the United States at the Plaza Accord (1985). Surprising many observers, Japanese companies chose to delocalize their manufacturing productions in ASEAN countries and to reorient their subsidiaries from domestic to exports markets. Within a decade, ASEAN countries became manufactured exporters and their growth accelerated.

Despite their trade openness, ASEAN economies did not suffer from the slowdown of the global economy in 1990 and their resilience attracted foreign capital as, following the recommendation of the international financial institutions, ASEAN countries opened their capital accounts. This reform had been advocated by the International Monetary Fund (IMF) in order to improve emerging countries’ access to the international saving, and it was strongly supported by the American Treasury eager to open Asian markets to US financial firms. It did increase capital inflows to Asia where no reforms had been implemented in order to improve financial regulation. Banks operated within an opaque framework of implicit or explicit government guaranties and borrowers relied too heavily on short-term credit. Currency mismatches were substantial in the balance sheets of the financial and nonfinancial sectors. Reassured by the implicit peg of the currencies to the dollar, these financial flows generated overinvestments and/or excessive import expansion while ASEAN exports started to face Chinese competition. While an exchange rate adjustment was expected, the Asian crisis (1997/98), which particularly affected Indonesia and Thailand, was a surprise.

The ASEAN countries were transformed by the crisis. As their investment rate declined, economic growth slowed down. Trade openness increased

and China became their main trading partner (Chaponnière, 2014). The combination of Chinese competition on ASEAN manufacturing exports and Chinese demand for raw materials contributed to a fairly pronounced reprimarization of exports in Indonesia and Malaysia.

### *The Unexpected Success of the ASEAN Free Trade Area*

The establishment of ASEAN in 1967 was preceded by several failed attempts. In 1954, the United States pushed the Philippines, Thailand, Japan, and South Korea to create a short-lived security alliance called SEATO (Southeast Asia Treaty Organization). Five years later, in 1961, Indonesia, Malaysia, the Philippines, and Thailand established the Association of South East Asia (ASA), which proved unable to resolve the dispute between Kuala Lumpur and Manila over the State of Sabah. In 1963, Malaysia, the Philippines, and Indonesia established the stillborn Maphilindo.

Finally, the threat of the domino effect after the communist victory in Viet Nam decided the creation of ASEAN. The August 1967 Bangkok Declaration was received with skepticism, as reflected by an article from the *Economist*, which reminded the readers that Indonesia had not yet established diplomatic relations with Malaysia and Singapore; it stressed the antagonism between Indonesia, Malaysia to Singapore, the border disputes between the Philippines and Malaysia, and so on.<sup>1</sup> The Bangkok Declaration did not mention the establishment of a common market and made an allusion to economic cooperation. During its first decade, ASEAN priorities were policy cooperation and diplomacy and it provided a framework to resolve disputes and to stabilize post-Viet Nam War relationships.

With the disappearance of the Vietnamese threat, economic issues gained in importance and ASEAN governments launched several small cooperation schemes. At the end of the 1980s, external evolutions pushed them to propose the creation of a free trade area. The Asian crisis (1997) did not reduce ASEAN's will to pursue integration, and it adopted its *Vision 2020* at the Hanoi Summit on December 5, 1997, and ratified the association's charter that provided an institutional framework.

## **Trade Liberalization: The Implementation of the ASEAN Free Trade Area**

### *The Disappointment of the First Trade Liberalization Attempts (1977–1992)*

The proposal to set up the ASEAN Free Trade Area (AFTA) was preceded by several projects that, in spite of a huge Japanese support, had little success.

The Preferential Trading Arrangements (PTA) signed in 1977 was the first economic cooperation project. It covered 2,327 products, which represented

a very low share of regional trade since the national administration established the PTA lists, and chose products that were either irrelevant or not tradable, as in the case of a “snow plough” equipment included in the list proposed by Indonesia, a country that lies along the equator.

Supported by Japan, the ASEAN Industrial Projects Program was launched in 1980 to promote five large projects that should have benefited from the economies of scale generated by the regional market. It resulted in two projects that would have been realized without the program.

In 1985, the Industrial Complementation Program aimed at promoting exchange of parts and components between member countries and envisaged the creation of an ASEAN. It failed because Malaysia chose to promote a national car project, Proton. Backed by Japan as well, the ASEAN Industrial Joint Venture (AIJV) had little success.

Import substitution strategies implemented by ASEAN countries reduced their openness to trade, notably for intermediate goods (Pangestu, 2009). Besides, in most countries, as growth rates were fairly high, governments had no incentive to trade liberalization.

In 1968, as the Philippines was the most industrialized economy, Manila proposed a Free Trade Area and a similar proposal by a United Nations report four years later was rejected by ASEAN. This project reemerged in the late 1980s in an environment transformed by the Yen rise, expansion of FDI in ASEAN, and the adoption of export promotion strategies in the region.

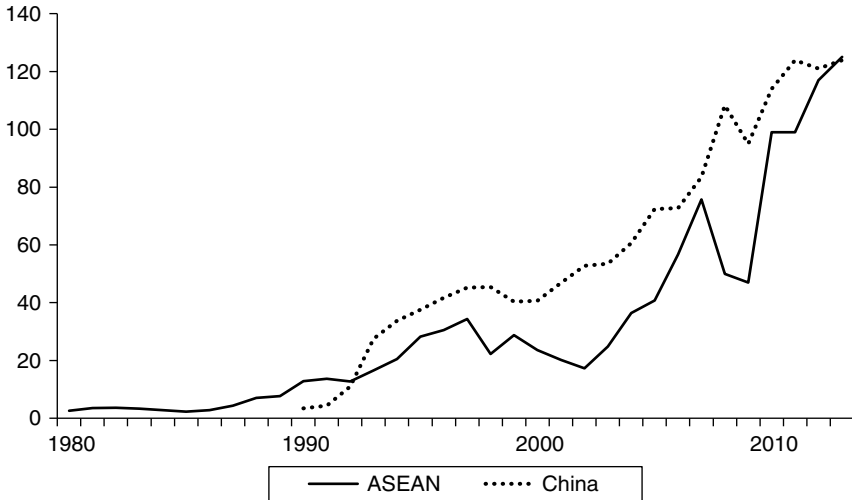
### *AFTA's Objectives*

Why did ASEAN governments, which strongly protected their domestic markets and exported mostly outside the region,<sup>2</sup> agree to launch the AFTA on January 28, 1992? The international context—slowness of the Uruguay Round, emergence of the Single European Market and of NAFTA—did matter; however, as Nesadurai (2003) points out, their main reason has probably been the fear of being marginalized by China in the competition for FDI.

In 1990, ASEAN received four times more FDI than China, and these inflows amounted to 6 percent of its GDP; two years later China caught up with ASEAN. Advertising ASEAN as a large integrated market was considered a way to fight this diversion. While FDI inflows toward ASEAN countries fell in the 1990s, they increased in the 2000s and finally caught up with Chinese FDI inflows by 2012 (figure 2.3).

Thus, AFTA's objective was not the promotion of intraregional trade but the improvement of ASEAN's attractiveness. Indeed ASEAN market was not an alternative to OECD markets as they represented over 80 percent of ASEAN foreign trade. Such “raison d'être” explains its achievements as well as its limits. Contrary to most expectations (Chaponnière, 1992), ASEAN countries lowered their tariffs. Nontariff barriers remain the main





**Figure 2.3** FDI inflows in ASEAN and China from 1980 to 2013 in US\$ billion.

*Source:* Authors' calculations with data from UNCTAD.

obstacle to intraregional trade, and little progress has been made in the liberalization of trade in services.

### *Lowering Tariff Barriers*

The establishment of a Customs Union was not an option as Singapore would not renounce its free port status. A free trade area could have allowed Singapore to become the entry gate of the other countries' imports. Moreover, the tariffs decrease was not a major challenge for SEA countries—with the exception of the Philippines—as the ratio of custom receipts to budget revenues was low (table 2.2).

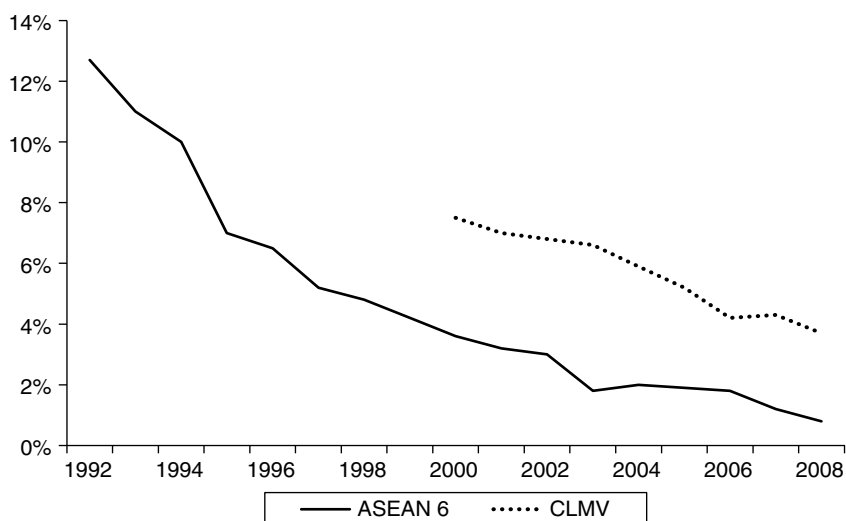
Governments agreed to implement the mechanism proposed by Indonesia: a Common Effective Preferential tariff (CEPT) between 0 and 5 percent for a list of products (inclusive list, IL) decided by each country.<sup>3</sup> Tariff reduction pace varied according to the initial tariff level and the countries' choice between a normal or a fast-track rate. In the case of the fast track, tariffs had to be reduced in a seven-year period, while it could last ten years for the other products. In addition, each country prepared a Temporary Exclusion List of products to be gradually included in the inclusive list, a list of sensitive products including raw agricultural products (to be included in 2010) and a general exclusion list in accordance with GATT criteria.

To benefit from CEPT preferential tariffs, producers must show that at least 40 percent of the product value comes from ASEAN; in practice the cumulative amount of non-ASEAN or indeterminate origin imported inputs must not exceed 60 percent. Exporters must obtain a certificate

**Table 2.2** Tariffs and customs revenue in ASEAN countries

	<i>Customs tariffs</i>		<i>Customs revenue</i>			
	<i>Average MFN rates of manufactured products (%)</i>		<i>% of budget</i>	<i>% of GDP</i>	<i>% of budget</i>	<i>% of GDP</i>
	1990	2010	1990		2010	
Cambodia	na	14			20	2
Indonesia	19	7	5	1		
Laos	na	8			11	1
Malaysia	12	9	12	2	1.80	0.20
Myanmar	na	5	24	1		
Philippines	19	6	28	4	24	3
Singapore	0	0	0	0	0	0
Thailand	40	9			6	1
Vietnam		10				

Source: Authors' calculations with data from World Bank.

**Figure 2.4** Tariffs on CEPT product.

Source: Authors' calculations with data from Pushpanathan (2009).

of origin (CEPT Form D) from the Ministry of Trade or the Customs Department. Initially, the components included in the final products should have an ASEAN content of 40 percent, reduced to 20 percent since 2004. Administrative procedures are fairly similar in all countries: exporters request a cost certification and obtain Form D from the Ministry of Trade and forward it to the importer in the country of destination. The latter sends the form to the customs administration in its country to benefit from the preferential rate.

**Table 2.3** Distribution of tariff lines by program in 2010

	<i>Tariff at 0%</i>	<i>Sensitive List (0–5%)</i>	<i>Highly sensitive list</i>	<i>Exclusion</i>	<i>Number of lines</i>
Brunei	8207	16		77	8300
Cambodia	10536	55		98	10689
Indonesia	8625		16	96	8737
Laos	10566	26		98	10690
Malaysia	12136	83	12	96	12327
Myanmar	8240	11		49	8300
Philippines	8854	80	19	27	8980
Singapore	5842				5842
Thailand	8287	13			8300
Vietnam	10465	58		166	10689

*Source:* Adapted from Chirathivat and Srisangnan (2013).

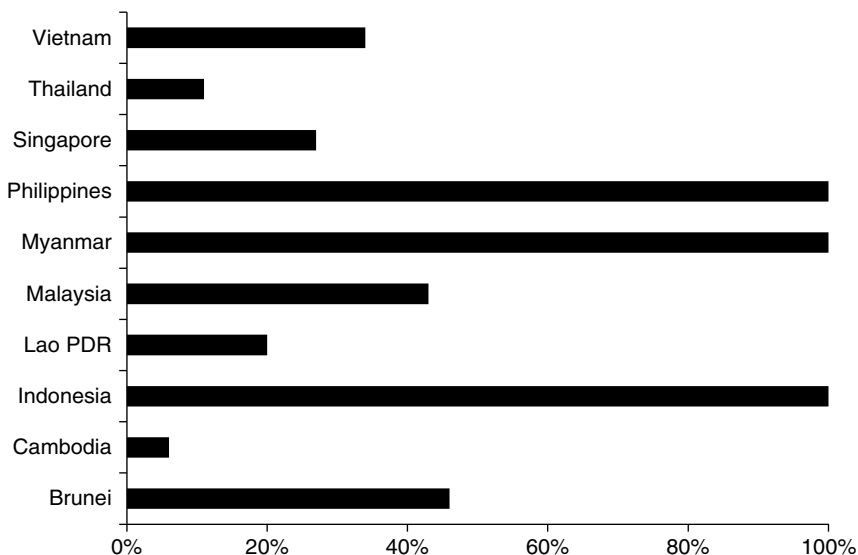
As countries enjoyed considerable latitude for implementation<sup>4</sup> and ASEAN did not establish a dispute settlement process, the choice of the CEPT as a tool for integration could have led to a failure as it had been the case for the PTAs.

In 1996, the ASEAN Industrial Cooperation (AICO) stimulated the process with the creation of a tariff between 0 and 5 percent for products traded between subsidiaries of multinational firms.<sup>5</sup> In 1999, the AFTA Council announced the complete removal of all tariffs for ASEAN (6) by 2015. Two months later, at a regional summit, this deadline was moved forward to 2010 and the objective was achieved! The average tariff on CEPT tariff lines fell from 12.7 percent in 1993 to 0.8 percent in 2008 (figure 2.4) and to 4.4 percent for CLMV. AFTA removed tariffs on most of the lines (table 2.3) in the case of ASEAN (6) and CLMV are close to this objective.

### *Nontariff Barriers and Trade Facilitation*

Article 5 of the AFTA Agreement mentioned the removal of nontariff barriers, which was supposed to start within five years. Little progress was made (Austria, 2013) and NTB remain the main obstacle to the completion of ASEAN trade integration as member countries made up for tariff reductions by raising their NTB.

Starting with Japan, Asian countries share a long tradition of nontariff barriers whose identification is difficult as they may be the result of apparently innocent administrative measures—thus, an Indonesian decision in 2012 to restrict the importation of horticultural products to secondary ports. According to Ando and Kimura (2013), NTB concern about half of ASEAN's tariff lines and are frequent in agriculture, agro-food, and chemicals. The fact that 10 percent of tariff lines are protected by a combination of nontariff barriers reflects a rather sophisticated system of protection (figure 2.5).



**Figure 2.5** Frequency of NTB by country.

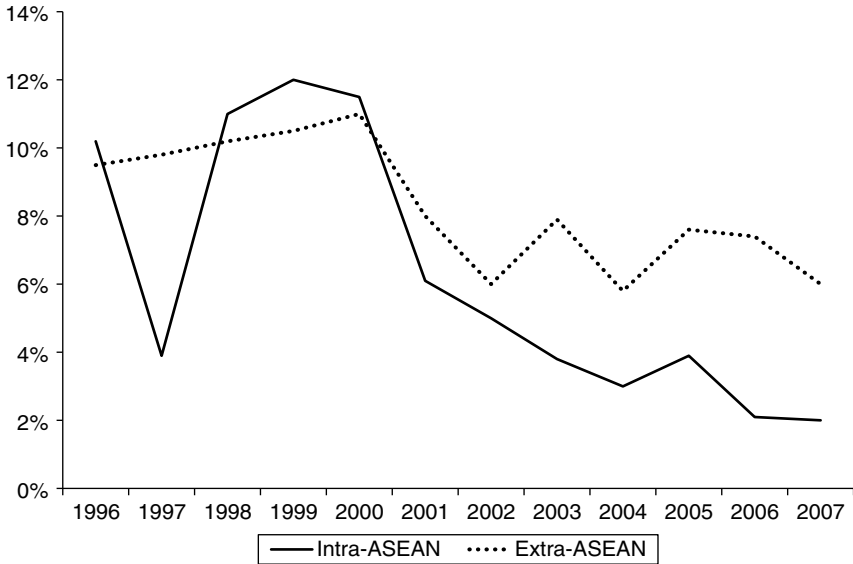
*Source:* Adapted by the authors with data from Ando and Obashi (2009).

Removing NTB is a hard political task as they are strongly supported by domestic lobbies (see chapter 1 in this book). On this matter, ASEAN's commitments have been vague: each country has to define the NTB that constitutes an obstacle and member countries have been slow to implement their commitments. This resulted in an increasing frustration among large ASEAN firms, which criticized the slow progress in harmonizing tax systems at a recent ASEAN Business Club meeting.<sup>6</sup> In contrast, significant progress has been accomplished for trade facilitation thanks to the implementation of the ASEAN Trade in Goods Agreement, ATIGA (2010), which harmonizes customs nomenclatures and procedures (single window), and has contributed to better connectivity through the computerization and transparency of procedures (ESCAP, 2011(a); and chapter 7 in this book). As the tariff equivalent of removing these obstacles could be higher than the tariffs, this progress has had a significant impact on exchanges growth (ESCAP, 2011(b)). According to ADB (2012, table 16, p. 38), ASEAN trade facilitation indicators such as the number of days taken for processing imports and exports are significantly better than those for most developing countries.

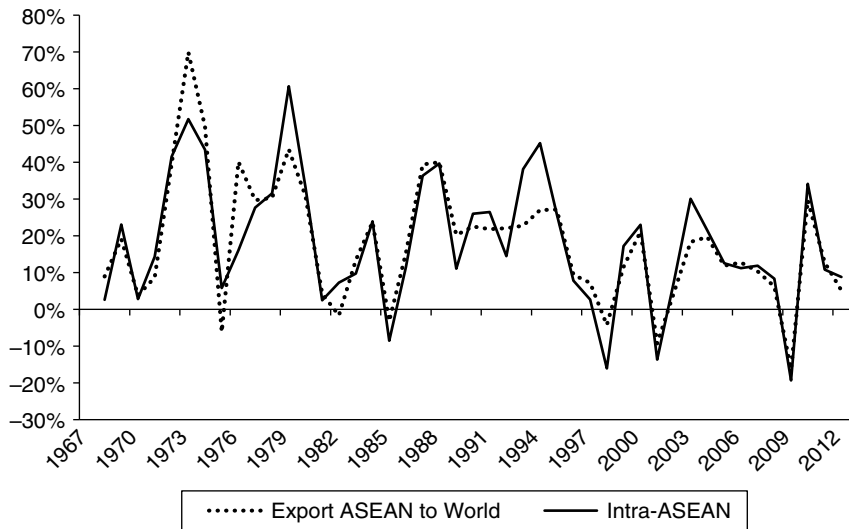
### *AFTA's Paradox*

AFTA tariff reductions went along a reduction of tariffs within the multilateral framework. The average tariff applied to imports of manufactured products (most favored nation, MFN, status) was even slightly higher than for intra-ASEAN trade until 2002 (figure 2.6).

However this has not resulted in a significant increase of intra-ASEAN trade, which fluctuates in the same manner as extra-ASEAN trade (figure 2.7).



**Figure 2.6** Average tariff rate (manufactured products), intra- and extra-ASEAN imports. *Source:* Authors' calculations with data from ASEAN tariff database.



**Figure 2.7** Intra-ASEAN and ASEAN-world manufactured export growth rate. *Source:* Authors' calculations with data from Chelem Cepii.

The limited spread between CEPT preferential tariff and MFN tariff explains the attitude of exporters who consider that AFTA tariff gain is not worthwhile as it is smaller than its cost of transaction. Surveys carried out in the 1990s revealed that only 1.5 percent of intra-ASEAN exporters benefited from AFTA tariff exemptions (Nesadurai, 2003), and such

a low rate was explained by a lack of familiarity; nevertheless, this rate has remained lower than that observed in other trade zones (Manchin and Pelkmans, 2008).

According to a study by the Asian Development Bank, only 22 percent of firms used the CEPT mechanism in 2006 (Cinieviski, 2010). In Thailand, this share rose up to 26.7 percent in 2008 (Chirathivat, quoted in ADB, 2012) with large variations according to sector: 28 percent in the automobile industry (Thailand is the regional hub for Toyota) and very low for electronics because the ITA (Information Technology Agreement) signed by 70 countries removes customs tariffs on IT products. The high share of electronics and the role of free trade zone explain the low rate in Malaysia (9 percent in 2008; Chirathivat and Srisangnan, 2013). In the case of the Philippines, one-third of exporters to ASEAN use AFTA. The proportion is higher in automobile manufacturing due to the success of the AICO program promoted by Honda and Toyota. The rate is low in the agri-food and electronic sectors as companies export from free trade areas. More generally, an EIU survey of executives of 800 companies spread across the Asia Pacific found that one in four took advantage of the more than 50 bilateral and regional trade agreements.<sup>7</sup>

Pelkmans (2009) and Hill and Menon (2010) estimate that if intrafirm transactions and exports from free trade zones are excluded, AFTA could explain one-fifth of intra-ASEAN trade. Trade specialists interviewed in the field made a similar assessment.<sup>8</sup> While AFTA did not lead to an increase in intra-ASEAN trade, which was not its objective, the ASEAN dimension may have improved the FDI attractiveness of the region; however, no survey has measured it.

## The Lack of Effective Regional Institutions

### *A Soft Institution: The ASEAN Secretariat*

Initially, ASEAN was a security-oriented association whose decisions were made on a consensual basis. “The ASEAN way” favors negotiation and consensus seeking—*Decide first, negotiate later*. The organization is chaired on a rotation basis by the chiefs of government and its institutional dynamism depends on the policy orientations of the leader in charge and on Indonesia, the region’s heavyweight. The support by President Suharto has been the most instrumental factor for the Bangkok declaration; AFTA was proposed by a Thai prime minister who was a respected former head of a large manufacturing company. Indonesian political difficulties explain the slowdown of the integration process in the early 2000s and recent Indonesian measures<sup>9</sup> will slow down the progress toward AEC. ASEAN has been particularly ineffective in periods of crisis (1997 Asian crisis and 2008 rice crisis).

Furthermore, the enlargement to CLMV lengthened the decision process: as in the case of the EU, some would have preferred ASEAN to deepen

its integration and limit its enlargement. While ASEAN governments initiated ambitious plans, they preferred “relatively limited institutional structures...unable to impose stronger discipline on member governments” (Nesadurai, 2003). Governments in Southeast Asia or in Europe have been reluctant to support regional institutions strong enough to override their sovereignty.

Since the establishment of ASEAN, both Singapore and Malaysia opposed the establishment of a large-staffed Secretariat as, being located in Jakarta, it would probably have been dominated by Indonesia. The Secretariat was considered as an operating tool in charge of the coordination between the member countries. In 1992, when ASEAN launched the Free Trade Agreement, 55 people were employed by the Secretariat, including drivers and secretaries, and its budget amounted to US\$300,000 (Pelkmans, 2009; see also chapter 1). Twenty years later, the secretariat staff is 100 and its budget US\$15 million. Several secretaries have unsuccessfully pleaded for a budget increase. This would require a reform in the procedures as the ASEAN Charter stipulates that the budget shall be evenly distributed among countries: thus the contribution of Indonesia, or Singapore, is equal to that of Laos, the poorest economy! ASEAN staff members have three-year contracts that may be renewed (up to five times), provided they move up the Secretariat’s hierarchy.

Consequently, the Secretariat lacks institutional memory and expertise, and its main function is to organize a large number of meetings (almost 1,000 in 2012) between member countries. While they are not always effective, the many meetings have been instrumental in building a climate of confidence, and they have enhanced the institution’s credibility.

While ASEAN countries traditionally managed to speak with a single voice on matters of diplomacy and security, they have been unable to do so on economic issues. According to a former secretary general, “*Regional economic integration seems to have become stuck in framework agreements, work programs and master plans*” (Severino, 2006, p. 247). This was confirmed by the failure of the FTA project between EU and ASEAN. As negotiations started, EU found out rapidly that the ASEAN Secretariat was not a credible partner.<sup>10</sup>

Administrations and ministries from the member countries rely on external consultants funded by donors, the “dialogue partners,” namely, Japan, EU, United States, Australia, and UNDP. As shown in table 2.4, the donors’ contribution to AEC’s operation was about US\$90 million in 2011, that is, six times ASEAN’s operating budget. The external contribution is five times more important than the member countries’ funding. Thus, the dependence on funding from foreign donors is very high. They have financed 85 percent of the regional integration process (in 2011). EU assistance has intensified since AFTA and the adoption of the AEC project. Japan remains the leading contributor but its funding focuses on training and health.

**Table 2.4** European aid to ASEAN\* in million US\$ (ongoing programs in November 2011)

	<i>Programs linked to AEC</i>	<i>Other programs</i>	<i>Total</i>
Australia	18	73.2	91.2
EU	21.3	25.7	47
India	0.8	2.9	3.7
Japan	6.7	236.3	243
United States	16.6	25.2	41.8
Germany	14.4	16	30.4
Others	12	9	21
<b>Total</b>	<b>90</b>	<b>388</b>	<b>478</b>

\* These amounts do not include financing of programs and projects in ASEAN countries by bilateral or multilateral aid.

Source: EU delegation in Jakarta.

The ASEAN Economic Community objective calls for a larger budget and for a reform of its financing modalities as an equal contribution is no longer adequate. But, as governments are still reluctant to commit more funds to facilitate the new workload of the Secretariat (Sukma, 2014), ASEAN donors have announced that they could finance directly the Secretariat's operating budget.

### *The ASEAN Economic Community*

In December 1997, ASEAN's leaders adopted *ASEAN Vision 2020*, by which year the association would be an "ASEAN Economic Region characterized by a free flow of goods, services and investments, a freer flow of capital, equitable economic development and reduced poverty and socio-economic disparities." At their Phnom Penh summit five years later, ASEAN leaders called for the creation of the ASEAN Economic Community, which showed ASEAN's commitment for a form deeper than a free trade area that would entail a political and security dimension—regional cooperation. Surprisingly even though the 2020 deadline was considered as an ambitious target, the ASEAN Summit of January 2007 advanced it to 2015. According to Severino (2013), while the leaders did recognize that 2020 was ambitious, they thought that AEC would gain some publicity by moving forward a target that was unattainable anyway. This is an illustration of the "communication strategy" of ASEAN! In practical terms (Severino, 2013), ASEAN in its current stage would lose credibility if it set ambitious goals and failed to meet them. On the other hand, it would lose momentum or visibility if it set less-than-ambitious, but realistic, goals.

The ASEAN secretariat monitors the AEC project on the base of a scorecard, updated every six months, which lists legislative, regulatory, and operating measures related to commitments and indicates whether they have been adopted or not by all the countries. Unfortunately, the scoreboard does not differentiate the measures according to their



importance: realizing training seminars may have the same weight as the liberalization of financial services or the opening of the sugar market. It appears that most cases of “partially implemented” refer to “measures” related to trade or investments. Moreover, the implementation rate, which covers a single period—with delays accumulating from period to period—was 87.6 percent (92 measures out of 105) in 2008–2010 and 56 percent in 2010–2011. As these figures do not indicate the progress realized by each country, there is no way to assess the achievements of the measures (Testard, 2012). According to the scorecard, the region has achieved 73.6 percent of the targets for the period 2008–2009. In total, 91 out of 124 AEC legal instruments (73 percent) have entered into force, compared to only 50 percent in 2002 as of December 31, 2009. Due to this backlog of initiatives, one cannot anticipate a higher score in future evaluations. According to the director of the Institute of Southeast Asian Studies (Das et al., 2013) “too much political opposition and inadequate institutional infrastructure lie in the way of their effective implementation.”

The ASEAN Economic Community is not only a regional integration initiative but also a critical cog of a novel East Asian model of development and integration in which ASEAN has been playing a significant role (Ponciano et al., 2014).

### *Beyond ASEAN*

The drive for Asian integration beyond ASEAN began in the late 1980s at the initiative of Australia, which called for the creation of the APEC (Asia-Pacific Economic Cooperation), an initiative joined by the United States, which proposed the establishment of a free trade area of the Asia Pacific, FTAAP, at the 1992 Bogor summit. This initiative led the Malaysian prime minister to launch the East Asia Economic Caucus (EAEC) comprising ASEAN, China, Japan, Korea, and Taiwan; later on, the caucus became a group (EAEG), which evolved into the ASEAN+3 dialogue, involving China, Korea, and Japan, and expanded to India. The Asian crisis led to the Chiang Mai Initiative (2000), a currency swap arrangement among central banks financed by China, Korea, and Japan (Jetin, 2009).

As the Doha negotiation did not progress, new initiatives emerged at a bilateral and multilateral level: Japan followed by China and Korea launched several initiatives toward ASEAN and the multiplication of trade agreements—the noodle bowl (Baldwin, 2006)—results in a confused situation as it increases the number of rules of origin and reduces the use of the different trade agreements.

Merging these FTAs into a pan-Asian accord is one of the objectives of the Regional Comprehensive Economic Partnership (RCEP), an economic partnership between ASEAN and countries that signed FTAs with ASEAN, namely, Japan, China, South Korea, India, Australia, and New Zealand. RCEP aims at the creation of a high-quality, comprehensive economic

partnership agreement and the drawing up of regulations for an advanced supply chain in East Asia. At its first ministerial meeting in 2013, an agreement was reached on the principle of mutual tariff concessions. RCEP is unlikely to reach an agreement by the end of 2015 as India has introduced new rules of origin that include both value added criteria and change in the customs code.

To go beyond AFTA toward a pan-Asian integration would require an agreement between RCEP and the CJK (China, Japan, and Korea) AFTA project, which was initiated in 1999. Three years later the three East Asian countries have ratified an Investment Protection Agreement and announced that FTA negotiations would begin by year end. While political tensions in the China Sea led to a suspension of discussion between China and Japan, Korea has kept on negotiating with its East Asian neighbors.

While RCEP can be considered as the Asian route to regional integration, the United States has proposed an alternative route once it joined in 2009 the Trans-Pacific Strategic Economic Partnership Agreement (TPA4) signed between Brunei, Chile, New Zealand, and Singapore in 2006<sup>11</sup> as a reaction to the lack of progress of the APEC-FTA. TPA4 was transformed into the Transpacific Partnership (TPP), which appears as an instrument of the US pivot toward Asia since its objectives are both economic and geopolitics, as it aims at building the Asian equivalent of the North Atlantic Treaty. Among the 12 negotiating parties, there are four ASEAN countries, Brunei, Singapore—which signed an FTA with the United States—Malaysia and Viet Nam. As the US Congress did not give a “Trade Promotion Authority” to the executive, the US government has limited margin of negotiation with its partners and, considering the Japan-USA deadlock, the TPP will probably not meet its December 2015 deadline.

RCEP covers trade in goods and services, investment, economic cooperation, intellectual property right, competition, dispute settlement, and other issues covered by FTA. It shares the same items as the TPP with two exceptions: government procurement issues and labor standards are not included in the RCEP agenda (Watanabe, 2014).

## Market-Led Regional Economic Integration

### *Trade Polarizations*

Compared to other South-South trade agreements, ASEAN was a relative success (see figure 2.1) and intra-ASEAN trade has slightly increased while ASEAN’s share of world trade rose from 2 percent in 1967 to 6 percent on the eve of the Asian crisis. Several reasons explain this success.

- The role of Singapore, which hosts the regional headquarters of most large international firms. In 1990, Singapore exports represented 37 percent of intra-ASEAN manufactured exports. This share decreased to 26 percent while Thailand’s increased to 25 percent.

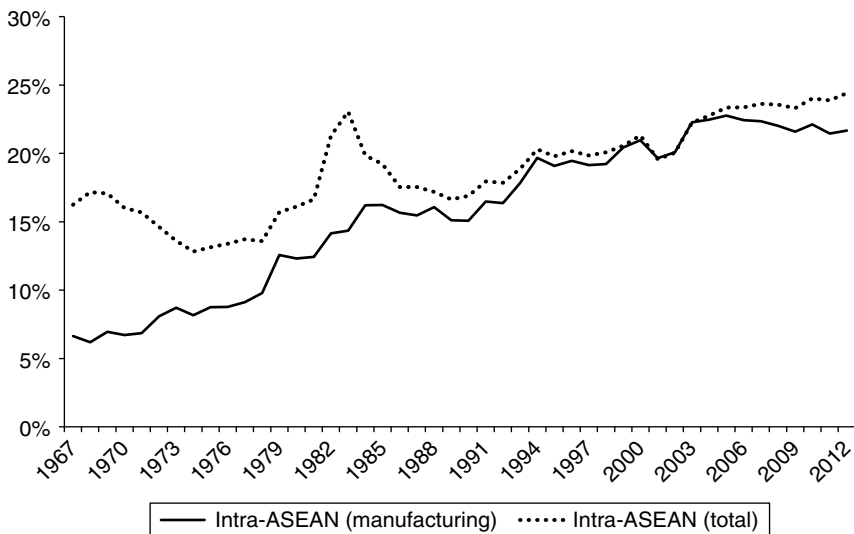
- The fact that ASEAN includes economies at various levels of development. Singapore-Malaysia trade accounted for three-quarters of intra-ASEAN trade in manufactured goods in 1990, and this share decreased to 50 percent in 2010 as a result of increasing trade between Thailand and Malaysia.
- The Chinese business networks, which play a very significant role in ASEAN economies. The role of multinational firm in intra-ASEAN trade is both an intraindustry and intrafirm trade (see the next section). The share of intra-ASEAN trade in ASEAN countries' trade is converging, and this trend is less the consequence of domestic policies than of location choices by foreign companies, which are both the architects and the engineers of the "ASEAN integrated circuit."

### *Intraindustry Trade in ASEAN*

At the regional level manufacturing trade, which developed faster than total trade, has been the major engine of trade integration (figure 2.8).

In 1980, as ASEAN countries were negotiating items to be included in the PTA lists, electronic components, which were not concerned, represented already over 30 percent of intra-ASEAN manufactured trade.<sup>12</sup> These products were exported by foreign subsidiaries in the free trade areas. The electrical/electronic subsector (Ando and Kimura, 2013) plays a significant role in intra-ASEAN trade and according to Chelem Cepii data, they accounted for more than 60 percent of this trade in 2000 and 45 percent in 2012.

The intensity of the division of labor between ASEAN countries can be assessed by the share of intraindustry trade as measured by the Grübel Lloyd (GL)<sup>13</sup> indicator, which varies from 0, when the products traded are



**Figure 2.8** Intra-ASEAN trade as a percent of ASEAN trade (total goods and manuf.).

Source: Authors' calculations with data from Chelem Cepii.

**Table 2.5** GL indicators in ASEAN

	<i>Singapore</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Thailand</i>	<i>Vietnam</i>
<i>2010</i>					
Indonesia	0.42	0.48	0.44	0.48	0.15
Singapore		0.73	0.53	0.57	0.17
Malaysia			0.51	0.69	0.20
Philippines				0.51	0.27
Thailand					0.38
<i>2000</i>					
Indonesia	0.42	0.40	0.44	0.44	0.43
Singapore		0.79	0.34	0.46	0.24
Malaysia			0.44	0.58	0.31
Philippines				0.38	0.18
Thailand					0.23
<i>1990</i>					
Indonesia	0.19	0.26	0.20	0.18	0.01
Singapore		0.55	0.35	0.37	na
Malaysia			0.23	0.21	0.02
Philippines				0.31	0.09
Thailand					0.02

*Source:* Computed from Chelem Cepii trade data.

completely different, to 1, when these products are identical. Intraindustry trade has significantly increased in ASEAN between 1990 and 2000 and has remained since then at a relatively high level. In comparison, GL levels are below 0.2 for Arab member countries of the Agadir agreement (table 2.5).

The trade intensity between countries is explained by a high level of intraindustry trade: thus the Singapore-Malaysia-Thailand trade, which explains over 40 percent of intra-ASEAN trade, is characterized by its high GL indicator.

The degree of complementarity and competition between ASEAN countries' exports can be appreciated by a comparison of their export structures based on the similarity indicator developed from Linnemann's work (1966).<sup>14</sup> It varies between 0 (no similarity) and 100 (complete similarity).

Table 2.6, which presents this indicator for 2000 and 2010, shows that both Indonesia and Viet Nam lie outside "the ASEAN integrated circuit": their export trade structures are quite dissimilar to that of Malaysia, Philippines, or Thailand for total exports as well as for manufactured exports. On the other hand, Malaysia, Philippines, and Thailand export structures exhibit a high similarity at both levels: these countries, together with Singapore,<sup>15</sup> are at the core of the ASEAN integrated circuit.

### *Trade in Value Added*

Intra-ASEAN trade was labeled as an "integrated circuit" early on (Chaponnière, 1984) as electronics components played a major role.<sup>16</sup> The expansion of Asia in world trade has both relied on and stimulated an

**Table 2.6** Degree of exports complementarities for total exports (manufactured exports)

	<i>Malaysia</i>	<i>Philippines</i>	<i>Thailand</i>	<i>Vietnam</i>
<i>2010</i>				
Indonesia	0.53 (0.25)	0.10 (0.20)	0.29 (0.63)	0.37 (0.36)
Malaysia		0.60 (0.85)	0.50 (0.60)	0.27(0.26)
Philippines			0.50 (0.55)	0.19 (0.20)
Thailand				0.28 (0.30)
<i>2000</i>				
Indonesia	0.37 (0.39)	0.10 (0.20)	0.23 (0.54)	0.58 (0.43)
Malaysia		0.90 (0.92)	0.80 (0.83)	0.18 (0.15)
Philippines			0.60(0.65)	0.06 (0.10)
Thailand				0.24 (0.32)

*Source:* Authors' calculations with data from Comtrade (1,250 items disaggregation).

increase of intermediate goods trade, whose share is much higher than in other regions (see chapter 4 in this book; and Athukorala, 2006). The high level of vertical division of labor is a result of the integration of Asian economies into global value chains, which has two series of consequences: (i) the fragmentation of production processes: this contributes to a decrease of the ratio of value added to manufacturing sales, which fell from 26 percent to 19 percent between 1990 and 2010 in Malaysia, one of the most integrated countries in global value chains, while it has remained high in Indonesia (40 percent), which is less integrated in production networks. (ii) An artificial increase of trade flows, as the customs measure the value of the same product at different stages of their production process: this explains the extremely high trade ratio in ASEAN (90 percent in 1990, over 100 percent in 2010). The growing lack of relevance of customs statistics has stimulated the design of new methodologies based on value added to analyze trade relations. Japanese economists have pioneered this innovative path. OECD and WTO have launched a program based on input-output tables of 41 countries for 2009, 4 of which are in Asia (Japan, China, Korea, and Indonesia). According to customs statistics, China is the leading exporter to Indonesia (13 percent of total) and Japan the main destination of Indonesian exports (18 percent). In value-added terms, the United States is the largest Indonesian export market (13 percent) and China its third largest (10 percent) after Japan (13 percent); Japan is the largest exporter to Indonesia (13 percent) and China the second largest (10 percent).

This methodology sheds a new light on regional trade integration intensity. Meng B et al. (2012) evaluate regional integrations on a customs statistics and value-added approach. The first approach shows that intra-ASEAN trade has been stable (at 1 percent of world trade) between 1995 and 2005 while the second approach (in value added) shows that its share trade fell from 0.7 to 0.5 percent. This means that when the vertical division of labor is taken into account the importance of regional integration and its evolution over time decline.

## Conclusion

ASEAN will celebrate its fiftieth anniversary in 2017 and such longevity is a surprise. Its major success has been regional stability rather than economic integration, diplomacy rather than trade. Except for minor skirmishes between Cambodian and Thai forces over a disputed strip of borderland, and between troops of Myanmar and Thailand at their common border, peace has prevailed in Southeast Asia. Until the Phnom Penh Summit in 2012,<sup>17</sup> ASEAN countries managed to speak with a single voice on matters of diplomacy and security. Regional conflicts did not degenerate and ASEAN successfully incorporated its former adversaries. ASEAN is a forum for dialogue that provides a framework to promote security and stability on a larger scale in Asia, where rivalries between old and new powers increase. Although it cannot be properly measured, this political stability has been a significant input for economic growth.

ASEAN economic integration is usually presented as a success, as observers consider its *de facto* integration as a consequence of its *de jure* integration. As a former ASEAN Secretariat official privately acknowledged, this illustrates the Secretariat communication expertise! As the 2015 deadline approaches, ASEAN will likely communicate on the achievement of the ASEAN Economic Community while by December 2015, the AEC will be a work in progress. ASEAN's member countries committed themselves to certain specific, time-bound measures that could lead to the integration of the regional economy. It remains to be seen if Asian countries will be able to move from a *de facto* business driven integration to a *de jure* institutional driver integration.

ASEAN economic driver used to be the US and Europe economies rather than Asian economies. It is less the case as China is the leading trading partner for most of the region's countries according to customs data and not yet in value added terms. Thus ASEAN is likely to merge into a wider regional group, trade policies will evolve, and CEPT tariffs will become redundant with MFNs. Synergies and the mutual consolidation process between regional liberalization and multilateral liberalization should continue.

The main drivers of the regional integration process have been exogenous. (i) Donor assistance was critical as it accounts for four-fifth of the institutional operating cost of the regional integration process: donors support the ASEAN Secretariat and provide the technical assistance that "feeds" the regional integration process; (ii) extraregional FDI, which built a network of interdependence between different economies.

Traditionally more open to FDI than other regions, ASEAN economies integrated into the strategies of multinational firms through the organization of global value chain. This *de facto* (Hale, 2010) integration led ASEAN's economic integration. Export expansion contributed to the growth and economic diversification enlarges the opportunities for intra-ASEAN trade. The eventual removal of NTB as well as economic development will stimulate regional trade based on products differentiation, which

is one of the main engines of regional trade expansion. The ASEAN experience illustrates the causal relationship from domestic growth to regional integration and further on, integration facilitates growth.

Regional trade intensification is led by manufactured goods, notably intermediate goods, and it has relied on intraindustry, rather than interindustry, trade. Sector wise, regional trade is led by electronics and mechanical industries (two-thirds of ASEAN international trade) where opportunities for division of labor are the greatest. In the absence of these two industries, regional trade would have been divided by three. The role of intraindustry trade, equally strong within NAFTA, has two implications: (i) Effective regional trade integration requires a minimum level of diversification and sophistication of the production structures of the partner countries. (ii) By nature, the contribution of regional trade is often overestimated, because its intraindustry component tends to increase faster than the interindustry part. This trend can be assessed by the difference in the value-added content of intraregional and extraregional exports.

Finally, there is a circular causality between regional trade integration and FDI attraction. Regional integration enlarges market prospects for foreign investors, which stimulate economic integration through trade and investment. Ekholm and Forslid (2007) labeled this strategy of investing in one country that is a member of a regional organization to target a whole region as “Export-Platform Foreign Direct Investment.” In the absence of sufficient FDI inflows, it is very difficult to stimulate a regional integration process. For these reasons, the prospects for deeper economic integration are weak for sub-Saharan Africa, except in the Southern cone, while they are significant for South America and for the Mediterranean region.

# Appendix

## List of Acronyms

ADB	Asian Development Bank
AEC	ASEAN Economic Community
AFTA	ASEAN Free Trade Agreement
AICO	ASEAN Industrial Cooperation
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of South East Asian Nations
ASEAN (6)	Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand
ASEAN (10)	ASEAN (6) plus Cambodia, Laos, Myanmar, Viet Nam
ATIGA	ASEAN Trade in Goods Agreement
BBC	Brand to Brand Complementation
Cepii	Centre d'Etudes Prospectives et d'Informations Internationales
CEPT	Common Effective Preferential Tariff
Chelem	Comptes Harmonisés sur les Echanges et L'Economie Mondiale
CJK	China, Japan, Korea
CLMV	Cambodia, Laos, Malaysia, Viet Nam
EAEC	East Asian Economic Caucus
EAEG	East Asian Economic Group
EU	European Union
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
FTAAP	Free Trade Area of the Asia Pacific
GATT	General Agreement on Tariffs and Trade
GL	Grubel Lloyd
MENA	Middle East and North Africa
MFN	Most Favored Nation
NAFTA	North American Free Trade Agreement
NTB	Nontariff Barrier
PTA	Preferential Trade Agreement
RCEP	Regional Comprehensive Economic Partnership



SEA	South East Asia
SEATO	South East Asia Treaty Organization
SMC	South Mediterranean Countries
TPA4	Trans-Pacific Strategic Economic Partnership Agreement (P4)
TPP	Trans-Pacific Partnership
WTO	World Trade Organization

## Notes

1. *The Economist*: “ASEAN togetherness,” August 12, 1967.
2. As mentioned in the *Economist* article reporting the birth of AFTA, it was then easier to find San Miguel beer in New York than in Bangkok (*The Economist*: Fortress Asia? October 24, 1992).
3. The selection of this flexible option made it possible to circumvent the opposition of the Philippines senate. The GATT had not to be notified because it authorized PTAs between countries of the South.
4. In accordance with Article 2, products are identified at HS (Harmonized System) six-digit levels, with the possibility of exclusions at the HS 8 level.
5. This privilege was initially limited to joint ventures with domestic participation (ASEAN) of 30 percent, and it was subsequently extended to joint ventures with domestic participation below 30 percent.
6. *Financial Times*, “Beyond BRICS: ASEAN Chiefs Fear Rising Protectionism,” September 8, 2014. According to Air Asia founder, “One thing that complicates ASEAN is that government is so involved in business,” “Governments have to distinguish: are they regulators and facilitators of business—or are they in business.”
7. *Financial Times*, “Do Trade Really Matter,” August 22, 2014.
8. This is also shown by a summary estimate applying the Form D utilization rate to the proportion of intra-ASEAN trade (25 percent) in total trade.
9. Indonesia has recently implemented measures limiting the hiring of foreign workers and foreign ownership. A policy orientation illustrated by the failed attempt by the Development Bank of Singapore (DBS) to buy a stake in Bank Danamon: The Development Bank of Singapore renounced to raise its participation after the decision taken during the summer 2012 by the Central bank to cap at 40 percent the share of another bank (domestic or foreign) in an Indonesian bank.
10. Brussels also concluded a Treaty with Singapore in 2012; negotiations with Malaysia have encountered serious difficulties; initial discussions with Indonesia have still not succeeded in defining the scoping; and discussions with Thailand have stalled.
11. In 2009, Washington joined the 2005 initiative (P-4 Agreement) of Singapore, New Zealand, and Chile for nearly total liberalization of all goods, including agriculture by 2017, and for Brunei to reduce tariffs to zero on all but a handful of products. The P-4 Agreement did not cover financial services or investment, but provided that these areas would be negotiated two years after the P-4 Agreement came into force (Meredith, 2011; Elms, 2012).
12. Paradoxically, as noted by Manchin and Pelkmans (2008), most intra-ASEAN trade in electronic goods cannot benefit from the CEPT preferential tariff because regional value-added is below the minimum required 40 percent.
13. Measured on the basis of Chelem data, which disaggregates world trade into 72 lines, the GL indicator is:  $GL = 1 - [\Sigma(X_i - M_i) / \Sigma(X_i + M_i)]$ , with  $M_i$  imports of product  $i$  and  $X_i$  exports of product  $i$ .

14. It indicates the “distance” between two trade structures, measured by the cosinus of the angle between the vectors representing the export (and import) structures.

Here, the measure is based on Comtrade (3 figures) 
$$Cos_{ij} = \frac{\sum_k E_{ik} * E_{jk}}{\sqrt{\sum_k E_{ik}^2 * \sum_k E_{jk}^2}}$$

15. Singapore is not included since Comtrade does not distinguish domestic exports from reexports by the city state.
16. The assembly of a finished product was the end of a long odyssey: silicon wafers produced in a factory in Singapore were cut into many chips in Malaysia before being tested in Singapore, preassembled as a subcomponent in the Philippines and this subcomponent was later inserted into a disk drive in Thailand, which itself was integrated into a PC assembled somewhere in Asia.
17. In July 2012, for the first time in 45 years, the Foreign Ministers’ Meeting did not conclude with a Joint Declaration, due to the opposition of the Philippines and Viet Nam to the Cambodian chair because of the country’s refusal to raise the incident between Philippines and Vietnamese ships on an atoll claimed by both countries.

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## Trade Implications of the ASEAN+ Agreements for Other Asian Countries

*Mia Mikic*

### Introduction

ASEAN integrative efforts envisioned through building ASEAN community have been supported by political and security, economic and sociocultural cooperation “that are closely intertwined and mutually reinforcing for the purpose of ensuring durable peace, stability and shared prosperity in the region” (ASEAN, 2003, p. 1). The ultimate goal of fostering economic integration among ASEAN member states (AMS) is to establish an effective ASEAN Economic Community (AEC), which will, by end of 2015, transform ASEAN “into a region with free movement of goods, services, investment, skilled labor, and freer flow of capital” (ASEAN, 2008, p. 5).

The regionalism efforts participated in by AMS also drove much of the overall Asian regionalism process. Over time there was a change from ASEAN-centered process of deepening the ASEAN internal integration by adding liberalization of trade in services, customs cooperation, technical cooperation, and a number of WTO-beyond areas, and leading ultimately toward AEC, to a different process of attracting out-of-ASEAN trading partners to complete ASEAN+1 agreements. While committed to completing the process of establishment of the AEC by end 2015, and duly partnering in the ASEAN+1 deals, individual AMS continue to seek additional bilateral agreements as well as participation in larger trading blocs, most notably Trans-Pacific Partnership Agreement and Regional Comprehensive Economic Partnership.

This chapter chronicles the regionalism efforts by AMS to date and comments on the impacts of the countries not directly part of that process. The first section describes a path to the current state of regionalism involving AMS and provides its basic features. This is followed by a focus on the Regional Comprehensive Economic Partnership (RCEP) process and

impacts. Since the formal start of negotiations in 2013, there were nine rounds of negotiations (by September 2015), but still not much is known with respect to the content of the agreement under negotiation. While this might appear to be a problem in a more precise estimation of impacts on the countries involved in the agreement and those left outside, we follow a more simple approach in reviewing factors impacting trade diversion, trade creation, and trade reversion (as outlined in Deardorff, 2013). In exploring the impacts of RCEP on nonnegotiating countries in Asia and elsewhere, much can be deduced from the evolution of the pattern of trade of AMS with these countries, and from the fact that many of them might have bilateral free trade agreements (FTAs) with a number of RCEP members already so that quality of these agreements relative to RCEP will be important. Last, the impact on the non-RCEP countries will also depend on competing (mega-)regional initiatives already in place or under negotiations (TPP, EEC, PACER+) or being planned (BIMSTEC, FTAAP). The chapter concludes by arguing that (i) a more effective integration of ASEAN into the global/Asia-wide economy must necessarily involve consolidation and rationalization of the current “noodle bowl”; and (ii) the interests of LDCs and other low-income countries should be protected by keeping RCEP open for their easy accession.

## Interplay of Internal and External Trade Liberalization

The AEC Blueprint, the principal document defining the scope, modalities, and timeline of achieving economic integration, puts in place four pillars for a transformation of a current ASEAN into AEC: (1) a single market and production base; (2) a highly competitive economic region; (3) a region of equitable economic development; and (4) a region fully integrated into the global economy (ASEAN, 2008). By early 2015, significant progress has been made under the first pillar, especially regarding removal of tariffs on intraregional trade in goods. Other areas that have to be tackled for a creation of a single market and production base, for instance, reducing use of nontariff barriers (NTBs), liberalization of services trade, and improving mobility of capital and skilled labor, are still very much unfinished business. Nevertheless, based on a self-assessment mechanism known as AEC Scorecard, it appears that AMS have been on track toward realizing AEC by reaching more than 82 percent (2012) of its final target by early 2015.<sup>1</sup>

Progress in achieving ASEAN single market and production base has not been motivated solely, or even dominantly, by seeking to build a fortress-like regional bloc focused only on maximization of intraregional cooperation. One of the unique features of ASEAN as a regional integration is that its trade, financial, and business links with the rest of the world have not been weakened as the intraregional relations strengthened. As explained more fully in chapter 4 of this volume, in order to get involved in production networks and global production sharing, initiated by Japanese

companies looking to outsource and relocate production out of wage-rising Japan, AMS realized the necessity to remove barriers across multiple markets within ASEAN. Efforts to do so had a combined effect of locking a subset of ASEAN countries as a building block for the “Factory of Asia” (ESCAP, 2009, 2010, 2011) as well as promoting intraregional trade and investment.

### *Trends in Trade and FDI Flows and Patterns*

This is also observed through statistics on intra-ASEAN and extra-ASEAN trade flows of AMS.<sup>2</sup> In a decade from 2003 to 2013, ASEAN has increased its exports and imports of merchandise to and from the world by 3 and 2.5 times, respectively. Yet its exports to China and India jumped 7.9 and 7.5 times, and imports 4.2 and 6.3 times, respectively. In contrast, its intra-ASEAN exports (imports) less than tripled, while trade with Japan hardly doubled; similarly so with the EU, and trade with the United States grew even less. In simple terms, if the ASEAN’s growth of exports and imports with the world is used as a benchmark, then intra-ASEAN trade as well as trade with traditional partners have grown less than average, while trade with emerging markets, especially China and India, has surged. This is best reflected in the change of shares of these partners in ASEAN’s trade. The intra-ASEAN trade rose from around 20 percent to around 25 percent. The predominant proportion of trade and investment remains with the partners outside ASEAN. However, there has been significant reshuffling within those trade and investment flows: while the EU and the United States were the main partners in 2003 with shares in total ASEAN imports of around 17 percent each, followed by Japan with 12 percent, by 2013 this place was taken by China, which almost doubled its share to around 17 percent, while the share of the EU and the United States contracted to 12 percent and 10.6 percent, respectively, and that of Japan to 9.5 percent.<sup>3</sup>

While intra-ASEAN FDI net inflows increased to 17.5 percent of total in 2013, AMS still very much depend on inflows from outside the ASEAN region. In recent years, including in 2013 (the latest year available), over 82 percent of total FDI net inflow came from outside ASEAN but only 30.1 percent from the partners with whom AMS are negotiating RCEP. Thus while there was some change in FDI inflow patterns, it was not as stark as in merchandise trade. In 2013, the EU and Japan were still the main sources of FDI with shares of 22 percent and 18.7 percent, respectively, with China coming a distant third with 7.1 percent share. The share of the United States has dropped from 9.4 percent in 2011 to 3.1 percent in 2013, following downward trend in shares of trade in goods between the United States and AMS.<sup>4</sup> Collectively, AMS captured over one-quarter of all FDI inflows to ESCAP developing countries in 2013, and over a decade 2003–2013 they have increased their share in world FDI net inflows from 4.9 percent to 8.6 percent.<sup>5</sup> The FDI outflow of AMS is exhibiting even more dynamic growth: between 2003 and 2013 their share in world

outflows increased more than four times, from 0.96 percent to 4 percent, with Singapore and Malaysia, and in more recent years, Thailand ranked top three sources for FDI outflows. A significant portion of those flows ended in the ASEAN region itself.

### *Path of Internal Integration*

The process of internal economic integration started earnestly with the adoption of ASEAN Free Trade Area (AFTA) and Common External Preferential Tariff (CEPT) in 1992 and progressed to cover services trade and regulation through introduction of ASEAN Framework Agreement on Services (AFAS) in 1995. Liberalization of investments started around the same time with both regional process and introduction of bilateral investment treaties (BITs) between the AMS. Other areas important for integration were gradually introduced as separate areas under economic cooperation, including finance, energy, transport, and some individual economic sectors (tourism, agriculture, etc.). This process of widening the coverage of integration was intertwined with a process of expanding membership to so-called CLMV countries: Cambodia (1999), Lao PDR and Myanmar (1997), and Viet Nam (1995).

The first three Mutual Recognition Agreements (MRAs) to facilitate movements of skilled labor were introduced in 2005 and more professions were added in 2008. MRAs were also introduced for the purpose of addressing some nontariff barriers such as technical standards in specific sectors (e.g., MRA for electrical and electronic equipment, signed in 2002, or similar attempts in cosmetics and pharmaceutical sectors). Major jump-start to internal ASEAN integration appears to have happened in 2010 when, first, all tariffs under CEPT for more developed ASEAN (6) members were brought down to zero and then AFTA/CEPT were replaced with ASEAN Agreement on Trade in Goods (ATIGA).

ATIGA is one of few trade liberalization agreements with a comprehensive trade facilitation focus.<sup>6</sup> As empirical studies regularly find trade being more constrained with lack of facilitating measures rather than with high tariffs, cooperation and regional trade facilitation policies are necessary for enabling intra- and extra-ASEAN trade and improving competitiveness of ASEAN products and services in general. The year 2010 also saw changes in liberalization in services trade as AMS adopted an increase in equity to 70 percent for four services subsectors, and in 2013 this also applied to logistic services. Targets for 2015 include AEC, removal of tariffs in CLMV countries (apart from those on sensitive or exclusion list), and free trade and 70 percent ASEAN equity in all services. While these targets are expected to be met by the end of 2015, AMS, except Singapore, still remain relatively closed to services trade judged by a degree of restrictiveness for multilateral market access through the General Agreement on Trade in Services (GATS) commitments. While AMS are no exception when it comes to Mode 4 service supply where almost all WTO members exercise extreme control of

their markets, they are also on a defensive when it comes to other modes of supply over the sectors with GATS schedules. Based on the World Bank's Services Trade Restrictions Database, most AMS are assessed as having "restrictive" or "virtually closed" services trade regimes.<sup>7</sup> Irrespective of their autonomous systems in selected services sectors being more liberal (thus causing so-called water in service regulations), a rather protectionist stance in this sector remains a problem for the implementation of AEC as well as for negotiation of more comprehensive deals such as TPP or RCEP.

Notwithstanding a diverse progress in a number of individual areas of internal integration and cooperation, AMS succeeded in increasing values of intra-ASEAN trade and investment, and improved connectivity in areas of transport, ICT, energy, as well as people-to-people. As observed, these positive changes did not occur at the expense of ASEAN's cooperation and trade with the rest of the world. On the contrary, trade and investment transactions, and business connectivity with partners outside ASEAN, especially China and India, increased more than the intra-ASEAN ones.

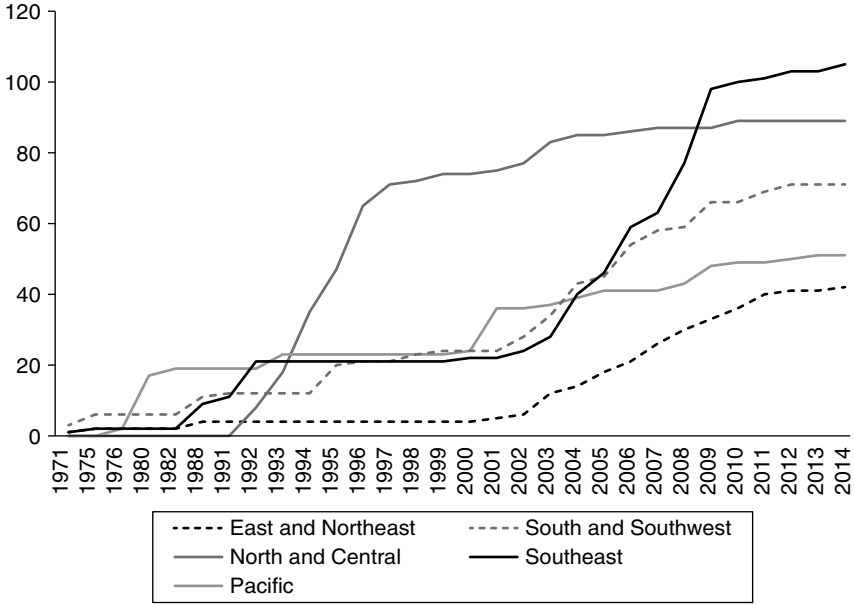
### *Looking Outward*

AMS have been playing an important role in the spread of various reciprocal trade agreements in Asia.<sup>8</sup> As can be observed in figure 3.1, up until the establishment of the WTO, AMS had concluded only few free trade agreements, including AFTA, and those among developing countries (such as GTPS). It was mostly Singapore who, after unilaterally having removed its applied most favored nation (MFN) tariffs to zero, ran ahead of other AMS, and Asian countries in general, in initiating the bilateral preferential liberalization, not only in trade in goods, but more so in trade in services and in investment. Singapore was joined by Thailand, Malaysia, and Brunei Darussalam in taking the whole group of Southeast Asian countries to the top position in the Asia-Pacific region in terms of a cumulative number of signed and notified FTAs (figure 3.1).

After China joined WTO in 2001, it turned to preferential liberalization, and its first regional trade agreement was with ASEAN in 2002. This also opened a floodgate for other countries in East Asia and elsewhere to approach ASEAN for the purpose of establishing larger areas for free trade and investment. Already established connections with global value chains (GVCs) and functioning production sharing in key sectors such as automobiles and electronics, as well as promise of large emerging market of ASEAN, implied that these agreements were better done with all AMS rather than one or few. This provided an impetus for negotiation of various ASEAN+1 agreements.

The AEC Blueprint with the inbuilt pillar 4 came in 2007 to reinforce these already started initiatives. Pillar 4 aims for a full integration of AMS in the global economy and specifies measures and actions for achieving this goal (section D, AEC Blueprint). Admittedly, compared to number of measures listed under pillars 1 and 2, AEC's pillar 4 falls a little flat comprising





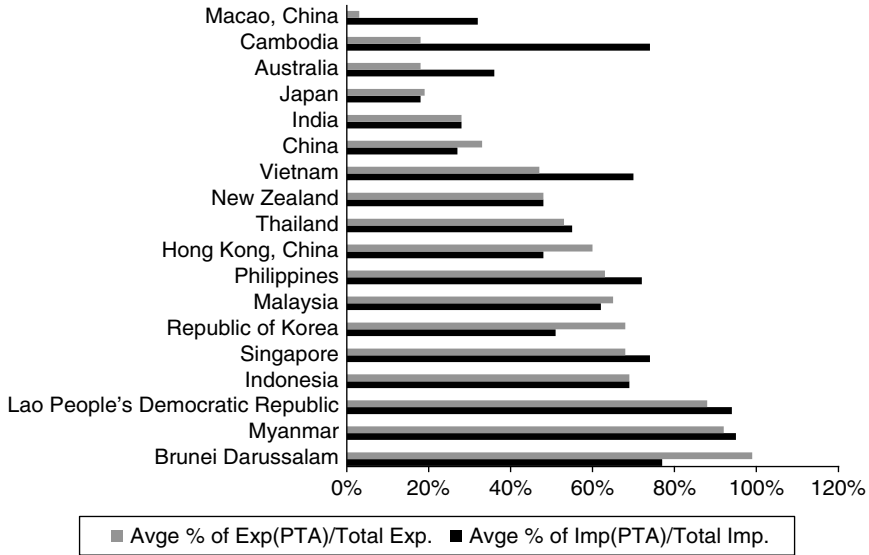
**Figure 3.1** Cumulative number of preferential trade agreements (notified and non-notified to the WTO), by Asia-Pacific subregion, 1971–2014 (July).

Source: Based on data downloaded from WTO RTA database accessed in July 2014 at <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx>.

only eight requested actions over the 2008–2015 period. The pillar’s strategy is phrased as the “coherent approach towards external economic relations and enhanced participation in Global Supply Networks.” The measures range from a review of commitments entered into through trade and partnership agreements with third partners with respect to internal integration commitments, to actions requesting identification of a coherent technical assistance framework to assist weaker regions within ASEAN, and enable them to become (more effective) part of regional and global economies (in particular, Global Production Sharing). The action planned for the 2014–2015 implementation period referred to achieving consistency in ASEAN trade and partnership agreements vis-à-vis AEC commitments. It appears that drafters of the AEC Blueprint had a perfect foresight as indeed between the time of issuing the blueprint and 2015, AMS have amassed large number of agreements creating a noodle bowl effect with a possible upward pressure on transaction (trade) costs for producers and traders (EIU, 2014; but for somewhat different views, see Kawai and Wignaraja [2009]) and with controversial information on the use of FTAs by businesses.

**Features of Current Regionalism**

One of the problems many countries face, including some AMS, relates to a relatively low share of trade with partners in the FTAs in a country’s



**Figure 3.2** Share of exports and imports with FTA partners in countries' total trade.

*Source:* Calculated based on data available in APTIAD, 2014: [http://artnet.unescap.org/APTIAD/agg\\_db.aspx](http://artnet.unescap.org/APTIAD/agg_db.aspx).

total trade. Figure 3.2 shows how much of exports and imports of AMS is captured by trading partners with whom these AMS have FTAs or Comprehensive Economic Partnership Agreements (CEPAs) in place. On one extreme of the range is Japan with less than 20 percent of its exports and imports done with partners (indicating that lack of FTAs between Japan and East Asian countries, as well as the United States, might be seriously reducing trade opportunities) to Myanmar, which does more than 90 percent of its exports and imports with its FTA partners (dominantly with Thailand through AFTA/ATIGA and other partners in ASEAN+1 deals since Myanmar has no bilateral FTAs).

There is no correlation between the number of FTAs to which a country is a signatory and its share of trade that is attributed to those agreements. For example, the Lao PDR's nine FTAs currently in force capture a much larger share of its trade than Singapore's 21 trade agreements. Another example is India, which is a member of the same number of FTAs as Malaysia (14), but which has a significantly lower trade share attributable to its FTA partner countries. Therefore, what is important is identifying how business and economic current and potential linkages are placed, and then trying to deepen those through FTAs. This also explains why many countries continue to depend on trade with non-FTA countries, such as Japan and the United States, Australia and the EU. It also shows why similar linkages established through global value chains and other business and investment deals will often determine trade flows over and above the directions envisaged under signed FTAs.

Another feature of the multiple FTAs, as indicated, is a possibility of increasing transaction costs and lowering utilization rate of FTAs. The precise measurements of utilization of negotiated preferential terms of trade, mostly tariffs, by traders (firms) are not readily available. The most reliable source of data needed to calculate utilization rates would be customs authorities in each country. Often however these are not available and analysts undertake so-called perception surveys of firms/traders to gauge effects of multiple FTA including diverse and complex Rules of Origin (RoO)<sup>9</sup> on the utility of FTAs. The already mentioned survey done by the EIU (2014) found very modest utilization of FTAs under implementation of AMS and partners. The survey included eight economies (all but Hong Kong, China associated with ASEAN, or ASEAN+1 deals)<sup>10</sup> and found that enterprises report using only 26 percent of FTA preferences. The average utilization rate of the ASEAN FTAs by the AMS was 50 percent, which is almost double of 29 percent found as the utilization rate of FTA with ASEAN for the economies outside the bloc (i.e., Australia, India, China and Hong Kong, China). This survey also found that bilateral FTAs (between individual countries) get even lower usage rate of 19 percent. This is somewhat in contrast with the findings of Tambunan (2015) who cites that for the micro- and SMEs the utilization of ASEAN-wide FTAs appears to be less than for bilateral FTAs initiated by individual AMS. He attributed it to bilateral trading partners negotiating deeper market access concessions than the more limited ASEAN-wide FTAs.

ESCAP (2011, p. 120) provided a rough calculation of “additional costs imposed through overlapping and complex RoO to range between 3% of the value of the export for companies of developing countries, to 8% or higher in some lower income countries.” Much literature has been pointing to a possibility of the “noodle bowl” or “spaghetti bowl” causing this effect by introducing complex layers of multiple RoO in place of relatively simple terms of multilateral WTO agreements. For the FTAs to be useful, they must provide margin of preference large enough to cover the cost of compliance (which normally are highest for the technical requirements and the lowest for the simple change in tariff classification; see more details in Carrere and de Melo [2004]). Margin of preference in case of ASEAN-wide FTAs is a mere 1.58 percentage points, which could explain relatively low enthusiasm on part of traders to use the FTAs.

Yet despite criticism and skepticism in a more traditional literature on regionalism (for instance, by Jagdish Bhagwati), negotiators and policy-makers showed no reservations in making new deals. Compared to the overall Asia-Pacific regionalism landscape involving 155 enforced agreements (as of July 2015), the “ASEAN+” trade agreements’ architecture appears to be less complex. Nevertheless, it already comprises five signed “ASEAN+1” free trade agreements, one ASEAN+3 agreement that has been under discussion for some time, one three-party free trade agreement under consideration/negotiation (China-Japan-Republic of Korea), and Regional Comprehensive Economic Partnership (ASEAN+6) under

negotiation. Moreover, there are another 23 bilateral trade agreements of variable depth among these 16 countries negotiating RCEP already under implementation. To make things even more complicated, 7 out of 16 RCEP-negotiating countries are also engaged with a remaining 5 countries in the negotiation of the TPP agreement. All but ASEAN LDCs and India would end up negotiating the APEC-driven FTAAP if and when it is decided to proceed with it.

## Regional Comprehensive Economic Partnership

Early in the process of pursuing AEC, AMS have already been engaged in a variety of trade (and investment) arrangements with a large number of partners, some of which are dominant trading forces at the global level, and it became clear that this may impact the path to AEC and its operations. Thus pillar 4 of the AEC sought to improve coherence of various existing agreements. It also clearly asked for an ASEAN centrality while encouraging individual AMS to integrate deeper and more extensively into the global economy and value chains. In that context, a pursuit of further integration with partners in the ASEAN+1 agreements (China, Japan, Republic of Korea, India, Australia, and New Zealand) through the RCEP presented itself as a path toward seeking a necessary consolidation of existing ASEAN's trade agreements.

The ASEAN Framework on RCEP was adopted in November 2011. The Guiding Principles and Objectives for Negotiating the Regional Comprehensive Economic Partnership (ASEAN, 2012) were adopted by the ministers on August 30, 2012, and subsequently endorsed by the leaders when they launched the RCEP negotiations at the sidelines of the twenty-first ASEAN Summit on November 20, 2012. According to the Joint Declaration on the Launch of Negotiations for the RCEP, leaders declared their commitment to commence RCEP negotiations to achieve “a modern, comprehensive, high quality and mutually beneficial economic partnership agreement” in early 2013 and aim to complete them by the end of 2015 based on the guiding principles. The first round of negotiations was held on May 9–13, 2013, in Brunei Darussalam. So far nine rounds have been completed, the ninth one in August 2015.

### *Coverage of RCEP*

RCEP negotiations are expected to cover a range of trade, investment, and related issues. The guiding principles (ASEAN, 2012) specify that the negotiation will include the following areas: goods, trade in services, investment, economic and technical cooperation, intellectual property, competition, dispute settlement, and other issues. The summary is provided in table 3.1.

RCEP intends to have broader and deeper engagement with significant improvements over the existing ASEAN+1 free trade agreements, while recognizing the individual and diverse circumstances of the participating

**Table 3.1** Possible areas of negotiations under RCEP

<i>Sectors</i>	<i>Measures</i>
Trade in goods	<ul style="list-style-type: none"> <li>• Market access</li> <li>• Rules of origin</li> <li>• Customs procedures and trade facilitation</li> <li>• Trade remedies</li> <li>• Sanitary and phytosanitary measures</li> <li>• Standards, Technical Regulation, and Conformity Assessment Procedure (STRACAP, i.e., technical barriers to trade)</li> </ul>
Trade in services	Development of transparent rules to facilitate expansion of trade in services, including increased market access
Investment	Development of transparent rules to facilitate and protect investors and investments and to reduce barriers to investment
Competition	<ul style="list-style-type: none"> <li>• Promotion of competition</li> <li>• Economic efficiency</li> <li>• Consumer welfare</li> <li>• Curtailment of anticompetitive practices and enforcement of intellectual property rights</li> </ul>
Intellectual property	Promoting economic integration and cooperation in the utilization, protection, and enforcement of intellectual property rights
Economic and technical cooperation	Including electronic commerce
Dispute settlement and institutional issues	<ul style="list-style-type: none"> <li>• Provide an effective, efficient, and transparent process for consultations and dispute resolution</li> <li>• Institutional provisions</li> </ul>
Other trade rules	<ul style="list-style-type: none"> <li>• Government procurement;</li> <li>• Small and medium enterprises</li> <li>• Trade and labor</li> <li>• Trade and environment</li> </ul>

*Source:* Author's compilation.

countries. Their objective is to achieve a modern, comprehensive, high-quality, and mutually beneficial economic partnership agreement covering a wide range of trade-related issues (cf. Wignaraja, 2013).

### *Scope for Tariff Liberalization*

Existing FTAs—alongside unilateral and multilateral liberalization—have already significantly reduced tariff rates among the countries negotiating RCEP. Currently, applied tariff rates among RCEP economies are at 8.66 percent (Tran and Heal, 2014). RCEP could therefore generate significant benefits from tariff liberalization. Furthermore, there are concealed tariff spikes on sensitive products such as agricultural goods. Removing distortions in markets of these products by negotiating concessions without using sensitive lists would bring most benefits, yet it might be the most contentious areas of negotiations causing delays. Furthermore, a particular

challenge will be unifying different tariff reduction rates and coverage of goods under the existing ASEAN+1 FTAs.

### *Nontariff Barriers*

While tariffs have lost their protectionist bite, nontariff barriers (NTBs) have emerged as a serious trade impediment. In the AEC, the NTBs were supposed to be eliminated by 2010, except for the Philippines (by 2012) and for CLMV (by 2015, with flexibility of extension to 2018 for some products). In reality it is difficult to identify all the NTBs and their impact on intra-ASEAN trade for each country, given the fact that work on ASEAN Non-tariff Measures Database, which was meant to produce an inventory of all nontariff measures (NTMs), especially those that act as trade barriers, is progressing very slowly.

Furthermore, nontariff measures, such as technical barriers to trade, have increasingly moved to center stage in recent trade agreements. As average tariffs have generally fallen, nontariff measures now often present greater barriers to trade. RCEP will contain provisions on NTMs. However, there is often a gap between commitments and implementation in NTM reduction. To the extent that the RCEP model replicates the underperformance of ASEAN in effectively reducing NTMs, it is unlikely to deliver very substantial gains.

Another difficulty akin to NTBs faced by RCEP would be in a form of existing RoO and the need to harmonize them. ASEAN+6 existing deals might involve at least 22 different types of RoOs with many product-specific rules (Menon, 2014). It may thus be difficult for countries to compromise on a single set of RoOs that can effectively replace existing ones. In such an outcome, the RCEP's RoOs could simply add further complexity to the system.

### *Potential for Services Trade and Investment Liberalization*

As discussed earlier in the chapter, the average level of services trade restrictiveness among RCEP economies is relatively high compared to other countries. While this indicates there is greater scope for services liberalization under RCEP, expectations are not high that RCEP will produce substantial progress. Services trade in RCEP is likely to be based on the ASEAN Framework Agreement of Services (AFAS), and the three ASEAN+1 FTAs that have chapters on services trade (AANZFTA, ACFTA, and AKFTA) as well as relevant provisions under the AEC (Das, 2014). These are widely regarded not to have generated much liberalization beyond countries' existing WTO commitments under GATS. Domestic political barriers are likely to pose an obstacle to significant movement on, for instance, foreign equity participation, land ownership, and cross-border movements of professionals.

The highly problematic area in the first pillar of AEC is the enforcement of the agreements related to liberalization of trade in services and the

mobility of skilled labor. In general, trade in services has been less liberalized than trade in goods. Although the ASEAN ministers declared 2015 as the end date for liberalization of all services sectors, the liberalization of services for AEC means removing all limitations for Mode 1 (cross-border supply) and Mode 2 (consumption abroad) but only progressive liberalization for Mode 3 (commercial presence) and Mode 4 (movement of natural persons). Mode 3 liberalization envisions only a maximum of 70 percent of ASEAN equity share while Mode 4 liberalization is confined to movement of professionals only. However, there are preagreed flexibilities that imply some subsectors are excluded from liberalization in all the four modes of supply. Moreover, implementation of agreements is still an issue as, in practice, domestic restrictions on equity, landholdings, and licensing requirements continue to pose significant barriers to intraregional investment in services and mobility of skilled labor.

## Examining the Impacts of RCEP on Other Asian Economies

The traditional way to examine the impacts of an FTA is to look at trade creation and trade diversion effects.<sup>11</sup> Trade creation is understood as an increase in trade as a result of a member country replacing previous domestic production with imports from another member country, which then has its exports boosted up. Both imports and exports are done on cost efficiency basis, and therefore they have a potential to expand consumption frontier in both countries. There is no direct impact on countries that are not party to the agreement because prior the agreement protectionism prevented trade.

In contrast, trade diversion exists when a member country replaces an import sourced prior to the existence of the agreement from a country that is not a party of the agreement with an import from a partner country after the agreement is put in place. The change—a switch from an efficient supplier (a third country) to an inefficient supplier (a member country)—reduces efficiency in allocation of resources across both countries. The importing country loses in terms of sourcing from a less efficient supply and also through a loss of tariff revenue. The bottom line of trade creation cum trade diversion analysis is that there is a possibility that countries might lose from engaging in an FTA. According to Jacob Viner, who developed this theory, there is no a priori knowledge on the end result and only after an FTA is signed and implemented can one know the actual impacts. Moreover, there is a real loss of exports for the country outside the agreement, which for some small and low income countries might be detrimental to their development prospects.

The problem in applying this rather clear and simple analysis is that in reality countries have, as we have seen, not only agreements that cover

many more areas on top of tariff cuts for trade in goods, but also they have multiple overlapping agreements with both, countries that are parties to a new agreement and those that are remaining outside it.








Figure 3.3 illustrates this situation. A total of 16 RCEP negotiating parties at present share 23 bilateral FTAs in force and some are finalized to be signed/implemented while a number is under negotiations or study. This means that trade diversion impact on the third countries might not be felt so strongly; they will depend on the depth of tariff cuts between parties in the existing deals and in the future ones. As long as the new agreement is not more liberalizing, the impact on the third parties might be negligible, except of course when a new agreement is rather more comprehensive and offers many more areas of liberalization and cooperation. In that context an effect of trade reversal—the recovery of trade diversion, according to Deardorff (2013), could happen.

Thus, in examining the potential impacts of RCEP, one needs to consider both the current web of bilateral and other FTAs (figure 3.3) and trade flows that exists among the countries in order to gauge trade creation and trade diversion effects.

The economies in Asia and the Pacific that are excluded from RCEP are mostly concentrated in North and Central Asia, South Asia, and the Pacific, and all of them have maintained their trade and investment relationships with outside the region, in particular the United States and the EU. As discussed in many ESCAP's reports, trade and investment flows across the Asian continent are very fragmented and in fact the only country that is systematically increasing its share in other countries' trade and investment is China. For example, intraregional trade of the South Asian subregion, with India being the largest economy and trader there, has yet to cross the 5 percent mark. While some small countries, for example, Bhutan or Nepal, are very much dependent on trade with India, in general the larger economies in the subregion have weak trade and investment linkages with the rest of Asia, and are instead directed toward China, to a lesser degree Japan and Republic of Korea. Since all those already have ASEAN+1 FTAs, and some other FTAs with individual AMS, a completion of RCEP is not expected to introduce much disruption in current trade and investment flows. As discussed, impact will depend on (i) differential margin of preferences, and (ii) other areas of liberalization/regulation. The instrumental role will be played by NTBs, liberalization in services sector, and introduction of new regulation on competition and investment. In principle, the deeper liberalization is agreed under RCEP, *ceteris paribus*, more trade diversion might occur for the countries that are not directly involved with RCEP (e.g., Pakistan or Sri Lanka). However, such deep liberalization in RCEP will also trigger trade reversion that was potentially lost from partners among ASEAN+6 as some of them might have better quality deals with the countries outside the group (e.g., with the EU or the United States).



	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	Australia	China	India	Japan	N.Zealand	ROK
Brunei	x															
Cambodia	x															
Indonesia		x														
Lao PDR			x													
Malaysia				x												
Myanmar					x											
Philippines						x										
Singapore							x									
Thailand								x								
Viet Nam									x							
Australia										x						
China											x					
India												x				
Japan													x			
N.Zealand														x		
ROK															x	

- Legend:
-  ASEAN
  -  ASEAN+1 agreements
  -  Plurilateral agreements (APTA and Trans-Pacific Partnership Agreement -P4) involving ASEAN and Dialogue partners
  -  BTA in force (on top of ASEAN, ASEAN+1 agreements)
  -  BTA under negotiations between Dialogue partners and ASEAN members
  -  BTA signed but not in force
  -  BTA under negotiations between Dialogue partners

**Figure 3.3** Existing and planned FTAs among RCEP negotiating parties.  
*Source:* Compiled by author.

In this context it is also important to know under which circumstances the agreement would be open for accession by the third parties, because in a situation where one country suspect high trade diversion, it might reverse them by joining the agreement given that open accession is part of the final text. Last, the impacts on trade and investment flows from RCEP on other countries will also depend on the existence of any competing negotiations that may affect the path and impact of the RCEP negotiations and/or cause change in trade flows and patters

#### *Open Accession Clause and S&DT*

The Guiding Principles (ASEAN, 2012) stipulate conditions that are very important when considering the impact of the third parties as well as the members negotiating RCEP. It says: “Any ASEAN FTA Partner that did not participate in the RCEP negotiations at the outset would be allowed to join the negotiations, subject to terms and conditions that would be agreed with all other participating countries. The RCEP agreement will also have an open accession clause to enable the participation of any ASEAN FTA partner that did not participate in the RCEP negotiations and any other external economic partners after the completion of the RCEP negotiations.” This in principle means that the key feature of ASEAN regionalism, that is, open regionalism, will remain protected and that countries that may be left outside the negotiating process might be allowed in at a later stage.

There are three LDCs among ASEAN members, and they retain special and differential treatment in the RCEP negotiations as the guiding principles stipulate that the priority will be attached to early tariff elimination on products of interest to the least developed ASEAN member states.

While those two principles work in the interest of broadening and deepening of the liberalization and impact of integration, there are contrasted by the principle not allowing the rationalization of the FTA despite very obvious demonstration of the need to do so. The principle says: “The ASEAN+1 FTAs and the bilateral/plurilateral FTAs between and among participating countries will continue to exist and no provision in the RCEP agreement will detract from the terms and conditions in these bilateral/plurilateral FTAs between and among the participating countries.” It is not clear why this principle was added as it directly reduces the benefits that the rationalization of FTAs would bring to both less and more advanced members.

#### *Mega-regionals’ Competition*

In terms of the competition with other regional blocs, so-called mega-blocs or mega-regionals there are two contenders, one under negotiations already, Transpacific Partnership (agreement), and the other being considered as a driver of APEC-led integration and proposed at the 2014 APEC Summit, FTAAP. Literature defines “mega-blocs” as group of countries with combined GDP of at least a trillion dollars, comprising economies that are in the top largest economies in the world either in terms of GDP or aggregate exports. Population is also relevant as it adds to the purchasing power of

**Table 3.2** Economic size of mega-regionals

	<i>TPP</i>	<i>RCEP</i>	<i>FTAAP</i>
Number of economies involved	12	16	21
Population (millions)	802	3,430	2,783
Aggregate share of world GDP (%)	38	29	58
Aggregate share of world exports (%)	24	30	46
Trade dependence (%)			
Number of bilateral agreements among the negotiating parties already in implementation	25	23	51

*Source:* Calculated based on data from ESCAP online Statistics, APTIAD, and World Development Indicators.

the economy (Clarette, 2014). Table 3.2 provides a comparison of economic size of these three blocs. The RCEP market accounts for about 30 percent of world GDP and exports and 49 percent of the world's population. If negotiated successfully, RCEP would create the most extensive trading bloc in the world and would have significant implications as an ASEAN-centered regional free trade initiative. On the other hand, it will still be the most trade dependent than FTAP or TPP. TPP, while largest in terms of the share in the world GDP of 60 percent, accounts for only 40 percent of the world population and 33 percent of exports. FTAAP, with the largest number of countries, but excluding India, still features as the super mega-bloc.

RCEP has an ambition of evolving into a high-standard (so-called next generation) trade agreement. In addition to establishing a free trade among these countries, negotiators will have to pursue a long list of other issues, both goods trade-related and in other areas. The reasons for this are based from empirically tested trade theory predictions that (i) tariffs-only based liberalization is the least beneficial and that in turn nontariff liberalization brings much greater benefits, and that (ii) gains are larger for smaller countries that have lower productivity and higher trade protection prior to liberalization. The rationale to include at least all six ASEAN dialogue partners in these negotiations is also consistent with repeatedly proven empirical findings of gains from trade liberalization being larger the larger is the number of countries involved, with the maximum total benefits obtained when there is the global free trade.

One study puts the global income gains by 2025 from RCEP at \$644 billion, and that one from TPP at \$223 billion (Petri et al., 2014). The larger gains associated with RCEP derive mainly from assumptions of increased trade among the large ASEAN+6 partners, that is, Japan, China, and India, because there is no agreement at present involving all three of them, rather than from greater trade with the ASEAN-10 economies, or between them and the six (see figure 3.3).

It will not be easy to realize these benefits. First, negotiators from large countries may find it difficult to respect the central role of ASEAN in RCEP. Second, there is a risk that the RCEP can only achieve limited trade and investment liberalization if parties with different levels of development and

interests negotiate exclusions to protect sensitive sectors. Third, the RCEP will need to improve its coverage of new trade issues such as competition policy, environment, and labor standards. These problems are increasingly being addressed by the most comprehensive trade agreements in Asia and internationally. Fourth, there is a risk that firms, particularly small and medium sized enterprises, may underuse the RCEP due to a limited understanding of its legal provisions. Fifth, many countries will find it difficult to pay for physical infrastructure and improve trade facilitation so goods and services can be transported smoothly across RCEP member countries. Sixth, it is possible that the RCEP and other mega-regional FTAs may exacerbate the divergence between regional and WTO trade rules. The WTO could become less relevant to global trade governance.

## Conclusion

The fourth pillar of full integration into the global economy focuses on a coherent approach toward external relations and enhanced participation in global value chains. Significant participation in GVCs by major ASEAN countries has been observed. However, there is a large gap between major ASEAN countries and CLMV though Viet Nam has been rapidly catching up. Cambodia has participated mainly in the GVCs of apparel and footwear. Lao PDR and Myanmar are lagging behind due to their exports consisting of mainly primary inputs.

Many new and overlapping economic cooperation arrangements in the Asia-Pacific region are also posing a major challenge to the private sector as well as policy implementers. The “noodle bowl” phenomenon has already reached an alarming level in the region, making trade costlier rather than cheaper—thus opposing the basic objective of a FTA—and business difficult for small and medium-sized firms. It was also pointed out earlier by the ESCAP (2012) that, once it is implemented, RCEP should consolidate all existing ASEAN+1 framework. If, however, the other bilateral and ASEAN+1 agreements remain in force, it would add to the complexities rather than easing trade and trade disputes. Consolidation of existing agreements into one overall agreement would allow manufacturers in the RCEP region to cumulate with 15 other countries and enhance opportunities for regional supply chains, rather than undertake trading on a bilateral basis. The ultimate goal should be one integrated Asia; however, this may challenge the central role of ASEAN in the region.

The RCEP is less ambitious than the TPP or some bilateral FTAs and the prospect of development assistance for adjustment means developing countries will find it easier to join. However, RCEP, along with the TPP, will influence the emerging regional trade architecture toward achieving a free trade area of the Asia and the Pacific.

Provided that meaningful content can be agreed on, the size of the economies engaged in those mega-trade negotiations guarantees that outside

countries will also be strongly impacted. There will be direct, first-order trade-deviation effects on exports and imports of goods and services, as countries not part of the negotiations will face preferences acquired by beneficiaries inside agreements. Furthermore, there will be second-order effects derived from subsequent competitiveness changes in those countries inside agreements, as they will more readily attract investment and technology flows.

On the coherence of ASEAN's external relations, the reality is that each ASEAN country has been active in initiating bilateral FTAs, and has a different stance regarding external relations, including the decision to join deep integration agreements such as the Trans-Pacific Partnership. However, there is a recent effort to restore the centrality of ASEAN by pursuing RCEP, but this will happen only if it is used to streamline and harmonize provisions in the existing network of ASEAN-plus FTAs. However, the RCEP is presaged to be willing to recognize countries at different levels of development. The RCEP based on existing ASEAN-plus FTAs implies that RCEP might have a significant level of flexibility regarding product inclusions and the level of commitment.

Furthermore, institutional strengthening of ASEAN (Secretariat) is necessary, to be able to not only promote, but also monitor and enforce the implementation of the AEC. This institutional strengthening applies in particular to the ASEAN Secretariat being able to coordinate actions and policies of its member states in external economic relations, especially with respect to consolidation of bilateral trade agreements.

## Notes

1. An interesting take on the relevance of the Scorecard results is given by Jennifer Lo in her text "What's the score?" contributed to *China Daily Asia* on January 30, 2015.
2. All data is from the UN Comtrade downloaded using World Integrated trade Solution (WITS) on April 13, 2015.
3. Trade data on commercial services would reflect a much more significant role of the EU and the United States, but because there are no comprehensive bilateral trade flows data on commercial services, the coverage in the chapter is limited to merchandise trade.
4. ASEANStats database accessed on April 26, 2015, from <http://www.asean.org/news/item/foreign-direct-investment-statistics>.
5. Based on ESCAP Online Statistics, accessed on April 26, 2015.
6. See more details in Duval (2011).
7. See also Fukunaga and Isono (2013).
8. While academic literature is more akin to using a term "preferential trade agreements" as an umbrella term covering various types of these deals, practitioners are more in favor of using "free trade agreements" or "regional trade agreements." Negotiators increasingly prefer to engage in (comprehensive) partnership agreements. On the other hand, WTO disciplines still refer only to free trade agreements (FTAs) and customs unions, although in the notification process one can use terms

- such as “partial scope agreements” and “economic integration agreements.” In this chapter, to reduce confusion and remain true to terms chosen by countries themselves, we will use (as synonyms) free trade agreements and regional trade agreements (RTAs) and when appropriate comprehensive [economic] partnership agreements (C[E]PA).
9. Rules of Origin (RoOs) help determine whether traded products are eligible for preferential treatment under an FTA. While they serve to promote production and trade of original goods among FTA members, the existence of multiple overlapping RoOs under different FTAs can create “noodle bowl” effects that pose difficulties for businesses and lower the numbers of firms utilizing available preferences.
  10. The economies were Australia, China, India, Indonesia, Malaysia, Singapore, Vietnam and Hong Kong, China. For details see EIU (2014).
  11. This section leans on the approach used in Deardorff (2013).

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## Southeast Asian Countries in Global Production Networks

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Cross-border dispersion of different stages/slices of the production processes within vertically integrated global industries, which we label “global production sharing”<sup>1</sup> in this chapter, has been a key structural change in the global economy in recent decades (Jones and Kierzkowski, 2001; Helpman, 2011). This process of international division of labor opens up opportunities for countries to specialize in different slices (tasks) of the production process in line with their relative cost advantages. Trade based on global production sharing, that is, trade in parts and components, and final assembly traded within global production networks, has been the prime mover of the dramatic shift in manufacturing exports from developed to developing countries (Krugman, 2008). Given this structural shift in trade patterns, the conventional approach to analyzing export performance, which treats international trade as an exchange of good produced from beginning to end in a given trading partner, is rapidly losing its relevance.

The purpose of this chapter is to examine emerging patterns of global production sharing and its implications for regional and global economic integration in light of the experiences of countries in Southeast Asia. Southeast Asia provides an ideal laboratory for studying this subject given the pivotal role played by this phenomenon in global economic integration of these countries in general and the notable intercountry differences in terms of the timing of their involvements. Contrary to the view that shifting production bases within vertically integrated global industries to developing countries (the so-called second unbundling) began in the mid-1980s (Baldwin, 2014, p. 214), the Southeast Asian economies, led by Singapore and Malaysia, have been major and successful participants in global production networks since the early 1970s. “Network products” (parts and components, and final assembly traded within production networks) now constitute almost two-thirds of the merchandise exports of Singapore,



Malaysia, and the Philippines, almost half those of Thailand, and a smaller but still significant share for Indonesia. From a small and recent base, they are growing rapidly in Viet Nam, while beginning in 2012 Cambodia has begun to participate in global production networks on a modest scale.

In order to assess the magnitude and nature of fragmentation trade, it is necessary to separate parts and components from final (assembled) products in reported trade data. We do this through a careful disaggregation of five-digit level data based on the Revision 3 of the Standard International Trade Classification (SITC, Rev 3) of the United Nation trade data reporting system. The data are for the period from 1992, when almost all countries reporting to the UN trade system had adopted the revised reporting system, to 2012, the most recent year for which data are available for all reporting countries.

The chapter begins with a historical overview of the Southeast Asia's engagement in global production sharing. The next section examines the nature and extent of network trade and the role of the Southeast Asian countries in this new global division of labor. The following section discusses the geographic profile of Southeast Asian trade with emphasis on the implications of global production sharing for the debates on regional versus global integration. In this section, particular emphasis is placed on the implications of global production sharing for the policy debate on the formation of a Southeast-Asia centered mega trading bloc (the Regional Comprehensive Economic Partnership [RCEP]) as proposed at the 2011 Annual Summit of the Association of Southeast Asian Nations (ASEAN). The procedure followed in delineating network trade from the standard customs record based national trade data as reported in the UN Comtrade database and methodological issues related to estimating the impact of global production sharing on trade patterns are discussed in the appendix.

## Brief History

Southeast Asia's engagement in global production sharing dates back to 1968 when two US-based electronics companies, National Semiconductors and Texas Instruments, set up production bases in Singapore for assembling semiconductor devices (Lee, 2000). By the early 1970s Singapore had become the largest source country for imports of semiconductor devices to the United States, accounting for nearly 25 percent of total imports of this product (Grunwald and Flamm, 1985). Within the next five years, a number of other US electronics firms and their counterparts in Europe and Japan started assembly operations in the country.

From about 1972 the Singapore-based MNEs began to relocate some low-end assembly activities in Malaysia, Thailand, and the Philippines in response to rapid growth of wages and land prices. Many newcomer MNEs to the region also set up production bases in these countries bypassing Singapore. By the late 1980s, this process had created a new regional

division of labor, based on skill differences involved in different stages of the production process and relative wages, and improved communication and transport infrastructure. At the time, there was a widespread concern in policy circles in Singapore that the regional spread of MNE operations in electronics industry could be at the expense of Singapore. However, the subsequent developments vividly demonstrated that “the larger the scale and scope of electronic industry [which produces a wide range of heterogeneous end products, each of which needs a large number of equally heterogeneous components in its manufacture] in Southeast Asia, the greater the economies of scale and more the opportunities for specialisation for all participating countries” (Goh, 1990).

From about the mid-1980s, semiconductor assembly declined in relative importance, and computer peripherals, especially hard disk drives and computers, became the more important parts of Singapore’s electronic industry. By the late 1980s, Singapore was the world’s largest exporter of hard disk drives, accounting for almost half of world production (McKendrick et al., 2000). As is the case with semiconductor assembly, these new product lines soon became parts of regional production networks encompassing Malaysia, Thailand, and the Philippines.

Over the past two decades Southeast Asian’s involvement in international production networks have gradually evolved and spread to many industries such as sport footwear, automobile, televisions and radio receivers, sewing machines, office equipment, electrical machinery machine tools, cameras, watches, light emitting diodes (LED), solar panel, and surgical and medical devices. Over the years Singapore’s role in regional production networks has gradually shifted from low-skill component assembly and testing to component design and fabrication, and providing headquarter services for production units located in the neighboring countries (Wong, 2007).

Until about the early 1990s, Southeast Asian countries’ engagement in global production sharing was predominantly a two-way exchange with the home countries of MNEs: parts and components assembled were exported to the home country to be incorporated in final products. As regional supply networks of parts and components became firmly established, MNEs began to move final assembly of an increasingly broad range of electronics and electrical goods (such as computers, cameras, TV sets, and motor cars) to Southeast Asian locations. This process intensified following the rapid appreciation of the yen after the Plaza Accord in 1985, which propelled Japanese MNEs in electronics and electrical goods industries to relocate assembly plants in Southeast Asia to maintain their international competitiveness.

In recent years, the Southeast Asian production networks have begun to spread to Viet Nam and Cambodia. Following those countries’ adoption of market-oriented policy reforms starting in the late 1980s, a number of Korean, Taiwanese, and Japanese firms set up assembly plants in Viet Nam. However, these early ventures were predominantly of the conventional

import-substitution variety, with few links to the global production networks of the parent companies. From about the late 1990s parts and components assembly within regional production networks began to emerge with the involvement of small- and medium-scale investors from Taiwan province of China and the Republic of Korea. During the next one-and-a-half decades, the only major global player to set up an assembly plant in Viet Nam was Hitachi of Japan.

A major breakthrough occurred with the decision in February 2006 by Intel Corporation, the world's largest semiconductor producer, to set up a \$300 million testing and assembly plant (subsequently revised to \$1 billion) in Ho Chi Minh City (Athukorala and Tien, 2012). Following Intel's footsteps, a number of other major players in the electronics industry have already come to Viet Nam. These include the Taiwanese-based Hon Hai Precision Industry and Compact Electronics (the world's largest and second-largest electronics contract manufacturers) and Nidec Corporation, a Japanese manufacturer of hard disk drive motors and electrical and optical components. In 2009, Samsung Electronics set up a large plant in Hanoi to assemble handheld products (HHPs) such as smartphones and tablets. Over the past four years, Samsung has been gradually shifting HHP assembly from its plant in China to its Viet Nam plant as part of a diversification strategy in response to increasing wages and rental costs in China.

There are also early signs of regional production networks expanding to Cambodia. In 2011, Minebea, a large Japanese MNE, which produces a wide range of parts and components for the automotive and electronics industries, set up a plant (Minebea Cambodia) in the Phnom Penh Special Economic Zone to assemble parts for cellular phones using components imported from its factories in Thailand, Malaysia, and China. Other MNEs that have set up assembly plant in Cambodia include Sumitomo Corporation, Japan (wiring harnesses for cars); Denso, Japan (motorcycle ignition components); Pactics, Belgium (sleeves for sunglasses made by premier eyewear companies); Tiffany & Company, USA (diamond polishing); and Hyundai, which recently set up a plant to assemble cars for exporting to the EU countries under the "GSP-plus" tariff concessions. As of 2014, there are signs that a number of other Japanese companies, which have production based in China and Thailand, are planning to relocate some segments of their production processes to Cambodia. Rising wages and rental costs in China and Thailand, and production disruption caused by floods in Thailand in 2011 seems to have contributed to Cambodia's attractiveness as a new host country within regional production networks (Hill and Menon, 2013; Abe, 2014).

Despite obvious advantages in terms of its location and relative wages, Indonesia has remained a small player in regional production networks. Fairchild and National Semiconductor, which had already established production bases in Singapore in the early 1970s, set up assembly plants in Indonesia in the mid-1970s. Both these firms terminated operations in 1986, presumably because of the unfavorable business environment, in particular

labor market rigidities that hinder restructuring operations in line with global changes in the semiconductor industry (Thee and Pangestu, 1998; Manning and Purnagunawan, 2011). Since then, major MNEs involved in global production sharing have continued to shun Indonesia as production location. Indonesia's engagement in regional production networks has so far been limited only to some low-end assembly activities undertaken mostly by Singaporean subcontracting companies in the Batam free trade zone (Kumar, 1994).

The continued attraction of the region (with the exception of Indonesia) as a location of assembly activities seems to have underpinned by a number of factors. First, despite rapid growth, manufacturing wages in all ASEAN countries except Singapore still remain lower than or comparable to those in countries in the European periphery and Mexico and other Latin American countries (table 4.1). Moreover, significant differences in wages among the countries within the East Asia region have provided the basis for rapid expansion of intraregional product sharing systems, giving rise to increased cross-border trade in parts and components.

Second, the relative factor cost advantage has been supplemented by relatively more favorable trade and investment policy regimes, and better

**Table 4.1** Average annual compensation per production worker (\$US per year)

	1988	1995	2000	2009
Portugal	10407	19572	16795	31745
Spain	25267	38742	32695	48512
Ireland	22578	30974	32391	56576
Poland	—	—	10487	13402
Czech Republic	—	—	7454	13113
Hungary	—	—	9342	16740
Turkey	8333	16606	21493	30297
Argentina	10050	29898	32700	18963
Brazil	11296	23116	19142	18315
Mexico	5400	8809	11527	14809
Costa Rica	—	—	11377	15312
China	—	—	7180	9275
Hong Kong	8009	10315	14282	10405
South Korea	8153	25484	28347	40592
Taiwan	9793	22908	25313	28919
Indonesia	6727	5876	3893	4374
Malaysia	4971	6677	7957	18696
Philippines	3955	6814	7716	7100
Singapore	10200	18647	24477	29717
Thailand	5000	6045	6081	7763
India	3762	4579	6813	9277

*Notes:* The data relate to majority-owned manufacturing subsidiaries of US multinational enterprises operating in each country. Salary/wage plus other remuneration.

*Source:* Compiled from the US Bureau of Economic Analysis (BEA) online database of the Survey of US Direct Investment Abroad ([http://www.bea.gov/scb/account\\_articles/international/iidguide.htm#link123b](http://www.bea.gov/scb/account_articles/international/iidguide.htm#link123b)).

trade-related infrastructure (ports and communication systems) (Athukorala and Hill, 2010). This has facilitated cross-border production sharing among these countries by reducing the cost of maintaining “service links” (Jones and Kierzkowski, 2001) within production networks. Efficient and speedy services links are vital for the smooth functioning of production networks and are a key determinant of scale economies in global production sharing.

Third, as firstcomers in this area of international specialization, Southeast countries (in particular Malaysia, Singapore, and Thailand) seem to offer considerable agglomeration advantages for companies that are already located there. The presence of other key market players in a given country or neighboring countries strongly influences site selection decisions of MNEs operating in assembly activities. Against the backdrop of a long period of successful operation in the region, many MNEs (particularly US-based MNEs) have assigned global production responsibilities to affiliates located in Singapore and more recently also to those located in Malaysia and Thailand (Amano, 2010; Athukorala, 2014; Kohpaiboon and Jongwanich, 2013; Wong, 2007). In sum, the ASEAN experience seems to support the view that MNE affiliates have a tendency to become increasingly embedded in host countries the longer they are present there and the more conducive the overall investment climate of the host country becomes over time (Rangan and Lawrence, 1999). At the formative stage of MNE entry into regional production, there was a general perception that these firms would soon prove to be “fly-by-night” operators. The developments over the past four decades clearly indicate that most MNEs have established deep roots in the region, contrary to the general perception that MNEs engaged in global production sharing are “fly-by-night” operators.

### *Trade Patterns*

Rapid export growth of Southeast Asia, in place since 1970s, has been underpinned by a profound shift in its export structure away from primary commodities and toward manufactures.<sup>2</sup> The share of manufacturing in total nonoil exports from Southeast Asia stood at 72 percent by 2011–2012, up from a mere 11 percent four decades ago. Among individual countries, the manufacturing share is still significantly lower than the regional average in Indonesia (54 percent), Viet Nam (67 percent), and smaller Indochina economies (58 percent), reflecting both the nature of resource endowment and their later adoption of export-oriented industrialization strategies. However, the rapid increase in the share of manufacturing is a common phenomenon observable across all countries in the region. Participation in global production sharing has played a pivotal role in this structural transformation in trade patterns in the region.

Global production sharing has resulted in the palpable structural shift in manufacturing trade away from mature industrial economies toward developing countries, and in particular countries in East Asia (table 4.2). The

**Table 4.2** Source-country composition of world manufacturing exports, 1992–2003 and 2011–2012 (%)

	1992–1993				2011–2012			
	Total manufacturing	Parts & components	Final assembly	Total Network trade	Total manufacturing	Parts & components	Final assembly	Total Network trade
Developing East Asia	18.4	16.6	22.5	18.8	32.5	39.5	50.9	43.8
China	2.7	1.1	1.9	1.4	16.8	15.2	25.6	19.1
Hong Kong	4.5	3.6	5.6	4.4	3.3	4.9	3.4	4.3
Korea	2.9	2.5	3.9	3.0	4.1	5.2	9.4	6.8
Taiwan	3.1	1.9	5.7	3.3	3.0	3.3	8.1	5.1
Southeast Asia	5.2	7.5	5.4	6.7	5.3	10.9	4.5	8.4
Indonesia	0.7	0.1	0.2	0.2	0.6	0.4	0.5	0.5
Malaysia	1.1	1.9	1.5	1.8	1.1	2.4	0.6	1.7
Philippines	0.2	0.2	0.1	0.2	0.4	0.7	0.3	0.6
Singapore	2.1	3.8	2.8	3.4	1.9	5.4	1.4	3.9
Thailand	1.1	1.3	0.9	1.2	1.3	1.9	1.7	1.8
Vietnam	—	—	—	—	0.3	0.2	0.1	0.2
India	0.6	0.1	0.2	0.1	1.8	0.7	1.1	0.9
Developing countries	22.1	19.4	26.1	22.0	38.2	44.6	59.8	50.3
Developed countries	77.9	80.6	73.9	78.0	61.8	55.4	40.2	49.7
Total	100	100	100	100	100	100	100	100
US\$ billion	2,567.2	754.4	462.6	1,216.9	10,004.3	2,924.0	1,788.3	4,712.3

Source: Data compiled from UN Comtrade database.

share of developing countries in total world network trade (parts and components, and final assembly) increased from 22.0 percent to 50.3 between 1992–2003 and 2009–2010, with the share of developing East Asia (DEA)<sup>3</sup> increasing even faster, from 18.8 percent to 43.8 percent. Within East Asia, Southeast Asia's share in world network trade increased from 6.7 percent to 8.4 percent during this period. At the individual country level, all major Southeast Asian countries, with the exception of Singapore, have shown an increase in their export market shares. For all Southeast Asian countries, the world market share in network products is significantly higher than that in total manufacturing, reflecting the importance of global production sharing for the export dynamism of these countries.

Table 4.3 presents comparative statistics on the share of network trade in total manufacturing exports and imports at the country and country group levels. It is evident that the share of network trade is much higher in DEAs than in all other regions of the world. In 2011–2012, exports within production networks accounted for 63.2 percent of total manufacturing exports in DEAs, compared to the world average of 47.1 percent. Within East Asia, Southeast Asian countries stand out for their heavy dependence on network trade. These products accounted for 71.5 percent of total manufacturing exports of these countries in 2011–2012, up from 56.8 percent in the early 1990s. Malaysia, Singapore, and the Philippines figure prominently for their heavy dependence on network trade compared to the other countries in the region. Internal country differences in the relative importance of network-related products on the import side closely mirror those on the export side. This is understandable because specialization within global production is essentially a two-way exchange, and countries specialize in a particular segment/task of the production chain.

When total network exports are disaggregated into parts and components (henceforth referred to as components for brevity) and final assembly, countries in Southeast Asia stand out from the rest of East Asia for the degree of component intensity of their trade flows within global production networks (table 4.3). Components accounted for 73.4 percent of total network exports of Southeast Asia in 2011–2012, up from 40 percent in 1992–1993. The comparable figures for DEA for the two time points are 39 percent and 49 percent, respectively. This comparison clearly points to the growing importance of Southeast Asian countries as suppliers of components to final assembly activities within China-dominated regional production networks. Disaggregated data (not reported here owing to space limitations) show that in 2011–2012, over 22 percent of component imports to China originated in Southeast Asia, up from 12 percent in 1992–1993. The share of components in total manufacturing exports to China from Southeast Asia increased from 38 percent to 62 percent between 1992–1993 and 2009–2010.

The commodity composition of network exports from Southeast Asia is compared with global patterns in table 4.4. The data clearly point to the heavy concentration of network exports from Southeast Asia in electronics

**Table 4.3** Share of network products in manufacturing trade, 1992–1993 and 2011–2012 (%)

	1992–1993			2011–2012		
	<i>Parts and components</i>	<i>Final assembly</i>	<i>Total network products</i>	<i>Parts and components</i>	<i>Final assembly</i>	<i>Total network products</i>
<i>(a) Exports</i>						
Developing East Asia	17.3	21.8	39.1	31.0	32.2	63.2
China + Hong Kong	7.4	13.7	21.1	20.5	36.8	57.3
Taiwan	24.7	17.6	42.3	36.7	43.1	79.8
South Korea	18.1	22.2	40.3	37.0	41.2	78.2
Southeast Asia	22.7	34.1	56.8	52.5	19.6	71.5
Indonesia	3.8	5.6	9.3	20.1	13.2	33.3
Malaysia	27.7	40.7	68.4	63.5	9.8	73.2
Philippines	32.9	20.5	53.4	62.0	14.3	76.3
Singapore	29.0	45.9	74.9	81.9	12.7	94.6
Thailand	14.1	29.0	43.1	46.9	22.8	69.7
Vietnam	—	—	—	20.1	10.3	30.5
India	3.0	3.4	6.4	11.6	11.3	22.9
Developed countries	20.4	28.5	48.9	25.2	23.6	48.8
Developing countries	14.6	21.8	36.4	34.1	28	62.0
World	19.3	26.3	45.5	29.2	17.9	47.1
<i>(b) Imports</i>						
Developing East Asia	29.0	16.7	45.8	44.4	17.2	61.6
China	20.4	14.0	34.4	41.4	22.1	63.5
Taiwan	29.5	18.0	47.5	35.8	22.1	57.9
South Korea	30.1	14.6	44.7	36.5	13.1	49.6
Southeast Asia	36.0	18.4	54.4	47.3	16.3	63.6
Indonesia	27.0	9.2	36.1	23.2	33.8	57.0
Malaysia	40.5	20.2	60.7	55.3	18.1	73.4
Philippines	32.6	15.0	47.6	67.2	16.5	83.7
Singapore	39.9	21.9	61.8	52.1	27.1	79.2
Thailand	30.6	15.6	46.2	42.1	7.8	49.9
Vietnam	—	—	—	20.1	9.6	29.7
India	17.5	10.6	28.1	23.2	18.2	41.4
Developing countries	11.9		40.4	33.4	20.1	53.5
Developed countries	22.6	25.2	47.8	24.2	28.2	52.4
World	19.6		45.7	28.1	24.2	52.3

Note: “—” denotes data not available.

Source: Compiled from UN Comtrade database.

and electrical goods (SITC 75, 76, and 77), in particular, semiconductor devices compared to total world network exports. Automobiles and other transport equipment account for only 9 percent of Southeast Asian exports, compared to a global average of 30 percent. At the individual country level, the composition of network exports from Thailand is much more diversified compared to the other countries. Thailand’s commodity composition is also much more in line with overall global patterns, with automobiles accounting for a much larger share compared to electronics. The striking difference between Thailand and Malaysia relating to the relative importance of



**Table 4.4** Composition of networks exports, 2011–2012 (%)<sup>a</sup>

	Office machines and automatic data processing machines		Telecom and sound recording equipment		Electrical machinery excluding semiconductors		Semi conductors <sup>b</sup>		Road vehicles	Other transport equipment	Professional and scientific equipment	Photographic apparatus and optical goods, watches and clocks		Total	
	(75)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)
East Asia	19.1	18.8	14.4	17.3	7.8	6.2	5.5	2.1	8.8	100					
Chian	24.9	22.9	16.2	7.8	6.1	5.4	5.3	1.5	9.9	100					
Hong Kong	17.7	25.8	17.4	25.1	0.6	0.2	3.4	5.0	4.9	100					
Korea, Rp	4.5	12.9	9.9	14.9	20.1	17.5	10.8	1.5	7.8	100					
Southeast Asia	17.5	10.1	30.9	10.5	10.4	5.0	5.6	2.5	7.5	100					
Indonesia	11.3	22.7	24.3	4.7	15.2	6.6	1.2	1.0	13.0	100					
Malaysia	23.0	14.6	11.9	36.2	1.8	1.5	5.3	1.2	4.5	100					
Philippines	25.7	3.0	14.3	42.7	7.1	2.3	0.9	2.2	1.8	100					
Singapore	15.1	6.2	8.7	44.6	2.3	4.7	4.3	1.6	12.5	100					
Thailand	21.4	10.5	15.1	11.4	22.4	2.8	2.1	3.2	11.2	100					
Vietnam	15.6	33.4	19.6	4.0	5.3	4.2	2.1	4.0	11.8	100					
India	1.9	10.9	14.1	1.9	26.3	22.0	3.0	1.0	18.8	100					
Developing countries	17.2	18.3	14.5	15.0	11.8	6.1	5.4	1.9	9.8	100					
World	10.9	12.1	13.8	9.2	21.8	6.6	6.5	2.2	16.9	100					

Notes:

<sup>a</sup> Standard International Trade Classification (SITC) codes are given in brackets.

<sup>b</sup> These two categories contain parts and components only.

Source: Compiled from UN Comtrade database.

automobiles within global production networks is particularly noteworthy. It clearly reflects the contrasting policies of the two countries relating to the domestic automobile industry (Athukorala and Kohpaiboon, 2010). At the individual country level, the degree of concentration in electrical machinery was particularly higher for Malaysia and the Philippines.

When China began to emerge as a major trading nation in late 1980s, there was a growing concern in policy circles in Southeast Asia, and in other Asian countries, that competition from China could crowd out their export opportunities. The rapid increase in China's world market share in these product lines, coupled with some anecdotal evidence of MNEs operating in Southeast Asian countries relocating to China, led to serious concern about possible erosion of the role of Southeast Asian countries in global production networks. These concerns gained added impetus from China's subsequent accession to the WTO, which not only provided China with most favored nation (MFN) status in major markets but also enhanced China's attractiveness to export-oriented investment by reducing the country risk of investment (Athukorala, 2009).

As we have noted, there has been a significant contraction in final assembly of consumer electronics and electrical goods exported from Southeast Asia as an outcome of competitive pressures from China.<sup>4</sup> However, this structural shift has not resulted in a "hollowing out" of production bases in Southeast Asia. On the contrary, the past two decades have seen a close complementarity between China and Southeast Asian countries within global production networks, for three reasons. This is because expansion in final assembly in China has created new demand for components assembled in Southeast Asia. Benefitting from this, electronics firms involved in component design, assembly, and testing in Southeast Asian countries restructured their operations by moving into high-value tasks in the value chain. The deep-rooted nature of their production bases and the pool of skilled workers developed over the past three decades have added this process of division of labor between China and Southeast Asia within global production networks.

### *Geographic Profile of Network Trade*

As mentioned before, at the early stage of Southeast Asia's engagement in global production sharing, the assembly activities were based on a two-way exchange with the home countries of MNEs involved. Thus, there was a clear developed-country bias in the geographic profile of the regions manufacturing trade driven by global production sharing. However, over the years, the geographic profile has shifted toward East Asia as regional production networks have expanded to encompass an increasing number of countries, and, in particular, the emergence of China as the premier assembly center within global production networks. Between 1992–1993 and 2011–2012 the share of Southeast Asian manufacturing exports destined to the East Asian markets (including Southeast Asia) increased from 51.2 percent to

63.5 percent, accompanied by a decline in the share accounted for by the traditional North American and European markets, from 38.3 percent to 25.5 percent. The share of exports to China in total exports soared from 8.5 percent to 19.0 percent.

However, caution is required when treating these figures as indicators of change over time in the relative importance of regional (East Asian) and extraregional markets for the growth dynamism of Southeast Asian countries. The increase in exports to China and the other East Asian countries has largely been the direct outcome of rapid integration of these countries as components suppliers within the rapidly expanding China-centered regional production networks. Components account for over two-thirds of Southeast Asia's intra-East Asian trade. The expansion of component trade depends inexorably on demand for final goods, and extraregional markets still account for the bulk of final goods exported from these countries.<sup>5</sup>

This caveat about the use of readily available trade data for analyzing regional versus global integration of the countries in East Asia is directly relevant for the contemporary debate on forming the Regional Comprehensive Economic Partnership (RCEP). In the rest of this section we, therefore, examine the implications of the ongoing process of economic integration in the region driven by global production sharing for the likely outcome of RCEP.

A distinguishing feature of the Southeast Asian approach to economic liberalization during the last three decades of the twentieth century was that it occurred predominantly on a unilateral and multilateral basis. In a significant departure from this nondiscriminatory policy posture, in the first decade of the New Millennium, these countries joined the global rush to signing free trade agreements (FTAs) (Ravenhill, 2014). The proliferation of FTAs has, however, given rise to concerns in recent years that the overlapping and complex web of FTAs, the so-called Asian FTA noodle bowl, may run counter to the original expectation of promoting trade and investment. There is evidence that actual rate of utilization of trade preferences offered by the FTAs are dismally low because of the stringent and complex rules of origin (RoOs)<sup>6</sup> and that the administrative discretion involved in the application of RoOs distorts trade patterns. Consequently, there has been a new emphasis in the trade policy debate in the region on the consolidation of multiple FTAs into a regionwide FTA. At its 2011 Annual Summit, the Association of Southeast Asian Nations adopted guiding principles and a negotiation time table for amalgamating the six "ASEAN+1 FTAs", and other bilateral FTAs involving individual ASEAN member countries, to form a consolidated trading bloc called the Regional Comprehensive Economic Partnership (RCEP). The stated aim is to form this mega trading agreement involving the 16 member countries by 2015.

It is widely held in the debate on the formation of RCEP that Southeast Asia and East Asia have become increasingly economically integrated over the years through the rapid expansion of manufacturing trade, reducing its dependence for economic dynamism on the rest of the world. This view is

rooted in the “standard” trade data analysis, which is based on the conventional notion of horizontal specialization that trade takes place in goods that are produced from start to finish in a given country. It has largely ignored the ongoing process of global production sharing and the resulting trade complementarities among countries at the global level. As we have already observed components are now exchanged across borders of the countries in the region at a faster rate than final goods. Conventional trade flow analysis can yield an unbiased picture of regional economic integration only if component trade and final trade follow the same geographic patterns. If component trade has a distinct intraregional bias, as one would reasonably anticipate in the context of growing network trade in the region, then the conventional trade flow analysis is bound to yield a misleading picture in regards to the relative importance of intraregional trade versus global trade for growth dynamism in the region. This is because growth based on assembly activities depends on the demand for final goods, which in turn depends largely on extraregional demand. The degree of understatement of the importance of extraregional demand is likely to increase over time as more complex production networks are created with an ever-increasing number of interacting countries.

Parts and components account for a much larger share in intraregional trade of these countries compared to their shares in world trade and trade with EU and NAFTA (table 4.5). In 2011–2012, parts and components accounted for nearly 60 percent of intraregional exports in RCEP compared 23.4 percent in total world exports of these countries. The pattern of component intensity of intraregional trade is strikingly similar in exports and imports, reflecting the growing importance of cross-border trade in parts and components among countries within regional production networks and the region’s reliance on the rest of the world as a market for final goods. The conventional trade-flow analysis, which does not distinguish between components and final goods, is, therefore, bound to yield a misleading picture regarding the relative importance of intraregional trade compared to global trade for growth dynamism in East Asia.

To illustrate this point, intraregional trade shares estimated using “reported” (standard) trade data, as well as trade data after netting out parts and components, are reported in table 4.5. The table covers trade in Asia, RCEP, and two subregions therein, which relate to contemporary Asian policy debates on regional economic integration. Data for NAFTA and EU-15 are reported for comparative purposes. Estimates are given for total trade (imports + exports) as well as for exports and imports separately in order to illustrate possible asymmetries in trade patterns resulting from Asia’s increased engagement in fragmentation-based international exchange.

Trade patterns depicted by the “reported” trade data affirm the prevailing perception that RCEP countries, in particular East Asian countries, have become increasingly integrated through merchandise trade. In 2011–2012, intraregional trade accounted for 58.2 percent of total manufacturing

**Table 4.5** Share of parts and components in bilateral trade flows, 2011–2012 (%)

<i>Reporting country</i>	<i>Destination</i>				
	<i>Southeast Asia<sup>b</sup></i>	<i>RCEP</i>	<i>NAFTA</i>	<i>EU15</i>	<i>World</i>
<i>(a) Exports<sup>a</sup></i>					
East Asia (EA)	55.5	58.6	25.1	24.2	35.1
Japan	47.9	41.5	31.5	31.0	35.1
Developing East Asia (DEA)	65.2	52.1	22.7	21.5	34.0
China (PRC)	48.7	45.2	17.1	16.2	25.5
Korea	63.7	67.8	36.6	25.7	43.8
Taiwan	61.2	62.3	35.0	38.2	44.2
ASEAN10	56.0	68.2	32.1	33.8	44.3
NAFTA	67.9	46.5	28.8	30.5	32.3
EU15	46.5	31.5	22.1	22.5	23.4
<i>(b) Imports<sup>a</sup></i>					
East Asia (EA)	68.3	61.7	54.7	33.4	42.3
Japan	44.9	34.2	41.0	19.2	20.1
Developing East Asia (DEA)	74.3	63.5	40.3	32.6	44.3
China (PRC)	74.0	58.2	40.1	31.5	44.2
Korea	55.7	34.0	38.9	22.9	31.9
Taiwan	68.8	46.7	40.2	28.2	38.6
ASEAN10	66.8	63.3	67.5	41.5	48.8
NAFTA	40.5	28.4	36.3	26.1	29.2
EU15	37.9	26.0	34.1	22.2	23.5

*Notes:*

<sup>a</sup> Intra-regional trade shares exclude bilateral flows between China and Hong Kong. EU15: 15 member countries of the European Union; NAFTA: countries in the North American Free Trade Agreement (United States, Canada, and Mexico); RCEP: countries in the Regional Comprehensive Economic Partnership initiated by ASEAN.

<sup>b</sup> Covers only the six main Southeast Asian countries.

*Source:* Compiled from UN Comtrade database, and Trade Data CD-ROM, Council for Economic Planning and Development, Taipei (for data on Taiwan).

trade of RCEP countries, up from 53.2 percent in 1992–1993. The level of intraregional trade in RCEP in 2011–2012 was much higher than that of NAFTA (38.4 percent) and comparable to that of EU-15 (57.5 percent). For developing East Asia (Asia excluding Japan) and ASEAN the ratios are lower than the aggregate regional figure, but they have increased at a much faster rate. The intraregional trade share of ASEAN has been much lower compared to the other two subregions.

However the picture changes significantly when components are netted out: the intra-RCEP share in final trade in 2011–2012 was 38.4 percent, which was only marginally higher compared to 1992–1993 (35.3 percent) (see table 4.6). The estimates based on unadjusted data and data on final trade are also vastly different for Developing East Asia and ASEAN. Both the level of trade in the two given years and the change over time in intraregional trade shares are significantly lower for estimates based on final trade. Interestingly, we do not observe such a difference in estimates for NAFTA and EU.

**Table 4.6** Intraregional shares of manufacturing trade: Total, parts and components, and final trade, 1992–1993 and 2011–2012 (%)<sup>a</sup>

	<i>Southeast Asia</i>	<i>RCEP</i>	<i>NAFTA</i>	<i>EU15</i>
<i>(a) Total trade</i>				
Exports				
1992–1993	20.7	47.2	44.4	61.2
2011–2012	18.2	48.2	48.1	56.8
Imports				
1992–1993	15.5	58.2	36.3	64.1
2011–2012	20.8	66.5	32.0	57.8
Trade (exports + imports)				
1992–1993	17.8	53.2	39.9	62.6
2011–2012	20.3	56.8	38.4	57.5
<i>(b) Parts and components</i>				
Exports				
1992–1993	30.3	50.2	43.5	62.3
2011–2012	25.2	62.2	46.9	55.9
Imports				
1992–1993	20.2	65.9	39.5	58.0
2011–2012	23.1	67.8	39.9	55.2
Trade				
1992–1993	24.1	57.0	41.4	60.1
2011–2012	23.4	64.0	43.2	55.5
<i>(c) Final goods<sup>b</sup></i>				
Exports				
1992–1993	16.1	36.2	44.7	60.9
2011–2012	15.9	37.4	48.7	57.0
Imports				
1992–1993	12.9	33.2	35.3	65.6
2011–2012	21.2	39.2	40.3	58.5
Trade				
1992–1993	14.3	35.3	39.4	63.3
2011–2012	18.3	38.4	42.1	57.3

*Notes:*

<sup>a</sup> Intraregional trade shares exclude bilateral flows between China and Hong Kong. EU15: 15 member countries of the European Union; NAFTA: countries in the North American Free Trade Agreement (USA, Canada and Mexico); RCEP: countries in the Regional Comprehensive Economic Partnership initiated by ASEAN.

<sup>b</sup> Covers only the six main Southeast Asian countries.

*Source:* Compiled from UN Comtrade database, and Trade Data CD-ROM, Council for Economic Planning and Development, Taipei (for data on Taiwan).

The intraregional shares calculated separately for imports and exports clearly show a notable asymmetry in the degree of regional trade integration in East Asia. Unlike in the EU and NAFTA, in Asia and RCEP the increase over time in the intraregional trade ratio (both measured using unadjusted data and data for final trade) has emanated largely from the rapid increase in intraregional imports; the expansion in intraregional exports has been consistently slower. The dependence of RCEP countries (and the country subgroups therein) on extraregional markets (in particular those

in NAFTA and EU) for export-led growth is far greater than is revealed by the standard intraregional trade ratios commonly used in the debate on regional economic integration. For instance, in 2011–2012, only 48.2 percent of total RCEP manufacturing exports was absorbed within the region, compared to an intraregional share of 66.5 percent in total manufacturing imports. This asymmetry is also clearly seen for the developing East Asian countries and ASEAN.

This asymmetry in intraregional trade in RCEP reflects the unique nature of the involvement of Japan and the PRC in regional production networks. From about the late 1980s, Japan's manufacturing trade relations with the rest of East Asia have been predominantly in the form of using the region as an assembly base for meeting demand in the region and, more importantly, for exporting to the rest of the world. The emergence of the PRC as a leading assembly center within regional production networks since the early 1990s further amplified this trade asymmetry. That is, the PRC is importing parts and components from the other East Asia countries to assemble final products, which are predominantly destined for markets in the rest of the world (Athukorala, 2009).

Interestingly, the degree of the asymmetry between intraregional shares of import and exports is much smaller when parts and components are netted out. This is understandable given the multiple border-crossing of parts and components within regional production networks. Both the level of trade in the given years and the change over time in intraregional trade shares are significantly lower for estimates based on final trade. Interestingly, we do not observe such a difference in estimates for NAFTA and the EU.

What are the implications of these findings for the contemporary policy debate on the formation of RCEP? In particular, is the newfound fondness of countries in the region for RCEP consistent with the objective of maximizing gains from the ongoing process of international product fragmentation? Our analysis vividly demonstrates that even though the intraregional trade in expanding extraregional trade is much more important for continued growth dynamism in Asia global trade also remains important for growth dynamism. In particular, growth based on assembly activities in the region depends on the demand for final goods, which is largely contingent on the extraregional growth. This dependence has in fact increased over the years. The rising importance of global production sharing seems to have strengthened, rather than weakened, East Asia's link with the wider global economy.

## Concluding Remarks

Global production sharing has become an integral part of the economic landscape of Southeast Asia. Trade in parts and components, and final assembly, within production networks have been expanding more rapidly than conventional final goods trade. A highly important recent development

in the international fragmentation of production has been the rapid integration of China into the regional production networks. China's imports of components from the other developing East Asian countries and Japan have grown rapidly, in line with the rapid expansion of manufacturing exports from China to extraregional markets, mostly to North America and the European Union.

Booming networks have resulted in a rapid increase in Southeast Asia's trade with countries in East Asia. This does not mean that the process has contributed to lessening the region's dependence on the global economy. On the contrary, the region's growth dynamism based on vertical specialization is deeply dependent on its extraregional trade in final goods, and this dependence has in fact *increased* over the years. Put simply, increased participation in global production sharing has made Asia increasingly dependent on extraregional trade for its growth dynamism. Policy initiatives in the domain of intraregional trade integration run the risk of hindering the growth dynamism of these countries, unless this new dimension of global integration is not specifically taken into account. In sum, the evidence harnessed in this chapter supports the view that, in a context where global production sharing is becoming the symbol of economic globalization, the standard trade flow analysis leads to misleading inferences about the patterns and degree of trade integration among nations.

To benefit from the new opportunities for trade expansion through global production sharing, the best policy choice appears to be nondiscriminatory multilateral and unilateral liberalization; the ongoing process of product fragmentation seems to have strengthened the case for a global, rather than a regional, approach to trade and investment policymaking. An effective approach to redressing the complexity that the "noodle bowl" of FTAs creates for international trade would involve a two-pronged strategy of systematically fitting the FTAs into the WTO system, and reducing the distortionary preference margins created by the web of FTAs through multilateral tariff reductions. The indications are that the proposed RCEP is bound to fall well short of achieving this objective.



# Appendix

## Data Source and Method of Data Compilation

Following the seminal paper by Yeats (2001), it has become common practice to use data on trade in parts and components extracted from the US trade data reporting system to measure the intensity and patterns of fragmentation-based specialization. However, parts and components are only one facet of network trade. As already noted, there has been a remarkable expansion of network activities from pure component production and assembly to final assembly. Moreover, the relative importance of these two tasks varies among countries and over time in a given country, making it problematic to use data on the parts and components trade as a general indicator of the trends and evolving patterns of network trade over time and across countries. In this chapter we define network trade to incorporate both parts and components and final assembly.

The data used in this section for all countries other than Taiwan are compiled from the United Nation's *Comtrade* Database, based on Revision 3 of the Standard International Trade Classification (SITC Rev. 3). Data for Taiwan Province of China are obtained from the trade database (based on the same classification system) of the Council for Economic Planning and Development, Taipei.

Parts and components are delineated from the reported trade data using a list compiled by mapping parts and components in the UN Broad Economic Classification (BEC) with the Harmonize System (HS) of trade classification at the six-digit level. The product list of the World Trade Organization (WTO) Information Technology Agreement Information gathered from firm-level surveys conducted in Thailand and Malaysia were used to fill gaps in the BEC list of parts and components. Data compiled at the HS six-digit level were converted to the Standard International Trade Classification (SITC) (based on the SITC Revision 3) using the UN HS-SITC concordance for the final analysis.<sup>7</sup> It is important to note that *parts and components*, as defined here, are only a subset of *intermediate goods*, even though the two terms have been widely used interchangeably in the recent literature on global production sharing. Parts and components are inputs further along the production chain. Parts and components, unlike the standard

intermediate inputs, such as iron and steel, industrial chemicals, and coal, are “relationship- specific” intermediate inputs; in most cases they do not have reference prices, and are not sold on exchanges and are more demanding on the contractual environment (Nunn, 2007). Most (if not all) of the parts and components do not have a “commercial life” of their own unless are embodied in a final product.

There is no hard and fast rule applicable to distinguishing between parts/components and assembled products in international trade data. The only practical way of doing this is to focus on the specific product categories in which network trade is heavily concentrated. Once these product categories are identified, trade in final assembly can be approximately estimated as the difference between parts and components—directly identified based on our list—and recorded trade in these product categories.

Guided by the available literature on production sharing,<sup>8</sup> we identified six product categories: office machines and automatic data processing machines (SITC 75), telecommunication and sound recording equipment (SITC 76), electrical machinery (SITC 77), road vehicles (SITC 78), professional and scientific equipment (SITC 87), and photographic apparatus (SITC 88). It is quite reasonable to assume that these product categories contain virtually no products produced from start to finish in a given country. However, admittedly, the estimates based on this list do not provide full coverage of final assembly in world trade. For instance, outsourcing of final assembly does take place in various miscellaneous product categories such as clothing, furniture, sporting goods, and leather products. It is not possible to meaningfully delineate parts and components and assembled goods in reported trade in these product categories because they contain a significant (yet unknown) share of horizontal trade.

Although SITC Rev 3 was introduced in the mid-1980s, a close examination of country-level data shows that data-recording system in many countries has considerable gaps in the coverage of parts and component trade until about 1990. We, therefore, use 1992 as the starting years of data disaggregation for the intercountry comparison of trade based on global production sharing.

A number of recent studies have trade patterns using “avenue added” trade data derived by combining the standard (customs record based) trade data with national input-output tables. Quite apart from formidable data issues involved, this approach is not relevant for the present study, which aims to examine the patterns and determinants of production-sharing-driven trade flows.

Differences between gross and value-added exports are relevant *only* for analyzing *bilateral* trade imbalances. Bilateral trade imbalances of course have implications for the global trade policy debate. (In fact, this is the reason why Pascal Lamy took the lead in setting up the OECD/WTO TiVD project.) But, from the development policy point of view, what is important for understanding a country’s engagement in global value chain is gross trade, separated into parts and components (*not* intermediate goods in the

conventional sense) and final trade (trade in final assembly). Under global production sharing, a country specializes in a given slice (task) in the production chain, depending on the relative cost advantage and the other factors, which determine its attractiveness as a production location. Trade policy (and public policy in general) has the potential to influence only on a country's engagement in a given slice (parts and component assembly/production and/or final assembly) of the value chain. Domestic value addition evolves over time as the country is well integrated in the value chain.

## Notes

1. The alternative terms used in the recent international trade literature include global production sharing, international production fragmentation, intraprocess trade, vertical specialization, slicing the value chain, and offshoring.
2. The data used in this section is from the United Nation's *Comtrade* Database, based on Revision 3 of the Standard International Trade Classification (SITC Rev. 3). In order to minimize the effect of possible random shocks and measurement errors, two-year averages are used in intertemporal comparison throughout this section.
3. DEA refers to East Asia excluding Japan.
4. Final assembly is generally more labor intensive than component assembly, production, and testing.
5. This was vividly illustrated by the behavior of trade flows following the onset of the global financial crisis (GFC). All major economies in Southeast and East Asia, including China, experienced a precipitous trade contraction for over six quarters from about the last quarter of 2008 (Athukorala and Kohpaiboon, 2012, Table 4).
6. The utilization rates of tariff concessions provided under the existing FTAs range from about 5 percent to 20 percent across different product categories (Ravenhill, 2014; Athukorala and Kohpaiboon, 2012).
7. For details on the method of classification and the list of parts and components, see Athukorala (2011).
8. See Krugman (2008) and the works cited therein.

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## Impact of Monetary Regime and Exchange Rates on ASEAN Economic Integration

*Nabil Aflouk, Jacques Mazier, and Myoung Keun On*

### Introduction

The ASEAN countries have experimented contrasted exchange rate regimes since the 1990s. The Asian crisis of 1997 has shown the limits of a simple dollar-peg policy without formal institutions. During the 2000s much effort has been devoted to improving monetary and financial cooperation at the regional level, especially with the Chiang Mai initiative and the Asian Bond market. But results have been limited, mainly due to political issues with the underlying competition between China and Japan. The financial crisis of 2008 has given new interest to the question of monetary cooperation at the regional level. Due to the high degree of heterogeneity of East Asian countries, it appears necessary to preserve the possibility of exchange rate adjustments in a future exchange rate regime. Various forms of monetary regime have been proposed from the Asian Currency Unit (ACU) to the common currency basket or the yen block or the yuan block in a long-term perspective, with improvement at the level of institutional forms, such as an Asian Monetary Fund and Asian bond markets. However obstacles remain the same with a lack of political project and the will of China to preserve its autonomy. A long transition period with adjustable exchange rates regime, based on different types of institutions, might be the more likely, before, may be in the long term, the settlement of a yuan block, which does not mean a yuan zone.

The chapter is organized as follows. The first section analyzes the story of East Asian monetary cooperation since the 1990s. Using a Fundamental Equilibrium Exchange Rate (FEER) approach, exchange rate misalignments (ERMs) are estimated and linked to the external performances and growth of East Asian countries. It appears that exchange rate misalignments are more limited in the current period than in the 1990s, in clear contrast with

what is observed between European countries. The second section examines the economic consequences of alternative exchange rate regimes in East Asia using a four-country stock flow consistent (SFC) model of East Asia. The configuration of the 1990s and 2010s can be compared and alternative scenarios for the future of ASEAN integration are discussed.

## East Asian Monetary Regimes and Exchange Rate Misalignments

East Asian exchange rate arrangements covered and still cover a wide range of regimes from the dollar peg of the 1990s to the managed floating of Malaysia, Indonesia, and Thailand or the more freely floating of Japan and Korea. A large difference exists between a *de jure* regime and a *de facto* one. Vast literature has tried to build a *de facto* classification (IMF, 2008; Reinhart and Rogoff, 2004). The main conclusion is that East Asian countries have a preference for intermediate regimes with pragmatic inflexions in case of necessity. Indicators of divergence or convergence between East Asian currencies have also been proposed to enlighten the policies followed (Pontines, 2013).

In order to assess the exchange rate policies of the ASEAN countries since the 1990s, the concept of equilibrium exchange rate will be used as a reference in this chapter. It allows the estimation of exchange rate misalignments with periods of overvaluation or undervaluation. Various methodologies can be used (NATREX, BEER, FEER, ...). The FEER methodology is preferred because it is based on a structural model of each economy and allows a coherent estimation of these misalignments thanks to the use of a multinational model linking the main trade partners. Furthermore this approach relies on the concept of current account equilibrium, which is a good tool to highlight external performances of each East Asian country. A first paragraph summarizes the methodological background, a second presents the exchange rate misalignments and characterizes the main features of the exchange rate policies.

### *Methodological Background: A FEER Approach*

“Exchange rate misalignment” is defined as the gap, in percentage, between observed exchange rates and equilibrium exchange rates. The Fundamental Equilibrium Exchange Rate is the exchange rate prevailing when the economy simultaneously reaches the external equilibrium (a sustainable current account determined by structural parameters) and the internal equilibrium (full utilization of the productive potential). Its limited relations with the intertemporal optimizing literature are often criticized, but the FEER does not pretend to describe the modality of the return to the equilibrium. It searches only, for each period, to estimate the real misalignment induced by internal and external imbalances in terms of comparative statics.

In order to estimate the ERM, the analysis is conducted in two steps. First, at the world level, a multinational model describing the foreign trade of the main countries and of the Rest of the World is used to calculate the main currencies (dollar, euro, yuan, yen, and pound sterling) and the equilibrium exchange rates (Jeong et al., 2010; Duwicquet et al., 2015). Second, at the level of each East Asian country, an equilibrium exchange rate is estimated, using a simple national model of foreign trade (Aflouk et al., 2010). It is not necessary for a relatively small country at the world scale to use a multinational model to estimate equilibrium exchange rates. Last, based on studies of the medium-term determinants of current account, the equilibrium current accounts are determined by using structural determinants (demographic features, public deficit, net foreign assets, oil products balance, etc.) relying on panel regression techniques. Estimations have been updated up to 2012.

### *Exchange Rate Policy and Misalignments*

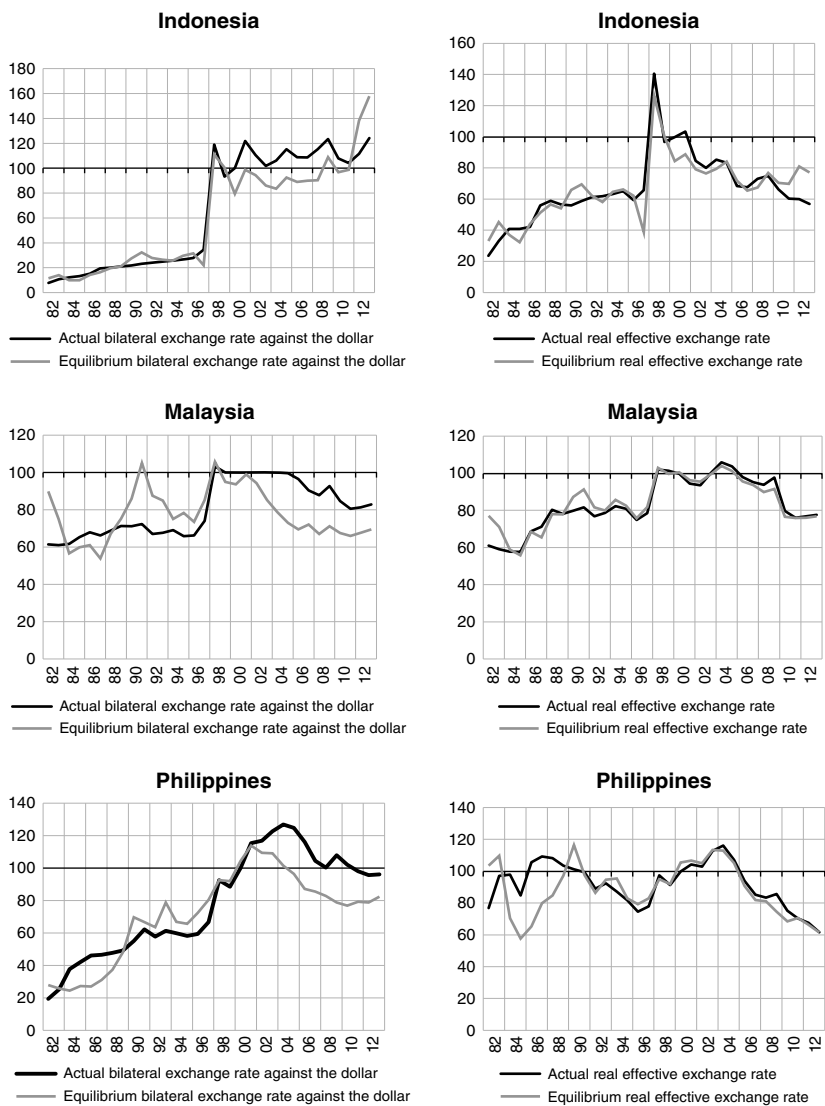
#### *From the 1980s to the Asian Crisis of 1997*

To avoid exchange rate misalignments between countries increasingly integrated, a dollar peg policy has been implemented in most of the East Asian countries at the end of the 1980s. Simultaneously financial liberalization has been developed during the 1990s, facilitating the finance of large current deficits. It has also induced short-term indebtedness in dollars, especially of the banking sector, which has appeared highly constraining when the crisis burst. The peg to the dollar of East Asian currencies led to large overvaluation in nominal terms, but less in real effective terms in the 1990s, in relation with important current deficits (see figure 5.1).

Thailand, Philippines, and Malaysia present some similarities with respect to exchange rate policy during the 1980s. The early 1980s were marked by the end of economic boom with current account deficit and overvaluation. The peg to the dollar in the middle of the 1980s allowed a real depreciation and an improvement of their current account, leading to an undervaluation of their currencies between 1985 and 1988, especially in Philippines and to a less extent in Malaysia where the ringgit was close to its equilibrium value. A reversal took place at the end of the 1980s where economic recovery was related to the reappearance of important current deficits. Thailand was the most affected while the phenomenon was less marked in Philippines where the growth was more modest and current deficit more contained. The Malaysian ringgit remained close to equilibrium as before, as Malaysian economy was more trade open, which reduced the amplitude of misalignments. Viet Nam, as an economy in transition during the 1990s, has followed a specific path with a large overvaluation during the first half of the 1990s.

Indonesia, as an oil-exporting country, presents also some specificity. The counter-oil shock in 1986 has degraded its current account, leading to





**Figure 5.1** Actual and equilibrium real effective and bilateral exchange rates of ASEAN+3 (base 100 in 2000).

*Source:* Authors' calculations with data from IFS for bilateral exchange rates, provisional data for 2013.

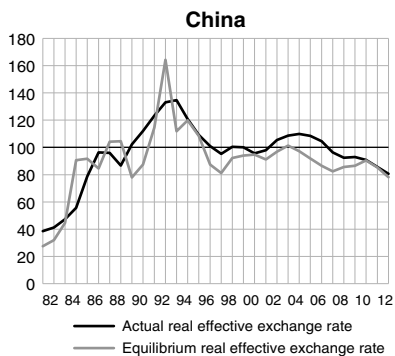
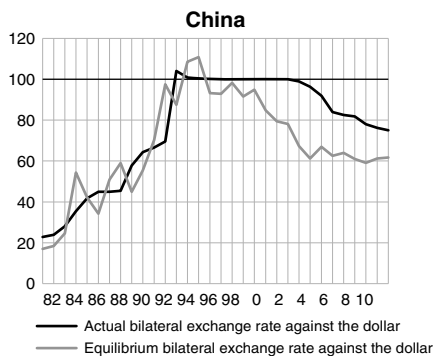
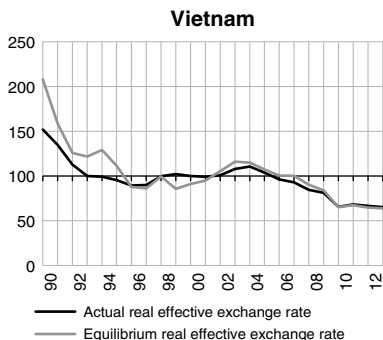
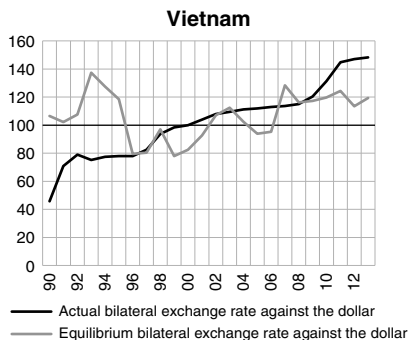
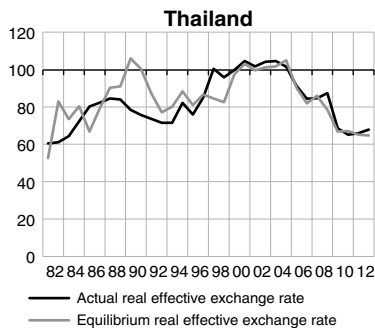
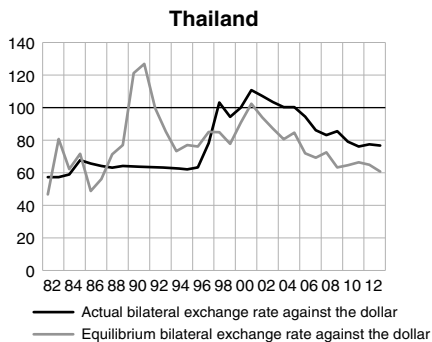


Figure 5.1 Continued

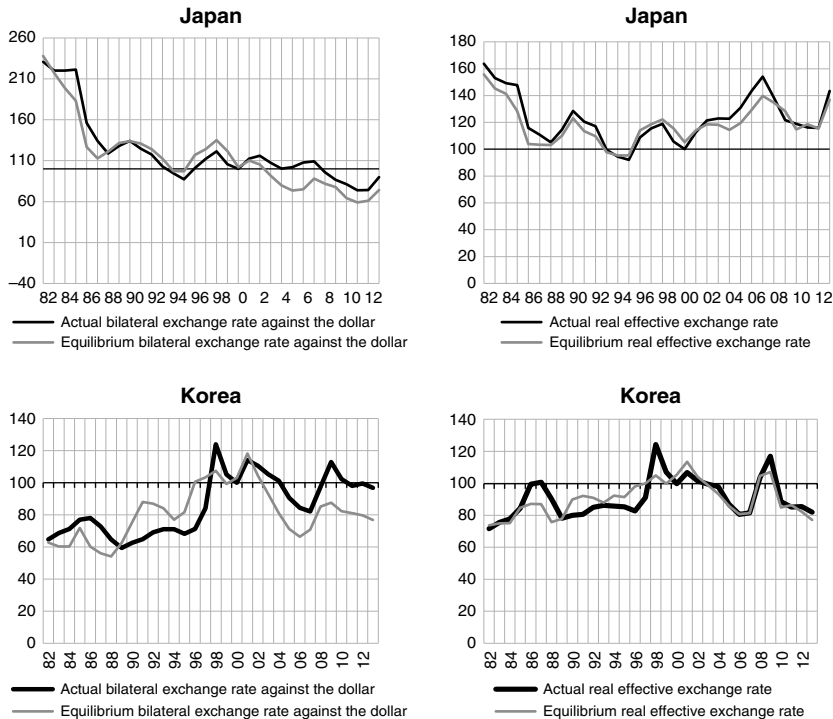


Figure 5.1 Continued.

overvaluation of its currency in the beginning of the 1990s. At that time, with sustained growth and current account more under control, overvaluation became weak and did not seem to have played a large role in the crisis of 1997. However the currency the most affected by the crisis has been the Indonesian rupee, which might be explained more by political reasons and other economic imbalances. The devaluation of the Indonesian rupee, in real and nominal terms, was of the most significant amplitude among the East Asian countries. It resulted in a rather limited amelioration of the current account and in an undervaluation of the rupee, which could be regarded as modest, compared with the amplitude of the shock. This result could reflect the destructive effects of the crisis on the Indonesian productive system.

In China the beginning of the 1980s is difficult to interpret due to the mode of regulation of the external trade that prevailed at that time. However, the yuan seemed to be overvalued in the middle of the 1980s with a massive current account deficit. Continued devaluations and the increasing usage of the swap centers exchange rate in China allowed the actual exchange rate to keep up with the depreciation of the equilibrium

exchange rate and to preserve undervaluation during most of the time in a context of degradation of the current account and of high inflation, so that in 1994, the year of the unification of the exchange rate system, the yuan was even undervalued in nominal and real terms. The second half of the 1990s, in particular since 1997, marked a turning point. The economic boom and the return of current surplus illustrated the success of the trade openness policy of the past years. This explained the revaluation of the equilibrium exchange rate of the yuan during the second half of the 1990s, both in nominal and real terms, in sharp contrast with the previous period. This diagnostic helps to find an explanation of the resistance of the yuan facing the Asian crisis of 1997–1998 during which the yuan was already undervalued. However this undervaluation has been temporally reduced after the Asian crisis and the large devaluations of most of the East Asian competitors.

In Republic of Korea, a period of undervaluation of the won during the 1980s, linked to the export growth strategy, was followed by a rather marked overvaluation, both in nominal and real terms. But, at the opposite of the Japanese case, this occurred after a real depreciation during the first half of the 1980s and, then, a stable dollar-won parity. This overvaluation of the won has been regarded as one of the factors explaining the Korean crisis in 1997.

Overaccumulation, diffusion of the slowdown through high economic interdependency, contagion effects, and capital flights have played a major role to explain the generalization of the crisis. The stabilization plans imposed by the IMF have amplified the economic slowdown and given a new impulsion to the financial liberalization and the deregulation. The lack of appropriate tools to solve the liquidity problems has been underlined while East Asia, as a whole, had sufficient reserves and net foreign assets to face the problems of the countries in deficit. It can also be noticed that intra-East Asia imbalances were too generalized at that time and made the intrazone finance more complex to organize.

#### *From the 2000s to the Financial Crisis of 2008*

The recovery has been rather quick after the Asian crisis, thanks partly to large devaluations that boosted exports. After these huge devaluations, pragmatic exchange rate policies were implemented with more diversity between countries than before, from rather strict dollar peg in Malaysia and China until 2005 to more floating regime like in the Republic of Korea. The result has been, on the whole, a general undervaluation against the dollar and, even if it is less marked, in real effective terms. This was very different from the 1990s and has given more room of maneuver to East Asian economies, with large current account surpluses, but at the expense of the Rest of the World. Actually the relative positions of various countries were rather contrasted.

The yuan has been stable against the dollar until 2005 and has moderately appreciated until 2008. It remained largely undervalued, in spite of a

real effective appreciation. This apparent paradox is simply explained by the larger revaluation of the equilibrium exchange rate of the yuan due to the remarkable improvement of the Chinese productive system's efficiency. This exchange rate policy can be easily understood from the Chinese point of view but it contributed to the persistency of global imbalances. The yen was also undervalued, but for a different reason and to a less extent, thanks to the real effective depreciation of the yen. This export-led growth strategy was used to help the Japanese economy to partly recover from the long stagnation of the 1990s. The Korean won was the less undervalued East Asian currency, following a rather sharp appreciation in nominal and real terms after 1999. The Korean exchange rate policy, with a won more freely floating, was more equilibrated from a global point of view, but put more constraints on the Korean economy.

The large devaluations following the Asian crisis contributed to the reconstitution of important current surpluses in Thailand and Malaysia, but not durably in Philippines and Viet Nam. The bath, the dong, and, to a less extent, the ringgit became undervalued, but not the Philippine peso as Philippines faced more structural problems at that time. The situation in Indonesia has been progressively normalized afterward, the country taking advantage of the rising oil prices during the 2000s. The undervaluation of the Indonesian rupee against the dollar was in line with the other East Asian countries at the end of the 2000s, but slightly less pronounced in real terms.

On the whole, during the 2000s, in spite of a general movement of appreciation, the East Asian currencies remained undervalued against the dollar (around 20–30 percent), but much less in real effective terms. Compared with the Chinese yuan, they appeared far less undervalued, which induced a bias in the international competition among East Asian countries. Beyond this general undervaluation against the dollar, the relative divergence between East Asian currencies reflected that the pragmatic exchange rate policy adopted didn't avoid some distortions between area's countries. The East Asian countries have undertaken two main initiatives at the regional level in order to be able to mobilize local resources in case of countries facing problems of payments, the Chiang Mai initiative (signed in 2000 at the level of the ASEAN+3), and the Asian Bond Market initiative. The Asian Bond Market initiative was the second major step in 2002. Its aims were multiple: give a regional alternative to the finance of national economies; avoid the asymmetries in currencies (which implies to borrow in foreign currency for financing the economy in local currency) and the asymmetric of maturity (which refers to short-term borrowing for supplying long-term loans); help the ASEAN's small countries whose size is too limited to develop bonds markets (Jetin, 2010).

The impact of the financial crisis of 2008 on East Asia has been more limited, although significant at short term and unequal according to the countries. The appreciation of the yen against the dollar has penalized the Japanese growth before a new turn with the Abenomics and the yen

depreciation. The undervaluation of the yuan has been preserved and then progressively reduced. Combined with the huge Chinese recovery plan of 2008, it has allowed China to preserve a high growth and to escape the crisis. The evolutions of the other East Asian currencies have been also differentiated. Most of the ASEAN currencies slightly appreciated against the dollar, except the Vietnamese dong, which depreciated progressively, while stabilizing its real exchange rate. In 2008 the Korean won has depreciated sharply, both against the dollar and in real terms. Indeed, the Korean economy has been badly affected by the crisis and has suffered, more than other East Asian countries, due to capital flights in 2008. The regional institutions, especially the Chiang Mai initiative, were unable to contribute to solve the problems of the Korean banking sector. Loans from the Federal Reserve Bank of New York (FED) and the Japanese and Chinese central banks were necessary. The won depreciation, under markets' pressure, helped the export sector, with a financial cost for the banks, and was followed by a stabilization, which, on the whole, preserved a slight real undervaluation.

On the whole, the divergence between East Asian nominal exchange rate evolutions must not be overestimated since the 2000s. In some countries (Malaysia, Philippines, Thailand, and China since 2005) the currencies have appreciated while in others (Viet Nam and, partly, Indonesia) depreciation is observed. In terms of real effective exchange rates, the appreciation trend is more general. Republic of Korea and Japan appeared rather specific with larger fluctuations of their currencies, both in nominal and real terms, reflecting a more floating regime, which doesn't exclude targeted interventions. Regarding exchange rate misalignment, East Asian currencies remained undervalued against the dollar during the 2000s. This has lasted since the burst of the financial crisis, except in Indonesia. However, in term of real effective rates, which is the more pertinent concept, exchange rate misalignments are more limited than before, even for the yuan whose real undervaluation has been reduced. The only exceptions seem to be Indonesia, where the real overvaluation appears important since 2009, and Viet Nam during the 2000s.

These reduced exchange rate misalignments for East Asian countries are in sharp contrast with what is observed in the euro zone since the 2000s. In spite of a euro only slightly undervalued for the whole euro area, overvaluation of the euro in Southern European countries (Spain, Portugal, Greece, France) is opposed to the undervaluation of the euro in the German block (Duwicquet et al., 2013). The euro zone crisis illustrates the failure of a rigid single currency system without appropriate adjustment mechanisms or forms of fiscal federalism. On the contrary, East Asian countries have adopted intermediate exchange rate regimes with a rather wide spectrum (crawling peg, managed floating, more freely floating). These exchange rate managements are rather asymmetric. By "fear of appreciation," East Asian countries have tried to limit the appreciation trend of their currencies and have accumulated huge foreign reserves, thanks to the current surpluses.

But these current surpluses have been reduced since the burst of the financial crisis and the world slowdown. These pragmatic exchange rate regimes have given useful room of maneuver to each country. However, there is a need of more exchange rate coordination due to the high level of economic and financial integration and to the risk of contagious crisis. There is no consensus on the way this coordination could be organized. But the experience of the 1990s, the high heterogeneity of the East Asian zone, and the failure of the euro zone show that a too rigid exchange rate system and a fortiori a project of monetary union are not appropriate. This question of the economic consequences of alternative exchange rate regimes in East Asia will be reexamined using a four-country stock flow consistent model of East Asia. The configuration of the 1990s and 2010s will be compared and alternative scenarios for the future of ASEAN integration will be discussed.

## **Alternative Exchange Rate Regimes in East Asia: A Four-Country Stock Flow Consistent Approach**

Since the burst of the financial crisis in 2008, the development of monetary and financial cooperation in East Asia has gained interest. First, some measures aimed at giving more formal structures to the Chiang Mai initiatives have been taken. Second, the project of an Asian Monetary Fund to face short-term adjustment problems has been relaunched. However, the great heterogeneity of East Asia, both in terms of level of development and of countries' size, pleads for keeping an adjustable exchange rate system in the future monetary regime, at least for a long transition period. To go beyond the present system based on managed floating with various forms according the different countries, two main forms of monetary cooperation have been proposed, one based on a common currencies basket (Williamson, 1998), the other based on the Asian Currency Unit (ACU).

The ACU project is the more ambitious. Since the end of the 2000s, in the context of financial crisis, it has gained interest (Shimizutani, 2009). It is a long-term project. The first step would be centered on the rebuilding of the institutions created with the Chiang Mai initiative and on the reinforcement of financial supervision. The second step, to be taken after 2020, would be the settlement of the ACU composed of the yen, yuan, won, and other East Asian currencies and its promotion for public and private uses. These years would be used to achieve the financial liberalization and reinforce the financial regulation before the transition to an exchange rate regime based on the ACU in the 2030s. Even at this long term, the perspective of a single currency seems problematic at the level of an area that will always be characterized by huge heterogeneity. On the contrary, the use of the ACU in an East Asian monetary regime where the national currencies would be preserved and would be in a system of fixed, but adjustable, exchange rates against the ACU would be a more realistic project. The

nature of the ACU remains open. It could be, as it is now planned, a currency basket. It could also be a new international currency floating against the dollar and the euro.

Concretely, a possible alternative to the ACU in the long term could be the yuan, once it has become fully convertible and the Chinese banking and financial system have been restructured and consolidated. Another possibility could be that of the “block yuan,” where the yuan would be used as an anchor for the other East Asian currencies, while the yen would be in a position rather similar to the one of the pound sterling against the euro. The point in debate is what should be the level of rigidity or flexibility of this regime. Whereas a rigid one would mean that this block yuan would be close to a yuan zone with fixed exchange rates (which would not be suitable for the heterogeneity of the zone), a more flexible one would give more room of maneuver to face asymmetric economic performances.

The problem raised by these flexible monetary regimes, whether with an anchor on the yuan or an ACU, is the risk of instability associated to capital flights and recurrent exchange rate adjustments. Hence, some form of capital controls would have to be maintained to provide the system with more stability.

To investigate the main impact of various exchange rate regimes on ASEAN countries and more generally of East Asia, we construct a four-country stock flow consistent model, which consists of four areas (two ASEAN countries, China, and the Rest of the World, including the United States). The simulations analyze the adjustment mechanisms following demand or supply shocks. Various forms of exchange rate regimes are considered for East Asia (yuan/dollar fixed or floating or managed; ASEAN currencies/dollar fixed or floating; ASEAN currencies/yuan fixed or managed; alternative ACU regimes with fixed, but adjustable exchange rates beyond a certain threshold). We study the adjustment mechanisms and the interactions among regions and especially among ASEAN countries under each alternative setting. First, the theoretical background is summarized. Second, the alternative monetary regimes and the associated closures of the four-country SFC model are presented. Third, the results of the simulations are given before concluding.

### *Theoretical Background*

The stock flow consistent approach, which a growing literature has been using in recent years, has several virtues. Especially, it can track the trajectory of flows and stocks, and model the financial sector explicitly as well as the production sector. The general methodology of SFC models is well explained in the book by Godley and Lavoie (2007b). SFC models comprise a set of behavioral equations that describe the transactions and decisions of institutional agents (households, firms, government, banks, central bank, Rest of the World) within the accounting framework in flows and stocks framed in complete balance sheets.



The contributions of Godley and Lavoie (2007a) and Lavoie and Zhao (2010) are seminal to analyze international monetary regimes with the SFC approach. They construct a three-country model based on the portfolio balance models that incorporate the imperfect asset substitutability and valuation effects caused by the changes of exchange rates. In contrast to Blanchard et al. (2005) they endogenize GDP and the supply of securities, and thereby the interaction between the real and financial variables can be considered more explicitly. They examine the impact of the diversification of the foreign reserves of China through some simulation experiments.

Mazier and Tiou-Tagba (2012) generalized the previous work by introducing the managed floating exchange rate system with the target variable such as foreign reserves or a current account surplus and by analyzing the cases with flexible prices instead of constant prices. These three-country models are extended to four-country models. Mazier and Valdecantos (2015) describe the institutional setting of the Eurosystem in detail in order to reproduce some of the events that happened during the crisis of the Eurozone. Mazier and Valdecantos (2014) analyze the implications regarding the intrazone imbalances in the euro area. They divide the euro area into two parts, North and South, and compare various alternative exchange rate regimes (monetary union, EMS, multiple euros, eurobancor), which can be thought as a way out of the current crisis.

### *Monetary Regimes in East Asia and SFC Model*

The world economy is divided in four areas: China, East Asia 1 and 2 (as representative of ASEAN divided in two countries) and the Rest of the World. Areas have their own currencies. The whole structure of the SFC model is close to the one used by the previous authors and will not be described in detail. The main equations are presented in Mazier et al. (2014). Households receive wages and interests, pay taxes, consume and hold cash and bank deposits. Firms accumulate capital, pay taxes and interests, finance their investments with undistributed profits and credit. Government expenditures are financed by taxes, after payments of interests, and by issuing public bonds to cover their deficit. These public bonds are the main international financial assets. Commercial banks receive households' deposits, hold reserves at the central bank, supply credit to the firms without restriction, hold domestic or foreign bonds with a portfolio behavior, and can be refinanced by the central bank. Banks' profits are redistributed to households as dividends. The central bank provides cash to households, receives reserves from the commercial banks and refinances them, holds domestic bonds and foreign reserves. Bonds issued by the Rest of the World government work as the unique foreign reserve. Profits of the central bank coming from interest payments are paid as taxes to the government. Interest rates are supposed constant. International trade is described through bilateral imports with demand effects and price effects linked to bilateral exchange rates. The flow of funds and the accumulation of capital,

financial assets and liabilities, and wealth are described in an SFC manner, including the reevaluation effects due to exchange rates variations.

Five basic monetary regimes can be considered for East Asia:

1. The regime XX, where the yuan and the East Asian currencies are both pegged to the currency of the Rest of the World (representative of the dollar) in a fixed regime. This reflects broadly the middle of the 1990s when the yuan was anchored to the dollar after a long period of devaluation and adjustment, while East Asian currencies were also pegged to the dollar. This was seen as an informal form of cooperation between them.
2. The regime XL, where the yuan is pegged to the currency of the Rest of the World while the East Asia and Rest of the World currencies are floating. This situation corresponds roughly to what prevailed during the end of the 1990s and the beginning of the 2000s.
3. The regime LL, which is a rather hypothetical regime where the yuan and the East Asian currencies are both supposed to be freely floating. This could be thought as a situation where the yuan has achieved its long transition period toward internationalization and is floating against the dollar. As in the regime XL, the East Asian currencies float. This regime would correspond to a world economy dominated by the market without forms of control.
4. The regime LX is another long-term scenario where the yuan is also floating after a complete liberalization. But the East Asian currencies would now be pegged to the yuan. In other words China and East Asia are supposed to have formed a yuan zone in a long-term perspective.
5. The ACU regime is a new one, based on a currency basket composed of the yuan and the East Asian currencies. Each East Asian currency, including the yuan, is in a fixed, but adjustable, exchange rate against the ACU. Two other alternative ACU regimes can be considered when the yuan or one of the two East Asian currencies doesn't belong to the ACU basket.

### *Alternative Closures of the East Asian Exchange Rate Regimes*

In SFC models the exchange rate determination is based on the adjustment between supply and demand of bonds on the different markets. It can be shown also that this is equivalent to a more traditional determination where exchange rates result from the sum of the flows in and out linked to trade, income, and capital movements. Since there are four areas, six bilateral exchange rates should be determined for fulfilling transactions:  $1UC^{RW} = E_1UC^{EA2}$ ;  $1UC^{RW} = E_2UC^{CH}$ ;  $1UC^{EA2} = E_3UC^{CH}$ ;  $1UC^{RW} = E_4UC^{EA1}$ ;  $1UC^{EA1} = E_5UC^{CH}$ ;  $1UC^{EA2} = E_6UC^{EA1}$  (UC, unit of currency).

#### *The Regime XX (Yuan/Rest of the World and ASEAN/Rest of the World Fixed)*

The starting point is the regime XX, where the exchange rates between both the yuan  $E_2$  and the ASEAN currencies  $E_1$  and  $E_4$  against the Rest of the World are fixed. This regime can be interpreted as the one prevailing in the middle of the 1990s, when the yuan was anchored to the dollar, but also most of the East Asian currencies. This peg of the East Asian currencies on the dollar was regarded as a de facto form of regional cooperation for

countries already economically integrated. As a consequence, the exchange rate of the ASEAN currencies against the yuan is also fixed.

To keep fixed their exchange rates against the dollar, the ASEAN and Chinese central banks adjust their foreign reserves and purchase or sell bonds issued by the US government. The ASEAN and Chinese bond markets are cleared by the demand of the domestic bonds by the central banks.

*The Regime XL (Yuan/Rest of the World Fixed, ASEAN/Rest of the World Floating)*

We now turn to the regime XL where the ASEAN currencies float against the Rest of the World (dollar) while the yuan remains fixed against the Rest of the World, as it was in the end of the 1990s and beginning of the 2000s. Since the exchange rates between ASEAN currencies and the Rest of the World ( $E_1$  and  $E_4$ ) are floating, foreign reserves held by the ASEAN central banks are constant while their balance sheet equilibrium determine the domestic bonds they hold.  $E_1$  and  $E_4$  are determined equating the demand of ASEAN bonds by Rest of the World banks and the supply of these bonds to Rest of the World banks given by the equilibrium of their markets.

*The Regime LL (Yuan/Rest of the World and ASEAN/Rest of the World Floating)*

The transition from a fixed regime to a floating regime reflects the tendency toward financial liberalization. It corresponds to a regime that could be implemented only at the end of a long period of transition. Building this version of the model is quite easy. With  $E_2$  determined under the floating regime, the foreign reserves of the Chinese central bank are now constant while its balance sheet equilibrium determines the domestic bonds it holds.  $E_2$  is determined by equating the demand of Chinese bonds by Rest of the World banks and the supply of these bonds to Rest of the World banks given by the equilibrium of their market.

*The Regime LX (Yuan Area)*

On the one side, the exchange rate regime between China and Rest of the World is liberalized and the yuan is floating. On the other side, the regional cooperation between East Asian countries is highly developed in order to form a yuan area with fixed exchange rates. The modeling of the floating yuan has already been presented and requires no change. However, as the yuan is now floating, the modeling of the yuan area with fixed exchange rates  $E_3$  and  $E_5$  between ASEAN and yuan has to be slightly changed, compared with the previous ones. The exchange rates  $E_1$  and  $E_4$  between ASEAN and Rest of the World are derived from the exchange rate  $E_2$  between yuan and the Rest of the World with the fixed exchange rate  $E_3$  and  $E_5$  between ASEAN and yuan.

*The ACU Regime*

The Asian Currency Unit (ACU) is a currency basket composed of the yuan and the ASEAN currencies ( $1UC^{RW} = E_{10}$  ACU), which is used only as a

unit of account. The ACU/Rest of the World exchange rate ( $E_{10}$ ) is built as a weighted average of the yuan ( $E_2$ ) and ASEAN currencies ( $E_1$  and  $E_4$ )/Rest of the World exchange rates. The yuan and the ASEAN currencies are floating against the Rest of the World currency and are pegged to the ACU ( $1 \text{ ACU} = E_7 \text{UC}^{\text{EA}2} = E_8 \text{UC}^{\text{CH}} = E_9 \text{UC}^{\text{EA}1}$ ). For sake of simplicity it is supposed there is no fluctuation margin but these exchange rates are adjustable when the current account in percent of GDP is permanently under a certain threshold. The yuan exchange rate is determined as previously in a floating regime. The ASEAN currencies/yuan exchange rates are fixed, but adjustable. Consequently the ASEAN currencies/Rest of the World exchange rates can be simply deduced from the yuan exchange rate. Under this hybrid regime ASEAN central banks accumulate foreign reserves under the form of bonds issued by the Rest of the World government.

$$\frac{1}{E_{10}} = \frac{Y^{\text{EA}2}}{Y^{\text{EA}2} + Y^{\text{CH}} + Y^{\text{EA}1}} \cdot \frac{1}{E_1} + \frac{Y^{\text{CH}}}{Y^{\text{EA}2} + Y^{\text{CH}} + Y^{\text{EA}1}} \cdot \frac{1}{E_2} + \frac{Y^{\text{EA}1}}{Y^{\text{EA}2} + Y^{\text{CH}} + Y^{\text{EA}1}} \cdot \frac{1}{E_4}$$

$$E_{7t} = E_{7t-1} \cdot (1 + \varphi), \text{ if } \frac{CA^{\text{EA}2}}{Y^{\text{EA}2}} \cdot \frac{t-i}{t-i} < -0.001, \forall i = 1, 2, 3, 4, 5 \text{ and only if}$$

$$E_{7t-1} = E_{7t-i}, \forall i = 2, 3, 4, 5$$

(same equations for  $E_8$  and  $E_9$ ).

#### *The ACU Regime without East Asia 2*

In this regime one ASEAN country or Japan remains outside the ACU regime and floats against the Rest of the World. This regime is very similar to the previous one. The only difference is the determination of East Asia 2 currency/Rest of the World, which is now floating.

$$\frac{1}{E_{10}} = \frac{Y^{\text{CH}}}{Y^{\text{CH}} + Y^{\text{EA}1}} \cdot \frac{1}{E_2} + \frac{Y^{\text{EA}1}}{Y^{\text{CH}} + Y^{\text{EA}1}} \cdot \frac{1}{E_4}$$

$$E_{8t} = E_{8t-1} \cdot (1 + \varphi), \text{ if } \frac{CA^{\text{CH}}}{Y^{\text{CH}}} \cdot \frac{t-i}{t-i} < -0.001, \forall i = 1, 2, 3, 4, 5 \text{ and only if}$$

$$E_{7t-1} = E_{7t-i}, \forall i = 2, 3, 4, 5$$

(same equation for  $E_9$ ).

#### *The ACU Regime without China*

In this alternative ACU regime China remains outside the system to preserve its autonomy and the yuan floats alone against the Rest of the World.

This regime is similar to the previous ones. East Asia 2 currency is the new anchor of the ACU regime.

$$\frac{1}{E_{10}} = \frac{Y^{EA2}}{Y^{EA2} + Y^{EA1}} \cdot \frac{1}{E_1} + \frac{Y^{EA1}}{Y^{EA2} + Y^{EA1}} \cdot \frac{1}{E_4}$$

$$E_{7t} = E_{7t-1} \cdot (1 + \varphi), \text{ if } \frac{CA^{EA2}}{Y^{EA2}} \cdot \frac{t-i}{t-i} < -0.001, \forall i = 1, 2, 3, 4, 5 \text{ and only if}$$

$$E_{7t-1} = E_{7t-i}, \forall i = 2, 3, 4, 5$$

(same equation for  $E_9$ ).

Table 5.1 shows the alternative closures for each exchange rate regime. The first three columns refer to variables that ensure the equilibrium with respect to each country’s bond market. The last three columns indicate the variables that ensure the equilibrium of each central bank’s balance sheet. We can recall, first, that the Rest of the World bonds market is always equilibrated by the domestic bonds held by the Rest of the World central bank, and second, that the equilibrium of the Rest of the World central bank balance sheet is not written, as it is the missing equation of the model.

**Table 5.1** Alternative closures of each exchange rate regime

	<i>Variable determined in bond market</i>			<i>Variable determined by CB</i>		
	$B^{CH}$	$B^{EA1}$	$B^{EA2}$	$CB^{CH}$	$CB^{EA1}$	$CB^{EA2}$
Regime XL Fixed $E_2$ , Floating $E_1 E_4$	$Bcb^{dCH}_{CH}$	$E_4$	$E_1$	$\Delta Bcb^{dRW}_{CH}$	$\Delta Bcb^{dEA1}_{EA1}$	$\Delta Bcb^{dEA2}_{EA2}$
Regime XX Fixed $E_1 E_2 E_4$	$Bcb^{dCH}_{CH}$	$Bcb^{dEA1}_{EA1}$	$Bcb^{dEA2}_{EA2}$	$\Delta Bcb^{dRW}_{CH}$	$\Delta Bcb^{dRW}_{EA1}$	$\Delta Bcb^{dRW}_{EA2}$
Regime LL Floating $E_1 E_2 E_4$	$E_2$	$E_4$	$E_1$	$\Delta Bcb^{dCH}_{CH}$	$\Delta Bcb^{dEA1}_{EA1}$	$\Delta Bcb^{dEA2}_{EA2}$
Regime yuan area Floating $E_2$ , Fixed $E_3 E_5$	$E_2$	$Bcb^{dEA1}_{EA1}$	$Bcb^{dEA2}_{EA2}$	$\Delta Bcb^{dCH}_{CH}$	$\Delta Bcb^{dRW}_{EA1}$	$\Delta Bcb^{dRW}_{EA2}$
ACU regime Floating $E_2$ , fixed but adjustable $E_3 E_5$	$E_2$	$Bcb^{dEA1}_{EA1}$	$Bcb^{dEA2}_{EA2}$	$\Delta Bcb^{dCH}_{CH}$	$\Delta Bcb^{dRW}_{EA1}$	$\Delta Bcb^{dRW}_{EA2}$
ACU regime without EA2 Floating $E_1 E_2$ , fixed but adjustable $E_5$	$E_2$	$Bcb^{dEA1}_{EA1}$	$E_1$	$\Delta Bcb^{dCH}_{CH}$	$\Delta Bcb^{dRW}_{EA1}$	$\Delta Bcb^{dEA2}_{EA2}$
ACU regime without yuan Floating $E_1 E_2$ , fixed but adjustable $E_6$	$E_2$	$Bcb^{dEA1}_{EA1}$	$E_1$	$\Delta Bcb^{dCH}_{CH}$	$\Delta Bcb^{dRW}_{EA1}$	$\Delta Bcb^{dEA2}_{EA2}$

### *The Case of Intermediate Exchange Rate Regimes*

Intermediate monetary regimes reflecting more managed floating exchange rate policies can be considered as they seem more realistic. These managed exchange rate regimes can be based on target used by the central bank concerning the level of current account or the level of foreign reserves. Four cases can be distinguished:

1. In the regime XA the yuan is still pegged to the Rest of the World but the East Asian currencies are now in a managed regime against the Rest of the World, instead of being purely floating like in the regime XL. It is still corresponding to the regime of the end of the 1990s and beginning of the 2000s. This regime can be constructed by modifying the exchange regime that determines  $E_1$  and  $E_4$  from the basic model. We can use two kinds of targeting. The former is based on the foreign reserves held by the East Asian central banks and uses the ratio of Rest of the World bonds held by central banks to GDP as a target, and the latter uses simply the ratio of the current account to GDP.
2. In the regime AL the Chinese monetary authorities follow a managed regime against the Rest of the World with a target for their foreign reserves or their current account surplus while East Asian currencies are floating against the Rest of the World. This regime is closer to the current monetary regime.
3. The regime AX is another version of the yuan area where the yuan follows a managed exchange regime against the Rest of the World and the East Asian currencies are in the fixed regime with the yuan. The Chinese financial liberalization is supposed to be less advanced and the Chinese authorities keep the yuan more under control.
4. The regime LA describes the situation where the East Asian monetary authorities manage their currencies to the yuan while the yuan is floating against the Rest of the World. This regime corresponds to a yuan block where the yuan is used as an anchor for the East Asian currencies, but in a more flexible manner.

### *Simulations*

We focus on asymmetric supply shocks inside East Asia, which are the main challenge for East Asian monetary regime. We consider, first, a loss of competitiveness of East Asia 1 against East Asia 2, and second, a loss of competitiveness of the two ASEAN countries against China. Results will be given only for the basic exchange rate regimes.

#### *A Loss of Competitiveness Intra-ASEAN*

A loss of competitiveness of East Asia 1 induces a negative shock with a slowdown and current deficit. With fixed exchange rate regimes like the regime XX (all the East Asian currencies pegged on the Rest of the World) or the yuan area, there is no adjustment mechanism. The slowdown and the current deficit remain on the long term. On the contrary more flexible regimes like the regime LL (floating regime) or XL (yuan fixed, EA1 and EA2 floating) allow a progressive adjustment with a recovery and a

reduction of the current deficit thanks to a depreciation of EA1 currency. The same results can be obtained with an ACU regime or an ACU regime without EA2, thanks once again to exchange rate adjustments obtained by successive steps. More surprisingly an ACU without the yuan gives negative results with a more dramatic GDP decline and current deficit. This can be easily understood, since, in this regime, the EA2 currency is the new anchor of the ACU regime and appreciates strongly due to the gains of competitiveness. EA1 currency follows this appreciation, which increases the initial negative shock. An adjustment is observed only in the long term. Figure 5.2 presents the evolution of EA1 GDP after the initial shock depending on the exchange rate regime and figure 5.3 shows the evolution of EA1 currency/Rest of the World exchange rate.

The impact on ASEAN integration can be examined through the evolution of the share of intra-ASEAN+3 trade in the total trade of each country. Figure 5.4 gives this share for country EA1. The loss of competitiveness induces a decrease of exports of East Asia 1 toward East Asia 2, which contributes to a decline of the rate of intraregional integration (around -2.5 percent). This decline is rather similar in the various exchange rate regimes with some deviations, which can be explained. Intra-Asian trade is larger in regimes XL and LL (where the relations between the yuan and EA currencies are more flexible) than in regimes XX and LX (where relations are more rigid) but the evolution of the ratio of intraregional trade is inversed, due to the large increase of exports toward the Rest of the World induced by the depreciation of EA currencies against the Rest of the World in the regimes XL and LLS. Similarly, the decline of the intraregional integration is more marked in the ACU regime without the yuan, as EA1 imports from China and EA2 decrease more, and less pronounced on the contrary in the ACU regime, as EA1 currency/EA2 currency depreciates.

*A loss of competitiveness of ASEAN against China.* As previously, a loss of competitiveness of ASEAN countries against China has first a negative impact in the EA1 country with a decline of GDP and an increasing current deficit. In fixed exchange rate regimes, this decline is enlarged like in the regime XX (all EA currencies pegged to the Rest of the World) or even more dramatically in the yuan area regime (the yuan appreciates with the improving Chinese competitiveness, inducing an appreciation of the East Asian currencies in spite of their loss of competitiveness). On the contrary more flexible exchange rate regimes like the XL regime (yuan/Rest of the World fixed, East Asian currencies floating), the regime LL (pure floating), or the ACU regime without the yuan allow a rather efficient adjustment with a GDP recovery and declining current deficit, thanks to the depreciation of the East Asian currencies against the Rest of the World. The ACU regime and even more the ACU regime without East Asia 2 are less attractive. The initial negative shock is amplified due to the appreciation of the EA1 currency induced by the appreciation of the yuan and of the ACU. It is only at medium-long term that exchange rate adjustments inside the ACU

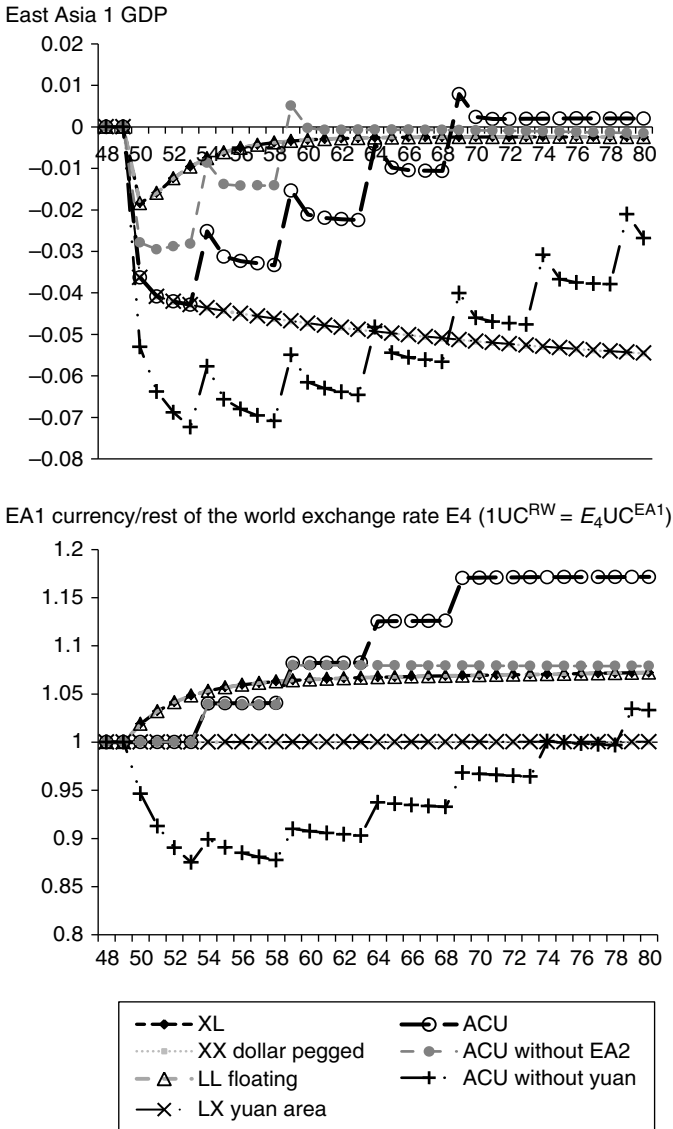
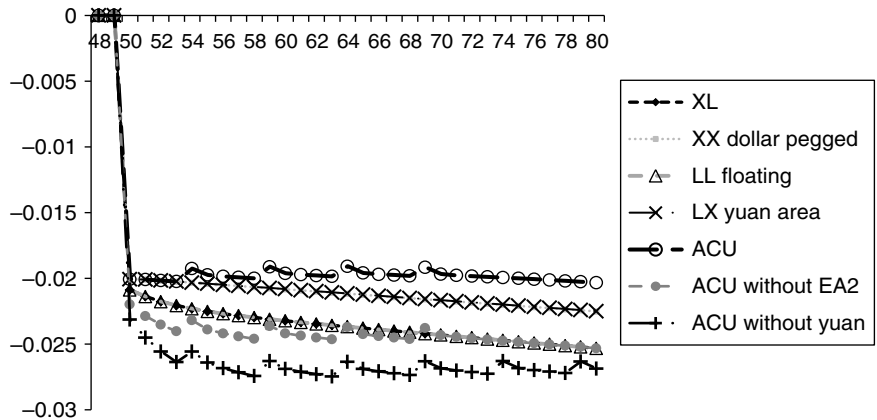


Figure 5.2 Loss of competitiveness of East Asia 1 against East Asia 2 (relative deviation compared with the base line) East Asia 1 GDP.

Source: Authors' calculations.

system allow a progressive recovery and reduction of the imbalances. Of course, in case of an ACU regime without EA2, the results are more favorable for this last country whose currency can depreciate. Figures 5.5 and 5.6 give the main results for EA1 GDP and EA1 currency/Rest of the World exchange rate.





**Figure 5.3** Loss of competitiveness of East Asia 1 against East Asia 2 (relative deviation compared with the base line) EA1 currency/Rest of the World exchange rate  $E_4$  ( $1UC^{RW} = E_4UC^{EA1}$ ).  
 Source: Authors' calculations.

Last, the impact on ASEAN integration can be examined (figure 5.7). The loss of competitiveness induces a decrease of exports of East Asia toward China, which contributes to a decline of the rate of intraregional integration. But the differences between the various exchange rate regimes are more marked than previously (between -2 percent and -6 percent). With the ACU regime the appreciation of the EA and Chinese currencies/Rest of the World exchange rates induces an increase of EA and Chinese imports from the Rest of the World, which is larger than the exports decrease and leads to a large decline of the rate of intraregional integration. This decline is even more important in case of a yuan area, as with fixed exchange rates there is no possible rebalance thanks to EA1 export to China.

**Conclusion**

This analysis based on an East Asian SFC four-country model has given a first description of East Asian monetary regimes, as they have been observed in the past or could evolve in the future.

The regime XX (fixed yuan and East Asian currencies against the Rest of the World) represents roughly what was prevailing during the middle of the 1990s. It reflects a weak form of de facto coordination between East Asian countries by anchoring on the dollar to avoid divergent evolutions. Gains of Chinese competitiveness against East Asia lead to a boom in China at the expense of ASEAN countries with large current imbalances, as there is no exchange rate adjustment mechanisms. The Asian crisis of 1997–1998 could be interpreted in this context with an East Asian speculative boom and declining competitiveness leading to large current deficits with no adjustment mechanisms.

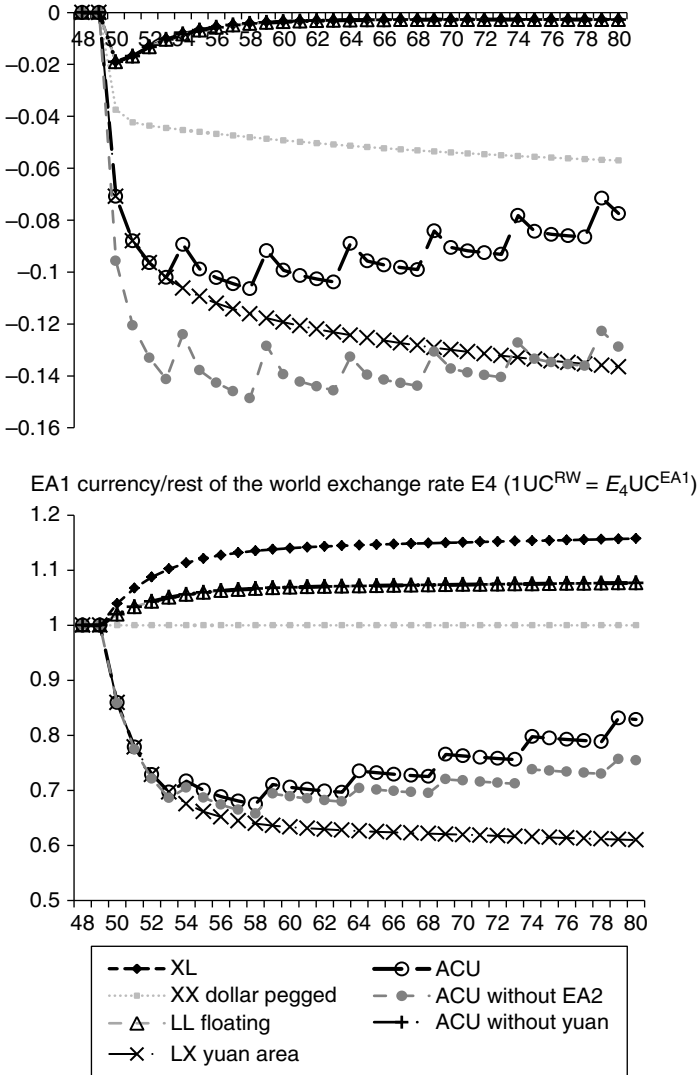


Figure 5.4 Loss of competitiveness of East Asia 1 against East Asia 2. Impact on the share of intra-ASEAN trade in the total trade of country EA1  $\left\{ \left( X_{EA2}^{EA1} + X_{CH}^{EA1} \right) + \left( IM_{EA2}^{EA1} + IM_{CH}^{EA1} \right) \right\} / \left( X^{EA1} + IM^{EA1} \right)$ , in difference with the base line.

Source: Authors' calculations.

The regime XL (fixed yuan/Rest of the World and floating East Asian currencies) and the intermediate regime XA (fixed yuan and managed East Asian currencies) correspond to the main lines of the end of the 1990s and beginning of the 2000s. Gains of competitiveness of China against East Asia can be balanced thanks to East Asian depreciation against the Rest of the World. Similarly, asymmetric supply shocks inside East Asia

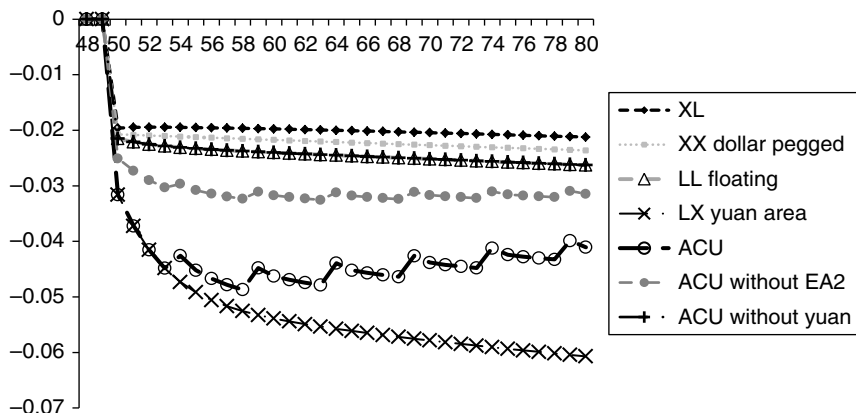


Figure 5.5 Loss of competitiveness of ASEAN countries against China (relative deviation compared with the base line).

Source: Authors' calculations.

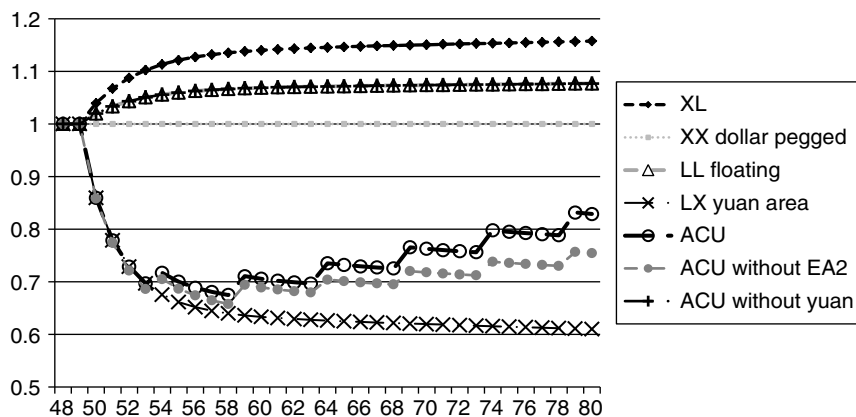


Figure 5.6 Loss of competitiveness of ASEAN countries against China (relative deviation compared with the base line), EA1 currency/Rest of the World exchange rate E4 ( $1UC^{RW} = E_4UC^{EA1}$ ).

Source: Authors' calculations.

can be easily managed. In spite of a modest yuan revaluation before the burst of the financial crisis in 2007–2008, intra–East Asian imbalances and exchange rate misalignments have been reduced thanks to more flexible exchange rate policies.

The regime LL (pure floating) illustrates once again that floating exchange rates are a powerful tool to reduce international imbalances. But the large instability is the intrinsic drawback of this exchange rate system. The economic policy instruments to preserve the stability should be implemented. Even though the adjustments are realized more gradually and the

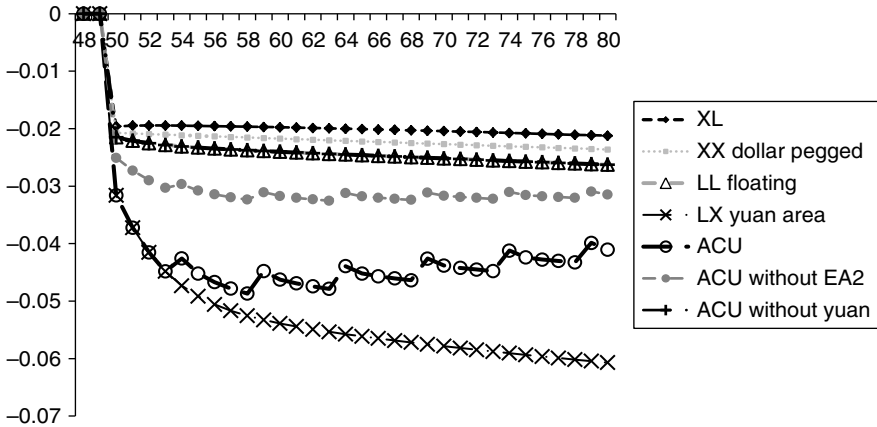


Figure 5.7 Loss of competitiveness of East Asia against China. Impact on the share of intra-ASEAN trade in the total trade of country EA1  $\left\{ \left( X_{EA2}^{EA1} + X_{CH}^{EA1} \right) + \left( IM_{EA2}^{EA1} + IM_{CH}^{EA1} \right) \right\} / \left( X^{EA1} + IM^{EA1} \right)$ , in difference with the base line.

Source: Authors' calculations.

scale of the fluctuation is larger compared to the case of the pure floating system, the managed exchange rate system (regime AL) could be a feasible political alternative as an intermediate stage. Compared with the present situation, two points must be underlined. First, it is clear that the yuan is not floating and the managed exchange rate of the yuan is under control of the Chinese central bank. Second, East Asian currencies are not also freely floating. However since the end of the 2000s the East Asian current surpluses have been reduced significantly.

The regimes LX and AX can be called yuan area with the ASEAN currencies anchored to the yuan, which is floating or managed against the Rest of the World. It is a long-term scenario, which could be achieved after a difficult process of economic and politic integration in East Asia. Although rather unlikely, it is worth being examined. A stimulation of Chinese growth diffuses to East Asia while the Rest of the World suffers losses due to the yuan depreciation. But in case of Chinese gains of competitiveness against the Rest of the World or East Asia, the induced growth leads to an appreciation of the yuan and of the East Asia currency, which penalizes its growth and deteriorates its current account. Asymmetric shocks in a fixed exchange rates regime induce divergent evolutions that are difficult to manage in the absence of exchange rate adjustments. This is a well-known result, often forgotten however as the euro area crisis illustrates it. Even if a yuan area is a long-term perspective, it does not play in its favor, more especially as this yuan area is characterized by strong structural heterogeneities between participant countries.

Last, the ACU regime is also a long-term scenario. It allows progressive adjustments facing asymmetric shocks inside East Asia and appears close to

floating or flexible exchange rate regimes. It can also be associated with the intermediate regime LA (yuan/Rest of the World floating, East Asia/yuan managed), a yuan block, where the yuan is used as an anchor and which is less rigid than a yuan zone with a single currency. These regimes seem rather appropriate for East Asia facing asymmetric shocks of competitiveness from China or inside ASEAN. However it must be underlined that the ACU regimes are very sensitive to the currencies participating to the ACU. For example, an ACU without the yuan is well suited for shocks originating from China, but more problematic for intra-ASEAN shocks.

These various exchange rate regimes don't change radically the impact of structural shocks on ASEAN intraregional integration. However significant differences can be observed in some cases of intra-ASEAN shocks.

## General Conclusion

This chapter has analyzed East Asian monetary cooperation since the 1990s. First, using a FEER approach, exchange rate misalignments have been estimated and linked to the external performances and growth of East Asian countries. Exchange rate misalignments are more limited in the 2000s and 2010s than in the 1990s, the main exception being Indonesia whose currency seems overvalued. Even the yuan undervaluation in real effective terms has been reduced. This configuration contrasts with what is observed between European countries where undervaluation of the euro for the German block is opposed to the overvaluation of the euro for Southern countries. These results can be linked to the nature of the exchange rate regimes, which have been adopted successively.

Second, an analysis based on an East Asian SFC four-country model has given a description of East Asian monetary regimes, as they have been observed in the past or could evolve in the future. It is of course a highly simplified representation, but it describes the interdependency between real and financial spheres in stocks and flows in a consistent way at the world level, which is not always done in other approaches. In particular, in this SFC approach there is no opposition between a determination of the exchange rates by the capital flows and by the trade sector. Both are taken into account simultaneously. A clear cut opposition has appeared between fixed exchange rate regimes, like the peg on the dollar (Rest of the World in the model) or the yuan area, which don't seem suitable for a highly heterogeneous region, and more flexible or managed regimes (floating or ACU regimes), which can better face asymmetric evolutions. However it must be underlined that ACU regimes give rather contrasted results according to the countries participating to the ACU. Beyond these ACU regimes, other East Asian monetary regimes could be explored, such as a system combining national currencies and a global ACU, floating at the world level and not reduced to a simple unit of account, with the possibility for the yuan to be inside or outside. Following Keynes proposals, an ACU bancor could also

be explored with a new institution acting as a Clearing Union at the East Asian level.

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# Global Value Chains and Competitiveness of the Integrated Regions: Exchange Rate Issues

*Witada Anukoonwattaka*

## Introduction

Asian and Pacific countries, particularly those in East Asia are major players in the global production-sharing phenomenon. Since the 1990s, global value chains (GVCs) have grown rapidly and integrated a number of Asian countries including the Association of Southeast Nations (ASEAN) into the phenomenon while China has emerged as a major assembly center where intermediate inputs from East Asian countries are used in the production of final goods for export to the rest of the world.

The rise of GVCs profoundly changes the notion of what economies do and what they produce. The VC implies the geographic dispersion of the stages of production (of goods and services) across national borders led by multinational corporations (MNCs) that play a central role in leading and coordinating these processes. GVCs typically involve the movements of intermediate goods through successive countries in which new value is added through various processes put in place, coordinated, and implemented through the global network system with a major role of the GVC-led firm. Although GVCs are typically operated by large MNCs, some local businesses in developing countries have also participated in GVCs and provided goods and services based on their expertise as suppliers, distributors, and business service providers.

This new form of global production poses challenges to policymaking and policy analyses for countries where GVC-related products have become a dominant feature of trade patterns. This study focuses on how these new patterns of production and trade influence the effects of exchange rates on international trade flows of manufactured goods, and draws attention to several ways in which GVCs have altered the nature of international production and trade assumed in traditional models of international trade. In

contrast to the traditional models of trade in which countries produce final goods, using primarily domestic factors of production, a large proportion of manufactured goods that are produced and traded across borders no longer comprises final goods but instead consist of intermediates (parts and components) and even exports of parts and components that typically incorporate a large proportion of imported manufactured goods. As a result, the drivers of trade competitiveness increasingly include factors that are outside the scope of national policies. This limits the direct influence of policy on the growth of exports, production, employment, and other development indicators.

In the real exchange rate context, changes in a country's real exchange rate affect not only the domestic price of final goods but also their cost of production. Cross-border trade is primarily driven not by consumer preferences or incomes in the destination country, as postulated in traditional models, but is derived from demand for final goods in the export destination markets. Furthermore, because of the central role of multinational corporations (MNCs) in many GVCs, a high proportion of trade in manufactures is intrafirm, influenced by the global profit maximizing objectives of the MNCs as well as their capacity to change production and sourcing patterns to meet those objectives.

This chapter discusses the need to reassess the analytical framework including those involving well-known relationships between trade and exchange rate movements. To gain a better insight into the issue, the empirical investigation is undertaken to examine the exchange rate sensitivity of GVC-related intermediate trade between China and major GVC trade partners in East Asia including ASEAN countries as well as the industrialized countries in the East and Northeast Asia. The empirical specification in this chapter is probed from the theoretical framework put forward in Anukoonwattaka (2012), which simplifies the GVC-related trade of Asian countries into a triangular model of GVC-related trade between China, other East Asian countries, and the rest of the world.

The rest of this chapter is as follows. The next section provides the background for understanding how Asia-Pacific players in the GVC phenomenon are interconnected through this new form of international trade and global production. The third section draws attention on how the new format of international trade and global production put challenges on policy analysis, especially on those related to the relationships between exchange rate and trade. Implications for the theoretical reassessment are drawn from the recent literature, and the empirical assessment on the issues is presented subsequently.

## **GVC-Related Trade in the Interconnected Asia-Pacific Economies**

During the past three decades, the expansion of GVCs has been an important part of progressive industrialization in Asia-Pacific economies, especially



the East Asia that includes economies in East and Northeast Asia as well as Southeast Asia. In the 1960s, Asia-Pacific economies participating in the global operation of MNCs included Japan, Republic of Korea, Singapore, Hong Kong, China, and Taiwan Province of China. Those countries have progressively changed from an FDI-host economy to become an FDI-home economy during the past three decades.

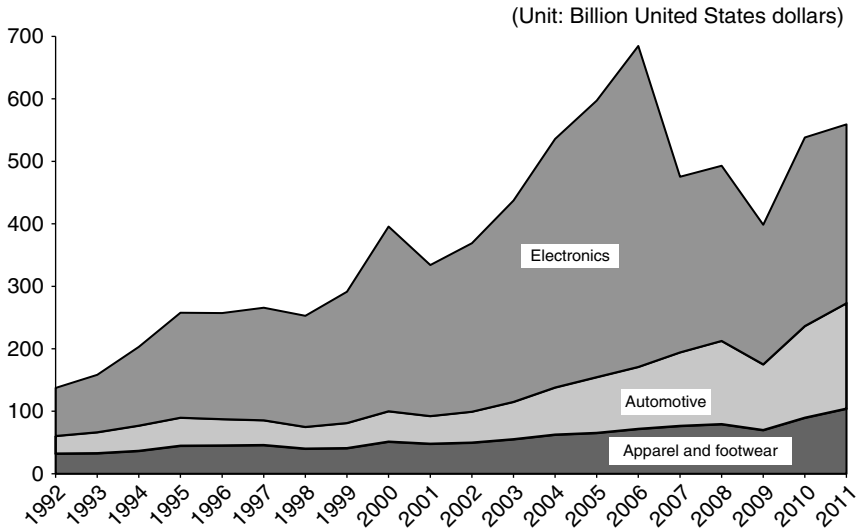
During the late 1970s, several MNCs including Japanese ones began to relocate some low-end assembly activities to Southeast Asian countries (particularly Malaysia, the Philippines, and Thailand). By the late 1990s, the international product fragmentation had become a common business strategy for the MNCs dealing in apparel and footwear, electronics, and later automotive industries in Asia and the Pacific.

The momentum of GVCs in the Asia-Pacific region was particularly accelerated by the joining of China in WTO in 2001. The more economic openness and economic reforms has allowed China to become a major “assembly center” for the regional and global value chain activities.

The evolution of GVCs in the Asia-Pacific region appears to correspond to dynamic decisions of MNCs in responding to changes in trade and business environments. Prior to the 1990s, operations of MNCs could be divided into two categories: “vertical” and “horizontal” FDI (Markusen, 2002). Vertical FDI corresponds to international fragmentation of production on a factor-cost saving basis (such as labor), while horizontal FDI occurs when MNCs follow a “build-where-you-sell” strategy for seeking markets. In the context of the Asia-Pacific region, vertical FDI by US electronics MNCs in the 1970s was documented as the beginning of GVCs in Asia. Meanwhile, investment by Japanese MNCs in the Southeast Asian automotive sector during the same period is an example of horizontal FDI responding to high tariff protection in the host countries.

Since the late 1990s, both horizontal and vertical operations of MNCs are increasingly able to coexist as declining tariffs and transportation costs allow for more flexibility in sourcing components from various countries. For example, Japanese automobile assemblers are taking advantage of regional trade liberalization programs to consolidate duplicated production facilities in ASEAN countries and facilitate the division of labor within the region, in order to achieve a regional scale of production.<sup>1</sup> In addition, during the past two decades, many MNCs have significantly upgraded technical activities of their regional production networks in ASEAN, and assigned global production responsibilities to affiliates located in Singapore and, more recently, to those located in Malaysia and Thailand (Athukorala, 2008; Borrus et al., 2000; and McKendrick et al., 2000). Overall, the ASEAN experience appears to support the view that MNC affiliates have a tendency to become increasingly embedded in host countries the longer they are present there (Rangan and Lawrence, 1999; and Athukorala and Yamashita, 2006).

By its nature, the growing of GVCs has come hand in hand with notable expansion of intraregional trade “through multiple border crossings of parts and components.” Therefore, trade in intermediates is commonly



**Figure 6.1** Exports of IPN-associated intermediate goods from Asia and the Pacific to the world, 1992–2011 (unit: billion US\$).

*Note:* Sturgeon and Memodevic (2010) combined SITC and BEC classifications with knowledge from qualitative research on specific industries to identify final and customized intermediate goods for the three industries where research suggested a prevalence of IPNs, that is, electronics, automotive, and apparel-footwear.

*Source:* Author's calculations using United Nations Comtrade data and the classification by Sturgeon and Memodevic (2010) of customized intermediate products.

used to proxy the expansion of GVCs.<sup>2</sup> Based on this measurement, the rapid growing of GVCs in the Asia-Pacific region has been found particularly in the electronics sector (figure 6.1). The sector currently accounts for about 50 percent of the region's component exports, while exports in automotive and apparel-footwear intermediates account for 30 percent and 19 percent, respectively.

Trade in intermediate products between developing countries, especially in East Asia, became increasingly significant during those periods. In the mid-1980s, developing nations in East Asia had little trade among themselves. They either produced their own intermediates or imported them from more advanced nations (mostly Japan, the United States, and members of the European Union).

The expansion of GVCs in the Asia-Pacific region is concentrated in the major trading economies in East Asia (table 6.1). More than 70 percent of GVC component exports by Asia and the Pacific in 2011 originated from East and Northeast Asian economies, with China, Japan, and the Republic of Korea as the top three exporters. In ASEAN, Indonesia, Malaysia, the Philippines, Singapore, and Thailand combined account for

**Table 6.1** Shares of the Asia-Pacific region in global exports of customized intermediate and final products by subregion and selected economies, 2011 (unit: percentage share in global exports)

	<i>Exports of intermediate goods</i>			<i>Exports of final goods</i>		
	<i>Apparel-footwear</i>	<i>Electronics</i>	<i>Automotive</i>	<i>Apparel-footwear</i>	<i>Electronics</i>	<i>Automotive</i>
<i>Asia-Pacific</i>	68.4	70.8	29.3	59.7	51.6	25.3
<i>East and Northeast Asia</i>	49.6	52.5	23.3	46.2	42.9	21.8
China	34.5	25.0	7.1	39.6	32.6	1.4
Japan	3.3	8.1	10.7	0.1	3.3	13.9
Republic of Korea	6.0	5.9	5.2	0.4	3.0	6.3
ASEAN	5.6	17.5	3.8	5.0	7.5	1.4
Indonesia	2.6	0.5	0.4	2.3	0.5	0.2
Malaysia	0.8	5.2	0.3	0.3	2.4	0.0
Philippines	0.1	2.5	0.4	0.3	0.4	0.0
Singapore	0.3	6.9	0.9	0.3	2.3	0.0
Thailand	1.8	2.4	1.7	0.9	1.9	1.1
<i>South and Southwest Asia</i>	13.0	0.4	1.8	8.3	0.8	1.8
India	5.7	0.3	0.8	3.5	0.5	0.7
Pakistan	3.5	0.0	0.0	1.0	0.0	0.0
<i>North and Central Asia</i>	0.1	0.1	0.1	0.1	0.2	0.1
Russian Federation	0.0	0.1	0.1	0.0	0.2	0.1
<i>Pacific</i>	0.1	0.3	0.2	0.1	0.3	0.2
Australia	0.1	0.2	0.2	0.1	0.2	0.2

*Source:* Author's calculations using United Nations Comtrade data based on the classification by Sturgeon and Memodevic (2010) of customized intermediate and final goods.

18 percent of global exports of electronic components. Economies in South and Southwest Asia account for 13 percent of global exports of intermediate apparel and footwear, mainly from India and Pakistan, as the rest of the region is not substantially integrated into the GVCs.

Advanced countries outside the region remain an important export market for Asian final products. The region still depends on the outside-the-region markets for more than 70 percent of finished automotive and apparel-footwear products and some 60 percent of final electronics. NAFTA and the European Union combined capture the majority of those final goods exports. However, there has been a rapid increase in intraregional demand for final goods during the past decade, especially in the case of electronics and automobiles.

Although the large proportion of final goods from GVC activities are still mainly serving the final demand of the United States and countries in the European Union, the process led to a significant rise in the shares of intraregional trade, especially trade in intermediate goods during the past two decades (table 6.2). The expansion of intraregional intermediate exports is a dynamic process that corresponds to the decreasing shares of the North American Free Trade Area (NAFTA), which mainly comprises the share of exports to the United States. The intraregional intermediate exports of the apparel-footwear sector expanded rapidly in the 1980s, while exports of electronics and automotive grew in the 1990s and 2000s. The share of intraregional exports of customized apparel-footwear components has been more than 60 percent since the early 1990s. In the case of electronics, intraregional export shares increased by more than 15 percentage points from 1992 to 2001. Currently, intraregional exports account for about 63 percent of the region's total exports. There was a similar trend for automotive components in the 2000s, when the share of intraregional exports increased from 33 percent in 2001 to 48 percent in 2011.

However, the rise of intraregional exports does not mean that the scope of international production networks in this region is just regional value chains. In fact, the production and trade network between Asia-Pacific countries has been a part of global value chains led by MNCs originating from advanced

**Table 6.2** Partners in Asia-Pacific intermediate goods trading (unit: percentage of Asia-Pacific component exports and imports)

<i>Sector</i>	<i>Partners</i>	<i>Exports</i>			<i>Imports</i>		
		1992	2001	2011	1992	2001	2011
Apparel-footwear	Asia-Pacific	62.7	63.5	59.9	71.1	69.5	75.1
	European Union	12.2	11.1	10.4	6.8	7.7	7.1
	NAFTA	8.4	6.8	4.8	3.1	2.3	1.7
	Rest of the world	16.8	18.6	24.9	18.9	20.5	16.1
Electronics	Asia-Pacific	44.4	59.3	62.8	60.9	59.2	65.3
	European Union	16.0	13.8	17.1	7.5	9.3	5.7
	NAFTA	31.3	18.9	12.2	24.5	18.5	8.3
	Rest of the world	8.2	7.9	7.9	7.0	13.0	20.7
Automotive	Asia-Pacific	26.2	32.5	48.0	56.1	52.8	56.8
	European Union	17.0	17.7	16.0	25.8	27.7	32.2
	NAFTA	43.9	37.9	22.7	14.0	13.6	6.3
	Rest of the world	12.9	11.9	13.3	4.2	5.9	4.6

*Source:* Author's calculations using United Nations Comtrade data based on the classification by Sturgeon and Memodevic (2010) of customized intermediate products.

economies such as Japan, the United States, and the European Union. The shares of combined European Union and NAFTA customized intermediate imports by Asia-Pacific remain relatively high for sophisticated industries. For example, the combined European Union and NAFTA shares in 2011 were 38.5 percent for the automotive sector and 14 percent for electronics. In contrast, the share was below 9 percent for the apparel and footwear sectors. The shares appear to be consistent with the trend that advanced countries are shifting from being a source of supply, or market for physical inputs, to becoming suppliers of nonphysical inputs such as design, management, and technologies as well as supplying highly differentiated physical inputs.

In these processes, China plays a particularly important role as the final-assembly center for GVCs in the Asia-Pacific region. The country contributes approximately 54 percent of final exports, while the intermediate exports by China accounted for just 34.5 percent of total intermediate exports by the Asia-Pacific region. China particularly dominates the exports of apparel-footwear and electronic final goods. However, China has not been a major international automotive assembler and its share was only 5.5 percent of finished-car exports by Asia and the Pacific.

Being a final-assembly center for GVCs, China relies significantly on imported parts and components from the Asia-Pacific countries. East Asian economies, particularly Japan, the Republic of Korea, and major ASEAN countries are the dominant suppliers to China (table 6.3). The shares of

**Table 6.3** Sources of IPN-associated intermediate imports by select industries in China, 2011 (unit: percentage of intermediate imports)

	<i>Apparel-footwear</i>	<i>Electronics</i>	<i>Automotive</i>
<i>Asia-Pacific</i>	56.3	45.7	55.7
Japan	18.0	15.1	36.8
Republic of Korea	11.9	13.7	16.4
Hong Kong, China	3.0	0.7	0.0
Singapore	0.2	1.6	0.2
<i>ASEAN excluding Singapore</i>	9.1	14.3	1.3
Indonesia	1.7	0.9	0.3
Malaysia	0.7	5.1	0.3
Philippines	0.3	3.4	0.1
Thailand	2.0	4.3	0.4
Vietnam	4.4	0.6	0.2
Other ASEAN	0.0	0.0	0.0
<i>SAFTA</i>	13.2	0.1	0.2
India	4.3	0.1	0.2
Pakistan	8.8	0.0	0.0
Other SAFTA	0.1	0.0	0.0
<i>Other Asia-Pacific</i>	1.0	0.1	0.8
<i>EU25</i>	5.8	4.3	34.5
<i>NAFTA</i>	2.5	3.6	4.3
<i>Rest of the world</i>	35.4	46.4	5.5

*Source:* Author's own calculations using United Nations Comtrade data based on the classification by Sturgeon and Memodevic (2010) of customized final goods.

ASEAN excluding Singapore are significant in the case of the electronic and apparel-footwear sectors. India and Pakistan have been integrated substantially only in the apparel and footwear sectors.

In sum, trade patterns show that only about ten countries in the region are significant to the development of the international production network (IPN) phenomenon in Asia. China, Indonesia, Japan, Malaysia, the Philippines, the Republic of Korea, Singapore, and Thailand are at the forefront, while India and Pakistan are involved significantly only in apparel and footwear GVCs. China has emerged as a major assembler for manufacturing production networks. However, the importance of China differs between industries. China is a particularly important final assembler for electronics. China's exports of electronics include substantial amounts of indirect exports of components made by other economies in the region. In the traditional IPN apparel and footwear sector, China still dominates assembling activities and final exports; however, emerging Asian economies in South and Southeast Asia (such as India, Pakistan, and Cambodia) are increasingly taking over the final-assembly stage. China has not emerged as a major assembling center for Asian automotive production networks. Automotive manufacturing and exports by the region are still dominated by East Asian countries including Japan, the Republic of Korea, and the ASEAN-4 (Indonesia, Malaysia, the Philippines, and Thailand).

## The Need for the Reassessment of Frameworks for Policy Analysis

GVCs challenge the prevailing policy thinking about how trade response to a change in exchange rate. In the context of international trade theory, a determinant of exports by a country is an exchange-rate adjusted relative price, which is termed as the "real exchange rate." A common underlying assumption for a range of theoretical framework is that each country produce and trade in final goods. In other words, import content in exports is ignored. By contrast, trade in intermediate products is typical for GVC-participating countries. Even exports of parts and components typically incorporate a substantial amount of import content. An implication is then the need for a reassessment of a range of analytical framework that explains how, and to what extent, exports of a country would be affected by an exchange rate shock.

The literature at large addresses this issue empirically based on the natural hedging role of imported input. The idea is simple: when a substantial part of international trade is trade in intermediates, exporters typically face a compensating movement in the marginal cost when hit by an exchange rate shock. This natural hedging of exchange rate movements, inherent in the imports of intermediate inputs, reduces the overall impact on the profitability of an export goods producer and its supply response to a change in real exchange rate. To this extent, a study by Amiti et al. (2012) shows

that in a very open economy like Belgium, large international companies are able to absorb almost 50 percent of the fluctuation in the exchange rate. This argument appears to be well received empirically in the literature. Several recent empirical analyses of trade in manufactured goods in the Asia-Pacific countries have pointed to the need to recognize the importance of trade in intermediates when analyzing the response to exchange rate movements.<sup>3</sup> In the absence of a formal model, the empirical models are estimated using various ad hoc specifications. For example, empirical studies by Berman et al. (2010), Campa and Goldberg (1997), Hummels et al. (2001), Greenaway et al. (2010), and Jayasuriya and Yamashita (2013) have pointed out that the effects of exchange rates changes on imported inputs would offset some of the impacts on final exports. In addition, empirical studies on exchange rates and China's trade balance using Chinese customs data found that ordinary exports responded negatively to an appreciation of the local currency, while the evidence was mixed on processing trade.<sup>4</sup> The findings have been interpreted in a similar way that high import content mitigates the exchange rate effects on the Chinese final exports (see, e.g., Ahmed, 2009; Cheng et al., 2010; Marquez and Schindler, 2007; Thorebecke, 2011 and 2012; Thorebecke and Smith, 2010; Xing, 2011; and Yamashita, 2011).

In fact, a paradigm shift from a macro-level framework to micro-level ones is required to understand how GVC trade would respond to a change in exchange rate. In the GVC context, "what a country does" (the GVC activities a country is mainly involved in) is endogenously determined at the firm (MNC)-level decisions to change production and sourcing patterns to meet the firm's objective of maximizing total profit from its global operations. This requires the MNC to continually reconsider their operations and sourcing patterns to minimize the total cost. For example, in recent years, some MNCs increased their domestic sourcing in China as the industrialization of China has been deeper. Consequently, the foreign value added in China's gross exports decreased from 36 percent in 2005 to around 29 percent in 2009 (Anukoonwattaka, 2012). At the same time, some of the next-tier emerging countries have been integrated into GVCs. The entry of some Asian LDCs to the downstream section of textile and footwear GVCs while China is increasingly shifting to the upstream process is an example of this case. This implies the needs for a highly refined micro-level and industry-specific framework to understand the current globalization of production. If there is one overarching requirement for the new analytical framework, it is that a fully fledged formal model would require an MNC-level trade model to describe the firm's decision-making at a highly refined "task level." In addition, at each task, there is supply-side substitution between suppliers from both domestic and import markets.

Ideally, a formal framework that can capture all facets of this complex phenomenon will not only require a multicountry, multicommodity general equilibrium framework; it will also need to incorporate the specific microeconomic firm-level characteristics of MNCs that modify standard

firm-level responses to changes in a country's exchange rate relative to various trading partners. This theoretical requirement has not been met by the existing literature. Although the large and growing literature of the "new-new" trade theory is rich and informative, it has to simplify scope of a firm into a single-task and single-location operation in order to keep the model tractable.<sup>5</sup>

The recent literature offers limited scope in this context of GVC because no allowance has been made for the location for each stage of the production process and the patterns of the IPN trade in intermediate goods to be endogenously determined within the models. Typically, it was assumed that a single intermediate input was used in the final-good production. Efforts to incorporate the multiple-component feature in a model are found in Feenstra and Hanson (1996), and Grossman and Rossi-Hansberg (2006). Those models demonstrated that incorporating multiple components ("tasks")—through the assumption of a continuum of tasks—could provide a richer set of insights. In the case of MNCs with foreign subsidiaries, the input decisions involve whether they should be sourced from "onshore or offshore," and which components should be sourced from where.<sup>6</sup>

With regards to the fact that an MNC has to decide on source on each component, a large literature highlighting the natural hedging role of imported inputs tends to ignore this issue by implicitly assuming that there is no substitution between imported inputs and domestic inputs. By contrast, the GVC dynamics reviewed earlier reflect that MNCs continually reconsider about potential sources and modes of input sourcing. In other words, at each components, there seems to be some degrees of substitution between potential sources including existing and potential component-exporting countries as well as domestic sourcing.

In addition, the standard empirical models such as the gravity models were formulated for explaining trade in final goods as derived from a consumer expenditure equation. The framework focuses on how responsive of demand in the export destination to the exchange-rate adjusted relative price. By contrast, when international trade in intermediate goods dominates the underlying demand for intermediate exports is not generated by the consumer expenditure at the export destination but at the country of final demand. Consider, for instance, the Thai exports of electronic components to China might be influenced by the shifts of the consumer expenditure of the United States rather than that of China.

Anukoonwattaka (2012) takes one step toward providing a firmer analytical basis. Following the multiple-task approach of Grossman and Rossi-Hansberg (2006), a firm-level, partial equilibrium analysis for analyzing how an MNC's input sourcing patterns respond to a change in an exchange rate was developed. When some degree of substitution between components sourced from different GVC-participating countries is allowed, the outcome is the multitask, multiexchange rate model that allows a change in



an exchange-rate adjusted relative price to have intensive margin effect (a change in the import volume of each component, which depends on a shift in demands) and the extensive margin effect (a change in the set of imported components, which depends on the degree of substitution between potential producers of each component). These effects sometimes compensate each other. For example, while a depreciation of the Chinese currency may decrease an incentive to import a component from ASEAN to further production in China, it may enhance the Chinese final exports, which in turn means that China would need more of each component including those that still have to import from Thailand. This means that the net impacts to total volume of trade tend to be ambiguous, and depend on specific contexts of the product and the country in question.

## The Evidence

To gain a better insight into the issue, the empirical investigation is undertaken to examine the exchange rate sensitivity of GVC-related intermediate input trade in the region focusing on how intermediate imports of China from major ASEAN countries and relatively technologically advanced East Asian countries behaved from 1992 to 2012. In order to focus on trade flows associated with production sharing between China and selected Asian trading partners, intermediates are identified using the Sturgeon and Memodevic (2010) classification of “customized” intermediate inputs of the globally integrated industries in the electronics, automotive, and apparel/footwear sectors at the five-digit SITC revision 3 product code. The set of component-exporting countries comprises advanced Asian countries (Japan, the Republic of Korea, and Singapore), major ASEAN countries (Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam), and India (Pakistan is also included for apparel and footwear components). For the selected industries, imports from those countries accounted for about 99 percent of China’s total imports from Asia and the Pacific in 2011.

Based on the implications probed from the formal model provided by Anukoonwattaka (2012), the relative prices adjusted by exchange rates of the downstream and upstream countries would influence GVC trade flows. The theory suggests that changes in exchange rates create opposite changes along the extensive and intensive margins of intermediate trade flow. Hence, relatively low sensitivity of intermediate imports to exchange rate changes can be expected. The impacts of changes in exchange rates differ between intensive and extensive margins. Therefore, the net effect tends to be ambiguous and may differ between industries and countries. The impacts of changes in exchange rates also depend on factors such as final demand elasticity, and elasticity of substitution between domestic and import components. Therefore, exchange rate elasticities are expected to vary across sectors and countries. It is therefore important to take these

variations into account in a model including multiple sectors and countries. The fixed effects estimation is used to handle these issues in the aggregate model. In addition, the model is estimated separately for each sector as well as for each sector-country pair in the dataset. Estimating sectoral models and sectoral-country models give insights into and knowledge of differences in the sensitivity of trade with regard to changes in exchange rates, which can be useful in deriving policy implications.

The impacts of changes in relative prices, adjusted by exchange rates, on intermediate imports by China from selected Asian countries are tested. The effect of changes in relative prices is captured by two real exchange rates in the regression: (a) the component-supplier rate; and (b) the final-exporting-country rate.<sup>7</sup> Those real exchange rates are represented in the regression as the index of real effective exchange rates of intermediate-exporting countries (IEER) and the real effective exchange rates of final-good exporting country (FEER), respectively.

Because intermediate imports are a function of final demand, final exports (X) are introduced as another explanatory variable. In addition, other control variables are introduced that may influence the demand for imported inputs, such as: (a) the growth of G-3 economies to act as a proxy for the world economy, which may influence demand for the final goods of IPNs<sup>8</sup>; (b) dummies to control for membership of WTO and preferential trade agreements; and (c) sector- and country-specific effects.

The empirical specification is in natural logarithm and has the following form:

$$\ln M_{itjk} = \alpha + \beta Z'_{itj} + \phi_1 \ln IEER_{itj} + \phi_2 \ln FEER_{ij} + \phi_3 \ln X_{itj} \quad (1)$$

Intermediate imports by China are used to mirror intermediate exports by selected Asian countries to the importing country. The subscripts  $i$ ,  $t$ ,  $j$ , and  $k$  represent a sourcing country, time period, a final product (industry), and an intermediate product, respectively. The variables in equation (1) are defined as follows:  $M_{itjk}$  represents China's imports of component  $k$  from industry  $j$  from country  $i$ , in year  $t$ .  $Z_{itj}$  is the vector of control variables that capture specific effects varying by countries, sectors, and time dimensions.  $IEER_{itj}$  is the real effective exchange rates of intermediate-exporting country  $i$  at time  $t$  for industry  $j$  against exchange rates of intermediate-export destinations.  $FEER_{ij}$  is the real effective exchange rate of the final-exporting country (China) at time  $t$  for industry  $j$  against exchange rates of final destinations.

The real effective exchange rate indices,  $IEER_{itj}$  and  $FEER_{ij}$ , are constructed in such a way that the increasing value of the indices represents a real depreciation. The real effective exchange rate indices are computed for each industry separately. The formula for computing these indices is  $IEER_{itj}$  (equation (2)), which measures the movements of the real exchange

rates between a component-exporting country  $i$  and the set of their major trading partner countries for industry  $j$  at time  $t$ <sup>9</sup>:

$$IEER_{itj} = \sum_k w_{ij}^p rer_{itj}^p, \quad \text{where } w_{ij}^p = \frac{X_{ij}^p}{\sum_p X_{ij}^p}, \quad (2)$$

where  $p$  is the index for an intermediate-importing country,<sup>10</sup> while  $rer_{itj}^p$  is the bilateral real exchange rate index of country  $i$  relative to its importing country  $p$  at time  $t$ , and  $w_{ij}^p$  is the weight for an intermediate-buyer country  $p$  in intermediate exports by country  $i$  for industry  $j$ .  $X_{ij}^p$  represents the exports of intermediate input  $j$  by country  $i$  to country  $p$  at the base year.<sup>11</sup>  $FEER_{itj}$  measures the movements of the real exchange rate between China (as the final-exporting country) relative to its major final-importing countries for sector  $j$  at time  $t$ .  $FEER_{itj}$  is defined as the final-exports weighed average of China's real exchange rates relative to the destinations of its exports of a given sector  $j$  (equation (3)):

$$FEER_{itj} = \sum_f w_j^f rer_{itj}^f, \quad \text{where } w_j^f = \frac{X_j^f}{\sum_f X_j^f}, \quad (3)$$

where  $f$  is the index for a final-importing country,  $rer_{itj}^f$  is China's bilateral real exchange rate index relative to its importing country  $f$  at time  $t$ ,  $w_j^f$  is the weight of a importing country  $f$  in exports of China, and  $X_j^f$  is total exports of industry  $j$  by China to importing country  $f$  at the base year.

The results from testing for correlation  $\rho$  between  $IEER_{itj}$  and  $FEER_{itj}$  show that the correlation between the two exchange rate variables is low. This could be because selected component-exporting countries are, in general, not a major destination of Chinese final exports.

The fixed-effects models are used to estimate the import equation (1) using panel data.<sup>12</sup> Based on insights from the theory, changes in exchange rates affect extensive and intensive margins of intermediate-input trade in opposite directions.

Given that final exports ( $X_{itj}$ ) is controlled, the exchange rate coefficients measure the effects of changes in exchange rates on extensive-margin of intermediate exports. Based on the theory, the coefficient of  $IEER_{itj}$  is expected to be positive. In other words, currency depreciation (appreciation) of a component-exporting country is expected to increase (decrease) the number of intermediate-export items. The reason is that the depreciation (appreciation) decreases (increases) the relative prices in a foreign currency for all components made by the country undergoing currency depreciation. To a downstream producer, some components that were previously sourced from domestic production would become less (more) costly if they were imported.

In contrast, the coefficient of  $FEER_{ij}$  is expected to be negative; that is, depreciation (appreciation) of the Chinese currency relative to its final-buyer currencies is expected to decrease (increase) the number of intermediate items exported by selected Asian countries to the Chinese market. However, this hypothesis could be violated if the exchange rate of China and the component exporting country is highly correlated.<sup>13</sup>

Another important variable is the final exports  $X_{ij}$ . The coefficient of  $X_{ij}$  measures the effects of changes in exchange rates on the intensive margin of intermediate exports. The coefficient is expected to be positive. The theoretical model makes it clear that the currency depreciation (appreciation) of any IPN-participating country is likely to increase (decrease) final exports along the intensive margin. The depreciation (appreciation) of an upstream currency decreases (increases) the cost of intermediate inputs to the final producer. In addition, the depreciation (appreciation) of a downstream reduces (increases) the relative price of final exports in foreign currency. These effects contribute to an increase (decrease) in final exports along the intensive margin. As a result, the effects are transmitted to intermediate exports by Asian countries because the Chinese imports of an IPN intermediate good is a function of China's final exports.

The fixed-effect model is estimated separately for each country and sector. The results are presented in table 6.4. It should be noted that only the estimated coefficients of explanatory variables of interest are reported. The estimations also incorporate other control variables such as the growth rates of G-3 economies and the dummy variables that are added to control sector-, year-, and country- fixed effects as well as the effects of WTO memberships and trade agreements.

Comparing the estimated coefficients of different sectors shows that the trade response to exchange rate shocks has sector-specific patterns. Evidence from the electronics sector appears to fit with the predictions in general. Table 6.5 shows the results from the electronics sector. In the case of ASEAN countries, their intermediate exports to China fit with the predictions of the theory. With the exception of Viet Nam, the depreciation (appreciation) of the exchange rate of a selected ASEAN country is associated with an increase (decrease) in intermediate exports. However, the impacts of final-exporting exchange rates are mixed. Component exports by Malaysia, the Philippines, and Viet Nam tend to follow the theoretical prediction that component exports are likely to decrease (increase) if the Chinese final-exporting real exchange rates depreciate (appreciate).

For other component supplying countries, their intermediate exports are not so sensitive to a change in real exchange rates. The Republic of Korea is an exception as there is some supporting evidence concerning the impacts of a change in upstream exchange rates ( $IEER_{itj}$ ) on intermediate exports; that is, component exports tend to increase (decrease) if currency depreciation (appreciation) occurs in the given component-exporting country. However, the  $FEER_{ij}$  coefficient has an unexpected positive sign. These mixed results may reflect a difference in the nature of IPN-participating

**Table 6.4** Fixed-effects estimations of exchange rate effects on intermediate electronics imports by China from selected Asian countries, 1992–2011

	$\ln IEER_{itj}$	$\ln FEER_{itj}$	$\ln X_{itj}$	Observations	$R^2$	Adjusted $R^2$
All	1.459*** (3.64)	-0.665 (-1.59)	0.841*** (11.91)	5 506	0.353	0.352
<i>Advanced Asia</i>						
Japan	-0.976* (-2.34)	0.675 (1.09)	0.453** (3.21)	770	0.239	0.234
Republic of Korea	2.818*** (4.61)	3.178** (3.39)	1.031*** (7.29)	755	0.488	0.484
Singapore	2.163 (1.33)	1.182 (1.36)	0.521** (2.94)	751	0.161	0.155
<i>ASEAN 5</i>						
Indonesia	2.988*** (4.32)	-0.139 (-0.11)	1.020*** (3.99)	536	0.44	0.434
Malaysia	6.039*** (7.28)	-2.387* (-2.50)	0.813*** (6.46)	687	0.588	0.585
Philippines	6.932*** (5.02)	-6.806*** (-4.19)	1.450*** (9.85)	554	0.615	0.612
Thailand	4.422** (3.24)	0.535 (0.48)	1.508*** (8.25)	644	0.485	0.481
Vietnam	-7.783 (1.53)	-7.956** (-2.74)	1.010* (2.13)	298	0.371	0.361
<i>South Asia</i>						
India	-1.001 (-0.36)	0.656 (0.26)	1.101*** (4.79)	511	0.331	0.324

Notes: Numbers in parenthesis are the t-statistic values.

The degree of statistical significance is \*\*\* 1 percent; \*\* 5 percent; and \* 10 percent.

Estimated constant terms are not reported.

Source: Author's own calculations.

countries. ASEAN may be considered as the East (a medium-wage country) in the theoretical model. In contrast, countries such as Japan, the Republic of Korea, and Singapore may be too advanced to fit the same role while India appears to be trailing others in the Asian IPNs.

Table 6.6 presents the results from the apparel/footwear sector. The exchange rates of Indonesia, the Republic of Korea, Malaysia, and Thailand have a significant influence on their intermediate exports to China. The coefficients of  $IEER_{itj}$  have the expected sign for those countries. A 1 percent depreciation of their currencies is associated with an increase in their intermediate exports to China by 1 percent (Indonesia), 2 percent (the Republic of Korea and Thailand), and 2.5 percent (Malaysia). The  $FEER_{itj}$  coefficient is statistically significant but with an unexpected sign in general. As already mentioned, the unexpected positive sign of the  $FEER_{itj}$  coefficient may be because China has moved from downstream production toward more upstream activities while, at the same time, the Chinese currency was showing an appreciation trend during the period under study. This is particularly evident where final assembly activities for apparel/footwear IPNs

**Table 6.5** Fixed-effects estimations of exchange rate effects on intermediate apparel/footwear imports by China from selected Asian countries, 1992–2011

	$\ln IEER_{ijt}$	$\ln FEER_{ijt}$	$\ln X_{ijt}$	Observations	$R^2$	Adjusted $R^2$
All	0.00798 (0.04)	0.765** (3.18)	0.507*** (8.03)	11 781	0.022	0.022
<i>Advanced Asia</i>						
Japan	0.388 (1.53)	1.399*** (4.11)	0.273*** (3.94)	1 865	0.031	0.029
Republic of Korea	1.850*** (6.66)	3.442*** (10.82)	0.445*** (4.39)	1 832	0.082	0.079
Singapore	-1.828 (-0.89)	0.822 (1.00)	-0.465 (-1.77)	1 143	0.059	0.055
<i>ASEAN 5</i>						
Indonesia	0.930*** (3.70)	0.38 (0.72)	0.608** (3.09)	1 293	0.047	0.044
Malaysia	2.525*** (3.50)	3.060** (3.09)	0.585* (2.15)	1 016	0.046	0.041
Philippines	-1.275 (-1.06)	3.040* (2.11)	0.277 (0.61)	654	0.013	0.006
Thailand	1.672** (2.75)	1.399* (2.04)	0.864*** (4.86)	1 343	0.083	0.079
Vietnam	-3.109 (-1.49)	1.493 (0.54)	1.542*** (4.27)	745	0.15	0.144
<i>South Asia</i>						
India	0.795 (0.73)	-1.339 (-1.46)	1.250*** (5.95)	1 213	0.196	0.192
Pakistan	-1.687 (-0.75)	-1.561 (-1.46)	0.289 (0.99)	677	0.018	0.01

Notes: Numbers in parenthesis are the t-statistic values.

The degree of statistical significance is \*\*\* 1 percent; \*\* 5 percent; and \* 10 percent.

Estimated constant terms are not reported.

Source: Author's own elaborations.

have been increasingly moved from China to low-wage countries such as Bangladesh, Cambodia, India, and Pakistan.

The results from the automotive sector (table 6.6) reveal that the model based on the theoretical framework does not fit well with the automotive IPNs in Asia. The coefficients of  $IEER_{ijt}$  and  $FEER_{ijt}$  have unexpected signs in most cases and are not significant. This is not surprising given the fact that China has not emerged as an export platform for the automotive industry. In addition, the model cannot capture potential factors shaping MNCs' sourcing decisions on automotive components such as scale intensity, "just-in-time" requirements, and trade and investment policies.

Table 6.7 shows the interaction between final exports and the final-exporting exchange rate to the regression in order to combine the effects of a change in the final-exporting exchange rate on the intensive and extensive margins. The coefficient of the interaction between  $FEER_{ijt}$  and  $X_{ijt}$  is positive and statistically significant for all industries. Thus this appears

**Table 6.6** Fixed-effects estimations of exchange rate effects on intermediate automotive component imports by China from selected Asian countries, 1992–2011

	$\ln IEER_{itj}$	$\ln FEER_{itj}$	$\ln X_{itj}$	Observations	R <sup>2</sup>	Adjusted R <sup>2</sup>
All	-1.991*** (-3.86)	1.962*** (4.81)	0.623*** (8.69)	3029	0.221	0.22
<i>Advanced Asia</i>						
Japan	-1.35 (-1.95)	0.735 (1.09)	0.414*** (4.69)	562	0.245	0.238
Republic of Korea	-1.693** (-2.98)	0.0578 (0.09)	0.675*** (3.90)	528	0.41	0.404
Singapore	-4.347 (-1.23)	2.028** (2.96)	0.304** (2.81)	399	0.105	0.094
<i>ASEAN 5</i>						
Indonesia	1.044 (0.86)	2.518 (1.08)	0.854** (3.05)	248	0.19	0.174
Malaysia	-0.953 (-0.34)	2.349 (1.68)	1.166*** (5.60)	349	0.264	0.253
Philippines	-7.054 (-1.70)	5.647** (2.91)	0.277 (0.64)	198	0.296	0.278
Thailand	-6.670** (-3.07)	1.914* (2.14)	0.582** (3.26)	369	0.278	0.268
Vietnam	-9.323 (-1.32)	7.741* (2.31)	0.342 (0.93)	122	0.214	0.18
<i>South Asia</i>						
India	-7.321** (-2.85)	3.771 (1.47)	0.502 (1.75)	254	0.211	0.195

Notes: Numbers in parenthesis are the t-statistic values.

The degree of statistical significance is \*\*\* 1 percent; \*\* 5 percent; and \* 10 percent.

Estimated constant terms are not reported.

Source: Author's own elaboration.

**Table 6.7** Intensive-margin effects

	<i>Electronics</i>		<i>Apparel and footwear</i>		<i>Automotive</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
$\ln IEER_{itj}$	1.459*** (3.64)	1.434*** (3.59)	0.00798 (0.04)	-0.0659 (-0.38)	-1.991*** (-3.86)	-2.179*** (-4.14)
$\ln FEER_{itj} * X_{itj}$		0.883*** (12.46)		0.427*** (7.12)		0.552*** (7.73)
Constant	-11.79*** (-3.93)	-16.70*** (-6.98)	-7.233*** (-3.34)	-2.650* (-2.17)	-3.140 (-1.06)	7.028* (2.59)
Observations	5 506	5 506	11 781	11781	3 029	3 029
R <sup>2</sup>	0.353	0.352	0.022	0.022	0.221	0.214
Adjusted R <sup>2</sup>	0.352	0.352	0.022	0.021	0.220	0.213

Notes: Numbers in parenthesis are the t-statistic values.

The degree of statistical significance is \*\*\* 1 percent; \*\* 5 percent; and \* 10 percent.

Estimated constant terms are not reported.

Source: Author's own elaboration.

**Table 6.8** Intensive-margin effects by country—electronics

	Advanced Asia					ASEAN 5					South Asia
	Japan	Republic of Korea	Singapore	Indonesia	Malaysia	Philippines	Thailand	Vietnam	India		
$\ln IEER_{ij}$	-0.996*	2.255***	3.076	2.999***	5.768***	4.473***	4.434**	-6.959	-0.603		
	(-2.43)	(4.59)	(1.97)	(4.30)	(7.20)	(3.71)	(3.23)	(-1.44)	(-0.38)		
$\ln FEER_{ij} * X_{ij}$	0.423**	0.888***	0.497**	1.042***	0.971***	1.746***	1.496***	0.911	1.113***		
	(2.73)	(5.43)	(2.81)	(4.62)	(7.53)	(12.24)	(7.25)	(1.85)	(5.03)		
Constant	6.316	-19.11***	-16.71*	-29.49***	-37.11***	-46.71***	-41.77***	17.04	-14.71		
	(1.84)	(-5.44)	(-2.06)	(-4.98)	(-9.69)	(-6.69)	(-6.62)	(0.59)	(-1.46)		
Observations	770	755	751	536	687	554	644	298	511		
R <sup>2</sup>	0.239	0.478	0.160	0.440	0.582	0.592	0.485	0.353	0.331		
Adjusted R <sup>2</sup>	0.235	0.475	0.155	0.435	0.580	0.589	0.482	0.344	0.326		

Notes: Numbers in parenthesis are the t-statistic values.

The degree of statistical significance is \*\*\* 1 percent, \*\* 5 percent, and \* 10 percent.

Estimated constant terms are not reported.

Source: Author's own elaboration.



**Table 6.9** Intensive-margin effects by country—apparel and footwear

	ASEAN 5									
	Advanced Asia					South Asia				
	Japan	Republic of Korea	Singapore	Indonesia	Malaysia	Philippines	Thailand	Vietnam	India	Pakistan
$\ln IEE_{ijt}$	-0.297 (-1.61)	0.824*** (3.42)	-1.559 (-0.76)	0.905*** (3.65)	2.172** (2.92)	-0.915 (-0.79)	1.508* (2.56)	-2.427 (-1.34)	-0.456 (-0.49)	-1.382 (-0.61)
$\ln FEER_{ijt} * X_{ijt}$	0.179** (2.66)	0.124 (1.31)	-0.564* (-2.30)	0.576** (3.11)	0.248 (1.01)	-0.0476 (-0.12)	0.696*** (3.80)	1.489*** (4.46)	1.336*** (6.66)	0.507 (1.90)
Constant	6.150*** (4.70)	1.142 (0.59)	21.32 (1.65)	-10.26** (-2.77)	-10.17* (-2.50)	7.345 (0.75)	-15.34** (-3.29)	-14.21 (-1.32)	-19.82** (-2.85)	0.512 (0.04)
Observations	1 865	1 832	1 143	1 293	1 016	654	1 343	745	1 213	677
R <sup>2</sup>	0.023	0.045	0.058	0.047	0.034	0.006	0.080	0.150	0.194	0.014
Adjusted R <sup>2</sup>	0.021	0.043	0.055	0.044	0.031	0.000	0.077	0.145	0.191	0.008

Notes: Numbers in parenthesis are the t-statistic values.

The degree of statistical significance is \*\*\* 1 percent; \*\* 5 percent; and \* 10 percent. Estimated constant terms are not reported.

Source: Author's own elaboration.

**Table 6.10** Intensive-margin effects by country—automotive

	ASEAN 5										South Asia
	Advanced Asia										
	Japan	Republic of Korea	Singapore	Indonesia	Malaysia	Philippines	Thailand	Vietnam	India		
$\ln IEER_{ij}$	-1.009 (-1.93)	-1.687** (-2.91)	-6.235 (-1.82)	0.468 (0.36)	-2.160 (-0.71)	-8.623 (-2.07)	-8.825** (-3.27)	-9.204 (-1.30)	-6.221* (-2.52)		
$\ln FEER_{ij} * X_{ij}$	0.379*** (3.91)	0.678*** (4.12)	0.210* (2.28)	0.734** (3.13)	1.142*** (5.55)	0.120 (0.27)	0.469* (2.51)	-0.0273 (-0.06)	0.543 (1.76)		
Constant	8.151* (2.69)	5.087 (1.22)	29.13 (1.81)	-10.05 (-1.55)	-2.911 (-0.24)	37.21 (1.76)	37.28** (2.80)	44.34 (1.20)	24.15 (1.71)		
Observations	562	528	399	248	349	198	369	122	254		
R <sup>2</sup>	0.243	0.410	0.088	0.185	0.258	0.275	0.273	0.181	0.198		
Adjusted R <sup>2</sup>	0.238	0.405	0.079	0.171	0.249	0.260	0.265	0.153	0.185		

Notes: Numbers in parenthesis are the t-statistic values.

The degree of statistical significance is \*\*\* 1 percent; \*\* 5 percent; and \* 10 percent. Estimated constant terms are not reported.

Source: Author's own elaboration.

to imply that the intensive margin effect tends to dominate the extensive margin effect of changes in exchange rates. In other words, based on the sample, upstream countries tend to benefit from a Chinese currency depreciation. Their intermediate exports to China tend to increase, even though the number of export items might decline.<sup>14</sup>

To see whether the patterns discussed here are general across countries, a similar regression is estimated separately for each country. Tables 6.8–6.10 present the estimations at the country level, which tend to support the aggregate industry-level regressions in table 6.4. The results confirm that depreciation of the Chinese currency tends, in general, to have a positive net impact on exports by upstream countries.

## Conclusions

Trade and exchange rate literature suggests that real exchange rates are one important variable in determining trade flows. The findings apply to trade in end products as well as intermediate products destined for use in the importing country. However, this standard conjecture is becoming increasingly inapplicable when the growth of cross-border fragmentation in production generates trade patterns in which parts and components flow from one country to another, to be assembled into products that are then exported rather than used domestically.

This chapter emphasizes that in order to understand the relationships between exchange rates and trade flows in the modern international trade and production environment, the effects of multiple exchange rates at multiple stages of production need to be taken into account. The empirical investigations in this chapter found that currency depreciation of a downstream country such as China does not necessarily benefit exports by an upstream Asian country including that in ASEAN even if their exports are complementary.

The mechanisms at play in the Chinese exchange rate effects are (a) the interaction between the impacts on final demands, and (b) substitution between imports and domestic inputs. The trade-off reduces the sensitivity of upstream exports to changes in downstream exchange rates. However, based on the sample, the final demand effects may dominate the substitution effects. Different datasets could give dissimilar results. It should be noted that the heterogeneity of exchange rate impacts is observed across industries and countries, but the evidence is strong when the set of upstream countries are ASEAN members.

Based on the evidence found by this study, the current appreciation of the Chinese currency may have an adverse impact on Asian industries involved in GVCs. Since 2009, Asian exchange rates have, in general, been following an appreciation trend. An implication of the empirical evidence is, then, that the GVC participating countries in Asia may be adversely affected by the current movements of both upstream and downstream exchange rates.

Within the context of GVC trade, GVC participating industries may be benefiting from exchange rate coordination between GVC participating countries. However, the application of these findings in macroeconomic policy formation needs to take into account the limitations of this study. The policy implications mentioned in this study are drawn within the context of internationally integrated industries. In addition, the cross-industry analysis shows that there are substantial variations between GVC participating industries in production, trading partners, and responses to exchange rate changes. Therefore, the extent to which these sector-specific implications are applicable to trade flows in general needs a careful examination. For example, while the model's implications may be applicable to trade flows of electronics, they may not be applicable either to trade flows in an industry that is not highly integrated into GVCs or to trade in homogeneous products such as agricultural commodities and primary products. However, finding the policy balance that generates the optimal solution at the aggregate level is outside the scope of this study. In addition, general equilibrium impacts from the changes in key variables of the model are not included in this study.

## Notes

1. For details see, for example, Legewie (1999a and 1999b), and Hiratsuka (2010).
2. Intermediate goods can be parts and components or any other item used as an input in the production of manufactured goods for final consumers (Sturgeon and Memodevic, 2010). An intermediate good is defined as “an input to the production process that has itself been produced and, unlike capital, is used up in production. As an input, an intermediate good has itself been produced and is thus defined in contrast to a primary input. As an output, an intermediate good is used to produce other goods (or services) compared to a final good, which is consumed and can be referred to as a ‘consumption good’” (Deardorff, 2006, p. 118). The difference between intermediate and capital goods lies in the latter entering as a fixed asset in the production process. Like any primary factor (such as labor, land, or natural resources), capital is used but not used up in the production process. On the contrary, an intermediate good is used, often transformed, and incorporated in the final output (Miroudot and others, 2009). However, the official approach to identifying intermediate inputs is absent, and researchers use different categories to identify intermediate goods and services.
3. Several recent analyses of the exchange rate responses of the Asian manufacturing trade draw attention to the need to recognize the importance and role of imports of parts and components. See, for example: Greenaway et al. (2010); Jongwanish (2010); Thorbecke (2012); and Thorbecke and Smith (2010).
4. Processing trade comprises imports of inputs for China's exported goods as well as processing exports using those imported intermediate inputs. OECD-WTO (2013) found that the import content of China's electronics exports in 2009 was some 40 percent. In contrast, ordinary exports are based on local inputs, and ordinary imports do not significantly contain the reimported Chinese inputs.

5. Zhao and Xing (2006) proposed a model of an MNC with multiple location options for its horizontal FDI, which showed that exchange rate movements could affect horizontal FDI. However, vertical FDI, which heavily involves trade in intermediate inputs, was excluded from their model.
6. Feenstra and Hanson (2005) presented a model of an endogenous set of outsourced tasks in a two-task framework.
7. The theoretical model makes it clear that there is a substitution effect between domestic and import components when there is a change in the downstream exchange rate relative to the final buyer currency. The substitution effect would not be captured if a simultaneous-equation econometric approach is followed as suggested by Banik and Das (2013), or running separate regressions as suggested by Leamer and Stern (1970) and Magee (1975). Those techniques would not be able to capture the substitution impacts and, more importantly, could produce misleading results.
8. The G-3 originally comprised Germany, Japan, and the United States. However, the G-3 now includes the European Union rather than just Germany.
9. Ideally, constructing the real effective exchange rate at component level; however, the index computed at product level would face a serious problem resulting from missing values due to zero bilateral trade flows occurring often at the highly disaggregated level of trade data.
10. Definitions for the subscripts  $i$ ,  $t$ , and  $k$  discussed earlier are also applied here.
11. To ensure that changes in the effective exchange rate index reflect exchange rate movements, the weight term constant has been set across time. The effective exchange rates are based on exports destinations in the median year of the study period.
12. The regression series presented in this chapter are also estimated using the random effects model to check for robustness. There is no significant variation between the two specifications. In addition, the Hausman statistic indicates that the fixed effect approach is preferred.
13. The results from testing for the correlation  $\rho$  between  $IEER_{itj}$  and  $FEER_{itj}$  show that the correlation between the two exchange rate variables is low. The correlation coefficients are less than the threshold of 0.5 in absolute terms.
14. The theory suggests that the effects on intensive and extensive margins would partially offset each other. For instance, a depreciation of the Chinese currency is expected to reduce component exports by upstream countries along the extensive margin. In contrast, a final-export increase by China would increase exports of intermediates from upstream countries along the intensive margin. Note that the interaction between final exports and the intermediate-exporting exchange rate are not incorporated into the regressions, because the theory suggests that the extensive and intensive margins tend to move in the same direction if there is a change in intermediate-exporting exchange rates. Interacting the two terms would therefore not give any additional insight.

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# Intra- and Extraregional Trade Costs of ASEAN Economies: Implications for Asian Regional Integration

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## Introduction

Since its creation in 1967, the ASEAN (Association of Southeast Asia Nations) has been actively engaged in regional trade integration. ASEAN member states (AMS) have made particularly significant progress in reducing tariffs: by the end of 2014, intra-ASEAN tariffs had been eliminated for most goods, as scheduled by the ASEAN Economic Community (AEC). However, as envisaged in the AEC Blueprint, transforming ASEAN into “a single market and production base” by 2015 also involves removing other trade barriers and impediments. Many trade facilitation related initiatives have been taken by ASEAN members over the past two decades in this regard, with successful implementation of these initiatives expected to result in significant efficiency gains and measurable reduction in their overall cost of trade. However, implementation has been slower than expected. This chapter provides an analysis of the level of intraregional cost of trade in goods within Southeast Asia and between Southeast Asia and other regional groupings in Asia and the Pacific, identifying some of the key factors driving the reduction in these trade costs. Since AMS have already made considerable improvements in reducing tariffs, we focus on the analysis of trade costs other than tariffs.

## Trade Facilitation and Trade Costs Related Initiatives

To achieve the goal of “free flow of goods,” many commitments were listed in the AEC Blueprint, for example, the elimination of nontariff barriers (NTBs), the improvement of the Common Effective Preferential Tariffs



(CEPT) Rules of Origin (ROO), the harmonization of trade procedures and customs integration, and the establishment of the ASEAN Single Window (ASW) (ASEAN Secretariat, 2008). Several infrastructure initiatives aimed at facilitating trade were also undertaken, such as regional efforts in transport cooperation and improvements of land, maritime, air transports, and information infrastructure, which are essential to enabling the efficient movement of goods. However, while ASEAN countries have signed a host of agreements and arrangements to facilitate trade among themselves, few of these measures have actually been fully implemented. For example, the original ASW agreement envisaged that all ten member countries would have national single windows (NSWs) in place by 2012, but only four of them (Indonesia, Malaysia, Philippines, and Singapore) have fully operational NSWs as of 2014.<sup>1</sup> As reported in the AEC Scorecard, 24 out of the 56 measures undertaken to allow the “free flow of goods” were not fully implemented as of 2011 (ASEC, 2012). Several other trade facilitation and trade costs related components of the AEC roadmap will not be completed by all members by 2015, such as the elimination of NTBs and the modernization of tariff classification, customs valuation, and customs techniques. Concerning transport, 40 agreements were signed, but only 9 were in force as of 2012 (Albuero, forthcoming).

ASEAN has also long adopted an open regionalism strategy, as shown by the ASEAN+3 cooperation mechanism established in 1997 with China, Japan, and the Republic of Korea. This strategy is made explicit in the AEC Blueprint, which specifies “integration into the global economy” as its fourth and last primary objective. Five ASEAN+1 Free Trades Agreements (FTAs) have been signed with China, Japan, Republic of Korea, India, and Australia and New Zealand, respectively.<sup>2</sup> It has been noted, however, that even if these FTAs lead to the elimination of tariffs between partners, they are unlikely to be effective in removing NTBs and other regulatory barriers (ADB and ISEAS, 2013). The establishment of the Regional Comprehensive Economic Partnership (RCEP) between ASEAN and the six ASEAN+1 countries, which is under negotiation since February 2013, may hold some promise as it aims to deepen the engagement among members, but such an ambitious agreement is not likely to be completed in 2015 (ERIA, 2012).

On the whole, if ASEAN has made significant progress in implementing its extensive agreements and commitments related to intra- and extraregional trade integration and trade facilitation, it also appears that there remain several areas where implementation is lagging behind. Importantly, very large differences remain among member countries concerning implementation status of various commitments. While this is largely explained by differences in the levels of economic development of the three AMS with a least developed country status and other ASEAN developing economies, finding ways to bridge this implementation gap will be essential to the future success of the AEC. Furthermore, as exemplified in the case of the ASW development, efforts have been very much focused on integrating

cross-border regulatory trade and transport procedures, with limited attention paid to integrating regulatory and business processes along the entire supply chain, which is essential to reducing trade transaction costs (ESCAP and World Bank, 2013). Indeed, despite the achievements in implementing AFTA (ASEAN Free Trade Agreement) and ATIGA (ASEAN Trade in Goods Agreement), the relative volume of intra-ASEAN trade (as a percentage ASEAN's total trade) has not significantly increased since 2003. In contrast, ASEAN's trade volume with other Asian economies substantially rose, especially with China (CARI, 2013), which serves as a regional and global distribution and manufacturing hub for many industries.

This chapter analyzes whether all these commitments and agreements to remove trade barriers (other than tariffs) have been fruitful and whether they have resulted in the reduction of ASEAN trade costs. We first analyze the level of intra- and extraregional nontariff costs of trade in goods, using a new international bilateral trade cost database developed jointly by ESCAP and the World Bank. We then present additional cross-country indicators of trade facilitation efficiency, including the World Bank Ease of Doing Business (EDB) indicators, the ESCAP International Supply Chain Connectivity Index (ISCC), and the UNCTAD Liner Shipping Connectivity Index (LSCI). Following Duval and Utoktham (2011) and Arvis et al. (2013), an econometric model of nontariff comprehensive trade costs (NT-CTCs) is then developed and estimated using these specific indicators in an effort to identify some of the key factors driving the reduction in trade costs other than tariffs, and to evaluate the benefit from ASEAN and ASEAN+3 trade facilitation efforts. On the basis of the analysis, recommendations on policy priorities for ASEAN as well as greater Asia integration are formulated.

## Trade Costs and Facilitation Performance of ASEAN Countries

As explained earlier, AMS have made numerous commitments and agreements in an effort to enhance trade facilitation and reduce nontariff trade costs among them and with other regions. This section explores whether all these initiatives had a positive impact on the trade facilitation performance of ASEAN countries over the past decade. We begin by reviewing the aggregate level of nontariff trade costs of ASEAN followed by a presentation of other more specific trade facilitation performance indicators.

### *Intra- and Interregional Trade Costs of ASEAN*

The trade costs presented in this section are based on a new ESCAP-World Bank database featuring bilateral international trade costs in goods for 178 countries from 1995 to 2012.<sup>3</sup> As explained in Arvis et al. (2013), the bilateral measure of comprehensive trade costs (CTCs) featured in this database represents all extra costs involved in trading goods internationally with

another country rather than domestically within a country. It is comprehensive in the sense that it includes both observable and unobservable costs, that is, tariffs and traditional nontariff measures (NTMs) compliance costs but also transportation costs, behind-the-border barriers, costs associated with the performance of trade logistics and facilitation services, as well as barriers linked to differences in language, culture, and currency. Given that the success of ASEAN in eliminating tariffs on goods over time is fully recognized, we focus here on nontariff comprehensive trade costs, which capture all additional direct and indirect international trade costs other than tariff costs (Anderson and van Wincoop, 2004).<sup>4</sup>

Comprehensive intraregional trade costs are usually expected to be lower than interregional trade costs due to the geographic proximity between countries of the same region as well as similarities in languages and culture. In addition, as discussed earlier, ASEAN economies have taken several initiatives to reduce trade costs among themselves and remove other trade barriers. Interestingly, however, the results of table 7.1 show that nontariff comprehensive trade costs within ASEAN remain sometimes higher than those with other subregions.<sup>5</sup> The trade costs shown are average trade costs across all tradable goods produced in partner countries expressed as percentages of the value of such goods (i.e., as tariff equivalents). Trade costs of ASEAN-4 (Indonesia, Malaysia, Philippines, and Thailand) and ASEAN less developed CLMV economies<sup>6</sup> are shown separately to provide a clearer picture of the evolution of these two groups of ASEAN economies. Nontariff comprehensive trade costs vary greatly across the world's subregions. For example, they range from 44 percent for intra-European Union (EU-3) trade costs to a prohibitive 354 percent for trade between ASEAN-4 and North and Central Asia.

Intra-ASEAN-4 nontariff trade costs are relatively low (77 percent) compared to those of most other Asia-Pacific subregions, but they remain significantly higher than intra-European Union trade costs (44 percent) or even those between the three main Northeast Asia economies (51 percent). This later finding is particularly interesting, as there are no formal trade agreements in place between these three economies. In addition, bilateral nontariff trade costs between ASEAN-4 and Northeast Asia (China, Japan, and Republic of Korea), at approximately 75 percent, suggests that the level of trade integration between the four largest ASEAN economies is possibly lower than the one between these economies and the Northeast Asian economies.

The close integration between ASEAN and Northeast Asia is particularly remarkable in a context where the level of trade integration between ASEAN and other Asian subregions appears to be limited at best: nontariff trade costs between ASEAN-4 and Pacific economies (PAC-4) and North and Central Asia are 174 percent and 354 percent, respectively, which is 1.5–3 times higher than those with nonregional groupings such as North America (120 percent). ASEAN-4-South Asia (SAARC-4) trade costs stand lower at

**Table 7.1** Intra- and interregional trade costs of ASEAN and other world regions (excluding tariffs; values in %)

	<i>North and Central Asia</i>		<i>SAARC-4</i>	<i>CLMV</i>	<i>North America</i>		<i>NEA-3</i>	<i>EU-3</i>	<i>ASEAN-4</i>
<b>PAC-4</b>									
2007–2012	99.9								
% change from 2001 to 2006	25.84								
<b>North and Central Asia</b>									
2007–2012	321.5	99.9							
% change from 2001 to 2006	-0.63	10.41							
<b>SAARC-4</b>									
2007–2012	205.0	246.0	107.5						
% change from 2001 to 2006	12.09	8.35	3.92						
<b>CLMV</b>									
2007–2012	192.9	259.4	283.4	127.8					
% change from 2001 to 2006	-10.70	-0.21	20.16	-10.98					
<b>North America</b>									
2007–2012	214.0	264.7	140.9	199.4	46.5				
% change from 2001 to 2006	21.09	15.30	0.80	-15.32	-8.74				
<b>NEA-3</b>									
2007–2012	167.4	186.9	124.0	127.7	85.5	51.4			
% change from 2001 to 2006	26.52	0.53	-0.12	-15.10	-5.07	-6.56			
<b>EU-3</b>									
2007–2012	184.6	148.8	112.2	145.2	90.8	85.0	43.5		
% change from 2001 to 2006	24.11	-7.22	3.10	-3.40	-1.28	-4.57	-3.59		
<b>ASEAN-4</b>									
2007–2012	173.7	353.9	120.8	164.9	119.6	74.7	109.0	76.5	
% change from 2001 to 2006	24.36	15.85	-2.47	-0.04	4.74	5.19	5.13	7.39	

*Note:* for Total Goods (GTT).

ASEAN-4: Indonesia, Malaysia, the Philippines, and Thailand; CLMV: Cambodia, Lao PDR, and Vietnam; NEA-3: China, Japan, and Republic of Korea; North and Central Asia: Azerbaijan, Kazakhstan, Kyrgyzstan, and Russian Federation; PAC-4: Australia, Fiji, New Zealand, and Vanuatu ; SAARC-4: Bangladesh, India, Pakistan, and Sri Lanka; EU-3: France, Germany, and the United Kingdom; North America: Canada, Mexico, and the United States of America.

*Source:* ESCAP-World Bank Trade Costs Database.

about 121 percent, but still about 1.6 times the ASEAN-4-North-East Asia trade costs. Little progress also appears to have been made by ASEAN-4 in reducing such interregional trade costs between 2001 and 2012.

Looking more specifically at the group of ASEAN less developed economies, we find that intra-CLMV trade costs stand at about 128 percent, are nearly 70 percent higher than the intra-ASEAN-4 trade costs, and only slightly higher than intra-SAARC-4 trade costs. Despite geographical proximity and cultural similarities, NT-CTC between ASEAN-4 and CLMV (165 percent) are also significantly higher than those of ASEAN-4 with other non-Asian developed economies, for example, EU-3 (109 percent) and North America (95 percent). Even more preoccupying, CLMV-ASEAN-4 trade costs did not significantly decrease between 2001 and 2012 (by less than 1 percent). In contrast, CLMV's trade costs with almost all other regions decreased considerably since 2001. Indeed, intra-CLMV NT-CTC and CLMV-PAC-4 trade costs decreased by almost 11 percent, while trade costs between CLMV and North America decreased by more than 15 percent over the period. CLMV and Northeast Asia's trade costs performance also improved, since their bilateral trade costs dropped by 15 percent. In contrast, intra- and interregional ASEAN-4 trade costs remain largely stable and do not decrease significantly between the 2001–2006 and the 2007–2012 periods.

Overall, ASEAN member countries present several satisfying figures: intra-ASEAN-4 nontariff trade costs are relatively low and CLMV's rate of improvement is impressive. However, it appears that intra-ASEAN integration still needs to be deepened, and the gap between CLMV and ASEAN-4 countries should be reduced. This is evidenced by the fact that nontariff trade costs between ASEAN-4 and CLMV remain much higher than those between ASEAN-4 and Northeast Asia. These results also demonstrate that while the ASEAN+3 Free Trade Area is a success, ASEAN member countries have some difficulties to remove trade impediments other than tariffs between them. In addition, ASEAN should also intensify its extraregional integration with other Asia-Pacific economies—SAARC-4, PAC-4, and North and Central Asia—since their NT-CTC are higher than those with other non-Asian developed economies.

Tables 7.2 and 7.3 present nontariff bilateral trade costs among ASEAN countries<sup>7</sup> for manufacturing and agriculture, respectively, and their evolution since 1999. For manufacturing, nontariff trade costs of Thailand, Malaysia, and Viet Nam are generally low compared to those of other ASEAN members. In contrast, bilateral NT-CTC of Lao PDR is generally high, with the exception of its trade costs with Thailand and Viet Nam. While Viet Nam and Thailand exhibit a similar nontariff trade costs performance (as of 2009–2012), Viet Nam's nontariff trade costs have decreased more sharply than those of Thailand since 1999. Indeed, Viet Nam managed to reduce its NT-CTC with all the trading partners by at least 14 percent between 1999 and 2012. Nontariff trade costs between Viet Nam and Cambodia dropped by an impressive 54 percent over the period, and these two partners exhibit

**Table 7.2** Bilateral trade costs among ASEAN countries (1999–2002 vs. 2009–2012) for manufacturing (excluding tariffs; values in %)

	<i>Brunei</i>	<i>Cambodia</i>	<i>Indonesia</i>	<i>Lao PDR</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Singapore</i>	<i>Thailand</i>	<i>Vietnam</i>
<i>Indonesia</i>									
1999–2002	239.1	152.7							
2009–2012		123.7							
% change		-19.0							
<i>Lao PDR</i>									
1999–2002		144.0	313.9						
2009–2012		124.0	272.5						
% change		-13.9	-13.2						
<i>Malaysia</i>									
1999–2002	125.9	80.6	48.9	187.5					
2009–2012		71.6	57.3	185.6					
% change		-11.1	17.3	-1.0					
<i>Philippines</i>									
1999–2002	334.7	150.2	99.3	385.0	35.8				
2009–2012		156.5	114.8	355.5	70.2				
% change		4.2	15.5	-7.7	96.1				
<i>Singapore</i>									
1999–2002	142.7	127.0		270.5	35.7	91.4			
2009–2012		72.5	95.9	288.7	49.8	118.3			
% change		-42.9		6.7	39.4	29.4			
<i>Thailand</i>									
1999–2002	235.4	69.5	74.5	36.1	29.2	56.5	82.3		
2009–2012		32.4	72.7	27.7	31.8	68.0	88.1		
% change		-53.5	-2.5	-23.1	9.0	20.5	6.9		
<i>Vietnam</i>									
1999–2002		58.5	91.6		57.9	78.0	112.4	61.9	
2009–2012		26.9	78.1	34.9	40.9	67.2	89.2	42.3	
% change		-54.0	-14.8		-29.3	-13.9	-20.7	-31.7	

Source: ESCAP-World Bank Trade Costs Database.

**Table 7.3** Bilateral trade costs among ASEAN countries (1999–2002 vs. 2009–2012) for agriculture (excluding tariffs; values in %)

	<i>Brunei</i>	<i>Cambodia</i>	<i>Indonesia</i>	<i>Lao PDR</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Singapore</i>	<i>Thailand</i>	<i>Vietnam</i>
<i>Indonesia</i>									
1999–2002		409.9							
2009–2012		445.9							
% change		8.8							
<i>Lao PDR</i>									
1999–2002			350.1						
2009–2012			560.6						
% change			60.1						
<i>Malaysia</i>									
1999–2002	186.2	209.1	124.0	465.5					
2009–2012	189.6	235.4	131.8	541.3					
% change	1.8	12.6	6.3	16.3					
<i>Philippines</i>									
1999–2002	341.0		206.4		179.2				
2009–2012	380.9		204.4		189.3				
% change	11.7		-1.0		5.6				
<i>Singapore</i>									
1999–2002	217.0	156.9			71.4	164.8			
2009–2012	161.8	185.1	98.0	503.1	79.5	166.8			
% change	-25.4	17.9			11.3	1.2			
<i>Thailand</i>									
1999–2002	271.7	232.7	146.4	111.7	87.9	181.8	104.8		
2009–2012	352.6	149.3	150.9	87.3	86.7	168.6	94.9		
% change	29.8	-35.8	3.0	-21.8	-1.3	-7.3	-9.4		
<i>Vietnam</i>									
1999–2002		120.1	184.2	117.8	148.4	206.8	118.8	133.5	
2009–2012		132.4	151.4	117.8	128.7	182.3	128.4	108.9	
% change		10.2	-17.8		-13.2	-11.8	8.1	-18.4	

Source: ESCAP-World Bank Trade Costs Database.

now the lowest bilateral NT-CTC among the region (27 percent). Cambodia and Lao PDR also made fast improvements in reducing their trade costs over the period while the Philippines and Malaysia—starting with lower trade costs in 1999—made much slower progress.

As shown in table 7.3, the costs associated with trading agricultural products across borders are generally found to far exceed those involved in trading manufactured goods. This is partly due to the nature of the agricultural products (e.g., perishability), which can make them harder to trade across borders, as well as the higher level of regulations these products attract for food safety or food security reasons. Thailand and Viet Nam tend to exhibit the lowest agricultural nontariff trade costs, while Lao PDR and Brunei Darussalam have the highest ones. The fact that the cost premium for trading agricultural goods vary so widely across pairs of countries suggests that significant scope for reduction exists in many ASEAN members. Indeed, agricultural trade costs range from 80 percent for trade between Malaysia and Singapore, to 561 percent between Indonesia and Lao PDR. Therefore, focusing trade facilitation efforts on the agricultural sector may be particularly productive, especially given the importance of this sector for poverty reduction and more inclusive and sustainable development. On the whole, tables 7.2 and 7.3 have shown that even if the rate of improvement significantly varies across pairs of countries, ASEAN made consistent progress in reducing its nontariff bilateral trade costs over the past decade, both in manufacturing and agriculture.

#### *Additional Trade Facilitation Related Indicators of ASEAN Member Countries*

Bilateral comprehensive trade costs are a highly aggregated measure of trade cost. Following Duval and Utoktham (2011), several additional trade facilitation-related indicators are therefore reported here in order to provide a more precise overview of AMS trade facilitation performance. Each of these indicators captures some components of bilateral comprehensive trade costs and, the empirical work presented in the last section will aim at identifying the relative importance of each of these factors in nontariff trade costs.

First, figure 7.1 presents the decomposition of the 2014 International Supply Chain Connectivity (ISCC) index of AMS and other Asian and non-Asian developed countries for benchmarking purpose.<sup>8</sup> An international supply chain involves moving goods from a production facility in one country to another country for consumption or further processing. Given that around 80 percent of international trade is realized via seaports, a country's international supply chain connectivity performance depends not only on the effectiveness of procedures associated with moving goods from a factory to a port (or from a port to a factory or distribution center), but also on the level of connectivity of the port to other countries (ESCAP, 2013). In that context, the ISCC measures the overall trade facilitation performance of a country along the international supply chain based on the trading across border (TAB) indicators (i.e., number of documents, time, and cost involved



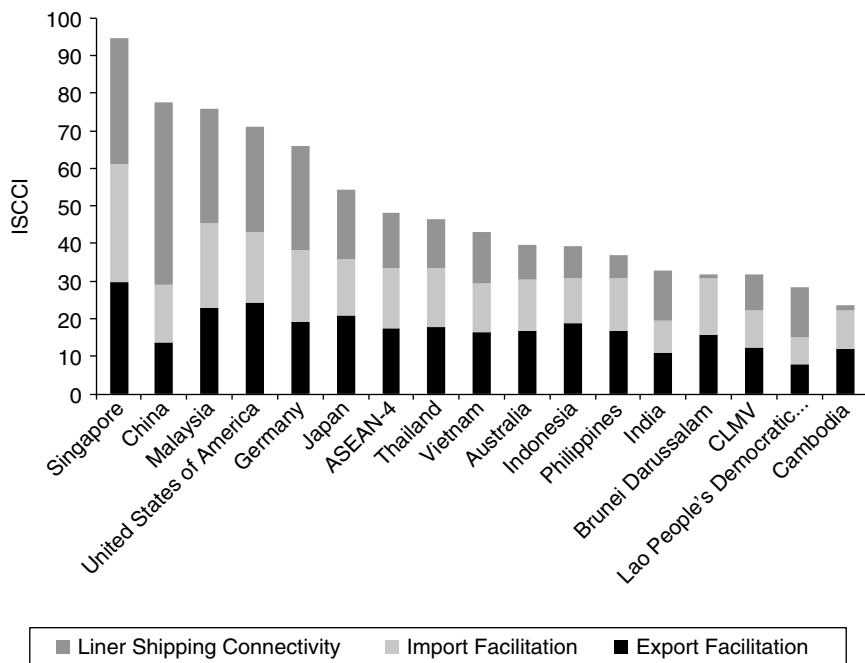


Figure 7.1 Contribution of export, import, and liner shipping connectivity performance to international supply chain connectivity in 2014.

in import/export) of the World Bank Doing Business Report, as well as on the Liner Shipping Connectivity Index of UNCTAD. It gives an overall score for each country, calculated giving equal weight (one-third) to its performance in terms of (i) TAB underlying import indicators, (ii) TAB underlying export indicators, and (iii) the LSCI score.<sup>9</sup>

In 2014, the world's top five best connected economies to international supply chains are all Asian economies, namely, Singapore, Hong Kong, China, Republic of Korea, and Malaysia. Two of this top five are AMS, which is very encouraging since they have a better ISCC score than other developed economies such as France, the United States, and Germany. Viet Nam performs well with an ISCC performance comparable to Thailand. While Indonesia and the Philippines have achieved a similar score to Australia, the ISCC of Cambodia and Lao PDR are still very low. Looking at the relative contribution of each component (import, export, international shipping) to the total ISCC index, it appears that the improvement of the liner shipping connectivity component should be prioritized for several ASEAN countries, that is, Indonesia, the Philippines, Brunei, and Cambodia. Moreover, the ISCC score of the Lao People's Democratic Republic is also largely supported by its LSCI performance, namely, the international connectivity of port in its transit country (Thailand). Therefore, enhancing supply chain

connectivity in Lao PDR will crucially depend on improving its import and export procedures, including transit procedures through Thailand.

The World Bank's TAB indicators allow us to apprehend many behind and at-the-border costs of ASEAN countries. Specifically, the export time indicator measures the time it takes to comply with all logistics and regulatory procedures<sup>10</sup> needed to move a standardized cargo from a warehouse to the seaport.<sup>11</sup> From 2006 to 2015, all AMS have decreased their time to export (apart from Singapore). The largest progress was made by Lao PDR, Cambodia, and Thailand, who decreased their export time by 32, 21, and 10 days, respectively, over the period. The gap between ASEAN-6 and CLMV countries is still noticeable in 2015: it takes CLMV countries eight more days on average than ASEAN-6 to export goods. On the whole, figures suggest that there is a lot of room for ASEAN to streamline and improve its export processes, since it still takes two or three times more days to export goods in Southeast Asia than in developed countries, for example, the United States.

Furthermore, the Liner Shipping Connectivity Index provides useful information on the efficiency of maritime services, as well as the implied quality of the port infrastructure.<sup>12</sup> China has the highest port connectivity in the world, well ahead of all ASEAN countries. Malaysia and Singapore exhibit the highest scores among ASEAN countries, and rank in the world's top five best connected economies in terms of seaports. Thailand and Viet Nam have made important improvements in ten years, and they now belong to the first tier of the world ranking. While Indonesia is also ranked in the first tier, quite ahead of the Philippines, the latter country made more progress in its liner shipping connectivity and increased its LSCI score by almost five units since 2004. In contrast, the LSCI scores of Brunei Darussalam, Myanmar, and Cambodia are extremely low (they all ranked in the bottom tier) and did not increase significantly since 2004. The reinforcement of liner shipping connectivity of the latter countries could have a very productive impact on their trade efficiency as LSCI is a key determinant of the overall international supply chain connectivity performance.

As explained in Duval and Utoktham (2010), an increasing number of studies have shown that the quality of the business environment in partner countries has a significant impact on trade flows. Indeed, international trade usually involves additional and more complex interactions with regulators relatively to domestic trade. The World Bank's Ease of Doing Business (EDB) ranking, which evaluates the domestic regulatory business environment, is presented in figure 7.2 for ASEAN countries (plus China and the United States for benchmarking purpose). Figure 7.2 also shows three underlying EDB indicators thought to be particularly important for trade facilitation: the ease of getting credit, the level of investor protection, and the ease of enforcing contracts. In 2015, Singapore, Malaysia, and Thailand have the best overall EDB ranking among AMS. Viet Nam also exhibits a satisfying

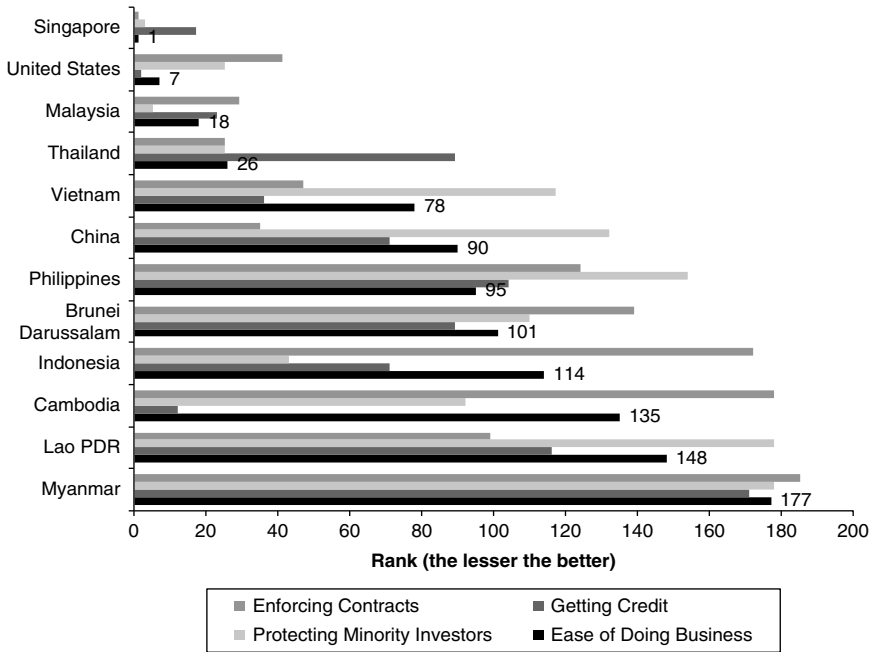


Figure 7.2 Ease of doing business: 2015 ranking.

business environment, ranking significantly better than China. In contrast, the business regulatory environments of Indonesia, Cambodia, Lao PDR, and Myanmar are found to be relatively inefficient and these countries all belong to the last tier of the world ranking. In terms of contract enforcement, Indonesia, Cambodia, and Myanmar rank significantly lower than others. Considering investor protection, Myanmar and Lao PDR perform the worst, followed by the Philippines. Interestingly, Cambodia has the best performance in terms of the ease of getting credit among all ASEAN countries, while Lao PDR and Myanmar have the worst.

Finally, information and communication technology (ICT) services were found to have an effect on bilateral trade flows in Southeast Asia (Shepherd and Wilson, 2009). Indeed, improvements in ICT usage are also likely to reduce overall trade costs, as it can greatly reduce the cost and time of exchanging information involved, through the automation of trade procedures. Once again, Singapore and Malaysia exhibit the highest levels of ICT usage among ASEAN countries, with more than two-thirds of the population using the Internet (see figure 7.3). In spite of significant improvements since 2005, the level of ICT usage remains very low in Lao PDR, Cambodia, and Myanmar. Overall, the figure suggests that most ASEAN countries still have much progress to make before reaching the performance of developed economies such as the United States.

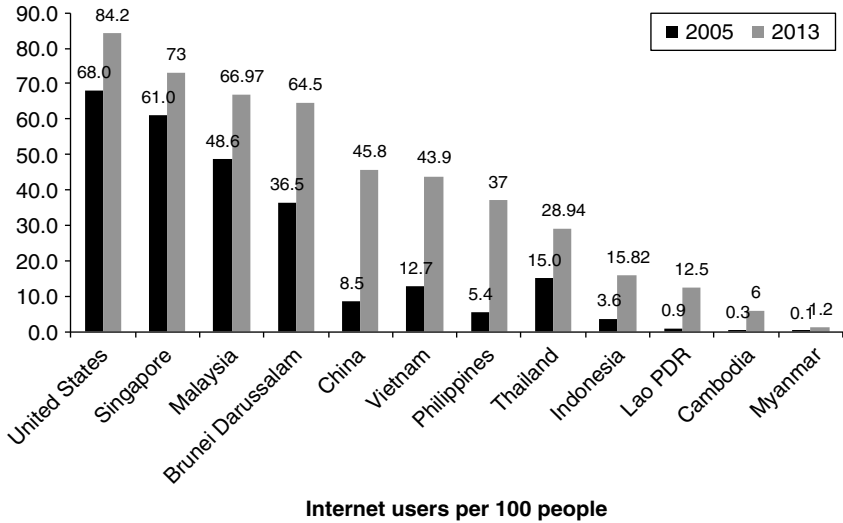


Figure 7.3 Information and communication technology usage in ASEAN.

## Identifying Key Factors in Reducing Trade Costs in ASEAN

Our descriptive analysis on the level of bilateral nontariff comprehensive trade cost is useful to assess the trade facilitation performance of ASEAN countries as well as to highlight the need to reduce trade costs. However, it does not provide information on the measures policymakers need to adopt to achieve this goal. Indeed, a wide range of factors affect the level of trade costs: some of them are inherent to the location, history, and culture of the trading countries, while others can be more easily addressed through policy such as costs linked to the quality of logistics infrastructure and services, a productive business environment, or a favorable exchange rate (Arvis et al., 2013). To address this issue, we follow Duval and Utoktham (2011) and develop an econometric model to evaluate the relative importance of different trade-related policies and other factors on ASEAN nontariff comprehensive trade costs. We also analyze the impact of regional integration efforts, that is, trade facilitation commitments and initiatives, among AMS and among ASEAN+3 economies. Based on the results, we will formulate recommendations on ASEAN policy prioritization, as well as guidance for further intra- and interregional integration.

Following the trade modeling literature, we include variables that apprehend “natural” trade costs, such as geographic distance between the countries and contiguity.<sup>13</sup> These “natural” trade costs cannot be eliminated with policy measures, at least within a reasonable time frame. In turn, we include

variables that capture the part of trade costs that can be impacted by policy reform. Indeed, the International Supply Chain Connectivity index (ISCC) reflects the efficiency of polices related to logistics services and trade procedures. The World Bank's Ease of Doing Business (EDB) indicators (credit information, protecting investors, and enforcing contracts) reveal the effect of the regulatory business environment on NT-CTC. We also include the rate of Internet users in our model in order to apprehend the impact of policies related to access to ICT services.

We use panel data on 178 countries from 2006 to 2012 to estimate the model. As we are interested in intra- and extraregional trade costs of ASEAN economies, we reduce the sample to nine reporters (nine AMS): Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Singapore, Thailand, and Viet Nam,<sup>14</sup> and keep all countries as partners. We compare two sectors: agriculture and manufacturing. Furthermore, we have built two regional dummy variables—one for ASEAN and one for Northeast Asia (China, Japan, and Republic of Korea)—so as to evaluate the effects on trade costs of ASEAN intraregional and ASEAN+3 integration efforts. Therefore, our linearized model of nontariff comprehensive trade costs is the following:

$$\begin{aligned} \ln(\text{NT-CTC}_{ij}) = & \beta_0 + \beta_1 \ln(\text{dist}_{ij}) + \beta_2 (\text{contig}_{ij}) + \beta_3 \ln(\text{ISCC}_{ij}) \\ & + \beta_4 \ln(\text{ICT}_{ij}) + \beta_5 (\text{doingbiz}_{ij}) + \beta_6 (\text{ASEAN\_par}_{ij}) \\ & + \beta_7 (\text{NEA3\_par}_{ij}) + e_{ij}, \end{aligned}$$

where,

- $\text{dist}_{ij}$  is the bilateral distance between trading partners in kilometers;
- $\text{contig}_{ij}$  is a dummy variable equal to unity if the reporter and partner countries are contiguous;
- $\text{ISCC}_{ij}$  is a geometric average of  $\text{ISCC}_i$  (international supply chain connectivity index) and  $\text{ISCC}_j$ ;
- $\text{ICT}_{ij}$  is a geometric average of  $\text{intusers}_i$  (number of Internet users per 100 inhabitants) and  $\text{intusers}_j$ ;
- $\text{Doingbiz}_{ij}$  is a geometric average of three Ease of Doing Business indicators of  $i$  and  $j$ , which consist of
  - $\text{creditinfo}_{ij}$ : depth of credit information index (0–6),
  - $\text{disclosure}_{ij}$ : extent of disclosure index (0–10),
  - $\text{procedure}_{ij}$ : procedure of enforcing contract (number of steps);
- $\text{ASEAN\_par}_{ij}$  is a dummy variable equal to unity if the ASEAN partner is an AMS; and
- $\text{NEA3\_par}_{ij}$  is a dummy variable equal to unity if the ASEAN partner is China, Japan, or Republic of Korea.

We estimate the baseline NT-CTC model using Ordinary Least Squares (OLS) with robust clustered standard error by country pair and using fixed effects for years and income groups. As a robustness check, we also run Poisson Pseudo Maximum Likelihood (PPML) as an alternative estimator.

The results are summarized in table 7.4. We find that results are consistent across estimation techniques. Signs (direction of effect) of all factors that are statistically significant are consistent with expectation. All variables included in the model are statistically significant, except the procedure of enforcing contract indicator, which is never significant, as well as the ICT usage indicator for manufactured goods in the PPML model (model 2). Also, the dummy for ASEAN partners is not significant for agricultural goods.

The OLS and PPML models present similar results. We analyze the OLS models, as they exhibit the best fits. Referring to the models (1) and (3), the region dummies give interesting results on the level of ASEAN intra- and interregional integration. For manufactured goods, it is clear that ASEAN trade facilitation commitments and efforts have borne fruits. Indeed, the results show that, on average, ASEAN member countries face 13.4 percent

**Table 7.4** Results of NT-CTC model estimations

Variables	-1	-2	-3	-4
	<i>Manufacturing: OLS of ln(NT-CTC)</i>	<i>Manufacturing: PPML of NT-CTC</i>	<i>Agriculture: OLS of ln(NT-CTC)</i>	<i>Agriculture: PPML of NT-CTC</i>
ln_dist	0.141*** [7.530]	0.133*** [6.271]	0.122*** [4.789]	0.127*** [4.286]
contig	-0.190** [-2.526]	-0.241*** [-3.235]	-0.238*** [-3.914]	-0.309*** [-4.428]
ln_iscc_ij	-0.560*** [-10.20]	-0.606*** [-9.765]	-0.293*** [-3.649]	-0.349*** [-3.608]
ln_internetusers_ij	-0.0435** [-2.020]	-0.0308 [-1.237]	-0.0585** [-2.161]	-0.0770** [-2.529]
creditinfo_ij	-0.0368*** [-7.137]	-0.0342*** [-6.174]	-0.0563*** [-7.521]	-0.0547*** [-6.408]
disclosure_ij	-0.0172*** [-4.443]	-0.0213*** [-5.032]	-0.0256*** [-5.212]	-0.0257*** [-4.836]
procedure_ij	-0.00184 [-0.677]	-0.000456 [-0.161]	-0.00434 [-1.043]	-0.00592 [-1.258]
dum_ASEAN_par	-0.134*** [-2.721]	-0.157*** [-2.779]	-0.0472 [-0.812]	-0.00549 [-0.0793]
dum_NEA3_par	-0.114*** [-4.358]	-0.129*** [-4.547]	-0.148*** [-2.885]	-0.118* [-1.766]
Constant	2.662*** [8.757]	2.917*** [8.618]	2.014*** [4.115]	2.296*** [3.766]
Observations	4.875	4.875	3.255	3.255
R-squared	0.529	0.457	0.341	0.266
Fixed effects	Year and income group	Year and income group	Year and income group	Year and income group
Clustered SE	Country pair	Country pair	Country pair	Country pair
Adj. R-squared	0.527		0.337	

Notes: \*\*\* p<0.01; \*\* p<0.05; \* p<0.1.  
t-stat. in square brackets.

Source: Authors' own calculations.

lower trade costs (excluding tariffs) when trading with each other than with the rest of the world, keeping everything else constant. The results also demonstrate strong connectivity between ASEAN and Northeast Asia (ASEAN+3): trading with China, Japan, or Korea is on average 11.4 percent less expensive than trading with other regions. For agricultural goods, the cost advantage of trading within ASEAN is less obvious—the ASEAN partner dummy is not significant, but the cost advantage of trading between ASEAN and the three Northeast Asian countries remains. While this result illustrates the success of ASEAN+3 trade facilitation initiatives, it suggests that ASEAN members have room for improvements in intraregional integration so as to reduce agricultural trade costs among them.

In terms of “natural” and policy-related factors, the estimated coefficients in table 7.4 only describe the effects of marginal changes in the value of one factor, assuming other variables constant. Moreover, from a policy perspective, improving one indicator by one unit (or 1 percent) could be much more costly and difficult to achieve than improving another factor by the same amount. In order to provide more information on which policy should be prioritized for action, we have therefore calculated the contribution of each variable to the actual total variation of nontariff trade costs. As defined in Fields (2003), the percentage contribution  $\kappa_k$  of an independent variable  $x_k$  to nontariff trade costs  $ntc_{ij}$  is:

$$\kappa_k = \frac{\beta_k \text{cov}(x_k, ntc_{ij})}{\text{var}(ntc_{ij})}$$

where  $\beta_k$  is the estimated regression coefficient of  $x_k$ .

We have measured the contributions of each independent variable to NT-CTC using the estimated regression coefficients of models (1) and (3) in table 7.4. Results are reported in table 7.5. First, it is important to note that a large part of the total variation in NT-CTC (from 50 to 65 percent) is not explained by any of the factors included in our model. This is particularly true in the case of trade costs of agricultural products, which face particularly complex procedures and requirements. Second, natural barriers remain an important component of NT-CTC and the magnitude of impact is similar for manufacturing and agriculture. Unsurprisingly, having a common border is relatively more important in enabling trade in agriculture than in manufacturing between partner countries.

Third, results suggest that policy reform could have a very broad impact on trade costs. Indeed, policy-related variables explain approximately 26.5 percent and 23 percent of the variation in trade costs, for manufacturing and agriculture, respectively.<sup>15</sup> More precisely, the trade facilitation indicator (ISCC index) alone contributes to 15.2 percent of the total variation for manufacturing. The important but relatively lower contribution of that indicator to the trade cost reduction in the agricultural sector (7.6 percent) may be in part explained by the fact that the indicator only captures

**Table 7.5** Contribution of natural barriers, behind-the-border facilitation and trade-related practice to nontariff trade costs (values in %)

	(1)-Manufacturing	(3)-Agriculture
<i>“Natural” cost component</i>		
Geographic distance (ln_dist)	9.83	8.31
Common border (contig)	1.81	2.97
<i>Policy-related cost component</i>		
Trade facilitation performance (ln_iscc_ij)	15.24	7.56
ICT usage (ln_internetusers_ij)	2.49	3.09
<i>Business regulatory environment</i>		
<i>Ease of getting credit (creditinfo_ij)</i>	5.76	7.85
<i>Investor protection (disclosure_ij)</i>	2.99	4.46
<i>Regional integration efforts cost component</i>		
ASEAN efforts (dum_ASEAN_par)	2.64	0.96
ASEAN+3 efforts (dum_NEA3_par)	1.04	1.63
Total variation explained by the model	52.91	34.11

Source: Authors’ own calculations.

sea trade. These results suggest that ASEAN member countries interested in reducing trade costs should give priority to the improvement of logistics services, as well as the reduction of the time, cost, and number of documents involved in import and export.

Differences in behind-the-border business regulations—namely, depth of credit information and extent of information disclosure—also account for 8.8–12.3 percent of nontariff trade costs variations depending on the sector considered. The results specifically suggest that ASEAN should give special attention to measures aimed at increasing availability of trade finance and protection of investors, in particular by making more and better information available to stakeholders to evaluate (and lower) the risks associated with doing business, including trading. In that context, it is worth noting that differences in the use of ICT services also explain an important part—from 2 to 3 percent—of the variation in nontariff trade costs, highlighting the links between trade and ICT connectivity initiatives of ASEAN in enabling efficient communications between trade stakeholders, automating trade processes, and ultimately reducing trade costs.

Finally, the regional ASEAN and “+3” dummies explain 3.4 percent of the overall trade costs variation for manufactured goods. This confirms that intensifying regional integration efforts under the ASEAN framework could be productive in further reducing trade costs within ASEAN as well as with other trade partners. The contribution of intraregional integration efforts is approximately 2.5 times greater than the contribution of ASEAN+3 integration initiatives, suggesting that the implementation of all commitments made between ASEAN members in the AEC Blueprint should be particularly prioritized. For agricultural products, ASEAN+3 integration efforts account for 1.6 percent of NT-CTC total variation.<sup>16</sup> Special attention should therefore be given to improve intraregional trade facilitation of agricultural goods,



since ASEAN efforts and initiatives did not seem to have borne significant fruits for the agricultural sector since 2006.

## Conclusion

This chapter provided an overview of the progress made by AMS in improving trade efficiency and reducing trade costs. The analysis of intra- and interregional ASEAN trade costs confirms that ASEAN countries need to redouble their efforts to reduce trade costs other than tariffs (NT-CTC) with each other. In particular, NT-CTC between ASEAN-4 and CLMV are higher than ASEAN's bilateral trade costs with Northeast Asia. Indeed, the review of other trade facilitation-related indicators shows that the performance of countries in this area remains very uneven. While Singapore and Malaysia are among the world's top performers, Cambodia-Lao PDR and Myanmar (CLM) in particular—despite significant improvements—are still lagging far behind.<sup>17</sup> ASEAN also has substantial room to improve its extraregional trade connectivity with other Asia-Pacific economies, since NT-CTC between ASEAN and South, North and Central Asia as well as the Pacific regions are higher than those between ASEAN and other non-Asian developed economies.

The trade cost model helped identify the factors that weigh the most in reducing ASEAN comprehensive nontariff trade costs in manufacturing and agriculture. The results suggest that priority should be given to enhancing transport and logistics services as well as further streamlining trade procedures. This may be done by ratifying and/or more fully implementing the many agreements already signed, such as the ASEAN Single Window agreement, but also by engaging more actively with the private sector and increasing the efficiency of business-to-business processes. Enhancing the domestic regulatory business environment in ASEAN countries is also found to be one of the keys to further reduce ASEAN intra- and interregional trade costs, in particular making it easier for firms to get credit. Finally, measures aimed at improving the access and the use of ICT services should also be considered by ASEAN in order to facilitate trade.

The trade cost models presented in this chapter have captured the effects of intraregional as well as ASEAN+3 integration efforts and confirms that ASEAN intra- and extraregional integration initiatives have been worthwhile and effective in reducing trade costs above and beyond national initiatives taken by individual ASEAN economies, particularly in the manufacturing sector. Looking forward, more emphasis may be placed on reducing agricultural trade costs, which were found to have remained high. As part of reducing dependence on Northeast Asia and developed economies, more attention may be placed on reducing the very high trade costs between ASEAN and other Asia-Pacific developing regions.

## Notes

1. Based on the results of an expert survey undertaken by the ESCAP and the ADB for 2013/14. The dataset of trade facilitation and paperless trade implementation can be found on the following website: <http://unnex.unescap.org/tfforum13-survey.asp>.
2. Other trading partners have also demonstrated their interest, that is, ASEAN and the European Union are currently negotiating an FTA.
3. The ESCAP-World Bank database can be found on the following website: <http://artnet.unescap.org/databases.html#first>.
4. For further details on the calculation and definition of comprehensive bilateral trade costs, please refer Arvis et al. (2013).
5. These intra and interregional trade costs are calculated as simple averages of bilateral trade costs of all countries involved for which data is available.
6. The trade cost of the group does not include Myanmar as data for that country is missing.
7. Data on Myanmar's comprehensive trade costs are not available. Several other data points are missing, in particular bilateral trade costs involving Brunei Darussalam from 2006 onward for manufactured goods.
8. ISCC data is sourced from: <http://artnet.unescap.org/databases.html#fourth>. Myanmar's ISCC data is missing.
9. For landlocked countries, the LSCI from the main transit country is used as a proxy to calculate their liner shipping component.
10. Namely, document preparation, customs clearance and inspections, inland transport and handling, and port and terminal handling.
11. TAB data is sourced from: <http://www.doingbusiness.org/data/exploretopics/trading-across-borders>. For Lao PDR (landlocked country), whose seaport is located in the main transit economy (Thailand), the time associated with the procedures at the inland border is also taken into account.
12. The LSCI is composed of the following five quantitative indicators: (i) the number of ships providing services to and from a country; (ii) the combined TEU (20-foot equivalent unit: standard size container) carrying capacity of these ships; (iii) the number of services provided; (iv) the number of liner companies providing these services; and (v) the maximum vessel size available in a country. LSCI data is sourced from: <http://data.worldbank.org/indicator/IS.SHP.GCNW.XQ>.
13. Chen and Novy (2009) among others.
14. Bilateral comprehensive trade costs are not available for Myanmar.
15. We did not account for the contribution of the ease of enforcing contract since the estimated coefficients for this variable were not significant in table 7.4.
16. The contribution of the ASEAN dummy cannot be interpreted as the estimated coefficient in table 7.4 is not significant.
17. While Vietnam has been traditionally grouped with CLM countries, its performance in terms of trade cost and facilitation is closer to that of other ASEAN members.

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## Part II

# Impact of Regional Integration on Structural Change, Employment, and Inequalities

## Regional Trade Agreements, Employment, and Inclusiveness

*Kee Beom Kim, Fan Zhai, and Phu Huynh*

### Introduction

Formidable economic growth in the Association of Southeast Asian Nations (ASEAN) during the past several decades has brought millions out of poverty and significantly boosted living standards. From 1991 to 2013, the ASEAN economy expanded on average by 5 percent annually, and nearly 63 million workers lifted themselves out of extreme poverty as the US\$1.25-working poverty rate fell from 48.2 percent to 10.3 percent.<sup>1</sup> These positive trends were heavily shaped by an impressive structural shift of workers moving out of agriculture, robust labor productivity growth, and closer regional integration.

Deeper regional integration has been a core focus of ASEAN. At the ninth ASEAN Summit in 2003, ASEAN leaders resolved to establish by 2020 the ASEAN Community, comprised of three pillars: the ASEAN Political-Security Community, the ASEAN Socio-Cultural Community, and the ASEAN Economic Community. Subsequently, ASEAN leaders in 2007 adopted the Cebu Declaration on the Acceleration of the Establishment of an ASEAN Community by 2015. As ASEAN member states (AMS) today look forward to the dawn of the ASEAN Community, with the free flow of goods, services, investment, skilled labor, and a freer flow of capital that is part of the ASEAN Economic Community (AEC), a number of critical opportunities and challenges emerge in ensuring that such economic integration leads to the ASEAN Community goals of “durable peace, stability and shared prosperity” (ASEAN, 2003, p. 2).

In particular, ASEAN economic integration may spur further structural change—defined here as the movement of workers from one sector of an economy to another—beyond what may be expected in the absence of integration and result in changing patterns of production, with entailing impacts

on the 300 million workers in the ASEAN region and their families. After reviewing the structural changes that have taken place in the past decades in AMS, this chapter employs an innovative computable general equilibrium (CGE) model to assess the potential economic and labor market impacts of deepening ASEAN trade integration. Specifically, the model simulates the labor market impact of continued deepening regional economic integration in the form of removal of tariffs, liberalization of nontariff barriers (NTBs) for goods and services, and trade facilitation. Simulation results suggest that the implementation of trade measures that AMS have committed to could lead to significant increases in output and jobs while accelerating or slowing the pace of structural change. The chapter concludes with a number of policy implications to ensure that such changes in the composition and distribution of jobs across the region lead to inclusive and fair outcomes.

## The Changing Structure of Employment in ASEAN

Since 1992, when ASEAN leaders established the ASEAN Free Trade Area (AFTA) and 2003, when ASEAN leaders at the ninth ASEAN Summit resolved to establish the ASEAN Community, labor markets in AMS have undergone significant structural change. In particular, AMS have seen the share of agriculture in total employment decline over the past two decades (table 8.1). While agriculture has been the predominant source sector of employment since the establishment of ASEAN, services have now narrowly overtaken agriculture as the largest sector of employment. In 2013, services accounted for 40.6 percent of total employment in ASEAN, followed by agriculture with 40.0 percent, and the remaining 19.4 percent accounted by industry. However, the regional aggregates mask considerable variation across countries, and even with the structural change out of agriculture in the past two decades, agriculture remains the largest employer in half of the AMS: Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam. Moreover, the pace of structural change has varied among AMS, with the share of agricultural employment falling by more than 20 percentage points in Viet Nam, whereas Malaysia, where such structural change occurred at an earlier time and hence the share of agricultural employment was already relatively low compared to other AMS, witnessed a decline of less than 10 percentage points.

With the share of agriculture in total employment declining, some AMS have seen the share of employment in industry rise. In Viet Nam, employment in industry accounted for 10.6 percent of total employment in 1996 but that share doubled to 21.2 percent in 2013. On the other hand, the share of industrial employment in total employment in Malaysia declined by 4.3 percentage points between 1992 and 2013. In most AMS, with the exception of Cambodia, Lao PDR, Myanmar, and the Philippines, industry accounts for between 18 and 28 percent of total employment. Many AMS have seen the share of services in total employment rise in the past two decades. As such, in 2013, services accounted for the largest share of

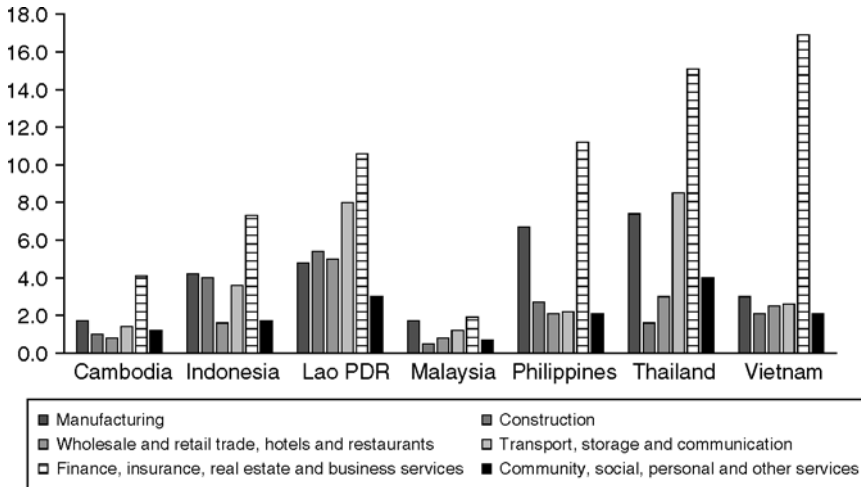
**Table 8.1** Employment by sector, *ca.* 1992, 2003, and 2013 (%)

		<i>Agriculture</i>	<i>Industry</i>	<i>Services</i>
Brunei Darussalam	1991	2.1	24.1	73.8
	2001	1.4	21.4	77.2
Cambodia	2004	57.6	13.3	29.1
	2012	51	18.6	30.4
Indonesia	1992	54.8	14.1	31.1
	2003	46.4	17.7	35.9
	2013	34.4	20.6	45
Lao PDR	1995	85.3	3.6	11.1
	2010	71.4	8.3	20.3
Malaysia	1992	21.8	31.6	46.6
	2003	14.3	32	53.7
	2013	13	27.3	59.7
Myanmar	2010	52.4	12	35.6
Philippines	1992	45.4	16	38.6
	2003	36.6	15.8	47.6
	2013	31.4	15.2	53.4
Singapore	1992	0.4	34.6	65
	2003	0.9	25	74.1
	2013	1.3	18.6	80.1
Thailand	1992	60.8	15.8	23.4
	2003	44.9	19.7	35.4
	2013	39.7	21.2	39.1
Vietnam	1996	70	10.6	19.4
	2003	59.7	16.4	23.9
	2013	46.8	21.2	32

*Source:* Authors' estimates based on national labor force surveys, with the exception of Brunei Darussalam (population census), Cambodia (Cambodia Socio-Economic Survey), and Myanmar (Integrated Household Living Conditions Survey).

employment in Singapore (80.1 percent), Brunei Darussalam (77.2 percent in 2001), Malaysia (59.7 percent), the Philippines (53.4 percent), and Indonesia (45.0 percent). Such structural change has played an important role in boosting overall productivity growth in many AMS. Between 1990 and 2005, Lee and McKibbin (2014) estimate that structural change accounted for 54.5 percent of labor productivity growth in Thailand, 38.0 percent in Indonesia, and 12 percent in Malaysia. In the Philippines and Singapore, productivity growth within individual sectors (weighted by the share of employment in each sector) played the dominant role in labor productivity growth during the same period.

Figure 8.1 provides the ratio of each subsector's labor productivity (output per worker) to that of agriculture, and while there are differences across countries, labor productivity in manufacturing and finance, insurance, real estate, and business services is generally highest in AMS. A key challenge for some AMS is that while the share of employment in agriculture, where labor productivity is typically lowest, is declining, the rise in services sector employment is taking place in subsectors where levels of productivity are not significantly higher than in agriculture (and in some cases, in subsectors



**Figure 8.1** Ratio of labor productivity by subsector to that of agriculture, 2012.  
*Source:* Authors’ estimates based on national accounts and national labor force surveys.

where productivity is lower than that in agriculture). In Cambodia, for example, wholesale and retail trade, hotels, and restaurants now accounts for 1 in 5 of total employment, but the level of productivity in that subsector is marginally lower than in agriculture. The bulk of job growth in recent years in Malaysia has taken place in services, but levels of productivity in wholesale and retail trade, hotels and restaurants and community, social and personal and other services are lower than in agriculture or manufacturing. In Indonesia and the Philippines, the wholesale and retail, trade, hotels and restaurants and community, social and personal services subsectors, where labor productivity is lowest with the exception of agriculture, accounted for 71.9 percent and 54.8 percent, respectively, of the additional jobs created between 2003 and 2013.

While the movement of workers from low productivity economic activities, in particular agriculture, to higher productivity activities in AMS has played an important role in raising aggregate labor productivity and reductions in working poverty, the fact that there continues to be wide differences in sectoral levels of labor productivity in many AMS points to continued scope for structural change to further boost productivity and living standards in the region.

## The Impact of ASEAN Trade Integration on the Structure of Labor Markets

Trade integration, through the full elimination of tariff and nontariff barriers and trade facilitation, is the principal element of the AEC. AMS have made substantial progress in this regard, and the value of intra-ASEAN



merchandise trade (imports and exports) has risen from US\$261 billion in 2004 to 609 billion in 2013. Nonetheless, the value of extra-ASEAN trade has also grown as rapidly during the same period, such that the share of intra-ASEAN trade to total trade has remained at around 24 percent. This share of intraregional trade, while higher compared to other regional integration initiatives such as the Andean Community (8.0 percent) and MERCOSUR (14.5 percent), is relatively lower than that of NAFTA (39.3 percent) and the EU (61.9 percent).<sup>2</sup>

Nonetheless, barriers to trade integration continue to exist and ASEAN leaders have “committed to firmly address the remaining challenges and continue to pursue economic integration with urgency and resolution” (ASEAN, 2014, p. 8). What are the potential economic and labor market impacts of continued deepening ASEAN economic integration by 2015 and beyond? Results of an innovative computable general equilibrium model simulating further trade liberalization and facilitation among AMS points to overall gains in output and employment in the countries and at the aggregate regional level, but with mixed distribution effects across member countries, sectors, and gender.

### *Model Description*

The CGE model used in this chapter is based on a global general equilibrium model developed by van der Mensbrugge (2005) and Zhai (2008) (see Appendix 1 and 2 for a detailed specification of the model). The model has its intellectual roots in a long tradition of multicountry, applied general equilibrium models (e.g., Shoven and Whalley, 1992; Hertel, 1997). It also builds on earlier work by Plummer et al. (2014) and ILO and ADB (2014). One novel feature of the model is its incorporation of recent innovations in heterogeneous-firms trade theory into an empirical global CGE framework. The model features intraindustry firm heterogeneity in productivity and fixed cost of exporting, enabling the investigation of the intraindustry reallocation of resources and the exporting decision by firms, and thereby capturing both the intensive and extensive margin of trade. Another distinctive aspect is a relatively more realistic representation of the way labor markets in developing AMS operate. For six AMS (Cambodia, Indonesia, Lao PDR, Philippines, Thailand, and Viet Nam), where microdata files of labor force surveys have been made available, the labor supply curve varies by three skill types: (i) fixed supply of high-skilled labor in each period to reflect the skilled labor shortages; (ii) an infinite supply of lower-skilled workers with a fixed real wage rate to reflect labor underutilization persistent in developing AMS and; (iii) a unitary labor supply curve in respect to the real wage rate for medium-skilled labor. In a sensitivity analysis, a unitary labor supply curve is assumed for both lower-skilled and medium-skilled labor (see Annex B for results of the sensitivity analysis). The sensitivity analysis shows that reflecting the underutilization of labor has a sizeable impact on total employment gains with relatively much smaller impacts on output.

The model is then used to simulate the economic and labor market impacts of a scenario (“AEC scenario”) that includes (i) removal over time of the remaining intraregional tariffs across ASEAN economies; (ii) liberalization over time of nontariff barriers for goods and services by 50 percent; and (iii) trade facilitation in the form of 20 percent reduction in fixed trade costs.

### Model Results

Simulation results point to substantial output gains relative to a baseline scenario (i.e., what is expected in the absence of the policy shock). GDP in the ASEAN region is 5.0 percent higher than the baseline in 2015, 6.3 percent higher in 2020, and 7.1 percent higher in 2025 relative to the baseline (figure 8.2).<sup>3</sup> Gains in output differ significantly by country, with lower-income AMS (Cambodia, Lao PDR, and Viet Nam) gaining the most by 2025 relative to the baseline, and Indonesia and other ASEAN gaining the least.<sup>4</sup> The degree of economic dependence on international trade and the direction of trade (i.e., the degree of trade with other AMS relative to non-AMS) accounts for an important part of the variations among countries in GDP gains. For example, in Cambodia and Viet Nam, total international trade (exports and imports) accounted for 87.8 percent and 155.0 percent of GDP, respectively, in 2007 (the base year of the model), whereas in Indonesia, the corresponding share was 43.8 percent (ASEAN, 2011).<sup>5</sup> Furthermore, consumers and producers in the lower income AMS face relatively higher trade barriers and costs, and thus stand to gain the most from increased international trade. Among the trade measures simulated, the removal of nontariff barriers (by 50 percent) plays a significant role in the driving the

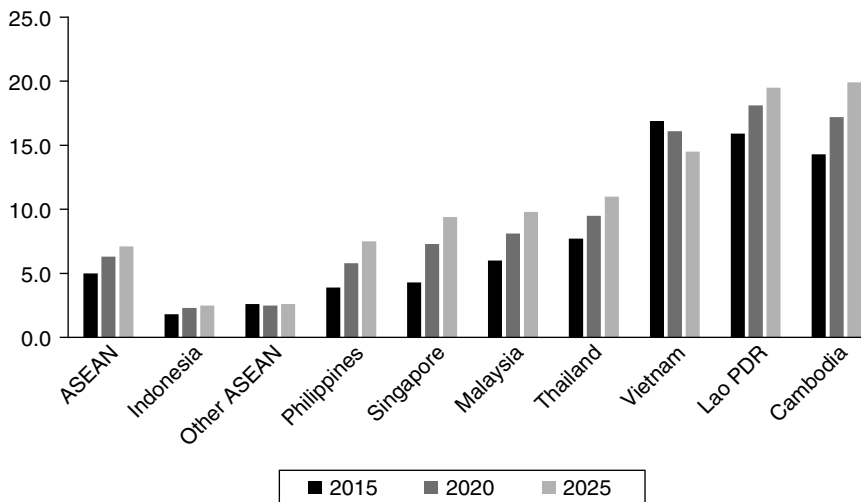


Figure 8.2 Change in GDP relative to the baseline, 2015, 2020, and 2025 (%).

Source: Authors' estimates.

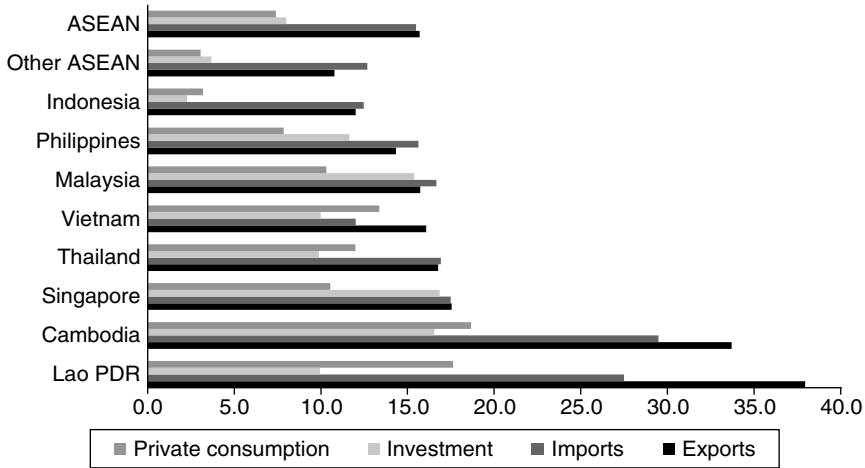


Figure 8.3 Change in consumption, investment, exports, and imports relative to the baseline, 2025 (%).

Source: Authors' estimates.

results. Excluding the removal of nontariff barriers from the policy shock results in substantially smaller gains for the ASEAN region, underscoring the important role the removal of nontariff barriers plays in benefiting from ASEAN trade liberalization.

Strong export growth underpins the gains in output relative to the baseline (figure 8.3). Exports are 15.7 percent higher in 2025 relative to the baseline for the ASEAN region, while imports rise by 15.5 percent.<sup>6</sup> Such international trade allows for specialization based on comparative advantage, which leads to higher consumption and investment possibilities. As such, private consumption is 7.4 percent higher in 2025 relative to the baseline while investment is 8.0 percent greater. As with gains in output, there are significant differences between countries with the rise in exports and imports relatively strong in Cambodia and Lao PDR.

Accompanying the changes in output, exports, and consumption, total employment also increases in Cambodia, Indonesia, Lao PDR, Philippines, Thailand, and Viet Nam.<sup>7</sup> In aggregate terms, gains in total employment in 2025 over the baseline range from 6.0 million in Viet Nam to 130,000 in Lao PDR (table 8.2). By gender, women account for half or more of the job gains over the baseline in Cambodia and Viet Nam, but account for only 41.6 percent of gains in Thailand and less than 37 percent in Indonesia, Lao PDR, and the Philippines.

By sector, job gains relative to the baseline are expected in the agriculture, trade and transportation, and construction in all six countries. In Viet Nam, the increase of jobs in the trade and transportation sector accounts for almost half of the total jobs gains over the baseline, while the sector accounts for around a third in Cambodia, Indonesia, Philippines, and around 20 percent

**Table 8.2** Changes in employment in 2025 relative to the baseline, by sector and sex (thousands)

	Cambodia		Indonesia		Lao PDR		Philippines		Thailand		Vietnam							
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women						
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total						
Total	456	641	1,098	1,412	516	1,928	83	47	130	2,040	1,104	3,144	1,293	922	2,215	3,019	3,028	6,047
Agriculture	188	172	360	317	126	443	26	24	50	758	349	1,107	696	525	1,221	1,000	980	1,979
Mining	5	1	6	18	3	21	1	1	2	-13	-2	-15	-1	0	-1	5	3	8
Food processing	-24	-25	-49	-171	-242	-412	-20	-35	-55	76	44	121	84	77	161	42	44	86
Textiles	13	39	52	45	71	116	0	-3	-3	-8	-11	1	2	3	18	35	54	
Apparel	8	32	41	8	14	22	1	5	6	6	22	28	-12	-39	-52	98	282	381
Wood products	6	7	13	7	6	13	9	6	15	-1	-1	-2	-1	0	-1	-4	-3	-8
Chemicals	16	15	31	97	46	142	0	0	0	-12	-7	-19	32	35	67	22	18	40
Metals	9	2	11	114	37	150	19	7	26	5	1	6	28	13	41	50	17	67
Electrical equipment	2	1	3	21	31	52	0	0	0	23	47	70	20	38	58	15	32	47
Vehicles	3	1	4	38	21	59	4	2	7	-9	-4	-13	52	52	104	25	26	51
Machinery	16	10	26	-15	-2	-17	21	10	31	70	21	90	107	49	156	26	6	32
Other manufacturing	2	17	19	75	35	111	-2	-1	-2	-1	0	-1	-10	-8	-18	46	18	65
Utilities	5	2	7	5	1	5	2	1	2	7	1	8	4	1	5	25	8	33
Construction	136	47	182	387	11	397	8	1	8	375	8	383	205	46	251	533	72	605
Trade and transportation	68	297	365	388	302	689	9	21	30	571	423	993	188	226	413	1,274	1,623	2,897
Private services	4	15	19	56	48	104	9	11	20	127	175	302	-93	-99	-192	-117	-87	-204
Government services	-1	7	6	24	9	33	-5	-2	-8	64	34	97	-8	6	-2	-39	-45	-84

Source: Authors' estimates.

in Lao PDR and Thailand. Agriculture, on the other hand, accounts for the largest share of total job gains over the baseline in Lao PDR, the Philippines, and Thailand. In Cambodia and Indonesia, the construction sector accounts for a relatively large share of the job gains, at around 20 percent. On the other hand, job losses relative to the baseline take place in food processing in Cambodia, Indonesia, and Lao PDR; and in private services in Thailand and Viet Nam. In the Philippines, small job losses over the baseline take place in chemicals and mining. There are also significant gender differences in the changes in employment by sector. In all the six AMS, women account for the bulk of job gains in apparel and textile but a small share of job gains in construction, machinery, and metals.

The potential job gains and losses relative to the baseline have the potential to slow or accelerate structural change in the six AMS (table 8.3). Despite the absolute gains in agriculture overall, the share of agriculture in total employment continues to decline between 2010 and 2025 in all six AMS, reflecting the relatively larger gains in industry and services. The implementation of trade measures that are part of the AEC scenario accelerates this pattern of change in Cambodia, Indonesia, Lao PDR, and Viet Nam. In Cambodia, for example, the share of agriculture in total employment continues to decline from 55.0 percent in 2010 to 50.0 percent in 2025 under the baseline scenario, but under the AEC scenario, this ratio in 2025 is further reduced to 48.3 percent (a further reduction of 1.7 percentage points compared to the baseline in the same year). On the other hand, the pace of structural change out of agriculture slows in the Philippines and Thailand. In Thailand, for example, while the share of employment in agriculture declines from 38.3 percent in 2010 to 33.7 percent in 2025 under the baseline scenario, under the AEC scenario, this ratio in 2025 falls to 34.9 percent (an increase of 1.1 percentage points compared to the baseline in the same year).

In Cambodia, under the baseline scenario, the share of industry in total employment increases from 14.9 percent in 2010 to 18.1 percent in 2025, with the implementation of the AEC scenario measures, it increases to 19.4 percent in 2025 (or by 1.3 percentage points). The growth in the share industrial employment is driven primarily by construction. The share of employment in services under the baseline scenario also increases by 1.8 percentage points, driven by trade and transportation, with the AEC scenario adding a further 0.4 percentage points to the increase.

In both Indonesia and Thailand, the share of industry and services in total employment continues to increase between 2010 and 2025 under the baseline scenario, with the share of construction and trade and transportation in total employment seeing a large increase. In Indonesia, the implementation of trade measures does not make a significant impact on the composition of sectoral employment in 2025 over the baseline. On the other hand, in Thailand, the share of employment in trade and transportation and private services could decline by 0.7 percentage points and 0.6 percentage points, respectively, in 2025 over the baseline.

**Table 8.3** Employment in each sector as a share of total employment under the baseline and AEC scenarios (%)

	Cambodia						Indonesia					
	2010		2025		2025		2010		2025		2025	
	Baseline Scenario	Baseline Scenario	Baseline Scenario	AEC Scenario	AEC Scenario	II-1 (percentage points)	Baseline Scenario	Baseline Scenario	Baseline Scenario	AEC Scenario	AEC Scenario	II-1 (percentage points)
<i>Agriculture</i>	55	50	48.3	19.4	19.4	-1.7	37.2	28.6	28.6	28.5	28.5	-0.1
<i>Industry</i>	14.9	18.1	19.4	0.3	0.3	1.3	20.5	21.9	21.9	22.1	22.1	0.2
<i>Mining</i>	0.2	0.3	0.3	0.7	0.7	0	0.7	0.6	0.6	0.6	0.6	0
<i>Food processing</i>	1.5	1.3	0.7	1.7	1.7	-0.6	3.3	3.6	3.6	3.2	3.2	-0.3
<i>Textiles</i>	1.4	1.4	1.7	4.8	4.7	0.3	1.3	1.1	1.1	1.2	1.2	0.1
<i>Apparel</i>	5.1	0.3	0.4	0.4	0.4	-0.1	1.5	1	1	1	1	0
<i>Wood products</i>	0.3	0.3	0.4	0.8	1	0.1	1	0.7	0.7	0.7	0.7	0
<i>Chemicals</i>	0.5	0.4	0.4	0.5	0.5	0.2	1.7	2.2	2.2	2.3	2.3	0.1
<i>Metals</i>	0.4	0.5	0.5	0.2	0.2	0	1.7	1.5	1.5	1.5	1.5	0.1
<i>Electrical equipment</i>	0.1	0.2	0.2	0.1	0.1	0	0.2	0.3	0.3	0.4	0.4	0
<i>Vehicles</i>	0.2	0.3	0.5	0.2	0.2	0.2	0.5	0.3	0.3	0.3	0.3	0
<i>Machinery</i>	0.1	0.1	0.2	0.2	0.2	0	0.5	0.4	0.4	0.4	0.4	0
<i>Other manufacturing</i>	0.2	0.3	0.4	0.3	0.3	0.1	0.9	1	1	1	1	0.1
<i>Utilities</i>	0.2	0.2	0.3	0.3	0.3	0	0.2	0.1	0.1	0.1	0.1	0
<i>Construction</i>	4.7	7.6	8.5	0.9	0.9	0.9	7	9.2	9.2	9.3	9.3	0.1
<i>Services</i>	30.1	31.9	32.3	19.1	19.1	0.4	42.3	49.4	49.4	49.4	49.4	-0.1
<i>Trade and transportation</i>	15.9	17.5	19.1	5	5	1.5	29.3	35.6	35.6	35.6	35.6	0
<i>Private services</i>	5.2	5.3	5	8.2	8.2	-0.3	3.2	3.9	3.9	3.9	3.9	0
<i>Government services</i>	9	9.1	8.2	100	100	-0.8	9.8	9.9	9.9	9.8	9.8	-0.1
<i>Total</i>	100	100	100	100	100		100	100	100	100	100	

	<i>Lao PDR</i>				<i>Philippines</i>			
<i>Agriculture</i>	69	66.8	66	-0.8	34.8	28.6	29	0.4
<i>Industry</i>	8.5	9.5	10	0.5	16.6	17.3	17.5	0.2
Mining	0	0	0.1	0	0.5	0.4	0.4	-0.1
Food processing	2.8	2.7	1.5	-1.2	2.1	2.3	2.4	0.1
Textiles	0.6	0.6	0.5	-0.1	0.4	0.3	0.3	0
Apparel	0.6	0.5	0.6	0.1	1.1	1.1	1.1	0
Wood products	0.2	1.1	1.4	0.3	0.9	0.7	0.7	0
Chemicals	0.1	0.1	0.1	0	1.1	1	0.9	-0.1
Metals	1.5	1.5	2	0.5	0.6	0.4	0.4	0
Electrical equipment	0	0	0	0	1.8	2.1	2.1	0
Vehicles	0.1	0.1	0.8	0.7	0.5	0.5	0.6	0.1
Machinery	0.1	0.2	0.4	0.1	0.8	0.6	0.6	-0.1
Other manufacturing	0.2	0.1	0.1	-0.1	0.5	0.4	0.4	0
Utilities	0.5	0.4	0.5	0	0.6	0.6	0.6	0
Construction	1.8	2	2.1	0.1	5.6	6.8	7.1	0.3
<i>Services</i>	22.5	23.7	23.9	0.2	48.6	54	53.5	-0.6
Trade and transportation	12.1	12.4	12.7	0.3	28.3	32.8	32.7	-0.1
Private services	3.5	4.1	4.5	0.3	8.7	10	10	0
Government services	6.9	7.1	6.8	-0.4	11.6	11.3	10.8	-0.5
<i>Total</i>	100	100	100		100	100	100	

Continued

Table 8.3 Continued

	Thailand				Vietnam			
	2010 Baseline Scenario	2025	2025	2010 Baseline Scenario	2025 Baseline Scenario	2025 AEC Scenario	II-I (percentage points)	II-I (percentage points)
		Baseline Scenario	AEC Scenario					
Industry	21.5	23.5	24.1	21.9	23.4	23.5	0.1	0.1
Mining	0.3	0.2	0.2	1	0.6	0.5	0	0
Food processing	2.4	3.4	3.6	2.7	3.9	3.7	0.2	-0.2
Textiles	1	0.6	0.6	0.7	0.7	0.7	0	0
Apparel	2	1.9	1.6	3.8	4.9	5	-0.2	0.1
Wood products	1	0.7	0.6	1.1	0.5	0.5	0	-0.1
Chemicals	1.9	1.9	1.9	0.9	0.7	0.7	0.1	0
Metals	1.6	1.2	1.2	1.6	1	1	0	0
Electrical equipment	1.5	2.1	2.1	0.3	0.3	0.3	0	0
Vehicles	1.3	1.8	2.1	0.5	0.4	0.4	0.3	0
Machinery	1.3	1.6	1.8	0.5	0.4	0.5	0.2	0
Other manufacturing	1.1	0.7	0.7	1.3	0.9	0.9	-0.1	0
Utilities	0.6	0.5	0.5	1.8	1.3	1.2	0	-0.1
Construction	5.4	6.9	7.2	5.7	7.8	8	0.2	0.2
Services	40.1	42.7	41	33.3	41.1	41.3	-1.8	0.2
Trade and transportation	27.4	31.7	31	18.4	26.7	28.7	-0.7	2
Private services	3.1	1.8	1.2	6.6	6.6	5.7	-0.6	-1
Government services	9.5	9.2	8.7	8.3	7.8	6.9	-0.5	-0.9
Total	100	100	100	100	100	100		

Source: Authors' estimates.



Structural change under the baseline scenario in Lao PDR is slow relative to other AMS, with the share of industrial employment in total employment increasing by 1.0 percentage point between 2010 and 2025, and the share of services increasing by 1.2 percentage points. The share of wood products in total employment sees the largest growth, with trade measures adding a further 0.3 percentage points to the increase.

In both the Philippines and Viet Nam, the share of industrial employment continues to increase between 2010 and 2025 under the baseline scenario but the increase is modest compared to the increase in the share of services employment (5.4 percentage points in the Philippines and 7.8 percentage points in Viet Nam). In the Philippines, as in the case of Indonesia, trade measures do not make a significant impact on the composition of sectoral employment in 2025 over the baseline. In Viet Nam, the implementation of trade measures increases the share of employment in trade and transportation by 2.0 percentage points in 2025 over the baseline, while the share of private services decreases by 1.0 percentage points.

## Policy Implications

Taken together, the analysis in the previous sections points to a number of policy implications. First, structural change from low productivity to higher productivity sectors in AMS is essential for continued improvements in living standards and improved labor market outcomes such as increased aggregate labor productivity and a lower incidence of working poverty. AMS have undergone significant structural change in recent decades, as evidenced in particular by the decline in the share of agriculture in total employment. Given that labor productivity is lowest in agriculture and poverty most prevalent in rural areas, there is a need to continue to facilitate such productive structural change but in a fair and inclusive manner. A key component in this regard involves improving access to education and training in rural areas and to disadvantaged groups while enhancing the quality of curriculum to be more responsive to industry demands. Also critical is developing robust skills certification and qualifications frameworks that provide formal recognition of competencies through quality assurance mechanisms that can be trusted by employers. These skills development initiatives must be underpinned by stronger institutional coordination between relevant government agencies (such as ministries of labor, planning and statistics, education and youth), the private sector, and trade unions.

In many ASEAN countries, structural change has been from agriculture to low-productivity services. In order to raise aggregate labor productivity and address the existing quantitative and qualitative employment challenges, there is a need to support employment growth in higher productivity services and manufacturing so as to absorb those leaving agriculture as well as the five million new entrants to ASEAN's labor force each year. While countries such as Cambodia and Viet Nam have experienced structural change

toward relatively higher productivity manufacturing in the past decades, the manufacturing base is dominated by textiles and apparel, and efforts are required to diversify employment to other manufacturing subsectors. Well-designed industrial and sectoral policies that are coordinated with employment policies can play an important role in facilitating structural change toward higher productivity activities.

Results of model simulation of ASEAN economic integration initiatives point to overall gains in welfare, wages, and employment in AMS as a result of deepening ASEAN integration, but the distribution of the benefits tend to be mixed across member countries and gender. With output and employment gains relative to the baseline strongest for the lower-income AMS, the results suggest that trade integration can play an important role in narrowing the development gaps between the higher- and lower-income AMS. With the bulk of additional jobs arising from trade integration expected to accrue to men, the results suggest the need to carefully monitor and manage the gender impacts of ASEAN integration and for concerted policy measures to support women's efforts to enter and stay in the labor force. This includes upgrading the skills of female jobseekers and encouraging their pursuit of nonconventional career tracks.

Simulation results also highlight the relative rise and decline of specific sectors, with entailing adjustment costs. In particular, the results indicate that the share of agriculture will continue to decline but that agriculture will continue to be a dominant employer in some AMS. Of particular concern is the potential of trade integration to weaken the food processing sectors in Cambodia, Indonesia, and Lao PDR, highlighting the need for initiatives to strengthen the value chains associated with agriculture. Some AMS will see a rise in the share of trade, construction, and private services as a share of total employment. In AMS, these sectors are often associated with vulnerable employment and the informal economy.<sup>8</sup> Continued efforts will be required to strengthen labor market policies and institutions to address informality and protect vulnerable groups of workers. With structural change also entailing considerable churning in the labor market, a key policy priority in the region is improving the quality, coverage, and sustainability of social protection through the implementation of the ASEAN Declaration on Strengthening Social Protection.<sup>9</sup>

# Appendix I: Detailed Specification of the CGE Model

## Production and Trade

Agriculture, mining, and government services sectors are assumed to exhibit perfect competition. In each of these sectors, a representative firm operates under constant returns to scale technology. Trade is modeled using the Armington assumption for import demand. Manufacturing and private services are characterized by monopolistic competition, and their structure of production and trade follows the seminal Melitz (2003) approach. Each sector with monopolistic competition consists of a continuum of firms that are differentiated by the varieties they produce and their productivity. Firms face fixed production costs, resulting in increasing returns to scale. There are also fixed costs and variable costs associated with exporting activities. On the demand side, agents have Dixit-Stiglitz preference over the continuum of varieties. As each firm is a monopolist for the variety it produces, it sets the price of its product at a constant mark-up over marginal cost. A firm enters domestic or export markets if and only if the net profit generated from such sales is sufficient to cover fixed cost. This zero cut-off profit condition defines the productivity thresholds for firm's entering domestic and exports markets, and in turn determines the equilibrium distribution of nonexporting firms and exporting firms, as well as their average productivities. Usually, the combination of a fixed export cost and a variable (iceberg) export cost ensures that the exporting productivity threshold is higher than that for production for domestic market, so that only a fraction of firms with high productivity export. These firms supply for both domestic and export markets. The number of firms in the monopolistic sectors is assumed to be fixed.

Production technology in each sector is modeled using nested constant elasticity of substitution (CES) functions. At the top level, the output is produced as a combination of aggregate nonenergy intermediate demand and a value added-energy bundle. At the second level, nonenergy aggregate intermediate demand is split into each commodity according to a Leontief

technology. The value added-energy bundle is produced by a capital-land-energy bundle and aggregate labor. The capital-land-energy bundle is further decomposed into capital-land bundle and aggregate energy. Finally, at the bottom level, aggregate labor is decomposed into low-skilled and skilled labor, and the capital-land bundle is decomposed into capital and land (for the agriculture sector) or natural resources (for forestry, fishing, and mining sectors). The energy composite good is subsequently decomposed into various fuel components (e.g., coal, oil, and gas) where relevant. At each level of production, there is a unit cost function that is dual to the CES aggregator function and demand functions for corresponding inputs. The top-level unit cost function defines the marginal cost of sectoral output. In the six ASEAN member countries for which micro-data files of labor force surveys are available (Indonesia, Philippines, Thailand, Laos, Viet Nam, and Cambodia), at the second level of the production structure, the value-added *cum* energy bundle is decomposed into less skilled aggregate labor on the one hand, and a capital-land-energy bundle on the other hand. The capital bundle is split into its human (i.e., high-skilled labor) and physical capital components, and the less skilled aggregate labor is composed of semi-skilled and low-skilled labor.

## Income Distribution, Demand, and Factor Markets

Incomes generated from production accrue to a single representative household in each region. A household maximizes utility using Extended Linear Expenditure System (ELES), which is derived from maximizing the Stone-Geary utility function. The consumption/savings decision is completely static. Savings enter the utility function as a “good” and its price is set as equal to the average price of consumer goods. Investment demand and government consumption are specified as a Leontief function. In each sector a composite good defined by the Dixit-Stiglitz aggregator over domestic and imported varieties is used for final and intermediate demand.

There are five primary factors of production. Capital, agricultural land, and labor are fully mobile across sectors within a region. In natural resource sectors of forestry, fishing, and mining, a sector-specific factor is introduced into the production function to reflect the resource constraints. In each period, the aggregate capital stock is predetermined by the investment and savings decision of the previous periods. The supply of land and sector-specific factors is assumed to be elastic, with response to the changes in their respective prices.

For six AMS (Cambodia, Indonesia, Lao PDR, Philippines, Thailand, and Viet Nam) where microdata files of labor force surveys have been made available, persistent unemployment for some categories of workers is assumed. For these countries, the supply of labor varies by three skill types: (i) fixed supply of high-skilled labor in each period to reflect the skilled labor shortages; (ii) an infinite supply of lower-skilled workers with a fixed real wage

rate to reflect labor underutilization persistent in developing AMS; and (iii) a unitary labor supply curve in respect to the real wage rate for medium-skilled labor. A unitary labor supply curve is assumed for both lower-skilled and medium-skilled labor in a sensitivity analysis.

In this specification, shocks that make ASEAN firms more competitive internationally, including the policy changes modeled, enable firms to expand with less binding labor constraints than are typically imposed by CGE models. The employment of low-skilled workers can expand without limit at constant wage rates, and the employment of medium-skilled workers can grow with only moderate wage increases. Low-skilled and semi-skilled workers can in turn be substituted, to some extent, for high-skilled workers and other inputs whose supply is subject to conventional limits.

## Macro Closure

There are three macro closures in the model: the net government balance, the trade balance, and the investment and savings balance. It is assumed that government consumption and saving are exogenous in real terms. Any changes in the government budget are automatically compensated by changes in income tax rates on households.

The second closure concerns the current account balance. In each region, the foreign savings are set exogenously. With the US GDP deflator being chosen as the numéraire of the model, equilibrium in the foreign account is achieved by changing the relative price across regions (i.e., the real exchange rate).

Domestic investment is the endogenous sum of household savings, government savings, and foreign savings. As government and foreign savings are exogenous, changes in investment are determined by changes in the levels of household saving. This closure rule corresponds to the “neoclassical” macroeconomic closure in the CGE literature.

## Recursive Dynamics

The model is recursive dynamic, beginning with the base year of 2007 and solved annually through 2025. Dynamics of the model are driven by exogenous population and labor force growth, as well as capital accumulation and exogenous technological progress. Population and labor force projections are based on the United Nation’s medium variant forecast. Technological progress is assumed to be labor-augmented, so the model can reach a steady state in the long run.

## Benchmark Data

The model has been calibrated to 2007 data of the GTAP 8 database. For tariff rates, the status quo of applied intra-ASEAN tariffs as of 2007 has been

applied. Nontariff barriers are estimated via the disaggregated trade restrictiveness indexes constructed by the World Bank (goods) and the Peterson Institute for International Economics (services), and modeled using both rent-generated tariff equivalent and “iceberg” costs approaches. Reductions are linearly implemented within the eight years of 2008–2015.

## Appendix 2: Sensitivity Analysis

A sensitivity analysis was conducted to assess the impact of incorporating labor underutilization in the labor market specification of developing AMS. The analysis illustrates the importance of different labor market specifications on output and total employment and shows that not reflecting the underutilization of labor in developing countries (i.e., assuming a unitary labor curve in respect to the real wage rate for both unskilled and skilled workers) has sizeable impact, with significantly lower increases in total employment relative to the baseline and comparatively much smaller gains in output (table 8.4). For example, in Viet Nam, assuming a unitary labor curve in respect to the real wage rate for both unskilled and skilled workers (Specification B) yields job gains relative to the baseline of 3.6 million compared to 6.0 million under an assumption of underutilization of labor.

The analysis suggests that CGE models that do not incorporate labor underutilization in developing countries could underestimate output and total employment gains, while overestimating the share of gains accruing to skilled workers.

**Table 8.4** Sensitivity to different labor market specifications

	<i>Change in GDP relative to the baseline in 2025 (%)</i>		<i>Change in total employment relative to the baseline in 2025 (thousands)</i>	
	<i>Specification A</i>	<i>Specification B</i>	<i>Specification A</i>	<i>Specification B</i>
ASEAN	7.1	6.8	n.a.	n.a.
Indonesia	2.5	2.3	1,928	1,139
Other ASEAN	2.6	2.6	n.a.	n.a.
Philippines	7.5	6.9	3,144	1,883
Singapore	9.4	9.3	n.a.	n.a.
Malaysia	9.8	9.8	n.a.	n.a.
Thailand	11	10.6	2,215	1,441
Vietnam	14.5	13.6	6,047	3,619
Lao PDR	19.5	19.1	130	80
Cambodia	19.9	18.3	1,098	630

Specification A refers to the labor market specification of (i) fixed supply of high-skilled labor; (ii) infinite supply of lower-skilled workers with a fixed real wage rate; and (iii) a unitary labor supply curve in respect to the real wage rate for medium-skilled labor.

Specification B refers to the labor market specification of (i) fixed supply of high-skilled labor and (ii) a unitary labor supply curve in respect to the real wage rate for lower-skilled and medium-skilled labor.

*Source:* Authors' estimates.

## Notes

\* Kee Beom Kim, International Labor Organization (ILO); Fan Zhai, China Investment Corporation (CIC); Phu Huynh, International Labor Organization (ILO). The views expressed are those of the authors and do not necessarily reflect the views and policies of the organizations they represent.

1. GDP growth and working poverty estimates are based on IMF (2014) and ILO (2014).
2. Authors' calculations based on WTO (2013).
3. As a result of trade diversion, GDP in some non-AMS decreases relative to the baseline. For more information on the welfare and output impacts of ASEAN trade integration in these non-AMS, see Plummer et al. (2014).
4. Due to data limitation, Brunei Darussalam and Myanmar are grouped under "other ASEAN."
5. Economic dependence on international trade has not seen large changes since 2007. In 2013, total international trade accounted for 118.1 percent of GDP in Cambodia in 2013 compared to 42.9 percent in Indonesia
6. In the model, the trade balance is exogenous, and thus imports rise with exports to maintain the exogenously determined trade balance.
7. For the decomposition of labor in the model, microdata files of labor force surveys are required but such files were made available for analysis by the authors in these six AMS.
8. Vulnerable employment is defined as own-account and contributing family workers. Such workers are less likely to have formal work arrangements while being more likely to carry economic risk. The informal economy typically offers low-quality, unproductive, and poorly remunerated employment opportunities. These jobs are often not recognized or protected by law, offer little or no social protection, and are typically characterized by the absence of rights at work and a lack of representation and voice in the workplace.
9. At the twenty-third ASEAN Summit in Brunei Darussalam (October 2013), ASEAN leaders adopted the ASEAN Declaration on Strengthening Social Protection, which identifies a number of actions toward improved quality, coverage, and sustainability of social protection in AMS.

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# Economic Development with Improved Conditions of Employment and Reduced Inequality: What Choices Does ASEAN Have in the Medium and Long Term?

*Francis Cripps and Naret Khurasee*

## Introduction

The countries of the Association of Southeast Nations (ASEAN) have abundant natural resources, highly developed historical cultures and, so far as coastal regions are concerned, long histories of trade within the region and with China, Japan, India, and Europe. In recent decades the economies of Singapore, Malaysia,<sup>1</sup> and Thailand have developed rapidly through participation in global production, trade, and financial networks. Other long-standing members of ASEAN, the Philippines and Indonesia, have followed this path with more limited success. Newer members of ASEAN—the so-called CMLV group comprising Cambodia, Myanmar, Lao PDR, and Viet Nam—had lower incomes and little participation in global trade when they joined ASEAN in the 1990s but have subsequently started to open their economies, embarking on the long process of building infrastructure and institutions required that link them more broadly and effectively into the global economy.

ASEAN itself is a loosely tied regional group in which member governments retain a great deal of autonomy. Prosperity brought by growth of trade, production, and finance in recent decades has made disparities in wealth and living standards within and between ASEAN countries increasingly evident. Insecurity, low-paid and low-productivity employment, and lack of opportunities for young people at one end of the scale contrast with opulence, glamor, and cronyism at the other end. As the political impact of regional and social divisions continues to make itself felt, ASEAN

leaders have to make some response. In 2011 they adopted a Framework for Equitable Economic Development.<sup>2</sup> Recently the World Bank contributed a first report monitoring progress toward this aim.<sup>3</sup> The overwhelming need to maintain peace, security, and stability of business and market infrastructure and institutions puts pressure on member governments to seek ways to bridge gaps and improve incomes and conditions of employment that affect large segments of the population and the common nature of many of the issues and their cross-border impacts mean that ASEAN as a whole cannot avoid collective consideration of such issues.

This chapter outlines a number of policy directions that might be considered by the AEC as a community to facilitate sustained improvement of conditions of employment and reduced inequality within and between member countries. The analysis relies on a global database with historical series for the past four decades and uses a macro model<sup>4</sup> to project outcomes for ASEAN and its member countries to 2030 with or without what will here be described as cohesion policies.<sup>5</sup> Previous versions of the databank and model have been used to investigate development and cohesion issues in Europe with a similar 2030 time horizon.<sup>6</sup> The exercise presented here differs from more detailed country-specific studies and investigations using business surveys and HDI indicators such as the World Bank monitoring report mentioned earlier. Our objective is to introduce macroeconomic issues into the discussion of sustainability and equity by examining links between exchange rate and trade policies, GDP growth, demography and migration, the sectoral breakdown of production and employment and resources available to government to promote sustainable, decentralized development.

The plan of the chapter is as follows. The first section draws attention to characteristics of the databank and model that are important for interpretation of historical data and projections presented here and to understand the approach. The next section reviews economic development in ASEAN countries since 1970 with a baseline projection to 2030. The third section introduces some measures of disparity between and within member countries and provides an assessment of historical experience and potential outcomes in the context of the same baseline projection. The final section describes the cohesion scenario and compares projected outcomes with the baseline in the second and third sections.

## Scope and Measurement Conventions

The scope of this analysis is broadly determined by the range of variables available in the global database and incorporated into the macro model. The database provides annual series for the world divided into 125 countries and 5 country groups from 1970 to the present but does not separately distinguish countries with populations of around one million or less (Brunei Darussalam, Timor-Leste). Although covering a wide range of topics it does not provide detailed disaggregation by institutional sector, commodity, or industry. It

includes estimates of employment and GDP by broad sector (agriculture, industry, and services) and of the division of GDP between income from employment<sup>7</sup> and the operating surplus of corporations but does not have breakdowns of employment in terms of status, conditions, or remuneration.

The model analyzes patterns of interdependence over the past 40 years between around 60 variables including energy supply and use, emissions, trade, prices, financial markets, capital flows, government budgets, income, expenditure, and sectoral production and employment, providing an overview of economic developments and geopolitical relationships in ASEAN countries and each other part of the world and may be used to simulate potential developments over the next one or two decades. Almost any major disturbance or policy initiative can be contemplated in a scenario, being represented in the model simulation by assumed changes in the behavior of macro variables. The macro model cannot detail the institutional mechanisms by which policies are implemented and the definition of baselines and scenarios evidently requires judgment. However the judgments made are subject to constraints imposed by country-level and global accounting identities and by limits on the scale of assumed changes in behavior ensuring they do not depart too far from patterns observed in the past.<sup>8</sup>

The model is used here to provide a broad assessment of the degree to which the pattern of economic growth in ASEAN might be pushed in one direction or another by coordinated policies in a manner that may have a beneficial influence on distribution within and between countries. Policies to improve distribution are examined in a “cohesion” scenario for comparison with a baseline in which economic integration proceeds without new initiatives to improve distribution. This provides a highly aggregated multicountry perspective on issues that are more often reviewed in a more specific and detailed manner and at a national level. The overview may be useful to the extent that the regional context and policies of ASEAN as a community set constraints on what is likely to happen or can be achieved in each member country. The aim of the chapter, therefore, is to develop a picture of ways in which AEC’s macroeconomic context could be adapted to facilitate more sustainable and inclusive development.

The baseline and the cohesion scenario make the same assumptions with respect to trade, private investment, and global partnerships, which are fundamental to ASEAN’s aspiration to strengthen its “competitive advantage as a production base geared for world markets.”<sup>9</sup>

Areas of policy that are considered differently in the cohesion scenario include exchange rate management, competition policy, agricultural policies, and government services and investment. Outcomes modeled in both projections include GDP growth, relative levels of per capita GDP and costs of production, cumulative net migration, agricultural employment, and the size of the productivity gap in agriculture relative to the rest of the economy, and the level of resources available for government to support decentralized development.

Two specific points must be explained here to clarify the meaning of numbers presented in the tables in this chapter.

The first point is that historical data and scenario outcomes use a real terms measurement convention to facilitate comparison over time and between countries. According to this convention domestic expenditure, production, and finance are measured in internationally comparable 2005 purchasing power units evaluated specifically for each country.<sup>10</sup> Ratios of domestic variables to each other and to GDP in any given country and year are exactly the same as national currency ratios. International transactions such as trade and balance of payments flows are measured in global 2005 purchasing power units, the same for all countries, to preserve the financial relationship between inflows and outflows across countries. For the purposes of comparison with GDP, international transactions are compared with GDP measured in the same global purchasing power units. This makes ratios of trade to GDP relatively high for ASEAN countries as their domestic transactions are typically cheaper than international transactions. Another way of expressing the difference between local and global purchasing power is to say that ASEAN members have low real exchange rates. This is certainly one of the factors making the region attractive to global companies as a production base for export to higher-income markets elsewhere.

The second point is that historical series from published international sources (chiefly the UN Statistics Division and IMF) have in many cases been adjusted to enforce accounting consistency both for each country individually and for the world as whole and may differ from series published by international organizations. No change is made to estimates of aggregate population and GDP published by the UN Statistics Division but other variables may require adjustment.<sup>11</sup> The largest changes to published sources are those required to bring balance of payments credits and debits (IMF) into equivalence with exports and imports considered as components of demand and supply (UN Statistics Division) and to bring breakdowns of merchandise trade (COMTRADE database) into equivalence with the adjusted balance of payments credits and debits. The benefit of the adjustment procedure in the context of a macro model is that monetary flows are tracked consistently within and between countries without hidden leakages or unspecified sources, reflecting the fact that the global economy is a closed system.

## Economic Development in Southeast Asia—Past and Future

ASEAN was established in the 1960s by its original six members with maintenance of peace and security and development of an independent voice in regional and global affairs as primary objectives. Moves toward economic integration followed from success in achieving the original objectives, leading to formal establishment of the ASEAN free trade area (AFTA) in 1992. In the early years other Southeast Asian countries—Cambodia, Myanmar,

Lao PDR, and Viet Nam—were still divided or isolated by war or internal conflict and were not able to join ASEAN until the mid-1990s. Nevertheless ASEAN countries are now broadly at peace internally, infrastructure has been enormously improved, new skills have developed with a fast-expanding middle class, and the region has gradually switched from dependence on markets in the United States and Europe to integrate more closely with Japan, Korea, and China in an East Asian economic zone, which is now the main growth area in the world economy. ASEAN member countries expect rising income and living standards in coming decades.

Table 9.1 gives an overview of growth of the ASEAN economy over four past decades with a baseline projection for 2030.<sup>12</sup>

As can be seen in the table, ASEAN economies as a group have grown slightly faster than the rest of East Asia over the past 40 years with higher but diminishing population growth. Inward capital investment accelerated after 1990 accompanied by sustained growth of exports. Energy dependence was not so much of a problem hitherto as the region has substantial supplies

**Table 9.1** The world, East Asia, and ASEAN: Growth rates, 1970–2030

	<i>Period average growth rates (% per annum)</i>		
	<i>1970–1990</i>	<i>1990–2010</i>	<i>2010–2030</i>
<i>World</i>			
GDP	3.7	3.3	3.3
Population	1.8	1.3	0.9
Exports of goods and services	5.6	5.6	3.6
Inward investment	9.8	7.4	5.3
Energy use	2.8	2.2	1.6
CO2 emissions	2.2	1.9	0.9
<i>East Asia</i>			
GDP	5.5	4.8	4.4
Population	1.6	0.8	0.2
Exports of goods and services	8.8	7.3	4.2
Inward investment	—	14.9	5.3
Energy use	4.8	4.6	1.6
CO2 emissions	4.4	4.5	0.9
<i>ASEAN (original and new members)</i>			
GDP	6.6	5.1	5.4
Population	2.3	1.4	0.8
Exports of goods and services	9.5	8.2	5.4
Inward investment	8.7	9.4	3.5
Energy use	5.7	4.7	3.1
CO2 emissions	5.3	5.4	2.3

*Notes:* GDP, trade, and inward investment measured in constant international purchasing power units. Inward investment is net acquisition less repayment of external liabilities including government debt and bank deposits. Inward investment for East Asia as a whole is estimated to have been negative in the early 1970s. Energy use measured by absorption of primary energy production plus imports less exports in oil-equivalent units (million tons). CO2 emissions measured in million tons.

*Source:* Calculations based on WD 6.4 databank and CAM 5.2 baseline projection.

of oil and gas but could become a problem for some member countries in future. Sustainability is a growing concern for ASEAN countries as their own environments are affected by commercial agriculture, urbanization, and industrialization and their contribution to global warming through CO<sub>2</sub> emissions is rising fast.

For the world as a whole the baseline projection to 2030 maintains GDP growth at a similar rate to that achieved in the period 1990–2010 but with slower growth of trade, energy absorption, and CO<sub>2</sub> emissions. The principal motor for global growth is investment in East Asia, which has become the largest world region in terms of GDP and trade. Having levels of income and productivity that are still low for the large majority of people East Asia offers major investment opportunities and a huge potential for expansion of the consumer market. The growth rate of the economy of East Asia as a whole is projected to slow down as the size of the Chinese economy, its already-large share of world markets, its growing demand for energy and raw materials, and the need to cope with environmental problems make it increasingly difficult and less attractive to maintain a very high growth rate. ASEAN's performance is projected to accelerate slightly as compared with the past two decades owing to continued acquisition of regional and global market shares by existing and new members.

Table 9.2 emphasizes ASEAN's transition from reliance on exports of raw materials and energy to a development path led by growth of exports of manufactures.

**Table 9.2** ASEAN's sources of external income, 1970–2030

<i>Purchasing power in billion 2005 dollars (figures in brackets are % of total)</i>				
	1970	1990	2010	2030b
Total current account receipts	50 (100)	308 (100)	1,514 (100)	4,398 (100)
Food and raw materials	24 (47)	47 (15)	158 (10)	171 (4)
Energy	4 (8)	42 (14)	179 (12)	326 (7)
Manufactures	8 (17)	143 (47)	793 (52)	2,598 (59)
Services	9 (17)	48 (16)	228 (15)	773 (18)
Income and transfers	5 (10)	28 (9)	156 (10)	529 (12)
Total exports of manufactures by market	8 (100)	143 (100)	793 (100)	2,598 (100)
ASEAN	3 (36)	38 (27)	190 (24)	696 (27)
Other East Asia	1 (13)	28 (20)	287 (36)	888 (34)
Europe and United States	3 (41)	67 (46)	218 (28)	714 (27)
Rest of the world	1 (12)	11 (8)	99 (13)	304 (12)

Despite its agrarian past, rich natural resources, traditional cultures, and substantial tourist revenue, ASEAN as a whole was already by 1990 a manufacturing exporter. Since then the share of manufactured exports in ASEAN's external income has increased further and is projected to reach nearly 60 percent of the total by 2030 as new members (CLMV) acquire more diversified export patterns. The share of food and raw materials in total external revenue declined dramatically between 1970 and 1990 and is projected to dwindle to a mere 4 percent by 2030 while services and other "invisible" income together maintain a 25–30 percent share. The share of energy exports has fluctuated considerably in line with ups and downs of the world market and will no doubt continue to do so in the coming decade but in the longer run ASEAN's energy surplus is likely to disappear due to rising internal demand.

The lower half of table 9.2 indicates the growing importance of the East Asian market, which has replaced the United States and Europe as the main destination for ASEAN's manufactured exports. Rapid growth of exports to East Asian countries outside ASEAN contrasts with a relatively static share of trade in manufactures between ASEAN countries despite implementation of the free trade agreement (AFTA) from the mid-1990s. The baseline to 2030 assumes an acceleration of intra-ASEAN trade affecting Thailand and neighboring countries in particular as land-based transport links are developed within the region. Nevertheless continued success of ASEAN's policy of strengthening the region's competitive position as a production base for external markets means that the share of internal trade is unlikely to increase much and remains far lower than intratrade within Europe or for that matter between different regions of China. ASEAN industrialization has been led by firms from outside the region, most particularly Japan, Europe, and the United States, with wider regional and global perspectives. Although Chinese firms nowadays play an increasing role they will inevitably be interested in production for their huge internal market and for other global markets as well as ASEAN.

The typical development pattern of ASEAN countries could be summarized in economic terms as export of primary commodities facilitated by infrastructure development raising national income, government revenues, education, logistics, business services, and public utilities to a level at which investment in manufacturing industries by international and local firms became increasingly profitable. Malaysia and Thailand were the two most successful countries to follow this path in the 1970s and 1980s with Singapore developing rapidly as the trade and financial hub. By 1990 these three countries led Southeast Asia in terms of GDP per capita by a substantial margin. Since then they have maintained their lead due to problems in the Philippines and to a lesser extent Indonesia.

The 1970s and 1980s were problematic for CLMV countries in the lower half of table 9.3 facing external and internal security issues as well as a collapse of world commodity prices in the early 1980s, which, together with debt overhangs and high dollar interest rates, resulted in a "lost decade" for many developing countries. Since 1990 CLMV countries have come



**Table 9.3** Economic growth in ASEAN member countries, 1970–2030

<i>Period average growth of real GDP (% per annum)</i>			
<i>Member countries</i>	<i>1970–1990</i>	<i>1990–2010</i>	<i>2010–2030</i>
Singapore	9.0	5.7	4.1
Malaysia and Brunei Darussalam	7.4	6.1	4.4
Thailand	6.9	4.3	4.4
ASEAN	6.6	5.1	5.4
Indonesia	8.9	4.4	5.0
Philippines	3.5	3.9	5.7
Vietnam	4.8	7.7	8.9
Lao PDR	5.0	6.7	6.1
Cambodia	–1.0	7.6	9.5
Myanmar	1.7	10.8	5.4

back quite strongly, albeit from low initial income levels, while the original members of ASEAN, particularly Indonesia, saw slow-downs following the major financial crisis in 1997, originating with a collapse of the Thai Baht, which undermined confidence of foreign and domestic investors and led to budget retrenchment. Recent crises in the United States and Europe following the financial “meltdown” in 2008 have had less impact on East Asia.

The table shows favorable prospects for sustained and quite rapid GDP growth up to 2030 for most member countries and particularly for Viet Nam, which has already built a diversified pattern of exports to other parts of the world including the United States. Cambodia has gained substantial revenue for agriculture and tourism and, like Viet Nam, has begun to develop manufactured exports. Prospects for Myanmar and the Lao PDR are somewhat less positive as these countries rely on raw material exports, and in the case of the Lao PDR, tourism, which although valuable as a stepping stone is less likely to provide a long-term dynamic.

Table 9.4 shows the structure of external balances (receipts less payments) projected for member countries in the 2020s, which together with changing competitiveness factors largely determines baseline outcomes shown in the preceding table. The three higher-income members together with Viet Nam and Cambodia are projected to have net surpluses in trade in manufactures.<sup>13</sup> This will be a major turnaround for the two latter countries that until recently had large deficits in manufactures. Other members are projected to have continuing deficits in manufactures covered by surpluses in food and raw materials, energy, services, or in the case of the Philippines, remittances. The Lao PDR and Myanmar are projected to remain dependent on net inflows of capital. In sum, ASEAN as a low-to-middle income zone within the East Asian economy has the space to continue expanding exports quite rapidly with newer members achieving the fastest growth rates as global and regional firms are attracted to locate new production facilities in these countries.

**Table 9.4** Balance of payments of ASEAN member countries in the 2020s*Period average balances (receipts less payments) as % of GDP*

<i>Member countries</i>	<i>Food and raw materials</i>	<i>Energy</i>	<i>Manu- factures</i>	<i>Services</i>	<i>Income and transfers</i>
Singapore	-2	-18	34	0	-2
Malaysia and Brunei Darussalam	0	4	7	0	-6
Thailand	3	-4	2	3	-2
ASEAN	1	0	3	1	0
Indonesia	4	5	-6	0	-3
Philippines	-2	-1	-3	1	9
Vietnam	-3	1	8	0	4
Lao PDR	5	-2	-11	2	2
Cambodia	-2	-6	7	3	2
Myanmar	3	2	-7	1	-3

The resolve of the leading members of ASEAN to develop the AEC in a sustainable and inclusive manner will facilitate GDP growth in newer member countries and may enable Viet Nam and Cambodia to achieve one or more decades of super-fast growth similar to that experienced by Singapore, Malaysia, and Thailand in the past. Myanmar and the Lao PDR are currently less integrated into regional and global markets and face formidable infrastructure challenges owing to their dispersed populations and mountainous terrain. They may need a longer period of time to acquire a strong development dynamic.

Prospects for the older ASEAN members are also varied. The Philippines stands to come back into Asian and Pacific markets as its security problems are resolved and in a context of improved political stability and security Indonesia's large internal market may attract industrial investment. Singapore and to a lesser extent Malaysia stand to gain from sustained growth of trade and GDP in other countries in the region. Thailand faces some risks from integration with lower-cost neighbors but may in the longer run strengthen its economy through integration with faster-growing neighbors.

## Inequality and Conditions of Employment

The political and economic advantages of a community based on an "ASEAN identity" but with minimal centralized institutions clearly outweigh possible economic disadvantages or risks affecting individual members. Nevertheless promotion of a shared identity and opening of borders step by step may not suffice to achieve the goal of reducing disparities between and within member countries. This section introduces some measures of disparity, employment conditions, and availability of government resources that will be used to assess past developments and the baseline projection to 2030. The next

**Table 9.5** Disparities between ASEAN member countries, 1970–2030

<i>Member countries</i>	<i>ASEAN average = 100</i>			
	<i>1970</i>	<i>1990</i>	<i>2010</i>	<i>2030</i>
Singapore	665	1123	992	669
Malaysia and Brunei Darussalam	270	295	307	223
Thailand	158	168	160	147
ASEAN	100	100	100	100
Indonesia	57	87	79	73
Philippines	210	106	74	69
Vietnam	53	39	65	129
Lao PDR	55	41	50	53
Cambodia	116	30	43	88
Myanmar	30	12	38	40

section will introduce the cohesion scenario and compare outcomes in that context with those projected in the baseline.

Table 9.5 shows the wide range of levels of per capita GDP in ASEAN. After divergence in the period up to 1990 there was significant catch-up by lower-income ASEAN members between 1990 and 2010 although the Philippines and, to a lesser extent, Indonesia fell behind in relative terms. Disparities projected in the 2030 baseline represent a reshuffling of positions rather than ongoing convergence. The position of the lowest-income members (Lao PDR and Myanmar) is little changed. Viet Nam and Cambodia rise up the ladder, passing Indonesia and the Philippines and, in Viet Nam's case, overtaking Thailand. According to this picture the AEC in 2030 would comprise four higher-income countries, three lower-income countries, and two very-low-income countries. This is not to say that the lower or very-low income countries will not benefit from rising income. But the baseline shown here is hardly consistent with the objective of reducing disparities between member countries and would be disappointing for the largest member, Indonesia, as well as the two lowest-income members, Myanmar and the Lao PDR.

Table 9.6 provides estimates of net migration by member country. The phenomenon of migration is related, at least in part, to disparities in employment opportunities and living conditions. Although estimates published by the UN DESA Population Division are approximate and show only a net figure (difference between inflows and outflows) for each country, the pattern appears broadly realistic.

The net outflow of migrants from ASEAN as a whole since 1970 is estimated to have reached nearly 10 million persons by 2010 and is projected to reach 20 million by 2030. These are not large numbers for a period of 60 years considered relative to ASEAN's 600 million population. The three higher-income ASEAN members have received net inflows.

**Table 9.6** Cumulative net migration, 1970–2030*Balance of inward and outward migration since 1970*

<i>Member countries</i>	<i>Millions of persons</i>		
	<i>1990</i>	<i>2010</i>	<i>2030</i>
Singapore	0.3	1.7	3.2
Malaysia and Brunei Darussalam	0.7	1.9	3.2
Thailand	1.6	2.6	3.9
ASEAN	-1.9	-9.6	-21.3
Indonesia	-0.5	-4.6	-10.7
Philippines	-1.1	-4.9	-11.4
Vietnam	-1.7	-3.2	-4.7
Lao PDR	-0.2	-0.5	-0.8
Cambodia	-0.7	-0.8	-1.0
Myanmar	-0.2	-1.8	-3.3

Singapore with a total population of 5.1 million in 2010 is estimated to have received a net inflow of 1.7 million persons over the preceding 40 years. The data do not tell us the destination of outward migration from Indonesia, the Philippines, and Viet Nam, but it seems likely that many people went to the United States and Europe as well as other countries in Asia. Thailand has received large numbers of migrant workers from neighboring countries—Myanmar, Cambodia, and the Lao PDR—who may be more likely to return home if they could find comparable employment opportunities in their own country. Since patterns of migration tend to persist, the baseline projection is in part an extrapolation of past movements. But if, as projected, per capita incomes in Viet Nam and Cambodia catch up with those in Thailand the net outflow from these countries is likely to come to an end and may indeed reverse. Baseline projections for Indonesia, the Philippines, Myanmar, and the Lao PDR show larger continued net outflows up to 2030 reflecting less optimistic baseline projections of GDP.

In the absence of direct measures of within-country disparities, two measures of internal economic structure are proposed here as proxy indicators.

The first is the difference in income, measured by GDP per person employed, between agriculture and other sectors (industry and services). This gap, which is evident in all member countries except Singapore, acquires increasing importance the larger the percentage of the labor force that remains reliant on agriculture as a primary source of income. The significance of the gap is not only the implication for living conditions in rural areas, which may to some extent be cushioned by traditional subsistence patterns and community institutions but also the outflow of low-wage labor when younger people from rural areas seek higher earnings and less arduous working conditions elsewhere. In the worst case the rural exodus provides the source for growth of urban slums.

**Table 9.7** Agricultural gaps, 1970–2030

<i>Member countries</i>	<i>Percent of total GDP</i>			
	<i>1970</i>	<i>1990</i>	<i>2010</i>	<i>2030</i>
Singapore	–1	–9	–8	–8
Malaysia and Brunei Darussalam	13	16	4	4
Thailand	154	150	45	35
ASEAN	74	101	51	43
Indonesia	24	87	41	36
Philippines	57	48	35	33
Vietnam	91	104	68	59
Lao PDR	300	276	382	372
Cambodia	134	124	130	122
Myanmar	78	41	74	75

Table 9.7 provides estimates of the size of the agricultural gap taking account of differences in income per person employed and the percentage of the labor force engaged in agriculture. In Singapore, which has only a small agricultural sector, income per person employed is somewhat higher than the average for other sectors. Malaysia already had a relatively balanced distribution between agriculture and other sectors in 1970 and although the gap increased slightly in the 1980s it has since fallen to a negligible level. In this sense Singapore and Malaysia have a more modern and presumptively less unequal pattern of employment than other member countries. Indonesia and the Philippines have relatively small agricultural gaps considering their lower level of GDP per capita, and the gap in Thailand has reduced considerably since 1990. Gaps in Viet Nam and Myanmar are slightly above the ASEAN average while the Lao PDR and Cambodia still have gaps on a scale similar to those which obtained in other member countries several decades ago.

In a situation of continuing underemployment it is difficult to predict how the balance of employment in agriculture and other sectors will shift in future. The baseline projection in table 9.7 is conservative, showing at best small reductions in some member countries. This is most likely to happen in practice in the absence of high demand for labor in construction and if government policies continue to protect small holders and existing patterns of farming.

The second internal distribution indicator used here is the size of the government budget for services and investment and more particularly, the ratio of the budget to GDP in agriculture since this provides some indication of resources available to support diversified development in rural areas. The government budget provides services like health and education and provincial and rural infrastructure such as roads, irrigation and drainage, and electricity. It also provides a somewhat diffused contribution to

**Table 9.8** Government resource ratio, 1970–2030

<i>Ratio of government expenditure on goods and services to GDP in agriculture</i>				
<i>Member countries</i>	<i>1970</i>	<i>1990</i>	<i>2010</i>	<i>2030</i>
Singapore	6.4	1.4	1.7	2.0
Malaysia and Brunei Darussalam	0.6	1.2	1.6	2.6
Thailand	0.6	1.4	1.8	2.2
ASEAN	0.4	0.8	1.0	1.2
Indonesia	0.3	0.7	0.8	1.1
Philippines	0.5	0.7	1.1	1.5
Vietnam	0.2	0.3	0.5	0.7
Lao PDR	0.3	0.2	0.5	0.6
Cambodia	0.1	0.2	0.3	0.3
Myanmar	0.4	0.3	0.4	0.6

household income through payment of salaries and other benefits to government employees and contractors all over the country. If the government budget is large relative to income from agriculture there is at least scope for government spending to promote development of agriculture itself and support decentralized development of services and industries that provide alternative sources of employment.

Table 9.8 shows past and projected values of the budget ratio to agricultural income. The countries with the largest agricultural gaps, Cambodia and the Lao PDR, have the least resources that could be used to supplement agricultural incomes and support alternative employment. Other lower-income countries such as Myanmar and Viet Nam also have limited government resources measured the same way. Higher-income ASEAN members are much better placed in this respect. These figures include all types of government spending on goods and services. We do not have data on the proportion of resources used in each country to support large cities and coastal industrial zones as against more dispersed provincial and rural areas.

## Potential Impact of Cohesion Policies

Two major concerns for ASEAN countries integrating more closely as an economic community (AEC) are how to maintain or strengthen cooperation between countries that have very different income levels and how to mitigate inequalities of income and wealth that are increasingly visible and a potential source of instability and internal conflict within countries.

The cohesion scenario examined in this section includes several areas that might be addressed by ASEAN in the context of the AEC, including exchange rate policies, competition policies, agricultural policies, and government service standards. These policy areas have been chosen as they are potentially significant for reduction of disparities and can be examined using the macro model. Other areas of equal interest such as the structure

of direct and indirect taxation, social security provision, employment policy, and minimum wage legislation are not included in this study as they require different tools of investigation.

The estimated impact of the cohesion scenario on GDP growth rates is shown in table 9.9. Overall the policies generate an increase of around 0.5 percent per year in real growth of the ASEAN economy as a whole as compared with the baseline. The increase is concentrated in middle and lower-income member countries with Indonesia gaining a large share as opposed to the baseline context in which Indonesia's GDP fails to keep up with the ASEAN average. Of the CLMV group Viet Nam alone has little or no increase in growth since its growth rate was already high enough in the baseline to bring it up to fourth place in terms of per capita GDP. Higher-income ASEAN members, Singapore, Malaysia, and Thailand, have lower GDP growth in the cohesion scenario than in the baseline. This reflects a deliberate shift of competitive advantage in favor of lower-income members. The cost to higher-income countries in terms of GDP growth should be compensated by improved security and sustainability of development with a stronger shared identity and reduced dependence on low-wage migrant workers.

We now consider different dimensions of cohesion policy and the potential impact on employment and income distribution within member countries.

**Table 9.9** GDP growth to 2030 with cohesion policies

<i>Member countries</i>	<i>ASEAN average = 1.00</i>			
	<i>2010–2030</i>			
	<i>1990–2010</i>	<i>Baseline</i>	<i>Cohesion policies</i>	<i>Policy effect</i>
Singapore	5.7	4.1	2.8	–1.4
Malaysia and Brunei Darussalam	6.1	4.4	2.8	–1.6
Thailand	4.3	4.4	3.9	–0.5
ASEAN	5.1	5.4	6.1	0.6
Indonesia	4.4	5.0	6.9	2.0
Philippines	3.9	5.7	7.2	1.6
Vietnam	7.7	8.9	8.7	–0.2
Lao PDR	6.7	6.1	8.2	2.1
Cambodia	7.6	9.5	11.3	1.8
Myanmar	10.8	5.4	6.5	1.1

*Source:* Calculations based on the WD 6.4 databank and comparison of (a) the CAM 5.2 baseline projection with (b) a cohesion policy scenario incorporating the following elements (see text for discussion and further detail):

1. exchange rate management favoring lower-income members
- 1a. special assistance for industrial development in Myanmar and the Lao PDR
2. competition policies to reduce oligopolistic practices, improve efficiency, and raise the share of employment income
3. agricultural policies that facilitate sustainable commercial farming, boost rural income, and reduce dependence on casual or low-paid labor
4. government service standards that support decentralized development

The first policy area is exchange-rate management, which in the cohesion scenario is coordinated to achieve adjustments in the pattern of costs and competitive advantage that help to reduce disparities of per capita GDP in the longer run. The assumption is that low real exchange rates relative to high income countries can help lower income members to attract investment and achieve faster growth as low-cost producers and exporters. To this end exchange rates of ASEAN members are targeted in real (inflation-adjusted) terms according to a scale based on per capita GDP. The exchange-rate policy is complemented by special privileges for investment in the manufacturing export sector in the least-industrialized member countries—Myanmar and the Lao PDR.

Table 9.10 shows the spread of real exchange rates in 2010 with Singapore on a par with the world average, the other original members in the range 64–83 percent and the CLMV group at the low end with rates between 40 and 50 percent of the world average. The baseline projection has minor adjustments of current real exchange rates with increases reflecting faster growth in the CLMV group and a fall in the rate for Indonesia. The average for ASEAN as a whole is 7 percent higher in 2030 than in 2010.

In the cohesion scenario ASEAN as a whole accepts a larger increase in its average real exchange rate and therefore its level of internal costs and prices relative to the world average. This would be commensurate with ASEAN's improving position in terms of income and living standards and increased reliance on nonprice competitive factors such as diversification of markets, increased efficiency, and skill of the labor force, higher automation, and improved logistics and business services. Myanmar and the Lao PDR would retain significantly lower real exchange rates while other members come close to the 85 percent level and Singapore's real exchange rate rises significantly above the world average.

**Table 9.10** Real exchange rates in 2030 with cohesion policies

<i>Member countries</i>	<i>World average = 1.00</i>			
	<i>2010</i>	<i>2030</i>		
		<i>Baseline</i>	<i>Cohesion policies</i>	<i>Policy effect (%)</i>
Singapore	1.01	1.01	1.14	13
Malaysia and Brunei Darussalam	0.65	0.71	0.87	22
Thailand	0.68	0.77	0.87	14
ASEAN	0.71	0.76	0.85	12
Indonesia	0.83	0.73	0.84	15
Philippines	0.64	0.79	0.80	2
Vietnam	0.45	0.71	0.87	22
Lao PDR	0.48	0.56	0.70	25
Cambodia	0.40	0.78	0.85	9
Myanmar	0.50	0.77	0.58	-25



**Table 9.11** Income from employment in 2030 with cohesion policies

<i>Member countries</i>	<i>Income from employment as % of GDP</i>			
	2010	2030		
		<i>Baseline</i>	<i>Cohesion policies</i>	<i>Policy effect</i>
Singapore	76	70	72	2
Malaysia and Brunei Darussalam	53	54	59	5
Thailand	53	53	59	6
ASEAN	52	50	54	4
Indonesia	46	45	51	6
Philippines	43	39	43	4
Vietnam	54	52	58	6
Lao PDR	38	37	40	3
Cambodia	54	51	57	6
Myanmar	54	56	58	1

The second dimension considered in the cohesion scenario is competition policy where the objective is to reduce oligopolistic practices, improve efficiency, and raise the share of employment income<sup>14</sup> toward 60 percent of GDP from the present average level of 52 percent. From the perspective of distribution, competition policies are a plausible method for diffusing benefits of GDP growth and economic development more widely through the urban and rural population. Table 9.11 shows estimates of the impact on the share of employment income in 2030 compared with the baseline and estimated figures for 2010 when the employment income share was particularly low in the Lao PDR, the Philippines, and Indonesia and substantially higher in Singapore than in other member countries.

In the baseline scenario the share of employment income is projected to fall in Singapore, the Philippines, and the fastest-growing member countries, Viet Nam and Cambodia, bringing the ASEAN average down by 2 percent of GDP. The estimated outcome of cohesion policies for ASEAN as a whole is a 4 percent increase relative to the baseline, 2 percent relative to 2010. The potential for an increased share is estimated to be in the range 4–6 percent of GDP in the majority of member countries but relatively low in Myanmar where the real exchange rate would be held down to boost competitiveness.

A third aspect of the cohesion scenario is a reduction in the gap between agriculture and other sectors. This is illustrated in table 9.12 where large changes are projected for the CLMV countries, especially the Lao PDR, which currently has the highest dependence on agriculture.

The behavioral shifts postulated in the macro model that generate results shown in table 9.12 are a substantial reduction in the number of people employed in agriculture and an increase in agricultural value added. Our assumption is that these shifts and reduction of the agricultural gap would be beneficial for employment and provide the opportunity for reduced

**Table 9.12** Agricultural gap in 2030 with cohesion policies*Shortfall in income per person employed relative to other sectors*

<i>Member countries</i>	<i>Percent of total GDP</i>			
	<i>2010</i>	<i>2030</i>		
		<i>Baseline</i>	<i>Cohesion policies</i>	<i>Policy effect</i>
Singapore	-8	-8	-8	0
Malaysia and Brunei Darussalam	4	4	3	0
Thailand	45	35	26	-9
ASEAN	51	43	28	-15
Indonesia	41	36	24	-12
Philippines	35	33	22	-11
Vietnam	68	59	35	-24
Lao PDR	382	372	184	-188
Cambodia	130	122	65	-57
Myanmar	74	75	37	-39

inequality in urban and rural areas by making possible (i) improved conditions of employment in agriculture itself, (ii) faster growth of total income generated by agriculture and agri-processing, and (iii) dispersed development of industrial and service sectors in provincial towns and cities. Policies to promote this pattern of development will include support for commercialization of agriculture and development of supporting industries and services with infrastructure investment. Such policies will undoubtedly benefit larger-scale farms and other local business and may be controversial as they tend to conflict with promotion of small farms and redistribution of land to low-income rural families.

Table 9.13 shows changes in employment that lie behind estimated reductions in agricultural gaps.

The scenario implies that progressive restructuring of agriculture could reduce employment in agriculture in 2030 by between 12 and 18 percent of the baseline in all member countries except Singapore and Malaysia, where dependence on agriculture is already relatively low. The benefit in terms of conditions of employment and reduced inequality in the economy as a whole will depend to a large extent on the development of alternative employment in industries and services in towns and cities in the same or nearby provinces or regions.

The final element in the cohesion scenario is an ASEAN member standard of resource provision for government expenditure in relation to GDP and the size of the dependent population (children, young people, and elderly). Table 9.14 illustrates the potential increase in resources in the cohesion scenario for government services and infrastructure investment considered as a ratio to the size of the agricultural sector measured by GDP. We consider this ratio to be significant for many ASEAN member countries as it gives an

**Table 9.13** Agricultural employment in 2030 with cohesion policies

<i>Member countries</i>	<i>Percent of total employment</i>			
	2010	2030		
		<i>Baseline</i>	<i>Cohesion policies</i>	<i>Policy effect (%)</i>
Singapore	1	1	1	1
Malaysia and Brunei Darussalam	13	10	10	1
Thailand	38	32	27	-13
ASEAN	43	38	32	-17
Indonesia	40	35	29	-17
Philippines	35	32	26	-18
Vietnam	52	45	37	-18
Lao PDR	85	84	73	-12
Cambodia	72	67	57	-15
Myanmar	64	60	50	-17

**Table 9.14** Government resource ratio in 2030 with cohesion policies

<i>Member countries</i>	<i>Ratio of government expenditure on goods and services to GDP in agriculture</i>			
	2010	2030		
		<i>Baseline</i>	<i>Cohesion policies</i>	<i>Policy effect (%)</i>
Singapore	1.71	2.02	2.03	1
Malaysia and Brunei Darussalam	1.63	2.56	2.65	4
Thailand	1.85	2.20	2.01	-8
ASEAN	1.04	1.24	1.25	1
Indonesia	0.84	1.08	1.25	15
Philippines	1.06	1.49	1.55	4
Vietnam	0.51	0.70	0.83	19
Lao PDR	0.55	0.59	0.68	16
Cambodia	0.27	0.33	0.47	45
Myanmar	0.39	0.64	0.56	-12

indication of the level of availability of resources for government spending to support dispersed development. The two main factors determining the ratio are government spending as a share of GDP and the share of agriculture in GDP.

The estimates in the table imply that economic growth across ASEAN projected in the cohesion scenario can substantially increase resources for spending on government services and investment relative to agricultural income, making it easier for member governments to support dispersed patterns of development.

## Notes

1. Limitations of the databank and model used in this chapter oblige us to combine figures for Brunei Darussalam with Malaysia. We do not comment specifically on Brunei

Darussalam and the reader is asked to bear in mind that references to Malaysia are in fact references to the two countries considered together. It must also be noted that figures for Indonesia are combined with those for Timor-Leste, which has applied to join ASEAN but is not yet a member.

2. ASEAN (2011).
3. World Bank (2014).
4. World economy database (WD 6.4) and CAM model version 5.2. The database and model are documented in detail in User Guides (Cripps and Khurasee, 2011 and 2013) available on request from Alphametrics.
5. The modeling system may also be used to examine sensitivity to different assumptions about the global context, considering trends and policy shifts in other parts of the world. To simplify the exposition a single global baseline is used here as a background for examining the potential impact of changes in policy within ASEAN.
6. See Cripps et al. (2014) and Cripps (2014a).
7. The measure of income from employment used here includes “mixed income” (rent and income from self-employment) as well as compensation of employees. Estimates of income from employment and numbers of people employed by broad sector are derived from somewhat fragmentary series reported by national statistical offices to the UN Statistics Division and the ILO, respectively. Gaps have been filled by interpolation or extrapolation. Other series used in this study rely on more complete official sources. The reader should be aware that some ASEAN member countries have been substantially affected by internal conflicts that limited or distorted their economies and economic statistics, especially in the 1970s and 1980s.
8. Readers interested in the methodology used to construct the database and macro model may refer to an overview published as an Appendix to the European study published earlier this year (Cripps, 2014b). More detailed reference material may be found in User Guides available on request from the authors (Cripps and Khurasee, 2011 and 2013).
9. ASEAN (1999).
10. World Bank (2008).
11. The methodology used to adjust the global system of accounts derives from Stone (1976) and Byron (1978).
12. Tables in this chapter report results for benchmark years (1970, 1990, 2010, and 2030). The databank and model provide year-by-year annual series for the entire period but since the analysis here is concerned with long-term development issues and medium to long-term projections are inevitably speculative we have not attempted to report the time path of changes in each variable or ratio in more detail.
13. Note that in Singapore’s case this does not imply the development of a large factory sector. The surplus may arise as much from services and trading activities that add value to products imported from elsewhere as from local manufacture of the products exported.
14. Measured broadly to include “mixed” income such as rents and earnings from self-employment as well as compensation of employees.

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## Does Outsourcing Enhance Skill Premiums in ASEAN?

*Aekapol Chongvilaivan*

### Concept of Outsourcing

Outsourcing can be loosely defined as the arrangements whereby the physical and/or human resources related to a firm's production factors are procured and/or administered by outside providers.<sup>1</sup> It appears to be widely accepted that outsourcing, both onshore and offshore, has become a firm's operating model that enhances the ability of the firm to combine different components of expertise, critical skills, and a highly motivated workforce. Three strands of literature, however, conceive the notion of outsourcing in three different ways.

The first is concerned with the extension of the classical trade model, that is, the Ricardian and Heckscher-Ohlin trade theories, in which intermediate inputs are allowed to trade internationally (see, for instance, Jones and Kierzkowski, 1990; Arndt, 1999; Jones, 2000; Deardorff, 2001; Bhagwati et al., 2004). The second theoretical framework builds upon the transaction cost approach to industrial organization where outsourcing is viewed as a decision to procure intermediate inputs from the markets, as opposed to internalization (see, for instance, McLaren, 2000; Qiu and Spencer, 2002; Grossman and Helpman, 2002 and 2005; Head et al., 2004; and Feenstra and Spencer, 2005). The third strand constitutes the property rights approach. It puts emphasis on property rights, which define boundaries of firms and explain outsourcing based on differences in factor endowments (see, for instance, Antràs, 2003 and 2005; and Antràs and Helpman, 2004).

In the context of the Association of Southeast Nations (ASEAN), the extension of the classical trade model is the most widely accepted notion of outsourcing. Unlike developed countries and developing countries in other parts of the world such as Latin America, the proliferation of outsourcing activities in ASEAN has been fueled principally by global production

networks. That is, thanks to declines in transportation costs and advancement of information and telecommunication technology (ICT), production fragmentation helps the ASEAN economies to expand their spectrum of comparative advantage by allowing them to build up specialization on and trade in parts and components, as opposed to final products as in the standard trade theory. Multinational firms, especially from the United States, the European Union, and Japan, tap on vertical specialization by establishing assembly plants that source parts and components from suppliers in ASEAN. This is particularly the case in electronics and automotive industries.

Jones and Kierzkowski (1990) are the first to explore the notion of production fragmentation and outsourcing by extending the classical trade model. As they pointed out, the substantial declines in “service link” costs encourage greater degrees to which the production processes that were once vertically integrated have been fragmented into a series of “production blocks” that may be outsourced to various regions of a country or abroad as part of global production networks. In the standard trade theory, firms carry out all production activities in-house—in vertically integrated blocks. As the service link costs decline, production fragmentation becomes economically viable. Production stages can be placed in the location where comparative advantage exists at the parts and components level.

Two conditions determine whether production fragmentation is viable (Kimura and Obayashi, 2011). The first is the gains from vertical specialization in terms of a plunge in production costs. Jones (2000) demonstrated this point by showing that in comparison with a vertically integrated firm, an outsourcing firm operates at lower production costs by specializing in certain parts and components and contracting out the rest of the production activities at arm’s length. In this way, the locus of total costs under production fragmentation, as outputs expand, is lower than that under vertically integrated production. The second condition is concerned with service link costs that incur from geographically dispersed nodes of production. The examples of service link costs under fragmentation are transportation costs, inventory costs, communication costs, and costs of contract enforcement, among others. If gains from specialization outweigh service link costs, firms opt for production fragmentation and outsource some of the parts and components from outside suppliers.

The conceptual framework put forward by Jones and Kierzkowski (1990) explains proliferation of outsourcing in ASEAN and is consistent with the flying-geese pattern introduced by Akamatsu (1962). The lower trade barriers as a result of closer economic ties within and outside ASEAN allow firms, both local and multinational, to contract out production activities at arm’s length and specialize on the production stages where their comparative advantage lies. At the same time, advancement of information and telecommunication technology, especially Internet and efficient logistics (e.g., just-in-time inventory system), trims down service link costs. Consequently,

more and more parts and components they once did for themselves are outsourced and become a vital part of international trade and investment.

## Global Production Networks in ASEAN

Outsourcing has diffused deeply into the ASEAN and East Asian regions since the mid-1980s. As conceptualized in the first section of this chapter, proliferation of outsourcing is attributable to substantial plunges in transportation and communication costs on top of ever-expanding globalization. Unlike the formation of similar production networks in other parts of the world, such as the United States-Mexico and Germany-Hungary/Czech Republic, ASEAN's global production networks have become a vital element of international trade and foreign investment, which in turn fostered impressive economic growth and the "Asian Miracle" in the early 1990s. Two factors account for the exceptionally important intrafirm and arm's length relationships in ASEAN (Ando and Kimura, 2005). First, ASEAN involves a relatively large number of countries at different levels of development, with large market size and abundant natural and human capital resources. Cross-country differences in factor prices and other locational advantages have made production fragmentation and vertical specialization along the value-chain economically viable. More importantly, ASEAN's global production networks, to a large extent, are policy driven. From the 1970s and the 1980s, most ASEAN countries and China employed import-substitution industrialization through which the governments ushered in selective FDI, particularly from the Asian forerunners (i.e., Japan, Korea, and Taiwan) to nurture potential infant manufacturing industries like automotive and electronics industries. These industries were handpicked due to the nature of high value added and potential backward and forward linkages with other industries through diffusions of knowledge and technology. As the industries started to take off, industrialization strategies were transitioned toward export orientation whereby export-processing zone and export promotion policies have allowed domestic industries to competitively take part in the global production networks (Ando, 2010).

One way to more clearly understand the roles of global production networks in the ASEAN economies is to examine the global value chain (GVC) participation rate. It examines sources of value added in trade. GVC participation is defined as "the portion of a country's exports that is part of a multi-stage trade process, by adding to the foreign value added used in a country's own exports and also the value added supplied to other countries' exports" (UNCTAD, 2013, p. 5). The first portion, the foreign value added used in a country's own exports, is concerned with production activities contracted out at arm's length to foreign providers and captures the "*upstream component*." The second portion, in contrast, gauges a country's own exports that are further processed by foreign counterparts and is known as the "*downstream component*." Given this definition, GVC participation can be used to



examine the extent to which industries in a country rely on internationally integrated production networks.

ADB (2014, pp. 57–8) has observed that except for Hong Kong SAR, China, all ASEAN and East Asian countries (including India) experienced a burgeoning of GVC participation between 1995 and 2008. The rise is particularly pronounced for China, India, and Japan where GVC participation was doubled from 20 percent in 1995 to more than 40 percent in 2008. Most ASEAN countries, notably Cambodia, Malaysia, Indonesia, the Philippines, Singapore, and Thailand, have also registered an increase in GVC participation. As of 2008, Singapore is in the forefront of the global production networks, with nearly 80 percent of GVC participation rate, followed by Malaysia, the Philippines, Viet Nam, Thailand, Cambodia, and Indonesia.

An alternative way to capture the extent of global production networks is Athukorala's (see chapter 4 in this book) share of network products. It makes use of the share of trade in parts and components in total trade. As shown in chapter 3, Malaysia, the Philippines, Singapore, and Thailand have the highest values of network products shares and are consistent with GVC participation discussed earlier. Some differences can be spotted, however. Viet Nam appears to have the lowest shares of network products in terms of both exports and imports. Another interesting observation is that all ASEAN countries including China, Japan, and Korea experienced a noticeable increase in the shares of network trade. This points to an increase in the roles of global production networks in ASEAN and East Asia and, therefore, is consistent with the trend of GVC participation.

More conducive business environments in ASEAN account for the proliferation of global production networks in ASEAN. The World Economic Forum provides the rankings and scores of the Enabling Trade Index measuring the extent to which an economy has developed institutions, policies, and services facilitating free flow of goods over border to destinations, with four subcategories: market access, border administration, transport and communication infrastructure, and business environment (World Economic Forum, 2012). It can be observed that countries with high values of the Enabling Trade Index are those with high GVC participation, especially Singapore, Malaysia, and Thailand. This is not surprising, however. As elaborated in the second section, production fragmentation depends on the trade-off between gains from specialization and service link costs. With a business environment that is conducive to international trade, goods and services can be traded at lower transaction costs and, thus, lower service link costs. This enables firms to leverage on production fragmentation as a key production pattern.

The other indicator of service link costs can be seen from a country's logistics capacity. Table 10.1 presents the Logistics Performance Index (LPI) by six subcategories—customs, infrastructure, international shipments, logistics competence, tracing and tracking, and timeliness.

**Table 10.1** Logistics Performance Index by subcategories, 2012

<i>Country</i>	<i>Customs</i>	<i>Infra.</i>	<i>International shipments</i>	<i>Logistics competence</i>	<i>Tracking and tracing</i>	<i>Timeliness</i>
Singapore	4.10	4.15	3.99	4.07	4.07	4.39
Japan	3.72	4.11	3.61	3.97	4.03	4.21
Korea, Rep.	3.42	3.74	3.67	3.65	3.68	4.02
China	3.25	3.61	3.46	3.47	3.52	3.80
Malaysia	3.28	3.43	3.40	3.45	3.54	3.86
Thailand	2.96	3.08	3.21	2.98	3.18	3.63
Philippines	2.62	2.80	2.97	3.14	3.30	3.30
Vietnam	2.65	2.68	3.14	2.68	3.16	3.64
Indonesia	2.53	2.54	2.97	2.85	3.12	3.61
Cambodia	2.30	2.20	2.61	2.50	2.77	2.95
Lao PDR	2.38	2.40	2.40	2.49	2.49	2.82
Myanmar	2.24	2.10	2.47	2.42	2.34	2.59

Source: World Bank's Logistics Performance Index Database (available at: <http://lpi.survey.worldbank.org/>).

As is the Enabling Trade Index, the countries like Singapore, Malaysia, and Thailand with impressive logistics performance tend to actively participate in the global production networks. For countries like Cambodia, Lao PDR, and Myanmar, where logistics infrastructure lagged behind, service link costs are prohibitively costly, thereby deterring businesses to rope in production fragmentation and outsourcing.

## Impacts on Labor Development

### *Labor Productivity*

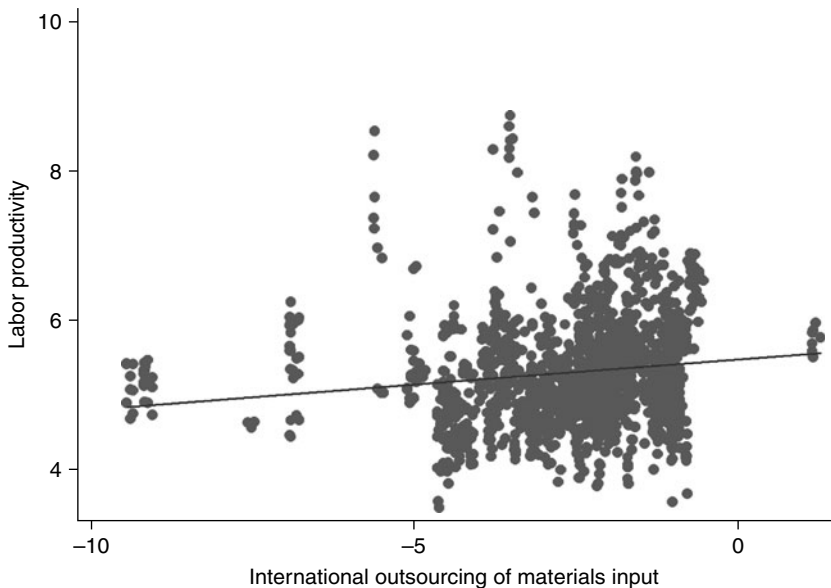
In recent years, one of the core interests in the economic impacts of production fragmentation has been predominantly concerned with a change in labor productivity. In the developed economies, outsourcing has been widely deemed by the public, media, and labor unions as “exporting jobs” as some production activities, especially labor-intensive ones, are contracted out to low-wage countries such as China, India, and developing ASEAN member countries. However, from the perspectives of ASEAN countries, there are considerable possibilities that proliferation of outsourcing activities beefs up the labor markets through labor productivity enhancement. This is highly plausible given the fact that many ASEAN countries like Malaysia, Thailand, and Indonesia successfully kicked off industrialization and become the exporters of skill-intensive parts and components production. From a policy standpoint, the labor productivity effects of production fragmentation is by all means crucial as labor productivity is ultimately translated into higher wages, more jobs, and improved standards of living. From a theoretical standpoint, the labor productivity effects of outsourcing are ambiguous, depending on whether labor is a substitute for or complement to the contracted out production activities, on which sectors pertain to

production fragmentation, factor and product market imperfections, and on the intersectoral and international labor mobility.<sup>2</sup>

Figures 10.1 and 10.2 present the relationship between international outsourcing of material and service inputs, respectively, and labor productivity based on a case of Singapore's manufacturing industries during 1995–2004 (Thangavelu and Chongvilaivan, 2013).

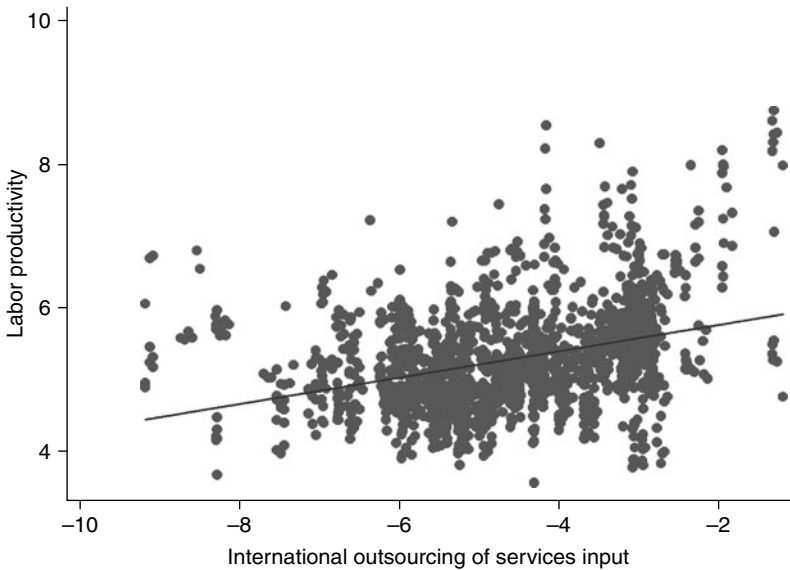
The index of materials outsourcing follows the narrow definition of international outsourcing first introduced by Feenstra and Hanson (1999) and is measured by the ratio of intraindustry materials imports to total industry sales. Likewise, international outsourcing of services account for imported services, that is, IT services and business services, as a share in total industry sales. The measure of labor productivity follows the conventional definition, outputs per worker. As shown in figures 10.1 and 10.2, both types of international outsourcing exhibit positive effects on labor productivity in Singapore's manufacturing industries. This implies labor productivity gains from contracting out production activities at arm's length.

As posited by Amiti and Konings (2007) and Amiti and Wei (2009), there are at least four mechanisms through which international outsourcing prompts an upward shift in labor productivity level. First, a decision to contract out production stages at arm's length enables a firm to relocate its less efficient production activities and to center on more efficient ones. In this sense, compositional adjustments associated with outsourcing activities



**Figure 10.1** A fitted plot of international outsourcing of materials input and labor productivity in Singapore manufacturing industries, 1995–2004.

*Source:* Thangavelu and Chongvilaivan (2013).



**Figure 10.2** A fitted plot of international outsourcing of services input and labor productivity in Singapore manufacturing industries, 1995–2004.

Source: Thangavelu and Chongvilaivan (2013).

give rise to labor efficiency improvements, on average. Second, outsourcing activities promote intrafirm restructurings that potentially push forward its technology frontier. The restructuring effects seem plausible with outsourcing of technology—and/or knowledge-intensive activities like information technology and computer services. Third, international outsourcing allows a firm to learn and adopt the uses of new intermediate input imports like software packages and know-how that by and large help improve its labor productivity. Last but not least, an outsourcing decision leads to a wider range of intermediate inputs available to a firm. As shown by Ethier (1982), a surge in materials and services input varieties brings about an outward shift in a firm’s overall labor productivity.

### *Skill Upgrading and Wage Inequality*

The growing amount of recent research in the area of international economics has associated the phenomenon of widening wage differentials between skilled and unskilled workers in developed countries with the prevalence of outsourcing activities whereby production stages firms once did for themselves have increasingly been contracted out at arm’s length to foreign providers (Feenstra and Hanson, 1996, 1999).<sup>3</sup> These studies produce rather consistent evidence that points to international outsourcing—the uses of parts and components imports that allow firms to specialize their core-competent activities, to enhance cost efficiency, and to maintain competitiveness in the globalized market—as a key catalyst of mounting wage inequality.

This phenomenon resulting from outsourcing activities is also known as “skill upgrading.”

In the context of ASEAN where member countries, except Singapore, are developing and either middle- or low-income, the relationship between outsourcing and wage inequality is less clear-cut and largely unexplored in the literature. First, international provision of intermediate inputs may raise the relative demand for skilled workers in less skill-intensive countries. Feenstra and Hanson (1996) develop a theoretical model of international outsourcing, which highlights the importance of international differences in relative prices as the driving force of outsourcing and showed that international outsourcing from more skill-intensive North to less skill-intensive South results in a widening wage gap between skilled and unskilled labor in both regions. In this case, we would expect exacerbated wage inequality in developing countries—the regions of South that are typically less skill-intensive and emerged as a hub of outsourcing provision.

More importantly, outsourcing providers could also procure higher levels of services than firms’ in-house production as the outsource providers could also tap the benefits from economies of scale as a result of mass production and distributing their fixed costs (Paisittanand and Olson, 2006). For example, IT outsourcing is often more efficient and more cost-saving than developing the systems internally because the service providers could have better knowledge of the software than the in-house IT team. Further, outsource providers have to constantly innovate and improve their product qualities to keep in line with the production structure of the key outsourcing companies. In this case, the decision of outsourcing provision brings about productivity gains from specialization (Amiti and Wei, 2009). If the effect on labor productivity is skill-biased in such a way that it is in favor of skilled workers, outsourcing provision could also account for the widening skilled-unskilled wage gap.

Table 10.2 sheds some light on the effects of outsourcing provision on wage inequality in Thailand’s manufacturing industries.

It reveals the elasticities of the wage gap between skilled and unskilled workers derived from the translog cost function (Chongvilaivan and Thangavelu, 2012). Three observations can be drawn from table 10.2.

First, outsourcing provision, in total, contributes to wage differentials between skilled and unskilled workers. A 1 percent increase in the intensity of total outsourcing provision results in 2.5 percent increases in the wage gap. This also implies “skill upgrading”—the productivity effects of total outsourcing provision are more pronounced for skilled workers. The positive impacts on wage inequality may be explained by the extent to which outsourcing providers in Thailand’s manufacturing industries are more likely to undertake skill-intensive production activities. Second, the effects on wage inequality are more pronounced for service outsourcing provision. This may be explained by the fact that services activities like repair and installation work are more skill-intensive than materials production. Last, outsourcing provision does not influence wage inequality evenly

**Table 10.2** The impacts of international outsourcing on wage inequality in Thailand's manufacturing industries

<i>Industry</i>	<i>Elasticities of Wage Inequality with respect to Outsourcing</i>		
	<i>Total</i>	<i>Material</i>	<i>Service</i>
Food products and beverages	2.309	0.573	0.297
Textiles	4.259	1.274	4.264
Wearing apparel; dressing and dyeing of fur	2.929	0.099	4.413
Leather, luggage, handbags, saddlery, harness, and footwear	2.265	0.621	1.760
Wood and products of wood and cork	2.698	0.796	1.063
Paper and paper products	3.453	1.015	7.972
Publishing, printing, and reproduction of recorded media	2.595	0.259	1.906
Coke, refined petroleum products, and nuclear fuel	2.661	0.255	11.839
Chemicals and chemical products	2.144	0.478	0.429
Rubber and plastics products	2.263	0.668	1.525
Other nonmetallic mineral products	2.166	0.697	0.552
Basic metals	3.125	1.291	0.624
Fabricated metal products, except machinery and equipment	2.347	0.579	1.164
Machinery and equipment n.e.c.	2.719	0.556	1.241
Office, accounting, and computing machinery	2.012	-0.005	0.214
Electrical machinery and apparatus n.e.c.	2.091	-1.217	2.064
Radio, television, and communication equipment and apparatus	2.370	0.900	1.686
Medical, precision and optical instruments, watches and clocks	4.592	1.524	0.243
Motor vehicles, trailers, and semi-trailers	2.424	0.877	0.235
Other transport equipment	2.637	1.478	2.405
Furniture; manufacturing n.e.c.	2.310	1.014	1.195
Total	2.472	0.725	1.227

*Source:* Chongvilaivan and Thangavelu (2012).

across industries. Although the positive effects of outsourcing provision on the wage gap are generally observed, the opposite results prevail in some industries—including food products and beverages; chemicals and chemical products; nonmetallic mineral products; basic metal; medical, precision, and optical instruments, watches, and clocks; and motor vehicles, trailers, and semi-trailers.

### *New Technology Adoption*

Another critical factor that underpins the nexus between outsourcing activities and labor is new technology adoption by firms. Outsourcing essentially exposes a firm to new products, ideas, and ways of doing businesses from its partners. In addition, outsourcing also induces a firm to leverage on product customization, quality control, and investment in innovation to stay competitive in the market. As firms take in new technology like automate production systems and more subtle production lines, labor can build up their skills and ultimately becomes more productive. This is also one of the reasons why outsourcing activities are associated with labor productivity and skill premium.

The General Statistical Office of Viet Nam (GSO, 2009) presents various characteristics of firms that are engaged in outsourcing activities in Viet Nam, based on *Annual Statistical Censuses & Survey: Enterprises* from 2002 to 2008.

It underlines that around 33 percent of outsourcing firms adopted new technology. Intuitively, international outsourcing offers an access to foreign contract partners and thus helps an outsourcing firm to tap on technology diffusion and spillovers. New technology adoption influences labor employed in-house in two ways. First, new technology improves labor productivity. The uses of automate machines, new software, and better quality control and product standardization, for example, directly boost outputs and firm performance. Given the same amount of employment, this implies greater labor productivity. Furthermore, new technology necessitates a new breed of skilled workers who are able to cope with and maintain more sophisticate machines, such as technicians, designers, and mechanical engineers. As a result, new technology adoption in conjunction with outsourcing activities shifts the labor demands toward skilled workers and away from unskilled ones.

### **Policy Implications**

The discussions so far underscore that the proliferation of production networks and outsourcing activities in ASEAN has wide-ranging impacts on labor markets. As firms become more and more specialized in certain stages of production, productivity of and demand for skilled workers rise, but unskilled workers—the largest pool of labor supplies in most ASEAN countries—tend to fall out from production fragmentation. The skill-biased effects of outsourcing ultimately bring about widening wage gap between skilled and unskilled workers.

While production networks have allowed ASEAN countries to thrive on industrialization and export-oriented economic growth, the key challenge facing ASEAN countries rests with how they can sufficiently build up their own labor capabilities. Naturally, firms, especially MNEs, opt for high skill-intensive production and trim down low skill-intensive activities. This

implies that if there are no adequate supplies of skilled and technical workers, they are on the verge of losing competitive advantage and bogged down in low value-added production. This labor market challenge is particularly the case in relatively less developed ASEAN countries like Cambodia, Lao PDR, Myanmar, and, to a lesser extent, Viet Nam, where domestic industries are struck in unskilled labor-intensive production and unable to climb up the value chain of production.

The future impacts of outsourcing on workforces in ASEAN will be in three areas (Thangavelu and Chongvilaivan, 2013). The fact that firms can outsource technical, skill-intensive works overseas due to the shortages of local talents implies that ASEAN countries would be facing a “drying up” of local capabilities and talents. The displacement of skilled jobs essentially deters interests in technical careers among the future generation of workforces. Additionally, outsourcing results in losses of intellectual assets and critical knowledge such as enterprise knowledge, cultural knowledge, social network knowledge, strategic knowledge, and industry and process knowledge. Traditionally, these intellectual assets need to be developed internally. However, thanks to outsourcing, firms can get things done with limited, if not no, intellectual assets. Likewise, outsourcing is intimately associated with organizational changes. With organizational transition, certain tasks are outsourced, and certain functions are retrenched. If firms and workers are not well-prepared with organizational changes, severe declines in organizational performance can be expected.

Outsourcing can impact ASEAN’s labor market either positively or negatively, depending critically on how timely and creative labor market policies are in response to the trend of production fragmentation. While the losses of some jobs and functions are part and parcel of outsourcing activities and unavoidable, the countries can strategically choose to specialize on higher value-added functions where their competitive advantage lies. While outsourcing improves overall firm and labor efficiency, the effects are not evenly distributed and therefore spawned inequality across skill groups and professions. The governments need to step in to ensure that education policy can redirect the pool of labor toward production activities with specialization. At the same time, sound social safety nets and unemployment compensation need to be put in place to shield those who fall out from proliferation of production networks.

## Notes

1. There are several synonyms of outsourcing employed in the literature, such as “use of outside contractors” (Abraham and Taylor, 1996), “vertical disintegration” (Holmes, 1999), and “fragmentation” (Arndt and Kierzkowski, 2001), among few others. See Olsen (2006) for a review of the existing literature.
2. See Jones and Kierzkowski (2001) for more detailed discussions of a theoretical treatment of production fragmentation and outsourcing.



3. Following the seminal papers by Feenstra and Hanson (1996, 1999), several empirical studies examined a relationship between outsourcing and wage inequality using information on a wide range of industries in various economies, such as Anderton and Brenton (1999) for the United Kingdom, Geishecker (2004) for Germany, and Hsieh and Woo (2005) for Hong Kong.

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## Regional Integration and the Creative Economies of ASEAN: Assessing the Potential for a Single ASEAN Creative Economy

*Teemu Alexander Puutio*

### The Late Recognition of Creative Economies and the Components of Creative Potential

The prestige of creative hubs such as the Silicon Valley in California is testament of the force that creative economies have in shaping the development of local communities, nations, and even whole regions. The term “creative economies” surfaced into the global zeitgeist around the turn of the millennia. The early understanding of creative economies was greatly influenced by the United Kingdom’s Department of Culture, Media and Sport’s (UKDCMS) the Creative Industries Mapping Document published in 1998. The document demarcated a local creative economy consisting of several interconnected industries that are based on individual creativity, skill, and talent, which contribute significantly to national wealth and employment by producing outputs and services that are often under the protection of intellectual property laws (UKDCMS, 1998). The industries that form this economy were found to operate at intersections of culture, creativity, and innovation, including the following (UKDCMS, 1998):

- advertising and marketing;
- architecture;
- crafts;
- product, graphic and fashion design;
- film, television, video, radio, and photography;
- music, performing and visual arts;
- museums, galleries, and libraries;
- publishing; and
- IT, software, and computer services.

Since 1998, numerous contending and complementary definitions have been devised by governments, intergovernmental organizations, and other stakeholders. The most valuable contributions to a cohesive and comprehensive definition have been made by UNCTAD, UNDP, and UNESCO. Since the launch of the Creative Economy Report series in 2008, these organizations have promoted a deeper understanding of the creative economies' visceral impact on international trade and economic development.

The report series also advocates for a broad definition of creative economies as the dynamic blend of the creative industries that cover all cycles of creation, production, and distribution of goods and services that use creativity and intellectual capital as primary inputs (UNDP-UNCTAD, 2008; UNDP-UNESCO, 2013). A plentitude of analytical frameworks for examining the contours of such a broad definition have been developed, including the eminent core-periphery models that places industries that are directly involved in making, producing, or marketing cultural products within the core and other industries around the diaspora (e.g., Markusen et al., 2008).

The recent surfacing of the term "creative economies" perpetuates two serious misconceptions that in turn sustain the existing and unhealthy disconnect between innovation policies and the creative industries (Higgs et al., 2008).

While creative economies have increased their recognized contributions to international trade and economic development beginning since the late 1990s, they have been far from inconsequential in the past. Indeed, as humanity manifested in tribal townships and ancient urban areas, economic activity was limited to creative industries and agriculture alone. Whereas the advent of industrialization and large-scale manufacturing decoupled the immediate link between the creator and the end-product, it did not diminish the importance of creativity to economic activity.

The onset of the digital era sparked off a roaring expansion of creative economies and enabled diffusion and distribution of unforeseen proportions. New technologies such as the Internet have multiplied the economic potential of existing products and allowed the creation of new creative goods and services. It is a common and dangerous misconception to interpret this burst of activity to have been caused by short-term changes in technology rather than having been mere enabled by them. Understanding the success of countries such as the United States of America necessitates thorough comprehension of how creative potential is developed like tension between tectonic plates over time, and how it can erupt and trigger tidal waves of creativity when the sufficient enabling factors are aligned.

Countless innovation theorists, social scientists, and economists have attempted to enumerate the enabling factors behind creativity. In 2001, Porter and Stern (2001) made one of the most prominent forays into examining the explanatory factors behind differences between national levels of innovation and creativity. Their study concluded that more than 99 percent of the diversity in patenting can be explained with a set of three interconnected

categories, namely, (i) the common innovation infrastructure comprising financial resources, public policies, and so on; (ii) the cluster-specific environments that accounts for, for example, the quality of specialized inputs and intraindustry rivalry; and (iii) the quality of reciprocal linkages between the shared innovation infrastructure and the industrial clusters (Porter and Stern, 2001).

These enabling factors can be further divided into two set of factors. The first set includes factors that are internalized by people including skills, attitudes, preferences, and motivation. The second set comprises factors that are intrinsic to the environments, including the availability of networks, social cohesion and market size, legal and incentive frameworks, and access to financial assets. The Creative Economy Report series advocates for a division of these enabling factors along the lines of resources, such as the creative workforce and their cultural institutions, and capacities, such as social capital and government participation.

The indefinite boundaries of creativity create a densely populated periphery of more general factors that affect national creative potential through influences on social cohesion. Religion, level of education, amount and quality of accessible information, limitations on freedom of thought and expression and the moral, and ethical preferences of both the producers and the consumers of creative goods and services are key among these more indefinite and complex factors. These more generalized factors are difficult to quantify when examining complete creative economies. However, they are amenable to analysis when examining subsets of the creative economy, namely, the local creative clusters.

Innovative clusters were first introduced to the mainstream economic research agenda through Marshall, Arrow and Romer's independent contributions on the topic of knowledge spillovers throughout the twentieth century. A more socioculturally nuanced branch of research on creative clusters grew under the influence of the 1995 paper "The Creative City" published by Charles Landry and Franco Bianchini (1995). Under this branch, creativity is seen as a reflexive function between the environment and the individuals and firms that inhabit it.

Creative clusters, such as United States of America's Silicon Valley and United Kingdom's Birmingham, are seen as cohesive and self-sustained creative units that contain the necessary and sufficient conditions for enabling creativity. The coexistence of disintegrated nodes of the creative supply chains, prerequisite labor and service pools, and the essential infrastructure and incentive frameworks are often included into these conditions (e.g., Pratt, 2004; Indergaard et al., 2013; UNDP-UNCTAD, 2008). In recent years, particular attention has been given to the creative clusters' access to a sufficiently deep "creative class" or the specialists and support functions of the "creative workforce" (Higgs et al., 2008), which can be fostered by building talents and skills and by promoting the diffusion of technology and tolerance (Florida, 2002).

To date, the economic and social research into creative clusters has been focused solely on collectives, townships, and cities. The term “regional clusters” is used in connection with local regions that connect several clusters, such as London or Cardiff in the United Kingdom. Indeed, the focus of modern research is yet to move to the interactions between countries and the potential for establishing creative economies that expand beyond individual borders.

## The Rise of Asian Creative Economies and the Diversity That Is ASEAN

Thus far the race for establishing and operating successful creative economies has been dominated by the developed countries in the West, with the United States and several countries from the European Union dictating the pace. Some Asia-Pacific countries such as Japan and the Republic of Korea have recently caught up with the forerunners through a combination of learning by doing and significant investments in developing creative capacities via education and institutions. The combination of preempted global creative space by the forerunners and stricter intellectual property rights rules has made it increasingly difficult for other countries in Asia to follow the examples set by these Asian creative giants. Other factors that hinder knowledge diffusion and the distribution of creative capacities in the Asia-Pacific region include differences in language, geography, and national socioeconomic and political circumstances (Kong et al., 2006).

However, creative cities have emerged beyond Seoul and Tokyo, including in Hong Kong, China, and the Association of Southeast Nations’ (ASEAN) Singapore. Apart from Singapore, however, the majority of ASEAN members still belong to the factor- and efficiency-driven categories of development where creativity and innovation play a minor role in their development (WEF, 2013). Indeed, the differences in the outcomes and outputs of the ASEAN member states’ creative economies, such as exports of creative goods and services, are colossal (see table 11.1).

Such immense diversity in capacities to innovate and create leads to infinitely different needs and demands within the ASEAN members. With more laggards than forerunners, catching up necessarily dominates pushing the envelope when it comes to deciding the lowest common denominators. A brief examination of the features of three ASEAN creative economies, namely, Cambodia, Viet Nam, and Singapore, bears witness to the immense differences in available resources and capabilities and the different short-term development needs in terms of creativity and innovation policies.

During the period 1999–2008, Cambodia’s GDP grew at an average annual rate of 9.5 percent placing the country among the world’s 15 fastest-growing economies (OECD, 2013). The expeditious growth has on its part alleviated the devastation caused to the country’s potential creative economic agenda during the Khmer Rouge regime. Even today, the creative and

**Table 11.1** Trade in creative goods and services in ASEAN member states

Country	Patent Applications				Trademark Applications				Trade in Creative Goods and Services (Measures US Dollars in Millions)					
	2007		2013		2007		2013		2007		2012		2012	
	2007	2013	2007	2013	2007	2013	2007	2013	2007	2012	2007	2012	2007	2012
Brunei Darussalam	91	30	883	999	376.676924 (2004)	383,61	16.842375 (2004)	23,7731						
Cambodia	13	75	553	1 008	1562,95	2383,57	69,7043	147,637						
Indonesia	3 326	7 542	44 738	63 599	124,241	4938,25	73,885	9383,88						
Lao People's Democratic Republic	1	0	0	1	—	—	—	—						
Malaysia	1 879	8 305	29 481	37 644	10159962.004275 (2006-2007)	6517,31	9850.696103 (2006-2007)	17605,6						
Myanmar	3	0	17	59	13,364	73.9184361 (2010-2011)	—	9173,94						
Philippines	3 578	3 415	16 019	23 847	33	84	72	126						
Singapore	12 983	14 049	31 977	38 022	14943,2	31207	25003	35085,5						
Thailand	7 003	7 743	37 994	53 102	4303528	12276	14275,5	19463,8						
Viet Nam	2 873	4 049	32 039	38 103	2110.030913 (2006)	4693.121877 (2011)	5771.4432645 (2006)	18345.483178 (2011)						

Source: Author's compilation based on WIPO (2015) and UNCTAD Stat. (2015).

cultural industries are dramatically underdeveloped due to the amalgamation of institutional deficiencies and generational gap in the participants in the creative workforce caused by the oppression by the Khmer Rouge. Many other factors hinder entrepreneurial growth in Cambodia's creative economy such as corruption, inadequate regulatory systems, an underdeveloped infrastructure and poor investment. The country's innovation performance is also weak due to lack of technological sophistication with very few researches, and limited research and development expenditure.

Although Cambodia does not have an explicit agenda for a science and technology sector, there has been a decisive effort to improve the creative and cultural industries by introducing programs focusing on fostering the creative capacities of young artists, indigenous people, and women. Another valuable initiative is the Cambodian Special Economic Zone Board, which was established to establish and manage numerous special economic zones that operate creativity and innovation fostering frameworks. In the short term, focusing on bolstering Cambodia's institution and infrastructure in support of the vibrant economic trade zones can play a significant role in transitioning the country from factor to efficiency drive creative economy.

More than two decades after implementing a comprehensive economic reform referred to as the "Doi moi reforms," Viet Nam has transformed from one of the world's poorest countries to a lower middle-income economy. Rapid expansion in agricultural production and intensive exploitation of natural resources has contributed significantly to Viet Nam's economic performance. However, recent challenges have prompted the Vietnamese government to reassess the sustainability of its economic growth model. The agricultural sector's contribution to the whole economy is likely to plateau without a significant increase in productivity level. For example, assembling electronic parts is still dominant in the manufactured sector, which does not require much technology in comparison to developing and manufacturing original products.

Viet Nam has a strong foundation for the development of cultural industries and with time, the country may find a competitive edge in this sector. Historically, Vietnamese culture has flourished and diversified in different regions, manifesting in the enormous variety of festivals, handicrafts, ethnic costumes, and traditions. Many villages in Viet Nam have the tradition of producing unique cultural products with a level of intricacy, which has been continuously refined through many centuries. The total value of exports of creative goods from Viet Nam increased substantially, driven by growth in categories such as jewelry, interior design, fashion, wicker ware, and yarn (UNCTAD Stat, 2015).

Additionally, Viet Nam's youthful population is both receptive toward external cultural influences and expressive of their own sense of cultural identity. The rapid improvement of Internet access and communications infrastructure has allowed the Vietnamese youth to stay up-to-date with contemporary cultural trends around the world. The fact that recorded media is the fourth most imported creative good indicates the level of openness



toward external cultures expressed through digital media, film, and music (UNCTAD Stat, 2015).

The Vietnamese government can shift traditional thinking by drafting a national strategy for the development of cultural industries in the long run. A forward thinking national strategy would allow Viet Nam to address fundamental issues hindering the developmental progress of the creative economy, including education and infrastructure gaps. Furthermore, the government can foster creativity by engaging the private sector and its entrepreneurs with more vigor. Viet Nam has great potential for establishing a thriving creative economy with a growing community of entrepreneurs, strong cultural foundation, and a young population with increased openness to international integration. However, realizing this potential requires shifting from a traditional view on culture to a more cohesive and creative clusters oriented outlook, with persistent support to the development of its fledgling creative industries.

Driven by long-term policies on education and effective government support, Singapore has transformed itself into an innovation and creativity-driven economy. For decades, Singapore has promoted an export-focused trade policy. As a consequence of its policies and level of development, Singapore accounts for the largest share of exports of creative goods and services from ASEAN (UNCTAD Stat, 2015). In 2012, Singapore's contribution to total ASEAN export of creative goods marked 42.45 percent, indicating the impact of Singapore's creative economy on ASEAN (UNCTAD Stat, 2015).

The impressive results are due to forward-looking policies, including those developed by the Singaporean Ministry of Trade and Industry. A particularly important initiative by the ministry was the establishment of the Economic Review Committee in 2001, which has led to the drafting and implementation of dedicated development strategies for the creative industries of Singapore. The strategy seeks to transform the Singapore into a multidimensional and entrepreneurial economy with knowledge-based and innovation focused strategies at the forefront. To achieve its objective, Singapore interweaves the arts, business, human creativity, and technology together to develop a vibrant and self-sustainable creative cluster to propel the growth of its creative economy.

Singapore has made significant progress in the field of interactive digital media that is utilized widely in education, entertainment, information, and knowledge diffusion and commerce. Singapore's success in this area has been precipitated by the world-class business climate and legislative frameworks that foster creative industries with substantive government support for research and development.

Indeed, Singapore's creative economy's competitive advantage over other ASEAN economies is greatly due to the strong support the creative industries receive from government institutions. The protection of intellectual property rights, expenditures on research and development, facilitation of university-industry collaboration, and promotion of human creativity are

all essential policy targets for Singapore's long-term future. Increasing access to export markets, attracting foreign investments, and creative talent will be the key to expanding Singapore's creative economy in the future. Propped by its relatively early success and success in long-term policymaking, Singapore is likely to sustain vibrant creative economy and play a key role in leading ASEAN's creative economies.

Instances of vast differences in resources, capabilities, and optimal strategies for development of creative economies could be shown for each ASEAN member state. Indeed, the ten members of ASEAN register at different points along the spectrum of development stages, literacy and achieved education rates, political institutions and ideologies, market sizes, and levels of technological sophistication. Consequently, the benefits and challenges of creative economies are interpreted in ten wholly unique ways.

## ASEAN's Path toward a Patchwork of Creative Economies

The dawn of the ASEAN Economic Community promises (AEC) positive change to the status quo. For the members of ASEAN, 2015 is poised to bring with it freer movement of skilled labor and more flexible allocation of capital alongside a wealth of other reforms ranging from the semantic to the significant. Taken together these reforms will enhance the movement the quintessential factors of flourishing creative economies—namely, the people and their ideas and creative skills. The deeper connectivity between the ASEAN members combined with the wider market for creative goods further brighten the aura of promise the year 2015 has.

It is beyond question that since 2005 ASEAN has made significant progress in promoting regional integration on the political level. However, the practical results of the integration remain ambiguous. Even the flagship initiative of establishing the AEC has suffered from lackadaisical attitudes and nonexistent legal frameworks, necessitating a postponement of its launch already in 2012. With little progress made since, many golden promises have soured into skepticism about the success of the community's impending launch.

In addition to the AEC, ASEAN integration supports its members' national creative capacities through two other cooperation modalities. First, ASEAN addresses many of the enabling factors of creativity through its efforts to establish an ASEAN Socio-Cultural Community, which augments the AEC. The blueprint for the sociocultural community was adopted in 2009, when ASEAN decided upon various strategies and objectives for improving the quality of life (ASEAN, 2009). Several of the initiatives within this blueprint address access to education, human resource development and strengthening entrepreneurship skills—all essential factors for creativity.

The ASEAN Working Group on Intellectual Property Cooperation (AWGIPC) comprising of sectoral representatives from intellectual property

rights (IPRs) offices of the ASEAN members also supports creativity and innovation within the ten country bloc. AWGIPC maintains discourse with ASEAN's dialogue partners such as Japan and the United States of America and the rest of the global IPRs community. In addition, AWGIPC devises and oversees the implementation of comprehensive IPRs action plans for cooperation within the area of IPRs. These ultimate objectives of the two action plans that have been delivered to date include soft goals such as promoting public awareness of IPRs, strengthening coordination and networking within ASEAN, promoting capacity building, and increasing the contributions of IPRs to the region's competitiveness and development.

In spite of the aforementioned three initiatives and venues of influence on creativity, concrete accomplishments in promoting creativity at the regional level are all but nonexistent. ASEAN's heterogeneous membership is one reason why the country bloc has been unable to move from haughty rhetoric and laudable objectives to real and noticeable changes in local creative economies, IPRs regimes, and innovative system.

Out of the necessity imposed by its diverse membership, ASEAN has adopted a soft-regionalism approach to its regional integration efforts, preferring flexibility, noninterventionism, and consensus-based decision-making over sovereignty transfers. The credit for progress made in promoting creativity within the country bloc belongs solely to the ASEAN members and their individual actions. As a result, the sought-after regional creative economy persists to resemble a loosely knit patchwork of disparate national regimes for creativity and innovation that interact only sporadically through non-ASEAN led developments such as supply chains.

Without decisive and centralized actions to harmonize institutions and bridge the resource and capability gaps, the creative economies of members with weak creative capacities and institutions will be foreshadowed by those of which have more sophisticated labor forces, stronger enabling legal frameworks, and a more comprehensive network of supportive institutions. As a result, weaker members may be excluded from the opportunities for growth promised by technological and creative developments. Ultimately they may find themselves in "low-technology and creativity traps" where specialized skills are employed only on the lower steps of the value-added ladder with diminishing prospects of taking the next step upward.

Strong national creative economies can and will emerge from these independent actions in due time, as all of the necessary enabling factors come together. The freer movement of capital, labor, and ideas between ASEAN member states will undoubtedly facilitate creativity and increase innovation. Joint initiatives for improving education, healthcare, and infrastructure will contribute to the long-term development of creative economies as well. Similarly, the slow but steady creation of cultural affinity and cohesion within ASEAN will favor creative economies of all member states. However, the foreseeable benefits of ASEAN integration are not sufficient to trigger a creative boom in any of the countries.

Until the promises of economic and sociocultural integration turn into reality, the potential for a regional creative economy will remain just that—potential in its pure and untouched form.

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## Part III

# Impact of Regional Integration on Poverty, Inequalities, and Social Cohesion

## Social Cohesion, Economic Resilience, and Long-Term Growth in Southeast Asia and Developing Countries

*Marc Lautier*

### Introduction

A vast array of economic literature examines the complex nature of growth: its stimulants as well as constraints. For instance, Easterly et al. (1993) argue that shocks, and to some extent luck, explain growth differential much better than the quality of policy or institutions. Development theory and the experiences of the past 50 years have demonstrated that structural change has been the main engine of long-term catching-up processes. In a review article, Syrquin (1988) noted that “economic development is seen as an interrelated set of long-run processes of structural transformation that accompany growth.” However, structural change, often accelerated by international trade and regional integration, increases the vulnerability of an economy. In addition, trade openness exposes countries to the spillovers of crises triggered elsewhere. Thus, at national level, the aptitude to adjust to shocks and to minimize growth losses is a major factor of development performance and economic growth sustainability. Economic resilience depends on domestic capabilities to design, implement, and support corrective and adaptive measures. Although shocks are crucial in determining growth path, the magnitude and the nature of their impact on catching-up processes and long-term growth vary among countries. As Berg and Ostry (2011, p. 6) put it, “Growth is easy to start, hard to keep going.”

This chapter argues that the ability to adjust to external shocks is a key explaining factor of long-term growth differences in the developing world, notably the success of most developing countries in Asia. The first draws the analytical framework, based on the role of social cohesion and state effectiveness. Then, specific indicators for these two notions are provided for a

large sample of developing countries (DC). Thus, the second part presents empirical evidences on economic resilience capability at works. This comparative analysis shows that while Southeast Asian economies are a diverse group, most of them have a strong ability to sustain growth for long periods of time.

## Issue and Analytical Framework

### *Openness, Shocks, and Fast Development*

Increasing economic openness in the developing world have amplified domestic economies' exposure to external conditions and changes. Integration in the global economy can stimulate the catching-up process and provide opportunities for growth acceleration. Yet, openness amplifies a country's vulnerability to external shocks. Shocks such as rapid changes in terms of trade, exchange rates, debt and financial crises, and so on will always be the collateral effects of an international integration strategy. These shocks provoke changes in domestic income and wealth distribution, and lead to new gains and losses that stimulate conflicts and threaten the country's stability. This outcome may deepen the negative impact of external shocks on the domestic economy. Their probability and their frequency increase with the degree of economic openness.

Because economic development is a process of structural change, faster are the changes and quicker is the development rhythm. The countries that can sustain multiple transitions across different stages of structural transformation grow successfully. The multiplication of shocks on economic structures can speed up the growth process (Hirschman; Schumpeter). Anyhow, structural change is a conflictual process "Economies do not grow smoothly and evenly, maintaining their shape as they increase their size. Instead, fast-growing economies go through a tumultuous process of creative destruction, breaking into new industries even as they abandon their traditional industrial strongholds."<sup>1</sup> As a consequence, the sustainability of development strategies based on international integration requires sufficient domestic absorption and adjustment capabilities. Lack, or weakness, of such capabilities make countries too vulnerable to external shocks and unable to benefit fully from the gain of global integration. Without these complementary capabilities, DC are at risk of getting too much of the pain and too little of the gain of international integration.

### *Economic Resilience: A Key Factor of Development Performance*

The first argument of this chapter is that shocks may accelerate the structural transformation in backward economies. However, the direction and the scope of their impact on growth—their "net" effect—depends on the country's ability to absorb, to adjust, and to recover from these shocks. This absorption capability is a critical component of any international integration

strategy. In countries with deep social division, for instance, high levels of economic, ethnic, or regional inequality, shocks on income or resources distribution will fuel potential social conflicts and may deepen the recession and the structural weaknesses of the domestic economy (Attanasio, 2004; Berg and Ostry, 2011; Collier, 2008; Rodrik, 1999). Countries with a weak or inefficient state will have great difficulties in managing both the economic and the social costs of these shocks and their redistributive consequences. They will also lack the capacity to design and to implement the appropriate adjustment policies. In such cases, structural adjustment is delayed. It may be imposed later by external institutions. Adaptive measures in trade policy, fiscal and budget policy, relative prices, and exchange rate management are not easily undertaken because of the potentially high cost of distributional conflicts. In the worst cases, economic paralysis may turn into economic collapse and the disintegration of domestic institutions. Thus, the domestic aptitude to adjust to shocks and to minimize growth losses is a major factor of development performance and sustainability. But where do the domestic capabilities for policy adjustment and economic resilience come from? How do all the aforementioned institutional factors affect economic resilience and ultimately economic growth?

#### *Key Concepts: Social Cohesion and State Effectiveness*

For a given level of income, a country's economic resilience capability depends on its social organization and on its government institutions. One way to analyze some of the social forces at work in development is through the concept of social cohesion, which is derived from the debate on social capital. There is an agreement among sociologists, political scientists, and economists that social capital is specific in that it is relational. It exists only because it is shared. However, the debate is still vigorous on the precise definition and the empirical use of social capital (Ponthieux, 2006). Hence the value of the more precise concept of "social cohesion" to study the impact of social relations on the development path. Chan et al. (2006, p. 8) define social cohesion as follows: "Social cohesion is a state of affairs concerning both the vertical and the horizontal interactions among members of a society, as characterized by a set of attitudes and norms that include trust, a sense of belonging, and the willingness to participate and help, as well as their behavioral manifestations." For the practical purposes of this chapter, social cohesion will refer to the institutions, relationships, and norms embedded in the social structures of the society that shape the quality and quantity of the social interactions. Social cohesion does not refer only to the sum of the institutions and norms that underpin a society; it is the glue that holds groups and societies together (Narayan, 1999). As social cohesion is an attribute of the social structure; it has good public characteristics.

Turning to the state, a vast sum of research has shown that an efficient state is critical for the growth and development process.<sup>2</sup> State effectiveness is defined here as the capacity of government institutions to design and



to implement development policies and adaptive measures. The concept of effectiveness refers to the extent to which the development policies objectives were achieved, taking into account changes in the economic environment. This aspect refers to the competence, authority, and resources of government organizations. The effectiveness of government depends, first, on the talent it can attract, the organizational structures it imposes, and the incentives it fosters. But the strength and the quality of government institutions do not depend only on the state apparatus, but also on a set of social relations, bureaucratic practices, and institutional routines that establish social order. Social cohesion, public policies, and government institutions are not independent. The structures, norms, and routines of the state are in interaction with the social structures and behaviors. Social cohesion has an impact on the overall governance environment and the effectiveness of government institutions, and the state's characteristics and government practices influence social cohesion. We consider here an ideal state while, of course, in practice the state behavior is often oriented toward the interest of specific groups. In the East Asian case, a large body of literature has analyzed the various nature of the state,<sup>3</sup> and it has notably shown that state effectiveness is not clearly linked to the degree of autocracy/democracy.

Thus, under conditions of good governance, the efficient state completes and strengthens informal interactions and coordination between social groups. While these institutional capabilities are uneasy to identify and to measure *ex ante*, we can easily appreciate *ex post* their outcome.

### *Central Idea of the Chapter*

Why do some DC experience a drop in their growth when they are exposed to external shocks while growth losses are very limited in others countries? This chapter argues that state effectiveness and social cohesion are a key to understanding differences in economic resilience between developing countries. We insist on the interaction between these institutional factors and the distributive impact of shocks to explain growth collapse and the length of recessions. The central idea in this chapter can be summarized by the following formulae:

1. Economic Resilience = (State Effectiveness) × (Social Cohesion)
2. Growth Loss = -(Shock)/(Economic Resilience)

In words, the negative effect of shocks on a country growth is stronger in a country characterized by less effective government institutions and a weaker social cohesion.

The interpretation is as follows. A shock reduces the domestic economic resources and modifies the income distribution. The larger the shock, the higher the income loss. Thus, all social groups cannot keep stable their income. Potentially asymmetric income losses will create rivalries between groups, which may take the form of social conflicts. In such a case, the cost

of the shock increases and the country's economic performance fall down. The resulting social conflict generates a cumulative process of domestic instability, which may possibly prevent significant economic recovery for a long time.

When social cohesion is sufficiently strong, opportunistic behavior is less frequent and social rivalries are less intense. Thus, there is a lower probability that the change in income distribution will generate social instability and domestic conflicts. When the state's authority is effective, change in distributional outcomes will be less sensitive to social demands and conflicts. In addition, an effective state will be able to manage distributional outcome inequities and to implement adaptive measures and economic recovery policies. On the other hand, when social cohesion is weak and the state ineffective, there are more incentives to adopt an opportunist behavior because income rivalries are not moderated by the informal (social cohesion) or more formal (government institutions) rules that govern the ex-post distribution of income. As a consequence, social conflict returns increase.

#### *A Simple Analytical Framework*

This simple analytical framework is helpful in understanding differences in economic resilience because it captures the key determinants of domestic absorption and adjustment capabilities to shocks. The two critical dimensions alongside which countries evolve on this map are: (i) the level of the state effectiveness and (ii) the degree of social cohesion (figure 12.1). In the best case (A quadrant Northeast), effective government institutions are complemented by a high level of social cohesion, which leads to robust economic and social structures. Countries that belong to this group are characterized by a high potential for development and, more specifically, by a strong capacity to manage both the opportunities and the risks that are associated with openness. This group include Singapore, post-1962 South-Korea, or pre-2000 Tunisia.<sup>4</sup> The relative absence of crime, violence, and domestic conflicts is a testimony to high levels of social cohesion in these countries. The Korean or the Singapore state or the Tunisian effective government has often been celebrated as an exemplary model for other DC by international organizations.<sup>5</sup> In societies characterized by a high density of social links and social cohesion and poorly functioning state (B quadrant Southeast), nongovernmental and informal institutions are substitutes for coordination processes, collective rules, and social norms production and diffusion. It explains, for instance, why informal credit arrangements (tontines) and micro-finance programs can be prosperous in this group of countries.<sup>6</sup> In the case of a weakening of the informal institutions capacity, social conflicts increase and the countries may move to the quadrant Southwest (D).

On the opposite, countries may also be characterized by the combination of an effective, a "strong," state and a high level of social fragmentation (C quadrant Northwest). In most of these cases, governing institutions

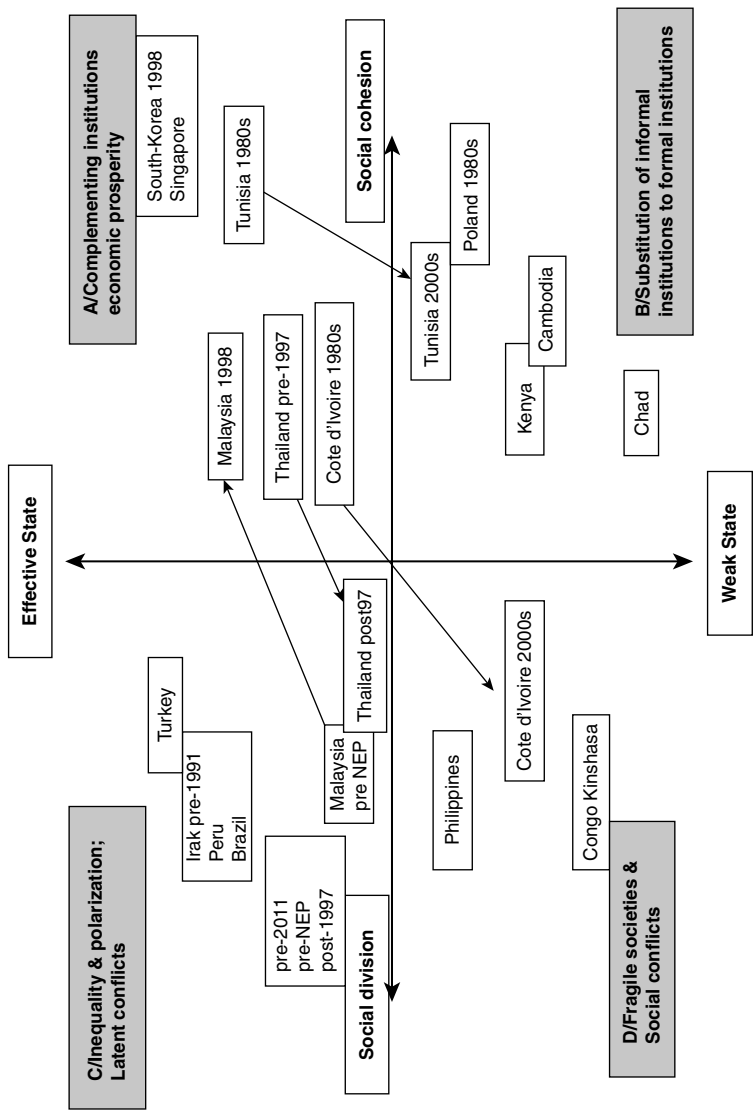


Figure 12.1 Economic resilience map.

Source: Author's own elaboration.

are under the exclusive control or influence of one dominant social group, leading to various discriminations based on ethnic, religious, cultural, economic, or regional differences. Countries that followed discriminating policies against indigenous populations (such as Peru, Bolivia) or which are characterized by high income inequality (such as Brazil) belong to this category. An extreme case of a country belonging to this group could be Iraq under Saddam Hussein rule. In such an institutional pattern, social rivalries and latent social conflicts are very acute. These conflicts may surface and degenerate into violence and civil war if the state becomes weaker (post-2011 Syria), or because of growing inequity, due to the disproportionate impact of an economic shock on discriminated groups income. These groups may eventually organize social and political movements that challenge the government power. Hirschman compared this process to a two-lane traffic jam. If one lane begins to move, drivers in the other at first take comfort, inferring that their lane will also move soon. But the longer they remain stuck, the more frustrated they will be and the other lane becomes a provocation.<sup>7</sup> The social conflict may further evolve into prerevolutionary stage and beyond. If political changes lead to more social integration and less inequality, societies may become more prosperous and eventually move into quadrant Northeast (A). Alternatively, they may degenerate in a permanent or prolonged conflict pattern that will erode the remaining state capacity. As the state ceases to fulfill its functions, and in the absence of sufficient social cohesion, power and authority may be taken over by various groups, with the use of violence and coercion; control over political and economic resources may become subject to armed conflict (D quadrant Southwest). Diverging trajectories of East-European countries, after the collapse of the communist states and the shock of economic transition, illustrated the influence of social cohesion on the alternative move in the A or D direction. The cohesive Polish society, for instance, performed much better than the fragmented Yugoslavia. The location of countries on the map are not static. They can change because of institutional, social, or economic development, war, and so on.

## Empirical Evidences: Southeast Asia among the Developing World

### *Economic Resilience and Long-Term Growth Gaps*

Growth in Cote d'Ivoire has been on average four points slower than in Thailand every year since 1980. As a result, the Thai GDP/capita has become three times bigger than the Cote d'Ivoire level in 2010, while it was only half in 1980.<sup>8</sup> Such a growth gap is usual when African experiences are compared with Asian performances. Many studies have documented the role of trade, structural change, manufacturing growth, education and investment, and so on to explain the very fast growth of Asian countries. They conclude

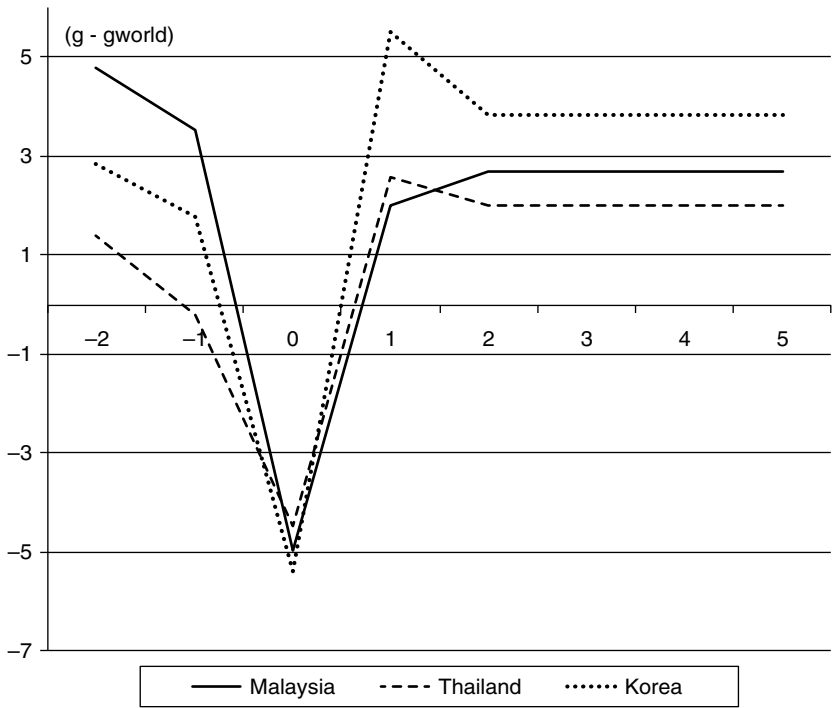
that growth, both absolute and relative, has been fast in Asia because it was led by powerful engines, first, investment (Krugman, 1994; World Bank, 1993).

In the former explanation, as in traditional development studies, growth stimulation is key in explaining average differences between countries. Thus, the policy issue focuses on the possible ways to increase the potential growth rate. We insist here on another cause of long-term variation in growth trends between developing countries—the different capacity of national economies to cope with shocks and to recover from a recession, that is, differences in economic resilience. A few papers have recently focused on the causes of the persistence of growth process and/or on economic resilience. Bourguignon (2004) observes that in a number of studies, inequality plays a central role in determining the rate and the pattern of growth. Berg and Ostry (2011), for instance, show that the duration of “growth spell” was associated with more equality in the income distribution, while Hausmann et al. (2006) investigate the factors associated with growth deceleration and demonstrate that the country’s structure of export is associated with lower crisis duration. These contributions illustrate that growth differential over a long period does not result only from disparity in growth speed during the phases of expansion but also from the limitation of growth losses during and after recessions. In other words, a large part of the growth differential between growth champions and laggards results from diverging postcrisis performances.

To illustrate the different impact of shocks among countries, we draw “Resilience Profiles” in Asia and in Africa, on the basis of their postcrisis experiences from 1970 to 2009 (see figures 12.2 and 12.3). For each country, we have calculated an average crisis profile: To neutralize the change in the international growth regime, we define a recession as a growth rate falling below the world average ( $y = 0$ ); For every recession ( $t = 0$ ), we compute  $t-1$  and  $t-2$  growth rates (“precrisis” period),  $t+1$  rate (“recovery” time), and the average growth rate from  $t+2$  to  $t+5$  (“postcrisis” period). While the scale of the recessions are similar in both groups here (growth rate falling around  $-5$  percent), postcrisis sequences are diverging. The recovery of Asian countries has been fast and sustainable growth has become positive in  $t+1$  and remains strong in the following years ( $+2$  to  $+4$  points above the world average). In Africa, a growth rebound in the short-term ( $t+1$ ) has not led to a stable expansion in the midterm.

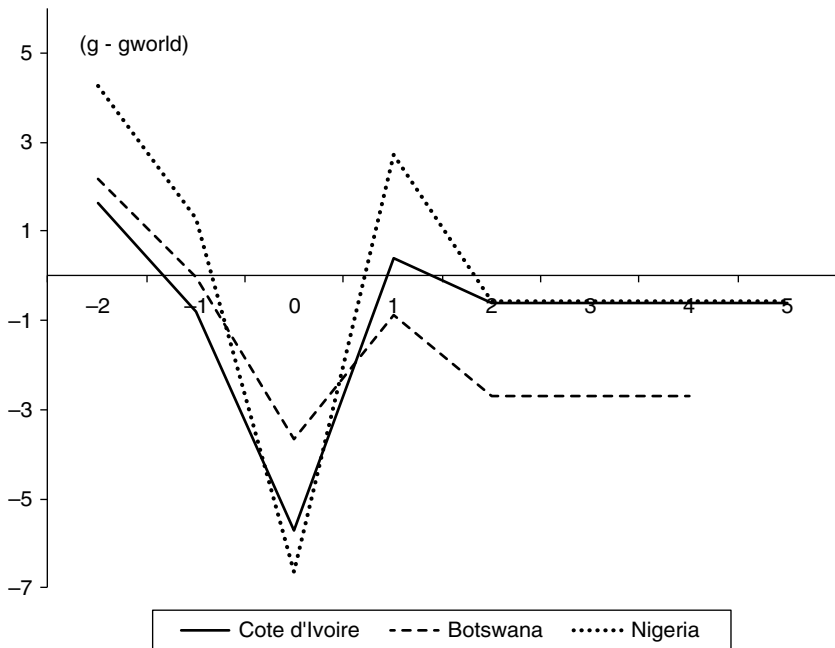
After a recession, average recovery time,<sup>9</sup> amounts to 1.25 years in Korea, 1.6 years in Malaysia and Thailand, but 3.2 years in Nigeria and 5.2 in Cote d’Ivoire! Recessions provoke growth collapses in Africa. Thus, a large part of the expansion gap between countries results from the length of recession, that is, difference in economic resilience. The 4.1 points average annual growth gap between Thailand and Cote d’Ivoire since 1970 is the sum of growth speed difference with Thailand, when the African economy was in expansion, plus difference in growth “lost” during the recession periods.

To show the impact of the length of recessions, and of the related growth losses, on long-term development, we compare growth gaps in a large sample of DC during the past three decades (1980–2010).<sup>10</sup> Since China has



**Figure 12.2** Resilience profiles in Asia.

Source: Author's calculations based on WDI data.



**Figure 12.3** Resilience profiles in Africa.

Source: Author's calculations based on WDI data.

been the fastest growing economy during this period (+9.8 percent/year), we define a “growth gap” as the difference between the country “i” average annual growth rate,  $g_i$ , and China’s.

Then, we present the structure of the growth gap as the sum of (a) growth speed difference with China + (b) growth losses. The first term is the cumulated difference of growth speed with China when the economy “i” is in expansion ( $g_i > g_w$ ); the second term is the cumulated growth lost during economy “i” recessions ( $g_i < g_w$ ).

Growth gap = (a) Growth speed difference + (b) Growth losses  
during recessions

This very simple growth accounting illustrates that average growth divergence between countries is strongly influenced by differences in economic resilience capacity. If we consider the “growth losses” component of the gap as a proxy for the lack of resilience, then this element accounts for one-third of the growth difference for MENA-Central Asia and one half for sub-Saharan Africa (SSA) and Latin America (table 12.1). Intraregional differences

**Table 12.1** Growth gaps structure

<i>Country/region</i>	<i>Growth gap (points)</i>	<i>Structure of the gap (%)</i>	
		<i>Speed difference</i>	<i>Growth losses</i>
MENA-Central Asia	5.8	67	33
Sub-Saharan Africa	6.5	57	43
South Asia	4.7	91	9
Southeast Asia	3.9	88	12
Singapore	3	93	7
Thailand	4.4	84	16
Malaysia	3.9	88	12
Indonesia	4.3	86	14
Philippines	6.4	63	37
Vietnam	3.5	100	0
Lao PDR	3.5	91	9
Cambodia	2.2	100	0
Latin America	6.7	54	46
Argentina	7.2	48	52
Bolivia	7.1	49	51
Brazil	7.1	49	51
Chile	5	81	19
Costa Rica	5.8	74	26
Ecuador	6.7	60	40
Nicaragua	7.8	36	64
Paraguay	6	67	33
Peru	6.5	56	44
Uruguay	7.3	47	53
Venezuela	7.7	31	69

*Source:* Author’s calculation based on a sample of 57 developing countries.

have been important in both regions. In Venezuela, Brazil, or Argentina, the growth gap with China is first explained by the lack of resilience. In African countries such as Togo, Gabon, Niger, Cote d'Ivoire, Central African Rep, Madagascar, and South Africa,<sup>11</sup> between 50 percent and 75 percent of the long-term growth divergence is due to the same cause, the length of recessions. In comparison, economic resilience has been stronger in Southeast Asia, as well as in South Asia, where growth losses have only contributed to, respectively, 12 percent and 9 percent of the growth gap with China.

In Asia, growth rates have been high on average but not stable. Asian economies went through several periods of slowdown and experienced rare contractions. The number of recessions varies with the definition of recessions. According to Kaminsky and Reinhart (1998), between 1970 and 1995 Latin American countries suffered 50 percent more crises by country than East Asia. Hong et al. (2009) observe a duration of recessions in Korea and Malaysia 40 percent shorter than the world average. The strong resilience capacity in the region was clearly illustrated during the worst regional crisis, initiated by the devaluation of the Bath on July 2, 1997: GDP fell by 7.4 percent in Malaysia, 10.5 percent in Thailand, 13 percent in Indonesia in 1998. Then, all SEA countries recovered positive, albeit lower, growth rates in 1999. The 2008–2009 global financial crisis impact was similar. Southeast Asian industrial production fell strongly in the last quarter of 2008 and growth rates became, on average, negative in 2009. However, contrary to many expectations, Asian economies experienced, again, a “V” shaped recovery. Expansionary monetary policies and ambitious stimulus packages strongly contributed to reduce the crisis amplitude (Hong et al., 2010).

#### *Social Cohesion and State Effectiveness Index*

Statistical assessment of the effectiveness, or of the “Strength,” of the state is difficult. Data, ranking, and index have been provided in numerous papers to try to figure out the quality of the governance or of the state’s administration, such as the “Government effectiveness” index from the World Bank Worldwide Governance Indicators (WGI) database or the state’s capacity indicators from the Institutional Profile Database (IPD). These indicators are built, partially or totally, upon opinions and marks given by experts and expatriates on different institutional issues in the corresponding country. Thus, they are often biased, not reliable and not robust.<sup>12</sup>

We use a different strategy here. We posit that the state’s main (economic) function is to provide public goods. Thus we define the state effectiveness as the capacity to provide these public goods and services. To evaluate it, we build a Public Goods Provision (PGP) index. The PGP index is a summary measure of average achievement in three key dimensions: education, public health, and infrastructure:

1. The education services dimension is measured by mean of years of schooling for adults aged 15 years and more.



2. The health services dimension is assessed by the mortality rate under 5.
3. The public infrastructure dimension is assessed by the kilometers of paved road per 100 square meters.<sup>13</sup>

The PGP index is the geometric mean of normalized indices for each of the three dimensions. Thus 100 is the highest level of state's effectiveness within our sample, and 0 is the lowest. We use a geometric mean because of the systemic nature of the state's capacity.

The three separate index and the summary index are calculated as follows for country *i*:

$$\text{PGP}_i \text{ index} = 100 \times [\text{PGP}_i \text{ value} - \text{Min PGP value}] / [\text{Max PGP value} - \text{Min PGP value}]$$

To measure social cohesion in a comparative perspective, we build a synthetic index that combines three critical aspects of social cohesion: income inequality; societal violence; interpersonal trust:

- the income inequality value is based on the Palma index (i.e., D1/Q4+Q5) for the 1990s decade;
- societal violence level is based on the intentional homicides rate (per 100,000 people), provided by the World Bank WDI (average during the 1990s decade or closest period available);
- interpersonal trust relies on the percentage of positive answer to the question "Most people can be trusted" in the World Values Survey network<sup>14</sup> (1990s decade or closest period available).

In a similar way, indices are calculated for each variables, from 0 to 100, then these three indices are combined into a social cohesion index using arithmetic mean, because of the cumulative nature of the concept.

Table 12.2 indicates the value for each regions and for a number of countries. State effectiveness varies within the developing world very weak in SSA (13 percent of the best performer level, Sri Lanka), better in MENA-Central Asia and Latin America but still low, and quite stronger in Asia, especially in East Asia. While SEA relative performance at the aggregate level is "intermediate," there are wide differences of effectiveness between the strong Singaporean state and Laos or Cambodia. On average, the level of the five SEA most populated countries is two times higher than Latin America's. Social cohesion differences between these two regions are similar. Finally, both dimensions are combined in the last column, using arithmetic mean (SE & SC index). To sum up, if Cambodia is excluded, SEA performances are lower than in East Asia but superior to other developing regions levels.

### *States and Social Cohesion in SEA*

With the exception of Philippines and Singapore, state's organizations—Siam, Khmer and Burma Kingdoms, Madjapahit in the Indonesian archipelago—existed in SEA long before the European colonization

**Table 12.2** Comparative indicators (from 0 to 100)

<i>Country/region</i>	<i>State Effectiveness index (SE)</i>	<i>Social Cohesion index</i>	
		<i>(SC)</i>	<i>SE &amp; SC index</i>
MENA-Central Asia	28	65	46
Sub-Sahara Africa	13	44	24
South Asia	48	75	65
East Asia	61	93	85
Southeast Asia	43	69	58
Singapore	96	64	92
Thailand	54	76	70
Malaysia	49	49	50
Indonesia	33	0	70
Philippines	43	42	43
Vietnam	41	86	67
Lao PDR	13	84	47
Cambodia	13	51	27
Latin America	24	35	25
Argentina	26	66	45
Bolivia	12	40	20
Brazil	17	0	0
Chile	25	47	33
Costa Rica	47	58	55
Ecuador	26	21	19
Nicaragua	18	36	22
Paraguay	16	13	7
Peru	17	36	21
Uruguay	30	36	30
Venezuela	27	31	25

*Source:* Author's calculation based on sample of 57 developing countries.

(Osborne, 2010). The colonial regimes accelerated the international integration of these economies but left behind meager state's capacities and insufficient, sometimes miserable, public goods facilities. The shortage was particularly obvious in the education sector. In 1950, average years of schooling was about 1.1 in Indonesia, Laos, and Burma; 2.1 in Malaysia, Thailand, and Philippines (but 4.5 in Korea), according to the Barro-Lee database. Thus most SEA newly independent states gave a priority to education. In Indonesia, Malaysia, and Thailand, universal primary education became a major government concern and was achieved by the early 1980s. But progress in postprimary enrollments was slower and more erratic (Booth, 2003; Jetin, 2010). However, "Human capital" expanded in the region. Average years of schooling has reached about 8 years in 2010 in Viet Nam, Thailand, Indonesia, Malaysia, and Philippines and 11 in Singapore. Thus, SEA has benefited from high investments in education but educational attainment has been lower than in Northeast Asia (Japan, South Korea, and Taiwan), while inequality in access to education has been higher, except Singapore (Phan and Coxhead, 2014). However, the most populated countries, including Indonesia, have improved education more efficiently than most of the DC. A large comparative study on educational achievements indicates, for

instance, that the rich/poor ratio in PISA secondary test scores is close to 1 in Korea and Thailand, but is above 1.3 in Argentina and about 1.5 in Brazil (Di Gropello, 2006). Within the region, Cambodia, Laos, and Myanmar records are weaker.

Disparities in education reflect differences in state's overall capacities, both within the region and between SEA and other DC. The main advantages of East Asian "authoritarian" states were the political stability, the state autonomy, and the quality of the bureaucratic elites (Johnson, 1987). The long-lasting Suharto regime in Indonesia or the Mahatir administrations in Malaysia had a long practice of concentrating all powers and they could rely on authoritarian means. It was also the case of the technocratic (and often military-supported) governments in Thailand, as well as in Myanmar or Viet Nam. However, in SEA this political stability did not always lead to state autonomy and the quality of the economic bureaucracy has been variable. In Thailand, Indonesia, and Malaysia, as well as in Viet Nam, governments have remained autonomous for macroeconomic policymaking. They have been capable of effective policy design and implementation has relied on powerful institutions. The Bank of Thailand was early on given a great degree of autonomy in deciding the monetary policy (Jensen, 2001). In the 1980s, economic administrative monitoring capacity was completed with three more organizations headed by technocrats directly appointed by the prime minister (Amsden, 2008; Hicken, 2004). The Malaysian MITI and MIDA have also enjoyed a large degree of autonomy over several decades and were crucial in maintaining a stable development strategy (Yusof and Bhattasali, 2008). The intervention of a coherent and powerful group of bureaucrats, not "seriously compromised by vested interests," explains the success of the 1980s macro-economic reforms in Indonesia according to Hill (2005). While it may be exaggerated to classify SEA countries, except Singapore, as "strong" developmental states, it would be incorrect to assume that SEA governments did not intervene to stimulate industrial change and growth. On average, interventions were frequent and often powerful. However industrial policies were less coherent and effective than in East Asia. Studwell (2013) has precisely documented these policy failures in Malaysia and Philippines. To sum up, most of SEA governments have been capable of reasonably effective policymaking and their administrations have not been badly corrupt. Their institutions have been above average by developing country standards, except in Myanmar, Philippines, Laos, and Cambodia, as is reflected by our SE index (table 12.2).

Discussion of such a diffuse phenomenon as social cohesion are always perilous and cannot be developed in depth here. Primary data shows that social trust is stronger in SEA than in other DC, except in Philippines, Malaysia, and Cambodia, where it is very low, and that assassinations are less frequent than in the average DC, except in Thailand and Philippines. Although international comparisons of inequality indicators is difficult, the available data on the distribution of income shows a less distorted distribution in SEA than in Latin America and Africa, but higher inequality than

in East and South Asia. Among the causes of these disparities, there are the initial conditions and the geopolitical environment. The particular historical context under which Taiwan and South Korea began their process of development created an unusually flat distribution of income and wealth, due to the large-scale migrations from the late 1940s and the land reforms initiated by the American authorities, which had a strong redistributive impact. In SEA, a critical part of the colonial legacy was the large income disparities. Malaysia inherited a “Latin American” pattern of inequality, with a profitable plantation economy connected to the global economy and a poor, mostly Malay, rural sector. Land reforms were aborted in Philippines, where landlords kept the economic and political powers (Studwell, 2013). The relative concentration of land ownership in SEA explain most of the initial inequality of income. Thailand never had a land reform, but more than 80 percent of land was owner-occupied (Jensen, 2001).

In the discussion of social stability and cohesion in Asia, the ethnic diversity versus homogeneity issue has often remained central. Explanation of income distribution in Taiwan and Korea has insisted on the high degree of ethnic homogeneity in both societies, whereas in Malaysia, a long-time favorite of scholars of ethnic diversity, the sharp initial disparities in the distribution of income across ethnic groups had to be reduced by affirmative policies to avoid greater political instability and social tensions. However, causal claims and significance of the ethnic diversity paradigm have been excessive. The government, controlled by the poorest ethnic group, promoted a realistically inclusive approach to growth that curbs ethnic and social grievances (box 12.1). Thus, the entire population has benefitted from the growth to some degree. In Malaysia a socioeconomic perspective has started to replace the ethnic view (Yusof and Bhattasali, 2008). Severe political or economic crises in Thailand, Indonesia, and Malaysia have not led to a rise in ethnic tensions. Thus, despite the boom in studies of ethnic tensions (Gilley, 2004), the empirical facts in SEA do not suggest that ethnic diversity indicators have a strong explaining power of social cohesion.

### Box 12.1 Management of a multiethnic society in Malaysia

Ethnic divisions in Malaysia have their roots in the colonial period, when large numbers of Chinese and Indian immigrated to take jobs and business opportunities. The 1957 constitution enshrined organizational principles, achieved through extensive negotiation among the majors groups. However, on May 13, 1969, interethnic clashes caused the death of more than 100 people and the most traumatic postindependence incident. In 1971, however, the new parliament passed a constitutional amendment that firmly established Malay primacy. The

amendment made it illegal to question publicly the sovereignty of the Malay rulers, the special position of Malays, or the citizenship rights of the immigrants. This ruling changed the character of electoral campaigns, since parties could no longer gain votes by relying on ethnic antagonisms.

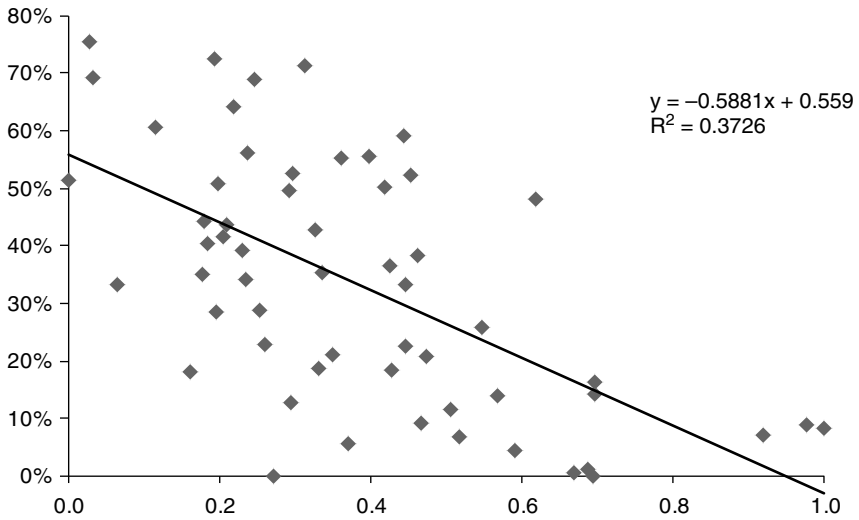
A second initiative, the New Economic Program (NEP, 1970–1990) boosted the economic position of the Malays. The program had two main elements. The first was the promotion of full productive employment of Malays and an expansion of the supply of skilled Malay labor. Preferential university admissions standards for Malays almost tripled their enrollment to three-quarters of the total. The second was the gradual redistribution of assets ownership. The government made it clear that it would not confiscate Chinese economic wealth, but that it would promote Malay participation in the economy. Strong growth allowed non-Malays to continue to gain while the NEP had a strong redistributive effect and ensured that the growth was shared.

### *Economic Resilience Capability at Works a Preliminary Assessment*

In this section, the relationship between economic resilience and social cohesion (SC) and state effectiveness (SE) is examined more systematically. Many factors play a role in economic resilience and long-term growth. Multiple regression analysis would be nicer than simple correlations, but is not feasible here given the relatively small number of sample countries and the fairly large number of possible determinants. Thus, given the nature of statistical relationships, what follows should be interpreted as highlighting associations rather than causation, proposing stylized facts that emerge from the data.

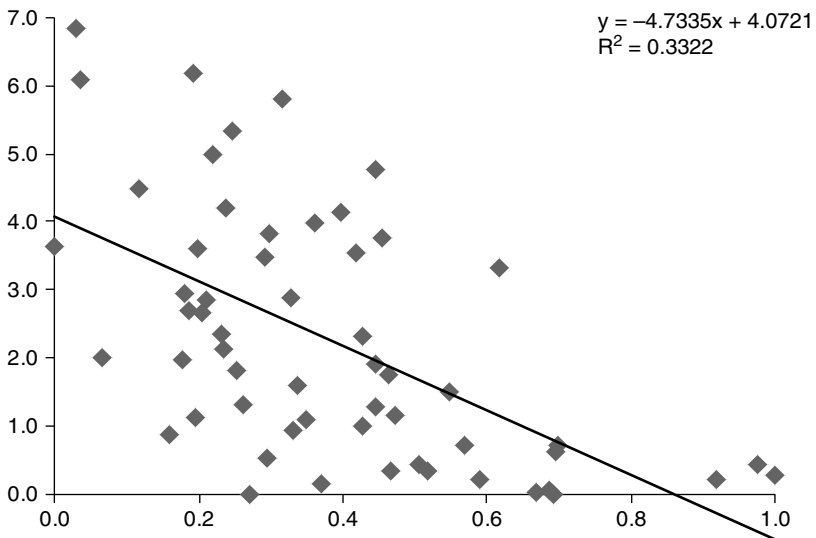
To answer the question of how far SC and SE can explain economic resilience, first we run simple OLS regressions of our SC and SE index on the “growth losses” component of the growth gap (see table 12.1), which is a proxy for the lack of economic resilience. Figures 12.4–12.6 show the relationship between the combined indicator SC & SE and the share of growth losses in the total growth gap. The coefficient has the sign to be expected, it is statistically significant and our synthetic indicator “explain” here some 37 percent of economic resilience variation. In figure 12.4, we use the average number of points of  $g$  loss per year as an indicator of resilience. Once again, the model provides an appropriate outcome, with a very similar  $R^2$ . As expected, the relationship is much stronger between SC & SE and the resilience component of the growth gap ( $g$  loss) than with the “speed difference” component. When the economy is in expansion, figure 12.5 shows a very weak association between a lower growth rate and the SC & SE variables. Given this, it is worth noting that overall results hold up even when East and Southeast Asia are excluded from the sample.

(g loss / g gap / SE & SC)



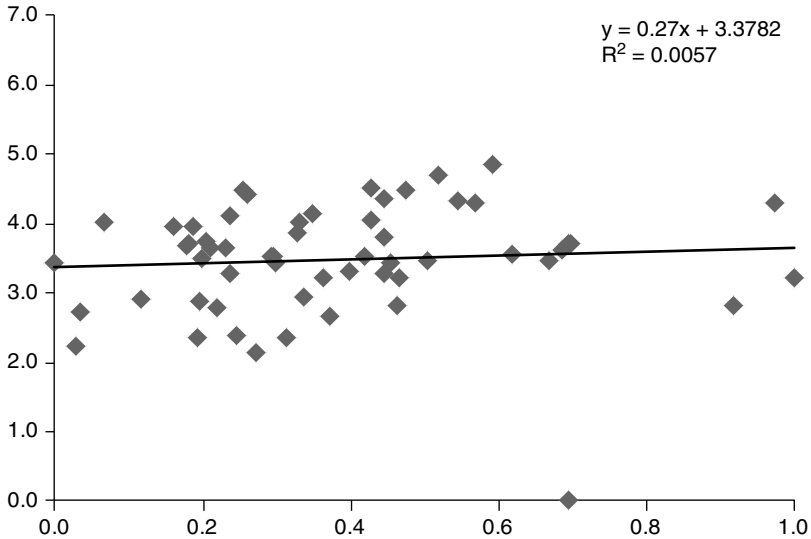
**Figure 12.4** Relationship between the contribution of growth losses to the growth gap (in %) and the indicator SC & SE (from 0 to 1).

*Source:* Author's calculation based on a sample of 57 developing countries.



**Figure 12.5** Relationship between growth losses (points) and the indicator SC & SE (from 0 to 1).

*Source:* See figure 12.4.



**Figure 12.6** Relationship between growth speed difference (points) and the indicator SC & SE (from 0 to 1).

*Source:* See figure 12.4.

Table 12.3 shows the result of repeating the exercise with our different indicators, first for *g* loss/*g* gap, then for growth losses in number of points (lines 1 and 2). All correlation coefficients have the sign to be expected and the statistical significance is strong. In addition, we perform correlations with an alternative index of resilience and long-term growth stability average growth rate/standard deviation, first for GDP/capita, then for GDP<sup>15</sup> (lines 3 and 4). For a given average expansion rate during the period, the ratio is lower if growth has been more erratic. For instance, Paraguay and Tunisia grew at the same rate, about 4 percent, between 1980 and 2013. However, growth has been more stable in Tunisia (standard deviation 2.4), with only two years in recession (including 2011, 0.2 percent), than in Paraguay where growth has been negative for seven years (standard deviation 4.3). Thus, for a given growth trend, the stronger the resilience capacity, the lower the measure of the instability of growth and the higher the ratio. Change in resilience indicators does not weaken the economic and statistical significance; our SE & SC index “explains” 40 percent in the first case (line 3). Finally, in the last column, we add the “government effectiveness” index,<sup>16</sup> taken from the World Bank WGI database, which is supposed to capture “the quality of public services, the quality of the civil service (...) and the quality of policy formulation and implementation” from a very large number of sources,<sup>17</sup> and we compare the results with our state effectiveness index, SE. The correlation coefficients of the World Bank index are considerably below the correlation coefficient shown for SE and they have much weaker statistical significance.

**Table 12.3** Correlation results

<i>Resilience indicator</i>	<i>SC&amp;SE</i>	<i>SC</i>	<i>SE</i>	<i>WGI gov. index</i>
g loss/g gap	-0.59*** (-5.71)	-0.49*** (-4.46)	-0.49*** (-4.00)	
R2	0.37	0.27	0.23	
g loss (pts)	-4.73*** (-5.23)	-3.98*** (-4.19)	-3.89*** (-3.67)	
R2	0.33	0.24	0.2	
g GDP/capita stdev	2.03***	1.65***	1.73***	0.31*
	-6.06	-4.53	-4.33	-2.14
R2	0.4	0.27	0.25	0.08
g GDP/stdev	2.00***	1.77***	1.55***	
				0.3
	-4.54	-3.95	-3.02	
	0.27	0.22	0.14	-1.67
R2				0.05
g GDP			3.59**	0.82*
			-3.46	-2.22
R2			0.18	0.09

Source: Author's own calculations.

The overall picture that emerges is one in which state effectiveness, when reasonably appreciated, and social cohesion explain a large part of economic resilience difference between countries. History of crisis episodes in Southeast Asia illustrates these relationships. In his reference study of crisis in Asia and Latin America, Maddison (1985) insisted already on the role of government effectiveness. He proposed a second reason to explain the speed and the quality of adjustment policies in Asia—there had been less manifest distributional conflicts. More recently, in the countries most affected by the 1997–1998 Asian financial crisis, government's effective capacity to implement rapidly adjustment measures were critical in containing the negative economic impact of the initial shock. The reform process interacts with social cohesion, notably because a sufficient degree of social cohesion is a condition of credibility for governments engaged in negotiation with foreign creditors and institutions. Preservation of the policy tools to strengthen the political stability and social cohesion was a key factor in determining the unorthodox response of Malaysia—capital controls—to the crisis in 1998.<sup>18</sup> In Thailand, and in South Korea, social stability and democratic institutions played an important role in adjustment policies to the crisis (Rodrik, 1999). Democracy provides mechanism of “voice” that facilitates a soft transfer of power to newcomers.<sup>19</sup> Indonesia, where recovery was slower, offers an interesting counterexample in the region, which can be associated to a weak state's effectiveness (see SE index in table 12.2). The economic crisis interacted with the decline of the Soeharto's regime and the fall of the government capabilities. Each crisis—the economic and the institutions collapses—was made worse by the other (Corden, 2007).



Some members of the governing party blamed the Chinese business community and incited to ethnic tensions (Rodrik, 1999). The Chinese businessmen lost confidence in their security, and that added to the flight of capital. Obviously, social cohesion was not strong enough to compensate for the sudden dilution of the state's authority. Since then, major institutional changes have been implemented in Indonesia and the country was much less affected than Thailand, Malaysia, Singapore, and Philippines by the 2009 world crisis.

## Conclusion

The main results here are that (a) increasing economic resilience—that is, reducing the loss of growth during recessions—is critical to achieving high growth rate over the long term; and (b) countries with more social cohesion and better state effectiveness tend to have significantly stronger economic resilience. Further research will be conducted to evaluate more precisely the impact of these variables on long-term resilience and growth, and how they interact with other policy and structural factors.

The evidence presented have already clear implications for international institutions involved in the design of adjustment plans, such as the Washington institutions or the EC. In a policy perspective at the country level, our results suggests that social cohesion and state's capabilities must be consolidated and promoted to benefit from the gains of economic openness. It is a necessary condition of any international integration strategy. In East Asia, the regionalization process has become a driving force for international integration. Lessons from the European experience show that regional integration could stimulate a growth process but that it leads to the reinforcement of agglomeration and scale economies. As a result, growth is not equally shared between the participating territories and it may lead to an increase in economic, spatial, and social inequalities. Thus, in such a process, the sustainability of growth will increasingly depends on the domestic attributes on which we insist here, especially social cohesion. In this context, the relatively low social cohesion differences between countries and the high average level in SEA, with the exception of Philippines and Cambodia, provide a positive input for further regional integration.

## Notes

\* The author would like to thank the participants of the CAF/CEPN/IRASEC seminar in December 2013 in Hanoi, where a previous version of this chapter was presented. Special thanks to Bruno Jetin for encouraging discussions and providing critical data sources and to François Moreau. Views expressed are ours alone.

1. *The Growth Report, Strategies for Sustained Growth and Inclusive Development*, Commission on Growth and Development (2008, p. 26).

2. From Myrdal, “Strong State,” to Chalmers Johnson, “Developmental State,” to the relatively recent, but growing, importance given to the quality of government institutions in World Bank WDR reports (1993, 1997 “The state in a changing world,” 2002, 2003, 2004).
3. Croissant and Bünte (2010); Croissant and Wurster (2010); Morlino et al. (2011).
4. The stabilizing power of social cohesion in a crisis context has been illustrated by postrevolution reactions in Tunisia (in 2011). Until now, tensions caused by the political transition have been far less violent in Tunisia than elsewhere and a new institutional (and democratic) order is under implementation in 2014–2015, successfully so far.
5. For instance, the World Bank’s “World Development Report 1997—the state in a changing world” insisted on the virtues of the Korean bureaucracy.
6. Bangladesh is a good illustration—a country with a very poor state and where Gramesh was born.
7. Hirschman (1981).
8. In constant 2005 dollars.
9. Delay to reach half of the precrisis expansion growth rate (primary data from WDI database).
10. Our sample includes 57 DC, for which enough data were available.
11. Data on African countries not reported here, but available for 21 countries.
12. For an illustration of the divergence between “expert-based” country assessment and the reality in the case of corruption, see Razafindrakrao and Roubaud (2010).
13. Education levels come from the Barro and Lee database; road density and mortality rates come from the WDI database. We use data in the middle of our 1980–2010 study period, when it was relevant and possible. Thus the education and road density are the 2000 values (implicitly the cumulated outcome of the 1990–2000 decade); infant mortality value is the average between 1990 and 1999.
14. <http://www.worldvaluessurvey.org/WVSONline.jsp> (accessed November 2014).
15. Same period 1980–2013.
16. Average value on the 1996–2000 period.
17. See <http://info.worldbank.org/governance/wgi/pdf/ge.pdf>.
18. The IMF program was not politically acceptable to the Malaysian government, as it was summed up by Prime Minister Mahathir: “[I]f we have to resort to the International Monetary Fund assistance..., the conditions imposed by the IMF will require us to open up our economy to foreigners. There will not be any Bumiputera quota as the New Policy is an injustice, and unacceptable to their liberal democracy.” Quoted in Athukorala (2010).
19. Since then, the widening gap between rural and urban households has eroded the social cohesion in Thailand and produced dangerous unresolved political tensions.

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## Reduction of Absolute Poverty, Increase of Relative Poverty, and Growing Inequalities: A Threat to Social Cohesion

*Bruno Jetin*

### Introduction

The Association of Southeast Nations (ASEAN) community is committed to poverty reduction and the well-being of its people thanks to inclusive growth and equitable access to opportunity of human development.<sup>1</sup> These principles are delineated in the three pillars of ASEAN cooperation, namely, the ASEAN political and security community, the ASEAN economic community, and the ASEAN sociocultural community, which are supposed to be mutually reinforcing. For instance, the improvement of well-being strengthens political stability, which is an important objective for the many “democracies with adjectives” (Collier and Levitsky, 1997) that count on Southeast Asia.

The objective of this chapter is to assess such a claim through the lens of social cohesion because a socially cohesive society has a political stability that is rooted in well-being. We further develop the meaning of social cohesion in a first section and define its components in order to assess the social cohesion of ASEAN country members. Before going into details, the second section checks if the existence of ASEAN has favored a process of convergence of living standards by looking at the relative importance of between- and within-country inequality. The third section looks closer to the recent evolution of within-country inequality. Inequality is a complex phenomenon that is perceived differently if growth benefits all segments of society and in particular if poverty decreases. These questions are explored in the next section, where we show that in several ASEAN countries absolute poverty has receded but has been replaced by relative poverty, which creates its own set of expectations and potential frustrations. Finally, in the last section we

present various dimensions of social cohesion in ASEAN countries and conclude by presenting country profiles.

## Social Cohesion: Definition and Measure

For decades development has been basically thought as a process of poverty reduction due to employment creation provided by high growth. Because most job creation would occur in cities where the bulk of industry and services would expand, the basic assumption has been that development is a process of structural change whereby people migrate from rural to urban areas to benefit from better paid jobs. Initially, development would lead to an increase of income inequality, which would later subside when structural change would be achieved and poverty eliminated. Moreover, income inequality was beneficial because wealth would trickle down from the rich to the middle class and finally to the poor. The observation that poverty did not always decline when growth accelerated and that income inequality was not always provisional but sometimes embedded in societies led to a new agenda of “inclusive growth” at the start of the year 2000. Inclusive growth is based on the idea that growth must be pro-poor, which means that it benefits the poor or that it benefits more the poor than the rich when a redistribution of wealth is deemed necessary. But inclusive growth goes beyond pro-poor policies because it should reduce the disadvantages faced by the poor that prevent them from getting access to opportunities in terms of education and health (Ranieri and Almeida Ramos, 2013). In other terms, the inclusive growth agenda addresses inequality of opportunity and not only income inequality.

Social cohesion overlaps with inclusive growth but goes beyond because it includes issues of governance and political legitimacy. The reason for this broadening is that poverty reduction and improvement in living standards do not necessarily lead to an improvement in well-being. One of the reasons is that material conditions of living, when they improve, change also one's expectations of life. A shift from absolute poverty to relative poverty and a growing middle class changes the focus of concerns from daily survival to more qualitative aspects of life, personal autonomy and self-realization, freedom and participation in social and political affairs (Delhey, 2010; Inglehart and Welzel, 2005). Although the concept is old (Jenson, 2010; Green et al., 2011), it has been revived by political unrests in Arab countries Brazil, Russia (2010–2011), Thailand (2010–2015), and China (Cai and Wang, 2012) because there is an interest in understanding why and how poverty and inequality turn into political conflict (OECD, 2011, 2012). In this sense, social cohesion is linked to research on well-being, which tries to determine what makes people happy or unhappy (Stiglitz et al., 2010). Several official reports have been dedicated to well-being and happiness (Helliwell and Wang, 2012; Helliwell et al., 2013) and international institutions and researchers have tried to include social cohesion and well-being concepts

into the development research agenda (Woolcock, 2011; Kroll, 2013; Malik, 2013; WB, 2013, pp. 57–8).

Amid the vast literature on social cohesion and the numerous proposed definitions, a consensual point is that social cohesion stems from “the interdependence between the members of the society, shared loyalties and solidarity” ... “communities of interpretation, feeling of a common identity, and a sense of belonging to the same community, trust among societal members as well as the extent of inequality and disparities” (Berger-Schmitt, 2000, p. 3). For our purpose, we use a narrower definition that covers parts of the elements cited earlier and has been proposed by OECD (2012, pp. 56–7): a socially cohesive society combines in an idiosyncratic and holistic way a low degree of exclusion, social capital, and social mobility. This definition is more appropriate for estimation.

- social exclusion comes from poverty and inequality of income and opportunity;
- social capital combines measures of trust (interpersonal and societal) and forms of civic engagement;
- social mobility measures the degree to which people believe or are capable of changing their position in their society.

We use this approach to estimate social cohesion in ASEAN as a region compared to the rest of the world. But before that, we review the long-term evolution of ASEAN to check if the process of regional integration has led to a convergence of living standards and a reduction of inequality.

## Are Living Standards Converging in Asia and in ASEAN?

Regional integration is expected to foster a process of economic convergence whereby the poorest catch up with the most advanced countries thanks to new trade and investment opportunities. This is especially the case in the Asia and Pacific region, which is made of a wide variety of countries at different stages of development. Figure 13.1 shows the long-term trend of the between-country inequality of Asia Pacific measured by the Theil index of real GDP.<sup>2</sup>

The Theil entropy index is calculated as follows:  $T = \sum_{i=1}^n y_i \ln\left(\frac{y_i}{p_i}\right)$ , where  $y_i$  is the share of country  $i$  in the total expenditure and  $p_i$  is the share of country  $i$  in the total population of all countries in the sample.<sup>3</sup> A decrease of the index reflects a reduction of inequality and vice versa.<sup>4</sup> Figure 13.1 shows that after two decades of fluctuations, there is a clear and steady reduction of inequality between countries. This reflects the rise of China, which is catching up with the most advanced countries of the region. If China is excluded from the sample, the decrease of inequality between countries, or in other terms, the convergence of living standards, starts later at the beginning of the years 2000. This proves that the process of convergence is not restricted to China

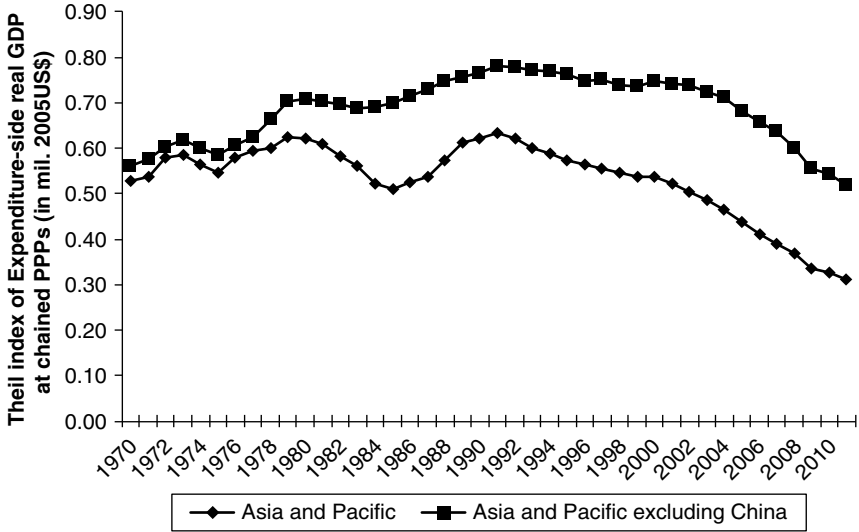


Figure 13.1 Convergence of living standards in the Asia Pacific, 1970–2011.

Source: Author’s calculations with data from Penn World Tables version 8.

and involves other countries of the region. However, when one looks at ASEAN as a subregion to check if the same phenomenon is occurring between country members, the picture is quite different. Figure 13.2 displays the long-term evolution of between-country inequality among ASEAN founders (Indonesia, Malaysia, the Philippines, Thailand, and Singapore) and ASEAN as it is today<sup>5</sup> to see if this larger group has experienced a different pattern.

The first observation is that for both ASEAN founders and total ASEAN there has not been a general trend toward convergence of living standard. There are different subperiods that are better explained by the pace of world growth and the capacity of ASEAN members to benefit from it than by an inner Southeast Asian integration process. Figure 13.2 shows that the launch of the Common Effective Preferential Tariff scheme (CEPT in 1992), which started the process of reduction of tariffs to create an ASEAN Free Trade Area (AFTA),<sup>6</sup> was not conducive to a convergence of living standards. Figure 13.2 shows that the inclusion of new members is not responsible for this absence of convergence that existed previously. In fact, the evolution of between-ASEAN country inequality is due to the vast heterogeneity between the ASEAN founders that did not narrow with time.

On one hand, there is a group of four countries (Singapore, Malaysia, Thailand, and to a lesser extent Brunei) that gets a higher share of expenditure than their population share of ASEAN and contributes to divergence (see figure 13.3).<sup>7</sup>

The case of Singapore is really exceptional: in 2011, Singapore’s population amounted to 0.9 percent of ASEAN population but Singapore made



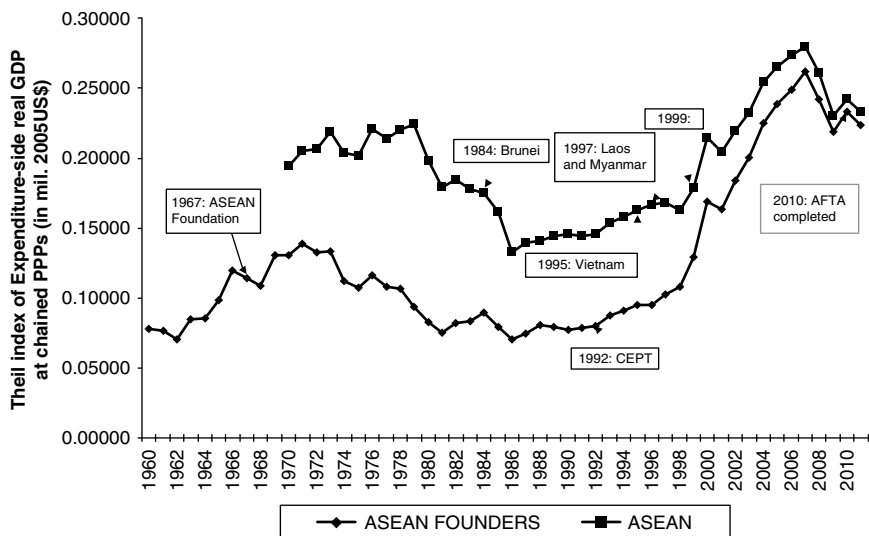


Figure 13.2 Between-country inequality of total ASEAN and ASEAN founder countries, 1960–2011.

Source: Author's calculations with data from Penn World Tables version 8.

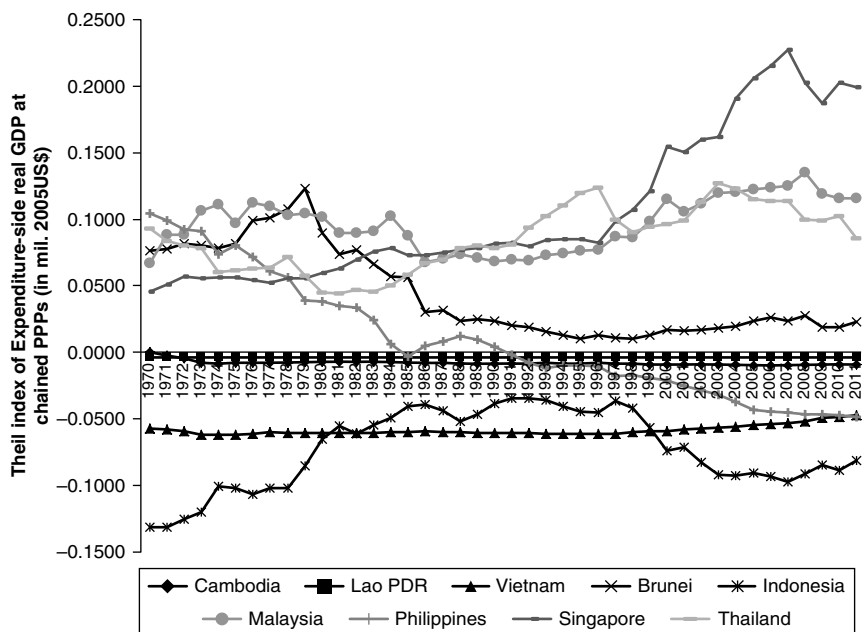


Figure 13.3 Contribution to the Theil Index of ASEAN real GDP, 1970–2011.

Source: Author's calculations with data from Penn World Tables version 8.

9 percent of ASEAN GDP. Singapore’s contribution to between-country inequality took off in 1996 and stayed high since then.

On the other hand, there is a second group of countries (Indonesia, Viet Nam, Laos, and Cambodia) whose population share is higher than their expenditure share. The Philippines are the only country that has moved from one group to the second because its growth stayed low while its population grew rapidly. Indonesia is the most important country of this group: on average over the period its population amounted to 45 percent of the population of ASEAN but its expenditures to only 35 percent. The biggest country of the region is still one of the poorest in terms of GDP per capita and until this situation improves on a long-term basis ASEAN will stay a heterogeneous region. Figure 13.3 shows that Indonesia did narrow the gap from 1970 to 1996 when its contribution to between-country inequality got closer to zero but the Asian crisis of 1997–1998 inverted the trend with long-lasting effect.

Only the past years saw an improvement due to the resilience of Indonesia to the international crisis that broke in 2008 and the acceleration of its growth. Another factor of convergence is the evolution of Viet Nam, which has slowly but gradually reduced its contribution to divergence. Viet Nam, whose population share amounts to 17 percent, has seen its expenditure share reached 10.2 percent of total ASEAN in 2011, up from 6.3 percent in 1980. If like Indonesia, the emergence of Viet Nam is confirmed over the long term, then ASEAN could really start to converge.<sup>8</sup> The same is true for Cambodia and Laos, which started to catch up during the years

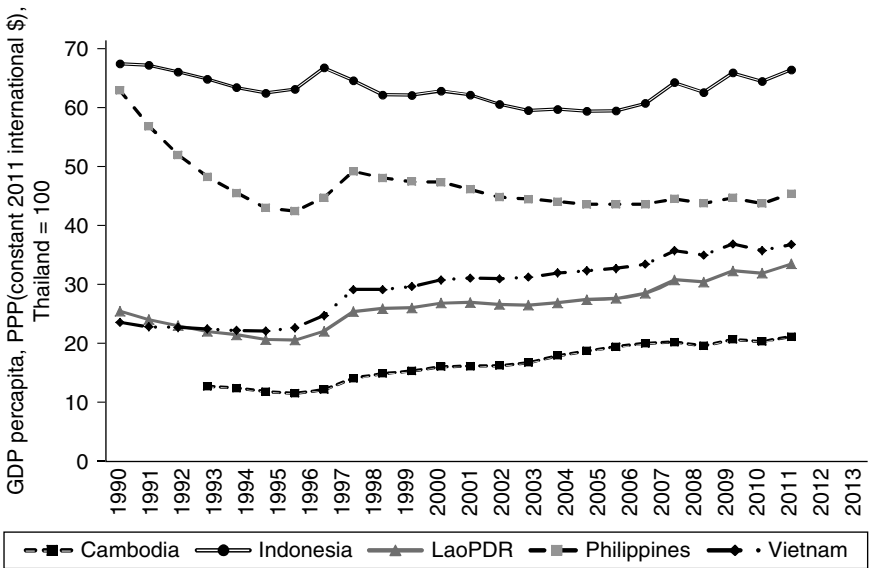


Figure 13.4 Convergence of low and middle-income ASEAN countries toward Thailand.

Source: Author’s calculations with data from World Development Indicators 2015.

2000 although it does not have a significant impact on ASEAN as a whole because of their small population and GDP size.<sup>9</sup> But if ASEAN has finally started to converge, it is not primarily due to its efforts of integration. Intra-ASEAN trade has stayed at a rather low level of around 25 percent of total ASEAN trade. The integration to the rest of Asia and the Pacific and beyond to global markets has been far more decisive. Moreover, it is a process of convergence of the poorest countries to the middle income countries. This means that the per-capita GDP gap of Indonesia and the newcomers is narrowing with Thailand (see figure 13.4) but the gap between Thailand and the richest ASEAN countries—Malaysia, Singapore, and Brunei—is not closing.<sup>10</sup>

Still, the reduction of between-country inequality of this sort would be an important achievement but provided that within-country inequality does not increase.

### A Recent Increase of within ASEAN Country Inequality

To check this hypothesis a new Theil index is calculated to estimate the respective shares of between-country inequality and within-country inequality of ASEAN members. The objective is to determine if inequality between inhabitants of ASEAN has increased or decreased over time because of a divergence or convergence between countries or because of higher or lower inequality within country members or a combination of both. The data on the expenditure distribution of each country comes from Povcalnet completed by World Development Indicators of the World Bank for selected years (1992, 2002, 2008, and 2012) for which data is available for all countries.<sup>11</sup> Due to the absence of data on expenditure distribution in Povcalnet, Singapore and Brunei are excluded from the sample. Therefore, the between-country inequality is underestimated and cannot be directly compared with the previous one based on Penn World Tables. The analysis thus focuses on the middle and low-income ASEAN countries. These are the most populated, which makes them representative of ASEAN.<sup>12</sup> The main results are summarized in table 13.1.

Over the two decades, the Theil index of ASEAN has risen from about 0.37 in 1992 to 0.39 in 2002, and then slowly returned to around its level of 1992. Between-country inequality followed the same pattern, which is coherent with what we have seen previously. But table 13.1 shows that within-country inequality, which had decreased steadily from 1992 to 2008, increased over the period 2008–2012 offsetting partially the decrease in between-country inequality. Around three-quarters of inequality among individuals living in ASEAN countries stems from within-country inequality and only one quarter from between-country inequality.

A closer look at the evolution of within-country inequality reveals that two countries only have seen a rise in inequality since 2010, the biggest being Indonesia and the smallest, Lao PDR (see table 13.2). These two countries registered the highest growth rate in inequality in Asia after China (Kanbur

**Table 13.1** Theil index of between and within inequality in ASEAN

<i>Summary of results</i>	1992	2002	2008	2012
Theil Index ASEAN	0.3683	0.3909	0.3915	0.3667
Between-country inequality	0.1003	0.1309	0.1259	0.0972
Within-country inequality	0.2680	0.2600	0.2656	0.2695
In %	1992	2002	2008	2012
Between-country inequality	27.2	33.5	32.2	26.5
Within-country inequality	72.8	66.5	67.8	73.5

*Source:* Author's calculations based on Povcalnet and World Development Indicators, The World Bank.

**Table 13.2** Within-country inequality indexes of ASEAN countries

<i>Theil Index</i>	1992	2002	2008	2012
Cambodia	0.276	0.218	0.212	0.174
Indonesia	0.142	0.151	0.182	0.244
Lao PDR	0.161	0.183	0.223	0.231
Malaysia	0.376	0.402	0.345	0.335
Philippines	0.34	0.343	0.321	0.321
Thailand	0.389	0.291	0.304	0.292
Vietnam	0.207	0.243	0.215	0.214
Theil ASEAN	0.263	0.257	0.259	0.269
Gini Index	1992	2002	2008	2012
Cambodia	38.28	35.53	35.15	31.82
Indonesia	29.31	29.74	34.11	31.33
Laos	30.43	32.47	35.46	36.22
Malaysia	45.9	46.1	44.1	43.1
Philippines	43.82	44.48	42.98	43.03
Thailand	47.86	41.98	40.51	39.37
Vietnam	35.68	37.55	35.57	35.62

*Source:* Author's calculations and Povcalnet.

et al., 2014). In Indonesia, inequality was low and even decreasing between 1993 and 2003 but showed a strong upward trend since then (Yusuf et al., 2014). The rise of inequality among individuals has been pervasive “whereas the gap between regions has been either consistent or decreasing slightly in more recent years” (p. 249). The shortage of relatively well-paid industrial jobs due to the stagnation of industry and the massive creation of jobs in low productivity sector is one of the reasons behind the rise of inequality in Indonesia. According to the World Bank (2014, pp. 36–7), the decline of real wages and salaries while rich Indonesians benefited from rising asset markets is another. The other ASEAN countries have either experienced

stagnation (Philippines and Viet Nam) or a slight decrease of inequality (Cambodia, Malaysia, and Thailand).

This observation based on Povcalnet data must be interpreted with caution. One reason for the decrease of inequality in some countries like Cambodia is the improvement of rural incomes in 2007 and 2009 due to good harvests and relatively high prices of rice, growth in agricultural wages, and higher income from off-farm self-employment (ADB, 2014a, pp. 10–11). These favorable circumstances are volatile so that the reduction of inequality may not be durable. Second, the Gini index does not catch the whole reality on the ground. In the case of Viet Nam, for instance, the return to a rather low level of consumption inequality with a Gini index of 35.6 percent in 2012 almost equal to that of 1992 does not mean that nothing happened in between. Badiani and Baulch (2012, p. 27) show how much inequality has risen between 2004 and 2010: “Growth has favored better-off households, both the relative and absolute gap in incomes between the rich and the poor has risen over time.” Third, even when decreasing, inequality is still high in most of ASEAN countries. Malaysia, which claims to become a high-income country by 2020, has a Gini coefficient (41) in 2014 much higher than the OECD average (32). The same holds true for the Philippines (43), Thailand (39.3), and even Viet Nam (35.6). Fourth, with the exception of Malaysia, all Gini indexes in ASEAN are calculated on consumption and not income like it is the practice in OECD countries and Latin America. While inequality of consumption may reflect more accurately the difficulties of daily life encountered by the majority of the population, they do not reflect the breadth of inequality stemming from income.<sup>13</sup> Income inequality is usually much higher than consumption inequality. In Indonesia, the difference could be 6 percent “suggesting that the current consumption Gini coefficients of 41 could represent an income Gini of around 47” (World Bank, 2014, p. 35) higher than in Malaysia. This means that seen from the criteria of income, the inequality gap between OECD countries and ASEAN countries is much higher and the idea that Southeast Asian countries are traditionally less unequal than other developing countries has to be reconsidered. In the case of Thailand, for instance, Rueanthip (2012, p. 32) has demonstrated that after controlling for regional price difference, the Gini index of real income was 46.6 percent in 2011, a very high level, and what’s more, almost exactly the same level as in 1996, 46.8 percent. This gives a complete different picture than the one given by Povcalnet, whereby consumption inequality decreased from 42.9 percent in 1996 to 39.4 in 2010. Beyond the difference of methodology, one explanation of such a divergence between consumption-based and income-based Gini coefficients is that households who have difficulties to cope with necessities resort to indebtedness.<sup>14</sup> During some years they can maintain or even improve their living standards until they really have to pay off their accumulated debt. In Thailand, households’ debt reached 85.9 percent of GDP at the end of 2014. Many households, not only the poor but also the middle class, are overindebted and have to reduce their

consumption. As a consequence, the gap between the Gini income and Gini consumption-based indexes should narrow in the future. The same problem is observed in Cambodia (ADB, 2014a, p. 14) and Malaysia where households' debt was the highest of Southeast Asia with 87.1 percent of GDP at the end of 2014 (Purnamasari et al., 2015).

To summarize, there are many indications pointing to a high degree of inequality in ASEAN countries, which do not appear clearly in inequality indexes. The impact of this high inequality on social cohesion is difficult to establish because it depends a lot on the national context. There may be instances where inequality is increasing but the income of all segments of the population is rising although at a different pace. High inequality may also be perceived as based on meritocracy and not unfair if everyone has a good access to an education of quality, in which cases, a rising inequality may not put social cohesion at risk. But there are also instances where growth is not inclusive and does not much benefit the poor and the middle class and appears as the mere enrichment of the wealthy. If compounded by inequality of opportunity in education and health, corruption and privileges acquired by birth instead of meritocracy, inequality will endanger social cohesion. Finally, the impact of inequality on social cohesion must be interpreted in relation to poverty. If absolute poverty declines sharply from a high level, it will offset at least partially a rise in inequality. Not only because the living standards of many people will have improved but also because it is much easier for governments to get the credit of poverty reduction and improve their legitimacy. Poverty is not justifiable and most countries have an explicit policy to curb poverty, which is not the case for income inequality, a more sensitive political issue. For a government to have an official policy of income inequality reduction implies that income inequality is condemned on moral ground and that a policy of income redistribution is implemented. This means that a fiscal policy is adopted whereby the rich in one way or another are taxed in order to help the poor. We are still very far from such a political agenda in ASEAN countries where a widely shared conception among the elite is "that those in society holding a disproportionate amount of wealth are not considered responsible for the betterment of the least advantaged" and taxation to provide the government with financial means is not considered a priority although the government is held responsible for providing public services, infrastructure and social services (Bock, 2014, p. 20). Poverty is a different matter because the implicit idea is that growth will be enough to curb poverty providing that it is inclusive, which means investing in infrastructure, connectivity, education, and health but excludes income distribution. During the 1980s and 1990s most of ASEAN founders governments have been helped by high growth leading to absolute poverty reduction. The CLMV countries are now benefiting from the same phenomenon that explains the recent catch-up vis-à-vis Thailand. But since the Asian crisis, ASEAN founders' growth has slowed and the nature of poverty has changed. While absolute poverty has dramatically declined, it has been substituted by relative poverty and the possibility to reinforce

social cohesion thanks to high growth is declining. We turn to the analysis of absolute and relative poverty and draw its lessons for social cohesion in the next section.

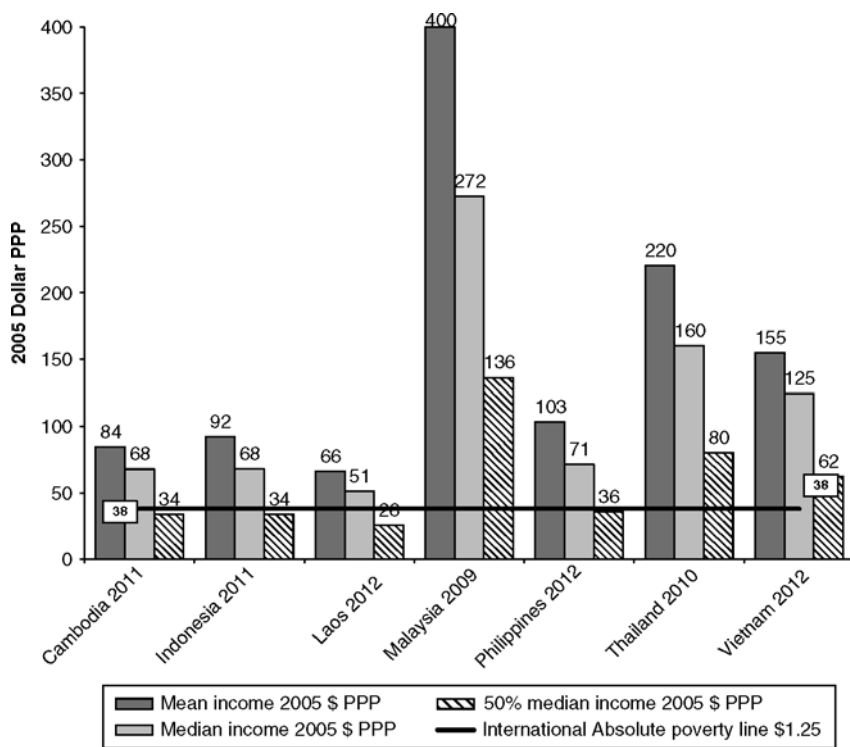
## Absolute and Relative Poverty and Social Exclusion in ASEAN

In ASEAN countries, many publications have highlighted that the absolute poverty headcount has been decreasing dramatically during the past two decades (ADB, 2014b). But this important achievement has overshadowed the rise of relative poverty. Absolute poverty is defined in regard of the cost of basic needs deemed necessary for survival and minimum capabilities and as such is undoubtedly a source of social exclusion. Relative poverty lines are defined in relation to the overall distribution of income, for instance, 50 percent (OECD, 2009) or 60 percent of the median national income (Guio et al., 2012). They measure the distance from customary living standard from the society in question and thus include distributional concerns in the definition of poverty (Garroway and Laiglesia, 2012, pp. 29–30; Birdsall and Meyer, 2014). Below this relative poverty line, since 1985 the Council of the European Union considers that “the persons whose resources (material, cultural and social) are so limited as to exclude them from the minimum acceptable way of life in the Member state to which they belong” (EUROSTAT, 2012). Relative poverty like absolute poverty is also a criterion of exclusion from society. This means that ASEAN country members, which have succeeded in getting rid of absolute poverty, still face a problem of exclusion when relative poverty has turned significant.

Following Garroway and Laiglesia (2012), we use Povcalnet to calculate the share of relative poverty in the countries where half the median income level is above the international absolute poverty line defined by the World Bank, that is, 2005 \$PPP 1.25 per day or \$38 per month. Figure 13.5 shows that three countries (on top of Singapore and Brunei), Malaysia, Thailand (since 1990), and Viet Nam (since 2010), fill this criterion.

In these three countries absolute poverty has almost disappeared but relative poverty headcount represents between 13 and 21.5 percent of the population (see table 13.3).

For Singapore, Donaldson et al. (2013) estimate relative poverty at 21 percent, which is the same as in Malaysia. Three other countries are in an intermediate situation: Indonesia, the Philippines, and Cambodia, which have a half median income close but still inferior to \$38 but whose absolute poverty headcount is still high, in the range of 10 percent (Cambodia) to 19 percent (the Philippines), which makes it a priority in terms of policy objective. But if GDP per capita growth continues on the same trend, we may expect to see the half-median income overcome the absolute poverty threshold in the near future. One may be less optimistic for Lao PDR where the half-median income (\$26) is still far from the absolute poverty level.



**Figure 13.5** Absolute and relative poverty in Southeast Asia around 2009–2012.

Source: Author's calculations with data from Povcalnet, World Bank.

**Table 13.3** Absolute and relative poverty in ASEAN member countries in percentage and thousands of individuals

Country	Absolute poverty headcount (%)	Relative poverty headcount (%)	Number of absolute poor (thousands)	Number of relative poor (thousands)
Cambodia 2011	10.1	5.5	1,467,889	796,019
Indonesia 2011	16.2	13	39,499,925	31,743,035
Laos 2012	30.3	9.8	2,011,027	652,620
Malaysia 2009	0	21.5	0	5,977,699
Philippines 2012	19	16.3	18,335,602	15,743,861
Thailand 2010	0.4	11.5	252,329	7,618,216
Vietnam 2012	2.4	13.3	2,166,122	11,807,142
Singapore	0	21	0	1,088,577

Source: Author's calculations with Povcalnet. For Singapore, Donaldson et al. (2013). Note: The table should be read like this. In Malaysia all poor are relative poor because absolute poverty is null. In Vietnam, there are 11.8 million relative poor who earn 50 percent of the median and more than \$38 a day and around 2.2 million of absolute poor who earn less than \$38 a day. So total poverty amounts to around 14 million individuals. In Lao PDR, 50 percent of the median income is still below \$38 a day and so relative poor are also absolute poor and total poverty amounts to 30.3 percent.



Because the international poverty line of the World Bank is often too low to estimate absolute poverty in ASEAN, we also look at the national poverty lines. These are usually better fitted to national specificities, but they also suffer sometimes from a political bias because governments decide eventually what is included or not in basic needs. Finally, we compare these objective absolute and relative poverty measures with the dissatisfaction with living standards. We consider the share of the population who answer negatively to the question: “are you satisfied with your living standard?” This question is part of the Gallup World Poll.<sup>15</sup> Although it is not a direct estimation of subjective poverty, because the question is not “do you consider yourself poor,” one may consider that the absolute and relative poor have all the reasons to be dissatisfied with their living standards. Figure 13.6 presents the average results for the most recent periods available.

First, we observe that the headcounts for international and the national poverty lines differ markedly. For Cambodia and the Philippines, for instance, the national is higher than the international headcount, which means that the national authorities value the minimum living standard at a higher level than the World Bank. In Lao PDR, it is the opposite, which means that the national poverty line is probably underestimated. In Viet Nam, the national poverty line is equal to the share of relative poverty while in Thailand it is higher, which means that it includes some elements of participation to

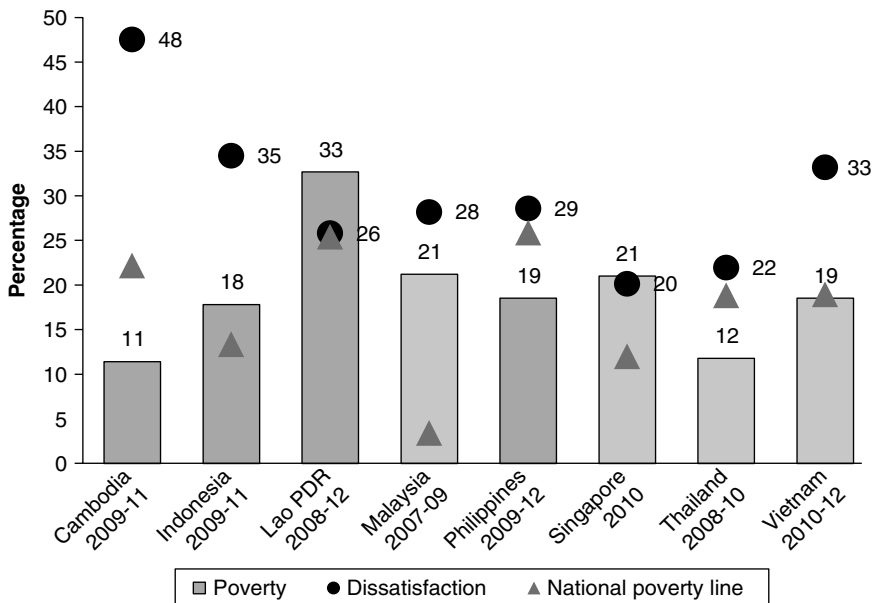


Figure 13.6 Objective poverty and dissatisfaction in ASEAN.

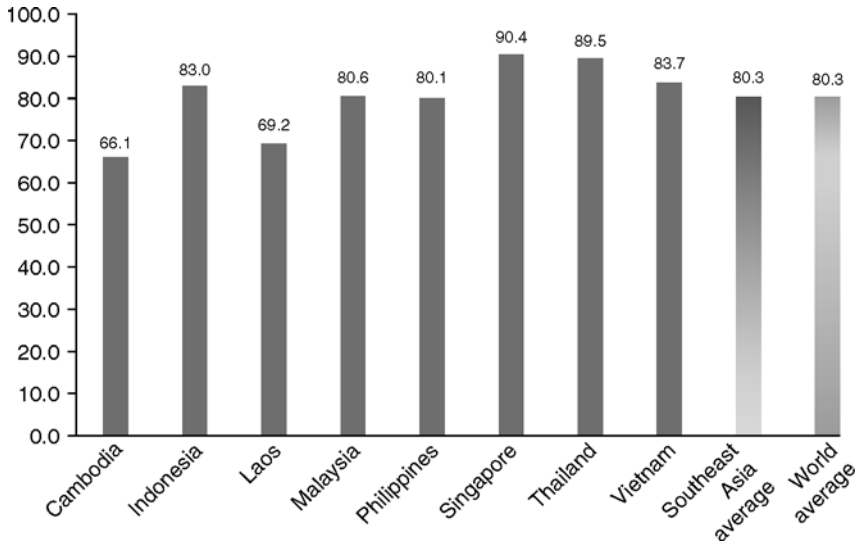
Source: Author’s calculations with Povcalnet, World Bank; Gallup World Polls; Singapore: Donaldson et al. (2013).

society above basic necessities. Second, in Cambodia, Indonesia, Malaysia, Viet Nam, and to a lesser extent Thailand, there is a significant gap (superior to 5 percent) between the share of the population that is dissatisfied and the share of either absolute or relative poor.<sup>16</sup> The gap is higher than 10 percent for Cambodia, Indonesia, and around 10 percent for the other countries. This means that in these countries either the estimates of objective poverty do not capture well the reality or that a significant share of the population beyond the poor are not satisfied with their living standards. In both cases, this dissatisfaction can be voiced if there is an opportunity and is potentially a source of political instability. Singapore is an interesting counterexample because the percentage of dissatisfied is equal to the share of relative poor. Still, a share of 20 percent of relative poor and dissatisfied is quite significant for the richest state of ASEAN.<sup>17</sup>

## Social Capital and Social Cohesion in ASEAN

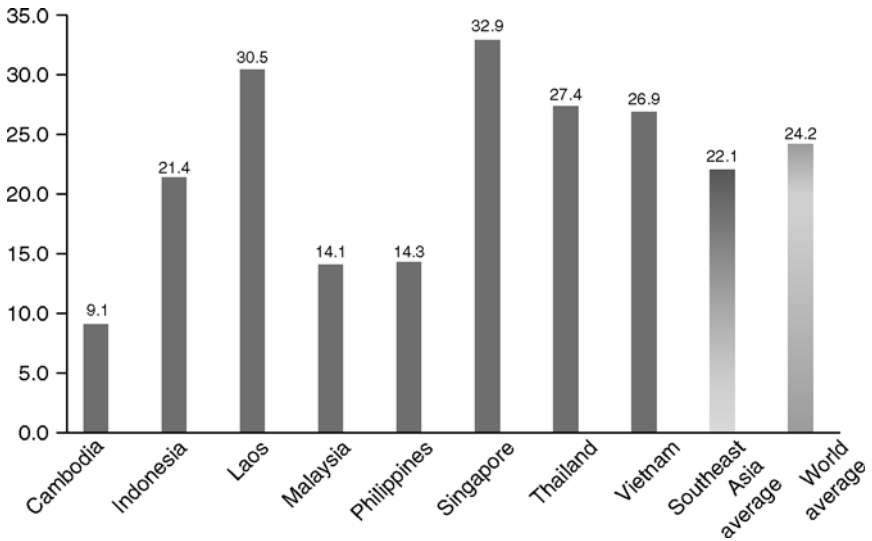
A high level of social capital is conducive to a socially cohesive society because social capital encompasses the ties that bind people together and their relationship with the society they live in in general.<sup>18</sup> Trust among the members of a society and civic participation of individuals are two ways to capture part of the global concept of social capital. Trust can be divided in two dimensions: societal trust, when individuals consider people in their society trustworthy; and interpersonal trust, when people have someone to rely on when in difficulty. Societal trust can be measured by the share of individuals who answer positively to the question: “Do you think that most people can be trusted?” Interpersonal trust can be measured by the share of individuals of answer positively to the question: “Can you rely on friends and family for help?” Civic participation can be judged by the share of people who answer positively to the question: “Have you volunteered your time in past month?” The data has been collected by the Gallup World Poll, and we present the average results for ASEAN country members, total ASEAN, and the World over the period 2011–2012 in figures 13.7–13.9.

Globally, ASEAN has the same level of interpersonal trust than the rest of the world, a lower level of societal trust and a higher level of volunteering. But the differences among ASEAN country members are important. Cambodia has systematically the lowest scores in trust and participation and has definitely a low social capital. Other countries register a mixed record. Lao PDR like Cambodia has a low level of interpersonal trust that can probably be explained by the still high level of poverty and difficulty to support each other in case of hardship. But Lao PDR has a higher-than-average level of societal trust and volunteering. Malaysia and the Philippines share the same profile: they have a level of interpersonal trust equal to the average, a very low level of societal trust, which may reflect a distrust toward people from different ethnics, religious beliefs, and geographical background, and a higher-than-average level of participation. The Philippines stands out with



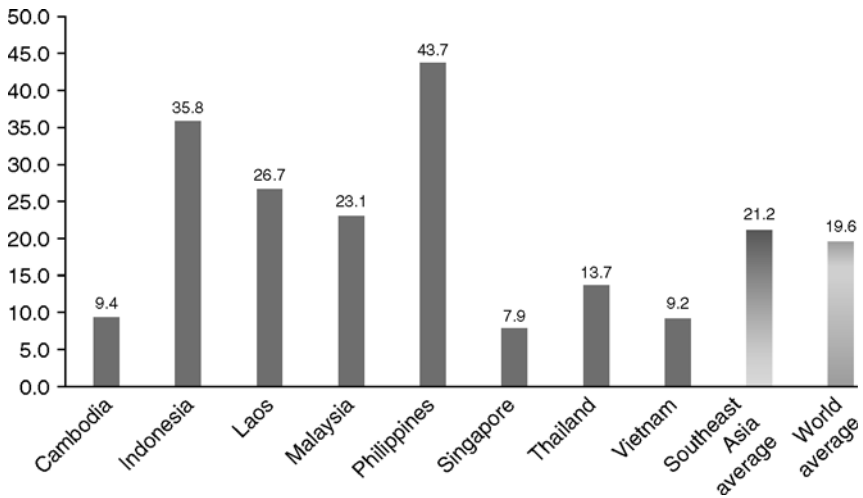
**Figure 13.7** Interpersonal trust: Can you rely on friends and family for help? (% yes), average 2011–2012.

Source: Author's calculations with Gallup World Poll.



**Figure 13.8** Societal trust: Do you think that most people can be trusted? (% yes), average 2011–2012.

Source: Author's calculations with Gallup World Poll.



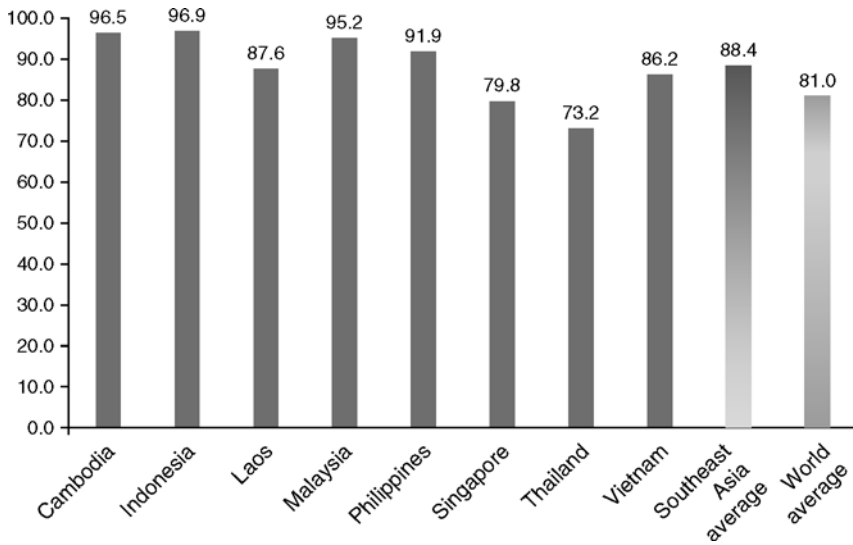
**Figure 13.9** Participation: Have you volunteered your time in past month? (% yes), average 2011–2012.

*Source:* Author's calculations with Gallup World Poll.

a very high level of volunteering, two times higher than the world average, which reveals a very high level of solidarity. This can be explained among other things by the importance of the labor movement, the density of NGO advocating on behalf of urban and rural poor, and caring organizations under the obedience of the Catholic Church. Singapore, Thailand, and to a lesser extent Viet Nam share common points. Singapore and Thailand have the highest level of interpersonal trust (10 percent above the average), a high level of societal trust, and a low level of volunteering. These three countries have a high level of intracommunity ties (bonding ties) and extra-community ties but with people of similar economic status and political influence (bridging ties) (Woolcock and Narayan, 2000) but do not engage a lot in the time-consuming grassroots activities. This is coherent with business and self-interest-centered societies where tight political controls erode traditional political participation (Skoric et al., 2009). Indonesia is a different case. It has also a high level of interpersonal and societal trust but also a high level of volunteering. In this sense, Indonesia has a high social capital contributing to a cohesive society.

## Mobility and Social Cohesion

Social mobility is important for social cohesion because people who believe in the possibility of seizing opportunity, getting out of poverty, and improving their situation by hard work will place more hope in society and will have a higher sense of belonging. Unfortunately, to our knowledge, there



**Figure 13.10** Can people get ahead by working hard? (% yes), 2011–2012.

*Source:* Author's calculations with Gallup World Poll.

is no systematic cross-country study of social mobility either intergenerational or otherwise. But we can measure the perceptions that people have of social mobility. The Gallup World Poll includes the following question: “Can people get ahead by working hard?” The positive answer reflects the perception that people have about social mobility and the open character of their country. Figure 13.10 show the percentage of people who answer yes in ASEAN country members, in ASEAN as a whole, and in the world.

ASEAN people are in general much more optimistic (88.4 percent) about the possibility to raise their social status through hard work than in the rest of the world (81.4 percent). Among ASEAN country members, it is interesting to note that in two countries, Singapore and Thailand, there are less people who believe in social upgrading with hard work. It is surprising for Singapore, which is often viewed and praised for being a model of meritocracy. There is probably disenchantment in a country where competition for positions is tough and open to foreigners. Thailand has the lowest score, which means that this country is perceived as closed and gives less space for meritocracy and more to advantages acquired by birth. It is the opposite in Malaysia, which enjoys rather high living standards in the region and this may reflect the feeling of ethnic Malays who are optimistic about finding a good job once they have completed their education. Another interesting result is that the poorest countries in terms of living standards have a high belief in the possibility of improving their situation by working hard. It is less so in Lao PDR, which is only starting its structural change

and where the vast majority of people still live off the farm. But it is striking that Cambodia registers one of the highest score. This means that people are optimistic about the possibility to change their life for the better despite hardship because high growth and catching-up induce people to believe that there opportunities to improve their life.

## Conclusion

This chapter has tried to present some of the various facets of social cohesion in ASEAN countries. To make sense of the data, building country profiles is instructive. We contrast three countries in our conclusion as representative of the full array of country cases in ASEAN: Cambodia, Indonesia, and Singapore. Cambodia is a country where social cohesion is at risk because a high share of people beyond the poor are dissatisfied. There is also a low level of trust and a low level of volunteering. The only element that plays positively for Cambodian social cohesion is social mobility. But this is only perceived mobility and if the objective mobility, the one that people really experience is low, then the only component that plays positively for social cohesion may vanish and political instability may erupt more than it is already the case. Singapore is at the other extreme of the spectrum. Its citizens enjoy a high level of satisfaction, and there is a high level of trust. Singapore can be said to be a highly socially cohesive society. Still, the rather low level of perceived social mobility is an element of concern for future political stability. Indonesia is in an intermediate situation in terms of cohesive society. It has a rather high share of dissatisfied people, but a high level of trust and participation and a high perceived social mobility. Indonesia is representative of the majority of ASEAN countries. Its future stability depends on its capacity to deliver its promises: reducing the motives for dissatisfaction and materializing upward social mobility. In this endeavor, the contribution of the ASEAN community will probably be small and national politics surely more decisive.

## Appendix I

The 25 countries of the Asia-Pacific region selected are: Australia, Bangladesh, Bhutan, Brunei, Cambodia, China, Hong Kong (China), India, Indonesia, Japan, Laos, Macao, Malaysia, Maldives, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, and Viet Nam.

## Appendix 2

To estimate the within-country Theil index, we have used the mean income and the decile income distribution published in Povcalnet detailed tables for each country and year, accessed January 31, 2015. Data was not always available for all countries for the years 1992, 2002, 2008, and 2012, in which case the closest year was selected. For Cambodia: 1994, 2004, 2008, and 2011. Indonesia: 1993, 2002, 2008, and 2011. Laos: 1992, 2002, 2008, and 2012. Malaysia: 1992, 2004, 2007, and 2012. Philippines: 1991, 2003, 2009, and 2012. Thailand: 1992, 2002, 2007, and 2011. Viet Nam: 1992, 2002, 2008, and 2012. The Theil index of Malaysia for the year 2012 has been estimated. We have calculated a Theil index of income inequality with the data published by the Department of Statistics of Malaysia over the period 1984–2009 and observed that it follows closely the one calculated with Povcalnet data. It has decreased by 3.5 percent between 2009 and 2012, and we have applied this reduction to the Theil Index of 2009 calculated with Povcalnet data.

## Notes

1. This is the eleventh principles enacted in article 2 of the ASEAN Charter, which entered into force in 2008.
2. The real GDP is calculated by the expenditure approach and is expressed in millions of US\$ 2005 at chained PPP. Source: Penn World Tables version 8.0.
3. We follow the same methodology as Park (2003) but with a larger set of countries (25 instead 19) and Penn World Tables version 8.0 instead of version 5.6.
4. There is perfect equality when each country has an expenditure share equal to its population share in which case  $T = 0$ . The Theil index assumes a maximum value of  $\ln(n)$  when there is complete inequality so that all GDP accrues to only one country.
5. Brunei joined ASEAN in 1984, Viet Nam in 1995, Laos and Myanmar in 1999, and Cambodia in 1999. Myanmar is excluded from the sample for lack of data. We have grouped newcomers with the founder members since 1970 to see if inequality between these countries, which would later form ASEAN as it is today, behaved differently than the sole ASEAN founders.
6. The AFTA was completed among ASEAN founders in 2010 and among all ASEAN countries in 2015 with the launch of the ASEAN Economic Community (ASEAN EC). In fact, all tariffs have been reduced to zero but many nontariffs barriers remain.
7. Figure 13.3 presents the contribution of each country to the Theil index of between-country inequality. For each year, the sum of each contribution equals to the Theil



- index of that year. For instance, in 2011, the Theil index for ASEAN was 0.233, and taking the two extremities of the spectrum, the contribution of Singapore was 0.199 and that of Indonesia was -0.08.
8. Some econometric studies have also reached the conclusion that there was no convergence in ASEAN over the period 1960–1999, but that convergence started over the period 2000–2010. For the first period, see Michelis and Neaime (2004), and for the second, see Chowdhary et al. (2011).
  9. Chongvilaivan (2014, pp. 308–10) has also calculated a Theil Index of between-country inequality in ASEAN from 1984 to 2010 based on World Development Indicators and excluding Cambodia from 1984 to 1992. Due to the difference of sample and data, he detects a convergence in the aftermath of the Asian crisis while in our estimation the convergence appears much later in 2007, one year before the global international crisis.
  10. In 2012, the GDP per capita in \$PPP 2005 in Singapore, Brunei, and Malaysia was, respectively, around 6, 5, and 1.7 higher than the one from Thailand.
  11. See appendix 1 for technical details.
  12. For practical reason, we will use the term “ASEAN” in the following comments bearing in mind that Singapore and Brunei are excluded.
  13. Either based on consumption or income, inequality indexes suffer from underreport of rich households. For instance, in Cambodia, “the 2009 Cambodia Socioeconomic Survey measured average consumption in the richest quintile at just \$3.75 per person per day” (ADB, 2014, p. 9). In Indonesia, according to the National Socioeconomic Survey (Susenas), “only 1.3 million (0.5% of the population) consumed more than IDR 4 million per month,” that is, \$340, which is not credible and “only around half of the owners of private passenger cars registered with the police are found in Susenas” (World Bank, 2014, p 36).
  14. This is what happened in the United States, and it led to the Great Recession of 2008–2009. See: Sturn and Van Treeck (2013).
  15. The Gallup World Poll data has been taken from the Legatum Index website accessed on June 1, 2014, and from the Human Development Report 2013 published by the UNDP: “Table 16, Supplementary Indicators: Perceptions of Wellbeing.”
  16. Absolute poverty measured with the international poverty line of \$1.25 is represented in figure 13.6 in plain bars (Cambodia, Indonesia, Laos, and the Philippines) while relative poverty is represented in hatched bars (Malaysia, Singapore, Thailand, and Viet Nam).
  17. The situation in Lao PDR must be understood with caution. The share of dissatisfied is equal to the national poverty line, which is probably underestimated. Over the period 2006–2008, the Gallup sample excludes 10 percent of the population living in remote mountainous regions where poverty is high. This proportion declines to 6 percent in the following years but in 2012 several cities amounting to 19 percent of the Lao population are excluded from the sample, which is clearly not a representative sample.
  18. According to Serageldin and Grootaert (2000, p. 44) “a glue that holds societies together” is generally recognized as necessary to a functioning social order, along with a certain degree of common cultural identification, a sense of “belonging,” and shared behavioral norms. This internal coherence helps to define social capital.

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## Investment in Infrastructure and Regional Integration: Will Connectivity Reduce Inequalities?

*Nathalie Fau*

The term “connectivity” emerged among Association of Southeast Nations (ASEAN) member states (AMS) during meetings concerning the building of the ASEAN economic community (AEC). Following numerous discussions of this concept at the fifteenth ASEAN Summit in October 2009, the Master Plan on ASEAN Connectivity (MPAC) was adopted in 2010, during the seventeenth ASEAN Summit in Viet Nam. The MPAC (ASEAN, 2011, pp. 1–3) defines connectivity as the physical, institutional, and people-to-people linkages that comprise the foundation support and facilitative means to achieve the economic, political security and sociocultural pillars toward realizing the vision of an integrated ASEAN Community. It therefore relies on three main pillars: the improvement of the institutional environment so as to reduce tariff and nontariff barriers and favor the creation of a single market in the sea and air sectors; the setting up of legislative measures favoring greater mobility of persons within ASEAN; and finally, the development of transnational transport infrastructures whose aim is to favor connectivity within ASEAN.

According to ASEAN leaders, improved connectivity, especially through transport links, is an essential condition for economic growth in Southeast Asia. Transport links not only provide physical access to resources, but also enable producers to take advantage of opportunities in domestic and foreign markets, leading to economies of scale and specialization. They also enable consumers to have access to a variety of competitively priced goods, encourage investment, promote social integration, and spur trade and economic growth. Furthermore, enhancing ASEAN’s connectivity is not only to reduce business transaction cost, time, and travel costs, but also to connect the “core” and the “periphery” in ASEAN (Basu Das, 2013, p. 3), thus distributing the benefits of multifaceted growth wider in the region and reducing the development divide in ASEAN.

ASEAN's connectivity plan therefore takes as its starting point the hypothesis that there exists an obvious link between building infrastructures, the opening up of territories and their inclusion in newly established networks, and economic development. Due to this fact and according to ASEAN leaders, the upgrading of infrastructure, the construction of new infrastructure, and the harmonization of the regulatory framework would significantly narrow the development gap within ASEAN. It is precisely this hypothesis that this chapter is questioning, by focusing especially on the MPAC's development projects for land (road and rail) and sea transport infrastructures. After presenting the main directions taken by the MPAC and the tools used to decrease territorial inequalities regarding provision of infrastructures, this chapter attempts to assess on different scales (regional, subregional, and local) the regions that have gained or lost since the MPAC was implemented and to explain the reasons for these disparities.

## The MPAC's Infrastructure Development Plan: A Project Designed to Combat Inequalities

The quality of infrastructures plays a crucial role in improving the attractiveness, connectivity, and accessibility of a country. However, the Logistics Performance Index (LPI), which measures not only the quality of infrastructures but also the efficiency of customs services or the speed of deliveries, emphasizes continuing wide discrepancies between ASEAN member states. The 2014 report produced by the World Bank indicates that ASEAN countries come into all categories: from logistic-friendly (Singapore and Malaysia occupy the fifth and twenty-fifth world positions, respectively) to logistic-unfriendly (Laos and Myanmar), via the status of Constant Performer (Thailand, Viet Nam, and the Philippines) and Partial Performer (Cambodia). The range could not be wider, and one of the MPAC's main objectives is therefore to reduce inequalities in infrastructure development.

### *Improving and Interconnecting Transport Networks within ASEAN*

The transport infrastructure development plans drawn up in the MPAC continue on the same main lines as previous plans: the Successor Plan of Action in Transport, 1999–2004; the ASEAN Transport Action Plan (ATAP), 2005–2010; and the ASEAN Strategic Transport Plan (ASTP), 2011–2015.

In the field of land infrastructure (ASEAN, 2011, pp. 11–13), the two most important projects are the ASEAN Highway Network (AHN) and the Singapore-Kunming Rail Link (SKRL). In all ASEAN countries, the improvement of road infrastructure is a national priority, designed increasingly in coordination with networks in neighboring countries. The AHN project, ratified in 1999, is a component of the Trans-Asian Highway. The aim is to construct by 2020 a network of 23 transnational roads, with a total of 38,000 kilometers, conforming to Class I standards, and to build the missing

sections, mainly in Myanmar, Laos, Viet Nam, and Cambodia. However, in spite of an extensive rail network, mostly dating from the colonial period, ASEAN has been slow in establishing a regional development policy for the rail sector. In the 1960s, in the context of the Trans-Asian Railway (TAR), the United Nations had proposed to support the building of a railway linking South China to Malaysia via Indochina. However, the network deteriorated rapidly through lack of maintenance and remains underexploited today for both passenger and freight transport. The SKRL project, proposed during the fifth ASEAN summit in December 1995, is a branch of the Pan-Asia Railway Network. Its aim is to integrate, modernize, and renovate existing rail networks and build missing sections in order to link Kunming, the capital of Yunnan in China, to Singapore, via railways running along both sides of the Indochinese Peninsula: in the east, the originally planned line passes through Kunming, Hanoi, Ho Chi Minh City, Phnom Penh, Bangkok, and Singapore; in the west, the line, whose construction is much further ahead, links Kunming to Singapore via Mandalay, Rangoon, and Bangkok. The missing sections are concentrated in Cambodia, where the only railway line working at present links Phnom Penh to Sihanoukville.

It is certainly in the sea transport sector that inequalities within ASEAN are the greatest. The flow of containers is concentrated on three ports located on the Malacca Straits: in 2013, Singapore, Port Klang (Malaysia), and Tanjung Pelepas (Malaysia) handled, respectively, 32.57 million, 10.35 million, and 7.7 million evps, between them accounting for 50.63 evps, or more than half the total traffic in Southeast Asia (56.6 percent), and 100 percent of the transshipment flow, estimated at 40 million evps in 2013 (Fau, 2014b). Similarly, the Liner Shipping Connective Index published by the World Bank, which enables a country's connectivity in the world network of regular sea transport to be measured, emphasizes very great disparities within ASEAN. For the period 2009–2013, three groups of countries appear clearly: the first group is at the top of world ratings, with Singapore (106.9) and Malaysia (98.2); the second is close to average with Viet Nam (43.3) and Thailand (38.3); and the last, very poorly connected to world shipping routes, includes both archipelagic states such as Indonesia (27.4) and the Philippines (18), and countries that have turned their backs on the outside world for many years, such as Myanmar (6) and Cambodia (5.3). In order to reduce these inequalities, the MPAC (ASEAN, 2011, pp. 13–14) plan has designated 47 priority ports for improving the ASEAN sea transport network. This plan has two main objectives: promoting maritime links between the countries of insular Southeast Asia and improving connectivity between continental and maritime areas. One of the major projects is to extend to the whole of ASEAN the Roll-on/Roll-off transport system that has already been tested in the Philippines and which has helped reduce unequal development in the archipelago.

Finally, in comparison to previous ASEAN transport plans, the MPAC's innovation is to promote the development of intermodalism (ASEAN, 2011,

p. 41). The improvement of connectivity within ASEAN cannot be restricted to a single form of transport. The very definition of the concept of “connectivity” by a geographer specializing in networks is the property of a network to offer alternative routes between places, either by a spatial mesh or by developing several different means of transport along the same route, or by both. The MPAC therefore affirms the necessity of improving links between means of transport. For example, the port is considered as an essential component in the construction of land corridors. Ports are “gateways” enabling the connection to the exterior of flows of goods using land routes structured by hubs, which collect and distribute them along these corridors. So, since the 2000s, transport investments have diversified in comparison to the previous decade (Taillard, 2014): not only roads and bridges, but also local feeder roads and ports connect them to the main maritime routes. They also include railways, airports, and river navigation for industrial development and tourism. These investments also largely surpass the field of transport and extend to what may be termed “interconnectivity,” including interconnections of electrical and telecommunications networks, construction of gas and oil pipelines, and creation of cross-border free development zones.

### *Concentrating, Regionalizing, and Opening Up to the Outside World: Spatial Strategies of Infrastructure Development*

Apart from a sector-by-sector approach, the MPAC is also developing a spatial strategy for infrastructure establishment: concentrating flows of traffic by building economic corridors, regionalizing planning via the identification of each subregion’s specific demands and needs for infrastructures, and finally, opening up with a view to interconnecting ASEAN transport networks with those in neighboring Asian countries.

### *Economic Corridors: Not Just Transport Routes, but Also Tools for Connecting Industrial Centers to Peripheral Areas*

The building of economic corridors is not specific to Asia. In fact, the Asian Development Bank (ADB) and the MPAC have taken development tools developed by the United Nations and the World Bank during the 2000s and applied them to ASEAN. In 2002, the United Nations also launched the project entitled “Capacity-Building in Developing Interregional Land and Land-cum-Sea Transport Linkages,” whose aim is to identify, in each world region, the interregional transport links that would contribute to better integration and promote economic development. According to United Nations planners (ESCAP, 2009), transnational corridors are the new geographical space where urban development and competition strategies are deployed. It is not just a question of linking cities via more efficient communication routes, either by creating them or improving existing ones, but of developing a new type of multipolar transnational space, connecting existing and emerging urban regions (Bender, 2001). In theory, this does not concern megalopolises, but should create new external conditions that many large

and medium-sized cities can take advantage of, especially in interior, border regions or in outlying pioneering areas. The function of these corridors is to favor the setting up of new productive activities, thanks to improved accessibility, the development of energy infrastructures, and the capacity for processing local products.

This economic corridor strategy was also directly influenced by the ERIA (2010; Kimura, 2013) research institute (Economic Research Institute for ASEAN and East Asia). During the 2010 East Asia Summit, ERIA proposed a transport and logistic infrastructure development project for ASEAN. This plan took as its starting point the unequal development of ASEAN countries, including development within the countries themselves; it divided ASEAN economic areas into three groups, classifying them according to the level of economic development: the “Tier 1” areas are zones with a high concentration of industrial production (Singapore, Selangor, Bangkok, Hanoi, Jakarta), but whose excessively large conurbations and risks of overcrowding may pose a threat to their capacity for innovation; “Tier 2” areas are involved in the industrial process but their advantages, location, and population density could all be more thoroughly exploited (Phnom Penh, Vientiane, Medan, Yangon, Danang, Davao, Makassar); finally, the “Tier 3” areas are marginal to industrial development and still confined to the primary sector (Dawei, Poipet, and the mountainous regions of Cambodia, Laos, and Myanmar). Starting from the observation that the industrial process can be broken down into several stages, each independent of the others, and each with its own technoeconomic characteristics, ERIA emphasizes that it is perfectly possible to segment the industrial process according to the “comparative advantages” of each region. However, this mode of operation, which has already been used for years in East Asia in the automobile, electronics, textile, and agro-industrial sectors, could be extended by linking “Tier 1,” “Tier 2,” and “Tier 3” areas with potential for industrial development more systematically, by means of high-quality transport infrastructures. Also, in order to avoid an excessive concentration of investments along a single route, ERIA recommends a mesh of Southeast Asian territories via several intersecting corridors and an extension of the corridors to neighboring countries.

*Infrastructure Development Plans Designed for Subregional Areas*

To start with, the demarcation of economic corridors was not designed on a trans-ASEAN scale, but on that of three subregions (ASEAN, 2011, p. 29): the Greater Mekong Subregion (GMS) regroups the five countries of the Indochinese peninsula (Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam) and two provinces of southern China (Yunnan was joined by Guangxi in 2004), the Indonesia-Malaysia and Thailand Growth Triangle (IMT-GT), The Brunei Darussalam, Indonesia, Malaysia, and the Philippines-East ASEAN Growth Area (BIMP-EAGA). These subregional economic zones (SREZs), created in the 1990s under the names of growth triangles or polygons, originally aimed to promote cooperation and regional synergy by



exploiting the complementary features of the groups of territories. These SREZs, many of which existed only on paper, attracted attention again with the ADB's launch of its development strategy for transnational transport routes, later renamed "economic corridors" (Fau, 2014a).

It is in continental areas, in the GMS, that this new model of economic development has been the most extensive (ADB, 1999; Taillard, 2014). The ADB's aim was, originally, to rebuild roads in order to favor the resumption of economic relations between countries in the peninsula, thus abolishing the isolation caused by the colonial period and the Cold War in favor of new regional integration. During the period 1992–2002, the ADB supported the creation of five economic corridors, both meridian and transversal; those providing the greatest structure, and the most ambitious, were the North-South corridor running from Kunming, in Yunnan, to Bangkok, in Thailand, after following the Chao Phraya basin and crossing four countries (China, Myanmar, Laos, and Thailand); and the East-West corridor linking both seaboard of the peninsula, and Myanmar with Thailand, Laos, and Viet Nam. It should also be noted that the southern corridor linking the capitals of Bangkok, Phnom Penh, and Ho Chi Minh City should play an increasingly important role, especially since an extension is planned to Tavoy in Burma. In the second stage (2002–2014), the network of corridors has become more varied and complex with the inclusion in 2004 of another Chinese province, Guangxi, and that of rail infrastructure. There is now an "increasing interface between GMS and ASEAN transport connectivity initiatives. For instance, some of the sections of the AHN coincide or interface with the road projects in the GMS Transport Sector Strategy (2006–2015), particularly in the CLMV countries (e.g., Siem Reap-Stung Treng in Cambodia, Hanoi Haiphong in Viet Nam). Furthermore, two GMS railway projects in Cambodia and Viet Nam form part of the SKRL" (ASEAN, 2011, p. 30).

In insular Southeast Asia, the ADB promotes the specific development of maritime corridors as well as projects for improving land infrastructure. The ADB (2007) has also included in its new development plan for IMT-GT for the period 2007–2011 the creation of three transversal economic corridors, each one linking a pair or a trio of ports: Songkhla-Penang-Medan, Melaka-Dumai, and Ranong-Phuket-Aceh. In order to encourage links between these major ports, priority has been given to the improvement of their infrastructures such as fast ferries and roll-on roll-off (RO-RO) ships. For example, the BIMP-EAGA plan for the period 2012–2016 (ADB, 2012) defines as one of its priorities the creation of an RO-RO network between ports designated as having priority in the MPAC: Glan-Tahuma, Zamboangan-Bongao, Tawi-Tawi, and Bongao-Sandakan. It also introduces the creation of two economic corridors: the West Borneo Economic Corridor (WBEC), which is, in fact, divided into three transnational land transport routes, and the Greater Sulu-Sulawesi Corridor (GSSC), which is, on the contrary, almost exclusively a maritime corridor linking North Sulawesi in Indonesia, Sabah in Malaysia, and Mindanao and Palawan in the Philippines.

*Improving Connectivity with Neighboring Non-ASEAN Countries*

Even though the main aim of the MPAC is to improve connectivity within ASEAN member states, there is also interest in improving connectivity with neighboring countries, especially China, India, and East Asian countries (Kimura and Umezaki, 2011). The objective is to affirm ASEAN's "centrality," that is, the region's unity in the face of the economic power of its neighbors. ASEAN wishes to use its position of intersection between Asian infrastructures to neutralize the influence of its powerful neighbors by counterbalancing them. Thus, in order to reduce the growing influence of China in connectivity plans for Southeast Asia, the MPAC (ASEAN, 2011, p. 41) supports the Mekong India Economic Corridor (MIETC) initiative. This plan proposes to build two routes: one sea route, linking Bangkok to Chennai in India, via Dawei in Burma; and one land route, linking Moreh, in the north of India, to Mae Sot in Thailand, via Bagan in Burma. Although the sea route is a legitimate part of the MPAC project since it is an extension of the Southern Economic Corridor proposed by the ADB for the GMS, the land element is more of an answer to the Indian government's worries, since it aims at disclosing northeast India.

## **Is Continental Southeast Asia Receiving too Much Attention, at the Expense of Maritime Southeast Asia?**

Although the division into subregional zones aimed to make it easier to determine priorities in needs for infrastructure, it may also have contributed to a divide in ASEAN between continental and maritime areas. Several elements support this hypothesis: unequal involvement of the ADB in the development of infrastructures between maritime and continental areas and the growing presence of China in building and financing GMS infrastructures. These two points emphasize that there is at present a real struggle between Asian powers to control the development of transport infrastructures within ASEAN.

*Unequal Involvement of the ADB between Maritime and Continental Areas*

The Asian Development Bank played an unequal role in the implementation of the integration process in the GMS and in the IMT-GT; whereas it is central in the first case, it is highly marginal in the second. Since 1992, the ADB has promoted and accompanied the creation of the GMS in order to favor increased commercial exchanges in the peninsula. Its involvement and commitment have played a central role in making this initiative credible both to the countries involved and to financial backers. On the contrary, the ADB was a late arrival to the IMT-GT project, and it only became involved in 2007, whereas this cooperation zone was created in 1993 following a trilateral agreement among Indonesia, Malaysia, and Thailand.

Also, the ADB's plans to build economic corridors linking both sides of the Malacca Straits seem to be a clumsy and unsuitable transposition of tools

tested in the GMS. Studies conducted by the ADB, but also by researchers such as Eswaran (2008) and Banomyong (2006) have shown that maritime corridors always perform less well than land corridors. They also revealed that the weakest link in the economic corridors of IMT-GT were transversal maritime corridors linking the two sides of the Straits of Malacca. However, this relatively low performance of maritime corridors, far from revealing the absence of traffic between the two shores, shows in fact that it is not very appropriate to resort to “economic corridors” to evaluate the quality of connectivity in the Malacca Straits. First, as stressed by Ruth Banomyong (2006), the corridors linking Malaysia and Sumatra are not multimodal transport corridors but more “traditional or archaic corridors” and the bilateral maritime trade between the two neighboring countries is being handled by nonconventional vessels (barter trade movement, fishing vessels but also illegal vessels). Furthermore, the fluid and relatively unconstrained nature of the maritime zone leads to a spatial organization in which the twinned ports are not only connected with each other, they also multiply the exchanges across the straits with ports located farther down in the port hierarchy, in a network that is more complex than a simple “hub and feeder” relationship (Fau, 2014b). In this context, a study on the connectivity of maritime corridors should take this diversity of sea traffic into account.

Finally, although the ADB has been responsible for both the GMS and growth triangles in the Malacca Straits, it is surprising to note that the infrastructure connection between these two transnational projects has never really been considered. Nevertheless, the two projects could be in competition with each other. For example, the projected oil and gas pipelines linking the port of Kyaukphyu in Myanmar with Kunming in China are directly intended to short-circuit the hitherto unavoidable passage via the Malacca Straits (Kimura and Umezaki, 2011).

Thus, the ADB’s decisions do seem to systematically favor the development of infrastructures in the GMS. Without directly penalizing maritime Southeast Asia, they do not promote either improved internal connectivity or improved links with continental Southeast Asia.

### *The Weight of China in the Financing of GMS Infrastructures: A Divisive Factor within ASEAN?*

According to Geoff Wade (2010), the development of land transport networks contributes more to improving connectivity between continental Southeast Asia and China than to intra-ASEAN connectivity. The very significant tropism exerted by the southern provinces of China on the countries of the GMS region may even eventually lead to a division between maritime and continental Southeast Asia. If we consider the recent evolution of railway projects proposed by China in the GMS, we can note that they bear no relation to those proposed by the MPAC. Its projected high-speed line between Kunming and Bangkok, unveiled in 2010, does not run along the east and west coasts of the Peninsula: it crosses it in its central part,

benefiting Laos and Thailand, but disadvantaging Viet Nam and Cambodia (Taillard, 2014). Also, the building of two railway lines, one in the west toward Burma and the other in the east toward Viet Nam, is aimed less at improving intra-Asian connectivity than connecting neighboring countries to the Chinese network.

As far as the Laotian government is concerned, it will certainly have to choose between the Chinese project, a 421-kilometer-long high-speed link between Vientiane and Kunming, and the project promoted by the ADB as part of the SKRL: a 220-kilometer-long line linking Laos to the Vietnamese border. To consider carrying out both projects at the same time seems unrealistic in view of the extremely high construction costs in a country that does not have even a basic road and railway system: US\$7 billion for the Chinese project and US\$5 billion for the ADB project, making a total greater than Laos's annual GNP. However, the Laotian government has already signed a contract with a Malaysian company (Giant Consolidated) to build its section of the SKRL, and taken out a loan from Peking via the Exim Bank for the link between Vientiane and the Chinese border. Laos's ambition to become a regional transport node is not risk free, and could even mortgage its future development. Since the Chinese railway company, which was supposed to finance 70 percent of the project, has finally withdrawn, the financial risk is now the sole responsibility of the Laotian government. However, "the loan is guaranteed, in addition to the future income from the railway and the assets linked to it, by Laotian royalties derived from joint Lao-Chinese mining ventures (exploiting gold, copper, potassium and in future bauxite and iron)" (Taillard, 2014, p. 42). In these conditions, the IMF and the ADB drew the attention of the Laotian government to the risks of such an investment, which would burden most of its mining resources with debt for 38 years until the debt was repaid. This awkward situation for Laos directly emphasizes how little ASEAN invests in infrastructure: the ASEAN Infrastructure Fund (AIF), created by ASEAN with the active support of the ADB in 2002, does not allow at this stage for any funding in the rail sector, with the energy sector taking priority.

But is it really possible to differentiate between continental Southeast Asia, said to be in China's orbit, and a more independent maritime Southeast Asia? Until very recently, Chinese infrastructure projects were concentrated on the GMS; however, in 2013, during an official visit to Indonesia, and during the sixteenth ASEAN+China summit in Brunei, China launched the "Maritime Silk Road" (MSR), a term referring to the fifteenth-century maritime expeditions led by Admiral Zheng He in Southeast Asia and the Indian Ocean, as far as the Persian Gulf. The advantage of this term is that it has a peaceful connotation, since these voyages of discovery did not lead to overseas expansion but to the development of trade. The promised aim of the MSR is thus to strengthen maritime cooperation between China and ASEAN countries. The China-ASEAN Maritime Cooperation Fund should enable the financing of port infrastructure construction projects, but also research programs concerning the maritime environment and fishing, and

collaborative security projects in the South China Sea and the Malacca Straits. There are still few concrete projects but the MSR should develop the specificity of maritime links between China and insular Southeast Asia.

*Development of Connectivity in Southeast Asia: Competition between the Asian Powers*

The Chinese government is not the only one wanting to control the development of transport routes in Southeast Asia. The GMS corridor linkage has whetted the appetite of major peninsular and Asian powers to assume control or leadership of these transnational integration dynamics (Taillard, 2014). The rivalry between Thailand and Viet Nam for the control of the peninsula is thus revealed by investment and infrastructure in neighboring countries in the context of competitive subregional cooperation: the Irrawaddy, Chao Phraya and Mekong Economic Strategy (ACMES) and Cambodia-Lao PDR-Viet Nam Development Triangle show the rivalry between Thailand and Viet Nam to impose their political and economic leadership on Lao PDR and Cambodia. Similarly, the integration of Thailand and Myanmar into the Mekong-Ganges program enables their respective governments to counterbalance the power of China. Furthermore, Japan is the largest aid donor for CLMV countries. Its official Development Assistance (ODA) supports a plethora of infrastructure developments throughout the region. Japan is also the largest provider of funds for the GMS program. In the GMS, there is growing competition between Chinese hegemony over the meridian corridors and Japan's dominance over transversal corridors: leaving China an open field on the meridian North-South corridor, Japan had supported the Cambodia-Laos-Viet Nam Triangle at a very early stage. It has invested mainly in transversal corridors, the East-West and Southern ones. This can also be seen in the rivalry among Singapore, Malaysia, and Indonesia to capture business from the flow of container ships and container trade in the Straits of Malacca (Fau, 2014b). The competition among ports along the Straits to attract shipping lines and cargo is rising and this prevents the possibility of developing port complementarities. The straits are seen as an international transport route rather than an internal sea, which is a serious handicap to the development of connectivity between the two shores. Due to this fact, unlike intrastraits traffic, where maritime connectivity is quite slight, external connectivity, that is, connectivity with the international market, is very good.

## Which Countries Have Benefited Most?

In order to estimate the economic impact of infrastructures—whether already built or planned—ERIA (2010) created in 2007 a Geographical Simulation Model (GSM) taking into account 956 units in 13 countries. The GSM measures, corridor by corridor, with the possibility of combining several corridors, this impact “in percentage of incremental gross regional products,

cumulative over ten years after the improvement of logistics links, vis-à-vis the benchmark case.” Once all the corridors are taken into account, the GSM shows that Myanmar is the greatest beneficiary (145.8 percent), followed by Viet Nam (114.6 percent), the Lao PDR (99.3 percent), Thailand (98.6 percent), and Cambodia (97.9 percent). The countries of maritime Southeast Asia show lesser gains, especially the three rated last: Indonesia (85 percent), the Philippines (73.4 percent), Malaysia (64.4 percent), Singapore (29.2 percent), and Brunei (2.7 percent). These results show that, with the exception of Thailand, it is the low-income countries that should benefit and that the corridors should reduce inequalities in growth within ASEAN.

Although these projections provide us with elements enabling us to measure the impact of corridors, they take it for granted that the ASEAN connectivity plan is accepted with equal enthusiasm throughout ASEAN countries. However, as Bambang Susantono (2013, p. 63) very rightly points out, citing the specific case of Indonesia: “it is natural for regional connectivity to be perceived with skepticism from several countries because of the perceived threats of a potential resource drain. Regional connectivity may come with positive and negative implication. (...) It is possible that the larger economies will crowd out the smaller economies.” The MPAC is not accepted in the same way everywhere, and while some governments see it as a new opportunity, others think of it as a real threat. Beyond the superficial consensus on the necessity of improving connectivity within ASEAN, the degree of involvement of the different governments can be measured by analyzing the extent to which the planning policies of ASEAN countries have been adapted to the MPAC. According to case studies performed by researchers from the “Transnational Dynamics in Southeast Asia, the Greater Mekong Subregion and Malacca Straits Economic Corridors” research (Fau, Khonthapane, Taillard, 2014), it is possible to distinguish between three types of ASEAN countries.

Indonesia is representative of the first type: countries favoring the improvement of internal, rather than regional connectivity. It is thus symptomatic that in the Master Plan for Acceleration and Expansion of Indonesia Economic Development, 2011–2015 (Mp3ei), the Indonesian government introduced economic corridor projects without really taking into account those proposed by the ADB (Charras, 2014). For example, in the Indonesian plan there is no mention of the two transversal routes proposed by the ADB to link the two sides of the Straits of Malacca in the frame of IMT-GT. In Sumatra, the strategy aims primarily at national integration. Thus, the flagship project will entail building a bridge linking Java to Sumatra across the Sunda Strait. In fact, as mentioned by M. Charras (2014, p. 235), there is little prospect for the development of connectivity between the eastern part of Sumatra and Malaysia as long as Sumatra is not physically linked to Java.

The second type of country, represented by Myanmar, is the exact opposite of the first: it favors the development of regional integration infrastructures without taking account of the spatial logic involved in developing its

own territory. Burma's port development policy is very significant in this regard. In order to meet regional demand for ASEAN access to the Indian Ocean, several building projects for deep-water ports are under consideration: Sittwe, Kyaukpyu, and Dawei (Htun et al., 2011; Vignat, 2014). In all three cases, it is a case of exploiting Burma's position as a veritable land bridge between ASEAN, China, and India, thus dispensing with the obligation of passing through the Malacca Straits. However, the three projected deep-water ports are very poorly connected to Yangon and Mandalay, where infrastructures are defective in many sections (Min and Toshihiro, 2012). The northwestern corridor (Kunming-Mandalay-Yangon) is also more significant in the context of China's development policy than that of Myanmar: it enables China to secure its access to the Indian Ocean and vary its energy supply routes, and only the Mandalay-Yangon section, which is the backbone of the territory controlled by the Burmese authorities, has any real meaning for Burmese territorial organization still dominated by armed conflicts in outlying areas. However, it should be noted that this is more or less a unique case and is mainly the result of the Burmese government's desire to improve international legitimacy, and get round the sanctions imposed by the West in 1997.

The third type, represented by two extreme cases, Laos and Thailand, is that of countries that take advantage of this improvement in regional connectivity to strengthen their economic weight. The inclusion of Laos in the GMS is a veritable strategic reversal: for a long time a land-locked buffer state, separating potential enemies during the Cold War period, its position is now that of an intersection on the scale of the peninsula. Laos is the country that has most closely taken into account the proposals of the ADB in its national plan, partly on account of its limited financial resources, but especially because three economic corridors cross its territory. The objective shared by the ADB and the Laotian government is to extract Laos from its enclaved position by placing it at the center of the subregional transport network (Pholsena, 2014.). Similarly, since 2001, the Thai government is guided by its ambition to make this country a logistic hub for mainland Southeast Asia and South China. Located in the center of the Greater Mekong Subregion, Thailand is improving its connectivity with Myanmar, Laos, and Cambodia by directly cofunding with other financial backers (China or the ADB) the road sections of economic corridors crossing their territories (Banomyong et al., 2011). It is also the main beneficiary of the Kunming-Bangkok meridian route, but also of the extension of the GMS corridors to India.

## Which Local Areas Have Benefited Most?

Does Southeast Asia's strategy of creating a web of transport routes help to strengthen already existing hubs, or, on the contrary, does it favor the

emergence of new ones? In the context of economic corridor creation, the ABD insists on the major role of two types of nodes structuring the internal working of the corridors: corridor heads on the one hand, and border cities on the other.

*Corridor Heads: Strengthening of Old Centers and Emergence of New Ones*

Regarding corridor heads, it is interesting to note that they are not only well-established centers but also emerging ones. The North-South corridor heads (Kunming, Bangkok, and Hanoi) and the southern ones (Bangkok and Hô Chin Minh) are metropolises of several million inhabitants, of regional importance, long integrated into trade networks. Formerly isolated from each other, these metropolises are increasingly linked together, thus favoring a synergic development. Their inclusion in the GMS contributes directly to strengthening their regional weight since their new functions include favoring links, not only between the different corridors, but also between continental and maritime transport flows. Ch. Taillard (2014) has estimated their new respective weights by identifying the number of economic corridors controlled by each of these metropolises. Bangkok and Kunming, at the intersection of at least three corridors, are well ahead of the others. The East-West corridor, on the other hand, favors the emergence of new centers, designating as corridor heads cities of lesser importance on the regional scale, such as Moulmein or Danang. The city of Da Nang, located in the center of Viet Nam, was long curbed in its economic development by the country's double metropolization around the northern and southern capitals, Hanoi and Hô Chi Minh-City. Its new regional role controlling the East-West corridor and the improvement of links with Bangkok have enabled it to acquire international functions hitherto monopolized by the other two Vietnamese metropolises.

Among these new hubs, we should mention the emergence of new ports. The development of land infrastructures in the Greater Mekong Subregion should eventually exert a direct influence on the reorganization of port facilities in Southeast Asia. Two of the economic corridors provide a link between the two seaboard of the peninsula: the first, the East-West corridor provides a 1,450-kilometer-long link between the Burmese port of Moulmein and the Laotian port of Danang, after crossing Myanmar, Thailand, Viet Nam, and Laos; the second, further south, passing through the peninsula's three southern capitals (Bangkok, Phnom Penh, and Hô Chi Minh-City) will be extended in the future, with Thai funding, to the west, as far as the Andaman Sea and Dawei (Tavoy). Also, the Kunming-Mandalay-Rangoon corridor, one of whose branches turns off to Sittwe, enables southern China to access a new maritime outlet. In this context, the western seaboard of the peninsula has a new role to play by capturing the flow of container transport normally transiting via the Malacca Straits (Htun et al., 2011; Banomyong et al., 2011).



### *Border Zones*

The originality of the ADB and MPAC programs is, however, to promote the integration of corridors via the valorization of border zones, in spite of their often marginal positions on a national scale. The main points of this strategy are: the multilateral Cross Border Transport Agreement (CBTA) and the planning and funding of free zones or special economic zones in border areas, as well as direct financial support for improving infrastructure in border cities located on corridors.

#### *Implementation of the CBTA: An Advantage or a Handicap for Border Areas?*

After the Asian crisis, the ADB made it imperative to link the reconstruction of transport infrastructure to the signing of specific free trade agreements, corridor by corridor, anticipating the global ASEAN Free Trade Agreement (AFTA) that will be applied in 2015 (Taillard, 2014). The CBTA, finalized in 2007 and supposed to become effective in 2010, seeks to standardize traffic and customs procedure among all countries and initiate single-stop inspections at GMS border crossing to reduce transport time (Ishida, 2013b). The CBTA therefore aims to facilitate border crossings and reduce transshipment costs. However, Ishida indicates that rules and regulations such as the CBTA are in place but have not been completely implemented. This may require a lot of effort in terms of implementation as some countries still cannot fulfill their contractual obligations. Signing or even ratifying an international agreement does not mean immediate implementation.

Apart from this observation, we may also wonder whether the generalized implementation of the CBTA may not in the long run penalize border zones. A freer flow of transnational traffic may change these areas into transit areas and activities directly linked to border trade may become obsolete: truck transshipment centers, warehouses including bonded warehouses, branches of logistics firms, or duty-free shops. Also, as observed by M. Ishida (2013b), when the integration of GMS countries becomes effective, industries will be more likely to be set up within neighboring countries, close to their major national centers, thereby deserting the border areas that are often less competitive and less well equipped in infrastructure.

#### *Unequal Impact of SEZ on Borders*

In the conclusion to his book, Masami Ishida (2013a, pp. 229–332) rightly emphasizes that the policies of middle-income countries/regions and Cambodia, Laos, and Myanmar are completely different with regard to their objectives in developing border areas. Although the former group aims to stimulate the growth of peripheral areas in order to reduce economic inequalities within the countries concerned, the latter group aims mainly to take advantage of the proximity of their rich neighbors to favor national economic growth and reduce the poverty level. Consequently, the development models of border areas are completely different.

On the Cambodian and Laotian borders, the two dominant forms of economic development are casinos, which proliferate since they are banned on the opposite side of the border and Special Economic Zones (SEZ), which try to attract foreign investors by offering exemptions from taxes and social charges without equivalent in Asia (Bafoil, 2013): a very low minimum wage (\$43 per month in Laos and \$62 in Cambodia in 2012), numerous tax exemptions for firms or extremely long leases (99 years for developers of these zones in Cambodia). In both cases, these zones operate more as enclaves than as growth center, and, far from favoring a spillover of growth, they are completely disconnected from their regional environment. In most cases, there is no connection between infrastructures built in these zones and those in the region. Thus, all the SEZs in Poipet, on the Cambodia/Thailand border, get their electricity supply from the Thai side, export their products through the port of Laem Chabang rather than that of Sihanoukville, and possess only a limited infrastructure network, since the roads and the border zone are financed by the only private developer of the SEZ and not the Cambodian government (Shiraishi, 2013). As for the casinos, they mainly fuel an illicit cross-border economy. The city of “Golden Boten,” located in the “golden triangle” area on the China/Laos border, is thus a Chinese enclave on Laotian territory completely dominated by a Chinese drug baron Ling Mingxian. It is not only a favorite tourist destination for the Chinese but also a major center for money-laundering, prostitution, and drug trafficking (Tan, 2014; Swe and Chambers, 2011, p. 85). SEZ in Cambodia and Laos have certainly become new international trading nodes, but this has not led to local development.

On the other hand, the Thai government uses the GMS as an extra tool for developing its outlying provinces and decongesting the Bangkok metropolitan area (Swe and Chambers, 2001; Tsuneshi, 2008; Lainé, 2014). It favors the creation of twin border cities, investing massively in cross-border transport infrastructure: a cross-border bridge like the “friendship bridge” between Nong Khai in Thailand and Thanaleng near Vientiane, the capital of Laos, or cross-border bus lines, both aiming to facilitate border crossing. It is also investing directly in the creation and development of SEZ. However, in spite of tax exemptions and preferential loans for firms choosing to decentralize their activities more than 150 kilometers from Bangkok, the effect of this border industrialization policy is still limited: the Chiang Rai SEZ, the country’s first, or the Mukdahan logistics center and industrial zone are having difficulty taking off. The only exception is the Mae Sot SEZ on the Burmese border: it attracts industries on account of the low cost of Burmese labor, which represents the majority of the workforce, and its easy access to Bangkok.

#### *Differential Benefits for Different Social Groups*

A road undeniably provides the possibility for local populations to integrate a market economy, although this possibility does not always become a reality

and can also produce differential benefits for different social groups. In her study of the social differences brought in northern Laos by the construction of National Road 3, a part of the Northern Economic Corridor, V. Bouté (2014) shows that not all populations are able to benefit from the road since pressure on land is increasing and a large sum is needed for initial investment. Only traders and the local urban elite, already well established, have been able to buy rubber plantations and thus benefit from the impact of the North-South economic corridor crossing the province of Luang Namtha, whereas new migrants, farmers from the highlands, have become impoverished. The work of Thein Swe and Paul Chambers (2011) shows that the road has led to the emergence of new social, economic, and environmental problems (illegal trade in wood and animals, spread of HIV/Aids and prostitution), as well as a mass displacement of Chinese to neighboring countries that is an increasing worry to local populations. They quote the words of Preecha Kamolbutr, the governor of Chiang Rai province: “Chinese businessmen come in with their own capital, their own workers and their own construction materials. I fear that in the future the Lao people might feel that they’ve been exploited. They will feel they’ve been invaded” (p. 91).

In northern Laos, the opening of the border and the road favored the installation of foreign concessions, mostly Chinese, investing mainly in the agricultural sector (rubber, maize, and tea). These plantations have not only replaced dry agriculture or cultivation on burnt land but may lead to a change in the region’s socioeconomic environment. Laotian farmers provide land and labor, and Chinese firm capital, technology, and market access. Danielle Tan (2014), however, shows that this system of “contract farming” is changing to that of a “concession model”: since Laotian labor is not sufficient, it is beginning to be replaced by workers from China. By thus conceding the right to use their land or by being dispossessed by foreign investors, Laotian farmers risk being excluded from any participation in the rural development policy of northern Laos; they may continue to own the rights to their land, but they may no longer take decisions regarding its use. Following the massive influx of Chinese migrants, Laotian traders have also lost their role of middlemen: they have been evicted from the sugar-cane trading network and also goods transport networks, and Chinese markets are beginning to supplant Laotian ones. The North-South economic corridor has certainly favored the agricultural development of northern Laos, but this is taking place, at best, with small benefit to the local population and, at worst, to their detriment.

The perception of the road by the local population is also an important, but often neglected factor for understanding these individual strategies. It leads to the migration of peasants from the highlands to the lowlands against all economic reason since the road is a symbol of modernity and development. V. Bouté (2014) describes how villagers have moved closer to roads while enclaved villages are gradually disappearing. This strong rural mobility, brought about both by coercive government measures and by the

attractiveness of new habitats situated along the roads, has profoundly changed the social composition of plains villages. The perception of the road may also be completely out of phase with that of the ADB and government planners, for whom the road is always associated with the idea of progress. For the population of the Sepon district in Savannakhet province in southern Laos, V. Pholsena (2014) shows that Road 9, damaged by years of conflict, is above all associated with memories of past barbarity and atrocities. Its rehabilitation is seen by the local population as a means of reconstruction and reconnection with civilization, and the road has become the symbol of a possible rebirth. Multiple factors also have to be taken into account when analyzing the impact of road construction on local society since “there is more to roads than social engineering projects, economic growth or security control” (Pholsena, 2014, p. 394).

## Conclusion

This chapter shows that there is no mechanical effect between the growth of transport flow and economic development, and this is true at all levels. A corridor may facilitate exchanges but if there are no goods to export and no market, it remains a mere transport route, a simple axial road. Of course, without transport there can be no exchange of goods, but exchanges also, and sometimes mainly, depend on many other factors: the manufacturing capacity of different areas, production costs, tariff and legal barriers, specific demand, and so on. Infrastructure building just provides new opportunities, but the reality of its economic impact depends on many factors: the strategies of international organizations such as the ADB, policies implemented by national governments, or capacity of adaptation of local populations. The success of certain spatial strategies, for example, economic corridors in mainland Southeast Asia or SEZ in Thailand, cannot be duplicated with similar success in other territories: corridors are not suited to the operation of maritime areas, and SEZ in Cambodia and Laos are merely enclaves unable to bring growth to their immediate environment.

It should also be emphasized that building new infrastructures may even play a negative role in territorial change. Enclosure is a protection from competition, and therefore, if accessibility improves, competition increases. The Indonesian government understands this: its reticence concerning greater involvement in the ASEAN connectivity plan is a means of protecting a still fragile economy. On the contrary, the opening of Laos to transnational infrastructures has certainly led to the opening up of this long-isolated territory, and increased integration into the world economy, but it has also directly contributed to an even greater marginalization of part of the Laotian population. According to the scale used, national or local, Laos is a winner or a loser of the development corridors. Each government has the task of anticipating the impact of building new transnational infrastructures by identifying the sectors and areas that may benefit or lose out.

At the very least, it is important to note that the term of “connectivity” has the advantage, for political actors, of erasing an important question, that of taking control of the integration process once interconnection between national networks has been achieved. However, infrastructures, corridors, and the regionalization networks that they create are, like territories, stakes of power: between China and Japan, Thailand and Viet Nam, and even between mainland and maritime Southeast Asia, competing for importance within ASEAN. The term “connectivity” used in the MPAC does not seem to take into account the increased competition between territories either: the plan for improving sea links between the ports of maritime Southeast Asia is certainly a means of promoting better regional integration but it takes little account of the major role of the shipping companies, which alone decide whether or not to use a port, and the growing competition between ASEAN ports to capture international traffic. Conciliating internal connectivity within ASEAN and external connectivity is not lacking in contradictions and difficulties.

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## Within-Country Spatial Inequality and Local Governance Capacity: The Case of Indonesia

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With an area of nearly two million square kilometers, a population of 250 million, and a GDP of US\$900 billion (2013), Indonesia, geographically and economically, dominates from far the countries of the Association of Southeast Nations (ASEAN). As one of the founding members, the country has been a major player in the organization since its creation in 1967. It remained so until the 1997 Asian financial crisis, which led to the downfall of President Suharto in May 1998 after 32 years in power and a period of economic, political, and social crisis in Indonesia. Its recovery from the crisis, its political and social stability, and moreover its improving economic performance allowed Indonesia to regain an international attraction and to benefit again from a large media coverage. Nevertheless, some internal weaknesses are obstacles for the country to achieve real leadership in Southeast Asia and beyond: among them, spatial and social inequalities and the difficulty national and local governance has to address them. Inequality is a complex matter, linked to a number of national and local dynamics, as well as, increasingly, to international ones. This chapter questions the contribution of local governance to inequality and the associated risks.

The first part of this chapter shows that spatial imbalance, often presented as new, is actually an old concern and was one of the factors in the country's 1996–1998 crisis. The second part focuses on inequality today through some indicators at local level. It also shows spatial and social inequality in Jakarta and Bali, often too quickly identified as “rich” provinces. The third part highlights some of the main factors explaining the weak capacity of local governments to tackle poverty and inequality. The fourth and last part puts forward the challenge of enabling good local governance for social cohesion. Using case studies, it also provides some good governance examples.



## Spatial Inequality: An Old Issue

Numerous articles, from academics and the media, have pointed out the amazing socioeconomic progress Indonesia has experienced in recent history. In 1984, 63 percent of Indonesians lived on less than PPP US\$1.25 per day, and 88 percent on less than PPP US\$2. By 2011, these rates had dropped to 16 percent and 43 percent, respectively. Between 1984 and 2013, gross national income per capita (GNI, Atlas method) increased over sixfold, from US\$560 to US\$3,580. The country's annual economic growth has been above 5.5 percent for the past ten years, and even above 6 percent in 2007–2008 and between 2010 and 2012.<sup>1</sup> The figures reflect indisputable progress in absolute terms, especially compared to the state of the nation back in the troubled years (1996–2002) with the economic, political, and social crisis in the aftermath of the 1997 Asian financial crisis. The progress is also remarkable considering the country's geographical configuration (over 17,000 islands) and population size that do not ease the implementation of socioeconomic policies. Administratively, the country is divided into 34 provinces, or Special Regions,<sup>2</sup> with the status of a province led by a governor, that are themselves divided into over 500 districts<sup>3</sup> (*kabupaten*) and municipalities (*kota*) led respectively by a regent (*bupati*) or a mayor (*wali kota*). This administrative level is divided into subdistricts (*kecamatan*), and into the smaller unit of village (*desa*). The implementation of decentralization in 2001, as well as democratic gains, and the recent relative political and social stability were highlighted as parts of the new face of “one of the largest democracies in the world,” as Indonesia has been promoted. For the first time since 1955, Indonesians went to the polls for the general parliamentary election in 1999 and the first direct presidential election in 2004, and for hundreds of direct local elections from 2005. An increasing number of press articles, mainly international, were published, especially after 2010, focusing on the rise of the middle class, on Indonesia's readiness to join BRICS, and on foreign investment potential: the country became, or became once more, the place to be for investors.<sup>4</sup> This was in sharp contrast to some scholarly studies carried out since decentralization in 2001 showing major dysfunction at local level, from failures in service delivery to widespread corruption and the domination of predatory activities and elites. This trend was also often reported by Indonesian newspapers such as the *Jakarta Globe* and the *Jakarta Post* in daily articles about corruption cases. Moreover, from 2012 to 2014, there were growing warnings in the media about the rise of inequality and the associated risk of social unrest.<sup>5</sup> The warnings were based on two types of sources: media reports about billionaires and their share of global or national wealth (*Forbes* 2014, and the *Jakarta Globe* 2013), and international organizations and NGO reports (United Nations, FMI, the World Bank, Oxfam, and others). In 2011, in Indonesia, the richest 20 percent of households represented 44 percent of the national consumption expenditure, and the poorest 40 percent, just 19 percent of expenditure.<sup>6</sup>

It is worth remembering that the issue of inequality in Indonesia is not a new one. The source of the 1996–1998 crisis was obviously in the wider financial crisis itself. At that time, the rupiah lost more than 85 percent of its value against the US dollar, GDP contracted by 13 percent, and inflation reached nearly 80 percent. As measured against the national poverty line, the number of poor increased by 43 percent during this period, from 34.5 million to 49.5 million (Ilmma and Wai-Poi, 2014, p. 105). But the origins of the crisis can also be found in the many symptoms of state failure: the major problem was the growing spatial and social inequality that Suharto's authoritarian New Order regime, with its prime directive "Development" (*Pembangunan*) and the state political violence allowed to mask for over 30 years. With the crisis, the regional imbalance between a rich center (Java and Bali) or the western part of Indonesia (Sumatra, Java, Bali), and the poor peripheral provinces, especially the eastern part of the archipelago, but also within provinces, districts, and cities, was finally and violently expressed. In short, spatial inequalities, partly inherited from colonial rule, were deepened by the fast pace of national economic development.<sup>7</sup> Some of the major effects of Indonesia's rapid development have been the looting of natural resources for the benefit of the center, Java, associated with widespread corruption, particularly by the Suharto clan itself. It is well documented that part of the Suharto fortune was amassed from the extension of palm oil perimeters, embezzling money from international aid, for reforestation, for example (Barr et al., 2010; Cayrac-Blanchard et al., 1993; Charras, 2005). Estimates showed that during the 30 years of the New Order, 30 percent of US\$30 billion in foreign aid disappeared into private pockets (Schulte Nordholt and Klinken, 2007, p. 7). Another big issue was the political and social pressure put on cultural diversity and on "ethnicity" in the name of national unity and economic development (Michaud and Picard, 2001; Picard and Woods, 1997). These two characteristics gave way to a shift from "cultural discourse" in favor of recognizing ethnic and linguistic diversity, to a more political one in favor of local power, and to the rise of ethnic and religious intolerance. With Suharto's withdrawal in May 1998, the dominant feeling was rather than there being "Unity in Diversity" (*Binneka Tunggal Ika*), Suharto's New Order had exacerbated social and cultural differences, between *Pribumi* (native Indonesians) and "Chinese"<sup>8</sup> notably, but also between transmigrants and local populations, between rich and poor, "civilized" versus "primitive," nationalist versus secessionist, Muslim versus Christian, and so on.<sup>9</sup> Social unrest and large-scale destruction in Jakarta and in other big cities erupted between 1996 and 1998. It was followed by serious ethnic conflict from 1999 to 2001 in West Kalimantan and Maluku, not to mention recurrent secessionist movements in Aceh and Papua, and the Bali bombing on October 12, 2002. On the top of that, following the referendum on self-determination carried out in East Timor in August 1999, the country's twenty-seventh province was heading toward independence after 24 years of Indonesian annexation and

harsh conflict. All these events explain the years of high instability, if not the risk of implosion,<sup>10</sup> that Indonesia faced between 1996–1998 and the end of 2002. Andrée Feillard and Rémy Madinier (2006, pp. 54, 83) have shown how this context of progressive degradation of the social fabric and the brutal economic and political crisis from 1996 created a hotbed for Islamic radicalism. And how, paradoxically, *Reformasi*, the national movement in favor of reforms in the aftermath of Suharto’s fall, fostered a land for both militia multiplication and for radical Islam. Again, keeping this period in mind allows us to assess better the amazing transformation the country has experienced since then. But, as various scholars and observers have highlighted, the country is still far from being free of the problems caused by spatial and social inequality.

### Inequality Today: A Reality for Both “Poor” and “Rich” Provinces

The Human Development Report (2014) highlights the progress that Indonesia has achieved at the national level, for life expectancy (70.8 in 2013, against 58.6 in 1980 and 65.5 in 1995), and for mean years of schooling (7.5 in 2013 against 3.1 in 1980), for example. However, this vast archipelago offers such contrasts that only analysis at the provincial, if not at the district, level can give a more accurate picture.

The statistics show that decentralization did not have a real impact on addressing regional imbalance. As Hill and Vidyattama (2014, pp. 71–5) pointed out, if we consider the island scale, not surprisingly, the group Java-Bali (excluding Jakarta) and Jakarta, representing 59.3 percent of the total GRP in 2010, with respectively 43 percent and 16.3 percent, against 49 percent in 1975, still by far dominate the national economy. However, one may note that the main growth rate of this island group occurred in the 1980s, its share representing 58 percent in 1990, with an increase mostly led by Jakarta.

According to the National Statistics (Badan Pusat Statistik—BPS, 2014, p. 577),<sup>11</sup> on the province scale and considering the GRP per capita in 2012, Jakarta and East Kalimantan (four times the national average), and West Papua and Riau archipelago (almost twice the national average) emerge as the wealthiest provinces. The provinces of Bangka Belitung, North Sumatra, South Sumatra, and East Java are close to the national average. All the other provinces are below, including a group of seven “very poor” provinces with a per capita income less than half the national average: Bengkulu and Gorontalo in Sumatra, West Sulawesi, and four provinces of eastern Indonesia—West Nusa Tenggara, East Nusa Tenggara, North Maluku, and Maluku (see table 15.1, column 1).

The poverty rate at the provincial level gives another perspective on regional inequality (BPS, 2014, p. 177). In 2013, Jakarta and Bali, respectively

**Table 15.1** Per capita gross domestic regional product at current market prices (thousands rupiahs) 2012, minimum wage per month 2013 (rupiahs), poverty rate, life expectancy, and HDI 2013 per province

	1: GRP per capita 2012 *	2: Minimum wage per month 2013	3: Poverty rate, Sept. 2013	4: Life expectancy at birth 2013	5: HDI 2013
<i>Sumatra</i>					
Aceh	20 486,2	1 550 000	17,72	69,40	73,05
North Sumatra	26 568,9	1 375 000	10,39	69,90	75,55
West Sumatra	22 208,6	1 350 000	7,56	70,09	75,01
Riau	79 112,7	1 400 000	8,42	71,73	77,25
Jambi	22 404,7	1 300 000	8,42	69,61	74,35
South Sumatra	26 790,9	1 630 000	14,06	70,10	74,36
Bengkulu	13 682,0	1 200 000	17,75	70,44	74,41
Lampung	18 611,5	1 150 000	14,39	70,09	72,87
Bangka Belitung	26 441,4	1 265 000	5,25	69,46	74,29
Archipelago Riau	49 644,3	1 365 087	6,35	69,97	76,56
<i>Java, Bali</i>					
DKI Jakarta	112 141,7	2 200 000	3,72	73,56	78,59
West Java	21 254,6	850 000	9,61	68,84	73,58
Central Java	17 140,2	830 000	14,44	71,97	74,05
DI Yogyakarta	16 227,1	947 114	15,03	73,62	77,37
East Java	26 444,8	866 250	12,73	70,37	73,54
Banten	19 003,5	1 170 000	5,89	65,47	71,90
Bali	20 742,9	1 181 000	4,49	71,20	74,11
<i>Kalimantan</i>					
West Kalimantan	16 831,7	1 060 000	8,74	67,40	70,93
Central Kalimantan	24 467,6	1 553 127	6,23	71,47	75,68
South Kalimantan	20 196,9	1 337 500	4,76	64,82	71,74
East Kalimantan	109 664,4	1 752 073	6,38	71,78	77,33
North Kalimantan	nc	nc	nc	69,70	74,72
<i>Sulawesi</i>					
North Sulawesi	20 344,8	1 550 000	8,50	72,62	77,36
Central Sulawesi	18 709,4	995 000	14,32	67,21	72,54
South Sulawesi	19 465,5	1 440 000	10,32	70,60	73,28
Southeast Sulawesi	15 785,7	1 125 207	13,73	68,56	71,73
Gorontalo	9 563,0	1 175 000	18,01	67,54	71,77
West Sulawesi	11 828,9	1 165 000	12,23	68,34	71,41
<i>Eastern Indonesia</i>					
West Nusa Tenggara	10 796,4	1 100 000	17,25	63,21	67,73
East Nusa Tenggara	7 249,0	1 010 000	20,24	68,05	68,77
Maluku	7 096,8	1 275 000	19,27	67,88	72,70
North Maluku	6 366,7	1 200 622	7,64	66,97	70,63
West Papua	52 383,9	1 720 000	27,14	69,14	70,62
Papua	24 729,9	1 710 000	31,53	69,13	66,25
<i>National Average</i>	<i>27 563,9</i>	<i>1 296 908</i>	<i>11,47</i>	<i>70,07</i>	<i>73,81</i>

\* Very preliminary figures.

Sources: *Statistical Yearbook of Indonesia 2014*, Badan Pusat Statistik (BPS), Jakarta, 2014, p. 577 (1), p. 112 (2), p. 177 (3); and Human Development Index by province 2013, BPS, p. 65 (4 and 5).

3.72 percent and 4.49 percent, ranked first for their low rate of people living below the poverty line compared to the national average (11.50 percent).<sup>12</sup> But 13 of the 33 provinces<sup>13</sup> were above it, in which eastern Indonesian provinces (except North Maluku) ranked the lowest with between 19 percent and over 31 percent of the population living below the poverty line (see table 15.1 column 3). As Amri Ilmma and Matthew Wai-Poi (2014, p. 118) noted, aside from West Kalimantan that has improved its ranking, and Aceh that has declined, the relative provincial poverty rankings have not changed dramatically over the past two decades: Papua, Maluku, West and East Nusa Tenggara remained consistently poor, and Jakarta and Bali consistently the least poor. Interestingly, note the peculiar case of Papua (West Papua and Papua) that is both a rich province in terms of per capita income, and one of the poorest in terms of its poverty rate. The same BPS document also shows inequality in monthly minimum wages by province, within the group Java-Bali for example, with the lowest minimum wage (Central Java) almost three times lower than the highest one in Indonesia (Jakarta) (table 15.1, column 2).

If we consider life expectancy at birth by province (BPS, 2014 p. 65), a major health inequality indicator, we observe an acute gap (up to ten years) between the first (Yogyakarta and Jakarta) and the last ranking province (West Nusa Tenggara), respectively, at over 73.50 and 63.21 (table 15.1, column 4).<sup>14</sup> Studies show also a sharp urban-rural divide, with rural populations ranking low on access to proper sanitation, clean drinking water, school enrolment, and high level of dropouts, access to the health system. However, the gap has declined consistently since 1993 (Yusuf and et al., 2014, p. 249).

But while inequality exists on the provincial scale, it is even more obvious at district level, as Hal Hill (2014, p. 1) pointed out:

At the district level, the richest region has a per capita income more than 50 times that of the poorest. Were they independent states, some parts of Indonesia would be classified as upper middle-income states, comparable to much richer Malaysia and Thailand, while other regions would be in the least developed group of extremely poor states.

Referring to the districts and municipalities with the highest and lowest GRP per capita in 1999 and 2011, Hal Hill and Yogi Vidyattama (2014, p. 85) show that six are on the list of the ten wealthiest for both reference years: Central, North, and South Jakarta, Kediri (East Java), Kutai and Balikpapan (East Kalimantan). Among the ten poorest, in which nine are located in eastern Indonesia, seven are common to both reference years: Central Maluku (Maluku), Manggarai, North Central Timor, West Sumba, Alor, Belu (East Nusa Tenggara), and Grobogan (Central Java).

On that matter, the analysis of Yusuf et al. (2014) led them to suggest that inequality in Indonesia rose significantly, but specifically after 2003, and

peculiarly within provinces and within districts, in urban areas as in rural areas. They found that

inequality in Indonesia in 2013 was driven primarily (93.7%) by within-province inequality. Inequality between provinces contributed only 6.3% to overall inequality. Similar patterns are evident between urban and rural areas. Inequality between urban and rural areas contributes only a small proportion (5.8%) to inequality in Indonesia. The largest contribution comes from inequality within urban and rural areas. (p. 249)

These figures reflect Indonesia's acute and growing problem of wealth distribution, contributing to social inequality between the "haves" and "have nots," and leading to social risk. The country's Gini coefficient speaks for itself. According to the World Bank (2014, p. 34), it remained stable, between 0.32 and 0.34, if not decreasing slightly before the 1997–1998 crisis. However after, there was clearly an upward trend and the Gini index climbed to 0.42 in 2013.<sup>15</sup> This constitutes the second largest increase of the Gini index in Asia during the period 1990–2011 after China, in sharp contrast with the downward trend observed recently in Thailand, Malaysia, the Philippines, and Cambodia.<sup>16</sup> As highlighted by UN-Habitat, a Gini index of 0.40 and above is seen as the international alert line for the risk of social unrest (UN-Habitat, 2008, p. 51; UN-DESA, 2013).<sup>17</sup> The rise of within-district and within-group inequality explains that social risk exist also for the provinces too quickly labeled as "rich" like Bali (four million inhabitants) and Jakarta.<sup>18</sup> The capital city provides probably the best representation of the spatial and social gap in the country, with luxurious, modern, residential, and commercial areas in the downtown Golden Triangle and, close to it or even in the interstices, as in many other areas of Jakarta, people struggling to make a living. Not surprisingly, the Gini coefficient of the Jakarta Special Region has been above 0.42 since 2011 and rose to 0.43 in 2014, up from 0.2 in 2007. In Bali, tourism has efficiently allowed the island to reduce poverty to 4.49 percent in 2013 down from 13.7 in 1993. But in reality only the district of Badung—where the main tourist resorts are located—and the municipality of Denpasar have by far the largest concentration tourism revenue, while the other areas, definitely more rural, are far behind. Moreover, according to personal observations, the apparent modernity southern Bali has gained with the development of large-scale resorts and shopping malls has not had an impact on the living standards of the majority of the local population. Here also the Gini ratio has been equal to or above 0.40 since 2011. More generally, the focus on people living below the poverty line and on extreme poverty reduction does not allow the right socioeconomic picture of the majority of the population that struggles for a living. Hence, reports about the rising Indonesian middle class is quite ambiguous. ADB (2010, pp. 11–12) figures show that the middle class grew from 25 percent to 43 percent of the population between 1999 and 2009, meaning in absolute terms, from 45 million to 93 million people. However,

as Gerry van Klinken (2014, p. 1) highlights, this dramatic increase is partly owing to the fact that ADB fixed the per-capita household expenditure threshold to a very low US\$2 a day. In doing so, the middle class also includes the monthly minimum wage beneficiaries, and comprises mostly basic administration, industry, or tourism employees. While it is true nowadays that many can afford goods such as motorbikes, telephones, and televisions, people regularly experience difficulty when adding daily transport, accommodation, education, and food expenses. Someone familiar with the Indonesian local context knows that, although the minimum wage has increased significantly since 2013, a family of four can neither live on 2.2 million rupiah a month in Jakarta (2013; 2.7 million rupiah in 2015, approximately US\$200), nor on 1.2 million rupiah (2013; 1.6 million rupiah in 2015, approximately US\$125) in the touristic southern Bali. In Bali, this is even truer in a context where estimates show that the Hindu Balinese spend on average 30 percent of their revenue on traditional ceremonies (Arida, 2012). In any case in Indonesia, the cost of family ceremonies or spending on health leads to lasting debt. The large demonstrations of workers held in Jakarta and in most of the provincial capitals in October 2012, twice in November 2013, and in December 2014 to raise the minimum wage testified to the new empowerment of labor organizations in the country and the social risk inherent to the rise in inequality. It is also useful to remember that in a country such as Indonesia, where the economy is still very much dominated by the informal sector, the minimum wage concerns only the minority of the population working in the public and in the formal private sectors, meaning 8 percent of the total active population in 2007 (World Bank, 2012, p. 23). This figure provides another sharp reminder of the country's socioeconomic background. At the same time, although incomes and employment—especially well paid—are important, they are not the only factors playing into inequality and poverty: access to transportation, housing, food, water, sanitation and electricity, health and education, justice and administrative services, especially ones of high quality, all constitute major conditioning factors. And this is where Indonesia still has much to do, especially in a context where according to BPS, the country's population will grow from 238 million to over 305 million, or increase by 3 million people every year, between 2010 and 2035.<sup>19</sup>

## The Contribution of Local Governance to the Complex Issue of Inequality

Explaining the rise of inequality is fundamental to address the problem, but as it is based on a wide set of endogenous and exogenous factors, it is a highly complex phenomenon. Yusuf et al. (2014, pp. 251–2) put forward some hypotheses on the trade sector, seeing a commodity boom in coal and palm oil during the 2000s, world price changes for mining commodities, and the increase in domestic rice prices as having increased inequality. Changes in the labor market, with the formal manufacturing sector reducing employment,

and an excess of unskilled labor in rural areas are other factors advanced by the same team to explain increasing rural inequality. These assumptions undoubtedly benefit from a genuine reflection on the complexity of inequality in Indonesia. However, here we want to highlight the contribution of local governance to inequality. As governance is one of the main tools to mitigate inequality led by geographical, historical, or socioeconomic factors, this issue is crucial. Here also, a number of endogenous and exogenous factors and dynamics converge, making good local governance extremely challenging, especially in the most internationalized areas (Cabasset, 2012, 2015). The fact that corruption and the limited capacity of civil servants were amplified by the decentralization process may have contributed to the rise of inequality at the beginning of the 2000s.

The Indonesian state has for a long time promoted its willingness to address the regional imbalance, and it is reflected in the Master Plan for Acceleration and Expansion of Indonesia's Economic Development 2011–2025. By settling, around the archipelago, six economic corridors—as economic centers and special economic zones in Sumatra, Java, Kalimantan, Sulawesi, Bali and Nusa Tenggara, Papua and Maluku—the state intends to integrate more provinces, districts, municipalities, subdistricts, and villages into the national economy. The development of these regions relies on incentives from the government, through favorable taxation and customs policies, labor regulations and licensing, in order to attract the private sector that is expected to bring 90 percent of all investment. The strategy is the same for the National Tourism Strategic Plan 2010–2014 (Republik Indonesia, 2010, p. 20) that declared 29 sites for priority development, several of them being coastal areas and small islands in eastern Indonesia. However, the concrete forms that the national policy takes locally are questionable. Large-scale infrastructure and projects, luxury tourism resorts, shopping malls, and golf courses constitute the basis of all economic development programs, without pushing real welfare progress. This trend of megaproject development, typical of the New Order way of operating, remained, in a decentralized political system, the main development model. First, the relevance of such large-scale projects to the local context is not assessed. Second, as is well documented (Erb et al., 2005; Hadiz, 2010; Schulte Nordholt and Klinken, 2007; Holtzappel and Ramstedt, 2009), the social, economic, and financial conditions of their implementation are locally often problematic. As experienced in many districts, the new political elite that emerged with decentralization, allied with external players, often monopolized the main business. Myrna Eindhoven (2007) highlighted in the Mentawai archipelago (West Sumatra) that although these new elites were exclusively formed by *putra asli daerah* (“son of the land,” genuinely local), they acted as new colonizers, reproducing Suharto's New Order administrative model. For long-term Indonesia observers, it is clear that there exists a harsh divide between those who can access efficient transport, health and education systems, mostly from the private sector, and the majority of the population, which has to rely on the often deficient public facilities. A national meeting on basic services



held at the end of 2013 found that the government had failed to implement properly Public Service Law n°25/2009, lacking measurable standards, mechanisms, or adequate service provision for marginal groups.<sup>20</sup> Indonesia is obviously not the only Southeast Asian country to have experienced this problem: assessing the impact of decentralization reveals that it has been marked by a degradation of public services during the first phase of its implementation in Thailand, Philippines, and Indonesia (Brillantes et al., 2012, p. 308).

With a sense of humor that often characterizes Indonesians, one often hears that there is no sustainable development, only sustainable corruption (*Pembangunan berkelanjutan vs korupsi berkelanjutan*). In 2014, the Transparency International index identifying levels of corruption ranked Indonesia 107 on a list of 175 countries, scoring 32 on a scale from 1 to 100, where 100 indicates no corruption. In Southeast Asia, Indonesia ranked fifth of ten regional countries (no data was available for Brunei). During three consecutive years (2012–2014), Indonesia was also on the black list of “high-risk and non-cooperative jurisdictions” established by the Financial Action Task Force (FATF) for money laundering and financing of terrorism. In 2014, aside from Myanmar, the country was the only one in Southeast Asia on that list. In February 2015, Indonesia was removed from the black list for the grey one due to the progress made on that issue.<sup>21</sup> The first-term mandate of President Susilo Bambang Yudhoyono (2004–2009) was rooted in the fight against corruption, giving power to then newly created Anti-Corruption Commission (KPK). His second term (2009–2014) showed his policies had a limited effect on reduction with members of his close circle tried for corruption. In October 2013, two events reminded people of the extensive scale of the phenomenon. The arrest by KPK of one of the highest public figures, the president of the Constitutional Court, Akil Mochtar, further lowered public opinion. Linked was the arrest, few days later, of the brother of the Banten province governor (West Java), and then the governor herself, Ratu Atut Chosiyah (in power since 2005). This was followed by more arrests, revealing the scandal of the Chosiyah dynasty: 12 family members in political office in the province had established a considerable financial and political empire.<sup>22</sup> They were charged with having monopolized all the projects undertaken in the province since 2011, and siphoning off public funds from infrastructure projects, and from social aid and community programs.

The dysfunctional nature of the civil service has a huge influence on local development. It also has a significant impact on safety with a lack of procedures and quality control, notably in administrative processes and in the construction and transports sectors.<sup>23</sup> This also affects the credibility and image of Indonesia on the international stage, especially when compared to Singapore and Malaysia, much more oriented toward quality product and services.

Many of these dysfunctions find their roots in the limited capabilities of civil servants and political officers. First, for a number of them, as Banten and other local governments have shown, getting a position in local or state

administration, or in the regional or national Parliament, primarily constitutes a “rent” or self-enrichment opportunity, rather than one of local development and management. As a result, in February 2011, 30 percent of regional heads (160 out of 524 people) were registered as graft suspects,<sup>24</sup> not including parliament members, ministers, and so on. Second, corruption, nepotism, and collusion remain inherent in the recruitment process rather than assessing the knowledge and skills of the candidates for the positions. Hofman et al. (2009, p. 106) gave an enlightening price range for getting a professional promotion in Central Java, including in the education sector. Third, few regents (districts heads) and civil servants have a clear understanding of the local territory they are supposed to manage, and many have poor knowledge of the national, the regional ASEAN, and the international economic, social, and environmental contexts and concerns. This has an acute impact not only on general governance, but also on the leadership that is often missing at the local level for project implementation. This constitutes an important point: in contrast to the “developed” countries that have benefited from 200 years of building administration, “developing” countries have not had that time to do it. Concurrently, poorly trained civil servants from the New Order period quite suddenly came to be in charge of considerable budgets and projects, long before the establishment of efficient governance. The remarks given earlier cannot reduce the importance of civil servants and political officers who effectively perform their duties at all administrative levels. But, generally speaking, a large number still appear unprepared to face their new responsibilities accompanying the decentralization in 2001. In this context, the increasing internationalization, and notably the regional reinforcement of integration with the ASEAN Economic Community (AEC) in 2015, is going to constitute another new challenge for local governments. Nevertheless, beside the initiation of the National Social Security System at the beginning of 2014, two important laws, n°5/2014 on Civil Administration, and n°6/2014 on Villages, enacted on January 15, 2014, could have a significant impact on administrative functioning and on village development (Howes and Davies, 2014, pp. 170–1) if properly implemented and respected. If so, there remains the need to tackle two key challenges that will undermine efforts made to improve governance: corruption, and the economic-political involvement of “Jakarta” in provincial and districts affairs. Both can be found in Bali where, from the 1960s, the involvement was seen throughout the period of the New Order regime (Aditjondro, 1995; Couteau, 2002). But this trend actually increased with decentralization, which devolved power to the districts, contributing to blow apart provincial cohesion: the districts compete for all kinds of projects, whatever the nature and quality, in direct contradiction with the 2009–2029 Bali Tourism Development Master Plan. In Kuta, for example, the biggest tourism resort, private investment is practically the only dominant power influencing urban change. Obviously Indonesia is far from being the only country in Southeast Asia “where formal economic policies are linked to informal economic activities and criminality in

which bureaucrats, politicians, militaries, police, businessmen and criminals have close relations” (Schulte Nordholt and Klinken, 2007, pp. 8–9). But these long-lasting characteristics have difficulty fitting with the expectation that Indonesia will gain real leadership in ASEAN and become a developed country and a prominent economic power in the world by 2025 (Republic of Indonesia, 2011, p. 10).

## The Challenge of Good Local Governance in Favor of Social Cohesion

Growing inequality, rampant corruption, collusion and nepotism (KKN), and the disillusionment of many Indonesians toward the political elite demonstrate that the 2014 presidential election—13 years after decentralization—was not without risks. Indeed, as many Indonesians expressed some months before the election, the hopes and promises from the post-1998 *Reformasi* have been forgotten. The expected improvement in living conditions became reality for the highest strata of the middle class, and for the highest class itself. And inequality has grown. Economic studies confirmed this feeling, showing that “Indonesia’s growth benefited the relatively rich households almost exclusively, while the poor gained little from this growth and often lost from it” (De Silva and Sumarto, 2014, p. 239). On the political side, in a context where the majority of the Indonesian population has known and lived under 32 years of Suharto’s authoritarian regime and more than 10 years of a chaotic decentralized system, these factors fed the belief, shared by many, that only a “Strong man” could lead the country. This explains why the presidential candidate Prabowo ranked so consistently high in the election surveys carried out in 2013 and 2014. On the other hand, for a large part of Indonesian society, only a “New man,” unassociated with the “Old guard,” particularly Suharto’s, could help the country tackle its main problems. The new leadership style, the modesty, as well as the corruption-free reputation of Joko Widodo “Jokowi” led him to win the July 2014 presidential election with his running mate Jusuf Kalla. In that perspective, while the 2014 presidential election occurred without any major problem, it may have also taken a wrong way if a “New man,” out of the traditional political circle, couldn’t get into the final pool. The nine priorities of Jokowi and Kalla electoral program show that the team had identified the main problems to be addressed: corruption, governance, law enforcement, regional imbalance, rural areas, quality of education, social welfare and health, and social cohesion.<sup>25</sup> In October, soon after he was sworn in, it seems that Jokowi was no longer inclined to follow the Master Plan for the Acceleration and Expansion of Indonesia’s Economic Development, preferring a more inclusive approach to one of growth and income.

It is worth observing, as Max Lane (2014, p. xvi) does, that in a context where scholars and observers often highlighted the absence or the negative

effects of decentralization on local and national governance, a recent political move shows local empowerment thanks to decentralization. Jokowi, former mayor of Solo (Java Center), became Jakarta's governor, then president of the Republic. Basuki Tjahaya Purnama (also known as Ahok), formerly East Belitung regent in Sumatra, became Jakarta's vice governor, and then Jakarta's governor. It is not possible to transform overnight a capital city internationally renowned for its long-term lack of proper urban planning and management. But Jokowi and Ahok (2012–2014), and Ahok since then, nevertheless succeeded in pushing through significant developments in transportation systems (MRT and bus), low-cost housing, transparency, and a skills-based recruitment process for civil servants, to name but a few. Other personalities have recently distinguished themselves for their good urban governance, with several centers repeatedly cited as livable cities or for their efforts toward this target. It is the case for Tarakan and Balikpapan (East Kalimantan) and, in Java, for Bandung, Surabaya, Solo, and Yogyakarta, for example. Yogyakarta is interesting. As opposed to a number of other Indonesian cities, Yogyakarta has not known the real estate boom and the erosion of historic or natural heritage that regularly characterizes the first decade of decentralization in Indonesia. The peculiar status of the Special Region of Yogyakarta and of the governor and sultan Hamengkubuwana X<sup>26</sup> are two main explicative factors of the territory's good governance. Yogyakarta Special Region indicators do not show a good socioeconomic performance, with a poverty rate (15 percent in 2013) above the national average, a GRP per capita 40 percent lower than the national average (2012), and a Gini coefficient equal or above 0.40 since 2010. However, Yogyakartaans still regularly describe their territory as being more egalitarian than many others. This is reflected in the HDI 2013 by province edited by the National Statistics Office (BPS, 2014, p. 65): Yogyakarta not only ranked in the highest provinces, it was first in 2013 (table 15.1, column 5). Nevertheless, important manifestations of new urban and socioeconomic changes can be seen since 2011–2012: large-scale hotel and shopping mall construction, including those in historic center, generated an explosion in land and housing prices, increasing inequality. For the reasons mentioned earlier, Bali is rarely cited for its good governance, though some places do deserve it, like the Sanur tourism resort (Southeast Bali). The place reflects a genuine urban policy, uniting all public and private actors and the local population on planning and management matters, and especially on the balance between international standard services and small local businesses. The local elite from some traditional families also played a crucial role. Many other local governments could be cited, carefully selecting the investments and activities they want, and doing their best to deliver proper public services. In every case, that local governments—and not the private sector—kept control over the territory management, associated with a high level of social structuration and the particular profile of the local elites, and played a critical role in the territorial governance.

## Conclusion

Indonesia has considerably improved its economic and socioeconomic performance at the national level, especially since the 1997 Asian financial crisis. The country has also achieved many of the Millennium Development Goals, such as halving extreme poverty between 1990 and 2015 (Alatas and Wai-Poi, 2015). Considering the size and the geographical configuration of the archipelago, this progress is remarkable. However, spatial and social inequality not only subsists, it has increased since 2003, particularly within provinces, within districts, and within urban and rural areas. This rise exposes the archipelago to social risk at all administrative levels, including in the “wealthiest” provinces. Explicative factors of inequality are complex, from variations in trade and labor market prices and to social policies. This chapter focused on the relationship between local governance and inequality, showing the main challenges that remain to be addressed, in which administrative efficiency and the fight against corruption. It also presented the impact of decentralization, contributing in some places to accelerate poor performance or misconduct, and participating in the rise of inequality. ASEAN’s largest country and economy has had the fastest but also the highest growth of inequality in the past decade. These characteristics could make Indonesia’s regional integration through AEC even more challenging, with many local governments not yet professionally prepared. Nevertheless, recent major changes could have a significant effect on improving administrative practice and good governance: the election of Jokowi as new president epitomizes the hope for a new generation of noncorrupt and efficient politicians. But it remains to be seen to what extent he will be able to enforce his presidential program, notably administration reform and the fight against corruption. Similarly, as it was demonstrated through case studies, several regents, mayors, and governors, who are successful products of decentralization, have recently emerged, displaying a new leadership style and real urban policies to benefit better governance.

## Notes

1. The figures are from the World Bank’s World Development Indicators.
2. As of 2014, there are only five Special Regions: Aceh, Jakarta, Papua, West Papua, and Yogyakarta.
3. The National Statistics Office (*Badan Pusat Statistik*—BPS) uses the term “Regency” as the translation of *kabupaten* (district).
4. See the report from Rastogi et al. (2013) ([www.bcgperspectives.com](http://www.bcgperspectives.com)). For an academic perspective, see, for example, Antony Reid (2012).
5. See UN-DESA (2013); “150 Richest Indonesians, 2012,” *Jakarta Globe—Globe Asia*, June 1, 2013; Anwar Nasution, “Remarkable Indonesia Rising? Only God Knows,” *Jakarta Post*, December 27, 2013; Oxfam International (2014); “Inside the 2014 Forbes Billionaires. List: Facts and Figures” and “The World’s Billionaires,” *Forbes*, March 3, 2014; OECD (2014); Harry Suhartono, Neil Chatterjee, and Novrida

- Manurun, "Indonesia's Widening Wealth Gap Becomes a Key Issue in Presidential Election," *Jakarta Globe*, April 14, 2014; The World Bank, July 2014.
6. The World Bank's World Development Indicators.
  7. "L'Indonésie et son nouvel Ordre," *Archipel* n°46 (1993), especially Charras (2005, pp. 173–90); Dorléans (1993, pp. 219–41); Raillon (1993, pp. 153–72).
  8. It is useful to remember that during periods of unrest and tension, banners with the word "pribumi" written on them were displayed on houses, flats, and shops in order to prevent the buildings' destruction.
  9. From the author's fieldwork observations at that time, and see Cabasset (2000, p. 330).
  10. See, for example, Kingsbury and Aveling (2004).
  11. The following data are official Indonesian statistics subject to reliability.
  12. According to UNDP-HDI (2014) for Indonesia, 16.2 percent of the people were living below the poverty line in 2012. Cf. UNDP-HDR (2014).
  13. There are 34 provinces since the creation of North Kalimantan in October 2012.
  14. Human Development Index (2014), BPS Indonesia, p. 65.
  15. For more on the Gini coefficient at the national average level, and for Jakarta and Bali, see the World Bank (July 2014, p. 33); and [www.bps.go.id](http://www.bps.go.id).
  16. The decrease in the Gini coefficient observed in these countries is very controversial. It is calculated on households' expenditure as in Indonesia. When it was calculated on income, it was much higher and did not decrease. For further details on this point, see chapter 14 in this book.
  17. See also Suhartono et al., "Indonesia's Widening Wealth Gap Becomes a Key Issue in Presidential Election."
  18. There are 10 million inhabitants in Jakarta's inner city plus 2 million commuting daily from surrounding cities and around 28 million inhabit the whole Jabodetabek area, a conurbation formed by the cities of Jakarta, Bogor, Depok, Tangerang, and Bekasi.
  19. "Editorial: Population Growth a Double-Edged Sword," *Jakarta Globe*, March 27, 2014.
  20. Haeril Halim, "Govt Fails to Deliver on Basics," *Jakarta Post*, December 23, 2013.
  21. [www.fatf-gafi.org](http://www.fatf-gafi.org).
  22. Camelia Pasandaran, "Constitutional Court Corruption Scandal Shakes Banten Dynasty," *Jakarta Globe*, October 11, 2013.
  23. Air Asia Indonesia plane QZ 8501 crash in Java Sea in December 2014 contributed to highlight air transport security failures.
  24. "30% of Regional Heads Graft Suspects," *Jakarta Post*, March 1, 2011.
  25. See the electoral campaign program "Visi, Misi dan Program Aksi. Jalan Perubahan untuk Indonesia yang Berdaulat, Mandiri dan Berkepribadian," Jakarta, May 2014, 14 p.; Dewi Kurniawati, "Jokowi's Nine Priorities Agenda (Nawa cita)," *Establishment Post*, September 30, 2014.
  26. For historical reasons, the Yogyakarta region is the only place in Indonesia where the position of governor (that is also the Sultan) is inherited.

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# Conclusion

*Mia Mikic and Bruno Jetin*

This book has analyzed critical issues of the Association of Southeast Nations' (ASEAN) attempt to create an economic community (AEC) combining a single production base and a single market. As recalled by Mikic in chapter 3, ASEAN is not only launching an AEC by the end of 2015, it has also embarked, since its annual summit in 2011, on the creation of a broad free trade zone encompassing all free trade agreements signed with China, Japan, Republic of Korea, India, Australia, and New Zealand, called the Regional Comprehensive Economic Partnership (RCEP). At the same time, major powers such as the United States and China are competing for hegemony on Asia-wide integration process with their respective favorite trade agreements, namely, the TPP and FTAAP. This peculiar moment raises doubts about the capacity of a "shallow" institution such as ASEAN to complete such an ambitious regional integration endeavor as the AEC plus the RCEP successfully. The different chapters of this book have stressed the difficulties that the AEC will have to overcome before broader economic integration may realistically be accomplished. The conclusions drawn by the authors point to the following issues.

Concerning the political and diplomatic dimensions of ASEAN, Jones in chapter 1 concludes that noninterference and nonbinding consensus inhibit deeper integration either within ASEAN or in the wider regional groupings. These norms and practices are only suited for "limited intergovernmental and bureaucratically rigidified interaction" but cannot promote a sense of "we-ness." More, dominant powers manipulate them for their own interest, which does not bode well for the capacity of ASEAN to assert itself in the future wider groupings.

Regarding the single production base and the single market, one may expect that this process of integration would create a genuine regional focus whereby an important share of goods and services produced by the single production base is sold locally in the single market. Such are, for instance, the European Union and to a certain degree North American Free Trade Area experiences. This is not the case for the AEC despite the use of the EU

rhetoric style. The common thread that links the ASEAN member states (AMS) national production bases is primarily the global production network established by Western and Japanese multinational firms. As recalled by Athukorala in chapter 4, “network products” constitute the bulk of manufacturing exports from Singapore, Malaysia, Philippines, and Thailand, and a smaller but significant share of Indonesia. The creation of regional or global production network by multinational firms originated from AMS is still incipient and one reason is that these southeast multinational firms have different and very country-specific interests. This means that the single production base is essentially a seamless area for non-ASEAN multinational firms to produce for exports to global markets. This reinforces the dependence of ASEAN growth on the global economy for the best when worldwide growth is buoyant and for the worse as epitomized by the 2008–2009 global recession.

This does not mean that all AMS are alike and that the single production base can be easily summed up in global production networks. Chaponnière and Lautier in chapter 2 show that both Indonesia and Viet Nam lie outside what they call “the ASEAN integrated circuit” to highlight the importance of electronics components’ trade inside global production network. Indonesian and Vietnamese export structures are quite dissimilar to that of Malaysia, Philippines, or Thailand, which constitute with Singapore the core of the ASEAN integrated circuit. This is of the utmost importance as Indonesia is by far the biggest ASEAN economy and plays an increasing role in global politics as reflected by its participation in the G20. According to data presented by Athukorala in chapter 4, manufacturing plays a lesser role in Indonesia than in other AMS amounting to 54 percent of its nonoil exports against 72 percent on average for total ASEAN, and network products account for 18 percent of nonoil exports versus 52 percent for total ASEAN. Exports of natural resources are much more important in Indonesia than in any ASEAN founders creating a “Dutch Disease” challenge to policymakers as the exchange rate tends to appreciate and makes other traditional exports (including tourism) less competitive; and the stock of realized FDI is the lowest in ASEAN alongside the Philippines. According to Athukorala, multinational firms have traditionally shunned Indonesia as network production location. This context explains why Indonesia appears as “precariously open” (Basri and Hill, 2011) and protectionism is still widely shared among Indonesian business elites and their support in the state apparatus who would stand to lose from a dramatic openness. Indonesia epitomizes clearly the struggle that exists in all AMS between free trade reformers to be found in the technocracy most linked to global firms and international institutions and the opponents representing small and medium-sized enterprises operating alongside a small number of big local enterprises linked in one way or another to the government, state-owned companies, and local banks, whose boards include many bureaucrats, politicians, and militaries. Since the reformers have not yet won a decisive victory against their opponents,

like in the European Union, the ongoing struggle explains the “work-in-progress” character of the AEC highlighted by Chaponnière and Lautier in their conclusion.

This also explains why the removing of nontariff barriers and other impediments to trade has been slower than expected as depicted in chapter 7. Worse, Duval and Feyler show that “nontariff comprehensive trade costs within ASEAN remain sometimes higher than those with other subregions.” They are higher than those between China, Japan, and the Republic of Korea, which have no formal single trade agreement in place between them. Duval and Feyler’s findings suggest that the level of trade integration between Indonesia, Malaysia, the Philippines, and Thailand is “possibly lower than the one between these economies and the three North-East Asian economies.” These NT-CTC are also higher between these four AMS founders and the group formed by Cambodia, Lao PDR, and Viet Nam than with European Union and North America. They did not significantly decrease between 2001 and 2012 despite the AEC implementation agenda. In a way, these findings recoup those of Athukorala, which points to a strong integration of AMS with Northeast Asia, and among them China, through global production networks. At the same time, they show that although the elimination of tariffs by AMS on intra-AEC trade is a real and important achievement, the single market will remain a remote objective if nontariff barriers remain in place and if laws and regulations governing markets do not harmonize. The outcome of these remaining impediments to the ASEAN single market is that the share of the intra-ASEAN trade in total AMS trade has not significantly increased since 2003 and remains around the one-quarter mark. Duval and Feyler conclude with policy recommendations pointing to the possibility of reducing significantly trade costs arising from nontariff barriers between AMS. One important source of high trade costs as discussed in chapter 3 is diverse and stringent RoO and in general high complexity of trading terms associated with a web of different trade agreements under implementation by AMS. Benefits from elimination of these extra costs of trade as well as regulatory barriers in diverse services activities are well proven by researchers and intuitively understood by business. But the question remains: Why is the political will to do it so weak?

Anukoonwattaka in chapter 6 and Aflouk, Mazier, and On in chapter 5 address the exchange rate issue of ASEAN economic integration, which again reflects the growing importance of global production networks. Anukoonwattaka studies how global value chains (GVCs) challenge the prevailing policy thinking about how trade responds to a change in exchange rate between AMS and China where most of assembly of components is now realized. For instance, a depreciation of the Chinese currency may decrease the incentive to import components from ASEAN but if it boosts Chinese final exports, the overall effect may be the continued exports of components from ASEAN even though of a lesser magnitude. Her empirical investigations reveal that this is not necessarily the case but is product-specific (with

stronger impacts for electronics, apparel/footwear, and automobiles) and depends on the countries involved. This creates more complexity in the definition of exchange rate policy but one recommendation is that GVC participating industries would benefit from exchange rate coordination among such countries. This is precisely the point to which Aflouk, Mazier, and On bring new insights. They show that East and Southeast Asian countries have adopted intermediate exchange rate regimes with a rather wide spectrum, which have given them useful room of maneuver to limit the appreciation of their currencies in the 2000s. At the same time these countries need more exchange rate coordination due to their high level of economic and financial integration and to limit the risk of contagious crisis. But there is no consensus on the way this coordination could be organized. The failure of the euro zone shows that a too-rigid exchange rate system and a fortiori a project of a monetary union is not appropriate when countries are at very different levels of development. This is precisely the case of AMS and Northeast Asian countries not to mention India, Australia, and New Zealand. To explore the various alternative exchange rate regimes around a possible Asian Currency Unit or Yuan block and its numerous variants, the authors use a four-country/area (two AMS, China, and the rest of the world) stock-flow consistent model to simulate what happens when China benefits from an initial gain in competitiveness vis-à-vis AMS or when one AMS suffers from an initial loss of competitiveness. These simulations lead them to the following conclusions. When the yuan and ASEAN currencies are pegged to the currencies of the rest of the world (which include the dollar) an initial Chinese competitiveness gains leads to a boom in China at the expense of AMS, which incur a slowdown of growth and large current account imbalances as there is no exchange rate adjustment mechanisms. When the yuan is pegged but AMS currencies are floating, an initial gain in competitiveness of China can be balanced thanks to AMS currencies' depreciation against the rest of the world and growth can quickly recover. Similarly, in case of an initial loss of competitiveness of one AMS against the other and China, the negative growth slowdown and current account deficit remain on the long term in case of fix peg of Asian currencies with the rest of the world or in case of a yuan area, because there is no adjustment mechanism. On the contrary, more flexible regimes like generalized floating or a pegged yuan and floating AMS currencies allow a progressive growth recovery and a reduction of current account deficit thanks to a depreciation of the currency of the AMS affected by the initial shock. The same result is obtained with an Asian Currency Unit but more slowly because the adjustment is realized step by step. The general conclusion is that flexible exchange rate regimes always perform better than fixed ones. For Asian integration, this means that a yuan area would have the same negative effects for ASEAN as the euro has for Southern Europe. An Asian currency unit, that is, a basket currency, would perform much better as it would allow regular adjustments of the exchange rates but its capacities are very sensitive to the precise mix of currencies participating in the Asian Currency Unit. For instance, such

a Unit without the yuan is well suited for shocks originating from China, but more problematic for intra-ASEAN shocks. But in any case, the Asian Currency Unit is a remote possibility that depends on a strong and long-term political will based on shared vision of common interests, which does not necessarily exist yet.

A third set of conclusions deals with the effects the ASEAN economic integration may have on jobs, wages, poverty, inequality, and social cohesion.

Kee, Fan, and Phu start with the hypothesis that regional integration may spur further the structural change associated with the development process, which entails a movement of workers from one sector of an economy to another beyond what may be expected in the absence of integration. They use an innovative computable general equilibrium model—the labor market impact of deepening ASEAN trade integration. The innovation comes from the inclusion of intraindustry firm heterogeneity and of three labor skill levels (high, medium, and low). The model is used to simulate the impact on labor market of an AEC scenario based on the complete removal of tariffs, the reduction by half of nontariff barriers, and a 20 percent reduction of fixed trade costs. The results show that GDP in ASEAN is 7.1 percent higher in 2025 relative to the baseline (2007), with lower-income AMS gaining the most and Indonesia and other AMS gaining the least. The degree of economic dependence on international trade and the share intra-ASEAN trade account for a large part of the variation in GDP gains. The removal of nontariff barriers plays an important role in the realization of the gains, which underscores the importance of Duval and Feyler's findings in chapter 7.

One important result of Kee, Fan, and Phu is the evaluation of job creations. Overall gains in total employment in 2025 range from 130,000 in Lao PDR to 6 million in Viet Nam. The share of agriculture continues to decline up to 2025, the AEC scenario accelerating this pattern in Cambodia, Indonesia, Lao PDR, and Viet Nam but slowing in the Philippines and Thailand. This structural change is decisive for the continued improvements of living standards and productivity gains and lower poverty incidence provided that workers find jobs in higher productivity services and manufacturing, which is far from guaranteed. There is a need to carefully monitor the quality of jobs created and the gender impact of ASEAN integration and adopt the necessary policies to avoid the rise of vulnerable employment and informal economy.

The relevance of job skills is then addressed by Chongvilaivan in chapter 10 and by Puutio in chapter 11.

Chongvilaivan approaches the issue of the proliferation of outsourcing activities in ASEAN fueled principally by global production networks and their effect on labor productivity and employment. He recalls that seen from developed economies' perspective, outsourcing is widely deemed as the export of jobs, usually low-skilled and low-productivity jobs. However, seen from ASEAN's perspective, outsourced jobs may raise labor productivity and translate into higher wages and standard of living. He presents such an example in the case of Singapore's manufacturing industries during

1995–2004. As a consequence, outsourcing tends to increase wage inequality especially when outsourced jobs are skill-intensive. He provides evidence for this in the case of manufacturing industries in Thailand although the intensity of the relation varies with the industry and there are even exceptions. He finally gives the example of Viet Nam to show that outsourcing helps ASEAN firms to tap on technology diffusion and spillovers. The overall outcome is that as “firms become more and more specialized in certain stages of production, productivity of and demand for skilled workers rise, but unskilled workers—the largest pool of labor supplies in most ASEAN countries—tend to fall out from production fragmentation.” It rests on AMS to develop adequate policies to upgrade education and skills, and one may wonder if the poorest AMS where unskilled workers are the most numerous are the best equipped to develop such policies.

Puutio describes the importance of creative economies both as source of growth and trade and as a source of skilled jobs. The success of Japan and the Republic of Korea in manga and music, for instance, generates a flow of exports in cultural products and services but also stimulates the sales of ICT products such as computers, tablets, smartphones, and TV from Japanese and Korean brand names. There is no doubt that AMS could mobilize their strong cultural heritage to develop a whole range of creative economies with positive effects on the creation of skilled jobs. Puutio describes this potential taking by the examples of Cambodia, Viet Nam, and Singapore. He reminds that ASEAN “addresses many of the enabling factors of creativity through its efforts to establish an ASEAN Socio-Cultural Community which augments the AEC.” But he observes that “concrete accomplishments in promoting creativity on the regional level are all but nonexistent.” One of the reasons is the weak protection of intellectual property rights in the region with the exception of Singapore, which has the strongest creative economies of the region. This touches upon difficult issues: the weak rule of law and the reluctance or incapacity of some AMS to protect property rights, in ICT, for instance, because piracy makes software free. At the same time, the generalization of strict property rights to all aspects of creative activities can turn into obstacles to creativity. It can also generate legal and trade conflicts such as who owns the ownership rights of Balinese dance or cook recipe between AMS. It is clear that on all these issues ASEAN provides no solution.

The chapter of Cripps and Khurasee provides a macroeconomic assessment of how the economic growth in ASEAN could be oriented by coordinated policies promoted by the AEC in the direction of a better income distribution between and within AMS. They rely on macro model (the World economy database and CAM model) to engage a prospective analysis that defines precisely what could be a “cohesion” scenario. This scenario includes exchange rate policies, competition policies, agricultural policies, and government services standards. The results show that these policies generate an increase of around 0.5 percent per year in real growth of the ASEAN economy compared to a baseline. The increase is concentrated in lower and middle income AMS with Lao PDR and Indonesia gaining the largest

share (respectively, 2.1 percent and 2 percent), followed by Cambodia, the Philippines, and Myanmar. Higher income AMS like Singapore, Malaysia, and Thailand have lower GDP growth reflecting a deliberate shift of competitive advantage in favor of lower income AMS. This cost would be “compensated by improved security, sustainability of development with a stronger shared identity and reduced dependence on low-wage migrant workers.” They then describe on a country and policy basis the details of this cohesion scenario. Of course, the political conditions for the realization of this cohesion scenario are far from being reunited but the interest of this prospective analysis is to show in a coherent macroeconomic way what could be done to allow for the emergence of a cohesive ASEAN.

The role of social cohesion is further explored by Lautier and Jetin in chapters 12 and 13. In a very original work, Lautier tackles a complex and critical issue for AMS, which is countries’ resilience to crisis. Starting with the fact that structural change is the main engine of long-term catch-up processes, he observes that structural change accelerated by international trade and regional integration increases the vulnerability of an economy and the risk of crisis contagion. He then argues that the capacity to adjust to these crises is a key determinant in the long-term growth differences in the developing world. He hypothesizes that the capacity to recover quickly from crises depends on what he calls “economic resilience,” which combines state effectiveness and social cohesion. When government and social cohesion is high the loss of growth is minimized because governments implement quickly adaptive measures and social conflict arising from crises is less intense. Using innovative indexes of state effectiveness and social cohesion he then shows that East Asia displays the highest level of state effectiveness and social cohesion compared to other regions of the world and Southeast Asia an intermediary level with wide discrepancies between Singapore at the highest level and Cambodia at the lowest. He then tests the relation between loss of growth and a combined index of state effectiveness and social cohesion, which represents economic resilience and reveals a significant relationship between the two. A high economic resilience is associated with a lower loss of growth. Southeast Asia history fits well with the relationship. His conclusion is that social cohesion and state effectiveness are key conditions to benefit from economic openness and in particular regional integration.

Jetin analyzes the role of social cohesion from a different perspective in chapter 13. ASEAN has promised to deliver poverty reduction and well-being to its people thanks to inclusive growth and equitable access to opportunity of human development. To assess such a claim he starts by looking at the evolution of living standards since 1960 and detects no convergence trend until the end of the 1990s between the countries that would form the ASEAN in 1967 despite the adoption of various measures of economic integration. Only since the years 2000 such a convergence seems to be at work due to the catching up of low-income AMS with Thailand, what he calls a convergence to the middle because Thailand is not closing the income per capita gap with the richest AMS, namely, Malaysia, Brunei, and Singapore.



These mixed results regarding between-country inequality are accompanied by an increase in within-country income inequality in almost all AMS or at best its stagnation at a high level. Jetin then assesses the importance of this high-income inequality for ASEAN's social cohesion. Inequality may not be perceived as unfair when absolute poverty declines and people have the feeling that the future is open thanks to high growth. To deepen the analysis he uses the OECD framework, which defines social cohesion as a combination of social exclusion, social capital, and social mobility and calculates relevant indexes of these three components. His results reveal a contrasted situation among AMS: Cambodia is a country where social cohesion is at risk because a high share of people beyond the poor are dissatisfied with their living standards and social capital is low. The only positive element for social cohesion is a high level of perceived social mobility, the feeling that by working hard one can improve one's personal situation. At the other extreme of the spectrum, Singapore is a highly cohesive society featuring a high level of satisfaction with living standards and a high level of trust. But paradoxically, perceived social mobility is rather low. Indonesia epitomizes the case of an intermediate level of social cohesion. It has a high share of dissatisfied people, but a high level of social capital and a high perceived level of social mobility. It is representative of the majority of AMS. Its future stability depends on its capacity to deliver its promises: reducing the motives for dissatisfaction and materializing upward social mobility.

Finally, the book delivers another set of important conclusions regarding connectivity and its underpinning infrastructure and their effect on inequality. The Master Plan on ASEAN Connectivity (MPAC) defines connectivity as the physical, institutional, and people-to-people linkages that comprise the foundation support and facilitative means to achieve the economic, political security and sociocultural pillars toward realizing the vision of an integrated ASEAN community. According to ASEAN leaders, the construction and upgrading of infrastructure and the harmonization of the regulatory framework would significantly narrow the development gap within ASEAN.

This question is addressed by Fau in chapter 14, using a geographical approach. Focusing especially on the MPAC's development projects, her investigation reveals that there is no mechanical effect between the growth of transport flow and economic development. Infrastructure building just provides new opportunities, but the reality of its economic impact depends on many factors: economical (manufacturing capacities of different areas, production costs, tariff and legal barriers, specific demands) and political (strategies of international organizations such as the ADB, policies implemented by national governments) and social (capacity of adaptation of local populations). This explains why the success of certain spatial strategies, for example, economic corridors in mainland Southeast Asia or special economic zones in Thailand, cannot be duplicated with similar achievement in other territories: economic corridors are not suited to the operation of maritime areas, and special economic zones in Cambodia and Lao PDR are

merely enclaves unable to bring growth to their immediate environment. Building new infrastructures may even play a negative role in territorial change. Enclosure is a protection from competition, and therefore, if accessibility improves, competition increases. This explains the reluctance of the Indonesian government to become more committed in the implementation of the ASEAN connectivity plan as it wants to protect a still fragile economy. On the contrary, the construction of transnational infrastructures in Lao PDR has certainly led to the opening up of this long-isolated territory, and increased integration into the world economy, but at the cost of an even greater marginalization of part of the Laotian population. A final important conclusion of Fau deals directly with ASEAN integration into broader Asia-wide settings. Connectivity has become a major power stake in regional competition between China, India, and Japan but also between AMS. It is also a stake for global transport firms like shipping companies who decide whether or not to use a port. The outcome result does not guarantee that internal connectivity within ASEAN and external connectivity outside ASEAN will be coherent and fit people's needs.

On that matter, Cabasset in chapter 15 provides a case study on spatial inequality in Indonesia, the biggest AMS. She recalls that spatial inequality is an old issue that was compounded but masked over 30 years by the Suharto regime. The fall of this dictatorial regime in May 1998 did put an end to growing spatial inequalities and worse they were compounded by an increase of income inequality among individuals within provinces and districts of the whole Indonesia, even in the richest parts. Although many economic factors are at play to explain the rise of inequality, Cabasset stresses the role of local governance as it can mitigate but also increase inequality. She shows that corruption and limited capacity of civil servants, which traditionally plague state effectiveness, to use Lautier's word, were amplified by the decentralization process of the beginning of the 2000s contributing to the rise of inequality. This also plays a role in the building of ASEAN community. Few districts heads and civil servants have a clear understanding of the local territory they are supposed to manage, and many have poor knowledge of the national, of ASEAN, and the international contexts and concerns. In this context, the increasing internationalization, and notably the regional reinforcement of integration with the AEC in 2015, is going to constitute another new challenge for local governments. These long-lasting characteristics do not match with the expectation that Indonesia will gain real leadership in ASEAN, and become a developed country and a prominent economic power in the world by 2025 as officially proclaimed.

This case study of the biggest ASEAN economy shows the distance that exists between the ambitious goals and the political and institutional reality on the ground, as if the strength of economic development promised by the AEC would be enough to push for a solution of all the pending problems. Out of three communities the AMS are pursuing, AEC is much more advanced than the Socio-Cultural or Political and Security Communities. AEC is mostly based on the trust that free intra-ASEAN trade, investment,

and mobility of skilled people will lead to a formation of a single market. No attempts in terms of a transfer of sovereignty of AMS to some supranational institution tasked to drive integration has ever been made. Thus the question could be raised about the prospects of such institutionally shallow integration in view of contemporary processes to establish other regional blocs, similarly based on freedom of flows of goods, services, capital, and people while also considering much more ambitious inroads toward regulations of competition policies, government procurement, IPRs, and labor and environment standards than the AEC. The network linkages between individual AMS and, for example, some of the negotiating parties in the RCEP are much stronger than among AMS and thus deeper liberalization in RCEP might in fact hinder, at least temporarily, the full completion of all pillars under the AEC. On the other hand, the same links may cause even further fragmentation between tight-knit economic network existing between AMS and Northeast Asia on one side and other subregions in Asia, in particular Central Asia and Pacific. Economic theory does not offer much to understand a priori impacts of these simultaneous processes of integration (AEC, RCEP, TPP, and FTAAP) apart from scenarios-based modeling using CGE-type models. However, given that too little is known about the depth of tariff elimination, nontariff barriers removal, and other commitments, and given that we do not have a clear idea of the transition periods, any such numerical modeling turns out to be highly hypothetical or even speculative. Chapter 3 thus uses a more orthodox approach of looking at factors impacting trade creation and trade diversion effects. It concludes that these effects will depend on how wide the differences might be between margins of preference in each agreement. In principle, individual countries in the AEC might be harmed by the regional integration at a broader level (RCEP or TPP) if their current intra-AEC trade is diverted to either non-ASEAN members of RCEP or TPP. Furthermore, there are countries not included in AEC, RCEP, or TPP negotiations, especially a number of Asian LDCs, and they could find themselves even more distanced from the dynamic East and Southeast Asia definitely suffer from. Two solutions are found to minimize these result from happening: (1) need to rationalize number of existing FTAs and retain those that are allowing for more flexible rules (e.g., coequal RoR), binding, at the regional level, all unilateral services and investment liberalization; and (2) open accession to all other Asian countries, especially LDCs, under the terms negotiated already among the members of RCEP.

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