

# Introduction

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After encountering difficulties with import-substitution policies, East Asian economies endeavored to liberalize trade and investment, and progress was made toward economic integration in the region. In particular, *de facto* integration preceded *de jure* integration in exported-oriented industries, where import tariffs on intermediate inputs were eliminated on condition that all such outputs were exported abroad. At the same time, rapid progress in transport and communication technology – as well as in infrastructure improvement – significantly reduced trade and transport costs, and thus facilitated the dispersion of economic activities throughout the region, so that latecomer countries could join the production networks organized by multinational enterprises (MNEs).

In a previous stage of industrial development, dense industrial agglomerations were created in advanced East Asian countries, such as Japan and the Asian Newly Industrializing Economies (NIEs). However, when companies were faced with rising wages and congestion in agglomerated areas, declining trade and transport costs facilitated relocation of labor-intensive industries to lower-wage countries, initially in Southeast Asia and then, after economic liberalization, to China and Vietnam. This catching-up process summarizes the industrial development of East Asia, where production networks have continuously expanded into less developed regions in tandem with newly created industrial agglomerations.

It is often claimed that the regional economy of East Asia has been integrated through market forces, with little support from formal institutional arrangements. However, this situation began to change when the ASEAN Free Trade Area (AFTA) was launched in 1993 with the aim of removing trade barriers throughout the region. *De jure* integration has gained momentum since the Singapore–Japan Free Trade Agreement (FTA) came into effect in 2002. Subsequently ASEAN’s bilateral FTA with China was formally launched in 2005, and the ASEAN–Korea and ASEAN–Japan FTAs took effect in 2007 and 2008 respectively. Furthermore, ASEAN has taken a further step forward, transforming itself from a mere free trade area into the ASEAN Economic Community (AEC), which could enhance

the free movement of goods, services, investment, capital, and skilled labor, and could contribute to the formation of a single market as well as a single production base in an increasingly competitive international market. The AEC is scheduled to be established by 2015.

Meanwhile the Asian financial crisis of 1997 triggered the spread of regional frameworks for financial cooperation, such as the Chiang Mai Initiative (CMI), the Asian Bond Market Initiative (ABMI), and the Asian Bond Fund (ABF). In the CMI, Japan, China and Korea joined in a regional currency swap arrangement with ASEAN to stabilize the regional economy, while the ABMI and the ABF aim to develop efficient and liquid bond markets in Asia, enabling better utilization of Asian savings for Asian investment. They also aim to mitigate currency and maturity mismatches in the financing of Asian borrowers, which was once considered a major cause of the Asian financial crisis.

As noted above, East Asian economic integration has made progress in both *de facto* and *de jure* terms. Considering the continuing trend toward lowering trade and transport costs, as well as the increasing number of free trade agreements and other regional cooperation frameworks, economic integration seems likely to advance further. However, today's East Asian economy has faced serious challenges that cover a number of areas and which call for concerted efforts by all the East Asian economies. In particular, the following issues should be addressed to enhance economic integration and growth in a sustainable manner.

1. The spatial structure of the East Asian economies has been strongly affected by decreasing trade and transport costs. The spatial structure – as well as the mechanics of East Asian economic integration – needs to be explained by consistently resorting to a comprehensive analytical framework. It is important to indicate the relationship between transport costs and industrial location. In particular, it is critically important to demonstrate how declining transport costs facilitate the dispersion of industrial activities, so that less developed economies may obtain opportunities to attract investment and participate in production networks organized by MNEs.
2. It is a well-known fact that economic integration in East Asia has been propelled by the activities of MNEs. MNEs have established production networks which are helpful to strengthen the competitiveness of the East Asian economies. However, rising wages in East Asia have made it necessary to search for success factors other than abundant labor and an investor-friendly investment climate. In this regard, technological progress has become a factor of key importance, especially for higher income East Asian countries. In the medium and long term,

East Asia needs to become an innovation center rather than a factory of the world.

3. Agriculture often constitutes a stumbling block that needs to be overcome for integration to make progress. Similarly, international integration of the service sector and the labor market, as well as monetary integration, involve a variety of sensitive and difficult problems. These problems need to be examined carefully if feasible solutions are to be found.
4. Formal institutions, such as the WTO and FTAs, eliminate cross-border barriers against trade in goods, services, labor, and investment. It follows that further integration will require strengthening of formal institutions. Similarly, efficient transportation and logistics services are key drivers of economic integration. It is thus very important to work out the best solutions for strengthening formal institutions as well as for improving efficiency in transportation and logistics services.
5. Economic integration may give rise to negative side effects, including regional inequality and increased poverty in parts of the integrated economy. These effects should be identified and appropriate measures taken to address them. In addition, energy and environmental issues are becoming increasingly serious. Coordinated efforts are necessary to realize sustainable growth and development in East Asia.

Although no easy solutions can be expected, these problems require special attention. Each chapter in this book tries to capture essential features of these problems and attempts to draw some policy implications. In broad terms, the book has the following features:

- The book is intended for policy makers, practitioners, academics, and students who are involved or interested in economic integration in East Asia. Thus the book avoids technical details, but interested readers may find the references in each chapter helpful for pursuing in-depth study.
- The book deals with economic integration of the East Asian countries, comprising the ten ASEAN countries – Brunei, Indonesia, Malaysia, the Philippines, Singapore, Thailand, Cambodia, Lao PDR, Myanmar, and Vietnam – plus three Northeast Asian countries – China, Japan, and the Republic of Korea (that is, ASEAN+3). But some chapters include India, Australia, and New Zealand as well (that is, ASEAN+6). Other combinations of countries are referred to in some of the chapters, depending on the purposes of the analysis or the availability of the data.

- The book is composed of five parts (Parts I–V), with each part dealing with specific topics of East Asian integration mentioned above. Below is an overview of each chapter.

## PART I FACTS AND THEORIES

Part I (Chapters 1–3) introduces facts and theories relating to East Asian integration. Many statistics and data are presented to give an introductory view of the progress of East Asian integration. The chapters in this section show that integration has already played a pivotal role in the economic development of each East Asian economy. An analytical framework of East Asian integration is provided, relying on the theories of New Economic Geography (NEG). NEG illuminates consistently the impacts of declining transport costs on the spatial structure of the integrating East Asian economy. NEG is referred to frequently in other parts of the book.

Chapter 1 provides a brief history of economic development in East Asia and gives an overview of the basic economic profile of each country. We then take a closer look at the structure of intra-regional trade with particular reference to production networks in the electronics and automobile industries. We point out that East Asia is nowadays functioning as a factory of the world, importing raw materials from outside the region, trading intermediate goods within the region, and then exporting final products to overseas destinations, and especially to the United States and the European Union (EU). East Asia may have become one of the world's most industrialized regions as a result, but its vulnerability arising from over-reliance on the United States and the EU has emerged since the beginning of the world economic crisis in 2008. In this context, it is becoming increasingly important to create final demand within the region big enough to absorb the bulk of the final products that the region manufactures.

Chapters 2 and 3 provide a basic framework for analyzing the extent to which economic integration contributes to industrial development in East Asia. In order to examine the major effects of integration on resource allocation and economic disparities, we take a close look at how economic integration creates forces of agglomeration and dispersion. We find that progress toward economic integration first accelerates industrial agglomeration in certain areas and/or countries of the integrated region. However, further progress toward integration may trigger a leap-out of the agglomerated industries and consequently bring about a shift from agglomeration toward concentrated dispersion. This process of concentrated dispersion tends to spur the governments of integrated countries

into excessive competition for luring footloose industries. Such governments need to adopt effective policy coordination, including coordinated types of assistance for the development of the Least Developed Countries (LDCs) within the integrated region.

## PART II INTEGRATION (1): PRODUCTION NETWORKS AND INNOVATION

Part II (Chapters 4–6) deals with issues relevant to production networks and innovation. It is often said that East Asian economies have been integrated and have achieved rapid economic growth by participating in production networks organized by MNEs. It is nevertheless important to examine the multifaceted impact of MNEs on the host country economies. This part of the book also deals with productivity growth and innovation. These issues are crucially important when considering success factors for future economic development in East Asia.

Chapter 4 discusses international production and distribution networks in East Asia. The effective utilization of international production and distribution networks has been one of the key elements underlying East Asia's high performance in the last decade or so. This chapter sheds light on the production networks that have rapidly developed in East Asia since the 1990s and gives a detailed account of their main characteristics and mechanisms, using finely disaggregated international trade data and micro-data relating to MNEs, that is, Japanese and American firms operating in the region. The production networks that can be seen mainly in the machinery industries in East Asia are distinctive as regards their significance in each economy, their geographical extensiveness involving many countries at different income levels, and their sophistication in both intra-firm and arm's-length relationships. To further activate fragmentation and to take advantage of the forces that are globalizing corporate activities for economic development, the key policy at government level is to host network-forming Foreign Direct Investment (FDI) and to promote agglomeration by implementing various measures that facilitate trade and FDI. A deliberate effort to reduce service link costs is also beneficial, as is effective utilization of FTAs and Regional Trade Agreements (RTAs).

In Chapter 5, the authors examine the positive and negative roles that MNEs play in host countries. Previous studies have confirmed that East Asian countries have enjoyed the benefits brought by MNEs in the form of faster economic growth, larger trade surpluses and smoother technology transfer. The negative effects, by comparison, have been rather mild.

Discussions of related theories and the MNEs' location choices in East Asia are also presented in this chapter, followed by a review of the path to prosperity taken by Korea and a survey of representative Korean firms which managed to become MNEs in the course of that process. In their march toward foreign expansion, Korean firms have responded particularly well to policies at home and in host countries.

Chapter 6 examines the productivity growth experience of the East Asian countries and India, and discusses possible explanations for various national experiences. An overview of labor productivity and total factor productivity reveals that growth has been uneven among Asian countries, especially following the currency crisis of 1997–98. One possible explanation is that China and India, which have been experiencing positive growth in the new millennium, have maintained high levels of research and development (R&D) spending relative to their GDPs. One of the factors that stimulate local R&D is reform of the intellectual property protection system. Patent reform, greater R&D spending, and higher rates of patenting have been highly correlated in East Asia and India, to the extent that in some technology fields, East Asia is now a major center of knowledge creation. However, an assessment of the overall effect of patent reform on economic development requires further investigation.

### **PART III INTEGRATION (2): AGRICULTURE, SERVICES, LABOR, AND MONEY**

This part of the book (Chapters 7–10) focuses on issues relevant to agriculture, service trade liberalization, international labor migration, and monetary integration. Agriculture often becomes a stumbling block that hinders economic integration, but the difficulties posed by the agricultural sector must be overcome if a more integrated East Asia is to be created. Similarly, service trade liberalization should be encouraged. International labor migration involves complex issues, but its causes and consequences should be clarified to draw out some policy implications. On the other hand, regional monetary and financial cooperation, which was launched after the Asian currency crisis, is expected to evolve into a more rigid form of policy coordination.

Chapter 7 discusses agricultural issues related to East Asia's economic integration. Agriculture comprises an important part of GDP and in some countries accounts for a significant proportion of exports, and thus contributes to the economy of the East Asian region. Currently, intra-regional agricultural trade accounts for about 30% of total imports in the region, and trade in farm products displays a large potential for expanding

intra-regional trade. Stringent agricultural protection measures remain in place in Japan and Korea, and some developing countries in the region are enforcing heavier agricultural protection, which may impede the elimination of all tariffs for economic integration. When considering the treatment of agriculture in the process of economic integration, it is useful to review the FTAs and Economic Partnership Agreements (EPAs) that have been concluded so far. It is important to fully incorporate the agricultural sector in the process of economic integration while arranging for it to be treated differently from other sectors. It would be desirable to establish a forum on agricultural partnership in East Asia, to discuss agricultural issues comprehensively on a multi-country basis.

Chapter 8 has a particular focus on the extent of international integration in the service sector. The author shows how an open service sector performs better on its own and how it can contribute to better performance in other parts of the economy, which in turn may lead to greater integration of other sectors of the economy as well. The significance of the sector in the economy is reviewed, and the phenomenon of the rising share of services in output is discussed. There then follows a discussion of the nature of trade and investment in services, and of barriers to trade in services. The significance of these barriers and progress on liberalization in East Asia is reviewed. The last section outlines some future steps that could support a services reform program.

Chapter 9 outlines a fundamental framework for interpreting the causes and consequences of international migration and presents some current evidence concerning the international migration of high-skilled and low-skilled workers in East Asia. This chapter also identifies some implications of the relationship between economic integration and immigration. In order to understand the causes and consequences of international migration, two mechanisms linking migration and economic integration are presented: namely (1) selectivity and sorting effects of out-migration in sending countries; (2) diversity-based international knowledge production and 'brain circulation' as consequences of immigration. In addition, this chapter discusses some implications of enhancing innovation capacity with a view to creating a world innovation center via economic integration and labor mobility.

Chapter 10 explains the costs and benefits of monetary integration, discusses theories and empirical studies on Optimum Currency Areas (OCAs), and examines the implications of the Asian currency crisis of 1997 for increased monetary integration and the possible formation of a currency union. The double mismatch of financial institutions' balance sheets in terms of maturity and currency has been identified as a factor that increased the severity of the Asian currency crisis of 1997. In response

to this, the monetary authorities of the East Asian countries launched three kinds of initiative in the 2000s: the Chiang Mai Initiative, the Asian Bond Market Initiative, and the Asian Bond Fund. These initiatives are regarded as the first steps toward regional monetary and financial cooperation in East Asia, and have opened the way for the development of regional monetary coordination, leading to possible regional monetary integration in the future.

## PART IV DRIVERS OF INTEGRATION

Part IV (Chapters 11–14) discusses the drivers of East Asian integration. There are two kinds of drivers of economic integration. One is the formal institutions which eliminate barriers not only against trade in goods but also against trade in services and investment. The other is a rapid decline in trade and communication costs resulting from technological progress and infrastructure improvement. These issues are discussed comprehensively, and some policy recommendations are presented.

Chapter 11 reviews the historical development of institution building in East Asia and discusses the prospects for the future. After the Second World War, the central theme of the newly independent states became the maintenance of national sovereignty, territorial integrity and policy autonomy, and economic integration was not sought until the 1990s. Economic globalization and the end of the Cold War encouraged ASEAN members to form AFTA, which served as a precedent for the subsequent East Asian economic integration processes. The Asian financial crisis, along with other factors such as the stagnation of Asia-Pacific Economic Cooperation (APEC) and World Trade Organization (WTO) activities, acted as a trigger for East Asian regionalism in the form of the ASEAN+3 process. Since the turn of the century, a number of initiatives, agreements and frameworks have proliferated in and around East Asia. At this point in time, it seems that economic integration in the region is better understood when the processes are viewed as a whole, and when due recognition is given to their distinctive flexible, inclusive and multi-layered nature.

Chapter 12 discusses the recent development in institution and policy coordination in East Asia, with particular focus on the ASEAN+6 grouping (ASEAN plus China, Japan, the Republic of Korea, India, Australia and New Zealand). The increase in intra-regional trade has been driven by ongoing transactions in parts and components. This reflects policy efforts to exempt import tariffs on intermediate inputs when used for exported-oriented industries, such as electronics. On the

other hand, tariffs on consumer goods are still high. In recent years, although FTAs have proliferated, the utilization rates of tax privileges under FTAs have not been particularly significant. In particular, small and medium enterprises (SMEs) have not obtained benefits from FTAs. Moreover, region-wide FTAs cannot solve the 'spaghetti bowl' problem, which is likely to persist as long as each country freely sets its own tariff rates and lists for exclusions from tariff elimination. The way to escape from this trap is to eliminate tariffs on all manufactured products. The elimination of most-favored nation (MFN) tariffs under the WTO should be actively pursued.

Chapter 13 discusses transport costs, which are one of the key factors in economic integration. Freight transport in East Asia has been developing extremely rapidly in recent decades. Transport networks, which vary in routes, modes, speed and quality, have evolved to offer faster, more extensive and more accurate services to meet industry needs. On the other hand, there are several unsolved bottlenecks remaining in East Asia, where there are great differences in transport development. To identify the remaining bottlenecks, it is necessary to determine what factors affect transport costs and trade patterns. This chapter also discusses how transport networks have been improved in East Asia.

Chapter 14 discusses the challenges and issues of infrastructure development for East Asia's economic integration. Infrastructure development, especially of the cross-border variety, is an essential determinant of successful economic integration in East Asia. The effective development of cross-border infrastructure is crucial for sustaining rapid growth in East Asia, particularly in narrowing the gap among the region's economies. This could be 'hard' infrastructure or physical connectivity, as well as the harmonization and refinement of existing policies, rules and regulations, also regarded as 'soft' (or facilitating) infrastructure. Cross-border infrastructure development provides access to a larger market and to production networks, particularly for landlocked and isolated countries. Infrastructure development can accelerate economic integration in East Asia insofar as physical linkages can come to terms with diversity, and particularly geographical diversity. Improving connectivity can bring large welfare gains through increased market access, reduced trade costs and more efficient energy production and use. Infrastructure can bind the countries of East Asia to a commitment to stimulate economic activity through a sharing of scarce resources and by ensuring the symmetric distribution of regional infrastructure costs and benefits across participating countries, thereby contributing to the emergence of an integrated Asia.

## PART V COHESION AND SUSTAINABILITY

Part V (Chapters 15–18) focuses on issues related to cohesion and the sustainability of the integrating East Asian economies. If only a part of each country is incorporated into regional integration, leaving other parts behind, policies of economic integration may widen regional inequalities rather than reduce them. Poverty may also increase in sectors of the economy that are negatively affected by integration. On the other hand, energy supply and environmental management are becoming crucially important in ensuring the sustainability of the integrating economy. Regional cooperation is indispensable for tackling such increasingly difficult challenges.

Chapter 15 investigates the relationship between economic integration and regional disparities in East Asia. Income inequalities across countries are tending to become less pronounced in East Asia, especially in those countries which are more open to regional integration of trade and investment. On the other hand, regional inequalities within each country are increasing because of the tendency toward industrial agglomeration. Because of low labor mobility and the poor absorptive capacity of the urban sector due to lack of adequate infrastructure, existing agglomerations in several countries are too small to enable people in poor regions to migrate out of poverty, and the result is persistent and exacerbated regional income inequality.

In Chapter 16, the relationship between poverty and economic integration is discussed. Theoretically, economic integration can be expected to facilitate agglomeration and concentrated dispersion, resulting in the urbanization of some rural areas and the creation of new opportunities for employment and economic activity. These forces will in due course vitalize the regional economy and can eventually contribute to poverty reduction. However, it cannot be guaranteed that all poor people will be able to participate in this process. Empirical evidence suggests that even in East Asia, trade expansion and FDI inflow have not yet contributed to poverty alleviation. Although economic integration does not appear to affect poverty rates in aggregate, it is bound to create losers and winners. The chapter discusses measures for making economic integration more supportive of the poor and less harmful for the losers in the integration process.

Chapter 17 explores the issue of whether energy supply will become a bottleneck that hampers rapid economic growth in East Asia and, if that is the case, what kinds of measures should be taken in the region. In particular, regional energy cooperation is crucial for sustainable development in East Asia. The author analyzes the issues relevant to regional energy cooperation, such as the energy structure of East Asia, the ongoing

progress of energy cooperation, the drastic changes in the energy market and their impacts, and the frictions involved in energy use in East Asia. In the context of these analyses, the need for energy cooperation is discussed.

Chapter 18 analyzes the impacts of economic integration on environmental issues. Ensuring that the environmental consequences of economic integration are as benign as possible is of key importance to sustainable development in East Asia. While the openness of economies in East Asia is often found to reduce local pollution such as sulfur dioxide, adverse effects can be seen in other areas such as global warming, deforestation and the emission of hazardous waste. This chapter reviews studies on the impact of trade on the environment and discusses linkages between openness and the environment. It is suggested that, as a precautionary measure, trade should be monitored carefully to avoid a possible adverse impact on the environment. To draw lessons for Asia, this chapter summarizes what the European Union (EU) and the North American Free Trade Agreement (NAFTA) have achieved so far in environmental management.

The book concludes with a chapter that explores the important challenges facing East Asian integration. The chapter attempts to present policy options, and indicates the directions that have to be followed to address these challenges.

