



ASEAN AT 50: Achievements and Challenges in Regional Integration





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Note

All references to “dollars” (\$) are to United States dollars, unless otherwise stated.

Details and percentages in tables do not necessarily add to totals because of rounding.

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Abbreviations

| | |
|---------|---|
| ACIA | ASEAN Comprehensive Investment Agreement |
| ADB | Asian Development Bank |
| AEC | ASEAN Economic Community |
| AFAS | ASEAN Framework Agreement on Services |
| AFTA | ASEAN Free Trade Area |
| AIF | ASEAN Infrastructure Fund |
| AIIB | Asian Infrastructure Investment Bank |
| APAST | ASEAN Plan of Action on Science and Technology |
| ASEAN | Association of Southeast Asian Nations |
| ASEAN-6 | Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore and Thailand |
| ASW | ASEAN Single Window |
| ATIGA | ASEAN Trade in Goods Agreement |
| ATR | ASEAN Trade Repository |

| | |
|-----------|---|
| BIMP-EAGA | Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area |
| B&R | Belt and Road Plan |
| CEPT | Common Effective Preferential Tariff |
| CLMV | Cambodia, Lao People's Democratic Republic, Myanmar, Viet Nam |
| FDI | foreign direct investment |
| FTA | free trade agreement |
| GATS | General Agreement on Trade in Services |
| GEL | general exception list |
| GMS | Greater Mekong Subregion |
| GVC | global value chain |
| IAI | Initiative for ASEAN Integration |
| ICC | International Competitive Coefficient |
| LCR | local content requirement |
| MNC | multinational corporation |
| MPAC | Master Plan on ASEAN Connectivity |
| NAFTA | North American Free Trade Agreement |
| NTB | non-tariff barrier |
| PIS | Priority Integration Sectors |
| R&D | research and development |
| RCEP | Regional Comprehensive Economic Partnership |
| RIF | Regional Investment Framework |
| RIF-IP | Regional Investment Framework Implementation Plan |
| STI | science, technology and innovation |
| TEL | temporary exclusion list |
| WTO | World Trade Organization |

I. Introduction

The impact of finance-driven globalization, particularly after it triggered the 2008 financial crisis, has compelled politicians, policymakers and citizens to become involved in the debate over the future of the global economic system to deliver inclusive and sustainable outcomes for all. These discussions about globalization have also instigated a debate on the effectiveness and accountability of global institutions and reinvigorated arguments for greater regional integration. As the Association of South-East Asian Nations (ASEAN) celebrates its 50th anniversary, it is a propitious time to take stock of the organization's track record on regional economic integration to spur economic development in member countries.

In the past, successful experiments in regionalism involved greater integration of economies at similar stages of development. In this sense, ASEAN represents an alternative approach that incorporates a broader range of economic and policy experiences. This is reflected, for example, in the articulation of the "ASEAN Community" in the late 1990s and early 2000s that consciously combined notions of an economic entity with political-security and social-cultural considerations. Other institutional innovations include explicit initiatives to narrow development gaps between member countries and subregional transboundary projects, in addition to more conventional provisions for "sensitive sectors" and "special and differential treatment". Moreover, unlike regional agreements such as the European Union and the North American Free Trade Agreement (NAFTA), ASEAN is a more flexible arrangement that emphasizes consensus-building and informal norms, instead of legalistic structures and independent enforcement of the rules (Llamas, 2017; Chia, 2013).

Although the organization is sometimes criticized for the slow pace of implementing its plans, the 50th anniversary of ASEAN comes at an "inflection point" in economic globalization, when the standard approaches to liberalization, privatization and free trade agreements have ceased to be the default policy option due to growing doubts about the economic outcomes these have delivered, and increasing political disaffection and opposition. In this sense, ASEAN's institutional style of regional integration may be slower but more politically viable in the longer run - as one commentator put it, ASEAN never progresses in a linear fashion; it is like a crab that moves "two steps forward, one step backwards and one step sideways", but progress has been no less tangible (Mahbubani, 2017: 9).

In many respects, the crux of ASEAN integration has largely been a story of the "old trade agenda" of "at-the-border" measures, particularly tariff reduction (MGI, 2014). This agenda has helped sustain export expansion, economic growth, and improvements in poverty reduction and social indicators, that compare favourably with most other developing regions of the world. As the regional agenda turns increasingly to "behind-the-border" measures, it remains an open question whether this kind of deeper integration will ultimately reinforce the stated goals of "a stable, prosperous, and highly competitive region with equitable economic development, and reduced poverty and socio-economic disparities" (ASEAN Secretariat, 2008a; 2015a).

In light of the varied development stages of its member countries, ASEAN's experience not only represents an important example of catch-up growth in the context of South-South regional integration, particularly for the newer low-income member countries, but also raises critical questions of whether deeper

integration can propel the more developed member countries from middle-income to high-income status (aside from Singapore). In particular, as engagement with global value chains (GVCs) has become conventional wisdom in contemporary development strategy, ASEAN's experience provides an important touchstone for other developing countries due to the region's reliance on foreign direct investment (FDI) to lead export diversification and industrialization (Hobday, 2011). Despite being collectively the third largest economy in Asia and the seventh largest in the world, the extent that ASEAN has been able to drive broad-based industrial upgrading through GVC participation is an open question.

As such, ASEAN's development model is distinctive from that of East Asia's, which explicitly sought to sustain very high rates of domestic capital formation and to foster "national champions" in technology- and capital-intensive manufacturing sectors. It would be wrong to draw direct policy lessons or to blindly imitate the East Asian model, but given its success in reaching high-income status, the history of East Asian development may well provide subtle yet useful insights for ASEAN countries. Indeed, openings to strategically modify the "ASEAN model" may be more feasible under a backdrop of shifting global economic norms and governance (Gereffi, 2014), especially at the regional level, with increasing competitive engagement by major powers with ASEAN (Hiebert, 2017; Acharya, 2017; Gill et al., 2016; Miller, 2015; Teo and Singh, 2014).

Well-established structural barriers to industrial upgrading in GVCs suggest that ASEAN may need to pragmatically pursue a new policy direction over the coming years (UNCTAD, 2016). Although some relevant language is already present in existing ASEAN documentation, a more concerted approach in this regard could be the key to sustained regional economic dynamism and to the realization of ASEAN *centrality*. In particular, the ASEAN framework should leave sufficient room for manoeuvre for member countries to experiment with selectively blending the concept of comparative advantage with that of industrial policy, "in a way that generates pressure for upgrading and diversifying national production" (Wade, 2003: 636).¹ It is in this manner that governments in the successful late-industrializing countries of East Asia focused on engaging the private sector "to socially construct competitive assets (resources, capabilities, and organizations) rather than to create perfect markets" (Andreoni and Chang, 2017: 179).

From this alternative perspective, following a review of ASEAN integration across key policy areas, the paper proposes a strategic shift in the "ASEAN Way" model and vision that could drive progress towards the region's development ambitions over the next 50 years. Sections II and III provide a brief background of the institutional evolution of ASEAN and ASEAN Economic Community (AEC), followed by a summary of broad economic achievements over the past five decades. Sections IV and V assess the state of ASEAN regional integration and implementation in the areas of goods and services trade, and investment and finance, respectively. Section VI examines the issue of infrastructure cooperation in the ASEAN region, with a focus on various regional and subregional initiatives. Section VII analyses the export diversification of ASEAN member countries in GVCs using a "catch-up" development framework. This section also includes two case studies that explore the challenges and opportunities in upgrading, as well as regional trends in science, technology and innovation. Section VIII suggests a strategic shift in the "ASEAN Way" model and

¹ Or as Justin Lin (2016) argued, to find the middle ground between the excesses of government intervention of 1960s-1970s structuralist economics, on the one hand, and the neglect of the positive role of the state of 1980s-1990s neoclassical economics, on the other.

provides concluding remarks on events shaping its evolution, with emphasis on the role of China in regional development finance.

II. Political Origins and the "ASEAN Way"

Geographically, South-east Asia includes the area south of China and to the east and south-east of India. It has two main regions – i.e. continental South-east Asia (which includes Myanmar, Viet Nam, the Lao People's Democratic Republic, Thailand, Cambodia, Singapore and peninsular Malaysia) and archipelagic South-east Asia (which includes Malaysian Sabah, Brunei Darussalam, Indonesia, the Philippines, and Timor-Leste). For the purposes of this paper, the area of South-east Asia includes the current 10 members of ASEAN: Viet Nam, the Lao People's Democratic Republic, Cambodia, Thailand, Indonesia, Malaysia, Myanmar, the Philippines, Singapore and Brunei Darussalam.

Although several organizations have been established to foster regional integration,² few have the history and experience of ASEAN. Founded amidst the tensions of the cold war, the organization's initial purpose was to foster regional peace and security by acting as a bulwark against communist expansion in the region. Four main reasons motivated the founding members: first, to prevent external interests from exploiting the power vacuum following decolonization of the region; second, the opportunity to foster cooperation among countries with common interests in the same geographic region; third, to create a stronger collective voice when addressing and dealing with major powers on global issues; fourth, the belief that cooperation and integration would serve the interests of all, which could not be achieved through individual efforts alone (Mahbubani and Severino, 2014).

Contemporary regional cooperation in South-east Asia after World War II began with the South-east Asia Treaty Organization (SEATO) in 1954. The organization, which included the region's former colonial powers, was primarily political and military in nature, with members holding joint exercises each year. The lack of cohesion amongst members on a range of issues resulted in the decision in 1975 to bring an end to joint activities and the organization was formally dissolved in 1977.

The second post-World War II attempt to improve regional ties in South-east Asia was the Association of South-east Asia (ASA), formed in 1961 by Thailand, the Philippines and Malaysia. ASA was a forum for foreign ministers of each country to participate in confidence-building and form closer regional ties (South Centre, 2007: 9). Many of these same high-level diplomatic processes underpinned the proposals for Maphilindo (including Malaysia, the Philippines and Indonesia), an organization proposed to bring about unity among the Malay peoples in 1963. Ultimately, while Maphilindo was unsuccessful, many Maphilindo ideas, such as consensus decision-making, were carried over to the new ASEAN.

In the early 1960s, all ASA members were dealing with domestic insurgencies. Neighbouring Indonesia was also in the midst of trying to reduce the impact of communism in its territory. When a new non-communist Government was established in Indonesia in 1965, its leadership approached ASA about becoming a member. Given the size and political weight of Indonesia, the members of ASA were wary of the impact

² These include, for example, the African Union, the Caribbean Community, the Union of South American Nations, the South Asian Agreement for Regional Cooperation.

Indonesia would have if it were to join (South Centre, 2007: 9). Negotiations with Indonesia about joining ASA proved difficult and leaders began to realize that perhaps regional cooperation should encompass more than ASA, with or without Indonesia. Rather than Indonesia joining ASA, a new organization was formed. In 1967, ASA members along with Indonesia and the newly independent Singapore founded the Association of Southeast Asian Nations (ASEAN) largely based on the ASA model.

Unlike SEATO, with its limited participation of South-east Asian countries and ASA with its small membership and limited influence, the members of ASEAN were all from the region and the inclusion of Indonesia gave the association more weight and substance. Some argue that were it not for the change of Government in Indonesia and its priority to engage with neighbouring countries, ASEAN as we know it today would not exist. This shift of perspective in Indonesia enabled the founding members of ASEAN to engage and build trust with Indonesia, the regional powerhouse, at a critical time in a cooperative manner.

Prior to ASEAN's founding, many South-east Asian countries had only recently attained independence after years of colonization, and the process was still unfolding. During World War II, Japan had captured Myanmar, Malaysia and Singapore from the United Kingdom, Indonesia from the Dutch, Indochina (except Thailand) from the French, and the Philippines from the United States. Then, after World War II, France tried to reclaim its colonial holdings of the Lao People's Democratic Republic, Cambodia and Viet Nam. France gave up its claims after the First Indochina War (1946-1954), leaving Viet Nam divided into two countries (North Viet Nam and South Viet Nam). The Second Indochina War (also called the Viet Nam War) was in full force during the period of ASEAN's birth in 1967. Tensions were also high among the founding members of ASEAN. Thailand and Indonesia were both dealing with communist insurgencies and Singapore had only gained independence from Malaysia in 1965.

In this context, the new ASEAN leaders envisioned a larger and more inclusive regional association from the inception of ASEAN. Founded in 1967, ASEAN initially consisted of five members: Indonesia, Malaysia, the Philippines, Singapore and Thailand. The short, initial ASEAN Declaration stipulated "that the Association would be open for participation by all States in the South-east Asian region subscribing to its aims, principles and purposes" (Flores and Abad, 1997). Paragraph one of the Declaration states that the three main pillars for ASEAN cooperation were economic, political and cultural. By 1984, ASEAN membership would expand its membership with Brunei Darussalam, and with the end of the cold war, Viet Nam joined in 1995, followed by the Lao People's Democratic Republic and Myanmar in 1997, and Cambodia in 1999.

The Declaration's repeated reference to security issues reflects ASEAN's concerns with the deepening involvement of the United States in the Viet Nam conflict. Members of the new ASEAN were worried about the potential impact of the conflict in their countries. The negative economic impact of the war and the potential increase in foreign military bases in the territory of ASEAN members were top concerns. The issue of foreign bases is addressed in paragraph six of the preamble of the ASEAN Declaration, which states:

All foreign bases are temporary and remain only with the expressed concurrence of the countries concerned and are not intended to be used directly and indirectly to subvert the national independence and freedom of States in the area or prejudice the orderly processes of their national development (Flores and Abad, 1997).

A few years after the establishment of ASEAN, its members went further in their commitment to reduce foreign military influence in the region when they signed the Zone of Peace, Freedom and Neutrality (ZOPFAN) Declaration in November 1971. The members signed on to “exert initially necessary efforts to secure the recognition of, and respect for, South East Asia as a Zone of Peace, Freedom and Neutrality, free from any form or manner of interference by outside Powers” (ASEAN, 1971).

The security issue was taken up again five years later with the Treaty of Amity and Cooperation, which has been described as “an original and indigenous Southeast Asian answer to the question of how to cope with intraregional conflicts and disputes... the treaty if signed by all Southeast Asian States, would constitute the regional foundations for regional neutrality” (Subedi, 1998). The Treaty commits members to settle disputes peacefully and establishes a code of conduct for members if disputes arise. While these initiatives were taken during the Viet Nam War and cold war eras with an eye to limiting the role of the United States and the Soviet Union in the region, they remain important as the economic and military power and influence of neighbouring India and China increase.

Though the early years of ASEAN were largely preoccupied with security concerns, the association is now deeply involved with an array of regional issues. The ASEAN policy of non-interference in the domestic affairs of member States and the emphasis on consensus have resulted in an association that has been adept at engaging members with various government structures and adapting to political shifts such as the end of the cold war. ASEAN's adherence to principles of national sovereignty and non-interference were also necessary due to the wide range of diversity in governance structures, cultures/religions and levels of economic development among its membership.

With regard to culture and religion, ASEAN is also very diverse; among founding members, for instance, the Philippines is more than 85 per cent Roman Catholic, Thailand has a significant Buddhist population, and Indonesia has the largest Muslim population in the world. In terms of stage of development, large differences between member countries existed at the establishment of ASEAN and continue to this day. The result is an ASEAN composed of least developed (Cambodia, the Lao People's Democratic Republic, Myanmar), middle income (Thailand, Indonesia, Malaysia, the Philippines, Brunei Darussalam), and high-income (Singapore) developing countries. ASEAN has also had to balance different levels of geographic, political and economic strength among members from the beginning. Among ASEAN founders, Indonesia has the most economic and political strength compared to other founding members. Geographically, ASEAN also has had to position itself carefully between communist China to the North and the United States, with its numerous military bases in the region.

The differences in history, culture and levels of economic development among ASEAN members have had an impact on the processes and institutional frameworks developed by the organization. The ASEAN institutional model has been described as less formal and softer than other integration experiences. ASEAN members have chosen to focus on developing a regional integration model enabling members to opt for cooperation when it is useful, while also ensuring the ability to retain national sovereignty. It is this approach that finds itself reflected in the ASEAN Charter.

The negotiation and adoption of the ASEAN Charter in 2007 was a significant step forward in the institutional consolidation and development of ASEAN. It brought together and clearly identified the purpose of the ASEAN; set out a list of principles to govern the relationships of ASEAN member States with

each other; established ASEAN as a separate legal entity under international law; established clear institutional arrangements for governance and implementation from the summit-level to the national level as well as for decision-making and implementation; created additional regional bodies, dispute settlement and compliance; established its financing; established principles and mechanisms for a regional approach to ASEAN's and ASEAN member States' external relations (ASEAN Secretariat, 2008b).

ASEAN declarations and joint statements are the product of the relationships built over the years at regular meetings of ministers in a wide range of areas from health to environment to energy issues. Decisions are made by consensus with the implementation of agreements left to national Governments (through each Government's ASEAN national secretariat) with little ASEAN regional oversight. ASEAN's institutional mechanisms and operations have developed in a way that prioritizes consensus achieved through diplomacy as the primary means of both making decisions and resolving any internal disputes.

The "ASEAN Way"

Cooperation in ASEAN has progressed based on three key principles: (a) consensus decision-making; (b) respect for national sovereignty; and (c) non-interference in the domestic affairs of members. These three principles are the core of what has been called the "ASEAN Way".

The "ASEAN Way" has been written about extensively, some in praise of the consensus-building model of decision-making and some critical of the model for its lack of speed and results. Critics point to the lack of progress on many issues. The small ASEAN Secretariat has virtually no power and its limited funding for research and implementation of agreements, action plans, etc., has resulted in poor follow-through on many fronts. ASEAN has no tested formal dispute settlement mechanism nor any means of requiring members to follow through on ASEAN commitments. Therefore, where the political will to implement policies by national leaders is lacking, so too is the realization of improved ASEAN integration (Economist, 2016; Dibb, 2017).

Nonetheless, informal diplomacy, consensus decision-making, and ASEAN's non-intrusive principle are at the heart of the ASEAN Way. Despite the perceived limitations by critics of the ASEAN Way, significant progress has in fact been made in improving cooperation and building a foundation of confidence among ASEAN's diverse membership. The relative lack of intraregional conflict and record of improved economic growth in the region are highlighted as proof of ASEAN's success.

Understanding the ASEAN Way requires drawing upon the history of the region and the foundation it provides for ASEAN's decision-making framework. Prior to colonization, diplomacy in the region was considered "personalistic, informal, and non-contractual" (Goh, 2003: 114-115). This brand of diplomacy was then continued when colonization ended. Even when more formal political institutions were created, both during and after colonization, "in reality most states in Southeast Asia were ruled by small elite circles...this had the effect of institutionalizing a highly private and informal political culture" (Goh, 2003: 115).

The diplomacy-based decision-making modalities of ASEAN has its advantages. ASEAN decisions on important regional issues are made by those with significant authority in their Governments. The use of consensus decision-making is also a means of ensuring that more powerful States do not entirely take over

the organization's agenda or trajectory. With the varying sizes, Governments, and levels of development among member countries, maintaining this kind of internal balance may be essential for the survival of the association in terms of ensuring that the interests of all members are promoted and mutually beneficial solutions to disputes are prioritized.

But there are also drawbacks to the diplomatic style which ASEAN employs. As many decisions are made at the highest levels, they are often far removed from the daily lives of residents in the region. While issues like security may arguably be best handled by high-level officials at the regional level, decisions and region-wide commitments pertaining to health, migration and the environment all have a direct impact on citizens who currently have little voice in ASEAN's system of decision-making. The lack of institutional mechanisms in ASEAN that allow for direct or indirect public participation in ASEAN discussions is complicated by the diversity of the political governance arrangements of ASEAN members, which enable varying degrees of domestic public participation and civil society activism.

Regionalism as developed by ASEAN has been labelled by some as "pragmatic integration" or market-driven integration. Market-driven integration means that integration has been successful in areas where the benefits of integration for members are well perceived (Berkofsky, 2005: 7). As a result, cooperation on security issues and a handful of political issues has been more successful than cooperation on the economic front. Recently, ASEAN has taken several steps to increase economic cooperation, and has set ambitious goals for economic integration to be attained by 2020. With the recent collapse of the Doha Round trade talks, it is possible that if greater access to markets cannot be attained through the World Trade Organization, ASEAN members will move more swiftly to realize improved intra-ASEAN economic cooperation.

III. ASEAN Economic Community: Evolution and Achievements

Early attempts of economic cooperation and integration were modest and began with the Agreement on ASEAN Preferential Trading Arrangements in 1977. The arrangements sought to promote economic cooperation through: mutual assistance with respect to basic commodities, such as food and energy; provision of support for the products involved in ASEAN industrial projects; expansion of intra-ASEAN trade; and increasing the utilization of raw materials in member countries. The arrangements allowed member countries to use policy instruments such as: long-term supply contracts for selected products; purchase finance for exports or imports at preferential interest rates; preferential treatment in procurement by member States; extension of tariff preferences; preferential liberalization of non-tariff measures; and other measures (ASEAN, 1977).

The changing security environment set the stage for increasing regional economic integration, as seen in the 1992 Framework Agreement on Enhancing ASEAN Economic Cooperation. This development paralleled broad external trends in this area with the conclusion of the Uruguay Round in 1991, the emergence of the European Single Market in 1993, and the completion of the United States-Canada Free Trade Agreement in 1988, followed by NAFTA in 1994. The agreement outlined the establishment of the ASEAN Free Trade Area (AFTA), the formation of the ASEAN Secretariat as a monitoring body, along with

other areas of cooperation in industry, minerals and energy; finance and banking; food, agriculture and forestry; and transportation and communications (ASEAN Secretariat, 1992a).

The main role of AFTA was the intra-ASEAN tariff reduction and policy harmonization under the Common Effective Preferential Tariff (CEPT) scheme. The CEPT required that tariff rates be reduced to a level of 0-5 per cent over a period of 15 years (by 2008), covering all manufactured products including capital goods, processed agricultural products and other items not defined as agricultural products. Although in 1995 the phase-in period was later reduced to 10 years (by 2002), AFTA also contained important flexibilities for member States to exclude specific products on a temporary or rolling basis (see next section). Other provisions included the elimination of all quantitative restrictions for products under the CEPT scheme, gradual removal of non-tariff barriers (NTBs) over a five-year period, and rules of origin threshold set at 40 per cent of content sourced from any member State (ASEAN Secretariat, 1992b). By 1999, further provisions were made to include items deemed "sensitive products" and "highly sensitive products" to member States (ASEAN Secretariat, 1999). CEPT-AFTA was replaced by the ASEAN Trade in Goods Agreement (ATIGA) in 2010, with the objective to reduce tariff levels to 0 per cent, albeit with some exceptions (see next section).

First conceptualized in 1997, ASEAN leaders declared plans in 2003 to push regional integration toward the formation of the ASEAN Community: consisting of the ASEAN Economic Community (AEC), the ASEAN Political-Security Community, and the ASEAN Socio-Cultural Community, which would transform ASEAN into "a stable, prosperous, and highly competitive region with equitable economic development, and reduced poverty and socio-economic disparities". Initially planned for implementation by 2020, the timeline for the ASEAN Community was moved to 2015 (ASEAN Secretariat, 2015b).

By 2007, ASEAN leaders published a single and coherent blueprint (2008-2015) for advancing the AEC with clear implementation targets and timelines, albeit with clear flexibilities to accommodate the varied interests of all ASEAN member countries. Although all aspects of this blueprint were not implemented on time, a subsequent blueprint was issued for the period 2016-2025. Based on the principles of an open, outward-looking, inclusive, rules-based and market-driven regional economy, the AEC blueprint 2025 builds on the previous one to encompass five mutually-reinforcing pillars: (a) a highly integrated and cohesive economy; (b) a competitive, innovative and dynamic ASEAN; (c) enhanced connectivity and sectoral cooperation; (d) a resilient, inclusive, people-oriented, and people-centred ASEAN; and (e) a global ASEAN (ASEAN, 2008; 2015a)

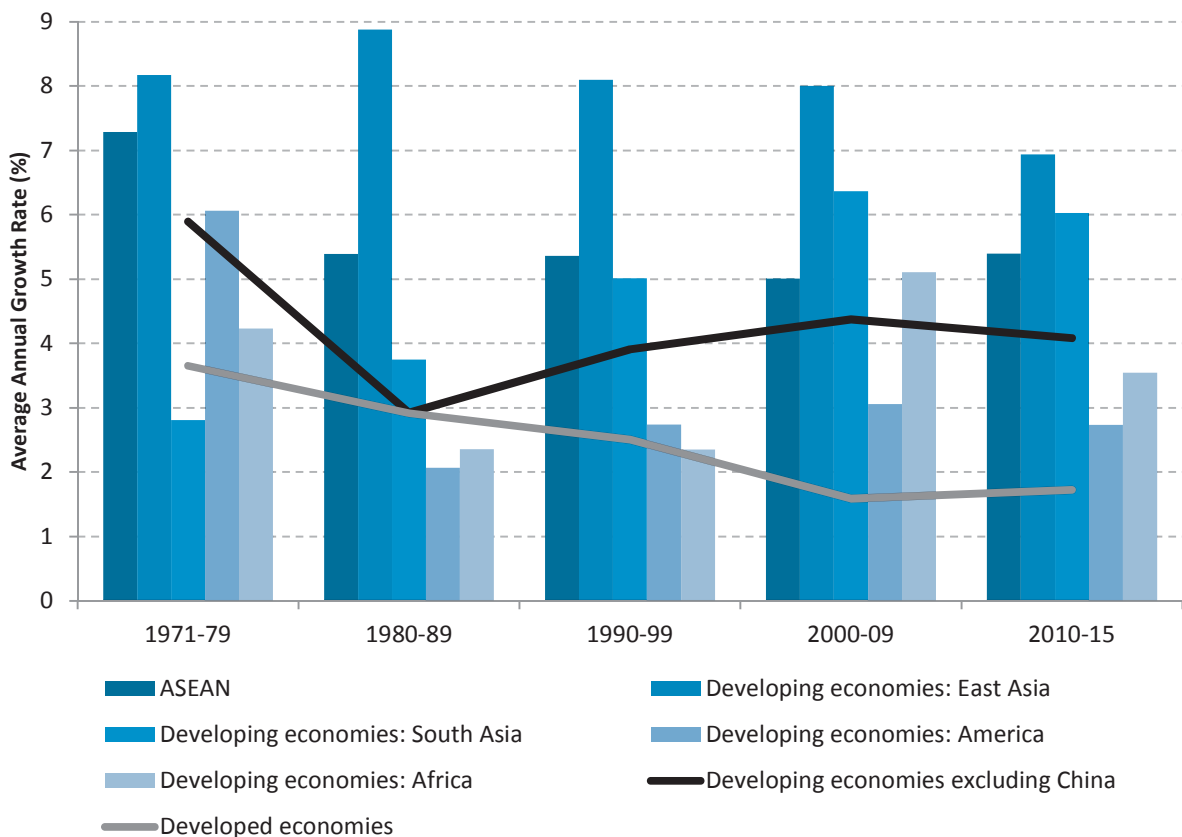
In terms of "behind-the-border" policy initiatives, regional integration in service sectors began with the signing of the ASEAN Framework Agreement on Services (AFAS) in 1995, two years after the CEPT-AFTA was implemented. The agreement aimed to expand the depth and scope of liberalization beyond commitments made by member States under WTO's General Agreement on Trade in Services (GATS) (ASEAN Secretariat, 1995b), which came into effect the same year. However, it was only in the AEC blueprint 2015 that four priority service sectors were targeted for substantial trade in services liberalization by 2010: air transport, e-ASEAN, health care and tourism. A fifth sector, logistics services, was later added for liberalization by 2013 and all other services sectors by 2015 (ASEAN Secretariat, 2008a). Member countries are also in the process of enhancing AFAS provisions through an ASEAN Trade in Services Agreement (ATISA) (ASEAN Secretariat, 2015b).

Similarly, in the area of investment policy, the ASEAN Comprehensive Investment Agreement (ACIA) took effect in 2012, and builds on two previous frameworks, the ASEAN Investment Guarantee Agreement (ASEAN IGA) in 1987 and the Framework Agreement on ASEAN Investment Area (AIA) in 1998. The ASEAN IGA was focused on protecting and promoting investments of member States, while the AIA established a more liberal and transparent investment climate. The ACIA is aimed for progressive liberalization, but like the AIA it includes provisions that allow member States to deviate from national treatment provisions (ASEAN Secretariat, 2012a: 12-13). Unlike the AIA, the ACIA prohibits performance requirements, covers areas such as portfolio investment and intellectual property, and adopts an investor-State dispute settlement mechanism (ASEAN Secretariat, 2015b).

Economic achievements

Over nearly the past half-century, average annual economic growth in the ASEAN region has remained robust, hovering around 5 per cent from the 1980s onwards, after reaching an average of around 7 per cent in the 1970s (see figure 1). Though the regional growth rate has trailed that of the developing East Asia region, primarily lead by countries such as the Republic of Korea and Taiwan Province of China, and later by China, ASEAN has clearly outperformed developing regions in Latin America and in Africa, as well as the overall growth rate for developed and developing countries (excluding China). Growth in ASEAN also exceeded that of South Asia, before being surpassed after the turn of the century.

Figure 1. ASEAN GDP growth: Regional comparative, 1971-2015



Source: UNCTADstat.

These growth patterns are broadly reflected at the country level, with the exceptions of relatively unstable growth in Brunei Darussalam and the Philippines between 1980 and 2000 (see figure 2). Divided into subgroups, average annual economic growth rates in the ASEAN-6 (Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand) are significantly higher than those of the less developed ASEAN-CLMV (Cambodia, the Lao People’s Democratic Republic, Myanmar and Viet Nam) in the 1970s and into the 1980s. But this situation has changed, with particularly strong growth in the ASEAN-CLMV grouping sustained in the period from 1990 to 2015.

Figure 2. ASEAN GDP growth, by member country, 1971-2015



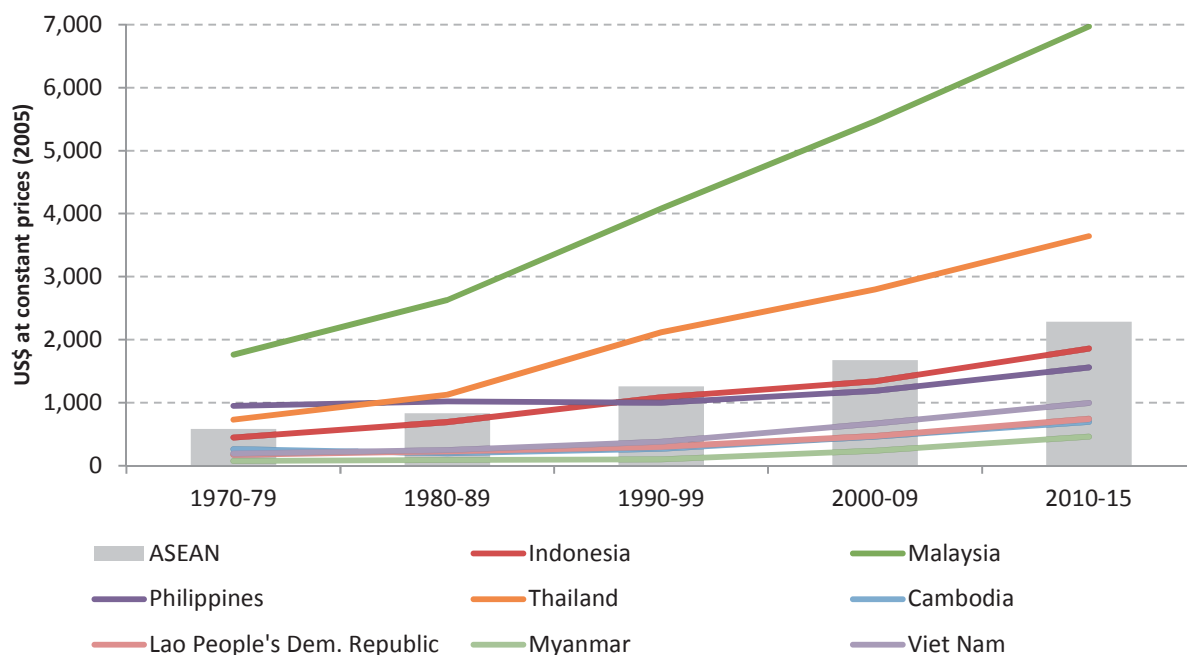
Source: UNCTADstat.

ASEAN's economic growth performance has led to a clear reduction in ASEAN's headcount poverty rate (\$1.25 purchasing power parity per day), from 57.1 per cent in 1981 to 15.6 per cent in 2010. While this rate of poverty reduction is lower than China's, it is higher than India's (Ponciano et al., 2014: 19-23).

In terms of GDP per capita, the ASEAN region has witnessed rapid improvement from an annual average of \$584.2 in the 1970s to \$2,284.4 in 2010-2015, an increase of nearly 400 per cent (see figure 3). At the

country level, Brunei Darussalam and Singapore have the highest GDP per capita levels, \$25,663 and \$38,228, respectively, in 2015 (for presentation purposes, these countries are not shown in figure 3). Aside from Malaysia, which has attained upper-middle-income status, the remaining ASEAN countries are lower-middle-income or low-income countries. The former category consists of Thailand, Indonesia and the Philippines, while the latter category includes Viet Nam, the Lao People’s Democratic Republic, Cambodia and Myanmar - countries that only joined ASEAN in the 1990s.

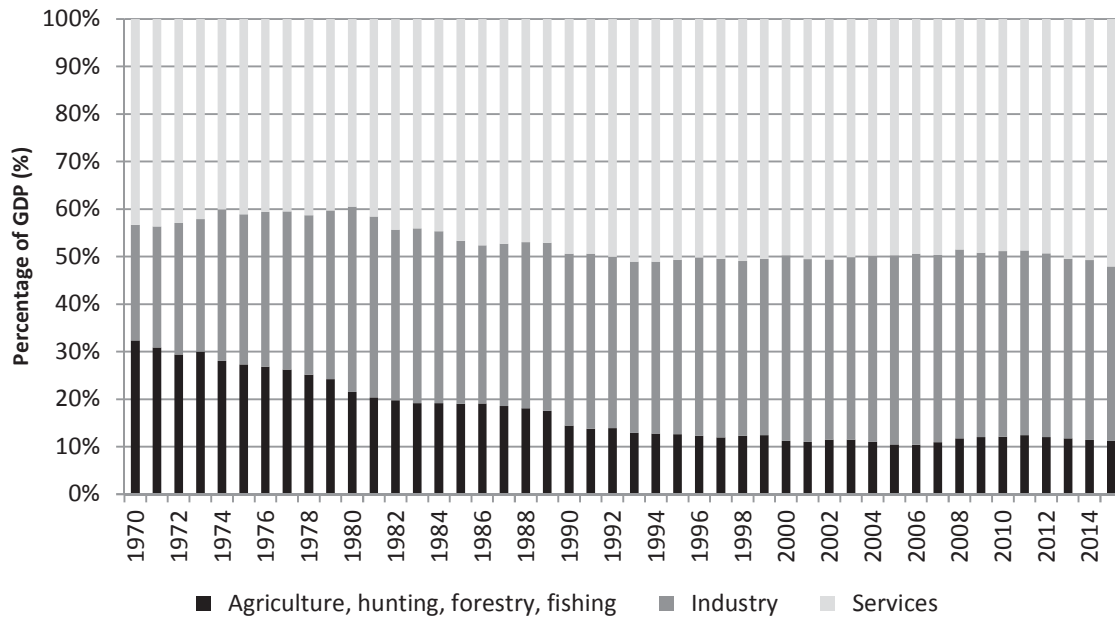
Figure 3. ASEAN GDP per capita, 1970-2015



Source: UNCTADstat.

In terms of sectoral shifts, the ASEAN regional economy has generally followed the broad trends of structural transformation, with a clear reduction in the contribution of the agricultural sector (including hunting, forestry and fishing) to GDP and the increase in contribution of industry and service sectors (see figure 4). The share of the agricultural sector has fallen from 32.4 per cent in 1970 to 11.2 per cent in 2015, while the share of industry and services sectors each rose by almost 10 percentage points: industry sector from 24.3 per cent to 36.7 per cent, and services sector from 43.3 per cent to 52.1 per cent.

Figure 4. ASEAN sectoral shifts, 1970-2015



Source: UNCTADstat.

At the ASEAN country level, the agriculture sector still plays a larger role in ASEAN-CLMV countries in 2015: Cambodia, 28.2 per cent; the Lao People’s Democratic Republic, 23.6 per cent; Myanmar, 26.7 per cent; and Viet Nam, 18.9 per cent. The increase in ASEAN's service sector share is attributable to countries such as Singapore, whose service sector contributed 73.6 per cent of GDP, and to a lesser extent to Philippines (58.2 per cent), Thailand (55.1 per cent) and Malaysia (51.8 per cent). In terms of the industry sector, countries with the largest share in GDP in 2015 were Brunei Darussalam, 60.2 per cent; Indonesia, 41.3 per cent; Malaysia, 39.6 per cent; Viet Nam, 37.0 per cent; Thailand, 35.7 per cent; and Myanmar, 34.5 per cent.

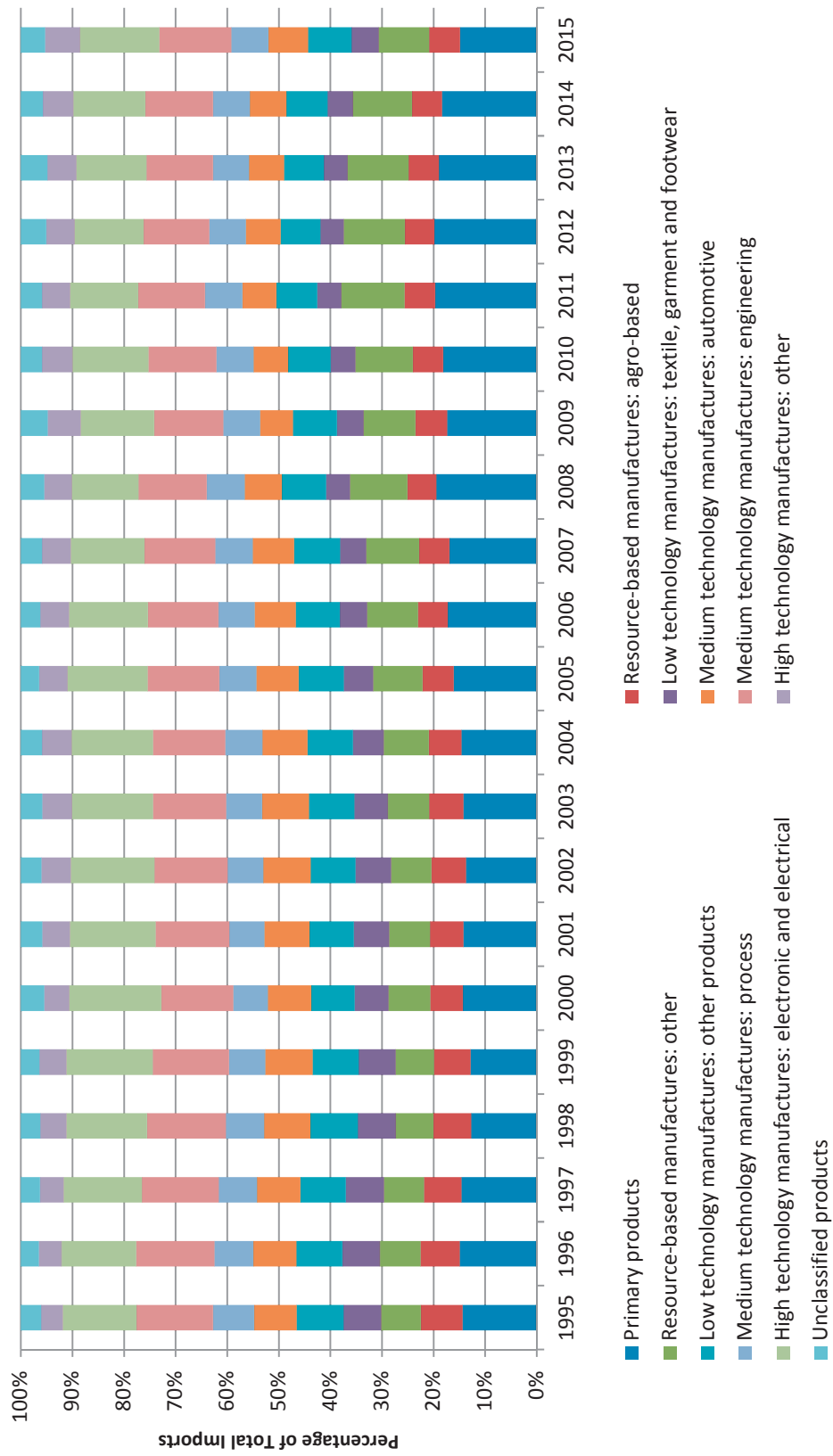
Observable shifts in the broad sectoral GDP shares of ASEAN, however, are not as apparent in the technology structure of the region's exports and imports, at least for the period 1995-2015. In the former, the share of primary products and resource-based manufactures in total ASEAN member countries' exports rose from 30.4 per cent in 1995, to 32.9 per cent in 2015 (figure 5). Medium technology exports rose from 16.8 per cent, to 20.7 per cent, mainly due to automotive and process manufactures. The share of high technology exports fell from 34.9 per cent to 29.8 per cent: as exports of electronic and electrical manufactures decreased from 33.1 per cent to 26.5 per cent, and other manufactures increased from 1.8 per cent to 3.3 per cent.

Figure 5. ASEAN technology structure of exports, 1995-2015



Source: UNCTADstat.

Figure 6. ASEAN technology structure of imports, 1995-2015



Source: UNCTADstat.

Similarly, in the technology structure of imports, the share of primary products and resource-based manufactures held steady, from 30.2 per cent in 1995 to 30.6 per cent in 2015 (figure 6). The share of low and medium technology manufactures declined by low single digits, while that of high technology manufactures rose from 18.5 per cent to 22.2 per cent.

IV. Integration in Trade and Services

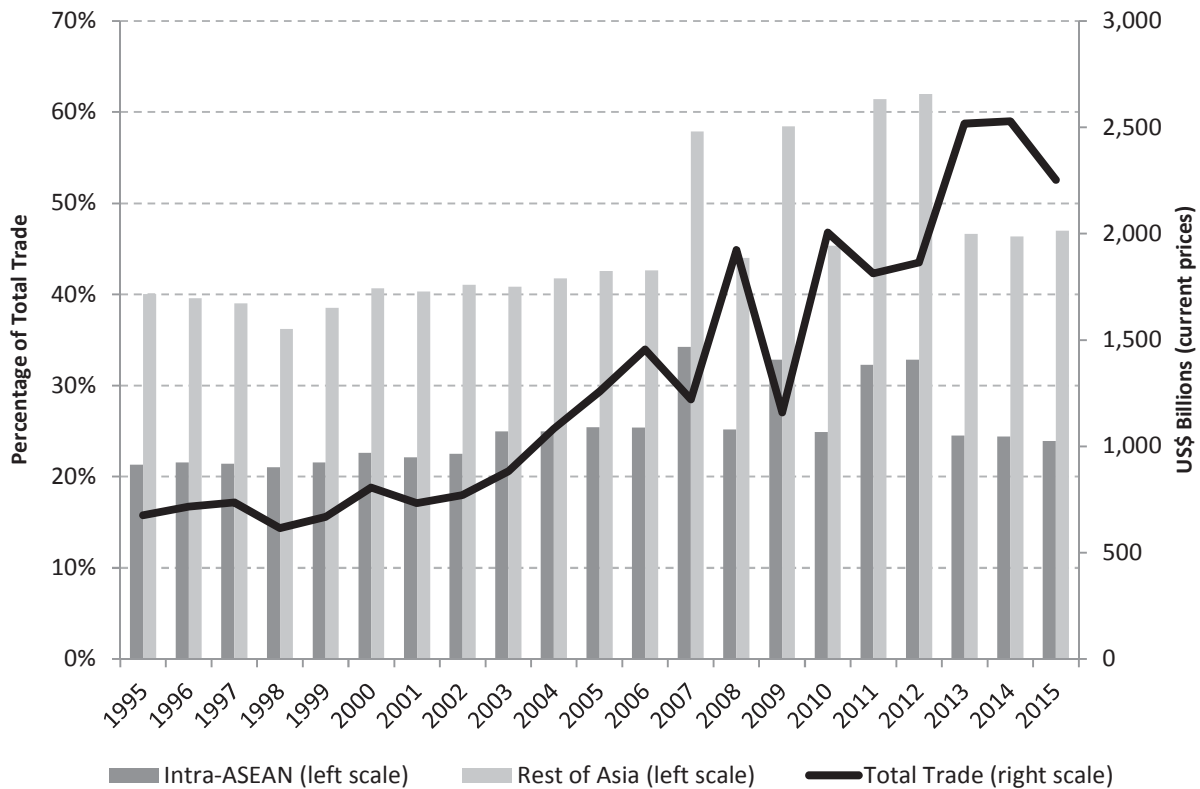
Overall, the first AEC blueprint set out 316 measures, which were later expanded to 611 measures. Despite efforts to prioritize the measures, by the end of October 2015, the implementation rate of the full AEC scorecard was 79.5 per cent, or 486 out of the 611 measures (ASEAN Secretariat, 2015c: 10). Unimplemented measures of the AEC blueprint 2015 have been included in the AEC blueprint 2025 (ASEAN Secretariat, 2015a: 1). The scorecard generally only provides broad indicators that have limitations for evaluating the extent of AEC implementation due to lack of specificity that leaves room for interpretation (MGI, 2014: 40). This section and the following two sections do not systematically catalogue the list of unimplemented measures, but highlight the remaining flexibilities in the key areas of the free flow of goods and services, investment and finance, and infrastructure and (sub)regional initiatives.

Free flow of goods

As mentioned above, the tariff liberalization has been the clearest area of success for ASEAN regional integration. The ASEAN Free Trade Area (AFTA) was agreed to in 1992 and came into force in 1993, with a firm timetable established leading to the full implementation of the agreement by 2002 for the ASEAN-6 countries. Overall, in the context of rising total trade flows (exports and imports), intra-ASEAN trade has accounted for between one-fifth and one-quarter of ASEAN's trade with the world: rising from 21.3 per cent in 1995 to 23.9 per cent in 2015, with spikes reaching over 30 per cent in 2007, 2009, 2011 and 2012 (figure 7).³ Total trade with the rest of Asia (minus intra-ASEAN trade) has accounted about 40 per cent of ASEAN's trade with the world, increasing from 40 per cent in 1995 to 47 per cent in 2015, with spikes reaching over 60 per cent in 2011 and 2012.

³ Intra-ASEAN trade flows are lower compared to other regions. Intra-regional total trade in the European Union was 61.7 per cent in 2015, while intra-regional total trade in NAFTA was 50.4 per cent in the same year (UNCTADstat). See also, MGI 2014: 37.

Figure 7. ASEAN total trade, intra-ASEAN and rest of Asia, 1995-2015

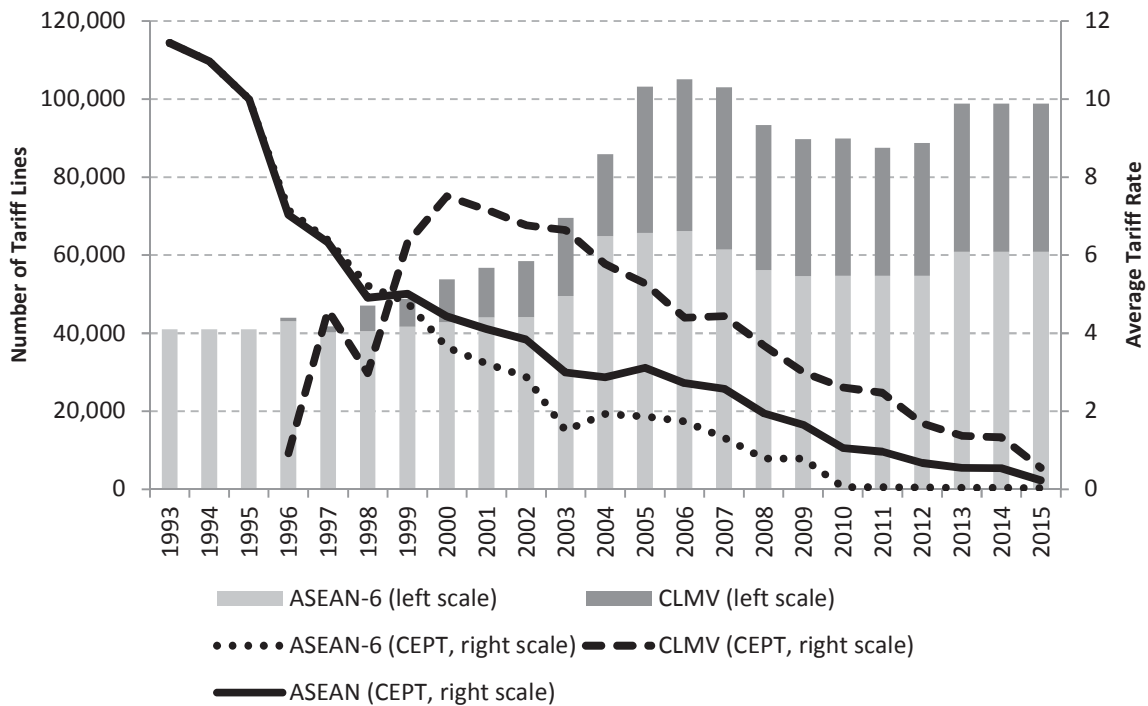


Source: UNCTADstat.

As shown in figure 8, average intra-ASEAN tariff rates have been on a steady decline since the enactment of AFTA, as a greater number of tariff lines were added to member States' "inclusion lists", particularly for CLMV countries. The number of tariff lines under CEPT appeared to peak in 2006, before declining in the lead-up to the global financial crisis of 2008-2009. Since then, the number of CEPT tariff lines has reached a plateau of just under 100,000 over the period 2013-2015. By 2002, ASEAN-6 countries had an average CEPT tariff rate of 2.89, and individual CLMV countries also achieved the target tariff range according to their respective deadlines (ASEAN Secretariat, 2015d). By 2003, intraregional tariffs on 99.6 per cent of products in the ILs of ASEAN-6 were within the 0-5 per cent range, and only 247 tariff lines, or 0.5 per cent of all products traded in the region, remained outside of the CEPT scheme (ASEAN Secretariat, 2003).

While the overall intraregional decline in tariff rates and increase in tariff coverage is evident, AFTA also included important flexibilities for tariff lines outside of the CEPT's inclusion lists that take the form of temporary exclusion list (TEL), sensitive list, and general exception list (GEL).

Figure 8. ASEAN CEPT/ATIGA tariff lines and average tariff rates, 1993-2015



Source: ASEAN Secretariat, 2015d.

TEL tariff lines were shielded from trade liberalization for a temporary period only, and eventually all these products would be transferred to the inclusion list as part of the overall tariff reduction process, with the transfer of annual instalments of TEL tariff lines beginning in 1996. By 2000, for example, there were 9,674 tariff lines under the TEL category, accounting for roughly 15 per cent of all ASEAN tariff lines (ASEAN Secretariat, 2000). In 1993, at the beginning of AFTA, the bulk of tariff items of ASEAN-6 countries in this category were in chemicals, plastics and vehicles sectors - accounting for 45 per cent of all TEL items. Main products by country were: machinery and electrical appliances for Brunei Darussalam; chemicals for Indonesia; vehicles for Malaysia; textiles for Philippines; and vehicles for Thailand (ASEAN Secretariat, 1995b).

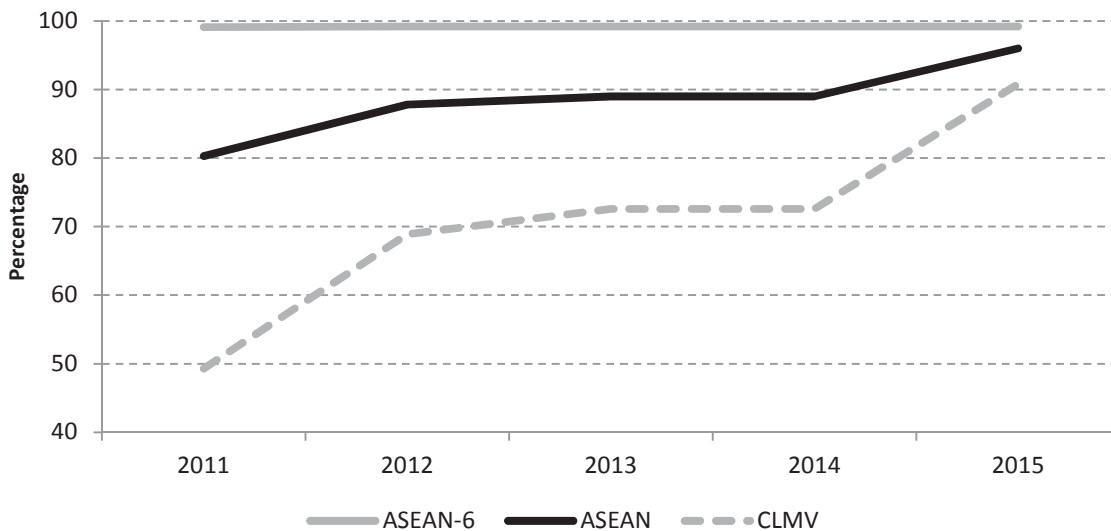
Sensitive list products consist of unprocessed agricultural products that were given until 2010 before being included in the inclusion list. CLMV countries were provided longer time frames for implementation: 2013 for Viet Nam, 2015 for the Lao People’s Democratic Republic and Myanmar, and 2017 for Cambodia. In 2000, there were 370 tariff items under the sensitive list, which represented 0.58 per cent of all ASEAN tariff lines (ASEAN Secretariat, 2000). In 1993, fish, edible vegetables, and edible fruits were the three largest tariff items under the sensitive list category. Other items also included rubber, raw hides and wood products (ASEAN Secretariat, 1995b).

GEL products are permanently excluded from AFTA for reasons of national security; public morals; human, animal or plant life and health; and articles of artistic, historic and archaeological value. In 2000, there were 1,036 tariff items placed under GEL, which accounted for 1.61 per cent of all ASEAN tariff lines (ASEAN Secretariat, 2000).

Further impetus for tariff liberalization was achieved with the ASEAN Trade in Goods Agreement (ATIGA) of 2010. According to the agreement, for ASEAN-6 countries, import tariffs on at least 80 per cent of items in the inclusion list were eliminated by 2009, while for CLMV countries, import duties on products not exceeding 7 per cent of inclusion list tariff lines shall be eliminated by 2017. For the Lao People’s Democratic Republic, Myanmar and Viet Nam, import tariffs on all inclusion list products were equal to or less than 5 per cent by 2009; for Cambodia, import tariffs of at least 80 per cent of inclusion list items were equal to or less than 5 per cent by 2009 (ASEAN Secretariat, 2009: 17-19). As shown in figure 9, the share of tariff lines at 0 per cent has reached 99.2 per cent in 2015 for ASEAN-6 countries. For CLMV countries, the share of 0 per cent tariff lines reached 72.6 per cent in 2014, and was expected to increase further to 90.8 per cent in 2015. By 2018, tariff elimination for ASEAN-6, CLMV and ASEAN is set at 99.2 per cent, 97.8 per cent and 98.7 per cent, respectively (ASEAN Secretariat 2016a: 3-4).

However, ATIGA also includes certain flexibilities, as seen in AFTA. For instance, similar to the sensitive list category, unprocessed agricultural products listed by member States in ATIGA Schedule D remain subject to sensitive list product provisions mentioned above, while import duties on unprocessed agricultural products placed in ATIGA Schedule E will be reduced according to the timetable established therein. Similar to GEL products, ATIGA Schedule H items are not subject to import duty reduction or elimination for the same reasons as discussed above (ASEAN Secretariat, 2009: 19-20). Schedule H provisions also permit the ability to place "restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry", as well as to adopt measures "essential to the acquisition or distribution of products in general or local short supply" (ASEAN Secretariat, 2009: 10-11).

Figure 9. Share of Zero per cent tariff lines in ATIGA, 2011-2015



Source: ASEAN Secretariat, 2015b: 10.

ATIGA commitments also entail that tariff duties for products in "Priority Integration Sectors" (PIS) should be at 0 per cent, except those indicated in negative lists linked to the Protocols of the ASEAN Framework Agreement for the Integration of Priority Sectors. This protocol was established in 2004, focusing on 11 sectors: agro-based products; air transport; automotive; e-ASEAN; electronics; fisheries; health care;

rubber-based products; textile and apparel; tourism; and wood-based products. A 12th sector, logistics, was added in 2007. These sectors were selected on the basis of comparative advantage in natural resource endowments, labour skills and cost competitiveness, with a value-added contribution to ASEAN's economic development (ASEAN Secretariat, 2015b: 111)

According to the protocol, tariff duties should be eliminated for products in each priority sector by 2007 for ASEAN-6 countries, and by 2012 for CLMV countries. However, exceptions are made for priority sector items that are placed in the sensitive list and GEL categories, or are included by a member State in the protocol's negative lists. Each member State's negative list cannot exceed 15 per cent of the total product list covering these sectors, which is equivalent to 641 out of a total 4,273 tariff lines at the eight-digit tariff level. In addition, the protocol includes measures to improve transparency related to NTBs, to harmonize licensing and custom procedures as well as product standards and technical regulations (ASEAN Secretariat, 2004). Despite sectoral-level roadmaps developed for each priority sector, the level of regional integration varies, due to NTBs related to administrative charges, certificates of approval, import licensing, quality control measures, internal taxes, and prohibition measures. By one account, the least degree of progress has been in sectors such as automotive, electronics, textile and apparel, agro-based products and fisheries, as well as in health care, logistics and e-ASEAN (MGI, 2014: 41).

Moreover, in the case of the four natural resource-based PIS, namely, agro-based products, fisheries, rubber-based and wood-based products, the number of tariff items covered as a share of total tariffs can vary quite widely. At the eight-digit tariff level, product coverage can range from 100 per cent for fisheries products, to 82.1 per cent for rubber-based products, 57.5 per cent for wood-based products, and 11.9 per cent for agro-based products (ASEAN Secretariat, 2015b: 116).

PIS coverage of agro-based products is narrow, including a small number of vegetables (fresh or preserved), some fruits and nuts (fresh, preserved or processed), a wide range of oilseeds (except most vegetable oils or margarines), an array of oilseed-based animal feed and a small number of grains and flour, mainly maize. Products not covered include all live animals and meat-related products; all dairy products; all live plants; most fresh fruits and vegetables; and all coffee- and tea-based products. PIS coverage of wood-based products is broader, and includes most (semi-) processed wood products such as sawn wood, fibreboard, plywood and particleboard, but does not include rough timber, basketwork, rattan (other than furniture) or wood derivatives such as wood pulp and paper. PIS coverage of rubber-based products is even broader, but notably excludes all unprocessed rubber products, all synthetic rubber, waste rubber and compound rubber products (ASEAN Secretariat, 2015b: 116-117).

In terms of impact of PIS initiatives, growth in intraregional exports in these natural resource-based sectors has been marginal. Between 2004 and 2014, there has been slight growth of intraregional exports as a share of total exports for agro-based and rubber-based products, but intraregional exports of wood-based and fisheries products as a share of total exports has declined (ASEAN Secretariat, 2015b: 126).

In the area of non-tariff measures, AFTA first sought to remove quantitative restrictions on products under the CEPT scheme, as well as NTBs on a gradual basis within a period of five years. Efforts to eliminate NTBs were also included in ATIGA which establishes their removal in three tranches as follows:

Achievements and Challenges in Regional Integration

- Brunei, Indonesia, Malaysia, Singapore and Thailand shall eliminate in three tranches by January 2008, 2009 and 2010;
- The Philippines shall eliminate in three tranches by January 2010, 2011 and 2012;
- Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam shall eliminate in three tranches by January 2013, 2014 and 2015 with flexibilities up to 2018.

Available data does not permit calculating the total number of ASEAN NTBs applied and eliminated. Table 1, however, provides a sense of measures notified at the WTO by ASEAN members in terms of NTBs initiated and in force as of Dec. 31 2016. Across the different kinds of NTBs, the largest absolute numbers remain in the areas of SPS and TBT, in terms of initiated NTBs, whereas SPS and QR are the largest in terms of NTBs that are in force. Indeed, it appears the number of QR in force has increased: with 236 measures in force in by year-end 2016, compared to 102 measures in force in 2015 (ASEAN Secretariat 2015b: 16).

Table 1. Notified Non-Tariff Barriers, 2016

| | SPS | | TBT | | ADP | | SG | | SSG | QR | TRQ |
|----------------------------|------------|------------|--------------|------------|-----------|-----------|-----------|-----------|----------|------------|-----------|
| | Initiated | In Force | Initiated | In Force | Initiated | In Force | Initiated | In Force | In Force | In Force | In Force |
| Brunei Darussalam | 2 | 1 | 2 | | | | | | | | |
| Cambodia | | | 2 | 1 | | | | | | | |
| Indonesia | 62 | 52 | 89 | 24 | 22 | 33 | | 6 | | | 2 |
| Lao People's Dem. Republic | 1 | | 1 | | | | | | | 12 | |
| Malaysia | 30 | 7 | 214 | 15 | 12 | 21 | 2 | 1 | | | 13 |
| Myanmar | | | 1 | 1 | | | | | | | |
| Philippines | 128 | 224 | 251 | 1 | 1 | 1 | | 3 | 7 | 21 | 14 |
| Singapore | 36 | 21 | 32 | 15 | | | | | | 91 | |
| Thailand | 218 | 19 | 565 | 34 | 12 | 40 | 1 | 3 | | 112 | 23 |
| Viet Nam | 55 | 31 | 63 | 29 | 3 | 4 | 3 | 1 | | | 2 |
| Total | 532 | 355 | 1,220 | 120 | 50 | 99 | 6 | 14 | 7 | 236 | 54 |

Source: WTO Integrated Trade Intelligence Portal.

Note: Sanitary and Phytosanitary (SPS); Technical Barriers to Trade (TBT); Antidumping (ADP); Safeguards (SG); Special Safeguard (SSG); Quantitative Restrictions (QR); Tariff-rate quotas (TRQ).

The removal of NTBs remains an important aspect in AEC Blueprint 2025, but efforts to remove them rely on a voluntary approach, which has had a limited impact. One central challenge identified is the institutional fragmentation of the national institutions involved in implementation, as well as the apparent inclination among member States to under-report NTBs that are in use (ASEAN Secretariat, 2015b: 16; Tangkitvanich and Rattanakhomfu, 2016: 5-6; Chia, 2013: 14-15). Due to discrepancies in measurement, other studies have reported a far higher incidence of NTBs: from around 1,500 in 2000 to just under 6,000 in 2015 (Ing et al., 2016: 22).

ATIGA also included other policy initiatives in the area of trade facilitation such as: the ASEAN Trade Repository (ATR) and the ASEAN Single Window (ASW). The goal of ATR is to create a central source of member countries' trade and customs laws and procedures that is publicly available through the Internet. ATR contains trade-related information such as: tariff nomenclature; most-favoured nation tariffs; rules of origin; non-tariff measures; national trade and customs laws and rules; procedures and documentary

requirements; administrative rulings; best practices in trade facilitation by each member State; and a list of authorized traders in member States. By 2015, however, only four member countries had completed their respective NTR web portals, namely: Indonesia, the Lao People's Democratic Republic, Malaysia and Thailand (ASEAN Secretariat, 2015b: 14).

The ASW is meant to improve the cross-border movement of goods via the creation of an integrated electronic platform that enables the exchange of electronic data for customs cargo clearance and exchange. The idea is to allow a single submission and synchronized processing of data and information from a single approval point for customs clearance of cargo. According to the AEC Blueprint 2015, national ASWs were to be operational in ASEAN-6 countries by 2008 at the latest, and in CLMV countries by 2012 at the latest (ASEAN Secretariat, 2008: 9). The AEC Blueprint 2025 further outlines that ASW should be fully rolled out in all ASEAN members and their scope should be widened to include more documents and stakeholders (ASEAN Secretariat, 2015a: 4).

According to recent research, full implementation of ASW by Singapore was achieved by 2011, followed by high levels of implementation in Malaysia, Thailand and Indonesia. Malaysia and Thailand were still conducting process and documentation simplification and harmonization in some government agencies linked to their ASWs, while Indonesia was gradually improving to reach a similar level. The Philippines had a lower level of implementation, followed by Cambodia, Viet Nam, the Lao People's Democratic Republic and Myanmar (no data available for Brunei Darussalam in 2011) (Intal Jr., 2015a: 27-28).

Rules of origin have also been an important feature of ASEAN trade agreements. The rule stipulating that products must have at least 40 per cent regional value content in order to benefit from tariff preferences was first included in AFTA in 1992. This rule was further elaborated in ATIGA, which classifies goods as: wholly obtained or produced (in the exporting member State), and not wholly obtained or produced (in the exporting member State). For goods in the latter classification to receive tariff preferences, the 40 per cent regional value content must be observed, or if all non-originating materials used in the production of the goods have undergone a change in tariff classification/heading at the four-digit level (ASEAN Secretariat, 2009: 28-31). Moreover, ATIGA also includes a list of 2,652 products at the six-digit level that can qualify for preferences if they satisfy product specific rules.⁴ A separate list of specific rules also exists for textile and textile products, consisting of 407 goods at the six-digit level.⁵

Free flow of services

Signed in 1995, the AFAS set in motion several rounds of negotiation in service sector integration, using a "positive list" approach that has evolved over time. At the first AFAS round in 1996-1998, commitments were negotiated on the basis of a request-and-offer approach, while later rounds adopted a formula-based approach to more forcefully drive liberalization (Hiong, 2011). By 2015, AFAS negotiations had reached a 9th round, and a 10th round had been started.

⁴ See, http://www.asean.org/wp-content/uploads/images/2012/Economic/AFTA/annex/sept_update/Annex%203%20Product%20Specific%20Rules%20-%20HS%202012.pdf.

⁵ See, <http://asean.org/asean-economic-community/asean-free-trade-area-afta-council/agreements-declarations/>.

As mentioned above, the AEC blueprint 2015 stipulated that all restrictions on services trade be removed for four priority sectors (air transport, e-ASEAN, health care and tourism) by 2010, and for a fifth priority sector (logistics) by 2013. All restrictions on trade for all other services sectors were to be removed by 2015. The blueprint also established consecutive liberalization rounds every two years from 2008 until 2015 (i.e. five rounds), with a target schedule of minimum numbers of newly added subsectors in each round. The overall package of commitments in each round would abide by the following parameters:

- No restrictions on mode 1 (cross-border trade) and mode 2 (consumption abroad);
- In terms of mode 3 (commercial presence), allow foreign (ASEAN) equity participation of:
 - not less than 51 per cent by 2008, 70 per cent by 2010 for the four priority sectors;
 - not less than 49 per cent by 2008, 51 per cent by 2010, and 70 per cent by 2013 for logistics services;
 - not less than 49 per cent by 2008, 51 per cent by 2010, and 70 per cent by 2015 for other services sectors; and
 - progressively remove other mode 3 market access limitations by 2015;
- Set parameters and schedule commitments of liberalization in mode 3 national treatment limitations, mode 4 (presence of natural persons) limitations, and horizontal limitations on market access, for each round by 2009. (ASEAN Secretariat, 2008a: 10-11; ASEAN Secretariat, 2015b: 27-30)

However, the AEC blueprint 2015 also provided for flexibilities in each liberalization round according to the following considerations:

- Possibility of catching up in the next round if a member country is not able to meet the commitments set in the previous round;
- Allowing the substitution of subsectors that have been agreed to be liberalized in a round, but for which a member country is not able to honour its commitments, with other subsectors outside the agreed subsectors;
- Liberalization through the "ASEAN Minus X" formula, which suggests that if a member country cannot honour its liberalization target, other member countries may proceed to implement their respective liberalization targets among themselves.

These provisions build on the flexibility allowance that permits member countries to not achieve up to 15 per cent of the total committed modes of supply in each round of liberalization (ASEAN Secretariat, 2008: 11; Yee, 2016a). Some have argued that due to the nature of these flexibilities, member countries are provided significant room for manoeuvre in terms of the back-loading of commitments and the adaptation of *de jure* binding agreements into *de facto* "best effort" agreements (Nikomborirak, 2013).

Overall, the number of services subsectors under AFAS commitments has clearly grown with each subsequent negotiating round, involving areas such as business services, professional services, construction, distribution, education, environmental services, maritime transport and

telecommunications, in addition to the aforementioned priority sectors.⁶ Nonetheless, ASEAN member States have generally taken a gradual approach to services sector liberalization that takes into consideration national circumstances and the different levels of development and capacity among different members.

While inclusion of services subsectors has been more extensive than provisions under GATS, in many cases the degree of liberalization within subsectors has not been intensive and provides limited preferential margins vis-a-vis multilateral agreements (ASEAN Secretariat, 2015b: 30; Chia, 2013: 19).⁷ Moreover, it should be recognized that progress on liberalization cannot simply be assessed in quantitative terms by counting the number of sectors with commitments and measuring the extent of the commitments. Such exercises often give equal weight to each sector and mode of delivery when in fact some sectors and modes of delivery carry more weight than others. For example, in air and marine transport services, mode 1 is far more important than for the telecommunications sector, which relies on mode 3. In contrast, mode 2 commitments are rarely the most important in services sectors. Thus, commitments can be made in subsectors that do not significantly increase the degree of liberalization (Mercurio, 2016: 14).

Also, commitments can often not be well coordinated with changes in domestic policy in member countries. In some cases, "the AFAS process is merely a game played on paper - commitments are gradually improved, but they lag actual practice, so no actual policy changes are required. In other cases, improvements in commitments are heavily qualified so as to retain many existing trade barriers" (Dee, 2015: 9). For example, commercial presence (mode 3) often requires the temporary transfer of corporate staff to establish the business in the new location and to later provide training, quality control, etc. for a significant period of time. However, as seen in the eighth AFAS package, a pattern of liberalization in health-care services emerged where mode 3 commitments were not accompanied by matching mode 4 commitments. In other instances, foreign equity limits in some health-care subsectors were raised, while relevant mode 4 commitments were withdrawn. This has led to situations in subsectors where rates of measured liberalization have increased along with an increasing number of trade barriers (Dee, 2015: 9, 29-30; Yee, 2016a: 3). In another study covering the four priority sectors and finance and telecom sectors, the average level of restrictiveness was estimated at 57 (100 = full integration), with air transport scoring the lowest level of restrictiveness (71) and health care scoring the highest level of restrictiveness (31) (MGI, 2014: 41).

To provide another sector-specific example, ASEAN member countries' commitments were undertaken in air transport in three key subsectors covered by GATS: repairs and maintenance, selling and marketing, and computer reservation systems. Most member countries have also made commitments in some or all of the related subsectors of aircraft rental (with and without crew), air freight forwarding, and aircraft catering. The Lao People's Democratic Republic has gone a step further, to also include aircraft line maintenance services, which is excluded from GATS. For each subsector, virtually all members have removed market access or national treatment limitations for mode 1 and mode 2, but in mode 3 half the

⁶ Liberalization of the air transport and financial services sectors, although initiated under the ambit of main negotiating body (the Coordinating Committee on Services), has been transferred to the portfolio of ASEAN Transport Ministers and Finance Ministers, respectively. See the next section for financial sector liberalization.

⁷ As such, the "impact of AFAS may therefore be more profound in terms of ensuring the certainty of regional policy rather than delivering additional preferential liberalization" (ASEAN Secretariat, 2015b: 30).

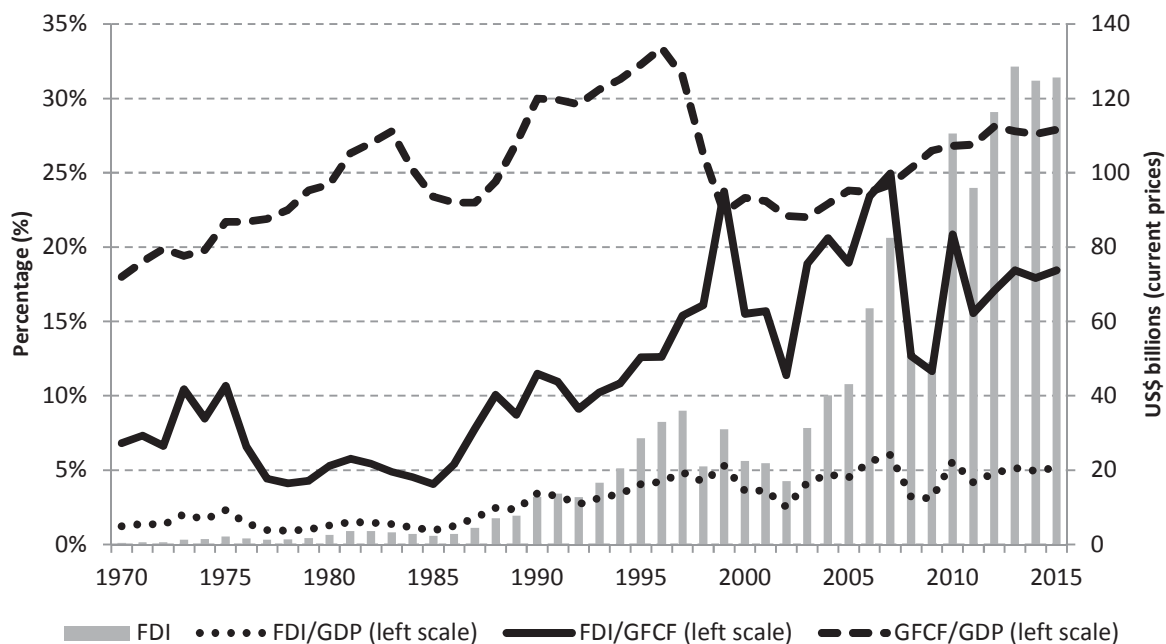
member countries failed to make commitments for at least some services that were committed under mode 1 and 2. Moreover, ownership limits of less than 70 per cent, the target established in the AEC blueprint 2015, have been maintained in three ASEAN member States in some of these subsectors and mode 4 limitations have also remained horizontal rather than subsector-specific (Mercurio, 2016: 15).

In terms of overall mode 4 services liberalization, mutual recognition arrangements (MRAs) have been concluded in eight areas relating to skilled professionals: engineering services, nursing services, architectural services, land surveying qualifications, medical practitioners, dental practitioners, accounting services and tourism professionals (ASEAN, 2015b: 33). However, in some cases, MRAs have established only partial recognition of professional services: MRAs in engineering and architecture, for example, are limited to temporary movement of professionals and do not exclude requirements for national immigration and work permits. For these reasons, use of this scheme has been low, with only a few registered professionals in Viet Nam, Indonesia, Malaysia and Singapore, and none elsewhere, as many choose to work overseas by registering as consultants. In other cases, in some countries, there is a lack of incentive to implement MRAs because existing regulations are more liberal under their most-favoured nation regime (OECD, 2016: 145-146).

V. Integration in Investment and Finance

Following the creation of ASEAN, annual FDI inflows remained relatively low until the 1990s, when they began to rise significantly. Though FDI inflows decreased in the late 1990s due to the Asian financial crisis, they have surged from 2003 onward (except with the onset of the global financial crisis of 2008-2009) to reach a level of over \$125bn by 2015 (figure 10). As a share of ASEAN GDP, however, annual FDI inflows in 2015 were just over 5 per cent; this level has not changed significantly since it was reached in the late 1990s and has not recovered since reaching a peak of 6 per cent in 2007. Given efforts to gradually liberalize foreign investment since the late 1990s, these trends have raised concerns about the ability of FDI liberalization to raise the level of overall domestic ASEAN investment rates and the productive capacity of the economy (OECD, 2016: 149).

Figure 10. ASEAN Inward FDI and GFCF Ratios, 1970-2015



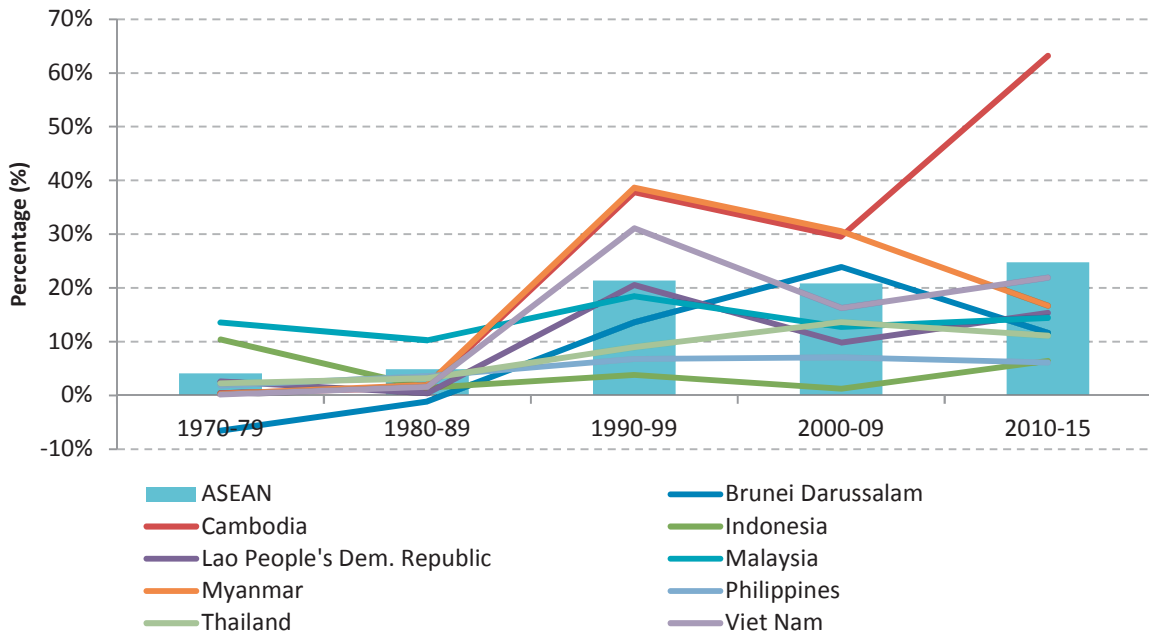
Source: UNCTADstat and World Development Indicators.

Inward FDI as a share of ASEAN gross fixed capital formation (GFCF) has been volatile in the past 20 years, rising quickly in the late 1990s to reach 23.8 per cent in 1999 before falling sharply to 11.4 per cent in 2002. A peak of 25 per cent was reached in 2007, before declining rapidly again with the global financial crisis, and reaching a low of 11.7 per cent in 2009. Since then, over the period 2010-2015, FDI as a share of GFCF has annually averaged 18.1 per cent. These observations broadly mirror trends in domestic ASEAN investment rates (GFCF/GDP) that rose to a high of 33.4 per cent in 1996, dropping to 22 per cent in 2003, and climbing gradually to reach a level of 27.9 per cent in 2015. Over the 2000-2016 period, ASEAN investment rates have been relatively low at an annual average of 25.1 per cent, which is roughly the same level for the entire 1970-2015 period.⁸ With average annual savings rates at a level of 31.1 per cent for the 2000-2016 period, there would appear to be more room to increase domestic investment rates.

Some further insights can be provided by examining average annual ASEAN FDI inflows as a share of GFCF at the country level (figure 11). The FDI/GFCF rate rose for all ASEAN countries from the 1980s to the 1990s, particularly CLMV countries. By the 2010-2015 period, FDI/GFCF rates had declined below the 20 per cent level for most countries, except Cambodia and Viet Nam. Five countries (Myanmar, the Lao People's Democratic Republic, Malaysia, Brunei Darussalam and Thailand) are in the 10-20 per cent range, while rates for the Philippines and Indonesia are in the 0-10 per cent range. (For presentation purposes, figure 11 does not include Singapore, which has much higher FDI/GFCF rates that could be skewed due to the country's role as a financial center.)

⁸ By comparison, over the period 1970-2015, average annual gross fixed capital formation was: 33.7 per cent for China, 31.1 per cent for the Republic of Korea, 29.1 per cent for Japan, and 24.8 per cent for Taiwan Province of China.

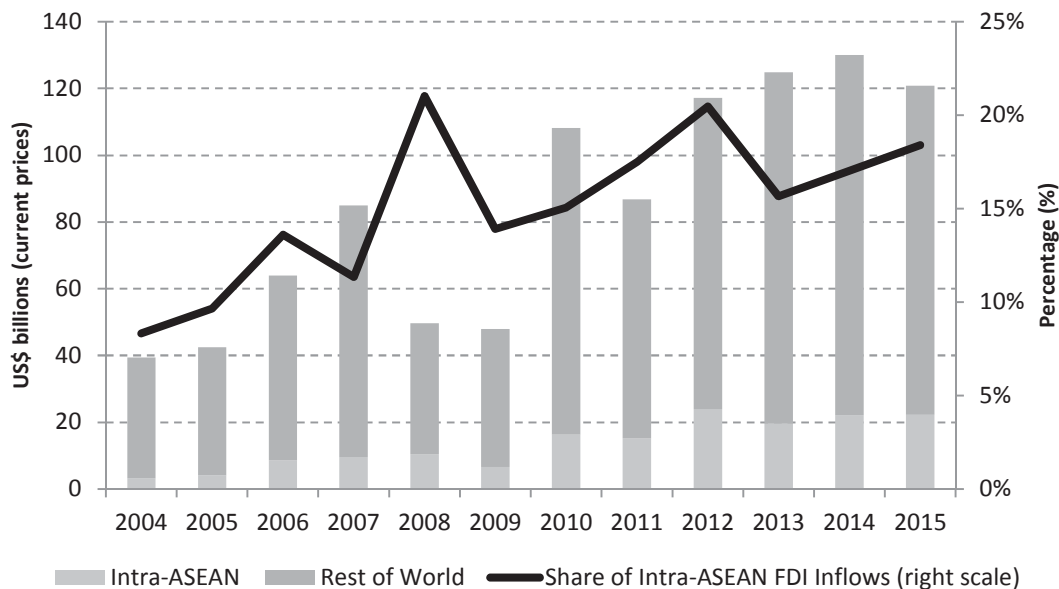
Figure 11. ASEAN inward FDI as a share of gross fixed capital formation, by country, 1970-2015



Source: UNCTADstat.

ASEAN FDI inflows have increased over time but, as in the case of intra-ASEAN trade flows, are mainly dominated by inflows from the rest of the world. Average annual intra-ASEAN FDI inflows have been relatively low at 15.2 per cent over the 2004-2015 period, albeit on a rising trend (figure 12). Where data is available, intra-ASEAN FDI inflows peaked at 21 per cent in 2008 and were 18.4 per cent in 2015.

Figure 12. Regional composition of annual ASEAN FDI inflows, 2004-2015



Source: ASEANstat and ASEAN Secretariat 2015e.

Achievements and Challenges in Regional Integration

A breakdown of ASEAN inward FDI by source and by economic sector allows some perspective on the main areas of intra-ASEAN investment countries and by countries from the rest of the world. Sectors highlighted in table 2 – namely, mining and quarrying, manufacturing, wholesale and retail trade and repair of motor vehicles and motor cycles, transportation and storage, information and communication, financial and insurance, and real estate represent the key areas receiving FDI (of over US\$ 1 billion) from countries outside of the ASEAN region. In total, these seven areas accounted for 81 per cent of total inward FDI from outside ASEAN countries in 2015. By contrast, the agriculture, forestry and fishing sector is the only sector that clearly receives more FDI from inside the region than from outside the region. In total, these eight sectors accounted for 87 per cent of intra-ASEAN FDI inflows in 2015.

Table 2. ASEAN inward FDI, by source and sector, 2012-2015

| Economic Sector | 2012 | | 2013 | | 2014 | | 2015 | |
|---|------------------|------------------|-------------------|------------------|-------------------|------------------|------------------|------------------|
| | ROW | Intra-ASEAN | ROW | Intra-ASEAN | ROW | Intra-ASEAN | ROW | Intra-ASEAN |
| Agriculture, forestry, and fishing | 0.49% | 5.40% | 0.69% | 8.18% | 0.57% | 18.53% | 0.90% | 18.38% |
| Mining and quarrying | 6.35% | 2.30% | 7.36% | 1.67% | 6.06% | 5.09% | 6.79% | 4.93% |
| Manufacturing | -0.01% | 22.21% | 30.47% | 31.62% | 10.90% | 28.27% | 24.23% | 23.43% |
| Electricity, gas, steam and air conditioning supply | 0.19% | 0.07% | 0.89% | 1.24% | 0.38% | 0.11% | 1.66% | 1.55% |
| Water supply; sewerage, waste management and remediation | 0.26% | 0.00% | 0.54% | 0.13% | 0.07% | 0.04% | -0.06% | 0.13% |
| Construction | -0.12% | 0.67% | 0.69% | -0.23% | 1.46% | 0.92% | 0.71% | 1.33% |
| Wholesale and retail trade; repair of motor vehicles and motor cycles | 19.24% | -2.95% | 15.14% | 4.88% | 18.01% | 4.97% | 10.25% | 4.73% |
| Transportation and storage | 4.54% | 2.13% | 2.48% | 0.92% | 2.17% | 1.79% | 3.03% | 1.34% |
| Accommodation and food service | 0.08% | 0.31% | 0.01% | 0.05% | 0.21% | -0.12% | 0.43% | 0.21% |
| Information and communication | 1.90% | 2.65% | 1.67% | 0.20% | 1.94% | -3.61% | 0.72% | 5.01% |
| Financial and Insurance | 43.05% | 42.19% | 23.47% | 15.06% | 36.80% | 26.78% | 36.16% | 16.53% |
| Real estate | 6.56% | 17.10% | 4.50% | 24.19% | 5.27% | 19.91% | 6.56% | 12.46% |
| Professional, scientific and technical | 5.75% | 0.65% | 0.36% | 0.21% | 0.81% | 0.10% | 0.28% | -0.12% |
| Administrative and support service | 0.16% | 0.38% | -0.02% | 0.50% | 0.19% | 0.27% | 0.24% | 0.12% |
| Public administration and defence; compulsory social security | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Education | 0.00% | 0.00% | 0.05% | 0.07% | 0.04% | 0.04% | 0.00% | 0.02% |
| Human health and social work | 0.32% | 0.00% | 0.11% | 0.08% | 0.16% | 0.19% | 0.11% | 0.14% |
| Arts, entertainment and recreation | 0.09% | 0.13% | 0.21% | 0.00% | -0.03% | 0.00% | 0.00% | -0.08% |
| Other services. | 9.74% | 4.90% | 9.13% | 4.64% | 11.77% | -6.64% | 6.17% | 0.31% |
| Unspecified | 1.34% | 0.91% | 3.04% | 0.00% | 3.85% | 0.26% | 4.08% | -0.44% |
| Total Sectors (US\$ millions) | 93,137.93 | 23,961.38 | 105,302.33 | 19,562.18 | 107,860.63 | 22,134.44 | 98,586.60 | 22,232.21 |

Source: ASEANstat.

Table 3 provides a sense of the main sources and destinations (host) of intra-ASEAN FDI inflows in 2015. In terms of sources of FDI, Singapore is the clearly the largest supplier of FDI to the ASEAN region, followed by Malaysia, the Philippines and Indonesia. In terms of FDI host countries, Indonesia is the largest recipient, followed by Singapore, Malaysia, Myanmar, Viet Nam, and Thailand. Only three ASEAN countries were net providers of FDI in 2015: Singapore (\$11.5 billion), Malaysia (\$1.6 billion), and Philippines (\$1.5 billion). Singapore's intra-ASEAN FDI went mainly to Indonesia, Malaysia, Myanmar and Thailand. Malaysia's intra-ASEAN FDI went primarily to Singapore and Viet Nam, while the Philippines intra-ASEAN FDI went mainly to Singapore.

Achievements and Challenges in Regional Integration

Table 3. Intra-ASEAN FDI, by host and source countries, US\$ millions, 2015

| | | Source | | | | | | | | | | |
|------|----------------------------|---------------------|----------|-----------|---------|----------|---------|------------|-----------|-----------|----------|----------|
| | | Brunei | Cambodia | Indonesia | Lao PDR | Malaysia | Myanmar | Philippine | Singapore | Thailand | Viet Nam | |
| Host | Brunei Darussalam | | 0.00 | 0.00 | 0.00 | 37.52 | 0.00 | 0.00 | 49.13 | 0.00 | 0.00 | 86.65 |
| | Cambodia | 2.47 | | 0.42 | 0.00 | 121.55 | 0.00 | 0.05 | 51.54 | 80.68 | 168.71 | 425.42 |
| | Indonesia | -2.99 | 0.00 | | 0.00 | 212.17 | 0.07 | 1.24 | 9,242.27 | 39.55 | 6.64 | 9,498.95 |
| | Lao People's Dem. Republic | 0.00 | 39.11 | 0.30 | | 12.36 | 0.00 | 0.00 | 0.14 | 69.30 | 100.62 | 221.83 |
| | Malaysia | -14.13 | 3.88 | 455.42 | -0.08 | | -1.08 | 52.77 | 1,862.88 | 339.10 | 20.25 | 2,719.01 |
| | Myanmar | 8.20 | 0.00 | 0.24 | 0.00 | 3.88 | | 0.00 | 1,562.60 | 537.78 | 117.95 | 2,230.65 |
| | Philippines | 0.08 | 0.10 | 1.57 | 0.01 | -1.36 | 0.05 | | 40.14 | 23.79 | 1.84 | 66.22 |
| | Singapore | -36.60 | 0.00 | 469.50 | 0.00 | 2,654.40 | 32.20 | 1,481.70 | | -1,276.50 | 65.80 | 3,390.50 |
| | Thailand | 2.06 | 4.24 | -39.65 | 1.10 | -21.46 | 0.62 | 6.50 | 1,459.86 | | 0.45 | 1,413.72 |
| | Viet Nam | 78.58 | 0.00 | 11.22 | 1.30 | 1,285.01 | 0.00 | 2.83 | 638.48 | 136.05 | | 2,153.47 |
| | | 37.67 | 47.33 | 899.02 | 2.33 | 4,304.07 | 31.86 | 1,545.09 | 14,907.04 | -50.25 | 482.26 | |
| | | Total Source | | | | | | | | | | |

Source: ASEANstat.

As mentioned in section III, the ASEAN Comprehensive Investment Agreement (ACIA) came into force in 2012 and seeks to streamline the investment regimes of member countries through progressive liberalization. ACIA seeks to adopt a comprehensive scope by covering investment liberalization, protection, promotion and facilitation. The agreement applies standards of national treatment and most-favoured nation status to investors of any other member State in the following sectors: manufacturing, agriculture, fishery, forestry, mining and quarrying, and incidental services. Certain provisions are also established regarding appointment of senior management and board of directors.

ACIA also sets out a "negative list" approach in article 9, which allows for reservations on national treatment and rules for appointment of senior management and board for directors, related to existing measures maintained by a member country at the central, regional and local government levels (ASEAN Secretariat, 2012a: 13). Further modalities were established for the elimination and improvement of ASEAN member countries investment restrictions.⁹ The modality comprises three components:

- Component 1: Reservations not subject to elimination or improvement. This consists of a non-exhaustive list that can cover, but is not limited to, measures related to land use/ownership, those prescribed under international conventions, general exceptions, security exceptions and constitutional constraints.
- Component 2: Reservations subject to elimination or improvement. This consists of a self-selected list of reservations to be progressively eliminated and/or improved according to the three phases of the AEC blueprint strategic schedule. Priority should be given to phase-out reservations that were previously found in the temporary exclusion list under the AIA.

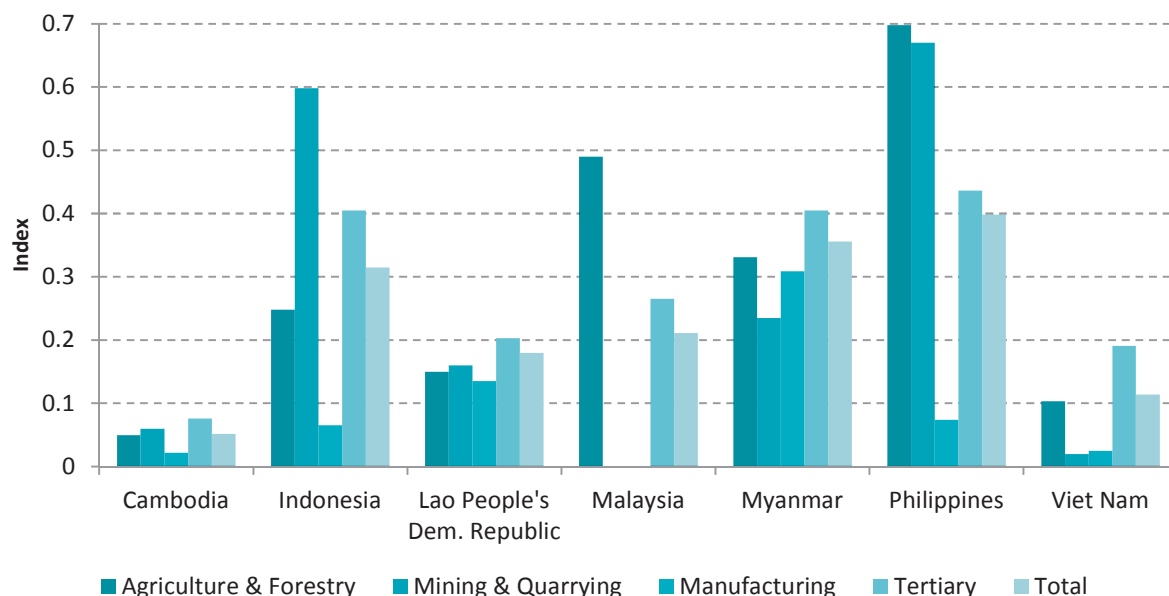
⁹ For respective ASEAN member countries' ACIA reservation lists, please see: http://asean.org/?static_post=asean-comprehensive-investment-agreement-reservation-list.

- Component 3: Adherence to a peer review process aimed at monitoring progress made, if any, on the implementation of the modality in respective member countries (ASEAN Secretariat, 2012b).

ASEAN investment liberalization in market access and national treatment has progressed under the ACIA, but the process has remained gradual, with notable differences between member countries (OECD, 2016: 150; Yee, 2016: 3; MGI, 2014: 41). A recent assessment of AEC implementation in this area noted that Cambodia, the Lao People’s Democratic Republic, Myanmar and Singapore have relatively high investment liberalization rates in the agriculture and mining sector, as well as the manufacturing sector. In Cambodia and the Lao People’s Democratic Republic, the agriculture and mining sector is more open than the manufacturing sector. Overall, these countries are the most open to foreign investment in ASEAN. By comparison, Brunei Darussalam, Indonesia, Malaysia, the Philippines and Thailand have adopted a more restrictive stance in the agriculture and mining sectors, and a much more open stance in the manufacturing sector. For example, according to the study, the Philippines had the most open manufacturing sector in ASEAN, but constitutional provisions limit foreigners to a minority position in investment in mining (including land), except under special circumstances where a foreign firm has reached a technical and financial agreement with the Government (Intal Jr., 2015b: 8-9).

These trends can be broadly observed in figure 3, showing the FDI restrictiveness of seven selected ASEAN countries across key sectors of the economy in 2016, with higher index scores representing more restrictive FDI regimes.¹⁰ According to these measures, manufacturing sectors in each country have the lowest index score relative to index scores for agriculture and forestry, mining and quarrying, and the tertiary sector. However, the relative degree of restrictiveness in non-manufacturing sectors is often far greater in countries such as Indonesia, Malaysia and the Philippines than is the case in the CLMV countries.

Figure 13. **FDI Restrictiveness Index, selected ASEAN countries and sectors, 2016**



Source: OECD. See <http://www.oecd.org/investment/fdiindex.htm>.

¹⁰ Note that the OECD average total FDI restrictiveness score was 0.067 in 2016.

These trends are better understood in the context of ASEAN national development strategies in which manufacturing sectors in Indonesia, Malaysia and the Philippines (and increasingly Viet Nam) have engaged in regional and global value chains (see next section). In contrast, at their earlier stages of development, the lower-income CMLV countries try to leverage what advantages they may have in natural resource endowments to attract capital and technical and managerial know-how through foreign investments in large plantations and capital-intensive energy and mining projects, in addition to manufacturing sectors (Intal Jr., 2015b: 8-9).

Financial integration

Broadly speaking, ASEAN nations learned from their experience with the Asian financial crisis of the late 1990s and many of the subsequent initiatives for regional financial integration appear to reflect this understanding of a careful and sequenced approach to liberalization of the financial sector and its related flows (Lim, 2017; ADB, 2013). The impetus to ASEAN's financial integration emerged with the Roadmap for Monetary and Financial Integration of ASEAN, which was endorsed by ASEAN Finance Ministers in 2003. The roadmap charts the broad course of action in the areas of (a) capital market development; (b) financial services liberalization; and (c) capital account liberalization. This was followed by the ASEAN Financial Integration Framework in 2011, which outlined the aim of creating a "semi-integrated" financial market by 2020 (ASEAN Secretariat, 2015b: 48).

The AEC blueprint 2015 included a short section related to freer capital flows focusing on strengthening capital market development and integration, and on allowing greater capital mobility. The former included efforts such as at greater harmonization of rules in ASEAN capital market standards for debt securities issuance, disclosure requirements and distribution, as well as encouraging greater recognition of credentials for financial market professionals. Importantly, efforts at greater capital mobility stressed the need for an "orderly capital account liberalization consistent with member countries' national agenda and readiness of the economy", as well as stating the right to adopt adequate safeguards to ensure macroeconomic stability against systemic risks linked to the liberalization process (ASEAN Secretariat, 2008a: 14-5).

The AEC blueprint 2025 reiterated and expanded upon these points. In the area of financial services liberalization, the aim is the gradual removal of restrictions on ASEAN financial institutions (banks, insurance companies and investment companies) to operate in other member countries' domestic markets. The blueprint seeks to deepen the use of the Qualified ASEAN Banks (QABs) initiative, established by the ASEAN Banking Integration Framework in 2014, which is aimed at providing the same degree of market access and operational flexibilities as those enjoyed by domestic banks in respective host countries. With national ASEAN financial systems largely bank-dominated,¹¹ the goal is to create a network of QABs that will allow indigenous ASEAN banks to play a greater role in promoting intraregional trade and investment (ASEAN Secretariat, 2015e: 7-8; 2015b: 48-49).¹²

¹¹ In 2009, it was estimated that commercial banks accounted for more than 82 per cent of total financial assets in ASEAN (ADB, 2013: 3).

¹² Financial services liberalization has also been pursued in the context of AFAS. By 2015, ASEAN Finance Ministers completed the 6th package of negotiations in this area, and the relevant negotiation committee was in the process

In terms of capital market development, the AEC blueprint 2025 plans to enhance capital market linkages related to clearing settlement and custody trading, and allow investors and issuers to operate in cross-border ASEAN markets. This will build on related initiatives such as the ASEAN Trading Link, which was launched in 2012 and provides an electronic single point of access connecting the stock market exchanges of Malaysia, Singapore and Thailand. These countries have also established an agreement to facilitate multi-jurisdictional offerings of equity and plain debt securities for companies seeking a secondary stock market listing in participating member countries. The blueprint also broadly promotes the development of sovereign and corporate bond markets as a way of diversifying risks away from bank lending and to provide investors with greater investment opportunities. As for payment and settlement systems, ASEAN seeks to improve in five principal areas: trade settlement, remittances, retail payments, capital markets and standardization (ASEAN Secretariat, 2015a: 8; 2015b: 51-53; Yee, 2016c).

According to recent research, ASEAN banking market integration has been slow to develop. While member countries, particularly the more developed of the ASEAN-6, have gradually opened up their respective banking sectors, cross-border banking and cross-border penetration of domestically based banks within ASEAN has been limited. For instance, in the three member States for which data was available (Malaysia, the Philippines and Thailand), domestic banks in these countries accounted for an average of 82 per cent of total commercial banks' assets in 2009. The share of ASEAN-based foreign banks in Malaysia was 8.5 per cent, the highest share among the three member countries; the share was 3.7 per cent in Thailand, and 0.4 per cent in the Philippines. In 2010, not a single ASEAN-based commercial bank had either a branch or a subsidiary in all ASEAN member countries: the three ASEAN banks with the widest regional coverage (Maybank of Malaysia, Bangkok Bank of Thailand, and United Overseas Bank of Singapore) have operations in seven ASEAN member countries. By comparison, international commercial banks, which are larger on average than ASEAN banks (in terms of assets), have a comparatively larger presence in the region (ADB, 2013: 4, 8; Almekinders et al., 2015: 11; ASEAN Secretariat, 2015b: 54-56).

The degree of financial integration can also be captured in intraregional portfolio investment asset (equity, debt securities) holdings of ASEAN member countries. Although the share of these intraregional holdings has increased in recent years, they remain at less than 10 per cent a year on average for the period 2001 to 2013 (ASEAN Secretariat, 2015b: 57; OECD, 2016: 148). Local ASEAN currency bond markets are relatively undeveloped; only Malaysia, Singapore and Thailand had a total (government and corporate) bond issuance of over 75 per cent of GDP in the first quarter of 2017 (ADB, 2017a: 18). Moreover, among the more developed ASEAN-6 countries, Singapore and Malaysia are the two largest portfolio investors, accounting respectively for 84.2 per cent and 12.1 per cent of the total intra-ASEAN portfolio investments in 2009 (ADB, 2013: 5).

Other related initiatives are occurring in conjunction with dialogue partners, such as the Asian Bond Markets Initiative, which began in 2003 and includes the participation of China, Japan and the Republic of Korea. In 2010, as part of the ASEAN+3 Bond Market Forum, these countries continued to seek the best way to harmonize regulations and market practices in Asian local currency bond transactions (Lim, 2017). In light of bond market development in recent years, in 2010 ASEAN+3 established the Credit Guarantee

of negotiations to review the financial services obligations under AFAS, as part of a chapter in ATISA (ASEAN Secretariat, 2015b: 49).

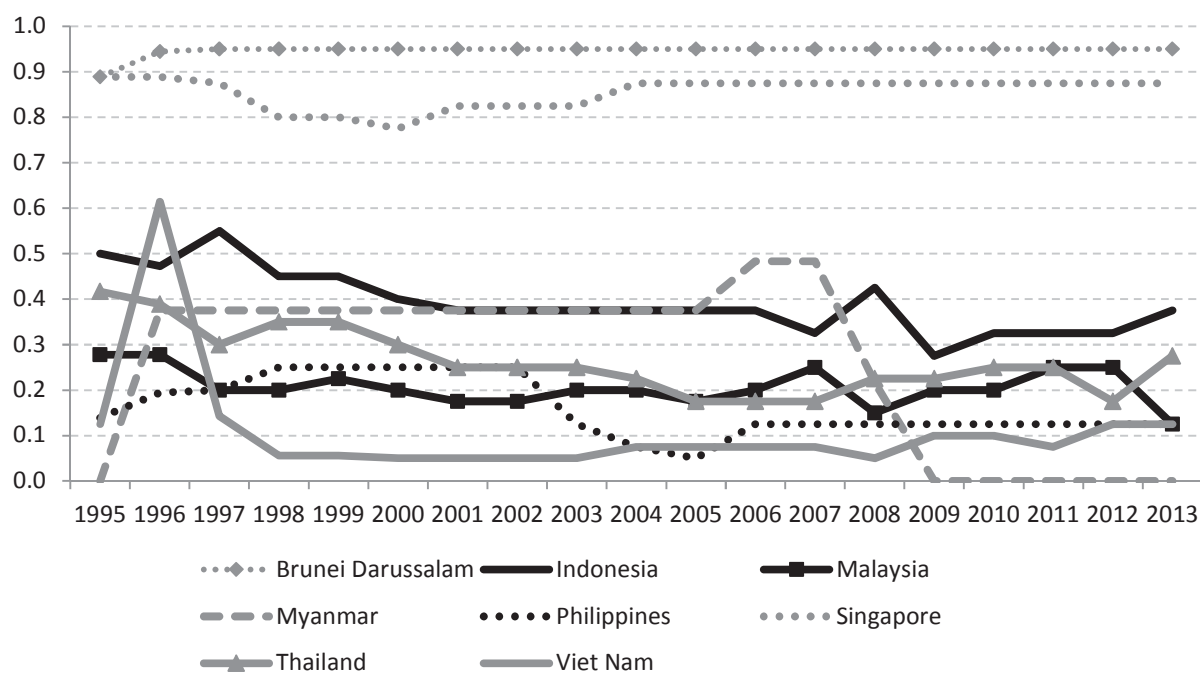
and Investment Facility (CGIF) as a trust fund of the Asian Development Bank to provide investment-rated firms better access to local currency bond markets and to lengthen bond maturities. Initially, the CGIF used a leverage ratio of 1:1 for its \$700 million of capital, but as its guarantee operations expanded, the ratio increased to 1:2.5 and its guarantee capacity was raised from \$700 million to \$1.75 billion. As of March 2017, CGIF had issued 17 credit guarantees (cumulatively valued at \$1.06 billion) for bonds issued by 13 companies in 8 ASEAN member countries (ADB, 2017b: 5).

In the area of capital account liberalization, ASEAN member countries have adopted a gradual approach to opening that is consistent with the language of both AEC blueprints. Although member countries have conducted a mapping exercise to measure the extent of capital account openness (ASEAN Secretariat, 2015b: 50), aside from Brunei Darussalam and Singapore, most ASEAN member countries for which data are available show a tendency to have reduced their openness, particularly after the Asian financial crisis in 1998-1999 and the global financial crisis of 2008-2009 (see figure 14).

A recent report in this area makes several general observations:

First, though a few member states are highly open, there still remain some restrictions on capital flows for macro-prudential reasons. Second, most of the controls are on outflows than on inflows. Third, although all member states except one have accepted the obligations under Article VII of the International Monetary Fund (IMF) Articles of Agreement, many still maintain current account-related payment restrictions, such as repatriation or surrender requirements for export proceeds and the verification procedures for service payments. Fourth, almost all member states have some restrictions on the offshore use of their currencies. Fifth, many member states place restrictions on external borrowing than on portfolio inflows, and many place some restrictions on external lending, especially in their national currencies. Sixth, many member states limit the ability of investors to hedge foreign currency risks, including the use of derivative transactions. Finally, a few member states impose a withholding tax on interest income and capital gains from certain types of securities (ADB, 2013: 14).

Figure 14. Index of capital control openness, 1995-2013



Source: Fernandez et al., 2016. See, <http://www.nber.org/data/international-finance/>.
 Note: A higher index value indicates a more open capital account.

In terms of crisis management, perhaps the most important regional financial arrangement was the creation of the Chiang Mai Initiative (CMI), initiated by the ASEAN+3 grouping in 2000 following the fallout of the Asian financial crisis. The CMI was a regional arrangement consisting of bilateral swaps and repurchase agreements used to assist member countries facing balance of payment liquidity problems. Having grown in size and structure, by 2007 it was converted to a multi-lateralized self-managed pool of reserves governed by a single contract called the Chiang Mai Initiative Multi-lateralization (CMIM). In July 2014, the pool of reserves was doubled to \$240 billion, with the portion de-linked from IMF conditionality increased to 40 per cent (Lim, 2017).

Overall, the CMIM remains untested and uncertainties linger about how it would operate in practice, but it has also contributed to regional cooperation by acting as a forum for policy dialogue on regional and country-specific macroeconomic and financial issues. In 2011, the ASEAN+3 Macroeconomic Research Organization was established in 2011 to support CMIM decision-making by performing the functions of surveillance and monitoring of national and regional economic trends, early detection of emerging financial risks and vulnerabilities, and recommendations for remedial actions (OECD, 2016: 152-153). The AEC blueprint 2025 outlines the need to further intensify and enhance these regional cooperative arrangements that allow monetary and fiscal authorities to exchange key macroeconomic information (ASEAN Secretariat, 2015a: 9).

VI. Infrastructure and (Sub)Regional Initiatives

While ASEAN has experienced sustained growth in past decades, this growth has contributed to increasing pressures on its stock of infrastructure. Despite clear economic gains, ASEAN's infrastructure coverage lags behind the Asian average and is only a fraction of the average for advanced OECD countries. This is particularly the case in physical infrastructure such as poor quality roads and incomplete road networks, missing rail links, deficient maritime and information and communications technology infrastructure and insufficient energy supply (ADB, 2016a: 5; UNCTAD, 2015). For example, the Asian Development Bank estimated that between 2006-2015 ASEAN countries needed infrastructure investments of \$596 billion, or an average investment of \$60 billion per year. This amount, however, is roughly five times the actual amount invested by the private sector during the 1990-2006 period. For the 2010-2020 period, ASEAN's national infrastructure needs are estimated at a total of \$1.09 trillion (Bhattacharyay, 2009: 15-16; ADB, 2016: 6).

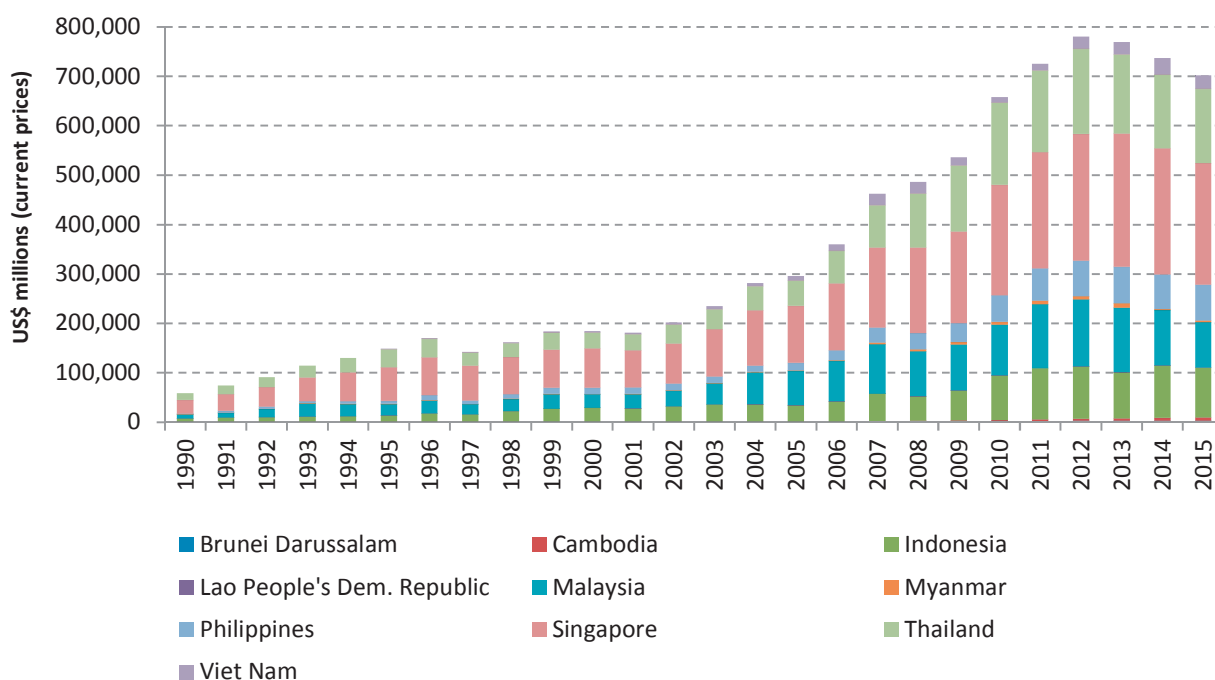
To address these issues, the Master Plan on ASEAN Connectivity 2010-2015 (MPAC 2010) was launched in 2010, with the focus on building three kinds of connective infrastructure: physical, institutional, and people-to-people. In terms of ASEAN land transport infrastructure, two flagship projects are prioritized, namely the ASEAN Highway Network (AHN) and the Singapore Kunming Rail Link (SKRL). The AHN project, for example, has spanned three phases that first began in 1999; the third phase includes the upgrading of all designated routes to at least Class I standards and upgrading low traffic volume non-arterial routes to Class II standards by 2020. While ASEAN has made significant process in increasing the length and upgrading highway road quality, member States still have missing links and below standards roads. For example, roads which are below Class III standards under the AHN have been estimated at 5,300 km across

the six member States of Indonesia, the Lao People’s Democratic Republic, Malaysia, Myanmar, the Philippines and Viet Nam (ASEAN Secretariat, 2011: 11-12; ASEAN Secretariat, 2015b: 61-63; OECD, 2016: 163-164).

Overall progress on major ASEAN infrastructure projects, however, has been mixed. Of the 125 individual initiatives outlined in MPAC 2010, only 39 were completed by the end of May 2016. An analysis of the major challenges linked to the prioritized MPAC 2010 infrastructure projects include financing, decision-making and implementation barriers. Highlighted financing barriers are: (a) low returns on investment have discouraged private-sector investment and in the case of the SKRL project, even projects on high-traffic routes have frequently needed subsidies in order to break even; (b) limited fiscal capacity of ASEAN member States amidst demands for government spending in other key areas of health, education and social services; and (c) constraints in mobilizing and accessing capital from other sources beyond member States' budgets, such as multilateral funds, bond markets, other governments, or the private sector (ASEAN Secretariat, 2016b: 23-24).

As noted in the previous section, over the 2000-2016 period, ASEAN investment rates have been relatively low, at an annual average of 25.1 per cent, which is roughly the same level for the entire period from 1970 to 2015. With average annual savings rates at a level of 31.1 per cent for the 2000-2016 period, there would appear to be more room to increase domestic investment rates. Another source of savings is in the form of foreign exchange reserves, which could also be used to finance regional infrastructure. As shown in figure 15, cumulative ASEAN foreign exchange reserves reached a peak in 2012 and remained at a level of \$700 billion in 2015. In recent years, major contributors to these reserves have been from ASEAN-6 countries, namely: Singapore, Thailand, Indonesia, Malaysia and the Philippines.

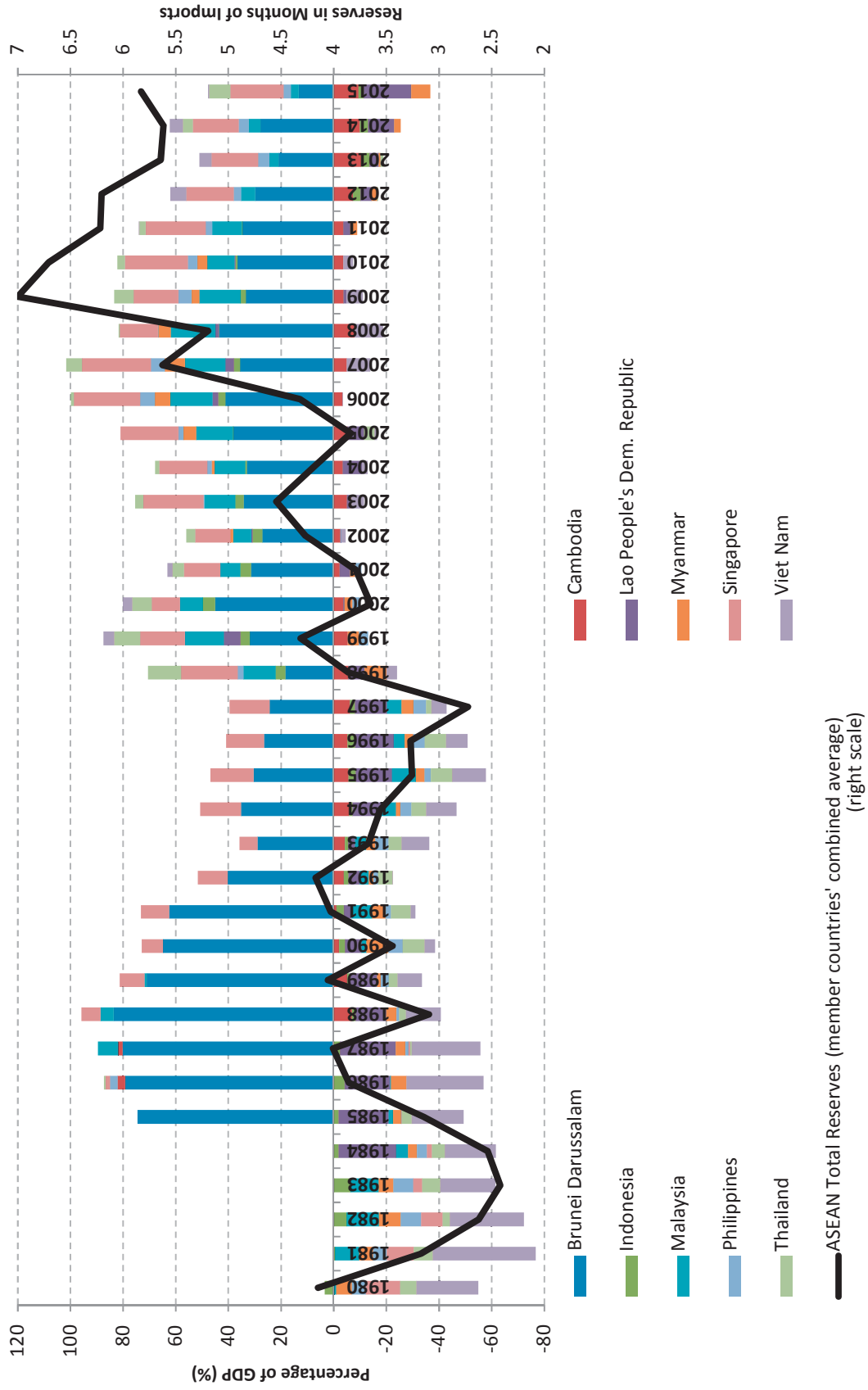
Figure 15. ASEAN foreign exchange reserves, 1990-2015



Source: IMF International Financial Statistics.

The accumulation of foreign reserves is considered a form of self-insurance from the risk of external shocks, but it should be noted that in terms of months of imports, only in recent years have ASEAN exchange reserves increased: rising from a low of 2.8 months' coverage in 1997 to a peak of 7 months' coverage in 2009, to a level of 5.8 months' coverage in 2015 (figure 16). As a rule of thumb, reserves that cover three months' worth of imports are generally considered adequate, but other fast-growing emerging economies, such as China, have accumulated between one and two years' worth. In recent years, the main country achieving net current account surpluses, through which net foreign assets (such as foreign exchange reserves) are acquired, has been Singapore, and to lesser extents, Thailand, Malaysia, the Philippines and Brunei Darussalam.

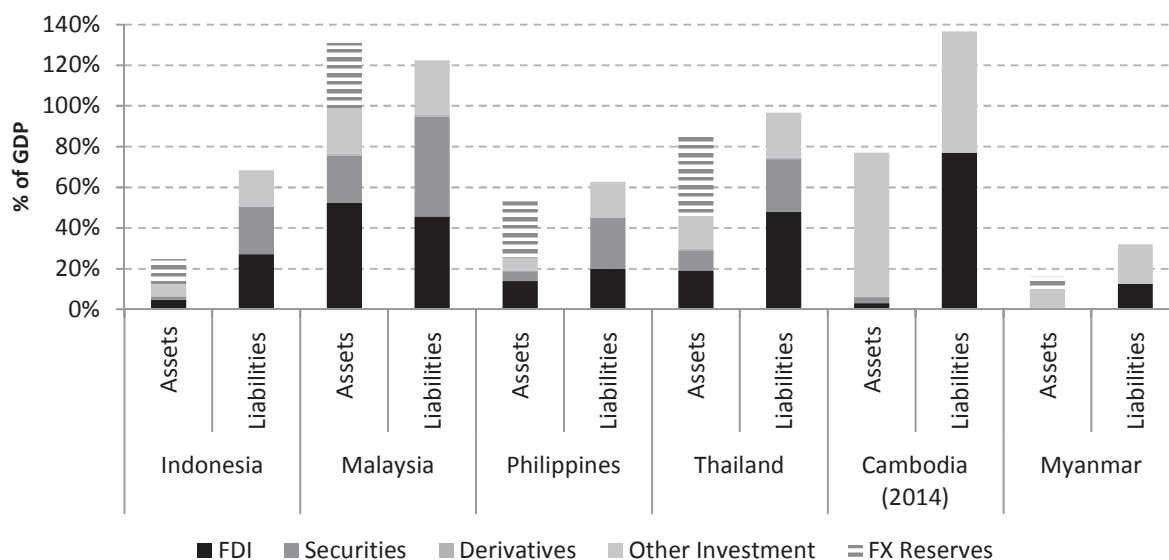
Figure 16. ASEAN net current account balances and total reserves, 1980-2015



Source: UNCTADstat and World Development Indicators.

However, of all ASEAN member countries for which data are available, only Malaysia and Singapore (not shown) had net international asset positions in 2015, reflecting these countries' stronger macroeconomic and financial account positions (figure 17). In contrast, Thailand and the Philippines recorded current account surpluses (and foreign exchange reserve accumulation), but overall had net international liability positions. If sustained over time, these net international liability positions could lead to growing payments on these liabilities, which will ultimately reduce the domestic availability of financial resources.

Figure 17. **Composition of ASEAN international assets and liabilities, 2015**



Source: IMF Balance of Payments and International Investment Position Statistics.

In light of limited sources of infrastructure investment and financing, the Asian Development Bank (ADB) and ASEAN member countries established the ASEAN Infrastructure Fund (AIF), which became a legal entity in 2012 and began its operations in 2013. It is expected that that AIF will finance up to \$300 million in annual projects, but as of 2015, its capitalization was \$485.3 million, of which \$335.3 million was contributed from ASEAN member States and \$150 million by ADB. In addition to these equity contributions, AIF plans to raise additional funds by using investment grade debt securities, which can be purchased by central banks in the region using their foreign exchange reserves. Thus far, seven projects have been funded, with AIF lending \$320 million out of a total project investment of \$2.8 billion (table 4).

Table 4. ASEAN Infrastructure Fund projects, 2013-2015

| Year | Project | Country | ASEAN Infrastructure Fund contribution (\$ million) | Other financing contributions (\$ million) | Total project financing (\$ million) |
|--------------|------------------------------------|----------------------------------|---|--|--------------------------------------|
| 2013 | Power Transmission Crossing | Indonesia | 25 | 224 | 249 |
| 2014 | Metropolitan Sanitation Management | Indonesia | 40 | 128.83 | 168.83 |
| 2014 | Power Grid Development | Viet Nam | 100 | 172.7 | 272.7 |
| 2015 | Sustainable and Inclusive Energy | Indonesia | 100 | 1,250 | 1,350 |
| 2015 | Road Improvement | Myanmar | 20 | 100 | 120 |
| 2015 | Corridor Towns Development | Lao People's Democratic Republic | 10 | 37 | 47 |
| 2015 | Electricity Grid Strengthening | Indonesia | 25 | 575 | 600 |
| Total | | | 320 | 2,487.53 | 2,807.53 |

Source: AIF website. See, <https://www.adb.org/site/aif/projects>.

AIF financing is in addition to ADB loan operations in the Asia region, which amounted to \$16.4 billion in 2016, of which 70 per cent is invested in infrastructure-related sectors (ADB, 2016b). In 2016, \$11.2 billion or 35 per cent of total ADB operations - including loans, grants, technical assistance, and co-financing - was allocated to the South-east Asia region (ADB, 2016c). In 2015, the ADB approved merging the lending operations of its Asian Development Fund (ADF) and its ordinary capital resources (OCR) balance sheet. Effective January 2017, the merger will allow the bank to raise its total lending and grants by 50 per cent, to more than \$20 billion per year by 2020 (ADB, 2015a).

Infrastructure issues are also broadly addressed in other ASEAN-related initiatives and programmes. For example, in recognition of the emergence of a "two-tier ASEAN" in terms of the lagging development indicators of CLMV countries compared to ASEAN-6 countries, ASEAN leaders adopted a special programme called "Initiative for ASEAN Integration" (IAI) in 2000. The IAI programme is to help narrow the development gap in terms of GDP per capita, human resources, institutional capacity, infrastructure and overall competitiveness. Resources for IAI are provided by ASEAN-6, dialogue partners and external partners.

Since 2000, three IAI work plans have been adopted. The first (2002-2008) had a total of 232 projects valued at \$52.9 million, and was focused on four areas: infrastructure, human resource development,

information and communications technology, and regional economic integration.¹³ The second work plan (2009-2015) was broadly aligned with the key areas of the three ASEAN Community blueprints, including the ASEAN Economic Community. The second work plan consisted of 182 actions, but by 2016, projects completed or those still being implemented covered 78 of the 182 actions, or 42.8 per cent. In light of this, implementation of the second work plan was extended until the adoption of the third work plan (2016-2020), which outlined five strategic areas: food and agriculture; trade facilitation; micro-, small- and medium-size enterprises; education; and health and well-being (ASEAN Secretariat, 2016c: 9-10).

Another special programme involves the Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA) subregional initiative that started in 1994 by these four ASEAN nations to accelerate economic development in areas that are the poorest in their respective countries and geographically distant from respective national capitals, but are within close proximity of each other.¹⁴ BIMP-EAGA cooperation revolves around six areas: infrastructure and connectivity; food basket; tourism; environment; trade and investment facilitation; and socio-cultural and education.

The initiative was bolstered in 2003 with the establishment of the annual BIMP-EAGA Leaders' Summit, which serves to demonstrate the continued commitment to this cooperation at the highest political levels. To sustain momentum, the Ninth BIMP-EAGA Ministerial Meeting, held in 2004, called for the preparation of the BIMP-EAGA Roadmap to Development 2006-2010. This roadmap identified broad strategic thrusts and cluster/sector-specific targets to guide implementation, including the goals of raising intra-EAGA trade by 10 per cent, investments by 10 per cent, and tourism by 20 per cent. Although these targets were attained, progress on overall implementation of the roadmap was modest. Midterm and final assessments performed in 2008 and 2010, respectively, concluded that project implementation was uneven. Amid calls by member countries to upscale infrastructure development efforts, in 2009, a fast-track process was created to prioritize infrastructure projects and to more systematically identify, program and implement them. The Implementation Blueprint (2012-2016) was subsequently formulated with 12 priority infrastructure projects, representing a total estimated cost of over \$1 billion (ADB, 2017b: 2-5; 2012a: 5-8).

Not surprisingly, some of these projects overlap with the Master Plan on ASEAN Connectivity 2010-2015 (MPAC 2010), including the Sarawak to West Kalimantan power interconnection project (between Malaysia and Indonesia), and portions of the ASEAN Highway Network (AHN) such as the Pontianak-Entikong transport link (Indonesia), and the rehabilitation of Davao-General Santos road (Philippines). Although project implementation information is not available for the Implementation Blueprint (2012-2016), a subsequent document called the BIMP-EAGA Vision 2025 contained a list of 57 projects worth a total of \$21.4 billion, including some of the 12 previously identified priority projects, (ADB, 2017c: 62-63).

Another subregional initiative is the Greater Mekong Subregion (GMS) economic cooperation programme, which involves six countries: Cambodia, the Lao People's Democratic Republic, Myanmar, Thailand, Viet

¹³ See <http://asean.org/asean-economic-community/initiative-for-asean-integration-iai-and-narrowing-the-development-gap-ndg/iai-work-plan-and-iai-projects/>.

¹⁴ The BIMP-EAGA covers the entire territory of Brunei Darussalam; the provinces of Kalimantan, Sulawesi, Maluku and West Papua of Indonesia; the states of Sabah and Sarawak and the federation of Labuan in Malaysia; and Mindanao and the province of Palawan in the Philippines. The subregion covers a land area of 1.6 million square kilometers with an estimated population of 70 million.

Nam and China's Yunnan and Guangxi provinces. Started in 1992 with assistance from the ADB, the initiative was aimed at overcoming barriers in subregional physical connectivity with improvements in infrastructure in order to stimulate trade, investment and economic growth.

Following close consultations among participating countries and the preparation of detailed sector and feasibility studies, several infrastructure and technical assistance initiatives were started in the late 1990s. With the onset of the Asian financial crisis, participating countries further cemented their involvement and, in 2002, endorsed the GMS' first 10-year strategic framework (2002-2012). It contained five strategic objectives: (a) strengthening infrastructure linkages, with a multisectoral approach; (b) facilitating cross-border trade; investment, and tourism; (c) enhancing private sector participation and improving competitiveness; (d) developing human resources and skills competencies; and (e) protecting the environment and the sustainable use of shared natural resources. The framework was carried out through 11 flagship projects and by 2012, project implementation over the course of two decades reached a total investment of about \$15 billion, with ADB contributing more than \$5 billion (UNCTAD, 2013: 103-107; ADB, 2012b; 2012c: 9).

In 2013, Ministers from GMS countries endorsed the Regional Investment Framework 2013-2022 (RIF), which outlined more than 200 investment and technical assistance projects to be implemented over the next decade. A GMS Regional Investment Framework Implementation Plan 2014-2018 (RIF-IP) was subsequently issued to better focus on implementation and to further prioritize 93 projects with an estimated total investment cost of \$30.4 billion. Transport sector projects account for 90 per cent of the total RIF-IP projects, in terms of value. These priority projects focus on: filling the remaining gaps in GMS transport corridors, including extension into Myanmar to hasten its integration with the subregion; maximizing multimodal transport linkages via roads, railways, ports, and inland water transport; strengthening GMS connectivity, trade, and growth; stressing other important aspects such as adequate maintenance of transport assets and attention to road safety; and enhancing connectivity within the subregion and with other subregions including South and Central Asia (GMS Secretariat, 2015). By 2016, a review of RIF-IP found that 52 of the original 93 high priority projects had secured financing estimated at \$26 billion, which represents 56 per cent of the number of priority projects, and 85 per cent of the original estimated cost (GMS Secretariat, 2016: 2).

Another relevant and more recent initiative has been the establishment of a second regional development bank in the form of the China-backed Asian Infrastructure Investment Bank (AIIB), which was formally launched in January 2016. With \$100 billion in authorized capital, the bank aims to invest in infrastructure and productive sectors in Asia. Initially with 57 signatory countries - 37 from the Asia region and 20 non-regional members, all ASEAN countries are founding members of the AIIB, combining for 7.2 per cent of total bank shares and 9.6 per cent of total bank regional shares (see table 5).¹⁵ ASEAN's overall shareholding in AIIB, led by China, is about half the size of its voting power in the ADB, led by Japan and the United States.¹⁶

¹⁵ ASEAN's shareholding in the bank is likely to shrink, as AIIB membership has since expanded by 23 countries to 80 in total (AIIB, 2017).

¹⁶ China is AIIB's largest shareholder, with 29.78 per cent of total bank shares. Japan and the United States are both the largest shareholders of ADB, with 12.78 per cent of total voting power, respectively.

Achievements and Challenges in Regional Integration

Table 5. **ASEAN countries' shares in AIIB and ADB**

| Country | AIIB Shares (% of total) | ADB voting power (% of total) |
|----------------------------------|-----------------------------|----------------------------------|
| Brunei Darussalam | 0.05 | 0.58 |
| Cambodia | 0.06 | 0.34 |
| Indonesia | 3.36 | 4.66 |
| Lao People's Democratic Republic | 0.04 | 0.31 |
| Malaysia | 0.11 | 2.48 |
| Myanmar | 0.26 | 0.73 |
| Philippines | 0.98 | 2.21 |
| Singapore | 0.25 | 0.57 |
| Thailand | 1.43 | 1.39 |
| Viet Nam | 0.66 | 0.57 |
| ASEAN Sub-total | 7.21 | 13.83 |

Source: AIIB 2015 and ADB 2016d.

In 2016, AIIB lent a total of \$1.73 billion to nine infrastructure projects, involving two ASEAN member countries (Indonesia and Myanmar) (see table 6). Total mobilized funding for these nine projects was \$12.2 billion, of which at least seven were jointly financed. At the bank's official launch in January 2016, China also announced a \$50 million special fund to assist developing country members in infrastructure-related project preparation (MOF, 2016). As of June 2017, AIIB had also approved another six loans (two involving Indonesia) and one equity investment.

Table 6. **AIIB projects, 2016**

| Country | Project | Sector | Total (\$m) | Contributions to Project (\$m) | |
|--------------|--|-----------|---------------|--------------------------------|---|
| | | | | AIIB | Others |
| Tajikistan | Border Road Improvement | Transport | 105.9 | 27.5 | EBRD (65.5), Tajikistan (15.9) |
| Bangladesh | Distribution System Upgrade and Expansion Project | Energy | 262.3 | 165 | N/A |
| Pakistan | National Motorway M-4 | Transport | 273 | 100 | ADB (100), DFID (34), Pakistan (39) |
| Indonesia | National Slum Upgrading | Urban | 1743 | 216.5 | Indonesia (1310), WB (216.5) |
| Pakistan | Tarbela 5 Hydropower Extension | Energy | 823.5 | 300 | WB (390), Pakistan (124.5) |
| Myanmar | Myingyan Power Plant | Energy | N/A | 20 | N/A |
| Oman | Railway System Prep. | Transport | 60 | 36 | Oman Global Logistics Group (OGLG) (24) |
| Oman | Duqm Port Commercial Terminal and Operational Zone Development | Transport | 353.3 | 265 | Special Economic Zone Authority of Duqm (SEZAD) (88.3) |
| Azerbaijan | Trans Anatolian Natural Gas Pipeline | Energy | 8,600 | 600 | Azerbaijan (1400), WB (800), EIB (1300), EBRD (500), Petroleum Pipeline Corp. of Turkey (BOTAS) (1000), British Petroleum (BP) (1000), Private (2000) |
| Total | | | 12,221 | 1,730 | |

Source: AIIB website. See, <https://www.aiib.org/en/projects/approved/index.html>.

Importantly, Chinese officials have hinted at pioneering an approach to multilateral development finance that combines high standards with rapid loan disbursements (Kozul-Wright and Poon, 2015), and indeed,

there are already signs of China's experimentation with AIIB operations. For instance, the board of executive directors is unpaid and non-resident, which will shorten the time for loan approval and reduce administrative overhead costs. Moreover, bidding for AIIB projects is open to all countries, and not just to member-country firms. In terms of environmental and social safeguards, some concerns have been expressed about the bank's reliance on corporate and country systems and the lack of detail on the mechanisms of oversight and transparency (Kamal and Gallagher, 2016). Others have argued that use of country systems is a positive sign of the bank's commitment to promoting greater borrowing capacity and streamlining of loan approval processes in host countries, which could lead to greater development impacts (Humphrey, 2015: 6-7).

VII. Global Value Chains and Technological Upgrading

Export-led growth has been a key component of the ASEAN model. However, and more than their neighbours to the North-East, ASEAN economies have relied more heavily on FDI and, in particular, on the participation in global value chains (GVCs). These chains are organized and coordinated by a lead multinational enterprise through networks of affiliates, contractual partners or arms' length suppliers. From their modest start in the clothing and electronics industries in the late 1960s, these chains and trading networks have now spread to many other industries. Moreover, in recent years, GVCs have evolved to encompass multiple countries involved in different stages of the assembly process and with proliferating linkages amongst developing countries (UNCTAD, 2015b).

Capturing the gains from this international "unbundling" of complex flows among stages of goods, technology, people, training, investment and information - flows that previously took place mainly within factories - has become the default contemporary growth strategy and has altered the menu of development policy options facing decision makers (UNCTAD, 2016; Milberg et al., 2014). In the mainstream view, whereas industrialization previously meant spending decades building whole supply chains at home, now developing countries could experience a quicker form of industrialization by joining supply chains instead of building their own (Baldwin, 2013). The reality, as discussed below, is more complicated and industrial upgrading remains a central challenge for the ASEAN region.

East Asia and South-east Asia have been at the forefront of the evolution and expansion of GVCs; for example, ASEAN's total network products (parts and components, and final assembly) as a share of total manufacturing exports rose from 56.8 per cent in 1992/93 to 66.1 per cent in 2006/07. On a regional basis, this is the highest level in the world. By comparison, NAFTA's share of total network products declined slightly, from 59.7 per cent to 59.3 per cent of total manufacturing trade, while EU-15's share rose from 40.7 per cent to 43.5 per cent. Over two-thirds of ASEAN's total network product exports consisted of parts and components, which in turn are largely concentrated (over 90 per cent) in the machinery and transport equipment sector (Athukorala, 2010a: 40-42; UNCTAD, 2015).

Despite the overall importance of GVCs to ASEAN countries' growth and exports, there appears to be limited consideration of ASEAN's position in GVCs and strategic measures to promote upgrading within these production networks. While both AEC blueprint documents contained sections that sought to enhance participation in GVCs, AEC blueprint 2015 included only two related actions: to continue adoption

of international practices and standards of production and distribution, and to provide technical assistance to CLMV countries to upgrade their industrial capability and productivity (ASEAN Secretariat, 2008a: 26). For its part, AEC blueprint 2025 included a larger section on this issue, but aside from suggesting participation in regional value chains as a stepping-stone for integration in GVCs, it mainly argued for regional branding initiatives, the removal of formal restrictions (market access and discriminatory measures), better trade facilitation and regulatory coherence (ASEAN Secretariat, 2015a: 11).

To provide a broader view of the region's participation in GVCs, this section uses the "international competitive coefficient" (ICC) analytical framework to assess the "catching-up" development process of respective ASEAN member countries. This framework, which is based on the "flying geese" paradigm, places emphasis on the sequential order of the catching-up process of industrialization in latecomer developing countries across three dimensions: (a) intra-industry dimension; (b) inter-industry dimension; and (c) international division of labour dimension. The first dimension considers the product cycle within a given developing country, where the country initially imports a product, then engages in domestic production mixed with imports, then is finally able to export the product (and may become a net exporter of this product). The second dimension considers the sequential creation of industries in a given developing country, whereby its range of industries are diversified and upgraded from consumer goods to capital goods, and/or from simple to more sophisticated products. The third dimension considers the process of industry relocation across countries, from advanced to latecomer developing countries, as the latter pursues a growth strategy to "catch-up" to the former (Lin, 2011; Ohno, 2009; Hiratsuka 2005).

The ICC methodology, which is further explained in annex 1, reveals export competitiveness trends for nine ASEAN member countries (except Myanmar), as well as for the Republic of Korea and China, over the 1967-2016 period for five broad product categories: textile and apparel, chemicals, machinery, transportation equipment, and electrical and electronic products. A number of trends can be observed:

- Using the Republic of Korea as a benchmark, it shows increasing export competitiveness profile across four out of the five categories, particularly in transportation equipment, and electrical and electronic products. As expected for countries advancing along catch-up growth, the Republic of Korea's export competitiveness in the textile and apparel sector declined over time, and entered the "reverse-import" stage by 2015. In light of the Republic of Korea's experience, successful catch-up development can be portrayed as an upward shift in export competitiveness, albeit to different degrees, across the four main product categories. Although China has a lower per capita GDP than the Republic of Korea and some of the more advanced ASEAN-6 countries, there is also a clear upward shift in its export competitiveness across all of the product categories.
- In contrast, the ICC profiles of the larger ASEAN-6 countries (Indonesia, Malaysia, the Philippines and Thailand) clearly show export competitiveness in at least two out of the five product categories: textile and apparel, and electrical and electronic products. Unlike the Republic of Korea, whose textile and apparel exports were already competitive in 1967, Thailand and the Philippines reached export competitiveness in this sector in the early- to mid-1970s, while Indonesia and Malaysia reach export competitiveness by the early 1980s. These results are not surprising given the longtime presence of GVCs in these two sectors in particular.

- ICC trends across these four ASEAN countries are not uniform. In the case of Thailand, export competitiveness was also gained in the transportation equipment sector, in addition to the two other product categories mentioned above, reflecting its ability to establish an automotive cluster (see below for further discussion). Competitiveness gains are also visible in the chemicals and machinery sectors, but not yet at the level of becoming a net exporter in these items.
- For the Philippines, it also achieves a degree of export competitiveness in transportation equipment in the mid-2000s, but this declines in subsequent years. In the case of Malaysia, it also gains degrees of competitiveness in other sectors, such as in the chemicals sector, but not yet at the level of being a net exporter in these items. As for Indonesia, export competitiveness in electrical and electronics products is achieved in the late 1990s, but drops precipitously in the wake of the global financial crisis in 2008-2009. Other clear gains can be seen in the transportation equipment and chemicals sectors, with the former appearing to attain export competitiveness by 2016.
- Although trade data availability is more limited, in general, ICC profiles for CLMV countries are consistent with their earlier stage of catch-up development. Viet Nam's ICC trends reveal that export competitiveness for textile and apparel products is rising from the late 1990s onwards, while for electrical and electronic products export competitiveness is only gained in 2012. Viet Nam also shows increasing competitiveness in the transport equipment sector, but has yet to become a net exporter of these items. By comparison, ICC trends for Cambodia reveal gradually declining export competitiveness in the textile and apparel sector, while all other sectors struggle to reach net export status. Cambodia's exports in electrical and electronic products are on an upwards ICC trend, but the country has yet to become a net exporter of these items.
- Data availability for the Lao People's Democratic Republic and Myanmar is too limited to adequately interpret their ICC trends. Data availability for Brunei Darussalam is somewhat better, but is hampered by gaps in the data for much of the 1990s and 2000s. Overall, the country shows little sustained signs of improving competitiveness across any of the sectors, which may be consistent given the country's small size and its strong reliance on petroleum and gas exports.

To better interpret the broad trends of the ICC profiles of ASEAN member countries and their role in GVCs, further detailed information is needed at the country and industry levels. In the electronics global supply chain, as is well known, **China** has become an epicenter of assembly operations, where parts and components are imported mainly from ASEAN countries, and subsequently shipped to developed country markets. Product R&D and design, as well as some high-end parts, are provided by lead firms of global supply chains based in the United States, Japan and the Republic of Korea, which often have manufacturing operations in ASEAN member countries. Facing mounting competitive pressures and the rapid appreciation of their currencies since the mid-1980s, electronics manufacturers from Japan, Taiwan Province of China, the Republic of Korea and Singapore began relocating factories to lower cost areas in South-east Asia. Consistent with the "flying geese" pattern, Japanese manufacturers first relocated to newly industrialized economies such as the Republic of Korea and Taiwan Province of China, then later to ASEAN countries, and then to China. In recent years, rising labour costs in China have prompted another

round of factory relocations to less-developed CLMV ASEAN countries such as Viet Nam and Myanmar (Thorbecke and Salike, 2013; Wood and Tetlow, 2013).

Malaysia's main role in electronics GVCs is as a contract manufacturer of parts assembly for components. The country was once a major location for final product assembly, but these operations were later relocated to China in the early 2000s to take advantage of lower labour costs. A very high proportion of electronics industry activities in Malaysia are foreign owned, which have benefited from generous investment incentives. However, contract manufacturing activities have limited opportunities for technology transfer of R&D and design functions. As a result, Malaysian firms have not significantly developed deep internal innovative capabilities and have relied on moving into higher-end applied manufacturing processes and service technologies. Although Malaysia's involvement in electronics GVCs began in the 1970s, it was not until the 1990s that the government began efforts to upgrade the sector to high value-added operations such as wafer fabrication, chip design, and R&D (Wood and Tetlow, 2013: 15; Rasiah, 2015: 9-11) (see below for further discussion).

Thailand's position in the electronics supply chain is also in the production of parts, especially data storage components, where it is a world leading producer of hard disk drives (HDD) that are used in laptops, smartphones, vehicles and other consumer electronics such as video game consoles. In the 1980s, Thailand benefited from foreign firms relocating their low-end HDD production processes from Singapore. As such, FDI plays a large role in Thailand's electronics sector: the sector receives roughly a quarter of Thailand's total manufacturing sector FDI. Due to a concentration of the world's largest HDD companies based in Thailand, upstream suppliers have also decided to establish production facilities in the country as well.

The Philippines' role in the supply chain is also in the production of intermediate goods, particularly HDDs and semiconductors. In the mid-1990s, Japanese manufacturers began establishing HDD assembly operations and the sector is dominated by foreign firms. For example, foreign companies accounted for 72 per cent of the industry's 936 firms in 2010, and 7 out of the world's top 20 semiconductor manufacturers have located facilities in the country (Wood and Tetlow, 2013: 16-17, 18-19; Hiratsuka, 2011: 6-8).

Indonesia's supply chain role is mainly in the assembly of finished electronic goods, as well as in the production of low value-added components. Indonesia's consumer electronics industry is driven by FDI, particularly from Japan and the Republic of Korea. In the 1970s, leading Japanese electronics firms entered into joint ventures or technical cooperation agreements that established assembly facilities that could also gain access to the Indonesian domestic market, which was protected by tariffs. Similarly, **Viet Nam's** role in the electronics supply chain is also concentrated in the assembly of finished products, along with some supporting parts production. The country's electronics sector is relatively less developed, and mainly consists of importing parts for assembly, which are low value added and low-skilled operations. As in most other cases in ASEAN, the sector is dominated by foreign companies: in 2008, two thirds of the country's 436 electronics firms were foreign-owned and these represented 95 per cent of the sector's total exports. In recent years, FDI in Viet Nam has benefited from companies wishing to diversify their operations away from China and escape its rising labour costs, while tapping into Viet Nam's low wage labour and its relatively large domestic market (Wood and Tetlow, 2013: 17-18).

Singapore's role in the electronics supply chain has shifted away from standard assembly and testing activities towards supply chain oversight functions, R&D and product design, and capital- and technology-intensive tasks in the production process. Many of these new activities take the form of services and are not captured in merchandise trade data. Exports of electronics products that do appear in trade data are mainly due to Singapore's role as a shipping hub for the ASEAN region and are not domestically produced goods. The city-State is also the headquarters for a number of leading multinational consumer electronics firms, and some companies have established research labs, which have strengthened Singapore's position as a world-class electronics manufacturing hub with extensive R&D capabilities (Wood and Tetlow, 2013: 14; Athukorala, 2010a: 6).

With the increasing significance of GVCs in shaping international trade and investment flows, the extent that participation in GVCs can drive industrialization in developing countries has become central to contemporary policy debates. In reality, however, most value chains are regional in nature with clear consequences for policy design and implementation. Moreover, lead firms are still predominantly from developed countries and from a small number of sectors such as clothing and textiles, electronics and the automotive sectors (Nolan, 2012; Starrs, 2014) and these firms tend to dominate the high value added activities at the beginning (design, R&D, financing) and end (logistics, branding, marketing) of the chain. While these features do not necessarily negate the calls for new thinking on policy related to GVCs, they should serve as a warning against designing strategies for structural transformation based exclusively on the opportunities linked to GVCs. In particular, the need for import promotion should not be used as a reason for downplaying the continued importance of a mix of proactive measures in support of import substitution and export promotion tailored to local conditions and constraints.

For these reasons, it should be no surprise that the ability of local firms to establish strong links with lead firms and the role of public policy to promote greater opportunities for upgrading within different GVC governance structures, are core issues in this debate (UNCTAD, 2016a; Gereffi, 2014; Lee et al., 2017; Park et al., 2013). To better highlight these considerations, two well-known case studies - electronics in Malaysia, and motor vehicles in Thailand - are further explored to highlight key upgrading opportunities and challenges experienced by local ASEAN firms.

Case study 1: Electronics cluster, Malaysia

Expansion in Malaysia's electronics manufacturing sector is generally associated with two phases. The first phase occurred in 1971, when export-oriented manufacturing was promoted in the second Malaysia Plan of 1971-75 and the subsequent establishment of free trade zones and other areas granted Licensed Manufacturing Warehouse status. Financial incentives such as tax holidays and investment credits were provided to foreign firms locating in these designated economic areas, and these were renewable every five years. The first electronics multinational corporations (MNCs) were semiconductor assembly operations that established facilities at the Bayan Lepas free trade zone in Penang in 1971, followed by a large influx of other MNCs. The second phase occurred in 1986, when the Government extended investment tax credits to electronics MNCs and attracted assembly operations for consumer electronics and computer peripherals. By the late 1980s, the electronics sector became the largest source of manufacturing employment, value added, and exports for the country. But it was not until the 1990s that government policy measures evolved from largely a regulatory function that approved incentives for

qualified firms, to a development function that targeted technological upgrading (Rasiah, 2015: 9-11; Athukorala, 2017: 184-185).

Although plans to upgrade the domestic electronics sector began in the 1990s, these efforts were limited and were later delayed by the Asian Financial crisis at the end of the decade. At the time, the crisis also exposed key structural weaknesses of the Malaysian electronics industry: an asymmetric industry structure; a heavy import dependence due to weak presence of domestic support industries and undeveloped linkages; a heavy reliance on exports, especially to the United States market; a highly concentrated export basket of products, mainly of low-end assembly operations; a declining capacity to generate employment; and a mismatch between the demand and supply for labour skills. For example, in terms of asymmetric industry structure, local Malaysian firms may dominate in number, but strategic decision-making in the sector is dominated by global lead firms. There are some cases of local firms - such as Eng Teknologi, LKT Industrial, and BCM Electronics - that have upgraded to become higher-tier local suppliers for lead firms, but Malaysia has generally not been able to develop a broad and multi-tier base of support industries, and the large majority of local firms are considered lower-tier suppliers (Ernst, 2002: 38-40; Athukorala, 2017: 189-191).

It was only the Government's decision in 2005 to extend the provision of R&D grants to foreign electronics firms that attracted foreign investments in high value added stages of semiconductor production process, such as wafer fabrication, semiconductor design, and R&D. While some progress has been made in industry upgrading, certain policy challenges persist in the form of, for example, shortages in the supply of labour skills including quality graduates with related electronics specializations, and the lack of institutional support for frontier research on semiconductors, both of which have restricted local firms' participation in R&D activities. Moreover, shortcomings in government monitoring and evaluation have reduced the effectiveness of policy tools, such as cases where the provision of government grants had not been made conditional on the achievement of upgrading targets and milestones (Rasiah, 2015: 12, 16).

The Government also established a number of industry-linked institutions to provide public goods and to mitigate market failures related to labour training, customs coordination, power and water supply, and transport and housing for workers. For example, the provincial Penang Government created the Penang Skills Development Centre (PSDC) in 1989 to address the immediate skills shortages facing the electronics sector. Mandated to provide technical training to high school graduates, PSDC is a tri-partite industry-led initiative that is 80 per cent financed by the private sector. Initially focused on basic technical and vocational training, the institution has evolved over time to address changing skill demands. In the late 1990s, PSDC launched a global supplier development programme to assist local firms foster their capabilities by building linkages with MNCs. In 2009, it received RM 30 million from the Government to provide business incubation services to start-up firms and existing small- and medium-sized enterprises (OECD, 2011; Athukorala, 2017: 185-186).

However, despite over 20 years in operation, PSDC is not considered an institution of higher education and is not fully integrated into Penang's higher education system: its partners are mainly foreign universities and its diplomas are not recognized by the Malaysian educational system. Although PSDC is recognized both nationally and internationally as a model of shared learning among the manufacturing

and service industry, PSDC's lack of domestic integration contributes to the fragmentation and weakness of regional innovation systems in Penang (OECD, 2011).

Case study 2: Automotive cluster, Thailand

Over the past five decades, Thailand has emerged as a global production and export hub for the major automotive companies throughout the ASEAN region. The industry accounts for almost 12 per cent of the country's GDP and employs over 300,000 people. In 2015, Thailand's automotive production was 1.92 million vehicles, which ranked the country 12th largest in the world and fourth largest in Asia behind only China, Japan and the Republic of Korea. Historically, commercial vehicles and pickup trucks have been the main product niche - accounting for 60 per cent of all vehicles produced in 2015 - but passenger car production has been rising in the last decade. Japanese automaker firms control about 85 per cent of domestic market share, and United States firms control 15 per cent (KI, 2016; Jirathiyut, 2016).

Despite very high levels of foreign ownership in the Thai automotive sector, the local content of domestically manufactured vehicles is near a level of 100 per cent (Kohpaiboon and Poapongsakorn, 2011). To better understand this achievement, it is important to note Thailand's decades-long experience with policies to raise local content levels and to foster domestic production capabilities. The origins of Thailand's automotive industry began in the 1960s, when the country pursued import substitution using high tariffs to attract foreign investment in the domestic assembly of vehicles from imported parts. By the late 1960s, Thai officials expressed concern over the sector's lack of broad-based growth and weak backwards linkages with local parts and components suppliers. In response, local content requirement (LCR) measures were implemented in 1975, which stipulated 25 per cent local content of passenger vehicles in order to qualify to import parts for assembly. The LCR for commercial vehicles and pick-up trucks was set at 15 per cent. By 1983, a new point-based LCR system was devised that assigned a point to every automotive part, and manufacturers were required to use locally produced parts up to a minimum point total (Athukorala, 2010b: 3; Kuroiwa and Techakanont, 2017: 9-10).¹⁷

At the time, a specific project was created to target local production of diesel engines for one-ton pick-up trucks subject to a specific LCR level and export performance requirements. Under this scheme, three selected foreign firms were chosen to locally produce diesel engines with at least 20 per cent local production in the first year (1989); the LCR would rise by 10 per cent each year, with the goal of 70 per cent local content by the end of 1995. These three designated producers had the flexibility to decide which components to procure locally, but had to achieve full localization for parts such as casting, forging and machining of cylinder blocks, cylinder heads, crankshafts, camshafts, and connecting rods by 1995. In return, the three producers were provided a captive market for their output, as local auto-assemblers were required to use only locally produced engines. At this time, auto manufacturers not only expanded their in-house production, but they also induced their suppliers in Japan to invest in Thailand (Athukorala, 2010b: 2-3; Kuroiwa and Techakanong, 2017: 11-12).

¹⁷ For example, the LCR for passenger cars was set at 54 points with auto parts classified into two lists: a mandatory list and a selective list. Each list contained 27 points: if any of the parts on the mandatory list were not domestically available, auto manufacturers could freely select substitutes from the selective list. Since auto manufacturers were already domestically procuring many parts found on the mandatory list, there was little resistance from automakers to the new system (Athukorala, 2010b: 3).

Since the 1990s, the Government gradually began to switch its automotive policy strategy's focus on the domestic market toward greater emphasis on global integration and creating a regional production hub. Thailand was the first developing country WTO member to adhere to the WTO agreement on Trade Related Investment Measures (TRIMS), and in 1998 it announced the abolition of the LCR regime. Moreover, all selective incentives granted to export-oriented activities and equity ownership restrictions on domestic-market oriented projects were abolished with immediate effect in 1999. Thus, even with the onset of the Asian financial crisis, Japanese investment recovered strongly after 2000, reinforced by Thailand's selection as a regional manufacturing base for Toyota's International Multipurpose Vehicle project (launched in 2004). Overall tariff rates on finished vehicles and completely knocked down kits have also been reduced in stages since 1992, but can still be relatively high - duties on finished vehicles can range from 20-80 per cent, depending on the type of vehicle (Athukorala, 2010: 4-5).

Moreover, applied excise taxes on automobiles can favour domestically produced vehicles. For passenger vehicles, the excise tax ranges from 30 to 50 per cent, whereas for pick-up trucks it is 3 per cent. In 2007, the Government introduced tax incentives for the production of small and efficient "eco cars", such as a preferential excise tax rate of 17 per cent. Other "eco car" incentive measures included a corporate tax exemption for eight years, a tax exemption on the import duty for machinery and equipment, and up to 90 per cent reduction for the import duties on raw materials and finished parts for two years. Companies that apply for these incentives are required to fulfill environmental and investment-related conditions, such as compliance with vehicle emission standards, minimum investment value, and minimum production scale (ITA, 2016: 48; UNESCAP, 2012).

While a number of domestic Thai firms have joined the ranks of Tier 1 automotive suppliers, a large majority of Thai firms are less sophisticated Tier 2 suppliers or below. When automakers began to source locally manufactured parts, they mainly turned to other MNC parts suppliers, while most local suppliers were relegated to lower tier supplier due to limited project development and engineering capabilities (Kohpaiboon and Poapongsakorn, 2011: 20-21). These lower tier suppliers provide auto parts such as stamping tools and accessories that do not require advanced production technologies. Technology transfers from automotive manufacturers have been focused on process innovations to meet standards in quality control and cost reduction targets; product innovation is often a top-down process with design specifications provided by automakers, resulting in few opportunities for joint development involving local firms. For these reasons, some have argued that "technology lending" (between the parent company and its Thai subsidiary) has allowed Thailand's automotive sector to make considerable progress, but the lack of actual "technology transfer" has limited the ability of local suppliers to upgrade their operations and to advance to higher levels of product sophistication (ADB, 2015b: 19-21; Komolavanij et al., 2010: 267; Sadoi, 2010: 330).

Innovation and technology

The importance of science, technology and innovation has long been recognized in ASEAN with the creation of the Ad hoc Committee on Science and Technology in 1970 to promote and intensify regional cooperation in this policy area. In 1978, the Ad hoc Committee became the ASEAN Committee on Science and Technology (COST), and produced the first ASEAN Plan of Action on Science and Technology (APAST)

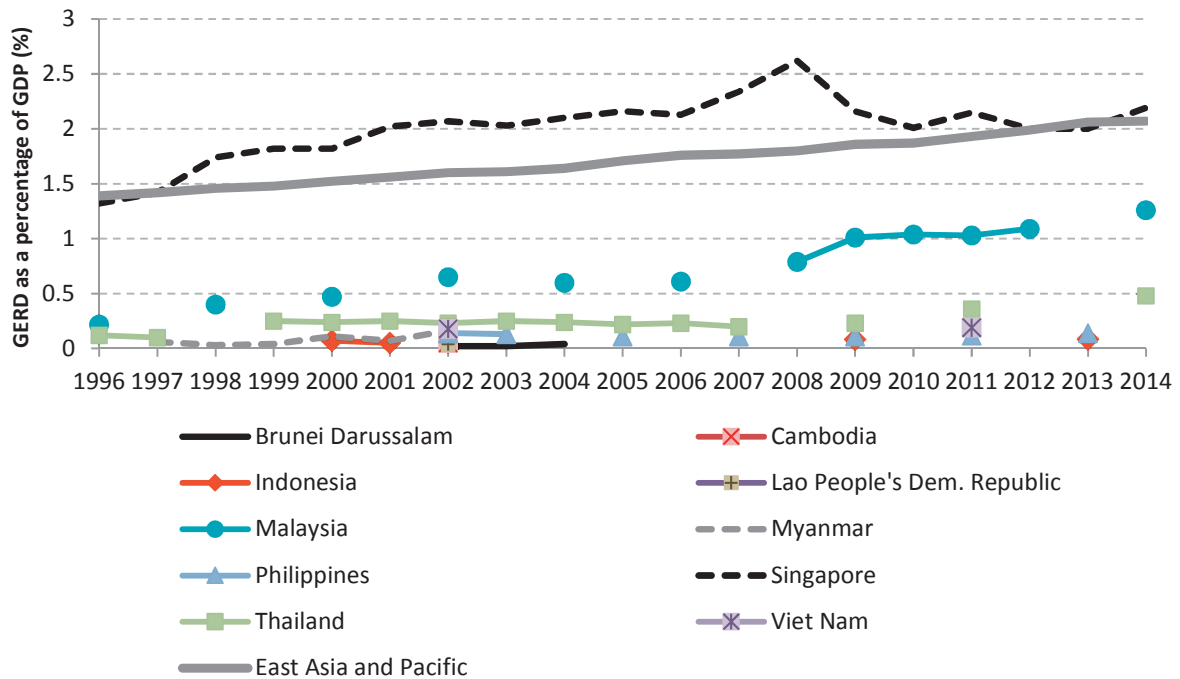
which was adopted in 1989. At the time, the ASEAN Trust Fund for Science and Technology (ASEAN Science Fund, ASF) was established with initial contributions of US\$ 50,000 from each ASEAN member country and NZ\$ 100,000 from the New Zealand Government. By 2000, ASEAN member countries agreed to raise their contributions to US\$ 1 million each. Initially, ASF operations were restricted to using 80 per cent of the interest earned on its funds towards COST-approved activities, which focused on commissioning policy studies, convening and hiring experts, and information exchange and dissemination. For example, for the Fourth APAST (2007-2011) there were 154 projects completed or in the process of implementation, supported by US\$ 12 million from dialogue partners such as Japan, China, India and the Republic of Korea (ASEAN Secretariat, 2015f).

In 2005, the ASEAN Development Fund (ADF) was established at the Tenth ASEAN Summit, whereby member countries agreed to each contribute \$1 million. The ADF replaced the ASEAN Fund that was established in 1969, and member countries' existing contributions to the ASEAN Fund were transferred to the ADF. In 2012, ASEAN Ministers recognized that more resources were needed to support larger scale projects and transferred some funds from ASF to create the ASEAN Innovation Fund (AIF). Unlike ASF, the principal sum of AIF can be invested in related projects, rather than just the interest earnings (ASEAN Secretariat, 2015f).

Despite the long history of cooperation in this policy area, the AEC blueprint 2015 did not contain a section on science, technology and innovation (STI), which was instead included in the blueprint for the ASEAN Social-Cultural Community. Building on this, a related section was incorporated in the AEC blueprint 2025 which outlined broad measures such as: information sharing and networking at universities and businesses; business incubator programmes; increased fiscal and non-fiscal policies for R&D; support for research and technology parks, joint corporate, government and/or university research laboratories, and R&D centres; links with global and regional R&D networks; strong intellectual property rights protections; and enhanced participation in global and regional value chains (ASEAN Secretariat, 2015a: 16-17).

Overall, STI indicators remain relatively weak for ASEAN member countries (Hayashi et al., 2015). For example, available statistics on gross expenditure on R&D reveal low levels for all ASEAN countries, except Singapore (figure 18). Malaysia has the second highest gross expenditure on R&D (GERD) level at 1.3 per cent of GDP in 2014, which is still relatively low, but much improved from the 0.2 per cent in 1996. GERD levels for all other ASEAN countries were below 0.5 per cent in 2014, which is far below the regional average for East Asia and the Pacific.

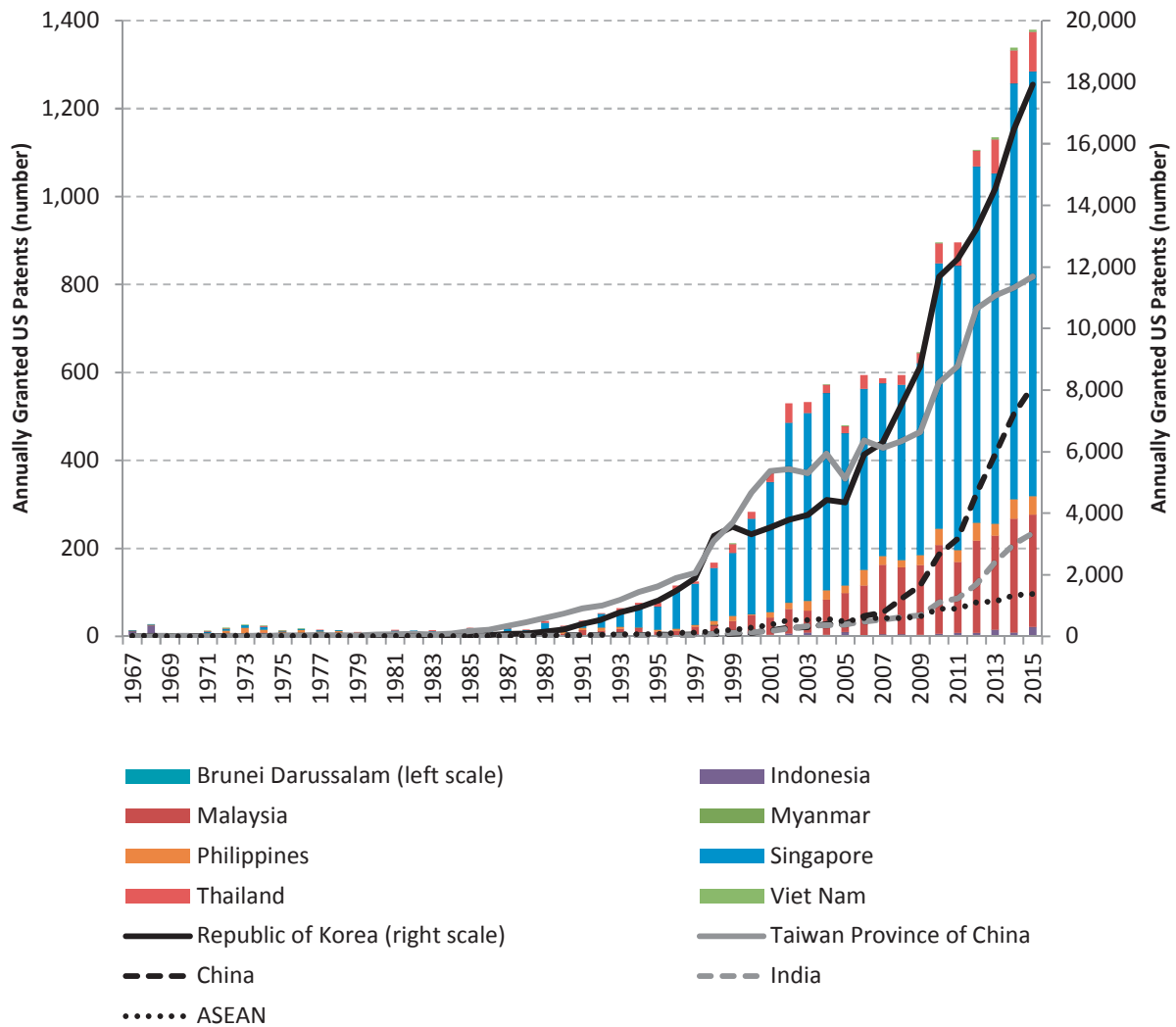
Figure 18. ASEAN gross expenditure on R&D (GERD), 1996-2014



Source: UNESCO.

These wide disparities in ASEAN innovation capabilities are consistent with observed trends in United States patenting activity by ASEAN member countries, which show the overarching dominance of Singapore, followed by Malaysia, Thailand, the Philippines and Indonesia (figure 19). In 2015, ASEAN countries filed a total of 1,379 patents in the United States, 966 of which were filed by Singapore (70 per cent), 256 by Malaysia (18.6 per cent), 89 by Thailand (6.5 per cent), 42 by the Philippines (3.0 per cent), and 20 by Indonesia (1.5 per cent). On a comparative basis, ASEAN countries significantly lag United States patenting activity by other leading emerging economies: in 2015, the Republic of Korea filed 17,924 patents, Taiwan Province of China filed 11,690, China filed 8,116, and India filed 3,355.

Figure 19. United States patents granted to ASEAN and Asian countries, 1967-2015



Source: United States Patent and Trademark Office (USPTO). See, https://www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_utlh.htm.

A recent review of ASEAN STI cooperation highlighted three main challenges:

- First, there is a lack of resource mobilization and funds for STI projects. Despite having highlighted the need for regional STI cooperation as early as 1970, the issue has not received much attention or funding from ASEAN member countries. The initial funding amount provided to ASF was small and its operations were very limited. Although funding amounts were increased in 2000, only in 2012 did ASEAN member countries consider changing their approach and recognize the need for greater resources for STI projects.
- Second, there is a lack of collaboration among ASEAN member countries. ASEAN does not have an effective coordination mechanism for a regional system of innovation and most R&D activities are still conducted by member countries outside of the regional framework created by successive

APAST documents. ASEAN also lacks a strong monitoring and evaluation system in order to measure progress and to provide a benchmark for targets and objectives.

- Third, institutional mechanisms such as COST subcommittees, which oversee the management, coordination, evaluation and implementation of regional projects, continue to rely almost completely on external funding from dialogue partners and other donors. This can affect funding levels when priorities of external funders shift away from STI issues, as well as impact the sense of regional/national buy-in of related project activities which weakens incentives for national-level implementation and follow-up. Moreover, activities have often consisted of small-scale activities in collaboration with dialogue partners and international organizations; while these can be useful, they lack the regional scope that can galvanize cooperation and reinforce commitments to agreed objectives (Irawan, 2016; ASEAN Secretariat, 2015f: 11-12; Lim, 2014).

VIII. Concluding Remarks: The ASEAN Model and Future Directions

As member countries and the international community reflect on the past 50 years of ASEAN's experience in regional integration, the organization's accomplishments in achieving political stability, along with sustained economic growth and poverty reduction, are widely established. At times criticized for its slow pace of implementation, this paper has shown how key ASEAN agreements covering trade in goods and services, investment and finance, and infrastructure and (sub)regional initiatives, have sought to balance objectives of regional integration with those of national sovereignty and development strategy.

ASEAN's area of cooperation and agreements now cover a wide range of policy issues, but for the most part, ASEAN's economic success with regional integration is due to its focus on the "old trade agenda" that has been primarily about "at-the-border" measures, particularly on tariff reductions. To be sure, "behind-the-border" policies are increasingly part of ASEAN's *de jure* organizational agenda, but most member countries appear to be well positioned to take a *de facto* cautious and gradual approach to liberalization in these policy areas. This *de facto* gradualist approach is further buttressed by ASEAN institutional architecture that lacks an enforcement mechanism for implementation.

ASEAN's "pragmatic integration" implies that integration occurs when it is deemed suitable to all members, which represents an informal and unorthodox adaptation to standard models of regional integration. As membership of ASEAN has grown from its original 5 members to the current 10, forging agreements among 10 members has at times been more difficult to achieve. When agreement cannot be reached on an issue, members may choose to work bilaterally or through the pragmatic "ASEAN minus X" formula for flexible participation in cooperation activities and projects that have already been agreed upon by all ASEAN member countries. Thus, ASEAN's X formula is a middle ground process between bilateral and ASEAN-wide agreements. However, there are drawbacks to the ASEAN X formula: the approach leads to different tiers of integration and cooperation within ASEAN, which results in only partial progress from a minority of members across many issue areas. Moreover, important issues not deemed beneficial (economically or politically), or considered too controversial may be left off the table or dealt with only

peripherally.

The principle of non-interference is a hallmark of the ASEAN Way and permeates ASEAN's processes. The non-interference principle has enabled ASEAN to become a flexible organization with a wide diversity in membership, and it is arguable that, were this principle replaced with a more formal sanction-oriented structure, ASEAN's membership might look very different today. On the other hand, the non-intrusive approach embraced by ASEAN makes it difficult to ensure that many of the goals established in the numerous declarations and agreements that members have signed would be fully implemented. Thus, the "ASEAN Way" has generally served member countries well over the past 50 years, but as ASEAN ages and matures as an organization, so should the "ASEAN Way" in terms of improving upon and consolidating its distinct form of decision-making. In light of the mixed economic track record, it seems likely that for the ASEAN Community to fully realize its three pillars, the "ASEAN Way" will need some revision.

For example, while many ASEAN Secretariat documents advocate the adoption of "international standards and best practices" across a range of policy areas, it is not clear how these relate to the "ASEAN Way" in furthering regional interests and objectives. Almost by definition, best practice institutions do not take into consideration local contextual features; it presumes that it is possible to decide in advance a set of appropriate institutional arrangements to which convergence is inherently desirable. As Rodrik (2008: 100) noted:

This [best practice] approach is founded in a first-best mindset which presumes the primary role of institutional arrangements is to minimize transaction costs in the immediately relevant domain - without paying attention to potential interactions with institutional features elsewhere in the system.

First-best approaches are based on mainstream economic concepts that place emphasis on the "phenomenon of exchange between rational individuals in the market and the related problem of allocative efficiency of scarce resources", which provides no real theory of production and overlooks the importance of organizational dynamics and technological learning in production over time (Andreoni and Chang, 2016: 174-175). Yet, it is clear that ASEAN policymakers operate in a unique "second-best" environment in which markets are not perfectly competitive and where the reduction of transaction costs alone is unlikely to be sufficient to resolve multiple market failures and production constraints. It is precisely this latecomer policy setting that is rife for institutional experimentation, where economic objectives "can be achieved through a number of different institutional designs, and sometimes it is worth doing things in an unorthodox, roundabout way if this will serve to relax other constraints elsewhere in the system" (Rodrik, 2008: 103).

For example, more dynamic and non-linear thinking may be needed in relation to ASEAN's difficulties in industrial upgrading and in creating strong backwards and forwards linkages with GVCs. While more participation in GVCs is desirable to promote learning at initial stages of development, subsequent upgrading stages may require some effort to foster local value chains which can lead to degrees of separation from existing foreign-dominated GVCs. After building up its own supply chain capabilities, an upgraded firm can decide to later re-integrate with GVCs (Lee et al., 2017; Amsden, 2009). Regional and global value chains are not mutually exclusive, but it is this kind of strategic manoeuvring and experimentation that could prove indispensable to ASEAN countries' unfinished processes of industrial

upgrading. As such, ASEAN member countries should not only consider *joining* GVCs, but *building* them too by pragmatically blending their ongoing GVC-led industrialization strategy with degrees of East Asian-style industrialization led by local firms.

More broadly, a second-best "ASEAN Way" policy approach may require an adjustment in the mindset of policymakers. Whereas the "international best practice" mindset simply calls for the removal of rules and regulations that are not deemed acceptable by advanced industrialized economies, a second-best "ASEAN Way" mindset would assess, take advantage of, and recover the array of policy instruments needed to support the building of local firms' competitive assets as an integral part of the structural transformation process (UNCTAD, 2014; UNIDO, 2013).¹⁸ This kind of adjustment takes time and is not automatic, but "industrial policy is a state of mind rather than a list of specific policies" (Rodrik, 2010), and remnants of such thinking are likely already present in some ASEAN member countries.

In looking forward at the prospects of the ASEAN region, two major initiatives of regional and global importance could provide further strategic opportunities to modify the "ASEAN model" and its development trajectory:

- **Regional Comprehensive Economic Partnership (RCEP):** Proposed by ASEAN countries in 2011, RCEP is in response to parallel initiatives such as the East Asia Free Trade Area supported by China, and the Comprehensive Economic Partnership for East Asia supported by Japan. RCEP would establish a free trade area encompassing 16 countries - the 10 ASEAN member countries, China, Japan, the Republic of Korea, India, Australia and New Zealand - with the objective of achieving a comprehensive agreement that is WTO-consistent, but that significantly deepens integration and liberalization in the region. RCEP would aim to streamline and harmonize rules connected to the proliferation of several bilateral and plurilateral arrangements, such as the ASEAN+1 free trade agreements (FTAs) that can result in intertwining and overlapping rules and regulations, such as different trade preferences for products in different FTAs and varying rules of origin requirements. If RCEP is successful, it would help cement ASEAN as a central hub in a wider Asia-Pacific regional architecture, and could act as the foundation for the Free Trade Area of the Asia-Pacific (FTAAP). This would make ASEAN countries and Asian partners agenda-setters in this larger FTAAP agreement, which could act as a building block in a revamped multilateral trading system. Negotiations started in 2013, but the initial plan to reach agreement by 2015 was not met. Although the final outcome is uncertain, RCEP will contain a "flexibility clause" that will allow for different forms of flexibility including provision of special and differential treatment, plus additional flexibility for the least developed ASEAN member countries. Some observers contend that such a clause will result in another so-called "low-quality" agreement that is not too different from existing ASEAN+1 FTAs, while pressure to reach a "high-quality" regional FTA has been reduced with United States withdrawal from Trans-Pacific Partnership negotiations (Basu Das and Jagtiani, 2014; Menon, 2013). This bodes well from a policy space perspective, but ASEAN member

¹⁸ This type of strategy need not be narrowly interpreted as reinforcing traditional support for incumbent domestic vested interests. Rather, what has enabled reform in some successful developing country cases was not a political reconfiguration through the defeat of vested interests, "but when different strategies are used to pursue those interests" (Rodrik, 2013).

countries must effectively leverage these policy flexibilities to upgrade national production capabilities and the position of local firms in GVCs.

- ***Belt and Road (B&R) Plan:*** First announced in 2013, the B&R plan is China's sprawling foreign economic policy plan to enhance cooperation and connectivity in the Asia region by financing and building a wide range of infrastructure projects. The initiative is conceptualized through the creation of two modern-day silk roads: the land-based "Silk Road Economic Belt" and the sea-based "Twenty-first Century Maritime Silk Road" that will stretch across Asia towards Europe (Poon, 2015a). Overall planned investments in countries along B&R routes are estimated at \$900 billion, with over \$50 billion invested by China between 2014 and 2016 (Xi, 2017). Given the prominent role of South-east Asia in the B&R plan and ASEAN member countries' own mixed record on infrastructure development, the initiative could provide a significant fillip to challenges confronting ASEAN infrastructure connectivity. Moreover, unlike previous times when Chinese firms were mainly investing abroad to gain access to foreign natural resources, B&R's broader thrust involving infrastructure and capital goods industries hints at China's own motivations for using the plan to spur economic upgrading. ASEAN countries should make the most of this financing to build up regional infrastructure and related project capabilities, while also promoting industry transfers from China involving value added manufacturing industries. This is part of China's so-called "international production capacity and equipment manufacturing cooperation", which intends to transfer industrial capacities to host countries in a range of sectors such as iron and steel, nonferrous metals, construction materials and machinery, infrastructure and manufacturing sectors (Poon, 2015b; Zhang, 2016). This production capacity cooperation is closely linked to the B&R plan. For instance, as part of the financial package announced at the B&R Forum, China Development Bank (CDB) will establish specialized loan facilities for B&R projects totaling RMB 250bn (\$36.2 billion). Of this total, RMB 100 billion is earmarked for specialized loans for infrastructure building, RMB 100 billion is earmarked for "production capacity cooperation", and RMB 50 billion for financial cooperation (BRFIC, 2017). As China pursues industrial upgrading and the building of global and regional value chains led by Chinese firms, ASEAN member countries should prioritize cooperation that involves technology "transfer" over technology "lending" to catalyse the gradual accumulation of technological capabilities over time.

To maximize their own strategic autonomy and economic benefits during a period of uncertain great power competition, it is perhaps not surprising that ASEAN member countries have increasingly resorted to diplomatic "hedging" in respective bilateral relations with the United States and China (Poon, 2014). In this context, ASEAN countries have adopted a pattern of interaction, which pragmatically prevents or avoids a rigid stance in great power alignment. Thus, "in the short term, hedgers may seem like they are leaning more one way; however, they will continue to preserve viable strategic options in the other direction" (Gill et al., 2016: 15).

In the area of economic policy, one obvious example of diplomatic hedging was seen in the controversy over membership in the China-backed Asian Infrastructure Investment Bank (AIIB). The initiative was strongly opposed by United States officials, but all ASEAN countries became AIIB founding members, except Indonesia, which joined later. In light of China's growing influence in global governance and its relative enthusiasm to finance and build large-scale infrastructure and industrial projects, ASEAN member

countries could contemplate three strategic options with China in the pivotal area of development finance. These options can be considered in the wider context of the "Financing for Development" Addis Ababa Action Agenda, which could prompt complementary initiatives by the United States and other dialogue partners:

- In June, the \$40 billion Silk Road Fund (SRF), considered as China's latest sovereign wealth fund and the main financial vehicle backing the B&R, signed a Memorandum of Understanding with the Interbank Consortium of Shanghai Cooperation Organization (SCO) to establish a framework for long-term cooperation in which to jointly promote investments in SCO member States. The consortium consists of national development banks and other financial institutions of SCO countries (SRF, 2017). The China-ASEAN Inter-Bank Association (CAIBA) was created in 2010, with the Sixth executive board meeting held in December 2016 (CDB, 2016). Chinese officials have suggested greater CAIBA involvement in B&R, but there has been no established framework between CAIBA and SRF.
- In 2015, China created a number of "production capacity cooperation" (PPC) funds with the African and Latin American regions, as well as with Kazakhstan. The \$10 billion China-Africa PPC fund was announced at the sixth Forum on China-Africa Cooperation (FOCAC) in December 2015, and is capitalized by China's State Administration for Foreign Exchange (SAFE) and China Export-Import Bank (EXIM). The \$10 billion China-Latin America PPC fund was established in June 2015, backed by the People's Bank of China (PBoC), SAFE, and CDB (GC, 2015). The \$2 billion China-Kazakhstan PCC fund was created in December 2015, with financing provided by SRF (Poon, 2015b). While China and ASEAN have previously established two joint investment funds,¹⁹ and have issued a China-ASEAN PCC "joint declaration" (Xinhua, 2016), a dedicated China-ASEAN PCC fund has not yet been announced.
- A China-ASEAN PPC fund would build upon these two previous entities - the ASEAN-China Investment Fund (ACIF), and the China-ASEAN Investment Cooperation Fund (CAICF) - by consciously fostering the pool of available ASEAN expertise in development financing and related operations. The extent of involvement of ASEAN personnel in the ACIF and CAICF is not clear. For instance, ACIF's management team consisted of two United Overseas Bank (UOB) subsidiaries, UOB Venture Management Private Ltd. (investment advisor) and UOB Capital Partners (general partner), the latter being incorporated in the United States state of Delaware. In addition to long-term funding, development finance institutions often closely monitor project investments and take a hands-on approach in their relationships with companies. This hands-on approach can

¹⁹ The two previous joint investment funds were: the \$76 million ASEAN-China Investment Fund (ACIF), created in 2003, and the \$10 million China-ASEAN Investment Cooperation Fund (CAICF), created in 2010 (Zhang, 2014). ACIF was formed as a private equity vehicle with a fund life of eight years, to provide export-oriented small- and medium-sized enterprises in ASEAN with both risk capital and knowledge transfer. ACIF's main investors included: ADB (\$15 million), the Swiss State Secretariat for Economic Affairs (SECO) (\$15 million), Singapore-listed United Overseas Bank Ltd. (UOB Group) (\$10 million), and CDB (\$15 million) (ADB, 2012d). CAICF is an open-ended private equity fund focusing on investments in infrastructure, energy and natural resources. It is sponsored by China EXIM and other institutional investors, and has an initial fund size of \$1 billion, with a total target fund size of \$10 billion. See <http://www.china-asean-fund.com/about-caf.php?slider1=2>.

involve taking a board seat in invested companies with the aim of improving operations at the firm level, or by providing other services such as initial public offering (IPO)-related groundwork support, which helps companies raise capital, but also contributes to the development of capital markets (ADB, 2012d; UNCTAD, 2016b). It is precisely through learning this hands-on firm-/project-level operational expertise that ASEAN countries will be better positioned to "socially construct competitive assets (resources, capabilities and organizations)" (Andreoni and Chang, 2017: 179).

With the presence of two major multilateral development banks in Asia, ASEAN member countries would be well advised to consciously leverage their outward orientation to foster their national institutional capabilities in the area of development finance. These capabilities could then be consolidated to establish a homegrown regional development finance platform that would coordinate ASEAN infrastructure plans, while also act as the focal point for interactions with MDBs. By actively drawing from the investment capabilities of ADB and AIIB, the idea is to gradually amplify ASEAN's abilities to provide its own homegrown development finance in the service of member countries' national development objectives, for the next 50 years and beyond.

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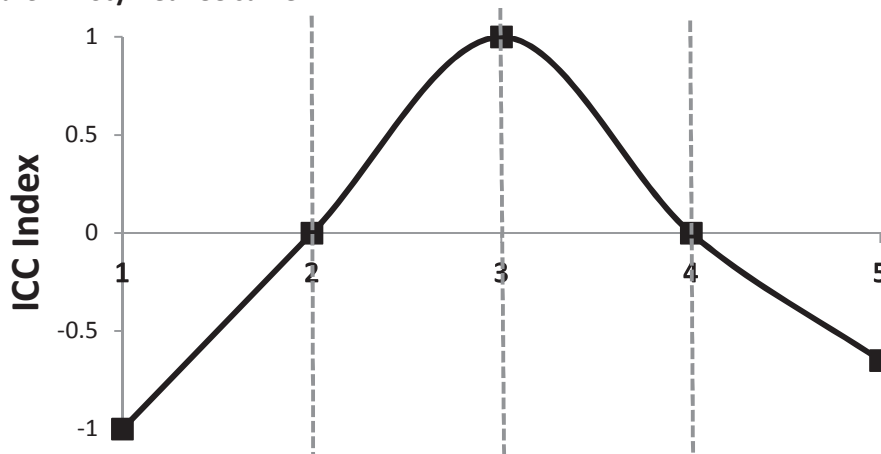
ANNEX: ASEAN Countries' International Competitive Coefficient (ICC) Index

The ICC index is defined as net exports over total trade and is expressed as follows:

$$\text{ICC} = (\text{exports} - \text{imports}) / (\text{exports} + \text{imports})$$

The ICC index is constructed to implicitly consider demand and supply sides, as the numerator “exports minus imports”, is identical to “domestic supply minus domestic demand”. Thus, calculating the simple ICC index over a number of years, by product or by industry, provides a dynamic illustration of the domestic demand and supply gap over time. The ICC index ranges from -1 to +1. When the ICC index is positive (>0), domestic supply exceeds domestic demand. When the ICC index is negative (<0), domestic supply is less than domestic demand. And in cases where the ICC index is rising, domestic supply is increasing against domestic demand, and vice versa (Hiratsuka, 2005: 4-5; Suh, 2007; 37).

Figure A1. Stylized ICC curve



To better capture the “catching-up” process, figure A1 stylizes the ICC index curve that moves between -1 and +1, and divides the ICC index into five development stages in relation to conditions in domestic supply and demand:

- [1] At the “**introductory stage**”, when a forerunner exports new products and a latecomer imports them, the ICC index of the latecomer takes the value of -1.
- [1 to 2] When the ICC index is increasing between -1 and 0, it is defined as the “**import substitution stage**”. At this stage of development, industry in the latecomer country shows weak competitiveness since the production level is not large enough in scale. The latecomer exports inferior quality products and domestic production is still less than domestic demand (net importer).

[2 to 3] At the “**export stage**”, the ICC index is rising between 0 and +1 and the latecomer produces at a larger scale and expands exports rapidly. Eventually, domestic production exceeds domestic demand and generally the latecomer exports low-end products but imports high-end products from the forerunner.

[3 to 4] At the “**mature stage**”, the ICC index declines to a level between +1 and 0. The product has “matured” through the product cycle and its technology has been standardized. The forerunner slowly decreases exports as it gradually fails to compete with the latecomer in export markets. Domestic production still exceeds domestic demand, but the forerunner at this “mature stage” exports high-end products and imports low-end products.

[4 to 5] At the “**reverse-import stage**”, the ICC index decreases to a level between 0 and -1. At this stage, the forerunner fails to compete with the latecomer in the latter’s domestic market, and domestic supply is less than domestic demand.

To use a country example, the “catching up” process can be conceptualized when the second-runner economies of the Asian Newly Industrialized Economies (NIEs) reach the “export stage” and the front-runner Japan drops down to the “mature stage” or “reverse import stage”, and/or when the latecomer economies of ASEAN and China move up to the “export stage” and the Asian NIEs or Japan move out of that stage (Hiratsuka, 2005: 6-7).

Country ICC profiles

All trade statistics sourced from United Nations COMTRADE database.

Figure A2. Brunei Darussalam ICC Index, 1967-2015

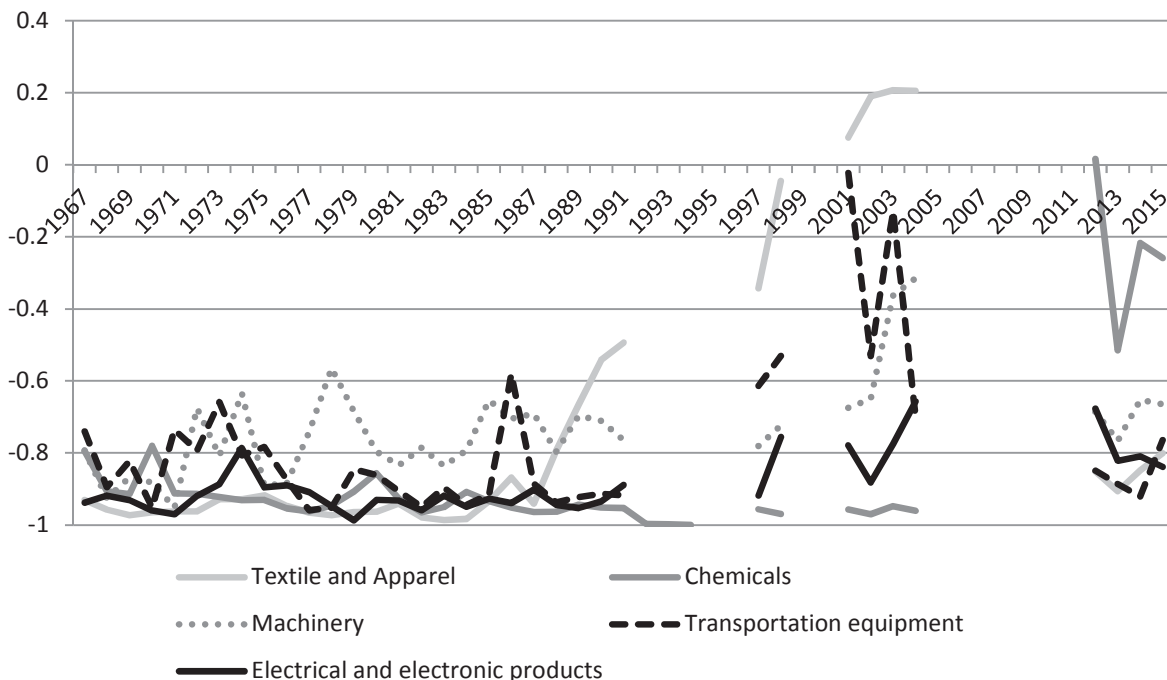


Figure A3. Cambodia ICC Index, 2000-2016

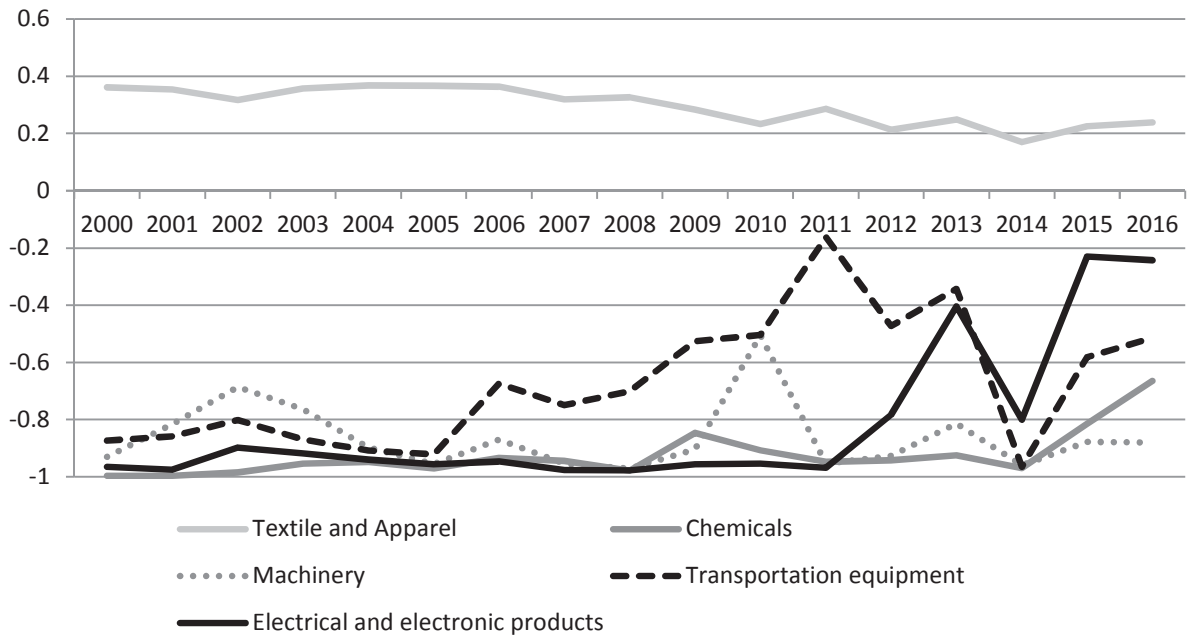


Figure A4. China ICC Index, 1984-2015

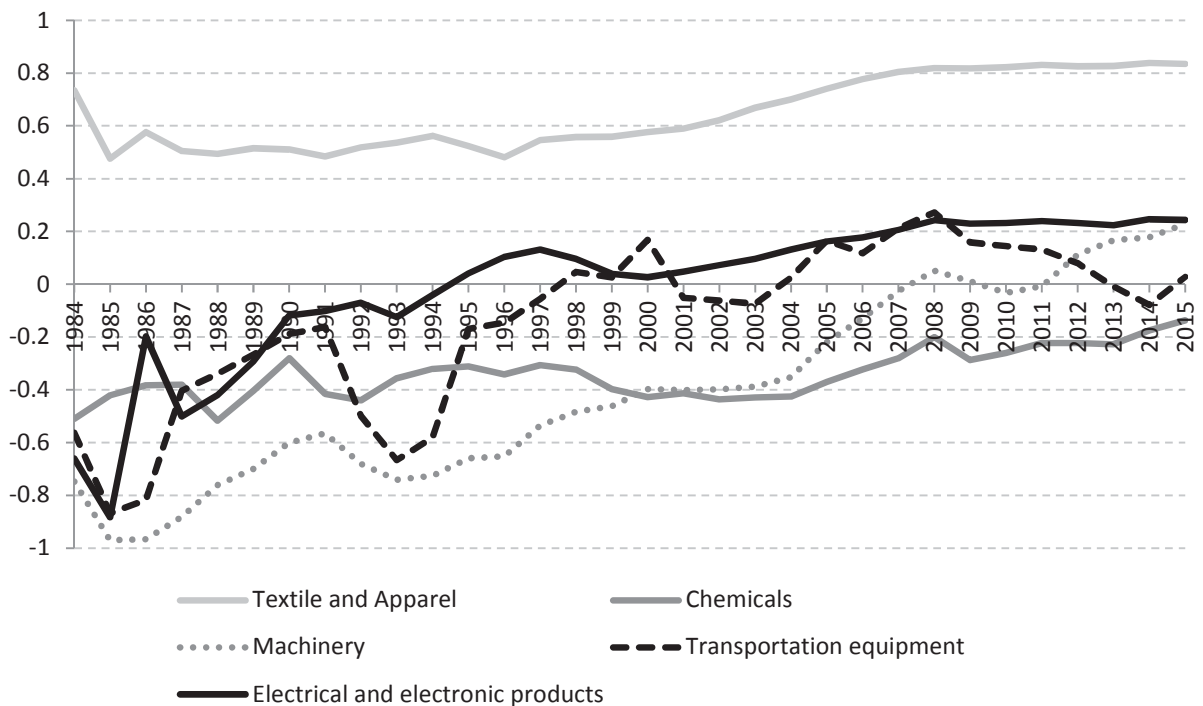


Figure A5. Indonesia ICC Index, 1967-2016

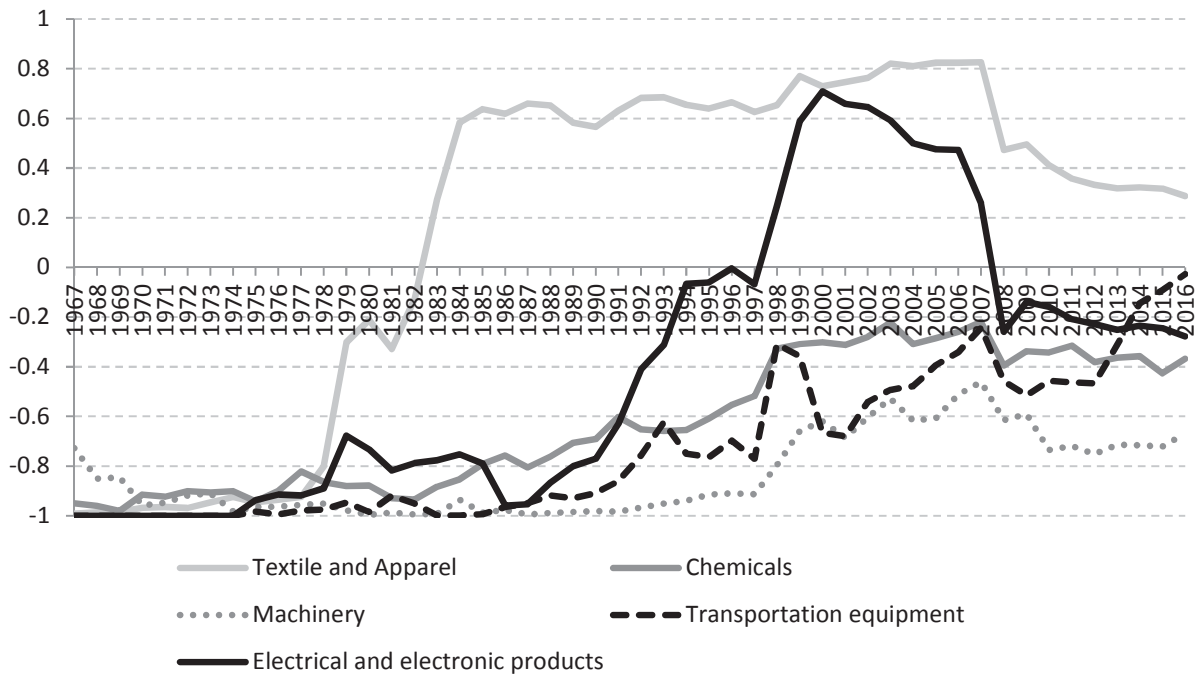


Figure A6. Lao People's Democratic Republic ICC Index, 2010-2016

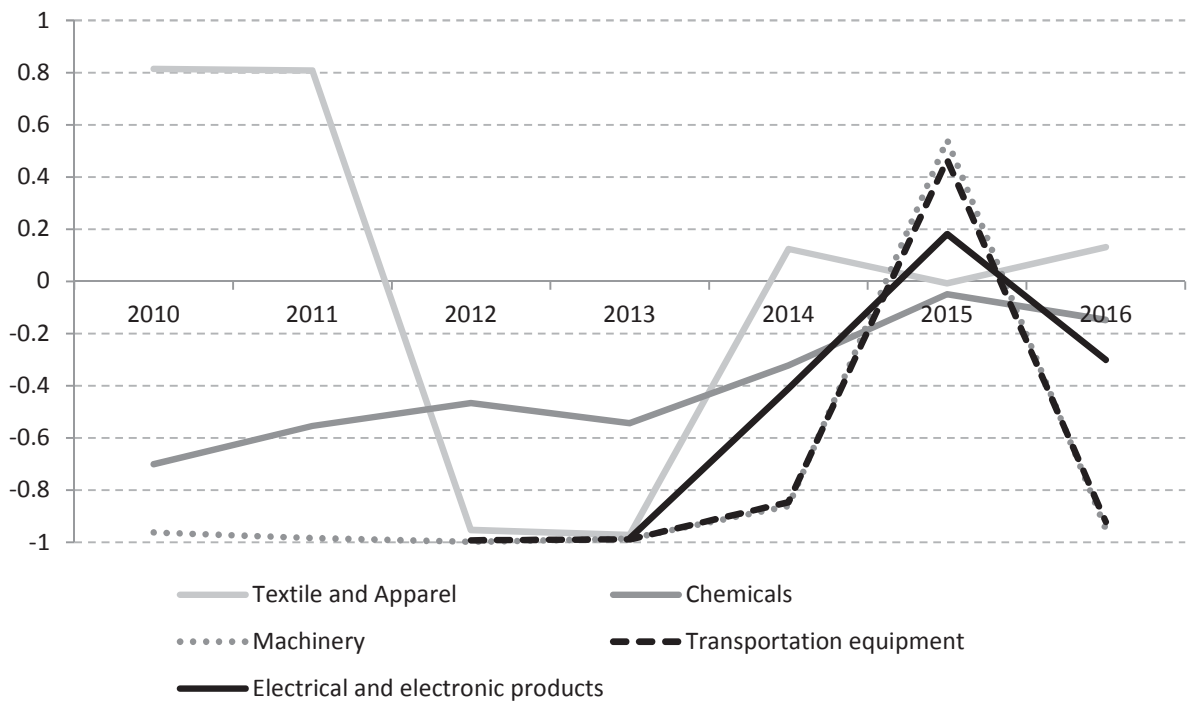


Figure A7. Malaysia ICC Index, 1967-2016

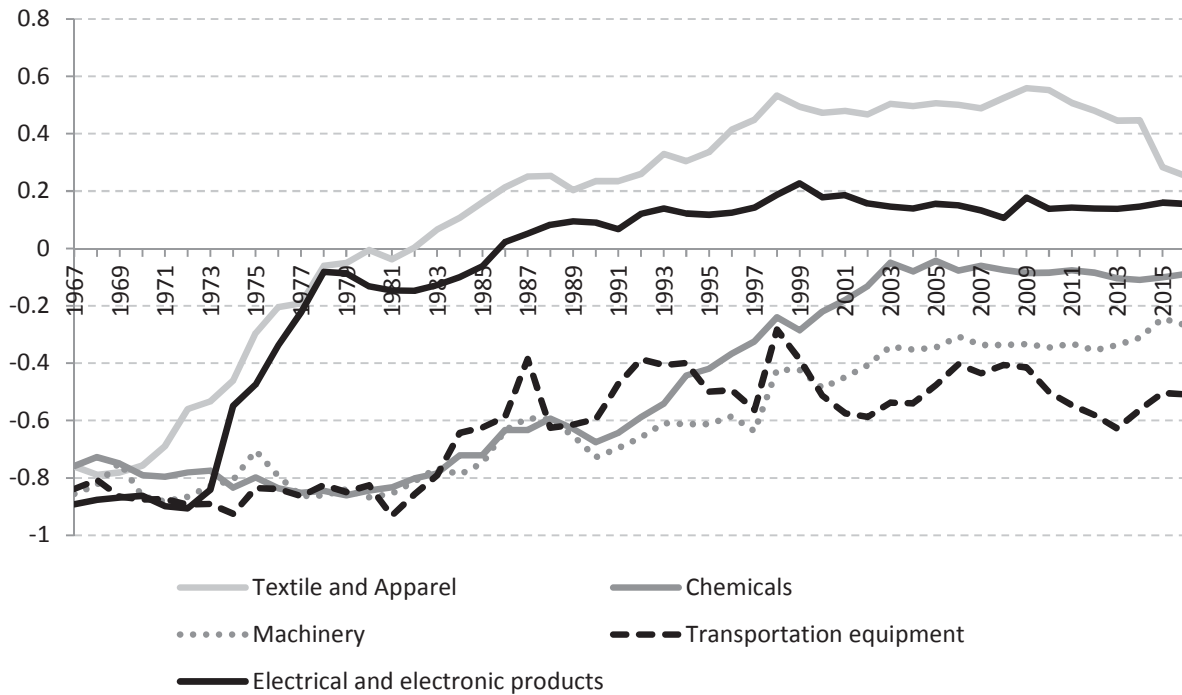


Figure A8. Philippines ICC Index, 1967-2016

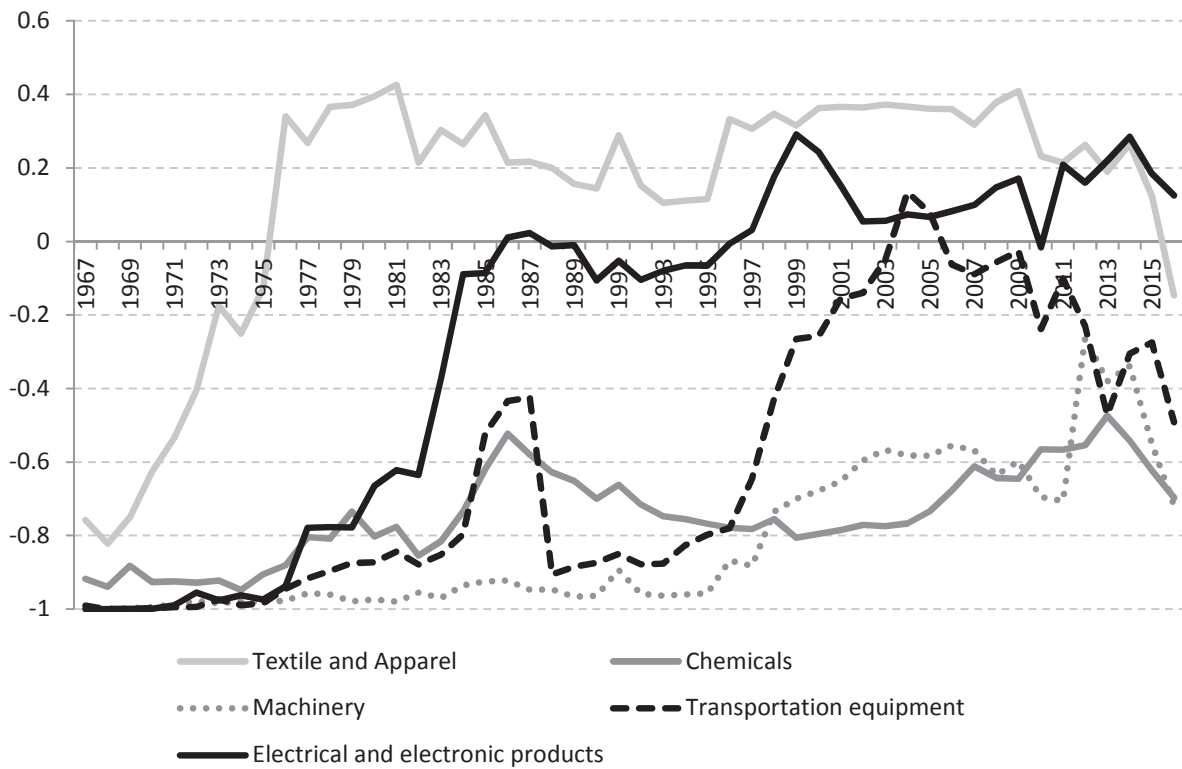


Figure A9. Singapore ICC Index, 1967-2015

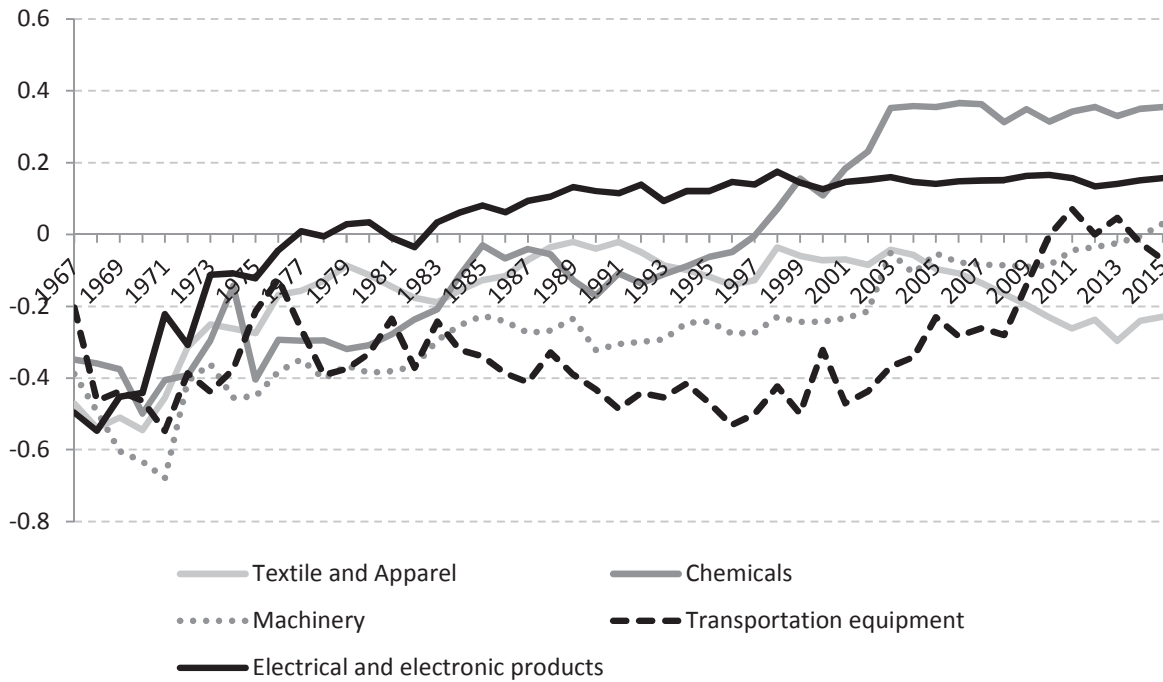


Figure A10. Republic of Korea ICC Index, 1967-2015

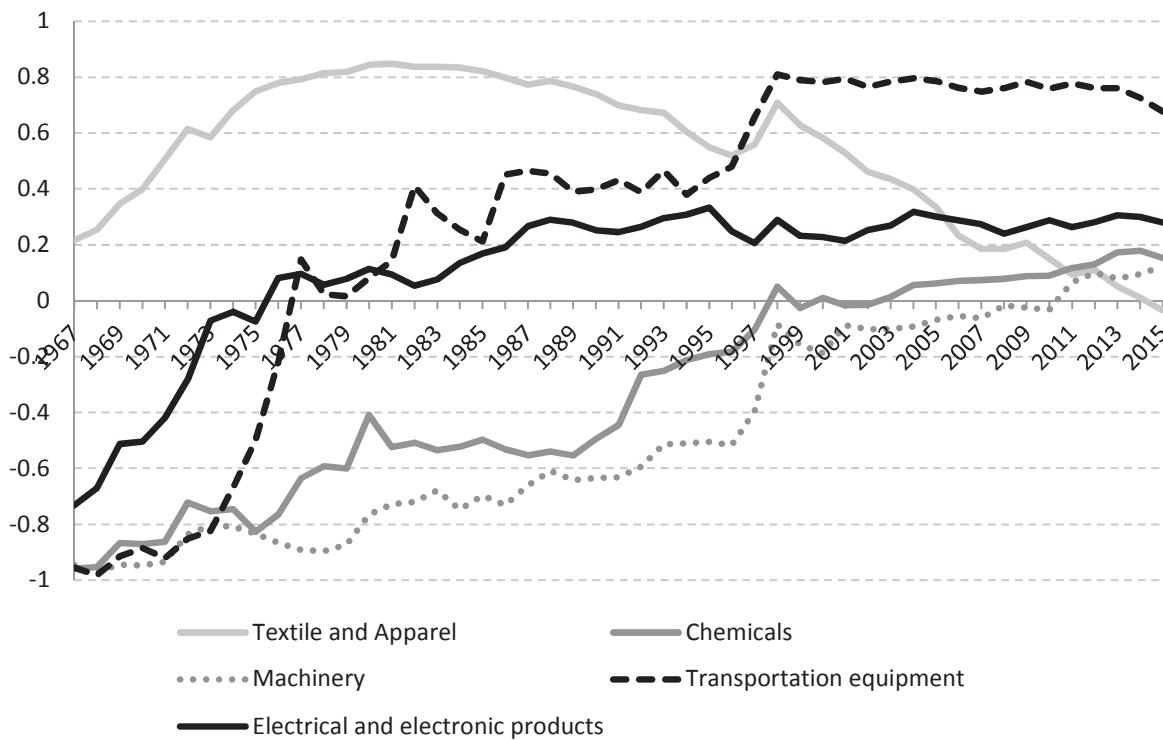


Figure A11. Thailand ICC Index, 1967-2015

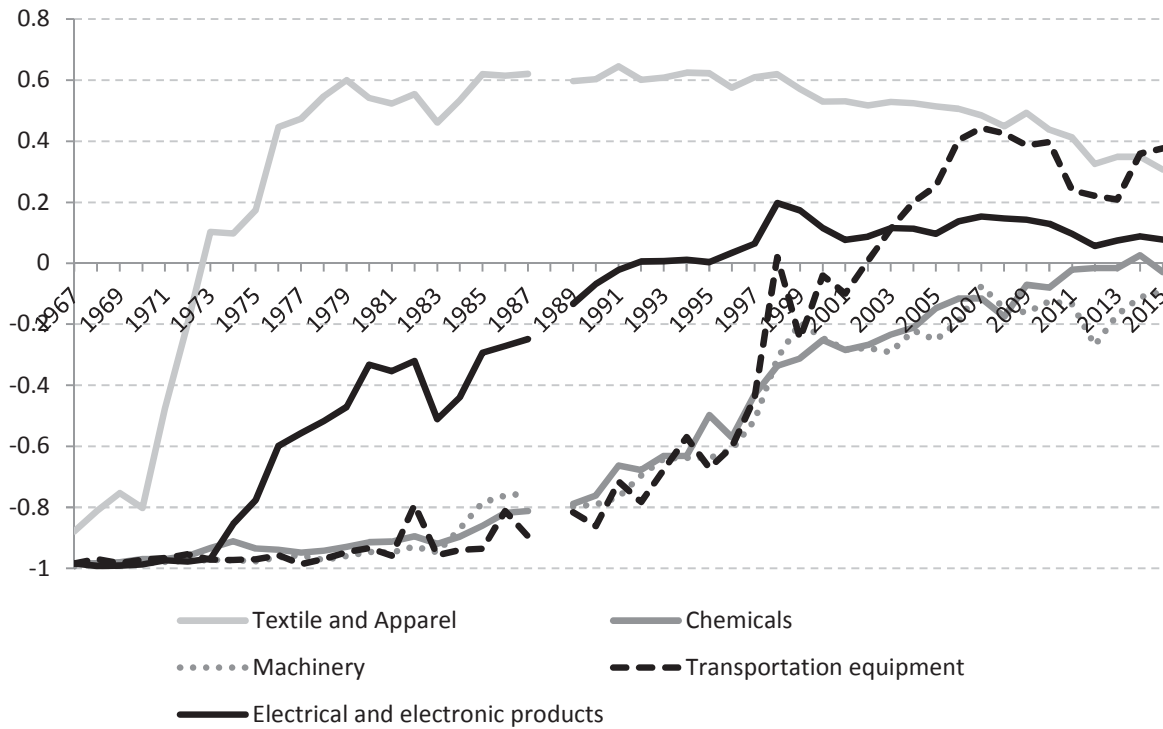


Figure A12. Viet Nam ICC Index, 1997-2015

