The ASEAN Economic Community
Into 2025 and Beyond

Edited by
Rebecca Sta. Maria, Shujiro Urata, and Ponciano S. Intal, Jr.
I congratulate the Economic Research Institute for ASEAN and East Asia (ERIA), the Permanent Mission of the Philippines to ASEAN and the Philippine ASEAN National Secretariat for publishing this 5-volume publication on perspectives on the making, substance, significance and future of ASEAN. This valuable publication, forming part of the Philippines’ commemorative activities in celebration of ASEAN’s golden anniversary, highlights ASEAN as one of the world’s most successful and enduring regional organizations.

It pleases me to note that this printed work equally supports the development priorities of President Rodrigo Duterte and the Philippine Chairmanship priorities – building a people-oriented and people-centered ASEAN, maintaining peace and stability in the region, cooperating in maritime security, advancing inclusive and innovation-led growth, promoting a resilient ASEAN, and establishing ASEAN as a model of regionalism and a global player. Consistent with President Duterte’s pursuit of an independent foreign policy for the benefit of the Filipino people, the publication also affirms the ASEAN Community Blueprints in raising the profile and awareness on the ASEAN pillars of political-security, economic and socio-cultural communities.

We seek the aid of the Almighty and are hopeful that this publication will provide the reader with greater insights on ASEAN’s history, will be used by decision makers, government officials, analysts, and the people of ASEAN, in charting the future course of the region.

Mabuhay!

Manila, August 2017

Alan Peter S. Cayetano
Secretary of Foreign Affairs
Republic of the Philippines
This 50th anniversary milestone of the founding of the Association of Southeast Asian Nations (ASEAN) is truly an event worth celebrating. We should come together and admire the achievements we can all see around us, both the visible changes in cityscapes and livelihoods of citizens of the region, and the equally important but invisible absence of interstate war and conflict that has marked the region now for nearly two generations. ASEAN can be proud of the role it has played in all of these.

But the purpose of reflecting on the achievements of the past is not to be self-congratulatory and self-indulgent. We must use this occasion to take stock of how we got to where we are, identify the challenges ahead, and to consider new directions for the future. We must learn from the past, from this region and other regional groupings, and think about how to shape and balance a future in which leaders will need to take into account the aspirations of citizens on the one hand, and the implications of the gig economy and ageing populations on the other.

This anniversary must be the platform from which to do this stocktake. The road ahead is long. And we do not want historians of the future to say that after the first 50 years of the Association, its leaders, complacent with stability and growth, turned inwards and forgot that to sustain and consolidate the growth of the past, they still needed to work together to achieve the goals of the ASEAN Economic Blueprint 2025, a highly integrated, cohesive, and global dynamic economy, supportive of innovation and competition.

This fifth volume of ERIA’s five-volume ASEAN@50 publication allows us to move beyond reflection and look into the challenges and possibilities for the future. The voices of ASEAN (see Volume 2) are again heard, along with the implications of other international developments that will have a bearing on the region. This volume moves on to look at many of the issues – from trade facilitation to non-tariff measures, services, connectivity, financial integration, and good regulatory practice, etc. – that are all still ‘works in process’ and need a lot more attention if by 2025 we are to have the ASEAN Economic Community we desire. Finally, this volume provides recommendations that could support us along the journey ahead, painting possibilities for where we may be in 2025 and 2035.
I would like to thank and congratulate all the contributors to this volume for their thoughts and computations that can inspire us for the journey. I would like to pay special thanks to H.E. Ambassador Elizabeth Buensuceso, Permanent Representative of the Philippines to ASEAN, for her passion and enthusiasm to support this and all other volumes of this anniversary publication.

Jakarta, August 2017

Hidetoshi Nishimura
President
Economic Research Institute for ASEAN and East Asia
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As the Association of Southeast Asian Nations (ASEAN) turns 50, it is appropriate to reflect on how this diverse group has worked at integrating countries at varying stages of economic development and with different political systems, ethnicities, and cultural backgrounds. Can the steps taken thus far lay the foundations for what may be regarded as a 21st century model for inclusive integration? What are the challenges that ASEAN must address if it is to continue to be a significant player on the global economic stage?

While it has achieved much over the 5 decades, the ASEAN community-building story has its share of critics and fans. Many are encouraged by steps taken to deepen the group’s economic integration. Just as many challenge the notion of the ASEAN Economic Community (AEC) specifically, and the ASEAN Community in general, claiming there is little substance to it beyond political rhetoric. To appreciate the strides made by this regional grouping, one must explore ASEAN’s economic journey from its modest goals of a preferential trade agreement in the 1970s through the establishment of the ASEAN Free Trade Area (AFTA) in the 1990s, the AEC Blueprint 2015, and the AEC Blueprint 2025.

ASEAN’s economic journey reflects the grouping’s step-by-step confidence-building approach towards integration. This served the members well, allowing for domestic adjustments even as it deepened its regional commitments, moving from voluntary liberalisation under the preferential trade agreement, through the rules-based AFTA and services liberalisation under the ASEAN Framework Agreement on Services (AFAS), and laying the foundations for an integrated investment region through the ASEAN Comprehensive Investment Agreement.
In 2006, when the proposal to push for the realisation of the AEC by 2015 was mooted, it made economic sense. The region had just come out of a major economic crisis, and initiatives towards the AFTA were well on the way. Only after assessing and being comfortable with the progress achieved under the AFTA did the economic leaders of the grouping take the next big step by bringing forward the timeline for the establishment of the AEC from 2020 to 2015. That was the genesis of the AEC Blueprint 2015 as the guiding framework for economic community-building. The AEC Scorecard was put in place to track the implementation of the AEC Blueprint 2015 measures.

The AEC 2015 was an ambitious attempt at moulding the varied economies towards an entity resembling a community. But ASEAN was also pragmatic in its approach to economic integration. Right at the outset, it was clear that the grouping was not looking to be a customs union. That would evolve with time. Because of the differing economic and political systems, as well as differing levels of economic development, the grouping adopted an ‘open regionalism’ approach. This would mean that regional economic integration would not be a drag on the growth plans of the member states. Rather, they took the ‘rising tide’ stance, a ‘prosper thy neighbour’ attitude, as they addressed the development gaps amongst member states.

To some extent this approach has worked out successfully for the grouping. It has contributed positively to the region’s economic growth and industrial development. There has been substantial elimination of tariffs, significant work on services liberalisation, and some measure of streamlining of investment rules. Much work has also been done on mutual recognition agreements and standards and conformance. The region has undeniably moved ahead and produced commendable outcomes towards the creation of an economic community.

The integrative chapters of Volume 3, entitled ASEAN and Member States: Transformation and Integration, a companion of this volume, elaborate on the commendable outcomes of ASEAN regional integration. As Volume 3 highlights, ASEAN has the highest intra-regional trade share amongst the regional integration areas involving the world’s developing and emerging countries and has a rising share of global trade. Similarly, intra-ASEAN foreign direct investment (FDI) forms the largest share of FDI inflows into ASEAN, while ASEAN’s share to global FDI inflows (especially FDI inflows into the developing world) has risen secularly. Equally important, ASEAN integration under the AFTA and towards the AEC has contributed to the domestic reform process in several member states, while also benefiting from unilateral liberalisation and the domestic reforms undertaken especially under the auspices of the World Trade Organization (WTO).
Even as the grouping worked to deepen intra-ASEAN economic ties, it engaged and expanded economic relations with its dialogue partners through free trade agreements (FTAs) and comprehensive economic partnerships.

As the AEC 2015 measures were being implemented, the grouping took the next step to ensure the continuation of efforts to deepen economic integration. Indeed, the discussion in Volume 3, which echoes the results of previous analyses – especially those undertaken by the Economic Research Institute for ASEAN and East Asia (ERIA) – show there is much to be done to ensure that ASEAN would indeed be a ‘single market and production base that is competitive and globally engaged while at the same time a region of equitable development’. The year 2015 was just another milestone. The AEC Blueprint 2025 – the follow-up to the AEC Blueprint 2015 – aims to complete the unfinished business of the AEC 2015 and further deepen the integration process with new reform and cooperation initiatives consistent with the dynamically changing international environment.

Drawn up in collaboration with the ASEAN business and research communities, the AEC 2025 is expected to have the following characteristics: (i) a highly integrated and cohesive economy; (ii) a competitive, innovative, and dynamic ASEAN; (iii) an ASEAN with enhanced connectivity and deeper sector cooperation; (iv) a resilient, inclusive, people-oriented, and people-centred ASEAN; and (v) a global ASEAN. These key features show the strong continuity with the AEC 2015 while moving forward into 2025.

It needs to be emphasised, however, that only with enhanced synergy amongst the ASEAN blueprints can there be inclusive and dynamic regional integration under the AEC that supports robust community-building within ASEAN. Of special importance are the complementarity of the AEC Blueprint 2025 with the Master Plan on ASEAN Connectivity (MPAC) 2025 and the ASEAN Socio-Cultural Community (ASCC) Blueprint 2025.

The papers and essays in this volume examine several key areas of integration that are of critical interest to the AEC moving into 2025 and beyond. The rest of this integrative chapter weaves the papers together, highlights their key ideas and recommendations, and situates a number of them in terms of the changing international environment. Section 1 presents the results of the ERIA survey of ASEAN people on their aspirations, expectations, and perceived pressing problems into 2025. This is elaborated in Volume 2, Voices of ASEAN: What Does ASEAN Mean to ASEAN Peoples, a companion to this volume. The section also discusses the two key international developments that have a critical bearing on ASEAN’s future. Thus, Section 1 provides the compelling contexts to the measures and initiatives that ASEAN needs to undertake to realise the
four key features of the AEC 2025 listed above. Section 2 discusses the key strategies or measures for the AEC into 2025 and beyond, based mainly on the papers and essays in the volume. Section 3 concludes and summarises the key recommendations and presents a possible snapshot of ASEAN by 2025 and 2035.

Framing ASEAN Integration, Domestic Reform, and Economic Transformation Into 2025 and Beyond

ASEAN Economic Community and ASEAN Community-building. As part of the ASEAN@50 project to commemorate the 50th anniversary of ASEAN, ERIA, together with partner institutions in all ASEAN Member States, undertook an internet- and paper-based survey of what ASEAN means to ASEAN peoples. The results of the survey are presented in Volume 2, a companion of this volume. Amongst the questions in the survey are the respondents’ aspirations and expectations for ASEAN by 2025. In addition, they were also asked to list the five most pressing concerns or problems for their countries, as well as for the ASEAN region to be addressed concertedly under ASEAN. More than 2,200 people took part, including students and youth, government and business people, and people from civil society and academe.

The results of the survey are noteworthy (see Chapter 1 of Volume 2). There is a strong aspiration for an ASEAN that is (i) integrated and connected; (ii) resilient, equitable, and sustainable; (iii) characterised by good governance; and (iv) with a significant global and regional presence and contribution.

At the same time, there is a significant gap between aspirations and expectations for 2025. ‘Expectations’ refers to what the respondents expect to happen by 2025; ‘aspirations’ are what they hope will happen by 2025. The gap is narrowest for integrated and connected ASEAN and widest for ASEAN good governance. The gap is also considerable or large for a resilient ASEAN, ASEAN’s global and regional engagement, and an equitable and sustainable ASEAN (Figures 1 to 3). As Figure 1 suggests, ASEAN people strongly aspire to having easy access to goods and services from any ASEAN source, as well as good information and transport connectivity within the region. They are mildly less enthusiastic about easy mobility of skilled workers and professionals within the region. Figures 2 and 3 indicate that nearly four in five respondents also aspire to an ASEAN that is resilient to natural disasters and a significant player on the international and regional stage. Nearly three in four respondents also would like to see good governance with little corruption, less income disparity, and less polluted cities in the region.
Figure 1: Integrated and Connected ASEAN
(% of respondents who agree with the statement)

Consumers have easy access to goods and services from any ASEAN country 82 74
It is easy for skilled workers and professionals to find work in other countries in ASEAN 76 61
ASEAN countries are well connected through roads, railways, air, and shipping 81 68
People and businesses can communicate easily with one another through ICT. 84 77

ASEAN = Association of Southeast Asian Nations; ICT = information and communications technology.

Figure 2: ASEAN Governance, Equity, Resilience, and Sustainability
(% of respondents who agree with the statement)

There is good governance and very much less corruption 74 39
There is equitable access to opportunities for ASEAN peoples 73 49
ASEAN major cities are less polluted and more livable than they are today 73 44
ASEAN is able to anticipate, respond, and recover faster together from natural disasters 78 58

ASEAN = Association of Southeast Asian Nations.
Figure 3: ASEAN Global and Regional Engagement
(% of respondents agreeing with the statement)

Aspirations and Hopes by 2025

- ASEAN is a strong voice and important player in global negotiations and forums: 79%
- ASEAN deeply engages powers in the region and the world (e.g. US, China) to ensure peace in the region and Asia–Pacific: 77%

Expectations by 2025

- ASEAN is a strong voice and important player in global negotiations and forums: 61%
- ASEAN deeply engages powers in the region and the world (e.g. US, China) to ensure peace in the region and Asia–Pacific: 61%

ASEAN = Association of Southeast Asian Nations.

Figure 4 shows the results on the most pressing problems facing ASEAN and the respondents’ own countries. Note that these are simple averages for the whole region. Although significant differences exist amongst ASEAN Member States in terms of the priority concerns at the national level, there is considerable unanimity amongst the respondents, especially on the top three problems. The most pressing problems for ASEAN to address at the regional level were deemed to be corruption; climate change and natural disasters; income disparity and social inequality; trade, investment, and regulatory coherence; and agriculture and food security. The results show that the most pressing national concerns or problems are corruption, income disparity and social inequity, agriculture and food security, unemployment and poverty, infrastructure availability and quality, quality education provision and access, and climate change and natural disasters.

For more details, see Chapter 1 of Intal and Ruddy (2017).
Figure 4: Most Pressing Problems in ASEAN and Own Country (% of all respondents)

ASEAN = Association of Southeast Asian Nations.

Figure 4 indicates a significant overlap between the regional and national concerns. Moreover, significant concordance also exists between the areas where there is an aspirations–expectations gap and the common pressing concerns or problems. Noteworthy are the issues of corruption; income disparity and social inequity; and climate change, natural disasters, and resiliency. Also of interest are the issues of poverty and unemployment, which to some extent are also related to the issues of income disparity, social inequity, and agriculture and food security. While the issue of trade, investment, and regulatory coherence is inherently more regional than national, nonetheless, the figure indicates that at least one in five of the respondents see it as one of the five most pressing problems in their own countries.
The significant overlap between the pressing regional and national concerns suggests that regionally concerted national actions would give rise to synergy amongst the ASEAN Member States. Thus, for example, member states working together to improve governance and reduce corruption would allow synergies through learning from one another on good practices and the experiences of other member states, and through the beneficial impact on the region’s foreign investment attractiveness from the regionally concerted national programmes and measures against corruption.

At the same time, many of the AEC blueprint measures can significantly address the concerns and expectations gaps raised above. Thus, for example, the implementation of the National Single Window (NSW) demands streamlined procedures, strong and seamless inter-agency coordination, and transparency, and allows for contactless transactions. Therefore, a NSW not only strengthens trade facilitation but is also an anti-corruption measure, given corruption tends to be prevalent in the customs operations of several member states. Similarly, the implementation of a well-performing national trade repository increases transparency, which itself is also an anti-corruption initiative. The AEC Blueprint 2025 includes the adoption and implementation of good regulatory practice (GRP), which is also a powerful tool to reduce corruption.

The figures also suggest that addressing the pressing concerns and the expectations gap calls for synergy amongst the various ASEAN blueprints. As such, there is a need to harness the complementarity of the measures in the AEC Blueprint 2025, the ASEAN Political–Security Community Blueprint 2025, and especially the MPAC Blueprint 2025 and the ASCC Blueprint 2025 to ensure the success of the AEC 2025 for the benefit of the ASEAN people. The salience of ensuring greater complementarity amongst the ASEAN blueprints becomes clearer from the discussion in the next section on the major international developments that would help frame ASEAN integration and domestic reform into 2025 and beyond.

Finally, enhancing the synergy amongst ASEAN Member States and amongst the ASEAN blueprints would bring out and bring forth a critical underpinning of the ASEAN integration effort. The pursuit of the AEC into 2025 and beyond is an essential element of ASEAN community–building. The results of the Voices of ASEAN peoples survey indicate a growing sense of ASEAN belonging and identity. The pursuit of the AEC into 2025 and beyond can be expected to contribute further to, and in turn also benefit from, community–building in ASEAN.
The changing international economic environment into 2025 and beyond. This section discusses the changed international economic environment and elaborates on the framework of enhancing synergy amongst integration, connectivity, cooperation, and domestic reform and institution building.

Brexit and the Trump victory in the United States (US) presidential elections have dominated the international headlines during most of the latter part of 2016 and in 2017. Both reflect popular disaffection about globalisation and integration in the two countries, which hitherto were bastions of global free trade. East Asia, being the beneficiary of the global shift in labour-intensive manufacturing, does not suffer from the Trumpian scepticism; nonetheless, it faces heightened anxieties about the impact of globalisation in the region. Brexit and the Trump victory highlight the issues of inclusivity and the management of adjustment in an increasingly integrated world. They tell us that globalisation and integration, if not managed well, and especially in the light of middle skilled labour–saving technology changes, could result in substantial inequitable outcomes, increased disaffection of a large segment of the population, and a greater call for more populist and inward-looking policies.

At the same time, however, the world has been seeing a tectonic geo-economic and technological change that offers tremendous opportunities to ASEAN from deeper integration and greater engagement with the global economy. For ASEAN, the most important is the tectonic geo-economic shift from the developed economies to the emerging markets – most importantly, China, India, and ASEAN – as the increasingly dominant drivers of global market and economic growth. The graduation of a huge mass of people in the emerging markets to the middle-income and consuming class, resulting in the surge in disposable consumption, offers what McKinsey calls the ‘... biggest growth opportunity in the history of capitalism’ (Atsmon, Child, and Kopka, 2012: 1). ASEAN, being at the geographic centre of the India–ASEAN–China ‘golden arc of opportunity’ – the largest rising consumer market in the world – needs to be well positioned to benefit from the challenges that such opportunity offers.

The future opportunities offered by robustly growing China, India, and ASEAN are large. For example, Atsmon, Child, and Kopka (2012) projected an increase in the number of Chinese households with annual income of US$16,000–US$34,000 from about 14 million in 2010 to about 167 million (representing about 400 million people) in 2020. China’s affluent households earning more than US$34,000 per year would increase from 4.3 million to about 21 million (60 million people) during the same period.
This is clearly a huge market. And as China becomes a high-income country, based on the World Bank definition, by about 2030 (OECD Development Centre, 2016), many more Chinese households will be added to the huge consumer market, with tremendous potential implications for expanded trade within the region.

Similarly, the McKinsey Global Institute (2007) projects that India’s middle class (households with an annual income of US$4,380–US$21,890) will increase from 13 million households (50 million people) in 2005 to 128 million households (583 million people) by 2025, making India the world’s fifth-largest consumer market by 2025.

Likewise, ASEAN is already one of the largest economic zones in the world, and its ‘consuming class’, or households with incomes capable of making significant discretionary purchases, is projected to increase from about 67 million in 2010 to about 125 million households by 2025 (Vinayak, Thompson, and Tonby, 2014).

The sheer magnitude of the projected consuming class in China, India, and ASEAN makes developing East Asia the largest source of market growth in the future.

In addition, the world is amid a digital revolution and globalisation where digital technologies and platforms have been reshaping business arrangements, dramatically expanding the market reach of small and medium-sized enterprises (SMEs) globally, enabling increased productivity in various ways, enhancing competition and the pressure for innovation, and expanding the potential for inclusive growth. Such digital dividends are particularly substantial where the ‘analogue complements’ in the form of better regulations, human capital, and good governance are present (World Bank, 2016).

As World Bank President Jim Yong Kim said in his foreword to the World Development Report 2016, we are ‘... in the midst of the greatest information and communication revolution in human history’ (World Bank, 2016, xiii). McKinsey is also heralding the era of ‘digital globalisation’, of a digitally connected global economy where data flows are an increasingly important factor and shaper of globalisation, and not just goods and services. Indeed, global data flows have been exploding in the face of the sharply sluggish global trade in goods and slump in global trade in services since the 2008–2009 Great Recession. The explosion and reach of the digital revolution are astounding: cross-border data flows grew 45 times from the mid-2000s to the mid-2010s, when there were about 1 billion social networking users, 360 million cross-border e-commerce shoppers, and 200 billion e-mail exchanges every day (Manyika et al., 2016).
Digitisation is changing the economics of globalisation. Global digital platforms have been driving down tremendously the cost of international communication and transaction, allowing small firms and entrepreneurs to reach a global market. Thus, with digitisation, globalisation is no longer mainly the preserve of large multinational corporations and banks but is becoming more inclusive. Manyika et al. (2016) point out that Amazon has 2 million third-party sellers, Alibaba has about 10 million SMEs, and Facebook has 50 million SMEs. China’s dominant e-commerce platform, Alibaba, serves more SME exporters than the offline market and sells more products per firm. Firms on Alibaba reach an average of 3 (and a maximum of 98) export destinations instead of 1 (and a maximum of 50) export destination in the offline market. A global survey by McKinsey suggests that the tech-savvy start-ups are preponderantly global in reach with 86% of them having cross-border customers. The tremendous success of Alibaba stems partly from its services, including instant communication between sellers and buyers through an online messaging system, guaranteed in-time delivery of money, verification of sellers for business-to-business transactions, and institution of supplier rating with an on-site quality control by a third-party verification company (Manyika et al., 2016). Arguably, these are critical intermediary and facilitating services for successful international trading in which the average SME would find it very expensive to invest.

The information and communications technology (ICT) revolution and digital globalisation phenomenon are providing tremendous benefits. ICT capital accounted for almost one-fifth of global growth during 1995–2014 (World Bank, 2016). Global data flows accounted for more than one-third of the US$7.8 trillion contribution of the global flows of goods, services, finance, and data to global gross domestic product (GDP) in 2014 (Manyika et al., 2016). Most of the contribution to GDP arises from the efficiency and productivity effects of the use of digital technologies to improve processes and optimise production in traditional sectors. The lower start-up and marginal costs enabled by the digital revolution mean newer firms provide stiffer competition with older firms. This induces innovation, which itself is facilitated by the ease of global flow of information and knowledge due to the digital revolution and globalisation. The digital revolution contributes further to growth through enhanced public participation in governance and improved government processes leading to better governance and greater ease of doing business. These benefits in turn encourage more investment.²

² See World Bank (2016); Manyika et al. (2016); and McKinsey Global Institute (2007).
However, the tremendous potential of the ICT revolution and digital globalisation is captured highly unevenly amongst countries. A few deeply globally connected countries have captured a large share of the benefits. In McKinsey’s Connectedness Index of 2014, which Singapore topped, most of the leading globally connected countries are advanced countries and high-income oil-rich Middle East countries, except for China, which is ranked seventh. Malaysia (20th) and Thailand (22nd) are the third- and fifth-highest-ranking emerging non-oil countries in the index after China (7th), Russia (14th), and Mexico (21st). The other ASEAN countries in the McKinsey Connectedness Index are Viet Nam, ranked 37th; Indonesia, ranked 51st; and the Philippines, ranked 54th (Manyika et al., 2016).

The World Development Report 2016 highlights the importance of the analogue complements in capturing the benefits of the digital revolution and minimising its potential adverse effects. First, access to the internet – the quintessential foundation of digital revolution – is still limited in many areas of the developing world, including in ASEAN. Thus, other things being equal, the potential effects of digital connectivity are skewed in favour of areas with access to the internet. And this could worsen inequality.

Besides differential access to digital technology, the World Development Report 2016 highlights the risks of distortionary and adverse effects of digital technologies amid weak ‘analogue complements’ (World Bank, 2016: 18–24). These include the following:

- The scale economies enabled by the internet and other digital technologies could result in the concentration of economic power if the regulatory environment for competition is weak.
- Slow adoption of digital technologies by non-ICT firms in developing countries can lead to wider productivity differentials amongst firms, with ICT-adoptive and skill-intensive firms having greater probability of export (and import competition) success compared to non-ICT firms.
- Digital technologies can potentially engender a ‘hollowing out’ of the labour market where semi-skilled and skilled workers are adversely affected by automation. This may increase the share of unskilled labour in the labour market unless there is a vigorous skills-upgrading programme. The net result of a weak skills development programme in the face of the digital revolution is a reduction in the share of labour income in the national income.
- If the accountability of government institutions is weak, digital technologies could lead to greater government control rather than greater people empowerment and inclusion.
It is apparent that the digital revolution and globalisation carry both tremendous potential benefits and large potential risks. This juxtaposition of large rewards and large risks is also present in the geo-economic shift towards the India–ASEAN–China golden arc of opportunity. To harness the potential rewards of the arc of opportunity, ASEAN needs to integrate more deeply with China and India. This means that ASEAN economies need to open up more to greater competition from China and India, and China and India need to open up more to ASEAN firms. However, experience of the implementation of the ASEAN–China FTA showed dislocations in some industries and a significant rise in protectionist voices in some ASEAN Member States. Being huge countries and economies, the various provinces of China and states of India have varying comparative advantages as have the different ASEAN Member States. This would result in intense competition amongst industries and firms in a more integrated India–ASEAN–China region.

ASEAN, being at the geographic centre of the India–ASEAN–China golden arc of opportunity and the largest rising consumer market in the world, needs to be well positioned to take on the challenges that such opportunity offers. At the same time, however, the lessons of Brexit and the Trump electoral victory highlight the importance of ensuring that growth is inclusive and that the adjustment to deeper economic engagement with the region and the world in a fast-changing technological and market environment does not lead to unnecessarily large costs to vulnerable groups. In addition, the digital revolution that is reshaping the nature of globalisation can lead to a greater development divide, economic concentration, and inequality if the analogue complements of the digital revolution are inadequate.

Thus, the challenge for ASEAN is to manage the adjustment challenges while seizing the long-run opportunities. Arguably, emphasis on the synergy amongst integration and domestic reform and connectivity and cooperation, together with appropriate adjustment or transition measures and institution building, is the way to frame integration and open regionalism for inclusive growth and economic transformation in ASEAN moving into 2025 and beyond. For ASEAN, this means primarily through the AEC Blueprint 2025, the ASCC Blueprint 2025, and the MPAC Blueprint 2025 at the regional ASEAN level; the Regional Comprehensive Economic Partnership (RCEP), when successfully concluded, at the East Asia level; and the complementary domestic policy and institutional improvements at the national level.

Towards inclusive and dynamic integration in ASEAN. In the face of the dynamic changes in the technology environment, which tend to benefit the more globally connected countries, ASEAN faces the challenge of driving integration within ASEAN and deeper economic links within East Asia to provide more of the benefits to its people
while also managing effectively the adjustment challenges as the region becomes more open and integrated. For ASEAN, moving forward to 2025 and beyond, engendering an inclusive, dynamically competitive (and increasingly innovative), and robustly growing region entails enhancing the synergies of integration, connectivity, domestic reform, regional and international cooperation, and institution building.

Inclusive growth is about providing all citizens the opportunity to benefit from economic growth. A highly integrated region must necessarily be deeply connected physically not just across countries but, more importantly, within them. A highly integrated region would need to be institutionally connected as well as more connected in terms of people-to-people interactions across borders. Integration and connectivity can contribute to inclusive growth by (i) bringing the peripheries closer to the growth centres; (ii) engendering a more competitive environment that ultimately is supportive of efficient and adaptable firms, be they large enterprises or SMEs; (iii) allowing consumers the wider choice of goods and services and giving firms a wider choice of inputs; and (iv) providing a larger market and business relationships for firms to grow.

All the potentials indicated above become more of a reality if domestic policy reforms and institution building that are consonant with the drive for integration and connectivity are undertaken. Integration does not only mean liberalised markets but, perhaps more importantly, more effective trade and investment facilitation. In turn, the latter demands better coordination amongst agencies; greater clarity and transparency of rules and regulations; and investment in systems, facilities, infrastructure, institutions, and the people manning them. Such investment in infrastructure, institutions, people, and systems would not only require increased financial resources but may also necessitate a change in people’s mindsets or perspectives arising from such initiatives as the sharing of best practices and experiences and other forms of international cooperation. In short, the end result is better governance, which arguably benefits the small enterprises and entrepreneurs more than the large enterprises. This is because small (and non-rent-seeking) firms and entrepreneurs do not have the political clout and the internal resources to properly and effectively navigate complex regulations and ill-performing institutions.

Integration, connectivity, and good governance are attractive to local and foreign businesses and investors. Improvements in these areas are the best way to enable the economic transformation of the region towards the ultimate goal of developed country status. As most ASEAN Member States are still well behind the technology frontier, investments and participation in global and regional production networks bring with them knowledge, people expertise, management and institutional practices, market and
input links, and process innovations that would enable firms and countries to catch up to the frontier. In tandem with these improvements are investments in human capital, especially training and education in the technical and engineering fields, which would enhance the environment for accelerated technology transfer, adaptation, and even innovation. Linking SMEs and entrepreneurs to the industrial and service clusters and production networks locally, regionally, and globally would result in even more inclusive and dynamic economies in the region. This is the dynamic and innovative ASEAN that can feasibly be aimed for in the near and medium term. At the same time, the foundations and urban amenities need to be deepened in the near and medium term for stronger innovation systems geared towards greater product innovation in the medium and long term.

Arguably, the pursuit of the AEC is the embodiment of the drive towards inclusive and dynamic regional economic integration. This is implied by the key features of the AEC Blueprint 2025 noted above that aim for a highly integrated, competitive, dynamic, innovative, inclusive, people-centred, and global ASEAN. Section 2 of this chapter focuses on key measures towards these aims, summarising and drawing from the papers and essays in the volume. They bring out the significant opportunities and challenges of deeper integration in ASEAN. The section also highlights the importance of harnessing the complementarity of the measures in the ASEAN blueprints, especially AEC 2025, MPAC 2025, and ASCC 2025. Enhancing their synergies entails not only keener appreciation of their complementarity but also greater concern for more coordinated implementation of the measures. In as much as the regional measures are ultimately implemented at the national level, the coherence of the regional measures with other domestic measures and policies as well as with the institution and capacity building strategy in each member state is vital for implementation.

Thus, whether the ASEAN blueprints deliver well for the ASEAN citizenry ultimately depends on the quality of implementation of the ASEAN measures and the complementary domestic measures (and to a small extent, the degree of regional and international cooperation measures) in support of the domestic reforms and capacity and institution building, especially in the poorer and more capacity-challenged member states.
Towards Dynamic and Inclusive Integration: Deepening the ASEAN Economic Community Into 2025 and Beyond

This section discusses several key or strategic areas that are central to the drive towards an integrated, connected, dynamic, equitable, and global ASEAN into 2025 and beyond. They include non-tariff measures (NTMs), trade facilitation, services development, GRP, connectivity and production networks, and RCEP, which exemplifies ASEAN’s role in the wider regional and global community.

Non-tariff measures. Ing and Cadot’s paper in this volume shows that whereas intra-regional tariffs within ASEAN have declined to near-zero on average (and indeed, are already zero for all but a few exceptions in the older ASEAN 6 countries\(^3\)) since 2010, the incidence of NTMs has increased during the same period. ASEAN officials have been concerned about this rising trend in the region.

NTMs are, in general, policy measures other than tariffs that can affect international trade. Most NTMs cover sanitary and phytosanitary (SPS) regulations and technical barriers to trade (TBT) regulations. However, they also include a diverse array of policy interventions affecting trade flows and prices such as licensing, price-control measures, and distribution restrictions. NTMs preponderantly have non-trade policy objectives, such as food safety or environmental protection. Arguably, the rising number of NTMs reflects in large part the growing concerns about product quality, safety, and environmental protection as per capita incomes rise. Indeed, the ERIA–United Nations Conference on Trade and Development (UNCTAD) project on NTMs headed by Ing and Cadot shows that the increase in the incidence of NTMs was even faster amongst the ASEAN+6 partners\(^4\) than amongst member states themselves during 2000–2015.

It must be emphasised that businesses need to adjust to the changing societal demands as reflected in the rising incidence of NTMs. As Ing and Cadot highlight in their paper in this volume, such costs could result from concomitant changes in the sourcing of inputs, adjustments in production processes, and even the costs of ensuring enforcement, especially in supply chains, to meet NTM requirements. The policy challenge for ASEAN is that although pursuing legitimate, non-trade objectives, NTMs can also be used as instruments of commercial policy in a restrictive or distortionary manner. This is especially because NTMs are more opaque and complex than tariffs, and

\(^3\) The older ASEAN 6 countries are Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

\(^4\) The ASEAN+6 dialogue partners are Australia, China, India, Japan, the Republic of Korea, and New Zealand.
thereby difficult to determine ex ante their potential negative or distortionary effect on international trade. The proliferation of NTMs in the face of essentially zero tariff rates may end up substituting a more transparent measure with an opaque one that has little or even negative trade gains. Not surprisingly, ASEAN trade officials have become increasingly concerned about NTMs in the region.

One challenge faced by ASEAN regarding NTMs is transparency, which depends on having accurate data and open dissemination. Towards this end, ERIA, in collaboration with UNCTAD and the World Bank, undertook an exhaustive and consistent NTM data collection project in 2015 that has produced data for all 10 ASEAN Member States. The data gathering took the form of national inventories of all NTMs and all products covered by each NTM at the most detailed level following the latest internationally accepted classification scheme. This collaborative project, which started with ASEAN, has been extended to the +6 dialogue partners of ASEAN involved in the ongoing RCEP negotiations. The ERIA–UNCTAD NTM project is a significant contribution towards the implementation of one of the key action lines on NTMs in the AEC Blueprint 2025 stocktaking and updating the ASEAN NTM database and incorporating it into the ASEAN Trade Repository and the National Trade Repository.

Nonetheless, a mechanism needs to be set up to ensure the continuous updating and dissemination of information. The key problem faced by past efforts to promote transparency, whether at the regional or multilateral level, has been incentives, as countries typically do not want to expose themselves to criticism for excessive – and possibly protectionist-minded – regulatory activism. With no ‘sticks’ readily available, the approach Ing and Cadot suggest is that of a ‘beauty contest’ where the ASEAN Secretariat ranks member countries by their transparency. However, ASEAN is uncomfortable with beauty contests. The challenge is whether strengthened monitoring by the ASEAN Secretariat as mandated in the AEC blueprint would be implemented and succeed.

In addition to transparency, streamlining NTMs and preventing unnecessary trade facilitation costs from their use is the ultimate policy concern. Trade negotiations in several regional integration arrangements in the developing world have largely failed. Ing and Cadot propose to view NTM streamlining from the perspective of regulatory improvement because many NTMs in the developing world are designed and implemented in a fragmentary manner and their coherence with other NTMs is often poorly thought through. Thus, Ing and Cadot propose something like a national NTM committee to promote greater coordination and internal consistency in the design and implementation of NTMs.
Moreover, if country-level streamlining is ASEAN-wide, the NTM committees or concerned regulatory–supervision bodies created in all 10 ASEAN Member States could share staff training (with assistance from the ASEAN Secretariat and development partners), leading to soft regulatory convergence based on shared review methods and concepts. This would facilitate regulatory cooperation between member states at the technical level. Technical staff could then share information and resolve issues below the media–political radar before these become friction points. As Ing and Cadot highlight, such informal technical cooperation was the hallmark of Franco–German cooperation in the early days of European integration and proved a powerful engine of convergence and reduction of friction. Such a mechanism is lacking in ASEAN and could be particularly beneficial given the relative lack of political drive for integration compared to that in post-war Europe. Complicated processes for certifications to export can be expected to hurt SMEs more than large enterprises. Hence, streamlined procedures to meet NTM requirements are an important consideration for regulatory improvement at the national level.

The AEC 2025 Consolidated Strategic Action Plan (CSAP) emphasises the need to minimise the trade protection impacts and compliance costs of NTMs by stocktaking and updating the NTM database and ensuring it is incorporated in the ASEAN Trade Repository and National Trade Repository. It also stresses strengthening engagement with business and other stakeholders on NTMs, and exploring stronger discipline in the ASEAN Trade in Goods Agreement. Because many NTMs relate to SPS measures and TBT, the CSAP also aims to coordinate all SPS-related activities and facilitate consultations to address problems related to the implementation of SPS measures. In addition, ASEAN has been strengthening and expanding its initiatives on standards, technical regulations, and conformity assessment procedures, a critical means of addressing TBTs. Finally, ASEAN has established the ASEAN Solutions for Investments, Services and Trade, an internet-based facility for receiving and responding to complaints by ASEAN-based firms. However, the private sector has barely used this facility.

There is tremendous overlap and complementarity between the AEC 2025 measures and the regulatory improvement perspective to addressing NTMs. In addressing the trade protection and compliance costs of NTMs, many standards, technical regulations, conformity assessment procedures, and SPSs can be considered within the ambit of regulatory cooperation, and the design and implementation of NTMs can follow GRP principles. The issue of GRP and international regulatory cooperation and the application of the concept of regulatory distance on NTMs as well as the role of international regulatory cooperation as a means of reducing regulatory distance to reduce trade cost are discussed further in a subsequent subsection on GRP, regulatory management, and international regulatory cooperation.
**Customs and other trade facilitation measures.** The ASEAN Trade Facilitation Framework covers NTMs, customs and transport facilitation, standards and conformance, transparency of trade regulations and procedures, and private sector engagement and business facilitation (Sudjana, 2016). Thus, the discussion above on NTMs falls under the broad scope of trade facilitation in ASEAN. Nonetheless, at the core of this broad trade facilitation framework are customs and export-, import-, and transit-related permitting and control processes, including rules of origin (ROO), which cover the narrow definition of trade facilitation.

The results of a 2011 ERIA survey on private sector concerns in ASEAN to be addressed by AEC measures by 2015 point to trade facilitation issues as their top priorities, specifically with respect to streamlined import–export processes and improved customs efficiency and integrity through greater use of ICT and linked clearance systems as in a single window (Intal, Narjoko, and Simorangkir, 2011). The foreign business sector in ASEAN, such as American and Japanese companies, has also raised the difficulties of importing and exporting in the region as key concerns in relation to doing business in ASEAN. Improvements in the indicators of doing business by the World Bank suggest improvements in the trading environment in the region. However, seamless trading in the region remains a significant challenge. The nature of modern manufacturing production networks, with their reliance on the fast back-and-forth flows of parts, components, and final assemblies for the region and the world, demands seamless movement of goods in the region if ASEAN is to compete with large countries such as China and India as a production base.

ASEAN is deeply cognizant of the critical importance of trade facilitation measures for seamless trading within ASEAN. The AEC Blueprint 2025 explicitly aims for ASEAN Member States to move closer to global best practice in trade facilitation. Amongst the key measures under the AEC 2025 Strategic Action Plan are the full operationalisation of the ASEAN Single Window (ASW) (and therefore also of NSWs) and the national trade repositories and ASEAN Trade Repository, in addition to continuing cooperation in customs modernisation amongst all ASEAN Member States. Well-performing NSWs address several concerns of the private sector. They include streamlined procedures in customs and permit-granting agencies, more effective inter-agency coordination, more harmonised data, paperless trading, and eventually more integrated risk management systems across (at least) key agencies involved in the import and export process. At present, not all ASEAN Member States have fully operational NSWs. The ASW has been successfully piloted with respect to the electronic exchange of the e-Form D (the certificate of origin) between five member states, with live exchange of the e-Form D amongst three member states using the ASW-enabling architecture. Clearly, much more is to be done to ensure all 10 ASEAN Member
States are involved in the ASW, including the ratification of the Protocol on the Legal Framework to Implement the ASW by all 10 member states. Equally important, during the 18 September 2012 symposium on the ASW and NSW in Jakarta, the private sector emphasised the importance of ASEAN Member States and their concerned agencies building their capacity for paperless cargo clearance as well as harmonised processes for interoperability and coherence between the NSWs and ASW. Thus, implementation is the key challenge towards full operationalisation of the NSWs and the ASW.

ASEAN has been undertaking other important trade facilitation initiatives. The ASEAN Customs Transit System Pilot Project amongst Malaysia, Singapore, and Thailand has been started. If successful, it will be rolled out to other ASEAN Member States. The ASEAN Customs Transit System is ASEAN’s centrepiece mechanism for a more seamless transit trade within the region. There is a significant cooperation programme amongst ASEAN customs authorities in the development of best practice documents for ASEAN in such customs-related areas as advance rulings on tariff classification, post-clearance audit, and strategic management.

With respect to ROO, the AEC 2025 Strategic Action Plan aims to enhance ROO and simplify the certification procedures of origin determination, including the realisation of an ASEAN-wide self-certification system. In their paper in this volume, Ing and Cadot find that, despite the apparent simplicity of ASEAN’s ROO, the average ad valorem equivalent of ROO is still significant at 3.4%, or about one-quarter of ASEAN’s most-favoured-nation tariffs. Equally important, the authors find that the ad valorem equivalents for the lower-skilled and more labour-intensive goods, such as textiles and garments and leather and leather products, are at least two to nearly three times the average for all products. It is in these labour-intensive goods that SMEs can potentially become exporters. However, the high ad valorem equivalents are likely to be important hindrances to SME exports to the rest of the region. The high ad valorem equivalents of ROO for products in which SMEs are more dominant may call for the exploration of mechanisms where self-certification schemes would benefit SMEs, perhaps by providing support to integrator-exporters of SMEs to be self-certified with appropriate controls along the SMEs supply chain.

Moving from the narrow definition of trade facilitation to the broad definition, ASEAN includes standards, conformance, and transport facilitation in addition to addressing NTMs as part of the trade facilitation framework. Standards and conformance are important considerations in trade facilitation because the procedures for conformance

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5 Symposium on the ASW and NSW, 18 September 2012 (Borobodur Hotel, Jakarta), ‘Session 4 Summary of Discussions and Recommendations’. 
with SPS or TBT requirements, if inefficient, can lead to large trade facilitation costs to exporters. Indeed, studies find that SME exporters in developing countries sometimes find it difficult to meet the conformity assessment requirements because of lack or inadequacy of internationally recognised quality infrastructure in their countries, which is constrained by the difficulty of getting foreign accreditation and establishing internationally recognised accreditation bodies, amongst other issues (ADB and UNESCAP, 2009).

Addressing TBTs was one of the earliest important initiatives of ASEAN. It began with the establishment of the ASEAN Consultative Committee for Standards and Quality in 1992 and its efforts to set frameworks, principles, and guidelines in consonance with the disciplines of the WTO TBT and SPS agreements; develop mutual recognition arrangements; and start harmonising regional standards with international ones. Within ASEAN, harmonised technical regulations, mutual recognition agreements on conformity assessments, and harmonising with international standards can be expected to reduce trade costs because standards and technical requirements are fewer and multiple testing and assessment are not needed. ASEAN’s efforts focused on several priority sectors although there have been significant difficulties in the implementation of the initiatives such as the Cosmetics Directive. The AEC 2025 Strategic Action Plan includes the development of generic guidelines to establish harmonised regulatory regimes (which can in principle expand the current sector coverage) and the strengthening of the regional rapid alert and market surveillance systems in member states. However, a substantial share of private sector concerns do not involve exporting to other ASEAN countries but to non-ASEAN countries, especially developed countries. Here, ASEAN Member States can clearly help their exporters by investing in better-quality national infrastructure, including internationally recognised testing and certification institutions, such as Malaysia’s Standards and Industrial Research Institute, and by streamlining procedures to obtain certifications. The electronic certification system for agricultural products in New Zealand may be too distant a goal for most ASEAN Member States at present (ADB and UNESCAP, 2009). Nonetheless, it highlights the potential for a more efficient, trusted, and effective certification system that would be the essence of a trade facilitative yet secure and credible standards and conformance system for ASEAN.

Transport facilitation is the other component of the broad ASEAN Trade Facilitation Framework. This has become more pressing because of the nature of production networks, especially in manufactures where competitiveness of firms draws in part on the quick and predictable flow of parts and components from both domestic and cross-border sources. To this end, ASEAN has forged several agreements with associated protocols. Most have entered into force, although some have yet to be fully
implemented by all member states. For land transport, the agreements are the ASEAN Framework Agreement on the Facilitation of Goods in Transit, the ASEAN Framework on the Facilitation of Inter-State Transport, and the ASEAN Framework Agreement on Multimodal Transport. Of interest is the ratification of Protocols 2 and 7 of the ASEAN Framework Agreement on the Facilitation of Goods in Transit. These protocols are important for the full implementation of the ASEAN Customs Transit System for transit trade in ASEAN, which is undergoing pilot testing. ASEAN is also moving towards the conclusion of the ASEAN Framework Agreement on the Facilitation of Cross Border Transport Passenger by Road Vehicles. The importance of the agreements can be gleaned from the results of the 2008 JETRO logistics study of trucking in ASEAN, which shows the substantial costs involved in cross-border container handling and unloading for customs clearance at the border (Intal et al., 2014). For air transport, ASEAN has three important agreements, each with their respective protocol: the Multilateral Agreement on Air Services, the Multilateral Agreement on the Full Liberalisation of Passenger Air Services, and the Multilateral Agreement on the Full Liberalisation of Air Freight Services. All are in force. Note that all of them involve greater liberalisation aiming towards open skies in ASEAN, thereby allowing for greater responsiveness to the demands of the changing flow of goods and people in the region.

ASEAN aims to reduce trade transactions costs by 10% by 2020. The setting of a quantitative target for trade facilitation is noteworthy because it is the first time ASEAN has done this for trade facilitation. It also means that ASEAN looks at the various factors affecting the trade facilitation environment comprehensively. Indeed, the ASEAN Trade Facilitation Joint Consultative Committee is developing a Trade Facilitation Strategic Action Plan that consolidates the strategic measures of the various sector plans that contribute to trade facilitation. These include customs standards and conformance, transport facilitation, and the additional value added from the trade facilitation group itself.

The setting of a quantitative target for trade facilitation necessarily calls for an indicator system that quantifies various facets of the trade facilitation environment and the implementation of key initiatives and measures of the ASEAN trade facilitation agenda. As ASEAN played an important role in the conclusion of the WTO Trade Facilitation Agreement in 2013, not surprisingly, the AEC Blueprint 2025 includes a general statement ensuring the smooth implementation of this agreement amongst ASEAN Member States, and indeed for ASEAN Member States to move closer to global best practice. The WTO Trade Facilitation Agreement covers a wide range of measures for a much more efficient and effective trade facilitation environment. Thus, it appears logical that the ASEAN Trade Facilitation Indicator System would need to draw significantly on the key measures in the WTO Trade Facilitation Agreement that are adapted to the
ASEAN context and are appropriately calibrated to allow the measurement of progress towards the global best practice aimed for in the AEC Blueprint 2025. In addition, the indicator system would need to embed and/or clearly link up with the measures of implementation of the significant initiatives and measures in the ASEAN Trade Facilitation Strategic Action Plan.

Given some independent estimates of trade transactions costs between ASEAN Member States, such as World Bank estimates of the time to export and import, or trade costs estimates of the World Bank–United Nations Economic and Social Commission for Asia and the Pacific, the quantitative relationship between trade facilitation costs and the various elements of the ASEAN Trade Facilitation Indicator System, including indicators of the performance of the key measures in the ASEAN Trade Facilitation Strategic Action Plan, can be established by the target year 2020. The ASEAN Seamless Trade Facilitation Indicators is currently being developed under the ASEAN Trade Facilitation Joint Consultative Committee and is expected to be a deliverable when the Philippines chairs ASEAN in 2017.

**Services development and liberalisation.** ASEAN Member States are significant players regionally and/or globally in several services. ASEAN as a group is a formidable tourism destination regionally and even globally. China, Hong Kong, Macau, Malaysia, and Thailand receive the largest number of tourists in East Asia, while Bali and Siem Reap are acknowledged to be amongst the top global tourist destinations. Singapore is a global player in finance and a top location for regional headquarters. The Philippines vies with India for the position of top global business process outsourcing location. ASEAN is also becoming known for health tourism, especially Malaysia, Singapore, and Thailand.

The list indicates that ASEAN is well positioned to benefit from a services revolution, in the same way that ASEAN has been a substantial player in the so-called ‘second unbundling’ characterised primarily by regional and global manufacturing production networks. Indeed, the dating of the start of the second unbundling from the last half of the 1980s coincides with ASEAN’s ‘golden decade’ of very high economic growth and a sharp rise in the export of manufactured goods.

The services revolution concerns the dramatic growth of tradable services facilitated by the digital revolution and globalisation and complemented by the rising share of the service component in manufacturing, in part as a quality and brand differentiator and especially for multinationals. In addition, demand for many services has medium to high income elasticity, which means that the demand for services will increase markedly as per capita incomes rise. Indeed, the surge of outbound tourism in China,
for example, reflects the income elasticity of demand for travel in China. This has already made China the global leader in outbound tourism expenditures by a large margin and has contributed substantially to the tourism booms in most of ASEAN. Similarly, Koudal (2006) found that the share of services in total sales revenues of the global manufacturing firms surveyed averaged 25%, with about one-fifth of firms reporting a services share of more than 50%.

Richard Baldwin (2017), populariser of the concept of the second unbundling, points to what may be termed as the ‘third unbundling’ that characterises the new globalisation. The third unbundling would be ushered in by advanced communications technology, such as machine translation, telepresence, and artificial intelligence, which would not necessarily require a labour service provider to be physically near the client. Baldwin highlights that the second unbundling is essentially the offshoring of knowledge (or ‘globalisation as knowledge arbitrage’) made profitable by ICT and the vast differences in wages across countries and manifested in the form of geographically dispersed manufacturing production chain or networks. In contrast, he sees the emerging third unbundling as ‘globalisation as arbitrage of labour services’. In a sense, this entails a deepening and widening of tradable services from the current offshored business process management and information technology services, health information management, knowledge processing services (e.g. legal, research, and engineering), and other related modern services that current ICT infrastructure has engendered in countries such as India and the Philippines. The third unbundling is thus akin to ‘services globalisation’, which is very different from the earlier view of services as non-tradable and non-scalable globally.

The discussion suggests there may be a need to reframe services sector development, facilitation, liberalisation, and integration in ASEAN. Already, as Christopher Findlay shows in his essay in this volume, by 2015, eight ASEAN Member States had a services share in GDP exceeding 40%, in three countries the share was over 50%, and in Singapore it was above 70%. The increase in the share of the services sector to GDP during 2000–2015 was especially significant in the Philippines and Singapore and to a lesser extent Indonesia, the Lao PDR, Malaysia, and Viet Nam. As the dominant sector in most ASEAN economies, robust growth of services is an important driver of overall economic growth. The tourism boom in most of ASEAN and the business process outsourcing boom in the Philippines show this very well. Findlay adds another important channel of robust services growth as impacting on overall economic growth: productivity. In contrast to the productivity pessimism on services in the early economic literature, Findlay presents several channels where services sector productivity can be large and shows that service productivity growth contributes to productivity growth in other economic sectors such as manufacturing. The discussion in the early part of the section
points to the substantial transformative and growth potential of technological advances on the services sector and the whole economy, showing clearly that services will be a key growth driver for many years to come.

Reframing services sector development, facilitation, liberalisation, and integration to better capture the benefits of the services revolution involves several important dimensions highlighted by Findlay. The first is to embed the mindset that exporters are importers. This is especially the case where global or regional value chains in services are involved, similar to production networks in goods especially manufacturing. The second related dimension is that access to skilled labour is important for the emergence of specialist service providers and the growth of competitive service niches. Until advanced technologies make non-face-to-face interactions price competitive and accessible, face-to-face interaction will remain important in the production of the (unique) service. This is because there is a significant element of simultaneity in the production and consumption of many services given that, unlike goods, most services cannot be stored.

The two above-mentioned dimensions necessarily involve greater liberalisation of services and of movement of people. ASEAN has a liberalisation agenda in services and movement of natural persons under the ASEAN Framework Agreement on Services. However, as the analysis in Volume 3 shows, a few member states face substantial challenges in the liberalisation of services under AFAS 9, and the region faces tremendous difficulties in pushing towards the last instalment of the AFAS process – AFAS 10. The great difficulty in moving into the last negotiation stage of AFAS 10 reflects the fact that many of the politically sensitive decisions made and the flexibilities introduced in the eighth and ninth AFAS packages complicate the AFAS 10 negotiations.

Framing service liberalisation from the perspective of the demands of the new services revolution and globalisation, as described above, would provide the impetus for a change in the mindset of people and policymakers towards a much greater openness to liberalisation and enhanced competition in services provision and the movement of natural persons.

Thus, Findlay stresses that for ASEAN to grow its services sector it must lower barriers to trade and investment and reduce restrictions on competition in domestic markets. He shares evidence that (i) higher degrees of restrictiveness are associated with poorer performance in services, (ii) decreasing services trade restrictiveness would also have a positive indirect impact on the manufacturing sectors that use services as intermediate inputs in production, and (iii) there is value in focusing on institutional quality when designing a strategy for the sector.
Two other dimensions are related to access to quality infrastructure and the need for aggressive investment in human capital, including retraining. Both dimensions, if lacking, could lead to significantly unequal outcomes of the services revolution on people.

As indicated by the World Bank (2016), the benefits of the ICT and digital revolution accrued to the countries (and, likely, firms) that are most globally connected. Also, firms without access to quality services infrastructure could be hurt by lower productivity compared to firms with access to quality infrastructure. On both counts, service liberalisation and integration could lead to more unequal outcomes.

The need for aggressive investment in human capital is also critical because the faster-growing modern services require much more skilled labour (e.g., college graduates) than other services. Hence, a labour force without sufficient skills would not benefit from the higher wages and salaries associated with the modern services sector. Greater income inequality could result unless semi-skilled workers can find remunerative jobs in the semi-skilled labour-intensive industries in other sectors such as manufacturing. This suggests that, for income equality purposes, encouraging manufacturing is an important complement to encouraging growth in the services sector, especially the modern services sector.

Finally, the services revolution and globalisation arising from the ICT revolution and the third unbundling suggest that cooperation in the certification of skills, including specialist skills, and possibly in encouraging the provision of specialist training would be an important regional services facilitation initiative. This goes beyond the ASEAN Qualifications Reference Framework. It may also involve the need to liberalise the education sector, or at least human resources training. This would enable the region to have an ample supply of skills needed in the much more liberalised services and labour markets arising from the improving ICT and emerging advanced communication technologies.

Finance, integration, and contagion. ASEAN has an extensive set of initiatives and measures that aim to strengthen financial links within the region, the foundations for financial and macroeconomic stability, and financial inclusion. The ASEAN Financial Integration Framework focuses on banking (with its ASEAN Banking Integration Framework); insurance (with its ASEAN Insurance Integration Framework); and capital market development with initiatives on the ASEAN Trading Unit, ASEAN Disclosure Standards, ASEAN Corporate Governance Scorecard, and Bond Market Development. The banking, insurance, and capital market development initiatives are to be underpinned by a payment and settlement system that fosters interoperability and efficiency in cross-border payments and is facilitated by adherence to principles of transparency. ASEAN also has a policy dialogue process on capital flows and
safeguard mechanisms for capital account liberalisation. Capacity building and a programmed liberalisation of financial services under AFAS complete a well-rounded and comprehensive set of financial integration initiatives and measures that are expected to support economic growth, improve savings and investment, and promote financial inclusion in the ASEAN region. The AEC 2025 CSAP contains a remarkably lengthy set of measures for financial integration for 2016–2025.6

Several characteristics of the ASEAN financial integration programme are worth mentioning. First, it deeply takes into account the significant difference in the readiness of the institutional and finance sectors of two groups of countries in ASEAN: the more financially developed ‘IMPST’ group of countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) and the less financially developed ‘BCLMV’ countries (Brunei, Cambodia, the Lao PDR, Myanmar, and Viet Nam). Second, it relies a lot on the ‘ASEAN – x’ principle which allows the ready, the willing, and frontrunners to move ahead with initiatives and the rest to catch up in the future. Third, there is a strong element of joint learning and exchange of knowledge and experience, which to a large extent flows directly from the first two characteristics. Lastly and most importantly, it is a cautious, gradual, and measured programme, which is arguably appropriate in the light of financial vulnerabilities in several member states and the recent turbulent experience of the eurozone, with its near-total financial integration.

Financial integration is a balancing act between benefits and risks. The benefits are potentially large. For example, a more financially integrated, well-regulated, and stronger finance sector in ASEAN that is linked well with the finance sectors of China, Japan, and the Republic of Korea has the potential to become a more important intermediary between the large savers of Northeast Asia, Malaysia, Singapore, and several investment-hungry ASEAN countries. This is especially the case in infrastructure, which demands longer-term tenor of loans and financial instruments.

Gochoco–Bautista and Remolona, in their essay in this volume, also state the benefits of ASEAN banking integration in terms of greater efficiency (through economies of scale, network externalities, and greater competition from the entry of foreign banks); possible lower costs and greater diversity of services offered; and more opportunities for risk sharing. A deep financial and capital market also increases the resiliency of the region’s economies to external shocks. All of these support investment, trade, and growth as well as financial inclusion.

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6 See ASEAN Senior Level Committee for Financial Integration (2015).
On the other hand, financial integration raises the risk of contagion. Of interest is the regional concentration of cross-border banking activity, which Gochoco–Bautista and Remolona identify as a major contagion factor during the Asian Financial Crisis of 1997–1998. The Gochoco–Bautista and Remolona essay in this volume focuses on these contagion risk factors. In the case of the Asian Financial Crisis, Japanese banks dramatically reduced their exposure to Asia because they were substantially hit by the crisis. In contrast, the European banks, which were less hard hit by the crisis, continued to lend to Asia. The Japanese case illustrates the ‘common lender’ effect – due to adverse effects on the balance sheet of the creditor bank, the creditor bank would reduce its exposure in other countries to restore capital adequacy ratios, meet margin calls, and the like. As a result, other countries become adversely affected or swamped by the crisis as well. The other related contagion risk factor is the ‘wake-up call’ effect where a crisis leads to a general rise in risk aversion (or at least an entire asset class), leading to withdrawal of a creditor bank even from hitherto unaffected countries, but in the process causing greater financial instability or even crisis in those countries.

The ASEAN financial integration agenda can be expected to result in qualified ASEAN banks doing more cross-border banking transactions within ASEAN. In effect, it would encourage greater concentration of their lending exposures in ASEAN, which, other things being equal, increases the common lender risk. Nonetheless, it is worth noting from the Gochoco–Bautista and Remolona essay that no ASEAN bank is a global systemically important bank. Within East Asia, all global systemically important banks are Chinese or Japanese. This brings to the fore that just as ASEAN aims to strengthen its finance sector under the ASEAN financial integration agenda, ASEAN is greatly affected by global and extra-ASEAN events and factors, such as the global financial cycle and the risk profile of East Asia’s global and regional systemically important banks. The Gochoco–Bautista and Remolona essay points to some areas of concern, including the growing concentration of the lending portfolio of the global systemically important banks on China and other emerging countries, the very high share of short-term loans, and the preponderance of loans in foreign currency (US dollars) in the loan portfolio of these banks.

What the Gochoco–Bautista and Remolona essay ultimately brings out is that the search for financial and macroeconomic stability in ASEAN is not confined within ASEAN. Laudable as the ASEAN financial integration measures are, they need to be complemented with at least East Asia–wide measures to improve the regulatory environment in the whole of East Asia, recognise and mitigate the risks from global systemically important banks, and address concerns about currency risk and maturity mismatches that pose potential risks to the whole region – including ASEAN.
Towards this end, Gochoco–Bautista and Remolona propose the extension of the Chiang Mai Initiative Multilateralization into a regional repo that would allow the provision of local currency liquidity, rather than being largely a mechanism for use during a crisis. The authors also propose that complementing the extension of the initiative into a repo market is a system of currency swaps in regional currencies that will provide both a safety net and a boost to the development of local currency capital markets.

**Good regulatory practice, regulatory management, and international regulatory cooperation.** One major addition in the AEC Blueprint 2025 from the AEC Blueprint 2015 is the incorporation of good regulatory practice (GRP), good governance, and ‘effective, efficient, coherent and responsive regulations’. In addition, GRP is embedded in the key measures for addressing NTMs and in ensuring a more facilitative standards and conformance regime in ASEAN. This is consistent with the view expressed in the Carroll, Gill, and Intal paper in this volume that while regulations are essential for the proper functioning of society and economy, they can nonetheless impose unnecessary burdens on firms and people if the regulations are poorly designed or implemented or are inconsistent with other regulations. Experience suggests that good regulatory quality contributes to foreign direct investment (FDI) attractiveness. See, for example, the performance of Singapore, which remains the top FDI destination in ASEAN despite its high wage, housing, and office space costs, in part because it boasts one of the best regulatory quality environments in the world. Indeed, in the Carroll, Gill, and Intal typology, the countries in East Asia (here defined to include ASEAN, Australia, India, and New Zealand apart from China, Japan, and the Republic of Korea) where GRP is well embedded – Australia, New Zealand, and Singapore – are amongst the global leaders in competitiveness and ease of doing business.

Carroll, Gill, and Intal highlight that embedding GRP throughout government takes a long time, indeed decades in many cases. The authors specify several key drivers for regulatory reform in East Asian countries, the most significant of which is actual or impending crisis and concerns about long-term loss of competitiveness. They present several well-established principles of GRP, including proportionate and effective response to the risk being addressed; minimisation of distortionary side effects; and transparency and stakeholder participation in the design, implementation, monitoring, and review of regulations. Much of the responsibility for engendering GRP in ASEAN would be at the national level. However, concerted national actions by all the ASEAN Member States carried out as a regional initiative can provide an impetus for domestic regulatory improvement. Demand for regionally concerted national actions by ASEAN Member States is supported by the results of the survey of what ASEAN means to ASEAN peoples discussed in Volume 2, *Voices of ASEAN*, a companion of this volume.
Corruption garnered the highest percentage of respondents who considered it amongst the five most pressing problems in the respondent home countries and in ASEAN as a whole. Arguably, regulatory reform and embedding GRP is one major means of addressing corruption.

ASEAN has agreed on a work plan on GRP for the AEC 2025. The work plan includes securing political commitment on GRP first through the agreement on and adoption of the GRP core principles for ASEAN. It also involves institutionalising a sustainable working mechanism on GRP in ASEAN, preparing a handbook on the operationalisation of the GRP core principles, piloting GRP in several sectors, and undertaking awareness raising and capacity building on GRP in the region (Tijaja, 2017).

Carroll, Gill, and Intal also highlight the role of international regulatory cooperation. While largely aimed at improving regulatory coherence across borders on goods and services that move across borders, international regulatory cooperation is also a good means for deeper relationships and greater understanding and trust amongst the regulators in the region. The wide array of approaches to such cooperation provide a good complement to the implementation of the regionally coordinated national GRP measures while at the same time engendering greater regulatory coherence and greater institutional connectivity within the region. Institutional connectivity is a key element of ASEAN connectivity, as discussed below.

An innovative approach and study by UNCTAD provides compelling support for international regulatory cooperation (UNCTAD, 2017). The study on Mercosur uses intensive and extensive mapping of NTMs to determine the impact on trade costs (unit import costs on a cost, insurance, and freight basis) and on economic welfare of the number of NTMs in the importing and exporting countries and the convergence or non-convergence of the NTM technical measures (SPS and TBT) or ‘regulatory overlap/distance’. The study shows that NTM technical measures in the exporting and importing countries raise trade costs, while regulatory convergence or the overlap of regulations between countries reduces trade costs between the countries. The finding that regulatory overlap reduces trade costs is compelling. It means that the more firms in one country face technical measures in the country that are similar to the technical measures of another country, the less would be the costs for firms in the exporting country of meeting the technical measures of the importing country. In the simulations done by UNCTAD on the economic welfare effects of regulatory convergence, the case of regulatory convergence through the adoption of international standards provides the best potential welfare benefits to Mercosur members.
Knebel and Peters (2017) provide results on ‘regulatory distance’ for technical measures amongst ASEAN Member States. The results show that NTMs are more numerous and the regulatory distance amongst ASEAN Member States is significantly bigger for agricultural products than for manufacturing. Concomitantly, the ad valorem equivalents of the NTMs are substantially higher in agriculture and food products – such as animals and meat, fats and oils, fruits, vegetables, and grains, and processed food, beverages, and tobacco – than in manufactures, such as metals and metal manufactures, miscellaneous manufactures, and even machinery and electronics.

The authors also show that by increasing the degree of regulatory overlap amongst the member states, but without increasing the overall number of NTMs, trade costs within ASEAN can be substantially reduced. This is especially pronounced in commodity groups in the primary sector and food products, and in chemicals, plastics and leather, footwear, machinery and electronics, and vehicles. Thus, the study suggests that there is substantial potential for trade cost reduction – and therefore potentially greater positive effect on intra-ASEAN trade and on overall economic welfare – from greater regulatory convergence within the region. Such efforts at regulatory convergence are at the heart of regulatory cooperation through mechanisms such as those on standards and conformance in ASEAN.

**Connectivity, production networks, agglomerations, and innovation.** One important factor behind the high rates of economic growth of ASEAN Member States in recent years is their involvement in regional production networks, or value chains, with multinational corporations distributing productive tasks across countries according to comparative advantage through FDI. Because of this distribution of tasks, each country in the region tends to produce and export what the country located at the next node of the value chain will buy for further transformation. This had led to increasing industrial specialisation at the country level, making the Asian economy increasingly interdependent economically with its regional partners.

The distribution of productive tasks in manufacturing has taken the form of highly complex networks. The region’s high-income countries, such as Japan, typically supply upstream capital-intensive and high-tech components. Low- or medium-income countries provide downstream assembly services, while several ASEAN countries are in the middle of the value chains. This increasing specialisation has enhanced efficiency by exploiting comparative advantage.

Value chains also played an important role in transferring technology and management know-how from multinational corporations to the countries involved in networks.
The countries and companies involved in value chains obtain knowledge and know-how about the production and delivery of the products assigned to them. Through this process, human resources are trained, educated, and nurtured. Indeed, the original ASEAN countries improved their technological and managerial capabilities through their involvement in value chains and they are becoming actively engaged in research and development activities.

The emergence and effective management of value chains contributed significantly to the rapid economic growth of ASEAN Member States and other countries involved in value chains as value chains have enabled them to use their resources efficiently, improve quality of human resources, and develop research and development and innovative capabilities. Two key factors have been important in the emergence and effective management of value chains in ASEAN and in East Asia. First, technological progress and deregulation in communication and transport services, resulting in a substantial decline in the cost of these services and facilitating international transactions in goods, services, and information. Thanks to these developments, internet and smartphone use has skyrocketed in many East Asian countries including ASEAN countries in a short period and cargo shipment and passenger transport has risen sharply. Second, liberalisation of international trade and investment policies in ASEAN and East Asian countries has facilitated cross-border movement of people, goods, services, and information. Many East Asian countries unilaterally reduced tariffs on imported goods and restrictions on inward FDI as they realised that adopting liberalisation policies would promote economic growth by increasing trade and FDI. In particular, ASEAN countries have adopted common policies to lower the barriers to trade in goods and services, investment, and the movement of skilled people between and amongst member states.

In light of growing uncertainty in the international economic policy environment, the continuing digital revolution, and the huge potential for achieving economic growth in ASEAN countries, especially the ‘CLMV’ countries (Cambodia, the Lao PDR, Myanmar, and Viet Nam), ASEAN countries are advised to pursue further integration and connectivity with each other and with other East Asian countries to achieve further economic growth.

Gary Hawke, in his essay in this volume, presents the view that economic integration can be approached not only through the usual liberalisation, facilitation, and capacity building, as in a typical FTA, but also in terms of connectivity. Physical infrastructure and connectivity are important to move goods and services across borders. Efficient movement demands efficient and coordinated border and customs formalities – an important element of institutional connectivity. The compatibility of the regulatory
systems of trading countries – or regulatory connectivity – becomes important if regulators consider regional ambitions and not only the protection of domestic consumers. Like the movement of natural persons in standard FTA discussions, personal knowledge and connections across borders or people-to-people connectivity is critical for business and trading relations. As Hawke points out, virtually all elements of the AEC blueprint can be framed in terms of connectivity. This constellation of connectivity – physical, institutional, and people-to-people – provides the pillars of the MPAC. Currently, however, the MPAC initiatives largely complement and aim to strengthen the AEC blueprint rather than providing an alternative blueprint for economic integration in ASEAN.

In her essay in this volume, Locknie Hsu looks at the legal barriers to supply chain connectivity in ASEAN, noting ASEAN’s goal of enhancing participation in global value chains. She points out that barriers to trade and investments remain significant, and transport facilitation agreements and protocols are not yet all fully ratified and implemented. The diversity of legal systems and laws also calls for some harmonisation to help the business sector and to understand better the application of such laws and thereby reduce their transactions costs and sense of uncertainty. An example of such possible harmonisation is the adoption of internationally accepted standards, such as the United Nations Convention on Contracts for the International Sale of Goods. Similarly, the differences in laws and legal processes in ASEAN translate into legal and time costs to deal with individual transactions or commercial disputes. This is where the ASEAN Solutions for Investments, Services and Trade needs to be an efficient and cost-effective dispute settlement mechanism. It may be particularly important for the region’s SMEs because currently established arbitration mechanisms, such as the Singapore International Commercial Court, are likely to be very expensive and out of reach for the region’s SMEs.

Hsu’s essay alludes to the considerable challenges to achieving seamless connectivity for a truly single production base in ASEAN. Nonetheless, the conception of economic integration from the connectivity lens leads to important insights and benefits. In international diplomacy, Hawke points out, connectivity promotes a cooperative approach to strengthening economic interdependence, in contrast to discussion of liberalisation. More importantly, connectivity leads more easily into discussions of production networks. Finally, connectivity also lends itself to discussions of inclusive growth in terms of both linking peripheries to growth centres and linking SMEs to production networks.

Fukunari Kimura and Yasushi Ueki, in their essay in this volume, focus on connectivity in their discussion of ASEAN’s path towards industrialisation and participation in
global value chains. They trace ASEAN’s growth in terms of industrial production fragmentation and agglomeration, and the role of connectivity in facilitating economic growth. Fragmentation describes the dispersion of the production process across geographical locations (i.e. Tier 3- and Tier 2-type operations) or production networks that involve mainly the flow of goods or parts and components. Examples of Tier 3-type operations are industries such as garments, footwear, and natural-resource-based industries. Tier 2 comprises the modern manufacturing sector, particularly machinery industries, with quick and time-sensitive value chains, designed and operated in the form of the second unbundling. In contrast to fragmentation forces that drive Tier 3 and Tier 2 operations, agglomeration is central to Tier 1 involvement in the global value chains. This is characterised by clusters, innovation, and employment of more highly educated and skilled individuals, and involves not only the flow of goods but also of knowledge and ideas.

The progression from Tier 3 through Tier 1 requires a different focus on connectivity. Tiers 3 and 2 call for trade facilitation in the form of tariff elimination and a reduction in logistics costs, and efficient physical connectivity of roads, rail, and ports. Tier 1 operations call for a higher trade and investment facilitation to allow for transfer of knowledge and attraction of higher-level skills. These would include institutional connectivity, and the liberalisation and strengthening of services that support global value chains such as finance, telecommunications, transport, distribution, and professional services. Integral to Tier 1 operations is efficient connectivity and urban amenities. Kimura and Ueki also stress that the quality of urban amenities will be a key point of consideration in attracting human capital for innovation.

Central to the Kimura–Ueki framework is industrial agglomeration, which allows for quick turnaround of a wider range of parts and components, and accelerate process innovations facilitated by outsourcing and subcontracting that may also give rise to more local firm involvement in production networks. Agglomeration is also important in technology transfer because ‘... proximity enables firms to communicate face-to-face more frequently, share more knowledge and experiences, and interact to create new knowledge’ (Kimura and Ueki, this volume). Kimura and Ueki add good urban amenities to agglomeration benefits to promote an environment for innovation. Urban amenities are important to encourage highly talented, internationally mobile individuals to settle down in an area, become an anchor for innovation, and thereby be part of a global network of innovation centres and satellites. From the perspective of Kimura and Ueki, this approach to moving up towards the innovation stage in industrialisation would be a realistic approach in ASEAN, as exemplified by Malaysia’s Multimedia Super Corridor and Singapore’s biotechnology cluster. As the authors point out, other capital cities or major urban centres in ASEAN may generate such windows to global innovation.
networks by developing human capital for innovation, and having better urban amenities and public services in addition to good international connectivity and a rich variety of available goods and services.

The drive towards more innovation-driven trade and development needs to be based on national policy and not merely be the product of good urban amenities and agglomeration externalities. This is the focus of Masahito Ambashi’s paper on innovation policy in ASEAN in this volume. After reviewing the national innovation systems and experiences of China, Japan, the Republic of Korea, and Singapore, Ambashi’s proposed innovation system for ASEAN countries draws from those of China and Singapore, complementing and expanding Kimura and Ueki’s discussion. While Japan and the Republic of Korea relied on domestic capital, aggressive technology imports, reverse engineering, and export-oriented incentive systems, China and Singapore relied a lot on FDI together with aggressive innovation-friendly government policies and investments and, in the case of Singapore, openness to highly qualified foreign personnel. The emphasis on FDI, much of it linked to production networks, and investing in human capital and infrastructure, such as technology or industrial parks as platforms for clusters and research centres, are consistent with the broader framework of Kimura and Ueki.

Noting that innovation is a primary source of sustained economic development and inclusive growth, Ambashi points out the importance of understanding innovation from broad perspectives. These include not only the development of new products and technology but also imitating those that already exist. Indeed, for developing countries, innovation through imitation is likely to be very important. He observes that ASEAN Member States are in different phases of innovation activities: Singapore is in the frontier phase, while Cambodia, the Lao PDR, and Myanmar are in the initial phase. Other countries are in between these two phases. He argues that different and appropriate innovation policies should be applied to the countries in different innovation phases by formulating a national innovation system.

Ambashi nonetheless claims that several common elements or factors are important for promoting innovation in all ASEAN Member States. They include stability in micro- and macroeconomic conditions, a favourable business climate, the presence of well-developed hard and soft infrastructure including governance, and the availability of capable human resources. Ambashi also argues that member states should implement region-wide innovation-supporting policies, including trade, investment, and service liberalisation; the promotion of movement of natural persons; and a peer review system of innovation capability. It is noteworthy that the heart of the ASEAN-wide innovation policies proposed by Ambashi are the same as the relevant elements for ASEAN economic integration under the AEC blueprints of 2015 and 2025. This suggests that a
successful national innovation policy and programme need to rest on an open economy and outward-oriented development, both nationally and regionally, such as that underpinning Singapore and, for the most part, China.

In addition to Ambashi’s proposed region-wide innovation-supporting policies, the AEC Blueprint 2025 lists several regional cooperation and coordination initiatives to promote innovation in ASEAN. These include (i) sharing information and networking at the university and business levels; (ii) developing and strengthening ASEAN links to global and regional research and development networks; (iii) developing business incubator programmes and encouraging entrepreneurship; (iv) fostering a hospitable intra-ASEAN policy environment for technology transfer, adaptation, and innovation; and (v) promoting strong intellectual property rights protection in the region. ASEAN’s programme of strengthening intellectual property rights cooperation in the region uses such strategies and measures as strengthening member states’ intellectual property offices and infrastructure, expanding the ASEAN Intellectual Property Ecosystem, and enhancing regional mechanisms to promote intellectual property–based asset creation and commercialisation. The latter includes such measures as commercialising geographic indication products in ASEAN and developing protection mechanisms for geographic indications and genetic resources, traditional knowledge, and traditional cultural expressions. The relatively long list of measures related to productivity-driven growth and innovation and to intellectual property rights cooperation reflects ASEAN’s greater focus on productivity, technology transfer, and innovation under the AEC Blueprint 2025 compared with the AEC Blueprint 2015.

**Regional Comprehensive Economic Partnership and new issues.** Each contributor points out challenges that ASEAN must deal with, whether in the area of connectivity, services integration, NTMs, or deeper integration through involvement in global value chains. Further, as we look to the next phase of ASEAN’s economic growth, it is clear that as complexity increases, ASEAN’s to-do list will also expand. The list covers a myriad of developments including in e-commerce, drone technology, supply chain security, and aspects of the sharing economy.

As Locknie Hsu points out,

‘[ASEAN] will need to keep abreast of the complex amalgam of new technologies, new business models, and new trade and investment opportunities – and possibly, new barriers that develop along with these – to design and implement timely and effective laws and regulations, and explore new legal and policy areas of cooperation and harmonisation.’
She further adds:

‘Beyond intra-ASEAN integration, the next 10 years will also require the bloc to consider – in the face of new, large regional trade alliances and initiatives – how best to leverage on ASEAN’s existing economic integration initiatives, systems, and instruments to ‘plug into’ the wider regional (and global) context so as to generate even more trade and investment for the member states.’

Hsu cites China’s Belt and Road Initiative as an opportunity ASEAN must take advantage of. The potential lies in the benefits from not only physical connectivity (both terrestrial and maritime) but also ‘new supply chains, production networks, investments, and markets’.

Complementing the Belt and Road Initiative is RCEP, which ASEAN is negotiating with its six dialogue partners. RCEP was designed to be a comprehensive and mutually beneficial economic partnership agreement that would involve broader and deeper engagement between ASEAN and its dialogue partners by significantly improving on their existing FTAs. When realised, the integrated FTA of 16 countries will be a huge market of its own representing 47% of the global population and over 40% of global trade.

It is intended to be a living agreement, providing a basis for addressing issues that may emerge in the future. In short, RCEP is forward-looking and inclusive. Ideally, RCEP will offer a 21st century model for inclusive integration amongst countries with different stages of economic development, political systems, ethnicity, and cultural backgrounds.

Given global economic and political developments, and with the Trans-Pacific Partnership Agreement in abeyance, the ASEAN-led RCEP can be the tailwind needed to counter the rising protectionism that increasingly blocks integration and the benefits of free movement of people, goods, and services. Equally important, as ASEAN, China, and India all require supply-side structural reforms to move up the development ladder and raise competitiveness, RCEP can be a concerted integration-cum-supply-side reform agenda facilitated by technical and economic cooperation.

The parties involved are well aware of the benefits that can accrue from deeper regional economic integration. RCEP must be more than just another FTA involving only the traditional elements of market access for goods and services, and investment. For RCEP to truly be the impetus for change, it must include three key interdependent dimensions: (i) broad and deep market access that permits skilled people and products to move
much more freely, (ii) rules that promote confidence in trade and commerce, and
(iii) an inclusive approach to economic cooperation that will enable the less-developed
members to take advantage of the benefits of integration.

Further, in the face of global economic developments and technological advancements
and disruptions, a forward-looking RCEP must recognise and accommodate
newer elements of trade facilitation, intellectual property rights, e-commerce, and
new production technologies, and incorporate an agenda for dealing with these
developments and other evolving issues.

RCEP is often compared with the Trans-Pacific Partnership Agreement, which was
touted as the gold standard and a model for future ambitious FTAs. The scope and
ambition of RCEP may arguably fall short of the Trans-Pacific Partnership Agreement.
However, regardless of the level of ambition, in the immediate to short term, it is
important for RCEP to aim for balanced and sustainable growth that would (i) facilitate
the involvement of micro, small, and medium-sized enterprises (MSMEs) in the
production networks and global value chains of larger companies in the region;
(ii) use economic and technical cooperation to further MSME development and
effective capacity building; (iii) focus on trade facilitation; and (iv) have trade facilitative
rules of origin and rules for e-commerce.

In the medium term, the parties must work towards rules or disciplines to support
competition (including in the areas of government procurement and state-owned
enterprises), intellectual property rights, and the digital economy.

More importantly, in parallel with negotiations, parties, especially those from developing
and less-developed economies, must consider adjustment policies at the national
level, including in infrastructure, education, and skills development, to prepare to take
advantage of the preferences being negotiated. Work on regulatory reform and the
management of NTMs must also be continuous.

Many of the fastest-growing economies in the world are in Asia. The completion of
RCEP negotiations would validate ASEAN’s role in the economic integration of the
region and global trade and investment.

Ultimately, RCEP is a test of ASEAN’s ability to provide economic leadership. RCEP can
be the 21st century model for inclusive integration amongst countries with different
stages of economic development, political systems, ethnicity, and cultural backgrounds.
And it will be key in shaping the Free Trade Area of the Asia Pacific.
Enhancing the AEC for inclusive integration. As indicated above, Brexit, the Trump victory in the US, and the rising voices of protectionism reflect popular disaffection about globalisation and integration primarily in some countries in the developed world. This disaffection is not yet evident in East Asia, which remains the most robustly growing region in the world. It is also worth noting that such disaffection seems to be much stronger in the US, which arguably faces one of the more unequal societies and less-inclusive social safety nets in the developed world. Brexit, the Trump victory, and the rise of protectionism highlight the importance of ensuring a more inclusive as much as dynamic regional integration as well as the issue of management of adjustment in an increasingly integrated world.

Inclusive integration and growth must necessarily aim first at drastically reducing if not eliminating poverty. From this perspective, many of the initiatives highlighted above can contribute significantly to inclusive growth. A very important means of reducing poverty is high economic growth. High rates of investment primarily cause high growth, as the results of the analysis in Volume 3, a companion of this volume, show. Most of the initiatives are meant to improve the investment attractiveness of the region through much more efficient trade facilitation, greater transparency and reduced burden of NTMs, a more open and competitive services sector, much improved connectivity, easier movement of natural persons, and institutionalisation of GRP and regulatory cooperation, amongst other measures. In addition, a stable macroeconomy and deep capital markets would encourage financing of long-term investments (e.g. infrastructure) with appropriate long tenor financial instruments, thereby minimising the problem of maturity mismatch that was one of the reasons for the 1997–1998 Asian financial and economic crises.

There is a very important follow-on effect of the robust and high economic growth on inclusivity. This is through the growth of MSMEs. High economic growth means high demand in the domestic market, which would likely be met by MSMEs simply because they constitute more than 90% of all enterprises in ASEAN. Indeed, much of the impact of integration on MSMEs is not through direct exports but rather through the robust growth of domestic demand arising from the high investment rate expected from the policy reforms and institution building attendant to integration. And most MSMEs are labour-intensive; thus, the expansion of MSMEs would result in a marked rise in the demand for labour, the major means for the poor to earn a living and get out of poverty. To a large extent, the increased direct exporting and number of exporters amongst the MSMEs arising from the integration process would be a secondary and affirming positive effect of integration.
Investment, trade, growth, and poverty reduction are also central to the narrowing of development gaps amongst the ASEAN Member States. Indeed, the CLMV countries have been the growth leaders in ASEAN since the latter 1990s. And poverty reduction in the CLMV countries, especially in Viet Nam, is nothing short of impressive.

Poverty reduction would be faster and outcomes would be more equitable if the design and implementation of the measures discussed above and similar measures were to be imbued with significant consideration for inclusive growth and integration. Thus, for example, trade facilitation measures such as the National Trade Repository and the NSW are potentially pro-MSMEs because MSMEs do not have the wherewithal to navigate complex and corruption-ridden export, import, and customs processes, which both initiatives are expected to address. Still, the effective utilisation of the NSW and the National Trade Repository by MSMEs would likely require proactive efforts by the government to inform and train MSMEs on how to utilise them, perhaps through mechanisms specifically geared for MSMEs.

Similarly, the usefulness of mutual recognition agreements in conformance assessment to MSMEs in a country would likely rest on the efficiency of the certification process and the availability of reasonably priced in-country testing facilities, preferably situated near the major production areas in that country. Connectivity generates more inclusive growth if the peripheral areas are also connected to the growth centres instead of connectivity serving only the growth centres. Stakeholder engagement that is part of GRP would need to involve MSME representatives to ensure that the concerns of the MSME sector are well taken care of in the design and implementation of policies, rules and regulations, and procedures in concerned government agencies.

Nonetheless, integration and globalisation, in conjunction with current and emerging technological developments, also provide the seeds for greater inequality if not addressed well. This is best captured by the ongoing digital revolution and globalisation. As the World Bank Development Report 2016 and McKinsey reports emphasised, the digital revolution enables MSMEs to go global directly, thereby tremendously expanding their market, and allows them to grow in market niches. However, apparently only MSMEs with access to good ICT infrastructure, an efficient logistics and payments system, and a good regulatory environment can grow well with their global markets. The World Development Report 2016 notes that it is essentially the digitally well-connected and largely developed countries that so far have benefited primarily from the digital revolution. The World Bank report also emphasises that if the analogue complements to the digital revolution, such as the appropriate policies and regulatory structures, are not in place, then the digital revolution and globalisation could lead to significant adverse distributional impacts.
Finally, purely economic measures are not sufficient to engender robustly inclusive outcomes in the light of technological developments and deepening economic integration. Thus, for example, the emerging technologies appear to make low- to semi-skilled workers redundant. A country without a sufficient and effective programme of skilling-up its workers could then end up facing the problem of unemployment of its low- to semi-skilled workers. Likewise, households in open economies are likely to face greater vicissitudes of the global markets unless their countries have robust safety nets. It is worth noting that open economies with good safety net programmes and institutions, such as Canada, Japan, and the Scandinavian countries, do not seem to harbour heightened protectionist sentiments compared to the US (which has a less adequate safety net, less adequate social security systems, and a more unequal society). Similarly, disasters can impoverish affected families, which may lose or be forced to sell income-earning assets or to borrow more. Thus, programmes that strengthen disaster prevention, enhance capacity to address disasters, and improve disaster relief and rehabilitation would ultimately contribute to more equitable and inclusive growth and integration.

There are likely to be many more possible non-economic measures that can complete economic measures and strategies to engender inclusive growth and integration. What the examples above and many more similar examples suggest is that engendering inclusive outcomes from the economic measures and regional integration in ASEAN would require harnessing the complementarity amongst the measures in the 2025 blueprints of the AEC, the ASCC, MPAC, and even that of the ASEAN Political–Security Community. That is, the pursuit of a dynamic and inclusive AEC and ASEAN is best served by strong coordination and complementation amongst these four major ASEAN blueprints.

**ASEAN by 2025 and 2035**

How will ASEAN and its member states evolve in the next decade or two? In this volume, Professor Ken Itakura provides some scenarios for 2025 and 2035. The simulations use a recursive dynamic computable general equilibrium model of global trade, which builds on the well-known Global Trade Analysis Project (GTAP) model. Itakura did four simulation scenarios, from a high-growth (H) scenario down to a low-growth scenario. The results are worth considering. Itakura’s H scenario assumes that the World Economic Outlook 2017 projected growth rate of ASEAN Member States in 2022 remains the same until 2035. The medium-growth (M), low-medium-growth, and low-growth scenarios assume average productivity growth of 50%, 25%, and 0%, respectively, of the productivity growth of the H scenario during 2018–2035. Lower productivity growth may result from modest progress in the implementation of the policy measures
formulated in the AEC Blueprint 2025. It may also result from limited success in absorbing technology from foreign countries. Slower economic growth may also reflect an unfavourable external environment, which may arise from growing protectionism as well as slower global economic growth.

This section focuses mainly on the H and M scenarios. The H scenario can be considered the optimistic scenario, while the M scenario, which assumes only half the productivity growth of the H scenario, can be considered the conservative scenario. The H scenario assumes the projected growth rates in 2022 in World Economic Outlook 2017 will remain constant up to 2035. This raises the question of how reasonable are the 2022 growth rates. Table 1 shows the average growth rates for 1999–2008 and 2009–2018, and the 2022 growth rate. It shows that the projected growth rate in 2022 is almost equal to the average growth rate for 2009–2018 for Cambodia, Indonesia, Malaysia, Thailand, and Singapore. Brunei Darussalam, the Lao PDR, Myanmar, and the Philippines are projected to have substantially higher growth rates in 2022 than the 2009–2018 average.

Brunei’s GDP is expected to grow at 5.3% in 2022 in contrast to an average contraction of 0.3% per year during 2009–2018. This probably reflects the effect of improved commodity export prices, which can be also a factor for the slightly higher growth in 2022 in Indonesia and Malaysia compared to the average for 2009–2018.

Table 1: Gross Domestic Product Growth Rates of ASEAN Member States, 1999–2018, 2022 (%)

<table>
<thead>
<tr>
<th>Member State</th>
<th>Average 1999–2008</th>
<th>Average 2009–2018</th>
<th>Projection 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei</td>
<td>1.9 (0.3)</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>9.5</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4.9</td>
<td>5.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>6.6</td>
<td>7.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5.5</td>
<td>4.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Myanmar</td>
<td>11.7</td>
<td>6.8</td>
<td>7.5</td>
</tr>
<tr>
<td>Philippines</td>
<td>4.6</td>
<td>5.9</td>
<td>7.0</td>
</tr>
<tr>
<td>Singapore</td>
<td>1.4</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Thailand</td>
<td>4.8</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>6.8</td>
<td>6.0</td>
<td>6.2</td>
</tr>
</tbody>
</table>

( ) = negative; ASEAN = Association of Southeast Asian Nations.
The Lao PDR’s expected 6.7% growth rate in 2022 is lower than the 7.5% average growth rate during 2009–2018. Nonetheless, the 2022 growth rate is consistent with the average growth rate during 1999–2008.

The growth rate for Myanmar is expected to be 7.5% in 2022, the highest amongst ASEAN Member States. This indicates the surging of the Myanmar economy from a low base arising from the opening up of the economy since the early 2010s. This high-growth phenomenon was also experienced by Cambodia, the Lao PDR, and Viet Nam.

The Philippine growth rate of 7.0% in 2022 is substantially higher than the average of 5.9% per year during 2009–2018, and reflects the expected continuing robust domestic consumption and the positive growth effect of the expected infrastructure boom under the ‘build, build, build’ strategy of the Duterte administration (2016–2022).

The H scenario, which sees ASEAN GDP growing at an average of 5.2% per year at constant 2011 prices during 2018–2035, is decidedly optimistic, especially in the light of the significant slowdown of ASEAN GDP from 5.9% in 2012 to 4.6% in 2016 and a projected 4.7% in 2017. Given that ASEAN’s total population and working age population are expected to grow by 0.8% and 0.7% annually respectively during 2018–2035, the annual productivity growth rate would have to be about 3.9% during the period (Figure 6), compared to the average productivity growth rate of 3.2% during 2012–2017, to attain the 5.2% average growth rate during 2018–2035.  

It is probably best to view the high annual productivity growth under the H scenario as the result of successes in the policies and programmes on goods and services, trade and investment liberalisation, facilitation of the movement of natural persons, infrastructure development (connectivity), behind-the-border regulatory improvements and institutionalisation of GRP, strengthening of both human capital and research and development investments, and heightened technology transfer in ASEAN. Many of these sorts of improvements are not well captured in computable general equilibrium models such as GTAP. Note that these kinds of improvement are what the AEC Blueprint 2025 aims to achieve. Thus, to a large extent, the optimistic case under the H scenario may approximate a successful implementation of AEC 2025 and later blueprints.

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Note though that the 3.9% productivity growth rate is a residual number, with overall growth rate and labour force growth rate exogenous. Thus, the productivity growth rate is influenced by the estimated growth rate of investment. This means that underestimating investment growth (which is endogenously determined) would overestimate the productivity growth rate. As investment functions do not capture well all factors affecting investment behaviour, there is a strong likelihood that the investment growth is underestimated, which means that the productivity growth rate is overestimated.
Nonetheless, it is worth emphasising that the economic performance of each ASEAN Member State ultimately depends on domestic policies, circumstances, and institutions. The AEC Blueprint 2025, with its implied focus on regionally coordinated or concerted measures, significantly helps strengthen the case for domestic reforms and institution building. Clearly, the H scenario assumes a more favourable external environment than that offered by the prevailing global uncertainties and apparent growing protectionism in 2016 and 2017.

**Key Results.** Figures 5 and 6 and Table 2 provide snapshots at the aggregate level for 2025 and 2035 for the H and M scenarios. They give the following insights:

- First, under both the H and M scenarios, ASEAN would be an upper-middle-income region on average by 2025 using the World Bank classification. This is because the region’s two most populous members, Indonesia and the Philippines, are projected to be upper-middle-income countries by 2025, albeit at the very low end of the per capita income range for the Philippines. By 2025, Malaysia would join Brunei and Singapore as a high-income country. All member states except Cambodia would be upper-middle-income countries by 2035 under the H scenario. Note that the total population of ASEAN is expected to increase from 602 million in 2011 to 695 million in 2025 and 744 million in 2035.

- The H scenario envisages an average economic growth rate of 5.2% per year for ASEAN as a whole. This means that the size of the ASEAN economy in 2025 would be twice as large as in 2011 and more than five times larger by 2035. Under the M scenario, ASEAN would grow at an average rate of 4.4% per year, resulting in a quadrupling of the economy by 2035 compared to 2011. In per capita terms, ASEAN GDP would be about 1.75 times higher in 2025 and more than 2.5 times higher in 2035 than in 2011 under the H scenario. Under the M scenario, GDP per capita would be double that of 2011 by 2035.

- Figure 5 shows significant difference in growth performances amongst the ASEAN Member States. Under the H scenario, the growth leaders are Myanmar (represented by ‘rest of Southeast Asia’, which is composed of Myanmar and Timor-Leste), the Philippines, and the Lao PDR. Brunei, Cambodia, and Viet Nam are assumed to average more than 6% per year. Under the M scenario, the Philippines, Brunei, and the Lao PDR are the growth leaders, in that order. Underpinning the continued top performance of these three countries is the implicit high investment growth, and for Lao PDR and the Philippines even under the M scenario, also comparatively high population and labour growth rates.

- Under the H scenario, the per capita GDP of the rest of Southeast Asia would increase nearly fivefold between 2011 and 2035, while those of Cambodia, the Lao PDR, the Philippines, and Viet Nam would increase fourfold. Indonesia and
Figure 5: Growth Rates in 2018–2035 and Gross Domestic Product Index, 2025 and 2035: ASEAN and ASEAN Member States

Real GDP (2011 = 100)

High-Growth Scenario

Real GDP Growth Rate

ASEAN = Association of Southeast Asian Nations; GDP = gross domestic product.

Source: Data from Itakura (2017); additional simulation runs for this volume.
Figure 6: Investment Levels (2025, 2035) and Productivity Growth (2018–2035) for ASEAN Member States

Investment (2011 = 100) High-Growth Scenario Productivity Growth Rate

ASEAN Brunei Cambodia Indonesia Lao PDR Malaysia Philippines Singapore Thailand Viet Nam RoSEAsia

Investment in 2025 (Relative to 2011) Investment in 2035 (Relative to 2011) Average Productivity Annual Growth Rate 2018–2035 (Right Axis)

ASEAN = Association of Southeast Asian Nations; Lao PDR = Lao People’s Democratic Republic.
Note: The model does not include or generate productivity growth rates for Singapore.
Source: Data from Itakura (2017); additional simulation runs for this volume.
Malaysia would grow threefold while Brunei, Singapore, and Thailand would grow about twofold. Under the M scenario, the Philippines would be the leader in terms of per capita increase by 2035, followed by Myanmar (rest of Southeast Asia), the Lao PDR, and Cambodia.

It is worth examining how population growth, investment growth, and productivity growth impact on the projected growth performance of each ASEAN Member State under the H scenario. Very high, double-digit investment and productivity growth rates are needed for Myanmar to have the region-leading growth rate despite having a population growth rate below the ASEAN average. Similarly, the Philippines’ high growth rate would also have to rely on a very high, double-digit investment growth rate. However, the productivity growth rate is much more modest and the country would have to count on having the highest population growth rate (together with the Lao PDR) in the region as a growth driver. High investment growth, robust productivity growth, and high population growth all contribute to the high growth rate for the Lao PDR.

Table 2: Per Capita Gross Domestic Product, 2015 and 2035: ASEAN and ASEAN Member States (US$ at 2011 Prices)

<table>
<thead>
<tr>
<th></th>
<th>High-Growth Scenario</th>
<th>Medium-Growth Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in 2011</td>
<td>in 2025</td>
</tr>
<tr>
<td>ASEAN</td>
<td>3,668</td>
<td>6,294</td>
</tr>
<tr>
<td>Brunei</td>
<td>41,060</td>
<td>52,141</td>
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<tr>
<td>Cambodia</td>
<td>878</td>
<td>1,788</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3,470</td>
<td>6,225</td>
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<tr>
<td>Lao PDR</td>
<td>1,266</td>
<td>2,656</td>
</tr>
<tr>
<td>Malaysia</td>
<td>10,058</td>
<td>16,354</td>
</tr>
<tr>
<td>Philippines</td>
<td>2,358</td>
<td>4,844</td>
</tr>
<tr>
<td>Singapore</td>
<td>52,871</td>
<td>65,199</td>
</tr>
<tr>
<td>Thailand</td>
<td>5,192</td>
<td>7,862</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>1,543</td>
<td>3,106</td>
</tr>
<tr>
<td>RoSEAsia</td>
<td>1,056</td>
<td>2,579</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; GDP = gross domestic product; Lao PDR = Lao People’s Democratic Republic; RoSEAsia = rest of Southeast Asia.

Source: Data from Itakura (2017); additional simulation runs for this volume.
The heavy emphasis on investment growth is probably reasonable because the Lao PDR, Myanmar, and the Philippines are particularly deficient in infrastructure and had low investment rates. Brunei needs to have large investment drive if it wants to diversify away from gas and oil or to expand into other byproducts or products derived from oil and gas. The production of products such as petrochemicals tends to be very capital intensive. Brunei had the lowest investment-to-GDP ratio amongst ASEAN Member States during 2000–2012 excluding the Lao PDR and Myanmar (see companion Volume 3, Chapter 1, Figure 2). The policy implication is clear: a policy focus on investing in infrastructure and a more conducive investment climate are warranted to attain high growth in both Brunei and the Philippines.

Viet Nam stands out as posting the highest rate of productivity growth under both the H and M scenarios. With slower population growth than the ASEAN average, Viet Nam’s high GDP growth rate is heavily dependent on productivity growth. Myanmar, Cambodia, and the Lao PDR follow Viet Nam as the top performers in productivity growth. This seems to indicate that the newer ASEAN members have a lot more room for productivity improvement, including probably a reallocation of resources and labour from the less-efficient sectors to the more-productive sectors. Amongst the older members, Malaysia registers the highest productivity growth rate. (Note, however, that the model does not include or generate productivity growth rates for Singapore.)

Trade. Itakura provides estimates of the trade and production structure for each member state and for ASEAN as a whole under various scenarios. It is worth noting that such estimates are heavily influenced by the structure during the base year of the simulation (2011) because no information is available on the nature of future investment decisions by investors although influenced by real exchange rate (terms of trade) changes. That is, changes would not be very different from the 2011 results.

Foreign trade has contributed to rapid economic growth in ASEAN Member States. Expansion of exports has enabled member states to earn foreign exchange with which they imported intermediate inputs and investment goods to produce manufactured goods. In particular, ASEAN Member States’ exports and imports have been increasing within the framework of regional and global supply chains, contributing to their strong economic growth. Figure 7 examines how the trade structure is projected to change.

The figure shows the trade-to-GDP ratios for 2011 (the base year), 2025, and 2035 for the H and M scenarios for nine ASEAN Member States. The estimates for Myanmar (rest of Southeast Asia) have been excluded because the model does not have a well-articulated Myanmar model and thus the results would be very unreliable. Including Myanmar would make the ASEAN totals less robust as well. Figure 7 shows contrasting
Figure 7: Trade to Gross Domestic Product Ratio, 2011, 2025, 2035: ASEAN and ASEAN Member States

ASEAN = Association of Southeast Asian Nations; GDP = gross domestic product; Lao PDR = Lao People’s Democratic Republic.

Note: The model does not include or generate productivity growth rates for Singapore.

Source: Data from Itakura (2017); additional simulation runs for this volume.
trends amongst the ASEAN Member States. One group of countries has largely marginal changes in ratios between 2011 and 2035: Brunei is largely stable, Cambodia rises and then falls back almost to the 2011 level, Indonesia marginally declines, and Thailand marginally increases. Another group of member states is expected to have higher trade-to-GDP ratios: the Lao PDR and the Philippines have some increase and Singapore has a more significant rise. The last group of member states is expected to have declining trade-to-GDP ratios: Malaysia slightly and Viet Nam more significantly.

It is worth noting that the decline in the trade ratio reflects the increasing importance of domestic activities, including consumption and investment, in generating economic growth for member states such as Malaysia and Viet Nam. The decline in the trade-to-GDP ratios does not mean that international trade is unimportant for economic growth; on the contrary, international trade continues to be important for realising high productivity growth, which is a basis of high economic growth. Export expansion will improve productivity as it enables producers to benefit from large-scale production. Importation of high-quality investment goods and inputs leads to high productivity. Note that both Malaysia and Viet Nam have a relatively high reliance on foreign trade at present. The decline in the ratio suggests essentially a much more robust domestic market, as reflected in the case of Viet Nam in terms of a declining import-to-GDP ratio and a declining export-to-GDP ratio. Despite the expected decline in the trade-to-GDP ratio, both Malaysia and Viet Nam will remain amongst the most trade-oriented ASEAN Member States by 2035. (In the case of Viet Nam, the decline is also likely due to the model having failed to capture well the dramatic growth of electronics and electrical equipment exports and imports, as exemplified by Samsung, in recent years because the structure of the economy in the GTAP model is based on 2011 data.)

Indonesia and the Philippines have been, and will remain, the least trade-dependent ASEAN Member States by 2035. The contrasting simulation results are worth noting. The rise in the trade-to-GDP ratio in the Philippines indicated in Figure 7 is consistent with the expected rise in the share of the machinery sector in the Philippine economy up to 2035. The machinery sector is comparatively more dependent on both importing and exporting as part of regional production networks. The marginal decline in the trade-to-GDP ratio of Indonesia would require more in-depth examination. One likely reason is that the structure of exports of Indonesia embedded in the model is heavily dependent on commodities. GDP growth outpaced the increase in the growth of aggregate real export prices and of export volumes. It may be best to view the Indonesia simulation results as suggestive of the need for Indonesia to aggressively move towards manufacturing exports and to reduce its reliance on commodity exports.
A look at the expected export- and import-to-GDP ratios that underpin the trade-to-GDP ratios of Brunei, Cambodia, and Thailand suggests that the apparent relative stability in the ratios hides significant changes in the export and import performances of the three countries. Specifically, Cambodia and Thailand are expected to have a lower import-to-GDP ratio and higher export-to-GDP ratio (not shown), suggesting that their exports are less import dependent. This is especially noteworthy for Cambodia and probably arises from market-oriented import substitution. In contrast, Brunei is expected to have a lower export-to-GDP ratio and a higher import-to-GDP ratio. With unfavourable terms of trade, the decline in the export-to-GDP ratio is realistic in view of the heavy dependence of the country on oil and gas exports. The expected higher import-to-GDP ratio for Brunei reflects the assumed high investment growth in the country. Investments in the country would be highly import intensive in view of the limited production capacity of the country in non-oil-based manufacturing and resource-based industries.

The simulation results for Singapore show an even greater trade orientation in both exports and imports as a ratio of the country’s GDP. The Lao PDR and the Philippines would also increase their trade orientation through higher export and import shares to GDP.

**Production structure.** Itakura’s simulation results show that all sector output volumes would increase in all ASEAN Member States, except for Singapore’s primary, energy, and light manufacturing sectors. Nonetheless, like many other countries, ASEAN Member States have experienced a shift in the production structure from the primary sector to manufacturing and services, except for Brunei, where the share of the mining industry (part of the primary sector) has remained high. Itakura presents the projected structure of production for 2035 (Table 3). For ASEAN as a group, the production structure remains more or less the same in 2035 as in 2011, with a slight shift from primary and manufacturing to services, particularly construction. The slight reduction in the shares of the primary and energy sectors appears counter-intuitive: it seems to indicate that the region, or at least several ASEAN Member States, is projected to remain competitive in the primary and energy sectors in the next 2 decades. As Table 3 shows, the slight changes in ASEAN’s overall production structure hide significant changes in the production structure of several member states.

The changes in the production structure are attributable to changes in supply and demand factors. Rapid economic growth resulting from the accumulation of physical and human capital would shift the pattern of comparative advantage away from the primary sector to manufacturing and services. A rapid increase in income resulting from economic growth would shift the pattern of demand from primary to manufacturing and services. An increase in the share of construction reflects active investment, which requires construction services.
### Table 3: Production Structure 2015 and 2035: ASEAN and ASEAN Member States

<table>
<thead>
<tr>
<th>ASEAN Member States</th>
<th>Brunei</th>
<th>Cambodia</th>
<th>Indonesia</th>
<th>Lao PDR</th>
<th>Malaysia</th>
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<tbody>
<tr>
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<td>18</td>
<td>31</td>
<td>32</td>
<td>30</td>
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<tr>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
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<td>4</td>
<td>4</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
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<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
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<td>11</td>
<td>11</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Trade, finance</td>
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<td>37</td>
<td>38</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Construction, others</td>
<td>25</td>
<td>29</td>
<td>29</td>
<td>15</td>
<td>16</td>
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</tbody>
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<tbody>
<tr>
<td>Primary, energy</td>
<td>23</td>
<td>14</td>
<td>13</td>
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<td>0</td>
<td>0</td>
<td>16</td>
<td>16</td>
<td>15</td>
<td>28</td>
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<tr>
<td>Light manufacturing</td>
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<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
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<tr>
<td>Heavy intermediates</td>
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<td>18</td>
<td>27</td>
<td>25</td>
<td>19</td>
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<tr>
<td>Machinery</td>
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<td>Utilities, transport, and communications</td>
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<td>Trade, finance</td>
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<tr>
<td>Construction, others</td>
<td>19</td>
<td>20</td>
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<td>18</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>15</td>
</tr>
</tbody>
</table>

- **ASEAN** = Association of Southeast Asian Nations; **H** = high-growth scenario; **M** = medium-growth scenario.
- **Source**: Data from Itakura (2017); additional simulation runs for this volume.

As indicated above, there are some cases where the patterns and/or magnitude of the changes in production structure are quite notable at the national level. For example, large declines in agriculture and natural resources are projected for Brunei, Indonesia, the Lao PDR, and the Philippines. Of the four ASEAN Member States, the change in the production structure in Brunei is the most striking in view of the historically large...
role of the oil and gas sector in Brunei’s economy. Perhaps the best way of viewing the results for Brunei is that the country’s projected high growth arising from a sharp rise in investments would most likely be feasible primarily through a sharp expansion of the trade, finance, and business services sector in view of the projected significant rise in wages in the country. The figures show a successful diversification of Brunei’s economy away from the energy sector.

In the Lao PDR, there is a substantial decline in the shares of the primary and energy sectors, together with a marked rise in the share of heavy industry. This shift in production structure in the Lao PDR is interesting because heavy industries tend to be power intensive, and the country is an energy exporter. The decline in the share of the primary sector in the Philippines is also projected to be large, in tandem with a substantial rise in the share of the machinery sector. Overall, this appears as essentially an acceleration of the current trend towards the machinery sector in the country. The marked reduction in the share of the primary sector in the Philippines could slow down if the country’s policy and institutional environment were to become more conducive to investments in mining, because the Philippines is reputed to be one of the most mineral-rich countries in the world.

In Indonesia, the decline in the shares of the primary and energy sectors is much more modest, and reflects the country’s comparative advantage in the sector. Nonetheless, what is interesting in the simulation results for Indonesia is that the share of the construction and other services sector would increase significantly, suggesting that the potential significant growth driver apart from construction concomitant to expected infrastructure build-up and investments in housing is services, most likely tourism, where the country has acknowledged tremendous potential.

Other interesting results in the Itakura simulations would require further analysis. Perhaps the most surprising at first glance are the results for Viet Nam, where there is a significant increase in the shares of the primary and energy sectors and of the ‘other services’ sector and a reduction in the shares of light manufacturing and machinery. The increase in the shares of the primary and energy sectors is due to the slight uptick in the share of the primary sector and the marked rise in the share of the energy sector. The other sector that is expected to increase its share of aggregate output is other services, which includes recreation, public administration, defence, education, health,

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8 Note that the estimates for Myanmar are not included in the table because they are unlikely to be reliable given that a Myanmar-specific input–output table is not available to generate the changes in production structure. Note also that modern financial and business services are more skilled, labour intensive, and comparatively higher paying than many other industries in an economy.
and dwellings. The other services are income elastic, which means the demand for them increases faster than the growth of income. Thus, to some extent, the surge in the share of other services is the natural result of an economy in which per capita income is rising substantially.

As indicated above, the simulation results for Viet Nam show the share of the primary sector holding up while the share of the light manufacturing sector (which includes textiles, apparel, and leather) will decline by 2035. Perhaps the results could be explained in terms of the high growth of wages, especially relative to Cambodia (which would see a much higher share of light manufacturing) in tandem with the higher productivity growth rate relative to other ASEAN Member States. The high productivity growth rate can be expected to include productivity growth in agriculture, which indicates that Viet Nam would increase its comparative advantage in agriculture vis-à-vis several member states.

The decline in the share of the trade and finance sector in Singapore in the simulations is also worth noting. This seems to suggest rising competition within the region in the trade and finance service sector as reflected in the rising share of the sector in Indonesia, Malaysia, and Thailand. The shifts in the production structure in Malaysia and Thailand appear consistent with the growing reputation of Thailand in the machinery sector and the growing regional strength of Malaysian financial institutions. Also worth noting is the increase in the shares of the primary and energy sectors in Cambodia. This probably reflects Cambodia’s large potential for agriculture because of its high ratio of arable land to population, which is one of the highest in ASEAN, together with the projected high productivity growth in the country indicated in the simulation results.

In summary, using the H scenario as a basis, an examination of the projected patterns of production for ASEAN Member States reveals several interesting patterns concerning the changes in the importance of different economic sectors for member states. The primary and natural resources sector is projected to remain large for new member states Cambodia, the Lao PDR, and Viet Nam, despite some decline in its total share. Light manufacturing is projected to account for a relatively large share for Cambodia. The share of heavy intermediates is relatively large for many member states, including Indonesia, the Lao PDR, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. The machinery sector accounts for a large share for the founding ASEAN Member States except Indonesia, including Malaysia, the Philippines, Singapore, and Thailand. The share of utilities, transport, and communication is high for Singapore compared to the other member states. Trade and finance are projected to account for a relatively large share for Brunei, Malaysia, the Philippines, Singapore, and Thailand. Construction is projected to make up a large share for Brunei and Indonesia.
Wages. Figure 8 presents the simulation results on the wages of skilled and unskilled labour in real terms (2011 prices) under the H scenario as an illustration of the possible impact on labour. As economic structures change over time and various sectors have different demands on skilled and unskilled labour, wage rate growth can differ between skilled and unskilled workers. However, it should be noted that computable general equilibrium models rely on the base year input–output structures of the economies and the estimates of sector composition and labour demands, and therefore of wage rate growth, can have substantial errors. Thus, such estimates are at best broad indications of changes.
The results are as follows:

■ For ASEAN as a whole, the growth rate of wages at constant 2011 prices (i.e. without an inflation factor) is robust for both unskilled and skilled workers. Equally noteworthy, the growth of wages of unskilled labour is projected to be higher than that of skilled labour. One probable reason for the projected higher rate of increase of unskilled labour compared with skilled labour is the expected sharp rise in infrastructure investments (and likely, housing construction), which use more unskilled labour. If we consider the growth of wages as a good indicator of the change in welfare of the people (since most of them would rely on their labour for their income), then the results of the H scenario indicate a comfortable improvement in the welfare of the ASEAN populace. The projected 4.2% and annual wage growth rate for unskilled labour and 3.5% for skilled labour for ASEAN as a whole in 2018–2035 are higher than the actual 3.7% and annual wage rate for unskilled and 3.0% for skilled workers in the region during 2011–2017. Note the higher growth rate of wages of unskilled labour compared with skilled labour. Other things being equal, this suggests a narrowing of income inequality.

■ There is considerable variation amongst member states in the growth of wage rates (Figure 8). The highest rate of wage increase is in Brunei, reflecting the effects of a very high investment rate and a very small labour force. It is important to note that the growth rates of wages under the H scenario are much higher than the actual performance during 2011–2017, which is estimated at a mere 0.3% for unskilled labour and 0.7% per year for skilled labour. In view of the lacklustre actual wage rate growth, the projections under the H scenario can be considered as the potential impact on wages in Brunei if the country experiences high economic growth buttressed by a very high investment rate.

■ Viet Nam has the second-highest wage growth rates. In both unskilled and skilled labour, the expected growth rates for 2018–2035 are higher than the actual wage growth rates of 3.3% for unskilled labour and 3.6% for skilled labour during 2011–2017. The highest productivity growth rate amongst ASEAN Member States amidst robust investment growth and high overall economic growth contributes to the robust growth in wages for unskilled labour and especially for skilled labour.

■ Wage growth in both unskilled labour and skilled labour is also expected to be robust in Indonesia, the region’s biggest economy and most populous country. Strong investment growth of 6.6% per year, robust productivity growth of 3.7% per year, and overall economic growth of 5.5% per year amidst a low growth of working age population of 0.8% per year explain the strong increase in wages of 3.9% per year for both unskilled and skilled labour during 2018–2035. Arguably, a higher economic growth rate in the 6% per year range, which would likely require a higher rate of growth of investment and productivity, could be expected to result in wage growth rates in excess of the 3.9% indicated in Figure 8.
Thailand’s expected wage growth rates are comparatively low, and are even lower than the estimated 3.0% annual growth rate during 2011–2017. Underpinning the low growth rates are the low overall economic growth amidst a declining labour force and very modest investment growth. It is important to note that the model does not allow intercountry movement of labour; hence, one likely source of overall growth of the economy – access to relatively cheap labour from Cambodia, the Lao PDR, and Myanmar – is not captured in the model. Equally important, the simulation model assumes that the projected economic growth into 2022, which is low for Thailand at 3.0% in 2022, is maintained up to 2035. Hence, the way for Thailand to raise the wage growth rates is to markedly raise the economic growth rate arising from a substantially higher investment rate and higher productivity growth rate. As it is, the model presents a case of the ‘middle-income trap’ for Thailand.

Cambodia’s rates of wage growth for both unskilled and skilled labour are the lowest in ASEAN. This is surprising given the high economic growth rate and robust productivity growth. They suggest that the returns to robust productivity growth and high overall growth would go disproportionately to the owners of capital. Perhaps this reflects the low investment growth for Cambodia, especially because construction accounts for about 46% of fixed capital formation in the country and construction tends to be unskilled-labour-intensive (although it is less labour-intensive in Cambodia than in other member states such as Indonesia, the Philippines, and even Viet Nam). Perhaps raising the level of investment growth, such as in infrastructure, and increasing the local labour content of construction would lead to a more significant increase in wages in Cambodia, especially of unskilled labour.

Impact of the Regional Comprehensive Economic Partnership on ASEAN Member States. Negotiations for RCEP involving ASEAN Member States and six ASEAN dialogue partners (Australia, China, India, Japan, the Republic of Korea, and New Zealand) began in 2013 and some progress has been made so far. Although several difficult issues remain before a conclusion can be reached, the negotiating parties are eager to finish the negotiations as soon as they can. Some members think that this is an opportune time to move RCEP negotiations forward because the Trans-Pacific Partnership, which is considered as a competitor to RCEP, is unlikely to be enacted in its original form due to the US’ withdrawal. There is also a view that RCEP members should take a lead in establishing the Free Trade Area of the Asia Pacific, which is seen as an eventual goal of a regional trade agreement in Asia-Pacific.

Itakura conducted a simulation analysis for the case where RCEP enters into force in 2018. Specifically, he assumed the removal of tariffs on trade amongst RCEP members, a 20% logistics improvement of merchandise trade, and a 20% reduction in the tariff
equivalents of services trade barriers. The results of the simulation analysis, using the H scenario as a base, are shown in Figure 9. For ASEAN as a group, the real GDP growth rate will increase by 0.2 percentage points from 5.2% to 5.4%. This may be considered as a lower bound because the simulation does not include effects that may be important, such as e-commerce, investment promotion, and connectivity. The changes in real GDP growth for member states resulting from the enactment of the RCEP range between 1.5 percentage points (Cambodia) and −0.07 percentage points (rest of Southeast Asia). A large gain from RCEP for Cambodia probably reflects its high tariff protection, which would be removed vis-à-vis RCEP trading partners. Other countries that can expect a relatively large gain include Thailand (0.62 percentage points) and the Lao PDR (0.57 percentage points). Member states can expect to achieve additional GDP growth if the enactment of RCEP leads to the formation of other mega regional partnerships including an ASEAN–European Union FTA and the Free Trade Area of the Asia Pacific.

Figure 9: Impacts of RCEP on Real Gross Domestic Product Growth in ASEAN and ASEAN Member States (%)

ASEAN = Association of Southeast Asian Nations; H = high-growth scenario; RCEP = Regional Comprehensive Economic Partnership; RoSEAsia = rest of Southeast Asia.
Source: Data from Itakura (2017); additional simulation runs for this volume.
Concluding Remarks: Strengthening the ASEAN Way towards ASEAN Centrality

The scenarios above started with the H scenario, which would result in a major economic transformation of most of ASEAN. Such a scenario demands high investment growth in many member states and a more robust rate of productivity growth than was achieved during 2012–2016. Such high investment growth and robust productivity growth are consistent with the expected outcomes of the various measures under the AEC Blueprint 2025. These include more competitive domestic markets, improved investment regimes, more seamless trade facilitation, institutionalisation of GRP and enhanced good governance, stronger focus on productivity and technology upgrading, greater connectivity, and deeper integration within ASEAN and the rest of the world.

The M scenario, on the other hand, is consistent with slow and limited progress in the implementation of the policy measures formulated in the AEC Blueprint 2025. It may also result from limited success in absorbing technology from foreign countries. Slower growth may reflect an unfavourable external environment, which may arise from growing protectionism as well as slower global economic growth.

The optimistic H scenario essentially assumes that the AEC Blueprint 2025 and the subsequent AEC blueprints would be implemented effectively. Implementation is the most critical element of the AEC Blueprint 2025 and successor blueprints, and it will determine whether the results envisioned by the H scenario are delivered.

The issue of implementation – and with it political will – is usually juxtaposed with ‘the ASEAN way’, as well as more technical-cum-political considerations such as monitoring, review, and sanctions. The ASEAN way, which describes a sequential approach towards economic integration, is a key source of frustration for those in a hurry when dealing with ASEAN. This approach of consensus in forging agreement and in decision-making has shaped ASEAN’s reputation as slow-moving but has also contributed to its longevity and success. Both Peter Drysdale and Gary Hawke reflect positively on this in their essays in the volume. Hawke describes the ASEAN way as a ‘patient evolution of agreement on objectives and frequent peer review of progress’. To some, he says, this may appear ‘imprecise and like subordination of results to process.’ Hawke argues that ‘even before the Greek crisis and Brexit, the “ASEAN way” was delivering more durable integration than agreements apparently enshrined in black-letter law.’

The ASEAN way has worked thus far. The informal nature of the decision-making process has no doubt assisted in the past. For Drysdale, ASEAN is ‘an experiment that has succeeded’. The consensus-building approach to economic cooperation and the
idea of open regionalism have been central in shaping its development. Viewing ASEAN through the lens of the economic and political history of the region, Drysdale sees ASEAN as ‘a remarkable story, not only in the annals of regional experience and history but also in the story of modern international affairs’. For him, the ASEAN model is ‘a significant innovation and achievement in international economic diplomacy’.

Its outward-looking and inclusive strategy, moving away from protectionist and inward-looking policies not only contributed to the region’s growth but also underpinned its political security. This approach has enabled the grouping to manage the political and security concerns that have surfaced, whether in the South China Sea or in the border areas.

But the environment is changing fast. To continue on its path of inclusive growth, ASEAN must take proactive steps to avoid domestic opposition to its liberalisation and reform initiatives. Yes, the ASEAN way has worked, but given growing populism and in the face of protectionist headwinds, change is necessary. Drysdale stresses that ASEAN will need to deepen domestic and popular support for ASEAN and regional economic integration.

The success of AEC 2025 also hinges on the speed of implementation and maintaining the sense of urgency needed to see through the commitments made. Recognition must be given to officials for drawing up the AEC 2025 Consolidated Strategic Action Plan (CSAP) to track implementation of the blueprint. The CSAP comprises 153 measures and 513 action lines for implementation through 2025, so it needs to have a rigorous mechanism to track implementation. A compliance scorecard, as was used to track the AEC 2015, will not suffice; ASEAN must also track the impact of the measures.

In addition to reviewing its decision-making process to strengthen the ASEAN way and thereby facilitate a more effective implementation of AEC 2025, ASEAN will need to have in place a rigorous and vigorous dispute-settlement or ombudsman mechanism. This is important because as integration deepens further, margins could tighten, and firms could become more vulnerable to the vagaries of the differences in regulations or in the implementation of ASEAN agreements. These changes could lead to a substantial increase in complaints of discriminatory behaviour by members.

A more important component of the strengthened ASEAN way is a monitoring and evaluation system that engenders deep engagement of and collaboration with the business community, think tanks and research institutes, and civil society for constructive feedback on the implementation of the CSAPs of the AEC Blueprint 2025 and its successors. Deeper stakeholder engagement will not only improve the implementation of the AEC measures but, equally importantly, will also engender a
deeper sense of belonging in and greater ownership of the ASEAN integration process by
the ASEAN people. In the process, ASEAN will become not only ‘leaders driven’ but also
increasingly ‘people driven’.

The Philippines provides an example of a possible framework and template that could
be followed by all ASEAN Member States in the implementation of the AEC Blueprint
2025. The Philippine framework has four Cs: Compliance to meet AEC obligations
in conjunction with the national development strategy and initiatives; Collaboration
amongst all government agencies and stakeholders for greater synergy and better results;
and Communication to target stakeholders for their greater awareness and participation.
All of those are in the pursuit of the fourth C – Competitiveness (of firms, industry,
and country) arising from better quality, productivity, and innovation (DTI, 2017).
Underpinning this framework is the strong alignment of the AEC Blueprint 2025 with the
national development plan of the country, which necessarily is the ultimate foundation
of the Philippine AEC 2025 Game Plan.

What is particularly noteworthy about the Philippine approach is that it lists the
Philippine initiatives that need to be undertaken to implement each key action
line corresponding to the strategic measures in the CSAP 2025. The Philippine
initiatives include ‘... legislative and policy reform measures, programs and activities
[to be or already being] undertaken individually by or in collaborative partnerships
amongst government agencies, and across economic sectors’ (DTI, 2017, p. 11).
The Philippine AEC 2025 Game Plan is a whole-of-government approach. It is the
product of the inter-agency Committee for the AEC composed of top officials of at least
10 major ministries, and contains detailed listings of what each agency or stakeholder
group needs to do or coordinate.

In effect, this is the Philippine implementation plan for the AEC Blueprint 2025. If all
member states had their own national implementation plans for AEC Blueprint 2025,
then the monitoring and evaluation of the implementation of the AEC 2025 for the
whole region would be much more rigorous, and, given transparency, more participatory.
The national implementation plans would allow for more in-depth monitoring and
peer discussion amongst member states, facilitated by the country visits of the ASEAN
Secretariat’s Integration Monitoring Directorate and the regular meetings of the
numerous ASEAN committees and working groups. At the national level, the existence
of an inter-agency body, such as the Philippine Committee for ASEAN Economic
Community, enables structured monitoring and coordination of the implementation of
the various country initiatives for AEC 2025. It is also worth noting that the Philippines
has been undertaking hundreds of advocacies, communications, and engagements with
target audiences to raise awareness and engender deeper engagement of the various
stakeholders in AEC initiatives. It is also important to emphasise that many of these AEC-related initiatives are themselves part of Philippine development programmes. It is this congruence of national and regional initiatives, together with stronger engagement of the concerned stakeholders, that provides a hopeful prognosis on the eventual success of the AEC Blueprint 2025.

Finally, that congruence and public awareness and participation – and the implied greater political will – can be expected to animate a bolder and more dynamic ASEAN. Indeed, if ASEAN is to serve as an effective counter-force to the anti-globalisation headwinds, one should expect a bolder, more dynamic ASEAN, and one that gives full meaning of the phrase ‘ASEAN Centrality’. As Drysdale aptly puts it, ‘ASEAN members can no longer simply be support players with the established industrial powers writing the script, as has largely been the case in these decades past’. As the results of the survey of ASEAN peoples on what ASEAN means to them show (see the companion volume, Volume 2, edited by Intal and Ruddy), ASEAN respondents have high aspirations and expectations for ASEAN to have a strong global and regional presence and voice by 2025. Both the AEC and RCEP can work in tandem to provide a good template for the rest of the world on moving towards inclusive and dynamic integration amongst countries of widely varying levels of development but with common aspirations for robust development and deeper economic engagement with one another and the rest of the world.

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ASEAN: The Experiment in Open Regionalism that Succeeded

Peter Drysdale
Head, East Asia Bureau of Economic Research
Crawford School of Public Policy, The Australian National University

Introduction

The strength and success of the Association of Southeast Asian Nations (ASEAN) as it passes its 50-year anniversary will be measured by its ability to continue to promote and encourage deeper regional integration into the global economy. The political and security distraction over troubles in the South China Sea is not the test of economic and political security on which ASEAN integrity and coherence will finally stand or fall.

This contention sits oddly perhaps against ASEAN’s early history. ASEAN emerged as an arrangement designed to deal with the legacy of insecurity in Southeast Asia after Sukarno’s removal from power and the communist insurgence in Indochina. Many commentators have measured the success of ASEAN’s first 50 years exclusively against the metric of how useful it was in managing these and other security affairs. Indeed, in 1967 as the foreign ministers of the ASEAN 5 – Indonesia, Malaysia, Thailand, Singapore, and the Philippines – gathered in Bangkok, it was defence and international relations that were uppermost on their minds.

And certainly, as a forum promoting non-violent conflict resolution, ASEAN has been a considerable political success. But there is another narrative that is often overlooked that provides a more persuasive account of why ASEAN has served regional security so well.

In the 1960s, the famous Swedish economist Gunnar Myrdal (1968) identified Southeast Asia amongst other parts of the developing world as a region stuck in a vicious cycle of poverty, a likely sea of instability and woes for many years to come.

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1 I am very much indebted to Patrick Deegan for research and other support that made the delivery of this paper possible. His cheerful assistance and help with drafting the paper added significant value to its argument. We are also most grateful for Sam Hardwick’s careful editing of the final manuscript.
Looking back today, Myrdal’s prognostication for the region seems to have been spectacularly wrong. But as an observer of the region at the time, it might have seemed a plausible, indeed an accurate, story about the state of Southeast Asia’s emergent nations.

What changed all this, of course, was how the Southeast Asian economy was turned around, not all at once or at the same pace, but in a common direction at around the same time. Without this redirection of economic policies across the region, the innovation and success of ASEAN would hardly have become the lynchpin of East Asian political arrangements that it is today.

The diversity in stages of development, economic endowments, institutions, culture, religion, and ethnicity may appear to have been an enduring source of regional political fragility. Economically, however, it was a fountain of strength, offering opportunity for specialisation that multiplied gains from trade for growth. It was growing economic security that attenuated the politics of ASEAN diversity and ensured its reach and influence, tenuous though at times it may have appeared. And it will be economic security and success that underpins ASEAN’s political sway and effectiveness in the face of political uncertainties going forward.

Somehow, against the odds, ASEAN settled on the right economic formula: one that guaranteed success despite the vicissitudes, notably during the Asian financial crisis, and one that delivered a credible and creditable measure of economic success across the region as a whole.

This paper looks at some of the important milestones along the way. It seeks to identify what legacies from these past successes will be crucial to ASEAN’s economic future.

It is a remarkable story, not only in the annals of regional experience and history but also in the story of modern international affairs. It is a story of which the ASEAN countries and their creative leaders at many levels can be truly proud. It is one that is too often underestimated by it being told through the prism of a post-colonial commentary that has its own axe to grind and dignity to maintain.

The major focus here, then, is on the economic character of the ASEAN enterprise and its development, and the driving conceptions and philosophies on which the economic success of ASEAN has been built. It is a story of significance for understanding ASEAN today and moving ASEAN forward – and beyond.
The paper first examines the shift in the policy paradigm that came to guide ASEAN’s original member states and then enlisted others. Southeast Asian economic policy strategies went from protectionist and inward looking to being dominantly outward looking. They sought to capitalise on Southeast Asia’s external opportunities wherever they were, not only in the region itself. This reorientation was a huge achievement and the source of great economic benefit. It was not, of course, a sweeping victory on every battlefront or in every nation state; the going was sometimes tough and lost direction.

This is exemplified in the case of Indonesia, examined in the second part of the paper, where the political economy of vested protectionist interests and atavistic policy thinking sometimes triumphed over the measurable gains from international integration.

The third part of the paper turns to how the articulation of the strategies of open regionalism and consensus building shaped the success of Asian regionalism and ASEAN. The ASEAN Economic Community (AEC) now embodies that spirit.

Finally, the present challenges for ASEAN and its unique strategies of association are outlined. Some assessment is offered as to whether Southeast Asian economies are up to tackling the issues associated with the middle-income trap and growing uncertainties in the international economic environment.

**Shifting the Policy Paradigm**

The birth of ASEAN in 1967 gave strength to an historical shift in Southeast Asia’s economies. A shift in thinking across the region and the domestic policy environment in member countries led to a move away from protectionism and import-substitution towards a more outward-looking orientation. ASEAN became a collaborative enterprise for ensuring that localised efforts resulted in productive regional outcomes. It created a space where regional integration supported and promoted domestic growth on one hand, while strengthening the global economic system on the other.

Japan’s fast growing economy was a natural force for regional integration in Asia. Its recovery after World War II fuelled a resumption of demand for industrial raw materials from its neighbours. Japan became a major supplier of labour-intensive and, later, capital- and technology-intensive manufactures to regional and international markets.
By 1960, the Japanese economy had recovered to ‘the level predicted by its pre-war trend’ (Ito, 1996: 208). Japanese annual real gross domestic product (GDP) growth of 9.4% in the period 1946 to 1960 and 8.3% in 1960 to 1975 was then unprecedented (Ito, 1996). The ‘miracle’ of Japanese growth was sustained by Japan’s accommodation in an increasingly open international trade regime.

The rapid growth of Japan’s economy in the late 1960s through to the early 1970s created huge demand for Southeast Asian exports. In 1967, for example, Japan absorbed 21.0% of all Southeast Asian exports (Kojima et al., 1971). And over half of Southeast Asia’s export trade was with advanced Pacific countries, including the United States (US) as well as Japan (Kojima et al., 1971).

Foreign direct investment (FDI), especially trade-oriented FDI from Japan, was critical to trade and income growth. It would soon be the key to early industrialisation through laying the foundations for the development of regional production networks.

How to take advantage of the surge in Japanese and international demand was an important focus of a landmark Asian Development Bank (ADB) report, Southeast Asia’s Economy in the 1970s, edited by Hla Myint in 1971. The study was written at the behest of the Fourth Ministerial Conference for the Economic Development of Southeast Asia, held in Bangkok in 1969, and was commissioned to (Myint, 1971: 2):

‘Analyse the nature of the major problems which confront the nations in the region in the seventies and explore the possibilities of individual and cooperative action by governments to effect their solution.’

Chapter 4 of the report, to which I contributed with Kiyoshi Kojima and Saburo Okita (1971: 310), noted that ‘the sense of political identity that is an essential precondition to meaningful government involvement in economic integration is yet far from evident in the Southeast Asian region’. There were, however, ‘signs of growing understanding of the importance of developing political commitment [to regional economic integration]’ (Kojima et al., 1971: 310). In many senses, ASEAN grew to fill the void. Its core members’ step-by-step commitment to international economic integration was the critical element that indirectly came to bind the Southeast Asian economies together.

The structure of ASEAN’s engagement in the international economy naturally recommended focusing on extra-regional markets such as Japan and industrialising Northeast Asia, and targets of growth opportunity in the industrial world. Intra-regional ASEAN trade in 1967 was only 9.5% of total ASEAN trade (Kojima et al., 1971).
In the late 1960s, intra-ASEAN trade was dominated, as it is today, by Singapore’s entrepôt trade with Indonesia and Malaysia. The ASEAN economies were still dominantly exporters of primary products to global markets. While the ADB report envisaged the growth of Special Economic Zones (SEZs) in manufacturing activity, the growth of Southeast Asia’s participation in regional production networks was then a thing of the future. Even in 2015, after the considerable expansion of regional production networks, ASEAN intra-regional trade was still a modest 24% of total trade (ASEAN Secretariat, 2015b). So important still to Southeast Asia’s economic prosperity is its integration into the broader regional and global economy.

The ADB report provided the intellectual foundation and justification for a number of important policy decisions in the region and began to shape the economic reform agenda of the then recently formed ASEAN group.

Although Myint (1971) was not intellectually comfortable with the argument,² the external economic relations chapter in the ADB report called for export-led development strategies. It encouraged a shift in thinking away from inward-looking domestic economic policy to an appreciation of how the domestic market could adjust to take advantage of external developments. In the early stages of ASEAN and regional economic integration, both projects were restrained by their inability to cross an imagined political-economic divide.

It was not until much later that the complementarity of regional economic integration and trade would become central to the political aspirations of the ASEAN enterprise. Today it is difficult to separate the economic from the political explanations of the success, strength, and unity of ASEAN.

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² Myint correctly argued that in principle the right strategy would be to address externality problems in whichever sector they were found to occur: the exportables, the importables, or non-tradeables sectors might equally qualify for policy attention. There is an extensive literature that both tries to validate the export-oriented strategy and criticises it intensively on political economy grounds from the left and on economic grounds from the right.

My Japanese colleagues and I, on the other hand, were persuaded, first, that relieving the export sector of distortions and impediments that made competition in the international market place more costly was the best and most practical route to establishing market efficiency across the whole economy and, second, that the opportunity of the expansion of international demand at that time made the export-oriented strategy especially rewarding.
Driving Domestic Reform

International integration that lifts national welfare demands effective domestic reform. It works on the premise that countries will produce what they can efficiently and cease producing, or at least cease protecting, inefficient or high-cost products, and that consumers are better off unconstrained in their choice between foreign and domestic goods and services.

In the 1970s and 1980s, the complementarities of exports and imports aligned nicely between Southeast Asia, East Asia, and across the Pacific. There was much to be gained through international specialisation in production and consumption by all.

Another integral part of that story was the advent of significantly increased FDI in the region in the 1980s and 1990s. Multinational corporations, particularly those from Japan, the US, and the newly industrialised economies of Northeast Asia, sought to extend their operations to Southeast Asia. These firms set out to take advantage of Southeast Asia’s lower costs of production and to reap the benefits of an expanded and integrated regional production network. Malaysia, Thailand, and Indonesia, which were to varying degrees open to foreign investment, benefitted from the inflow of capital (Thomsen, 1999). The Philippines, however, maintained domestic policies antithetical to FDI until the end of the 1990s and as a result did not enjoy the same inflow of capital from abroad until much later.

An increase in FDI flows and stock in this period provided significant benefit to the Southeast Asian economies, promoting competition, efficiency, and technology transfers in both the manufacturing and non-manufacturing sectors.

Countries gain the most economic benefit through unilateral reform, which can be both supported and supplemented by regional and international economic integration (Productivity Commission, 2010). The main benefits that arise from trade liberalisation result from a country’s purchasing its inputs and final goods from the lowest cost sources of supply, and exposing its industries to greater competition by reducing its own trade barriers. This creates a competitive environment that drives productivity and leads to a more efficient utilisation of resources within the economy.

But broad support – and especially domestic support in ASEAN Member States – for international integration and liberalisation, even amongst countries within the Southeast Asian region itself, could not always be relied upon. There was the legacy of colonial ‘dependency’ that was naturally hostile to open trade and investment ties with the major industrial powers.
The ongoing battle to dismantle trade and investment protectionism, although common to most ASEAN states, was nowhere more pronounced than it was in Indonesia.

Indonesia has always held the primary place in ASEAN. It is the biggest country in the association in terms of both population and economic size and carries the most political weight. Indonesia’s population of over 250 million and its approximately US$900 billion economy accounts for around 41% of ASEAN’s total population (UNCTAD, 2014) and 35% of ASEAN’s economy measured in terms of aggregate GDP (IMF, 2016). Indonesia’s domestic policy is therefore overwhelmingly important in shaping policy perceptions and direction in ASEAN. Dealing with Indonesia’s asymmetric presence in various dimensions was, after all, a major rationale for ASEAN’s formation.

While to date Indonesia has largely had a positive influence on the development of the association, the nature of its involvement and leadership is not without challenges – especially from Indonesian opponents of economic liberalisation at home and engagement internationally. They are challenges that proponents of economic reform in Indonesia have faced more or less continuously, if with periodic intensity and different degrees of success, for many decades.

In the 1980s, the purpose of deregulation was to increase Indonesia’s competitiveness and to drive the efficient allocation of resources in a burgeoning manufacturing sector. The success of deregulation was not only dependent on what was happening in the global economy or the ‘nature of existing international regimes’, as Soesastro (1989: 854) observed. It was also influenced deeply by domestic political and economic conditions. Those conditions have not always been favourable to good policy.

The aptness of the often-cited aphorism ‘bad times make good policies’ was evident in Indonesia in the early 1980s with the onset of the oil crisis. The foundations for economic deregulation had been laid and reforms initiated by Indonesia’s Minister of Finance Ali Wardhana who held that position from 1968 to 1983 (Indonesian Ministry of Finance, 2016). Wardhana was promoted to Coordinating Minister for Economic Affairs in 1983. He remained a key proponent of the dismantling of inefficient protection in Indonesia’s economy against the pressures of domestic vested interests and policy philosophies that favoured various degrees of ‘self-sufficiency’ and that were hostile to foreign participation in the economy. Liberalisation and reform in the 1980s coincided with the first major drop in oil prices in 1983. The crisis, as Soesastro (1989: 854) put it, ‘was sufficient to keep alive the deregulation process’. At the same time as Wardhana’s promotion, President Suharto sidelined opponents of reform and deregulation from
economic portfolios: notably, Ginandjar Kartasasmita (to Domestic Product Promotion) and Sudharmono (who became vice president, but ‘lost any significant influence over economic policy’) (Soesastro 1989: 861).

In 1990, the idea of constrained pluralism was enunciated as a way to better understand how Indonesia’s economic policies could be grounded (Soesastro and Drysdale, 1990). The main idea was that ‘policy players clearly do not act independently of interests and voices in the wider polity’ (Soesastro and Drysdale, 1990: 33). This highlighted the advantages of a case-by-case, issue-by-issue approach that avoided the attention of ‘high politics’ and the risk of outright rejection within a system. This political strategy also helped shield reforms from being blocked outright through the invocation of some opposing principle or ideology (Soesastro and Drysdale, 1990: 33). It was the ‘gradualist’ approach that Wardhana favoured. He argued that (as cited in Soesastro and Drysdale, 1990: 33):

> ‘As this progressive reform takes hold, it picks up adherents among those who have already benefited from deregulation, so that future reforms are received more warmly.’

It meant that dismantling protectionism required not only support at the top ministerial level, but better engagement from policy voices, academics, business groups, and Indonesian society. In the 1980s an emerging and educated middle class made this possible (Soesastro and Drysdale, 1990). But a central force in the articulation and delivery of the reform agenda in Indonesia and throughout ASEAN was the intellectual and technocratic core at the centre of which, in those early years, were Wardhana and his colleagues from the so called ‘Berkeley mafia’ (Chalmers and Hadiz, 2005). In subsequent years, a successor generation – some key members of which were educated in Australia as well as the US – were as important in thinking policy strategies through, socialising them, and taking reform up to the political level as opportunity arose, not only in Indonesia but through the ASEAN think-tank network.

With hindsight in 2005, Hadi Soesastro and Chatib Basri (2005) revisited Indonesia’s political economy over the years of reform. By then it was evident that the economic reforms of the 1980s – a time of slower economic growth and weakened oil prices – had changed the orientation of the Indonesian economy, ‘altering its trade regime to become more outward-looking, and accord[ing] high priority to developing non-oil and gas exports’ (Soesastro and Basri, 2005: 3). These developments ‘accentuated the historical shift [in the Indonesian economy] from import-substitution to export-orientation’ (Soesastro and Basri, 2005: 3).
Feridhanusetyawan and Pangestu (2003: 52) noted that between 1985 and 1990:

‘Tariffs were rationalised and reduced across the board, and some nontariff barriers (NTBs) were removed, especially import licensing and import monopolies. As a result, average unweighted tariffs declined from 27 per cent in 1986 to 20 per cent by 1992. NTBs as a percentage of tariff lines declined from 32 per cent in 1986 to 17 per cent in 1990 and to 5 per cent by 1992.’

The liberalisation and opening of Indonesia’s economy in these years led to rapid growth of non-oil exports, to the consequent diversification of Indonesia’s export base and to the expansion of both domestic and foreign export-oriented investment (Feridhanusetyawan and Pangestu, 2003).

In 2014, Indonesia’s new President Joko Widodo (Jokowi) tilted back towards protectionist thinking. This resurgence of protectionist sentiment had crept into the public debate around a new alignment of vested interests and anti-globalisation thinking that emerged in the context of China’s rising global influence.

Still, a change in Jokowi’s economic management team in the August 2015 cabinet reshuffle saw signs of a return to the economic reform agenda. The appointment of Darmin Nasution as Coordinating Minister of Economics and Tom Lembong as Minister for Trade were key examples. Arianto Patunru (2015) argued that these decisions assisted in pushing back against the protectionist trend. Parallels have been drawn between these changes and the reforms of the 1980s (Manning, 2015).

The July 2016 cabinet reshuffle sends rather more mixed messages. On one hand, the appointment of Sri Mulyani Indrawati as Finance Minister is a positive for the country’s economic management team. But the reshuffle also saw Lembong effectively demoted to the Investment Coordinating Board and the more political Enggartiasto Lukita promoted to the Trade portfolio. These changes might suggest that Jokowi is uncertain of the long-term direction of the nation’s economy, especially in light of the revolving door of trade ministers since he came to power.

The wellsprings of domestic resistance to deregulation and trade liberalisation are well entrenched across all ASEAN states except Singapore. Malaysia, the other most advanced ASEAN economy and well ahead of the pack when ASEAN formed, has its own political economy of protection. Malaysian protectionism is associated deeply with the vested interests of its cossetted Bumiputra enterprises, but there are forces of a similar kind in Thailand and the Philippines.
What has prevented these atavisms against reform and change from derailing the ASEAN integration enterprise and snuffing out the vision of an open ASEAN Economic Community?

Undoubtedly, the legacy of the practical reformist strategies of Wardhana and the power of the ideas that inspired them must be counted amongst the main reasons in Indonesia. On the flipside, the continued domestic commitment to ASEAN at a high political level, has paved the way for continued cooperation amongst the other spheres of society. Until now, the benefits have always outweighed the risks, something the informal nature of the decision-making process has no doubt assisted. But if the association is to continue on its current path, it will have to take proactive steps to avoid domestic opposition to ASEAN. It will need to deepen domestic and popular support for the association.

**ASEAN: Consensus Building and Open Regionalism**

Asia is host to some unique ideas and experiments in economic integration and international diplomacy. They are the product of ideas that emerged from increasing cooperation and integration in the 1960s and developed through a range of regional projects. The consensus building approach to economic cooperation and the idea of open regionalism have been central in shaping the development of ASEAN. Neither consensus building nor open regionalism are without critics, but 50 years on these foundational ideas appear to have held the association and its members in good stead.

These principles have also been successfully applied to other international diplomatic initiatives, such as the formation of the Asia-Pacific Economic Cooperation (APEC) process and the G20. Other models of regionalism with expansive supra-national characteristics, as in Europe, appear increasingly fractured. In context of this varied experience with international economic cooperation around the world, the ASEAN model can be viewed as a significant innovation and achievement in international economic diplomacy.

The formation of ASEAN contrasted sharply with the earlier experience of Europe’s integration in the 1958 European Economic Community, an early iteration of the European Union (EU). The two regional groupings developed for different reasons, according to different patterns and in response to their own set of circumstances. The differences between the two are evident in their different ‘perceptions of sovereignty, formal institutions and leadership’ (Murray, 2010: 598). ‘Design choices’, Murray (2010: 603) said, ‘have been framed as the choice between institutionalisation and flexibility or between closed and open regionalism’.
The diversity of Southeast Asia, and indeed of the Asia-Pacific region – in terms of stages of economic development, political systems, ethnicity, and cultural background – required early innovation in building cooperative mechanisms around the sensitivities of sovereignty, disparities in power, and institutional differences. Back in 1988, I remarked that, ‘despite their heterogeneity’, the countries of Southeast Asia had two key ‘overriding common interests’: ‘strong economic growth and development’ and ‘political and diplomatic interest in neighbourly cooperation’ (Drysdale, 1998: 18). Now, as they did then, ‘these common interests provide the simple but substantial focus for economic policies directed towards closer... economic cooperation’ (Drysdale, 1998: 18).

The design of ASEAN stands in contrast to the EU’s promotion of supra-national institutions in a system of binding decisions. Instead, a key component of the ASEAN framework is still its adherence to the principle of non-interference and recognition of member state sovereignty (see, for example, ASEAN Charter 2007, Art. 2 [2][a]). The ASEAN way of informal consensus in forging agreement and in decision-making has shaped the association’s reputation as slow moving but also, in a lot of ways, has contributed to its longevity and success.

ASEAN’s focus has always been external, unlike the internal focus of the EU. This contrast has been explained by Capannelli (2009) as the difference between the EU’s integration being driven by policy and ASEAN’s by markets. In a more severe critique, Kishore Mahbubani (1995: 109) wrote:

‘There are several flawed elements in Europe’s strategically incoherent policies. The first is Europe’s belief that it could secure peace by concentrating on the internal unification of Europe while detaching itself from its periphery. To an observer from East Asia, all the efforts to deepen unification through the Maastricht Treaty or widen unification by incorporating ‘similar’ European countries in the European Union seem like a household working to rearrange the living room furniture while ignoring the flood waters seeping in from the rising tides just outside the door.’

Mahbubani (1995: 109) warned back in 1995 that Europe’s exclusivism may have been a ‘strategic error’. With the exclusion of Turkey, ‘an opportunity was lost to demonstrate that an Islamic society could cross cultural boundaries and be like any other modern European state’ (Mahbubani, 1995: 109). ASEAN was able to integrate diversity, while the EU was not. Indeed, over 20 years later, with a domestic referendum in the United Kingdom driven partially along anti-Islamic lines, the people of Britain voted to leave the EU. While certain voices have come out warning ASEAN against complacency and against not heeding the lessons of the EU’s losing one of its key players, few acknowledge the strength that diversity brings to the ASEAN formula.
ASEAN’s outward orientation was economic as well as strategic. Unlike Europe’s unification, Asia’s economic integration was shaped by an openness and inclusiveness to countries outside of its membership from the beginning. The inclusive approach of Asia’s economic integration developed and was later enunciated using the dynamic term ‘open regionalism’.

Open regionalism ‘seeks to promote economic integration amongst participants without discrimination against other economies’ (Drysdale and Vines, 1998: 103). While the fleshing out of open regionalism and the emergence of the term did not eventuate until the 1980s, the evolution of the thinking behind it had longer antecedents. It had emerged when the ASEAN project was challenged by the idea of broader regional cooperation and became a central tenet on the way towards the establishment of APEC between the late 1970s and 1989 (Drysdale and Vines, 1998). It found support and intellectual development in the Pacific Trade and Development (PAFTAD) conferences that had run continuously since 1968 (Elek, 1991). It was first articulated in the Canberra Seminar in 1980, later the Pacific Economic Cooperation Council (PECC), which was a precursor to APEC (Drysdale and Terada, 2007).

Open regionalism was largely based on the idea that, much like regional security cooperation, effective economic cooperation in Asia would have to conform to similar principles of openness, equality, and evolution (Drysdale and Vines, 1998). In this sense, ASEAN as an association for both security and economic cooperation was developed within the framework of similar conceptual parameters.

The ASEAN Free Trade Area, signed in 1992, is unique amongst such arrangements. It embodies the purposeful multilateralisation of preferences initially exchanged between members. In this sense, it is a model for any preferential agreement that claims to have the global liberalisation of trade as its core objective. There are no other such agreements that embed a sunset clause on discriminatory trade treatment in this way.

The principles of cooperation that came at the early stages of developing the concept of ‘open regionalism’ in Canberra in September 1980 remain relevant for Asian economic regionalism and ASEAN now and well into the future (Drysdale and Vines, 1998: 103). Indeed, ASEAN and Asia–Pacific economic integration has proceeded a long way under the aegis of these principles. They also provide the coda for moving forward with the ASEAN Economic Community (AEC) put in place in December 2015.
Table 1 below sets out the development of the key ideas behind regional efforts that were ordered around the idea of an open regionalism in Asia.

### Table 1: The Development of Principles of Asian Economic Integration

<table>
<thead>
<tr>
<th>Date</th>
<th>Key Ideas</th>
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<tbody>
<tr>
<td><strong>Inclusiveness and support for the global economic system</strong></td>
<td></td>
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<tr>
<td>ASEAN Declaration 1967</td>
<td>‘Open for participation to all States in the South-East Asian Region subscribing to [ASEAN’s] aims, principles and purposes’ (Article 4). Promoting ‘close and beneficial cooperation with other States as well as international and regional organisations outside the region’ (Article 6). ‘The need to ensure that an outward-looking arrangement’ would also be ‘complementary’ to existing arrangements. ‘To support an expanding world economy and an open multilateral trading system’ (Leaders’ Declaration point 2(2)) and to enhance regional and global growth.’</td>
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<tr>
<td>Treaty of Amity and Cooperation 1976</td>
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<td>The Canberra Seminar 1980</td>
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<tr>
<td>APEC Bogor Goals 1994</td>
<td>‘To promote the centrality of ASEAN in external political, economic, social and cultural relations while remaining actively engaged, outward-looking, inclusive and non-discriminatory’ (Article 2(m)). ‘Furthering regional and global integration through bilateral and regional comprehensive economic partnerships’ (Article 2E (79)).</td>
</tr>
<tr>
<td>ASEAN Charter 2007</td>
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<td>AEC 2025 (December, 2015)</td>
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<tr>
<td><strong>Support for multilateralism and non-discrimination</strong></td>
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</tr>
<tr>
<td>‘To maintain close and beneficial cooperation with existing international and regional organizations with similar aims and purposes, and explore all avenues for even closer cooperation among themselves’ (Article 2(7)).</td>
<td>‘Parties shall exert their maximum efforts multilaterally as well as bilaterally on the basis of equality, non-discrimination and mutual benefit’ (Article 5). ‘The need for an “organic approach” building upon private arrangements and exchanges which already existed in the Pacific’ and in opposition to a discriminatory trading arrangement in the Pacific.’</td>
</tr>
<tr>
<td>‘[Opposed] to the creation of an inward-looking trading bloc that would divert from the pursuit of global free trade’ (Leaders’ Declaration point 6).</td>
<td>‘Adherence to multilateral trade rules and ASEAN’s rules-based regimes to move towards elimination of all barriers to regional economic integration, in a market-driven economy’ (Article 2(2)(n)). ‘Continue strongly supporting the multilateral trading system and actively participating in regional fora’ (Article 2E (80)(v)).</td>
</tr>
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The ASEAN Economic Community

In many ways, the ASEAN Economic Community, which came into being at the end of 2015, has become the next driver of open regionalism in Asia. It retains a focus on liberalisation internally, while looking outwards. Developments since the 1960s have seen a rapid and vast rise in ASEAN’s exports but the growth and share of intra-ASEAN trade continues to be far less significant. This is something the AEC seeks to address and something that Pangestu, Soesastro, and Ahmad (1992) highlighted as an important space for improving and broadening economic integration and the strength of ASEAN.

The 2025 AEC Blueprint builds on earlier efforts to increase the integration of the ASEAN member economies. The Blueprint focuses on internal liberalisation to reduce barriers in the intra-regional trade of goods and services, to enhance the investment environment, and to better integrate the financial sector, amongst others (ASEAN, 2015a). It acknowledges the win–win situation of regional integration assisting, for example, ASEAN’s participation in global value chains. The Blueprint also recognises that such integration will demand competitiveness, offering flow-on benefits in the ‘better realisation of economies of scale, collective efficiency and the organic formation of regional innovation systems’ (ASEAN, 2015a: 11).

Another critical aspect of the AEC is its emphasis on the global role of ASEAN. The document notes ongoing efforts and a number of strategies to improve the connectivity of the AEC and ASEAN with the global economy. The ASEAN-initiated Regional Comprehensive Economic Partnership (RCEP) is key amongst these initiatives. But perhaps most important is that the AEC, like Asian economic integration projects before it, sees regionalism as an inclusive measure of mutual benefit for the national, regional, and global economy.

The big question is whether AEC can prevail both as the principal guiding light in defining the approach to regional integration amongst the ASEAN 10 as well as their neighbours and serve as an effective counter-force in a period when protectionist currents have been unleashed all over the world. AEC may not achieve its international integrationist ambitions as quickly as might be hoped. But its remarkable background is that AEC is the product of leadership from technocrats significantly, although not exclusively, from Indonesia. These technocrats have crafted a framework of principles and strategies that will serve to guide ASEAN leaders towards entrenching openness and straightjacketed engagement and to constrain tendencies towards inward-looking protectionism that are endemic in the political economy of the region.
The Future: TPP, RCEP, and the Global System

An alternative model for economic integration epitomised by the Trans-Pacific Partnership (TPP) and, to a lesser extent, the RCEP has more recently engaged ASEAN members. The contest between these two mega-regional arrangements threatens to challenge ASEAN coherence (Dupont, 2013; Ba, 2016; Sally, 2014).

East Asia is looking to complete by early 2017 a major new economic agreement that ASEAN initiated. It offers the chance to lift regional growth closer to potential by locking in domestic reform and liberalisation through regional cooperation. The RCEP agreement was ASEAN’s response to the Trans-Pacific Partnership (TPP) and heralds the next phase in Asian economic cooperation (Dupont, 2013). But RCEP is qualitatively different from past cooperation in Asia – more comprehensive in scope and institutionally binding than any of its antecedents – and its delivery will require enormous political will.

Existing and growing economic ties supported and developed through ASEAN will be crucial to underpinning security and political cooperation in the region and globally. With China’s economic ascent and the US rebalancing to Asia post 9/11, commentators have highlighted an uncertain future for ASEAN amid the global power play. For now, the US and China have recognised the need to engage with ASEAN, with both pursuing closer economic and political ties with the regional grouping.

A peaceful balancing of power between Washington and Beijing would best serve ASEAN, allowing it to retain its own space to serve the interests of its member states rather than those of a hegemonic power. As Acharya (2015) observed, the power politics of Asia no longer relies on a hegemonic power. There is now far greater focus on interdependence (largely stemming from economic ties), regionalism, and the role of smaller, weaker states. It is in this context that the centrality of ASEAN has to be maintained. And this underlines the importance of the RCEP process in furthering and broadening regional and global economic integration and the position of ASEAN in the global system.

Economic cooperation and the growth of economic interdependence in East Asia occurred without preferential regional agreements, unlike in Europe through the EU or in North America with the North American Free Trade Agreement. Yet economic integration in East Asia by many measures is on par with that of these other regions. The main drivers were trade liberalisation (with successful commitments by the major East Asian players to the General Agreement on Tariffs and Trade/World Trade Organization) and competitive liberalisation of investment regimes. The World Trade Organization’s International Technology Agreement, for instance, gave a huge boost to the development of regional value chain production in the electronics sector (WTO, 1999).
The understanding that opening up to trade and investment is necessary for growth, development, and prosperity, as we have seen, has gained momentum in East Asia over the years. The growing weight of the East Asian economies in the international economy, combined with their proximity and the complementarity of their economies, is why intra-East Asian economic relationships have grown so large.

As the East Asian economies have climbed the income ladder – Japan, the Republic of Korea, Hong Kong, and Singapore are already high-income economies – their international economic policy interests have shifted from trade in goods and direct investment to trade in services, investment in production networks, and financial market integration through capital account liberalisation. The economic cooperation agenda in East Asia, including in ASEAN, now encompasses all these issues – not just border trade liberalisation but the economic and institutional reform behind the border that is essential to attaining the region’s future economic growth potential.

The diversity of the regional economies and polities, and difficulties stemming from historical and political baggage amongst them, has shaped the nature of economic cooperation in Asia. Building a framework of shared priorities and trust has allowed rapid catch up through the gains from trade and commerce for growth and development.

The next frontier to global economic integration lies in the stretch between East Asia and Eurasia. The China-backed One Belt, One Road initiative now has a role to play in that transformation. And it will be important to improve trade linkages between ASEAN and Europe.

With multilateral trade liberalisation stalled and the Doha Round going nowhere, Asia turned to imitating the negotiation of preferential bilateral agreements. Free trade agreements proliferated but have brought neither the large gains proponents claimed nor the damage critics argued they might (Armstrong, 2015). Excluding sensitive sectors, already low barriers to trade at the border and a lack of reform behind borders have meant that these preferential agreements have not brought significant benefit nor imposed large costs.

Enter the mega-regional arrangements – TPP and RCEP. They have the potential to exclude or include and therefore carry greater significance for the global system.

The TPP includes the eastern Pacific members of APEC – the US, its NAFTA partners Mexico and Canada plus Chile and Peru – as well as RCEP members Australia, Japan, Brunei, Malaysia, Singapore, and Viet Nam. But China, Indonesia, the Republic of Korea, India, and the other ASEAN states, leave a big hole in the TPP donut.
The RCEP group is where the global economic dynamism is. It presents a huge opportunity for the region (DFAT, 2016). Much ink has been spilled about what a large chunk of the world economy TPP represents. The group of countries that comprise RCEP were already larger than the TPP group in real terms by 2007. Given the rise of the Indian economy and China’s continued growth, even at 5% a year, the RCEP grouping could be double the size of the TPP group in 10 years.

RCEP includes the less developed countries in Southeast Asia and others like India that are further behind in living standards as well as in trade and economic reform. The gains from opening up these economies to more international competition and buttressing national domestic reform through regional reinforcement would be considerable.

China and India will not be able to join the TPP any time soon and an ambitious and high-quality RCEP would be able to offset trade and investment diversion from TPP and work to integrate the entire Asia-Pacific region (EABER, 2016). Exclusion from the TPP is not just a Chinese and Indian problem. ASEAN members not party to the TPP will also struggle to join in the near future, creating serious fault lines in progress towards East Asian economic integration. Already some manufacturers are moving from China to Viet Nam to take advantage of better access to the US market – a costly exercise that is diverting investment and trade away from non-TPP members.

The TPP is thought by many to be a higher-quality agreement because of the new issues it incorporates such as stronger intellectual property protections, data flow liberalisation, and new dispute settlement provisions. Some of those aspects will help open economies up and provide impetus for reform, but not all (see for example: Barfield, 2016; Katz, 2015; Dee, 2013).

Distinctively, RCEP will include an ongoing economic cooperation agenda providing regional peer support for domestic institutional reform. The economic cooperation agenda sets up RCEP as an important vehicle for building economic and political confidence in effecting the next big structural transformation across Asia, between China, India, Northeast Asia, South Asia, and Southeast Asia.

Comprehending and playing the pivotal role in delivering this next big Asian economic transformation is the challenge for ASEAN now.

The cooperation agenda of RCEP means the agreement is not a one-shot game. This is an opportunity for ASEAN and Asia to bring in harder cooperation with binding targets and commitments, combined with its cooperation agenda to help countries define their own paths to prosperity, in the tradition of ‘the ASEAN way’.
The momentum is building amongst the negotiating corps, though there is a quite a way to go. Failure does not mean that Asia will stumble. But it would mean that it would be in for a period of distinctly below potential growth from a group of economies more likely to get stuck in the middle-income trap. This is why the opportunity that RCEP presents to ASEAN and the Asian region is so important. It is also why it is such an important line of defence against fragility in the global political economy. But delivery on the RCEP agreement needs leadership.

Realising ASEAN’s growth potential requires ambition and the will within ASEAN polities to undertake the next round of reforms essential to lifting productivity and accelerating the necessary structural change. This is central to ASEAN economies like Malaysia and Thailand breaking through the middle-income trap. A strong, mutually reinforcing Asian growth environment will vastly increase the chance of growth success.

Are ASEAN leaders up to this challenge?

RCEP negotiations provide a ready-made framework for the ASEAN plus 6 East Asian partners to seize the moment.

The RCEP grouping is where the global economic dynamism is awaiting release.

In lifting the frontier of Asian growth through closer regional integration, ASEAN and East Asian governments will need to negotiate a single-undertaking trade deal as good as the TPP, or in some respects better. They plan to go beyond that with an ambitious economic cooperation programme, consistent with the traditions and principles embedded in the AEC. RCEP can aspire to be a model for a global set of non-prescriptive, principles-based rules for managing trade and other forms of international commerce in the 21st century.

US President Barack Obama has said the RCEP deal lacks ambition and ‘won’t prevent unfair competition among government-subsidized, state-owned enterprises’ (Washington Post, 2016). It won’t protect a free and open internet or intellectual property, labour standards, and the environment, he reckons.

In fact, RCEP must do more than these things to keep Asia’s structural reform-driven growth rolling forward. An RCEP agreement can be signed when, and only when, there is commitment to comprehensive freeing of trade in goods, services, and investments over the next decade. At the moment of signing, there must be an agreed path for the agreement’s implementation together with a framework for economic cooperation.
Concluding an agreement around the time of the ASEAN anniversary will give RCEP and ASEAN momentum and credibility.

There is no question that China, India, Indonesia, and other emerging countries in Asia will have trouble joining the US-led TPP any time soon, even if it is legislated by 2018 – an optimistic scenario. But an ambitious, high-quality RCEP can offset trade and investment diversion from the TPP and work to integrate the entire Asia-Pacific region.

What is needed is the right environment in the region for these countries to be able to undertake their own bold supply-side reforms at home. RCEP’s economic cooperation agenda positions it as a key vehicle for building economic and political confidence in effecting the next big structural transformation in Asia, right across the region between East Asia and South Asia, with China and India drafted to play leading roles and ASEAN central to that endeavour (EABER, 2016).

**Conclusion**

The next several decades, especially the decade through to 2025, will be years of momentous change and challenge for ASEAN. The story of ASEAN’s success over the past 5 decades offers guidance to managing these challenges on the horizon.

ASEAN brings to the task, as its legacy, a policy philosophy and an experiment that has succeeded. Shaped by its underlying commitment to open regionalism and to an outward-looking and inclusive economic strategy, ASEAN has delivered economic improvement and cooperation that has underpinned political security.

The ASEAN story is one of success in openness to the global economy. This is partly because that is where the economic opportunities and benefits are largest and partly because open dealings with other major economic powers have built ASEAN its own quotient of political security. Open regionalism, it turns out, is both a good economic and a good political strategy. There have been bumps along the way – in liberalising trade, dismantling protection, and maintaining an open and inclusive system that is able to cope with diversity – but the overarching ASEAN strategy has got it right and is key to continuing to secure the prosperity and security of Southeast Asia in the region and in the world.
The big difference for ASEAN, together with its other partners in Asia, is that success in achieving economic potential and political security will now depend on their assuming a role centre stage in the theatre of international economic diplomacy. ASEAN members can no longer simply be support players with the established industrial powers writing the script, as has largely been the case in these decades past. In the wake of the break-up of the EU, amongst other things over Islamophobic anxieties, this would indeed be an irony.

References


The Promise and Challenges of ASEAN and AEC in a Fast-Changing East Asia: AEC Blueprint as Driver of Transformation of ASEAN Member States

Gary Hawke
Former Head, School of Government and Professor, Victoria University of Wellington
Fellow, Royal Society of New Zealand
Member, Academic Advisory Council of the Economic Research Institute for ASEAN and East Asia

ASEAN

There is a conventional consensus history of the Association of Southeast Asian Nations (ASEAN), at least in the mainstream literature of international relations. It focuses on creating a zone of peace after Indonesia’s Confrontation against the formation of Malaysia in the 1960s and preserving that zone against the stresses of the war in Viet Nam and its aftermath. It had a large measure of success in this but did not advance far beyond mutual confidence building towards dispute resolution and preventive diplomacy. As a by-product of the security diplomacy, the members of ASEAN formulated a free trade agreement and followed the usual path from free trade in goods towards deeper integration. Again progress was slow. The general picture is of a talk shop rather than an executive agency.

This conventional account is misleading. It owes too much to North Atlantic thinking. It owes too little to economic analysis and too much to the Atlantic-oriented discipline of International Relations. The progression from confidence building to dispute resolution and preventive diplomacy was enshrined in the foundation of the ASEAN Regional Forum but owed a great deal to ASEAN politeness to its dialogue partners and little to ASEAN management of issues that were important to its members. These were dominated by human security rather than the ‘hard security’ favoured in academic International Relations and Strategic Studies.
The economic agenda was guided by regional developments. Economic growth was disseminated from Japan to the tigers – the Republic of Korea, Hong Kong, Taiwan, and Singapore – and thence to Southeast Asia generally. International production networks were built, and governments responded so as to benefit from economic integration while preserving social order. Governments were active, but they generally used collective decisions to facilitate adjustment to the changing scene, not to protect existing interests, although a specific sense of ‘social order’ such as the position of bumiputra in Malaysia could well prevail against a general preference for change over inertia. There were always exceptions but they were, and are, far from confined to ASEAN.¹

ASEAN governments evolved a pattern of working together. The ‘ASEAN way’ came to be patient evolution of agreement on objectives and frequent peer review of progress. To those familiar with processes elsewhere with an emphasis on defined ‘deliverables’, monitoring, and sanctions, it looked imprecise and like subordination of results to process. But even before the Greek crisis and ‘Brexit’, the ‘ASEAN way’ was delivering more durable integration than agreements apparently enshrined in black-letter law. A former European diplomat has observed, ‘I have always been struck by how, in Asia Pacific, the EU as a political construct fascinated pundits and politicians alike. Certainly “old and tired Europe” is often a subject of some condescension there. Particularly as Asian ways of consensus are supposed to exclude definitive transfer of, historically speaking at least, recently won national prerogatives. And yet, when discussing supranational elements to be included in the future of ASEAN, such as generally applicable human rights obligations, the European example loomed large.’ (Woker, 2016) The European Union (EU) was often² seen as the leading edge of economic integration but usually because European objectives and methods were familiar. (And EU notions of human rights were attractive to activists in that area.) Simple reflection on the absence in international contexts of any analogue to the monopoly on lawful coercion in domestic jurisdictions promotes doubts about the meaning of ‘obligatory’, ‘enforcement’, and ‘legally binding’ outside what is recognised as voluntary adherence to long-term self-interest. ‘The ASEAN way’ then becomes more attractive.

¹ Zoellner (2016) identified as a protective element the requirement in United States law that high-speed trains be manufactured domestically.
² But not always. While Ayson (2016) was expressing a common view, ‘the European Union, which, for all its faults, has been the deepest experiment in voluntary cooperative interstate relations the world has ever seen’, the editors of East Asia Forum (27 June 2016) thought ASEAN was more integrated: ‘On some measures, the Asian economy is more integrated than that in Europe, but without the stifling load of supra-national authorities and an unworkable common currency. The dense trans-regional trade and production networks that have fueled the region’s remarkable growth, with China at the heart of it, over the past three decades match those in Europe’. As we lack an agreed metric for integration, an empirical answer is not possible. But see Murray Petrie’s PhD thesis at the Victoria University of Wellington (2009) for how degrees of integration can be assessed.
It used to be common to talk of ASEAN ‘in the driver’s seat’. It provoked thoughts of a chauffeur, driving to instructions rather than by self-determination, but that in turn was countered by recognition of the influence of the driver when the back-seat drivers were a quarrelsome lot unable to agree amongst themselves. ASEAN could be influential, as it is now that it is more usual to talk of ‘ASEAN centrality’.

### ASEAN Economic Community

The ASEAN Economic Community (AEC) is located within the ASEAN Community. Use of the term ‘community’ proved to be controversial in Asia–Pacific Economic Cooperation (APEC) largely because of language difficulties. (In some APEC languages, the German concepts of Gemeinschaft, a community of people bonded by some common beliefs or attributes, and Gesellschaft, a community of people bound by a common set of laws, could not easily be expressed in one word. In Chinese, the available distinction was much closer to ‘big family’ and ‘political entity’.) ASEAN had no such difficulty. The importance of community building is not always understood by outsiders.

It conceived an ASEAN Community with three elements. Beside AEC, there is a Political and Security Community (APSC) and a Social and Cultural Community (ASCC). Like ASEAN itself, all are locally created conceptions. The Political and Security Community is not an instrument for collective defence like the North Atlantic Treaty Organization (NATO); its centrepieces in the Security field, the ASEAN Regional Forum (ARF) and ASEAN Defence Ministers Meeting are focused on cooperative and collective security. The declared characteristics of APSC are a rules-based community of shared values and norms; a cohesive, peaceful, stable, and resilient region with shared responsibility for comprehensive security; and a dynamic and outward-looking region in an increasingly integrated and interdependent world. The Social and Cultural Community seeks to develop shared notions of citizenship. Former ASEAN Secretary–General Surin Pitsuwan used to talk of the middle classes of ASEAN Member States recognising that they have more in common than they share with citizens with different income levels in their own country. More formally ASCC seeks caring societies, managing the social impact of economic integration, enhancing environmental security, and strengthening the foundations of regional social cohesion. While there is much angst about the depth of knowledge of ASEAN in the populations of ASEAN members, there is evidence of a growing sense of ASEAN identity amongst younger citizens: ‘There is a thin sense of belonging to the region despite largely positive attitudes among the region’s young people. A recent survey of 4,623 students among 22 universities in the 10 ASEAN states found that over 80% of young people surveyed view themselves as “citizens of ASEAN” but attitudes towards ASEAN, and towards other ASEAN countries, differed at national levels.
with people from newer member states being the most enthusiastic.’ (Thuzar, 2016)³

It is common to emphasise the diversity of ASEAN, although recently we have been more conscious of diversity within Europe, and we should look more to the gradual evolution of common elements in the narrative of ASEAN history. We see this in the China concept of ‘One Belt, One Road’: ‘Reviving the idea of the silk roads, on both land and sea, gives vitality to histories of transnational, even transcontinental, trade and people–people encounters as a shared heritage.’ (Winter, 2016) The history of conflicts will not disappear any more than similar elements in the shared history of Europe and America or of America and Asia but there is a common story of collaboration to be recovered. It already exists in the museums of South-east Asia.

AEC is more developed than the other elements of the ASEAN Community. The shared structure of responses to economic interdependence is complex and sophisticated. The Blueprint was adopted at an ASEAN Summit in Brunei Darussalam in 2009 and its durability is shown by its persistence through political developments which mean that only three of the signatories still hold the same offices now. They are the Sultan of Brunei Darussalam, Prime Minister Hun Sen of Cambodia, and Prime Minister Lee Hsien Loong of Singapore. (The other signatories were President SBY of Indonesia, Prime Minister Bouphavanh of the Lao PDR, Prime Minister Badawi of Malaysia, General Thein Sein of Myanmar, President Macapagal–Arroyo of the Philippines, General Chulanont of Thailand, and Prime Minister Dung of Viet Nam.)

The core of AEC was stated in Paragraph 5: ‘end goal of economic integration as espoused in the Vision 2020, which is based on a convergence of interests of ASEAN Member Countries to deepen and broaden economic integration through existing and new initiatives with clear timelines... in accordance to the principles of an open, outward-looking, inclusive, and market-driven economy consistent with multilateral rules as well as adherence to rules-based systems for effective compliance and implementation of economic commitments.’ The Blueprint then established objectives and detailed milestones for:

- Goods, services, investment, capital, skilled labour
- Competitive region
- Intellectual property
- Infrastructure
- e-commerce
- Equitable development

Small and medium enterprises
Initiative ASEAN Integration
Integration into the global economy

That is, the contemporary agenda for economic integration was encompassed.

Accordingly, the promise of AEC is that within the ASEAN conception of a community the contemporary agenda of economic integration should be pursued. It is worth noting that it includes ‘skilled labour’, which goes beyond many current agreements that envisage only temporary movement of professionals. The distinction between ‘skilled’ and ‘unskilled’ labour is unstable since technology is invading the spheres of what are regarded as the occupations of skilled labour, and what is important amongst employees is adaptability and the ability to learn to adapt to changing requirements rather than a static set of skills. Nevertheless, AEC is at the forefront of international practice in its treatment of labour movement. Secondly, the provisions of AEC envisage intellectual property as a:

‘powerful stimulus to (a) cultural, intellectual and artistic creativity and their commercialisation; (b) efficient adoption and adaptation of more advanced technologies; and (c) continuous learning to meet the ever-rising threshold of performance expectations’.

The emphasis on innovation rather than on protection of existing property is ahead of most international practice in the field.

AEC is not lacking in ambition. A Regional Comprehensive Economic Partnership (RCEP), conceived and realised as the realisation of the AEC objective of ‘Integration into the Global Economy’ would not be ‘lower level’ than the Trans-Pacific Partnership (TPP) or otherwise lacking in ambition. Peter Drysdale has argued that the ‘RCEP grouping is where the global economic dynamism is awaiting full release’ and that despite former US President Obama’s assertion that the ‘RCEP deal lacks ambition’ and ‘won’t prevent unfair competition among government-subsidized, state-owned enterprises’, it won’t protect a free and open internet or intellectual property, labour standards and the environment. RCEP can generate world growth through ‘commitment to comprehensive freeing of trade in goods, services and investments and an agreed path for its implementation together with a framework for economic cooperation’. (Drysdale, 2016) The only reservation that needs to be registered is that such enthusiasm has prevailed around ERIA for some time – I shared it in discussions with RCEP negotiators – and the outcome so far has been disappointing. What are the grounds for hoping for better in the future?
Challenges to AEC

It is not hard to identify key challenges to AEC – implementation is difficult, there are competing conceptions of integration, and the process of globalisation has experienced some rejection.

The AEC Blueprint includes a detailed implementation plan. There is always a problem with blueprints. A choice is needed within two doubts: To what extent is it worthwhile devoting time and energy to detail in advance of uncertain future events? On the other hand, can one be confident that the right path has been chosen if there is not in place a detailed map for progressing along it? The Blueprint requires flexibility for making amendments in the light of new information and confidence in political maturity to ensure that amendments are not seen as failures, all within skilled judgement about when to persist and when to amend.

Positive indications can be found in the scorecard exercises, especially the ERIA scorecard with its attempt to distinguish between formal meeting of obligations and implementing provisions in such a way as to promote integration. As previously noted, peer review of progress towards agreed objectives is more likely to promote successful implementation than external monitoring and evaluation. While ASEAN’s record in removing barriers to international integration leaves a great deal still to be done, as is revealed by such international studies as construction of trade restrictiveness indices, the dominant record is of slow but sustained improvement.

The structure of the AEC Blueprint looks like the now conventional list of chapters of a free trade agreement (FTA). But much of the discussion of integration within ASEAN and between ASEAN and its dialogue partners takes place in a competing paradigm of connectivity or co-operation.

The conventional approach to FTAs and the structure of AEC is shown in the right-hand column of the table. The overriding objective is usually stated as liberalisation or in APEC terminology, ‘trade and investment liberalization and facilitation’. It begins with the classic topic of trade in goods, especially tariffs, and then follows an internal logic. As tariffs were reduced, other barriers to trade became more prominent and so disciplines were placed on export subsidies and production subsidies, or preferences to local producers in government procurement decisions. Services were added to goods and as many services required a commercial presence, investment was further emphasised, direct foreign investment having been promoted as a means of evading tariffs or other barriers. Requirements for commercial presence were only one of a myriad of regulations that make trade more or less possible. Trade facilitation became
a topic for World Trade Organization negotiations although only in a narrow sense of more or less official processes at the border while similar processes were much more widespread and treated as part of trade facilitation in other venues. As the business issue moved from being ‘my goods for your goods’ ‘my factories in return for fair treatment’, intellectual property rights came to the fore and so did disciplines to ensure competitive behaviour. The general effect was a move from tariffs to barriers to international integration. At the same time, this internal logic was supplemented by changes in the external world. The internet made e-commerce prominent, and the desire for inclusive growth directed attention to small and medium-sized enterprises (SMEs). And some traditional questions became part of the general debate such as the conditions under which people worked to produce exports or to compete with imports, and the impact of business on the environment. There is a direct line of continuity from the earliest concerns of the General Agreement on Tariffs and Trade to the current agenda of the World Trade Organization and international economic diplomacy in general. Any a novelty in the current challenge is that management of negotiation is less prominent than it was in 2003 while securing domestic support for regional or global economic integration as a whole is much more so.

Table: Conception of Integration

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<th>Co-operation</th>
<th>Liberalisation</th>
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<td>Physical connectivity</td>
<td>Goods</td>
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<td>Institutional connectivity</td>
<td>Services</td>
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<td>Regulatory management</td>
<td>Investment</td>
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<td>Person-to-person connectivity</td>
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<td>Environment</td>
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The topic was seen by some as ‘trade’, but it was always really the conditions under which business could operate across national boundaries. In the broad sweep of history, suggestions of recent change, extending ‘trade’ beyond its natural boundaries and invading the territory of domestic regulation is distinctly odd. For economists ‘trade’ was always shorthand for ‘barriers’ to international exchange, especially barriers that were subject to discretionary decisions (i.e. excluding transport costs). The policy issue was always the conditions under which businesses operating across borders could generate consumer welfare in both exporting and importing economies. But to many business lobbyists and lawyers, ‘trade’ was invading areas properly regarded as the preserve of other specialities. While discussion was in terms of ‘liberalization’ (or increasingly ‘liberalization and facilitation’, the underlying logic always led to economic welfare, living standards in the relevant region. Only rhetorical advocacy stopped with cross-border operations of large multinationals.

Economic integration could be approached in a different way. Trade could not occur if it was not possible physically to move goods or services from one economy to another. Physical infrastructure was essential. Physical infrastructure has to be accompanied by appropriate rules or processes. At the border, customs procedures have to be efficient and so do rules such as those about what size trucks are allowed on the roads of adjoining economies. Not only border management regulations influence trade, especially when services are considered. The compatibility of regulatory systems in general, especially the willingness of regulators to consider regional ambitions rather than to restrict themselves to protecting domestic consumers, becomes a major component of ‘institutional connectivity’ (especially when domestic producers were assumed to be more respectful of local requirements than foreigners). Finally, there is the connectivity created by personal knowledge and connections extending beyond national boundaries. All aspects of connectivity are conceived as promoting a cooperative approach to increasing the possibilities of economic interdependence and utilising its ability to promote consumer welfare across participating economies. The essence of co-operation is win–win business transactions and governmental processes which ensure that policies do not unnecessarily inhibit competitive cross-border business. It is not Official Development Assistance.

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4 That is additional to the consequences of transport costs. In the late 19th century there was a widespread movement towards increased tariffs; however, it was substantially not an increase in protection but compensation for the way reduced transport costs impacted on the levels of protection accorded domestic producers. There are indications that this was more apparent to contemporary producers than it was to commentators. Cf ‘The United States Tariff and Industrial Protection in the Late Nineteenth Century’, Econ. Hist. Rev. Sec. Ser. XXVIII (Feb. 1975), pp. 84–99, reprinted in C. Knick Harley (ed.) (1996).

5 The reverse might also be true. Indonesian imports are stimulated by the better physical infrastructure between Java and Singapore than between Java and outlying Indonesian islands.
When the two concepts are described in terms like these, it becomes clear that they are different views of the same process. But that is an abstract judgement while politicians and officials look more closely at particular parts of the overall process. They need precision about what is permitted. The conventional process now includes ‘capacity building’ which is usually interpreted to mean promoting capability to engage in economic liberalisation – that is narrower than cooperation designed to identify win–win propositions whether for business or for devising and managing regulatory processes. Both are different from Official Development Assistance but conventional trade negotiators may think that development specialists should manage cooperation rather than ask trade negotiators to do so. Thinking in terms of connectivity relates more easily to the operations of international production networks than does separating goods and services or keeping e-commerce to a separate chapter even if it is labelled a ‘cross-cutting issue’. The connectivity approach leads directly to thinking in terms of inclusive growth, especially the ability of local SMEs to participate in international production networks while the conventional approach allocates SMEs to a separate chapter (usually dominated by financial provisions). Of course, whichever approach is taken, eventually provisions have to be written in legal language and deal with specific issues. But the general approach determines the tone and sense of purpose.

AEC is structured like a conventional FTA in an area where there is widespread inclination to think in terms of connectivity.

(Labour and Environmental clauses are somewhat different. Although they are often seen as an important component of the ‘higher standards’ specified by the TPP, the bland wording does little more than direct attention to obligations accepted as part of other international agreements. The critical question is whether the provisions will be interpreted in relation to international agreements or whether one party, the United States [US] Congress, will succeed in appointing itself as the arbiter of what the words mean. Will the labour provisions in practice be international norms prohibiting slave labour, ‘free association of labour’ as advocated by the International Labour Organization [ILO] and not as understood in US ‘right to work’ states, or the ambitions of US unions in frustrating the comparative advantage of economies with more abundant labour? Similar questions will be asked of the environmental clauses, but we can be sure that as incomes rise more economies in their own interest will preclude production methods which generate pollution of any kind.)

The biggest challenge to the AEC is the growth of anti-globalisation attitudes in the world in general and in ASEAN in particular. The strongest recent manifestations have been Brexit and the successful Trump campaign for the US presidency. Trump is explicitly anti-trade as it is currently practised. His rhetoric suggests that there is a form
of trade diplomacy that he would accept as fair and reasonable – it would ‘Make America Great’ again. But it is impossible to treat his rhetoric as input to rational discussion and the Trump presidency engenders unknown territory for the future of economic interdependence. The US has a stellar record in self-correction, albeit sometimes only after a lengthy delay, but a Trump presidency certainly challenges it. Hillary Clinton was caught in domestic politics and the constraints so imposed would have been significant, but the world would still have been recognisable had she won the presidency. Now it is governed by uncertainty, and uncertainty is a deterrent to investment. While Trump’s campaign offered some prospect of an infrastructure-driven fiscal stimulus for the US economy, private investment is unlikely to support a surge in public spending. Nor is it obvious that investors in other economies will be keen to finance the budget and current account deficits that Trump’s plans seem to envisage despite his protestations to the contrary. The US is unlikely to drive global growth. China is already generating about 40% of the increase in global production, and world trends are likely to continue to be dominated by Asia.

Brexit was not explicitly anti-trade or anti-integration. The advocates of Brexit envisaged continued British access to the EU single market. The precise terms of trade between a non-member United Kingdom and the EU are unknown but they will not do more than make economic interdependence more complex. The significance of Brexit lies elsewhere.

The reasons for the Brexit outcome are obscure. Polling by Lord Ashcroft Polls suggests that three narratives of sovereignty were important: ‘take back control’, immigration, and resentment of marginalisation. They came together and cannot be disentangled. (The Lord Ashcroft Polls offered the three choices of sovereignty, ‘Take Back Control’, immigration, and apprehension of future EU decisions outside United Kingdom control, and Leave voters ranked them in that order. Remain voters adopted the same ranking of modified statements of the same three issues.)6 We might reasonably ask how respondents distinguished such interrelated attitudes; the data are instincts rather than reasoning. However, in the context of elucidating lessons for AEC, we might notice the importance of ‘Take Back Control’ and note that ASEAN has not erected supranational authorities above the member states.

It is also possible to speculate that both the Trump phenomenon and Brexit owe something to the relative growth of Asia, especially China. Some commentators see Brexit as reducing support for the current international system: ‘Brexit is going to be a much bigger and wider problem for New Zealand because of what it means for

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the western commitment to a global order founded on international cooperation.’ (Ayson, 2016) It is probably better to invert that thought and recognise the resentment in former ‘Top dogs’ of how influence over international norms and processes has shifted eastwards: ‘Whatever British voters decide, wealth and power will continue moving eastward throughout the 21st century, Britain’s fate will remain inextricably linked with Europe’s, and people across the West will get even angrier at the elites who fail to prevent these things from happening.’ (Morris, 2016)

The world in which the AEC exists is likely to be less accommodating than it has been in the past, but trends in Europe and America do not predict how ASEAN will develop. ASEAN and AEC do not have ambitions of ‘ever closer union’ and although the United Kingdom’s exemption from that ambition of the EU was not sufficient to relieve English opposition to the EU, we may distinguish the ASEAN and Atlantic experiences. However, anxieties about globalisation certainly exist within ASEAN. One has only to look at concern in some Indonesian business circles about competition from China and pressure to wind back the Indonesia–China FTA rather than build on it towards a more integrationist RCEP.

The challenge to the AEC is the traditional one of managing the adjustments inevitable as individual economies adjust to existence within a set of interdependent economies. The task is to repeat the success of the Asian Miracle of promoting transitions and not resorting to protection of what exists. Francis Fukuyama declares his understanding of a ‘basic college level course’ in economics and recognises the futility of opposing the proposition that ‘free trade is a win–win for trading partners, increasing all countries’ aggregate incomes’ but he identifies the adjustment issue as the major issue: ‘it is not clear what kind of training can transform a 55-year-old assembly-line worker into a computer programmer or a Web designer.’ (Fukuyama, 2016) However, the generalisation of his concern is misplaced. There are numerous records of successful transformation of displaced workers into valued participants in growth industries.\(^7\) Information and computer technology has its own vocabulary and looks as mysterious as ‘rocket science’ but the issue is familiarity more than difficulty. We exaggerate the novelty of the contemporary challenge. *The Economist* (2016) recently disseminated the warning ‘EXPERTS warn that “the substitution of machinery for human labour” may “render the population redundant”. They worry that “the discovery of this mighty power” has come “before we knew how to employ it rightly”.’ But the words are 200 years old – and the sentiments have surfaced several times, with electricity and cars, with ATMs, etc. It is not hysteria we need but reasoned responses: ‘John Stuart Mill wrote in the 1840s that “there cannot be a more legitimate object of the

\(^7\) E.g. Jones (2015).
legislator’s care” than looking after those whose livelihoods are disrupted by technology. That was true in the era of the steam engine, and it remains true in the era of artificial intelligence.’

President-elect Trump is making decisions that are inconsistent with campaign statements, but it is hard to see how he could retreat from his clear commitments to abandon the TPP. At least some of the time, he returns to his promise to remove the US from TPP on his first day in office. The TPP requires ratification within 2 years by at least six members who constitute 85% of the combined gross domestic product of all 12 members – which means that the US, Japan, and four others must ratify it within 2 years. That is unlikely, and indeed if Trump finds a way on his first day in office to guarantee that the US can never ratify TPP, it would be dead from that day onward. Otherwise, it expires in February 2018.

The other 11 members of the TPP could decide to revise the text by changing or eliminating the provision about 85% of total gross domestic product. For some countries, a TPP without the US would still generate significant benefits; New Zealand calculates that the benefits to it would be about two-thirds of those of TPP with the US. Comparable calculations for other countries would vary widely but there would still be net benefits. However:

- Some countries find it hard to conceive TPP without the US. Japan has long regarded the Japan–US alliance as the core of the Asia–Pacific region and although it finds it hard to negotiate bilaterally with the US, it would find it ‘very difficult’ – which usually means ‘impossible’ – to negotiate an agreement excluding the US. The Malaysian government ‘sold’ TPP domestically as the substitute for the failed effort at a Malaysia–US FTA and would find it problematic to explain a TPP without the US. For Viet Nam, access to the US market was an important element of TPP, and in its absence Viet Nam would probably prefer to pursue its own domestic agenda – and FTAs where possible as with the EU.

- While the 11 members would start by thinking that only one change was needed in the existing TPP text, it would quickly be realised that had the US not participated in the negotiations, other provisions would have been different. The temptation to propose another minor change would be irresistible, but each member would want to exploit the US absence in a different way, while there would be residual feelings that the agreement should be such as to attract the US when it comes to its senses. So the 11 economies would find themselves in another negotiation, and they would ask whether they constituted the group where the cost and effort of such negotiation was likely to be most fruitful.
The TPP is effectively dead. There is some nostalgia, especially in Japan and the Republic of Korea, but those who hope for revival from life support might observe that it is now common to say that Doha has been dead since 2008. The Trade Facilitation Agreement might yet be rescued but it has effectively been severed from Doha and stands on its own. Some of the provisions of the TPP might have a similar future. In particular, the emphasis on developing the institutions of individual economies for managing the challenges of newer issues in economic integration, rather than seeking to impose specific rules, is a precedent worth developing.

The RCEP offers much better returns from continuing negotiations. It is ASEAN-led, not, as frequently claimed, China-led, but the presence of China, and the presence of India, mean that its coverage is significant and attractive. It is frequently described as ‘low-level’ in contrast to the TPP’s ‘high standards’ but the Guiding Principles of the RCEP and scrutiny of the actual provisions of the TPP suggest that the eventual gap between the two would not be as great as often alleged. The RCEP is likely to be announced in ASEAN’s 50th year, 2017, and to begin with less ambition, dealing mostly with goods, services, and investment but it should include a commitment to proceed within a specified time to extend towards newer issues of economic integration. It should in any case immediately have a better approach to rules of origin than TPP and so be better adapted to a world of international production networks (IPNs). RCEP is also likely to have more recognition of different levels of development than the TPP, providing different transition paths towards a common objective. But in the case of a recent agreement on an amendment to the Montreal Protocol in the field of environmental agreements, different timelines were welcomed: ‘The amendment set three separate timelines for countries at different stages of development. Rich countries, including the US, will need to reduce HFCs by 85 per cent by 2036. A second group, including China, have to achieve an 80 per cent reduction by 2045 (after peaking by 2024). The final group, including India, must reduce their HFCs by 85 per cent by 2047 (with a 2028 peak). This arrangement represented a concession to India, which was holding out for a better deal than that which China had already signed up to. But even India came to the party, surprising its counterparts by announcing an unconditional phase down of HFC-23 – the most potent of HFC gases – over the next 15 years. This would avoid an equivalent of about 100 million tons of carbon dioxide emissions over that period.’ (Slater, 2016) Such a mechanism could work in the economic integration field too, and could even provide for the specific circumstances of India. There is a strong feeling that the RCEP cannot be too different from the TPP in ‘ambition’ if it is to be credible, but for all the rhetoric about ‘high standards’, ‘gold standard’, and ‘twenty-first century agreement’ the TPP left plenty of room for better catering to the needs of contemporary economic integration while achieving a similar level of overall ambition.
The RCEP offers a way forward for economic integration in Asia. It would be consistent with the global disciplines of the World Trade Organization but it would still be desirable to have clear provisions for trans-Pacific interactions. The APEC Free Trade Area of the Asia-Pacific remains important for this even if the US declines to engage. It will eventually, but anyway there is business to be done with the Pacific Alliance.

**Development Strategy**

Asian leadership in economic integration provides an opportunity to use contemporary thinking. In particular, it would feature ‘inclusive growth’.

The need to attract popular support has brought ‘inclusive growth’ to the fore. In its Yokohama Declaration of 2010, APEC endorsed the ambition of ‘balanced, inclusive, sustainable, innovative, and secure’ growth. We hear less about ‘balanced’ these days as current account deficits and surpluses are less prominent. Indeed, even in the specific form of advocacy that China’s economic strategy should rely less on exports and more on domestic consumption, the rhetoric has been subdued by concern that trade has grown less rapidly relative to output than used to be the case. What should have been seen as an obvious implication of a rise in consumption relative to exports in an economy as large as China is treated as a new source of concern.

‘Inclusive’ growth remains highly visible. The central idea is that all citizens should have an opportunity to participate in the benefits of economic growth. This sometimes gets reduced in political rhetoric to promotion of micro, small, and medium-sized enterprises on the grounds that SMEs are numerous and provide a significant share of employment – as is the case in most economies, while the definition of SMEs varies with the size of each economy. However, it is unrealistic to think that SMEs will ever dominate exports as distinct from being components in international production networks. Just as we have learned that when exports are presented in terms of value added contributed, services become a much larger component than they are in conventional accounts, so if we had the data we should expect that on a value-added basis SMEs contribute a much larger share of exports than is usually realised. Fragmentation of production generates opportunities for SME participation as well as trade in intermediates and there is likely to be overlap in these processes. Furthermore, it is simplistic to think that SMEs would prosper if only they had access to cheaper finance. Just as infrastructure projects are constrained much more by lack of viable project specifications than by the availability of finance, so SMEs are constrained more by their capabilities than they are by finance. Policy concern about inclusive growth should focus less on SMEs than on flexibility and
adaptability throughout the economy – and hence on adjustment assistance for those most experiencing change – than on SMEs.

Sustainability has certainly not diminished in salience, although a significant part has been subsumed into the topic of climate change. In Asia, however, the older topics of pollution, management of water resources, and management of energy remain prominent. Social sustainability also attracts attention, sometimes in the specific topic of food security, usually but not always distinguished from food self-sufficiency, and sometimes in the broader topic of constructing social welfare safety nets while not destroying individual and family responsibilities. All eventually become part of an underlying project of community building. Environmental sustainability is approached through specific topics that contribute towards identifying long-term optima and giving them real substance in decision-making. Social sustainability is central to the ASEAN Social and Cultural Community. We can expect its development to be influential not only within ASEAN but in the wider processes of Asian economic growth, preferably avoiding the extremism or fanaticism which characterises much environmentalism in Europe.

Innovative growth reflects recognition of the role of ‘catching up to the frontier’ in economic growth. The ‘flying geese’ model of the dissemination of growth (and modernisation) from Japan to the Tigers and then to Southeast Asia and China has given way to international production networks but transmission of knowledge remains dominant. Innovation is much less concerned with property rights or even rewarding innovators than it is drawing firms into efficient production processes and utilising the process innovations that they pioneer.

‘Secure’ trade retains a connection with the security agenda as illustrated in the APEC Safer Trade in Asia–Pacific (STAR), but is now much more concerned with topics like traceability of constituents in the context of consumer safety and assurance of standards.

The important point is that Asian economic integration will be pursued within explicit promotion of a growth agenda such as that adopted at Yokohama. While this may sometimes go outside the comfort zones of negotiators happiest to deal with familiar issues of tariff schedules extended to cope with the supplementary issues of the contemporary agenda of trade and investment liberalisation, it provides an immediate approach to addressing the need to attract popular support for economic integration.

For some time, economic integration has been conceived as having at its centre incorporation into the world economy of resources (in the economic sense, including labour supplies) that are not fully exploited. The ‘flying geese’ extended the modernisation of the Japanese economy by drawing into efficient production the cheap
unskilled labour of Southeast Asia. From 1978, the under-utilised labour of China, initially coastal China and then central and western China, could be brought into the global economy. There was always more going on, not least in South America, and from 1990 the labour supply of central and eastern Europe could be freed from the shackles of central planning and absorbed into the global economy.

This conception of world development continues to be fruitful, not least in relation to Africa, but its limitations are becoming clearer. It implicitly gives primacy to the North Atlantic as the driver of demand towards satisfying which under-used resources are mobilised. It descends from ‘export-led’ growth and ultimately from ‘centre and periphery’ models of world economic development.

While declarations of a ‘new development model’ sometimes seem quaint, there are reasons for thinking them appropriate. The links between economies are less concentrated on different supplies of labour and labour-skills. Economies bring different contributions to production networks, whether comparative advantage in natural resources or comparative advantage in different parts of the production process. Those production networks create attractive opportunities for investment whether in production for export or for home consumption.

Connectivity is the key to this conception of development. It is now conventional to distinguish three elements of connectivity – infrastructural, institutional with special emphasis on regulatory connectivity, and people-to-people connectivity. Economies cannot collaborate within a regional economy if they are not connected. Transport linkages, road and rail, sea, or air are essential. Secondly, where physical links exist, the relevant rules must permit their use. Hence, border processes and rules about logistics are crucial. But so are all the domestic regulations that govern the transactions made possible by infrastructure and border processes. Thirdly, interactions amongst people will be needed to support economic interaction whether through the role of the movement of natural persons in managing business or in engendering knowledge of other cultures so as to bring resources to bear on what is demanded. In this conception of development, cooperation is not an optional extra; nor is it development aid or charity. It is not only increasing capability to implement trade and investment liberalisation as formulated in developed economies. Rather, it is an essential element in recognising and implementing the conditions of regional development.

The connectivity conception of development obviously appeals to China. It is appropriate for a large economy with a wide range of both land and sea connections to its neighbours. It is congenial to an economy that has developed large construction industries, which would now have spare capacity if they could service only their domestic
market. It is equally congenial to a large economy that has excelled at export-led growth and built financial reserves for which large-scale development projects could well be attractive uses. The One Belt One Road initiative can be understood as a response that matches Chinese strengths with contemporary developments in the international economy. But the connectivity analysis does not depend on the role of China any more than ‘free trade’ in the 19th century depended on the particular circumstances of the United Kingdom; it is fundamentally an implication of international production networks.

The structure of infrastructural connectivity, institutional – especially regulatory – connectivity, and people-to-people connectivity eventually has much in common with a conception of economic integration in terms of trade in goods, trade in services, investment, disciplines on subsidies, sanitary and phytosanitary measures, government procurement, labour standards, environmental standards, digital trade, and economic cooperation. That is, connectivity eventually covers the same ground as a contemporary FTA. That is not surprising. The essential aim is to construct a set of rules which ensures that business pursuing its own interests also generates a social optimum, and we know regional resources will generate most product when subjected to a minimum of additional restraints through national borders, while additional rules may be needed to ensure that additional resources can be created through learning by doing, that regions which would not otherwise share in the additional output are assisted to adapt, and that individuals within economies who would otherwise not share in the additional output are assisted to adapt (Hawke, 1999). But as we observed before, presentation matters. Connectivity puts inclusive growth at the centre; trade and investment liberalisation is too easily portrayed as advocacy for the interests of large corporations.

**Conclusion**

The AEC has plenty of promise in a fast-changing Asia. Its challenges are to manage implementation, achieving the fundamental purpose of community building and not being seduced into a remote monitoring and evaluation process, let alone being reduced to a tick-box mentality. Implementation and development has to be flexible and able to work with the logic of connectivity despite the pressures of complying with conventional trade negotiation. And it is crucial to retain domestic political support by providing effective transition paths allowing those adversely affected by economic integration to participate in the increased welfare it makes possible. Public understanding of AEC and its international setting is not likely ever to be as widespread as specialists would wish, but a feature shared most clearly by Brexit and Trump is questioning of elite opinions and Asia is not exempt from that trend. Most people learn when their direct interest is engaged, and the environment for integration is best promoted by identifying and
publicising its benefits – how many American and Europeans realise that the affordable travel they enjoy flows from economic growth that in turn depends on international trade? – and by providing credible assurance about adjustment paths for those who experience disruption in their lives because of international competition. Above all, there has to be a direct assault on mistaken perceptions. The rhetoric of the 1%, the alleged failure of ‘trickle down’, and allegations about the consequences of so-called ‘free markets’ and ‘neoliberalism’, even when obviously nonsensical, should not be left unchallenged. Nor should claims about ‘jobs being sucked away’; the relevant image is of a community benefiting from better use of the resources of a wider region while extending adjustment assistance to those who experience change directly. A gap between beliefs and analysis could derail global and regional integration even in Asia.

References


A More Integrated ASEAN: Facilitating Trade in Goods

Lili Yan Ing
Economic Research Institute for ASEAN and East Asia (ERIA) and University of Indonesia

Olivier Cadot
University of Lausanne, Centre for Economic Policy Research (CEPR), and FERDI

Introduction

With 40% of world output in 2014 (up from 30% in 2000) and two-thirds of the world’s economic growth in 2014, the East Asia and Pacific (EAP) region is becoming the world economy’s engine in terms of size and growth, with the Association of Southeast Asian Nations (ASEAN) sitting at its core (IMF, 2015). However, the region’s unprecedented rise exposes it to global economic and political challenges, while its deepening integration requires it to adapt young regional institutions to a rapidly changing economic environment.

Trade facilitation should be viewed as a strategic issue rather than a technical one. Whereas ASEAN has been successful in implementing key commitments, particularly regarding the phasing out of intra-regional tariffs, the regional trading environment remains vulnerable to many factors of entropy, including, amongst other things, a complex web of institutional arrangements that lacks coherence and a large stock of non-tariff measures (NTMs) subject to weak disciplines. ASEAN’s trade facilitation should strive to reduce these vulnerabilities. However, in the absence of a robust supranational institutional framework, progress can only be achieved step by step and be based on consensual propositions. This chapter suggests a number of limited-scope moves to help promote goodwill and soft convergence.

Three key trade facilitation issues are identified to focus on: (i) rules of origin (RoO), and (ii) NTM transparency and streamlining.
In terms of RoO, we argue that the current evolution of the regional ‘noodle bowl’ poses a potential threat to balanced development, for example in the Greater Mekong Region that needs to be addressed by combining a preferential market access strategy with region-wide RoO streamlining. In terms of NTM transparency, we argue that, based on recent analytical and data collection efforts led by the United Nations Conference on Trade and Development (UNCTAD) and the Economic Research Institute for ASEAN and East Asia (ERIA), the ASEAN Secretariat today has the means to assess NTM transparency at the country level. The key problem faced by past efforts to promote transparency, whether at the regional or multilateral level, is one of incentives, as countries typically do not want to expose themselves to criticism for excessive – and possibly protectionist-minded – regulatory activism. Our third recommendation bears on the thorny issue of NTM streamlining and is the most ambitious. The underlying notion is that NTM streamlining should not be viewed as a trade negotiation issue because NTMs are not pure trade policy instruments; the idea of bargaining down, say, the stringency of pesticide residue limits in fruits and vegetables would make little sense, and in general there can be no ‘formula’ nor reciprocity in NTM streamlining. The regional dimension would resurface in a key way, however, and this is a central aspect of our proposal. The creation of similar bodies in all ASEAN member countries and the scope for setting up common training would promote the emergence of a common vision in terms of regulatory principles.

The chapter is organised as follows. Section 2 provides a brief review of some structural features of regional trade in the EAP region, including its potential vulnerability. Section 3 discusses the issue of RoO and market access; Section 4 tackles NTMs. Section 5 summarises the recommendations.

**Out of the ‘Shallow Integration Trap’**

**Regional Integration in Asia: A Success Story So Far**

Intra-regional trade has been very dynamic in the EAP region, growing at an annual average rate of 10% from 1990–2012, twice as fast as in other regions of the world (IMF, 2014). As a result, ASEAN, particularly its five largest economies, is now more integrated than many other regions of the world (Figure 1), and markets have worked effectively to create the ‘single production base’ that was at the heart of

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1 This section presents descriptive statistics that are available for only a few countries with less than perfect overlap from one statistic to the other. As a result, the sample is specific to each statistic; most statements refer to the EAP region to avoid loading the narrative with qualifiers, while figure legends specify what sample is being used.
the ASEAN Economic Community vision. This deepening of trade integration has profound consequences for policymaking, some of which go beyond mere trade policy. For instance, integration has markedly reinforced the synchronisation of business cycles across the region’s major economies (IMF, 2015), underscoring the potential benefits that could be reaped from macroeconomic policy coordination.

![Figure 1: The Share of Intra-regional Trade Is Particularly High in ASEAN’s Largest Economies](image)

Regional integration in EAP has been largely driven by trade in manufactured products (Figure 2), as manufactured products account for over half of ASEAN member countries’ exports except those with large hydrocarbon exports (Indonesia, Myanmar, and Brunei Darussalam).

**Figure 1:** The Share of Intra-regional Trade Is Particularly High in ASEAN’s Largest Economies

ASEAN = Association of Southeast Asian Nations; ASEAN-5: Indonesia, Malaysia, Philippines, Singapore, and Thailand. The ‘China supply chain’ category includes China, Republic of Korea (henceforth, Korea), Malaysia, Philippines, Taiwan, and Thailand.

Note: Share of intra-regional trade in total trade.

Source: Duval et al. (2014).
Figure 2: Manufactured Products Dominate ASEAN Exports

ASEAN = Association of Southeast Asian Nations.

Figure 3: Growth and Poverty Reduction in EAP vs. Other Regions

Note: Regions are defined according to the World Bank’s classification: SSA = Sub-Saharan Africa; ECA = Europe and Central Asia; SA = South Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; EAP = East Asia and the Pacific (Cambodia, China, Fiji, Indonesia, Kiribati, Korea, the Lao People’s Democratic Republic, Malaysia, Marshall Islands, Federated States of Micronesia, Mongolia, Palau, Papua New Guinea, the Philippines, Samoa, Solomon Islands, Thailand, Timor–Leste, Tonga, Vanuatu, and Viet Nam.).
Sources: Cadot et al. (2015); original data from PovCalNet.
The large share of manufacturing in trade and production is a portent of long-term development and poverty reduction, as research shows that manufacturing value added has a high poverty-reduction power compared with value added in mining and even in agriculture. It is also a uniquely powerful vehicle for upward productivity convergence (Rodrik, 2013). Indeed, poverty reduction has been massive in EAP compared with other regions of the world (Figure 3).

Regional integration has also led to increased specialisation in the region. ASEAN’s trade in manufactured products is largely driven by cross-border value chains, with multinational companies distributing productive tasks across countries according to comparative advantage. As a result of this distribution of tasks, each country in the region tends to produce and export what the country located at the next node of the value chain will buy for further transformation. The resulting trade structure is not a traditional ‘intra-industry trade’ and had led to increasing industrial specialisation at the country level in the region, shown in Figure 4 as a decreasing correlation in the specialisation of national trade structures. This has made each Asian economy increasingly interdependent, economically, with its regional partners.

**Figure 4: The Correlation of Industrial Specialisations Has Decreased in Asia**

![Graph showing the correlation of industrial specialisations has decreased in Asia between 1990s and 2000s](image)

*Note: Bar heights reflect a measure of the cross-country correlation of national export structures in terms of products. ‘Asia’ is according to the IMF classification (China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand, Australia, and New Zealand). Source: Duval et al. (2014).*
This increasing specialisation has enhanced efficiency through the exploitation of comparative advantage. Whereas the distribution of productive tasks in manufacturing has taken the form of highly complex networks, the region’s high-income countries (e.g. Japan) typically supply upstream capital-intensive and high-tech components. Low- or medium-income ones provide downstream assembly services, with a number of ASEAN countries in the middle of the value chains. The role of China in EAP value chains has been evolving in a non-conventional fashion. On one hand, the first two columns of Figure 5 show that it has established a very strong position as a downstream assembler of components exported by ASEAN-5 countries. On the other hand, the right-hand side of Figure 5 shows that it has also gained strength as an upstream component supplier, in particular relative to Japan. While the type of components and semi-finished products that China exports for assembly is clearly very different in terms of technology from what Japan exports, this trend is remarkable, reflecting the rise of China’s technological and capital-intensive production capabilities. It is also quite relevant, as we will discuss further below in this chapter, for the textile industry where China is a large upstream producer.

**Figure 5: Asia’s Vertical Specialisation Patterns Reflect Comparative Advantage**

<table>
<thead>
<tr>
<th></th>
<th>1990s</th>
<th>2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN-5 value added in Chinese exports</td>
<td>4.70</td>
<td>4.85</td>
</tr>
<tr>
<td>ASEAN-5 value added in Japanese exports</td>
<td>0.35</td>
<td>0.40</td>
</tr>
<tr>
<td>Chinese value added in ASEAN-5 exports</td>
<td>2.65</td>
<td>2.80</td>
</tr>
<tr>
<td>Japanese value added in ASEAN-5 exports</td>
<td>4.30</td>
<td>4.50</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations.
Note: The value added content in exports is expressed as a percentage of the exporter’s GDP.
Source: Adapted from Duval et al. (2014), Figure 7.
This brief overview of some structural features of EAP trade highlights that regional integration in the EAP region has been efficient, driven by market forces; possibly as a result of this primacy of economics, it has delivered huge gains in terms of growth and poverty reduction compared with many politically driven South–South regional integration schemes. However, there is a flip side to the coin. Precisely because it has been, so far, largely driven by market forces, regional trade growth remains vulnerable to market shocks, which modern history shows can easily get out of hand in the absence of coordination mechanisms.

**But Key Vulnerabilities Remain to be Addressed**

For all the robust growth in EAP regional trade, further trade integration just cannot be taken for granted. First, world trade growth is structurally slowing down, a phenomenon called the ‘Great Trade Slowdown’ (Contantinescu et al., 2015). While the causes of this phenomenon are still poorly understood, statistical analysis suggests that, in many countries, each additional dollar of national income today generates less additional imports than in the 1990s (IMF, 2015). The import slowdown is particularly marked for China, a key market for ASEAN exporters (Figure 6).

Second, in the absence of coordination arrangements for exchange rate and monetary policy, regional trade in the EAP region is also vulnerable to exchange rate shocks. For instance, between 2012 and 2014, under the effect of the Bank of Japan’s monetary easing policy, the yen depreciated 40% against the dollar and 36% in nominal effective terms. While relieving pressure on the profit margins of Japanese exporters, the yen’s depreciation negatively affected those of Korean firms exporting to Japan (IMF, 2014) and may well have affected, directly and indirectly, those of ASEAN exporters. Exchange rate shocks of such large magnitude create uncertainty for exporters and investors, reducing incentives to invest in market penetration, and may even create a risk of competitive devaluations in the region.

Third, in the (unlikely) event of a breakdown of goodwill in the region, World Trade Organization (WTO) disciplines could prove weak in the face of pressures for tit-for-tat trade protection measures. One reason is that most ASEAN countries have bound their tariffs at levels substantially higher than those currently applied, leaving room for discretionary changes (Baldwin, 2007). In addition to tariffs, NTMs can also play a substantial role as low-visibility trade barriers; as we will see further below, ASEAN has a stock of such NTMs that could potentially pose a threat to regional integration.

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2 In technical terms, the income elasticity of trade has shrunk from 1.59 on average for 1980–1998 to 1.16 for 2000–2014.

3 On the effects of exchange rate volatility on trade and investment patterns, see Urata et al. (2008).
Figure 6: The Great Trade Slowdown

(a) Trade growth is slowing down globally

(b) China’s absorption power for manufactured products is decreasing

Note: Average annual growth of import volumes, by period, all countries.

GDP = gross domestic product.

Source: Adapted from Constantinescu et al. (2015).

In the face of these economic vulnerabilities, EAP regionalism lacks a strong institutional anchor. In policy terms, regional integration in EAP is a relatively recent trend compared with other regions, dating back essentially to the post-2000 period (Baldwin and Kawai, 2013). Since then, trade agreements have proliferated, some with a number of so-called ‘WTO+’ features (features that go beyond multilateral commitments). ASEAN has emerged as the core of this complex web, with compliance with the main commitments of the ASEAN Trade in Goods Agreement (ATIGA) progressing on schedule – better than in many other regional blocs in the world, especially South–South ones – and intra-bloc tariffs largely eliminated since 2010. However, the ‘noodle bowl’ creates centrifugal forces, with competing integration arrangements such as the Trans-Pacific Partnership (TPP) and bilateral agreements with the European Union (EU), potentially creating policy or institutional inconsistencies to be sorted out.
In purely economic terms, despite progress in the implementation of its commitments, ATIGA’s preferential trade regime does not seem to have been perceived by the private sector as very attractive, its utilisation rate appearing (on the basis of the limited data available) somewhat uneven (Figure 7).

One must be careful in interpreting the low uptake of ATIGA preferences. To some extent, it reflects a rather desirable feature of EAP regionalism – that it is ‘open regionalism’ emerging against a background of openness to the outside world and generally moderate most-favoured-nation (MFN) tariffs. However, it also mechanically limits the possible depth of tariff preference margins and, therefore, their relative attractiveness. At the sectoral level, low uptake of preferences also reflects the already noted dominance of manufactured products, particularly high-tech ones such as electronics and machinery, where tariffs are typically moderate, in EAP trade. In other words, it reflects structural features of regional trade rather than simply ineffective design or implementation.
However, the low uptake of ATIGA preferences also reflects an unfinished trade facilitation agenda, with two issues sticking out. First, the EAP noodle bowl creates a conflicting and cumbersome environment in terms of RoO (Baldwin and Kawai, 2013; Ing and Cadot, 2016; Inama and Sim, 2016). Second, NTMs, on which information is sometimes difficult to find for private sector operators (especially small and medium-sized enterprises), fragment markets and generate a regulatory burden that raises production and distribution costs. We now turn to a more detailed analysis of these two key issues and to a discussion that could put forward practical initiatives to tackle them effectively.

Streamlining Rules of Origin in the EAP Region

Trade facilitation is not just about reducing cross-border transaction costs: it is about reducing the vulnerability of the region’s unique network production structure to economic shocks and strengthening coordination, safeguards, and policy response mechanisms, particularly in the key areas of RoO and NTMs. We start with RoO and show that the issue of RoO streamlining must be considered jointly with that of market access.

ASEAN’s Rules of Origin: Simple on Paper, Complicated in Practice

On paper, the ATIGA’s RoO have a relatively simple structure compared with other systems such as the North American Free Trade Agreement (NAFTA) or Pan-Euro. ATIGA RoO rely primarily on a regional value content, and the importer can in some cases choose which rule to use amongst two alternative ones, like a value content or a change of tariff classification. The most prevalent combination of instruments is a choice between a 40% regional value content and a change of tariff heading (about a third of all products) or a change of tariff sub-heading (6% of all products).

However, in spite of their apparent simplicity, ATIGA’s RoO seem to have substantial trade-inhibiting effects, with recent research putting their ad-valorem equivalent (AVE) at about 3.40% (Ing and Cadot, 2016). This means that RoO inhibit ASEAN’s trade by an amount roughly equivalent to one quarter of its MFN tariffs. Put differently, RoO seem to ‘nullify’ one quarter of the effect of tariff-preference margins. The trade-inhibiting effect of ATIGA’s RoO varies substantially across sectors (Table 1), with implications that differ across member states. Whereas effects are typically small in sectors such as electronics or capital equipment where MFN tariffs are low, they seem much larger in sectors like fats (6.7%), leather products (9%), textile and apparel (8.3%), or footwear (12.7%). An analysis by instrument confirms that the ‘textile rule’ appears to be the most penalising of all RoO (Ing and Cadot, 2016).
### Table 1: Average AVEs for all RoO Instruments, by Section

<table>
<thead>
<tr>
<th>Section</th>
<th>Summary Description</th>
<th>Average AVE (%)</th>
<th>Trade Weights a/</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Live animals; animal products</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2</td>
<td>Vegetable products</td>
<td>1.91</td>
<td>2.61</td>
</tr>
<tr>
<td>3</td>
<td>Animal or vegetable fats</td>
<td>6.67</td>
<td>0.58</td>
</tr>
<tr>
<td>4</td>
<td>Food, beverages, and tobacco</td>
<td>1.73</td>
<td>3.05</td>
</tr>
<tr>
<td>5</td>
<td>Mineral products</td>
<td>1.52</td>
<td>19.59</td>
</tr>
<tr>
<td>6</td>
<td>Products of the chemical or allied industries</td>
<td>3.50</td>
<td>9.70</td>
</tr>
<tr>
<td>7</td>
<td>Plastics and articles thereof; rubber and articles thereof</td>
<td>1.87</td>
<td>4.63</td>
</tr>
<tr>
<td>8</td>
<td>Leather and leather products</td>
<td>9.05</td>
<td>0.60</td>
</tr>
<tr>
<td>9</td>
<td>Wood and articles of wood</td>
<td>–3.20</td>
<td>0.77</td>
</tr>
<tr>
<td>10</td>
<td>Pulp and paper</td>
<td>4.98</td>
<td>1.75</td>
</tr>
<tr>
<td>11</td>
<td>Textile and apparel</td>
<td>8.29</td>
<td>4.06</td>
</tr>
<tr>
<td>12</td>
<td>Footwear</td>
<td>12.67</td>
<td>0.77</td>
</tr>
<tr>
<td>13</td>
<td>Cement, glass, and stone</td>
<td>2.42</td>
<td>0.93</td>
</tr>
<tr>
<td>14</td>
<td>Precious metals and stones</td>
<td>3.81</td>
<td>2.97</td>
</tr>
<tr>
<td>15</td>
<td>Base metals and articles of base metal</td>
<td>–0.46</td>
<td>7.77</td>
</tr>
<tr>
<td>16</td>
<td>Machinery and electrical equipment</td>
<td>–0.36</td>
<td>25.89</td>
</tr>
<tr>
<td>17</td>
<td>Vehicles</td>
<td>6.89</td>
<td>8.99</td>
</tr>
<tr>
<td>18</td>
<td>Precision instruments, optics, watchmaking</td>
<td>3.34</td>
<td>3.33</td>
</tr>
<tr>
<td>19</td>
<td>Arms and ammunition; parts and accessories thereof</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>20</td>
<td>Miscellaneous manufactured articles</td>
<td>–3.37</td>
<td>1.99</td>
</tr>
<tr>
<td>21</td>
<td>Works of art, collectors’ pieces and antiques</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

**Average (%)**

- Simple: **3.40**
- Trade-weighted: **2.09**

AVE = ad-valorem equivalent; RoO = Rule of Origin.

**Note:** Trade weight calculated using world trade, following Leamer (1974), averaged over 2010–2011. Only Sections where RoD AVEs are significant used in their calculations; Section 1 omitted because entirely covered by ‘wholly obtained’ rule.

**Source:** Ing and Cadot (2016).

As discussed by Baldwin and Kawai (2013) and, more recently, by Inama and Sim (2015), RoO in the EAP region also suffer from fragmentation and a lack of consistency, part of the noodle bowl syndrome. In addition to its own syndromes, the EAP region’s strong trade linkages with the global economy expose it to the inconsistency of RoO models in the world’s big blocs. Irrespective of the inherent stringency of RoO, such inconsistencies will impose a burden on producers in terms of both production design and documentation that could be reduced by coordination and streamlining.
**Going Forward**

To identify the right direction where to push RoO streamlining, one must first understand how, in their current form, they risk distorting production and investment decisions in ways that could prove dangerous for the industrial development in developing countries. For that, one needs to go back to the issue of how production networks are designed. We saw in Section 1 of this chapter that the typical trade pattern in the region, based on comparative advantage, is one where medium- or high-income countries tend to specialise in the upstream (component manufacturing) part of value chains while low-income ones, which have the lowest labour costs, tend to specialise in the downstream (assembly) part. Figure 8 illustrates the generic value chain of a cotton shirt. Upstream operations such as spinning (which produces yarn) and weaving (which produces fabric) are intensive in capital and energy. They are best located in middle-income countries with strong access to capital markets and a good energy infrastructure; China has also positioned itself as a major player in that segment where its giant factories reap economies of scale. The same applies to dying and cutting, which is increasingly done with high-tech laser-guided machinery to meet the buyers’ precise specifications. By contrast, assembly operations display little or no economies of scale and require competitive labour costs but little upfront investment or energy.

![Figure 8: Comparative Advantage Along a Cotton Shirt’s Value Chain](image)

CLM = Cambodia, the Lao People’s Democratic Republic, and Myanmar.
Source: Author.

China has a very large garment assembly activity; it is strong at both ends of the value chain due to its size and internal diversity. However, rising labour costs are rapidly eroding its cost competitiveness in the downstream segment of the value chain, generating incentives for producers to offshore production to low-income countries with
lower labour costs. Southeast Asian countries stand to benefit massively in terms of jobs, growth, and poverty reduction from this opportunity, but wrong incentives could also thwart their ability to reap those benefits.

To be attractive as assembly platforms to investors, countries in the downstream part of the value chain need not only competitive labour costs: They also need (i) preferential access to developed markets and (ii) unrestricted access to the semi-finished products to be assembled, which they must import from countries that produce them competitively. This is where the combination of complex regional arrangements and RoO can play a possibly perverse role.

To see this, consider the problem of an investor wanting to export garments from Viet Nam to the United States. For the garments to be eligible for preferential access to the United States market, the investor must be able to procure eligible yarn, then fabric, to produce the garments. Chinese-made yarn will not be eligible, so one possible alternative will be to set up integrated textile-garment production (all the way down from the yarn to the garments) in Viet Nam. Such a business decision can make sense, irrespective of RoO, to facilitate coordination and quality control all along the value chain; what matters for us is that it is a largely irreversible one, as capital-intensive spinning–weaving operations cannot be moved easily.

Consider now the CLM countries (Cambodia, the Lao PDR, and Myanmar) as an alternative platform for garment assembly. Without preferential access to either United States or EU markets – beyond the shallow preferences of the General Scheme of Preferences (GSP) – their attractiveness is limited. Thus, the CLM countries are likely to remain dependent on imported yarn and fabric for a while; but then, under current RoO, even if they had preferential access to United States or EU markets, eligibility would be a problem. Thus, the CLM countries are doubly penalised: (i) by lack of strong, preferential access to Organisation for Economic Co-operation and Development (OECD) markets; and (ii) by RoO that are, de facto, more penalising for them than for Viet Nam given their economic environment. In other words, the combination of current market-access arrangements and RoO could result in the agglomeration of an increasingly powerful and concentrated textile-garment cluster in Viet Nam (already a powerhouse in that sector), at the expense of CLM countries left ‘in the dark’, with potentially adverse consequences for the balanced development of the Mekong subregion.4

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4 This syndrome could be even amplified under a Viet Nam–EU Free Trade Agreement involving cumulation with Korea, i.e. granting eligible treatment to garments assembled in Viet Nam from Korean fabric.
To promote a better and more balanced trade-led development strategy for the region, policymakers should focus on two key issues: forward and backward linkages. In terms of forward linkages, as the CLM countries are, by their comparative advantage, the ones located downstream in the textile-garment value chain, they have the most to gain from preferential access to EU markets, beyond the current GSP’s shallow preferences. In terms of backward linkages, ASEAN needs RoO to allow for the export of garments assembled from fabric produced in countries where they can be produced at competitive costs. This requires so-called ‘cumulation’ rules to allow fabric produced, say, in Viet Nam, to be assembled into garments in CLM countries and exported to OECD markets under substantial tariff-preference margins.

From Trade Facilitation to Deep Integration

We now turn to the second key trade-facilitation issue faced: non-tariff measures (NTMs). While many NTMs stem from non-trade policy objectives (for example, food safety or environmental protection), they can also be used as instruments of commercial policy; even NTMs pursuing legitimate, non-trade objectives can have restrictive or distortionary effects on international trade. Thus, they are at the core of ASEAN’s trade-facilitation agenda.

NTMs Generate Business Costs but Respond to Societal Demands

While tariffs were successfully phased out in ASEAN, NTMs tended to proliferate (Figure 9), creating a risk that one type of barrier substitutes for another with little net gain in terms of trade facilitation.

The costs imposed by NTMs on businesses are of three sorts: enforcement, sourcing, and process adaptation. First, enforcement costs relate to the effort that private companies must expend to show compliance with NTMs. Because these costs are largely fixed, they weigh more heavily on small firms than on larger ones. They might also weigh more heavily on foreign firms less familiar with local administrative processes, although foreign firms tend to be larger ones that can purchase legal and/or consulting assistance locally. Thus, through enforcement costs, NTMs may affect differentially local vs. foreign firms and small vs. large ones. Second, sourcing costs are generated by the switch from low-grade intermediate sources to high-grade ones to meet NTM standards. A given standard can have different effects depending on products and users. Last, process-adaptation costs relate to changes in capital equipment needed to meet NTM standards. For instance, dairy standards force farmers to buy expensive equipment to ensure that milk is not contaminated by bacteria before being pumped.
into tank trucks. Investment in compliant capital equipment typically also requires the upgrading of operator skills. Process-adaptation costs are essentially fixed costs and, therefore, affect small firms more than larger ones.

These costs are compounded when NTMs lack transparency, as uncertainty or lack of understanding can lead to costly business decisions, in particular when choices of machinery and capital equipment, which are typically irreversible, are involved. Beyond direct trade-facilitation gains, better transparency in NTMs is the best guarantee against capture by special interests. In the following section, we propose a feasible approach to promote progress in NTM transparency.
Striving for NTM Transparency

Transparency rests on two pillars: accurate data and open dissemination. In the area of NTMs, both have been lacking until recently, but the landscape is rapidly changing, in particular in the EAP region, under the impulse of a cooperative project led by ERIA in collaboration with UNCTAD, WTO, and the World Bank. In the last decade, UNCTAD has led a conceptual effort to classify all NTMs according to a clear and exhaustive nomenclature, the Multi-Agency Support Team (MAST), which was adopted in 2012 by the WTO for sanitary and phytosanitary measures and technical barriers to trade notifications and is, therefore, now the authoritative international NTM nomenclature (Table 1).

Based on this, UNCTAD has since then led, together with the World Bank, an effort to encourage all countries to collect NTM inventories based on it. While coverage and collection approaches were initially haphazard, they have progressively converged to a uniform template. In ASEAN, ERIA in 2015 took the responsibility of an exhaustive and consistent NTM data collection project that has now produced data for all 10 ASEAN member countries. The data take the form of national inventories of all NTMs and all products covered by each NTM, at the most detailed level (up to 64 types of measures and national tariff lines at HS-8 digit for most of ASEAN countries, HS-9 digit for Malaysia, and HS-10 digit for Indonesia).

**Table 2: The MAST NTM Classification**

<table>
<thead>
<tr>
<th>Import</th>
<th>Technical measures</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>A  Sanitary and Phytosanitary Measures</td>
</tr>
<tr>
<td></td>
<td>B  Technical Barriers to Trade</td>
</tr>
<tr>
<td></td>
<td>C  Pre-shipment Inspection and Other Formalities</td>
</tr>
<tr>
<td>Nontech</td>
<td>D  Contingent Trade-Protective Measures</td>
</tr>
<tr>
<td>Measures</td>
<td>E  Non-automatic Licensing, Quotas, Prohibitions and Quantity-Control Measures Other Than for SPS or TBT Reasons</td>
</tr>
<tr>
<td></td>
<td>F  Price-Control Measures, Including Additional Taxes and Charges</td>
</tr>
<tr>
<td></td>
<td>G  Finance Measures</td>
</tr>
<tr>
<td></td>
<td>H  Measures Affecting Competition</td>
</tr>
<tr>
<td></td>
<td>I  Trade-Related Investment Measures</td>
</tr>
<tr>
<td></td>
<td>J  Distribution Restrictions</td>
</tr>
<tr>
<td></td>
<td>K  Restrictions on Post-Sales Services</td>
</tr>
<tr>
<td></td>
<td>L  Subsidies (Excluding Export Subsidies under P7)</td>
</tr>
<tr>
<td></td>
<td>M  Government Procurement Restrictions</td>
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<tr>
<td></td>
<td>N  Intellectual Property</td>
</tr>
<tr>
<td></td>
<td>O  Rules of Origin</td>
</tr>
<tr>
<td>Export</td>
<td>P  Export-Related Measures</td>
</tr>
</tbody>
</table>

MAST = Multi-Agency Support Team; NTM = non-tariff measure; SPS = sanitary and phytosanitary; TBT = technical barriers to trade.

Source: UNCTAD (2012).
National NTM inventories are all based on legal texts and can be exploited statistically to understand what sectors are affected and what trade or non-trade purposes are pursued by NTMs (for a preliminary analysis, see Ing et al., 2016). Most importantly, they can serve as entry points to more detailed regulatory information, including business-relevant provisions, processes, workflows, and relevant official forms. For this, two conditions must be met. First, the data must be updated as frequently as possible (if possible in real time, and at the very least once a year). Second, the data and deeper regulatory information must be made readily available on each country’s trade portal. The WTO’s Trade Facilitation Agreement (TFA) mandates that all WTO members must maintain trade portals with the basic information that importers need. A ‘WTO+’ reading of the TFA would make the trade portal the natural repository of all information on NTMs, based on the data that was initially collected by ERIA. For this, countries should designate focal points in charge of updating regulatory information from the various ministries and agencies involved.

The key challenge facing past transparency efforts at both multilateral and regional levels is one of incentives, as countries typically do not want to expose themselves to criticism by betraying excessive and possibly protectionist regulatory activism. While the WTO’s notification mechanism has not been very successful in ensuring compliance, regional groupings such as ASEAN could be more successful in overcoming incentive problems through a permanent ‘beauty contest’ whereby countries are scored in terms of transparency. Recent research (Ing, Cadot, and Walz, 2016) provides a conceptual blueprint of how to rank countries formally in terms of their transparency to reward the most transparent and expose the least ones.

**From Transparency to ‘Dynamic Disciplines’**

As discussed earlier in this chapter, beyond transparency and direct trade costs, NTMs, left unchecked and subjected to limited multilateral disciplines, pose a potential threat to the stability of EAP’s regional trading environment. Yet, at the same time, NTMs are not just trade-policy instruments that can be negotiated down like tariffs; in fact they should not, as they often serve legitimate non-trade objectives. Negotiating down the stringency of pesticide residue regulations in fruits and vegetables to facilitate trade would not only be doomed politically: it would make little sense.

Although NTM streamlining at the regional level could easily be viewed as a key part of any trade-facilitation agenda, paradoxically the issue should not be approached through a trade angle. There are two reasons for this. First, as already mentioned, watering down consumer protection for the sake of more trade makes little sense. There is a second reason as well. If governments see NTM streamlining as concessions to their
partners, they will strategically wait for reciprocal concessions to be made. But there can be no simple ‘formula’ to negotiate down NTMs, which are often both indivisible and multiform, and their socially optimal stringency varies according to income levels; so there can be no real reciprocity. Regional bargaining on NTMs is doomed by design, and the most likely outcome is deadlock; for instance, recent attempts in East Africa (Common Market for Eastern and Southern Africa [COMESA], East African Community [EAC], and South African Development Community [SADC]) have failed to translate into action, while Mercosur has also had limited success in eliminating NTBs (Kreinin and Plummer, 2002).

Instead, what we propose here is to approach NTM streamlining through the angle of national regulatory-improvement agendas. Even when NTMs are not hijacked by special interests for protectionist purposes, NTMs are often poorly designed because authority over them is fragmented between agencies and ministries with narrow mandates and no formal mechanisms to internalise ‘spillovers’ from one area to another (say, from consumer protection to industrial competitiveness). As a result, conflicts between ministries tend to be resolved by political horse-trading with outcomes that are not socially optimal.

What we propose here could offer a blueprint for an ASEAN-wide approach to regulatory improvement. Taking a ‘WTO+’ reading of the TFA, depending on national circumstances, these NTM committees are divisions of trade facilitation, NTMs, national single window, investment procedure and regulations, or free trade agreements and/or economic cooperation committees, bringing together representatives of relevant line ministries. Crucially, the committees are endowed with technical staff capable of performing analytical reviews and producing recommendations for regulatory reforms to be submitted to high-level arbitrage. The analytical work of NTM committees has already produced very substantial reforms, such as Myanmar’s major overhaul of its import-licensing regime.

The proposed set-up is illustrated in Figure 10, taken from Ing et al. (2016), where the proposed regulatory supervision body is called a ‘National Economic Council’ (the name can vary according to national circumstances). The left-hand side of the figure shows the entry points into the process, which may include private-sector complaints, non-governmental organisations’ petitions, and other segments of civil society. It is also important that the National Economic Council be allowed to seize cases on its own initiative, particularly in the early stages of its life where it may have low visibility and private-sector complaints may be slow to come. The upper part of the figure shows higher levels (for example, the office of the president or prime minister), which may be where all reviews and decisions on trade and investment policy and
regulations will be agreed and set. Colour codes illustrate possible areas of National Economic Council competence, although more can be included.

Although our proposal means taking back the issue of NTM streamlining at the country level, there could be tremendous gains in terms of regional trade facilitation if it was promoted as an ASEAN-wide approach. Similar regulatory-supervision bodies created in all 10 ASEAN member countries could share staff training (with assistance from the ASEAN Secretariat and development partners), leading to soft regulatory convergence based on shared review methods and concepts. This would facilitate regulatory cooperation between member countries at the technical level, with technical staff sharing information and resolving issues below the media-political radar screen before they become friction points. Such informal technical cooperation was the hallmark of Franco-German cooperation in the early days of European integration and proved a powerful engine of convergence and reduction of friction, something that is lacking in ASEAN and could be particularly beneficial given the relative lack of political drive for integration compared with post-war Europe.

**Figure 10: Proposed Institutional Setup**

- **Parliament**
- **President/Prime Minister**
- **Legal Office: Legal reviews**
- **National Economic Council**
  - Strategic and Technical Review
  - Non-Tariff Measures
  - Trade Facilitation
  - National Single Window
  - National and Regional Investment Regulations and Procedures
  - Trade Agreements and Economic Cooperation
- **Line Ministries**

NGO = non-governmental organisation.
Source: Ing et al. (2016).
In the medium term, regulatory supervision bodies could and should be merged with antitrust bodies. There are conceptual, practical, and political reasons why such a merger would make sense. First, at the conceptual level, monopolies often need regulatory-sanctioned barriers to entry to persist, while economically toxic NTMs are often those that create monopolies, so the issues are largely intertwined and should be examined jointly. Second, at the practical level, the skills needed to perform regulatory and antitrust reviews are the same, essentially law and industrial economics; so there is a clear case for ‘economies of scope’ in terms of staff skills and use. Third and lastly, at the political level, both regulatory and antitrust supervision necessarily involve battles that can be won only with credibility and clout. Our third recommendation is to promote the simultaneous creation of a regulatory supervision body as an original and innovative road map to the thorny issue of NTM streamlining at the regional level.

Summary of Recommendations

To sum up, this chapter recommends:

- The creation of an RoO task force at the ASEAN level with a mandate to review the ‘noodle bowl’ of RoO and formulate recommendations for its streamlining, taking into account the crucial linkages between the region’s market-access strategy with major developed country markets and the needs of balanced regional development;
- The creation of an institutional mechanism at the ASEAN Secretariat to foster NTM transparency through continuous NTM data collection and dissemination and the setting up of a ‘stick and carrot’ mechanism, which could perhaps be linked to trade facilitation fund allocation, in terms of NTM transparency based on methodologies proposed in recent research;
- The promotion of regulatory supervision bodies in all ASEAN member countries, each with a mandate to review and improve key business-relevant regulations.

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Bringing ASEAN into the Global Services Network Revolution

Christopher Findlay
Executive Dean, Faculty of the Professions
University of Adelaide

Introduction

The services sector is already relatively large and growing in the Association of Southeast Asian Nations (ASEAN) so that its performance has significant implications for the economies of the region. Some effects are direct, through its own performance, and others are indirect, through its contribution to the performance of other sectors. There is scope for the services sector to make an even greater contribution than it has so far, including to the creation of ‘real jobs’ and not simply offering employment of ‘last resort’. However, significant reform, which is difficult in this sector, is a condition for capturing these opportunities. There is also a risk that a stronger contribution of services may be associated with issues of lack of inclusiveness in the growth that it induces. These are the topics of this chapter.

The next section discusses some basic data about services, their scale, their types, and their nature. One question is why the share of services in the economy grows as income grows. The relative positions of different ASEAN economies with respect to services are also noted.

The third section of the chapter discusses the nature of and the opportunities arising from the services revolution under way. This includes the application of new technology to services, the emerging closer collaboration of goods and services producers, and the increasing tradability of services. The section reviews an older argument that services sector growth is bad for overall productivity growth.

The fourth section includes discussion of ways to capture the opportunities of section 3. The earlier discussion in section 2 of the nature of services transactions provides a checklist of talking points, which include institutional factors, the policy environment, infrastructure quality, and human resources investment.
The chapter concludes with a discussion of the remaining challenges, especially related to the design of the policy reform agenda. This includes a review of the value of regional cooperation in ASEAN on services policy.

**Services – What Are They?**

The change in the share of services in gross domestic product (GDP) in ASEAN member economies and in the dialogue partners of China, including Hong Kong, Republic of Korea (henceforth, Korea), Japan, Australia, and India is shown in Figure 1. In all cases the services share increased. ASEAN members report of the order of at least 40% of output in services while China is at 50% according to these data in 2015: Thailand and the Philippines as well as Japan and Korea are in a group around 60%, while Singapore, Australia, and Hong Kong are at 70% and higher. Significant increases in the share have occurred in the Philippines, Malaysia, Singapore, and China since 2000.

![Figure 1: Service Sector Shares of GDP, 2000 and 2015](image)

GDP = gross domestic product; Lao PDR = Lao People’s Democratic Republic.

Source: ADB (2016).
Figure 1 shows rising shares of services in GDP over time. This could be due to technological change, including in the ways that business is organised, as explained below. Income per capita also rose over this period, which is another factor. Figure 2 shows a cross section of shares of services in GDP compared to income per capita. Higher incomes are associated with a higher services share of output, summarised by the positive slope of the trend line in the figure.

While the trend line in Figure 2 is linear, Eichengreen and Gupta (2011) observed a more complex relationship between the services share of output and income levels. They found that the share of services in output rises with income at lower income levels, but at a decelerating rate, and a later stage in which the services share rises at an accelerating rate as economies move from middle to high incomes. This last stage begins at US$3,800 (2000 purchasing power parity [PPP] values) in their 1950–2005 data set.

Eichengreen and Gupta distinguished three groups of services to deepen their analysis of the origins of the two stages of growth in the services share of output. One group they call the traditional services such as wholesale and retail trade, and transport and storage. The second is a group of services mainly consumed by households such as education, health, hotels, restaurants, and personal services. The third is a group of ‘modern’ services such as finance, business services, communications, computer services, and
legal services. In their data, the share of group one services declines over time, the share of the second group grows faster from middle-income levels, and the third group performs likewise but especially at higher income levels.

A number of factors contribute to these trends, according to Eichengreen and Gupta. These include income elasticities of demand, tradability, technology, and the demand by firms for intermediate inputs. Demand for services comes from household demand, export demand, and demand from other sectors. The tradability of services affects the scope for growth through exports. Technological change of interest occurs through the application of information and communications technology (ICT), which leads to better performance and more sales of services in markets. Firms demand intermediate inputs when they are willing to contract out the provision of ‘modern’ service activities, rather than providing them in house.

Eichengreen and Gupta refer to low levels of the household income elasticity of demand to explain the decline in the share of those services in group 1. They also refer to lower tradability of these activities, which reduces the scope for growth through exports, and the lesser scope to apply information and communications technology in these sectors, which also impedes their growth. These features of lack of tradability and limits on the application of technology may have been evident in their sample period, but recent events challenge this assessment. Much of the revolution now in progress applies in these sectors, as discussed further below.

The same factors related to demand, tradability, and technology apply to the second and third groups of services but with reverse effects. Group 2 services are more exportable, have a higher household income elasticity of demand, and show more scope for productivity growth. These forces are even stronger, Eichengreen and Gupta argue, for the third group.

The change in demand from other sectors for services is another explanator of the growth in services sales. As firms shift to outsourcing rather than in-house provision, the consequence is growth in the services sector according to the national accounting data. But outsourcing of services has a feature that differs from the procurement of intermediates in goods production. As Hill (1977) defined it, a service transaction occurs when one firm adds value to the products owned by another (or to a person). A firm could, for example, employ labour and capital to provide transport services in-house (where it would appear as part of its value adding effort) or it could contract out the provision of that activity. However, the transport company would not take ownership of the products it was handling.
Decisions to contract out can change over time. The decision to cease production in-house leads to a transaction at arm’s length, which requires a contract. Both parties must be confident that the contract can be enforced. This confidence is related to the quality of the institutions of an economy. Issues of confidence will be especially important for complex transactions, which are more likely to be associated with the so-called modern services. Rising confidence in contracting, or using the market, is therefore likely to be associated with a rising share of services in the economy, but especially modern services. The determinants of institutional quality are complex, but there is a relationship with income, though the direction of the causation is also debated. This relationship, however, helps explain the link of the surge in the services output share with higher incomes.¹ Income growth means that the economy eventually meets a threshold at which there is a widespread change in the confidence to use markets to buy services.

Eichengreen and Gupta, however, questioned the relative importance of the contracting out process as a source of services output growth. This follows their inspection of input–output coefficients (the use of services as intermediates in the value of output of other sectors) in the United States and other advanced countries as well as India. They are not convinced that outsourcing has been an important driver of services sector growth. More recently, however, Thangavelu, Nuryartono, and Findlay (2016) found a different situation where the use of services in Indonesian manufacturing has increased over time.

The expectation in this framework is that modern services will tend to grow more rapidly at higher levels of income. These are also the skill-intensive sectors. Buera and Kabowski (2012) provided data for the United States on the share of college educated employees in different service activities. Table 1 summarises the range of values of these shares for the three groups of services.

Table 1: Share of College Educated Employees by Groups of Services

<table>
<thead>
<tr>
<th>Group 1</th>
<th>0.03 to 0.36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>0.07 to 0.32</td>
</tr>
<tr>
<td>Group 3</td>
<td>0.27 to 0.70</td>
</tr>
</tbody>
</table>

Source: Calculated from data provided by Buera and Kabowski (2012).

¹ The option of contracting applies to households (for example, household cleaning services or maintenance) and for personal services (such as education or health). Buera and Kabowski (2012) provided a model of household decision-making which also leads to expectations of a threshold level of income above which the services share of output surges.
Table 1 shows some overlap in values and in fact there is little difference between
the first two groups. But the range of values is significantly different for group 3.
This situation highlights a risk, which is the lack of inclusive growth. In this framework,
the economy reaches a point where the skill-intensive modern sector starts growing
relative to the traditional sectors that are less skill-intensive. Demand for skilled labour
is increasing in this scenario and the wages of skilled labour could also increase and
would do so relative to the wages of unskilled labour. There remains, however, a part
of the services sector that could still be called ‘the employer of last resort’ (Manning
and Aswicahyono, 2012). This includes elements of services of categories of groups 1
and 2 (though noting the observation above that the services revolution also applies in
some of these areas). Wages in the modern sector rise more rapidly, which contributes
to a situation of a widening of the income distribution, in an environment where similar
forces in manufacturing are already leading to a ‘hollowing out’ of employment in
that sector. There is a risk, therefore, that events in the services sector will reinforce the
changes in manufacturing, which has negative consequences for the political support for
structural change, including that induced by openness and trade. Later sections include
further reference to the role of investment in human capital in this context.

The discussion so far has focussed on the positive relationship of the services share of
output to income per head. There is also considerable variation around the trend line in
Figure 2. ASEAN economies located below the line include Thailand, Malaysia, and in
particular Indonesia. One factor related to the size of the services sector is the overall
structure of the economy and the demand for services as intermediate inputs by the
rest of the economy. Organisation for Economic Co-operation and Development data
show that some sectors are relatively light users of services as intermediates, such as the
resource sectors. Economies with larger shares of outputs in those sectors may then also
have smaller aggregate services sectors. The performance of the sector also matters,
since that affects the willingness to contract out and buy services in markets, and the
drivers of services sector performance are a theme of the discussion below.

Finally, an interesting association is that between the services share of output and the
extent of urbanisation in an economy (see Figure 3). The effects could run in both
directions. Urbanisation supports the growth of the services sector, by providing larger
markets for specialist providers who supply the services contracted out by firms and
households. At the same time, an urban area is a more attractive place to live because of
the quality and range of services on offer. This linkage is receiving increasing attention in
research on the performance and growth of the services sector.
The Opportunity of the Services Revolution

One concern has been that productivity growth in services would lag manufacturing. Growth of the services sector would then slow down overall productivity growth. In addition, services prices would have to rise to cover the costs of attracting labour from its alternative higher productivity applications. Inevitably, according to this view, the quality of urban life would diminish over time (Baumol, 1967). Productivity in services is often difficult to measure because of the nature of the transaction, which involves adding value to things belonging to others (there is no purchase and sale to capture the increase in value), and that difficulty may have led to underestimates of productivity growth. However, despite this issue there is too much productivity pessimism in relation to services.

Services can contribute to productivity growth through a number of channels. First, in the Hill framework, the nature of the services transaction is evidently productivity improving. Firms and households decide to contract out because their overall performance is better when they do so: less labour and capital, and other inputs, are used relative to final output by contracting out to specialists who are more productive than are in-house providers. This effect is even greater when services markets are competitive, which in turns adds to incentives for innovation.
Second, there is more scope for application of ICT to services than has been imaged. This applies in particular to the first group of services defined by Eichengreen and Gupta. Parham (2004) reported research that found significant growth in productivity in the wholesale and retail sectors through the application of ICTs. That technology is a driver of the recent boom in the sharing economy, which has led to significant increases in the productivity of various forms of capital through joint use by larger numbers of users. This applies not just to cars and houses but also in other services such as education where online delivery makes course materials available to millions instead of hundreds of students, e.g. through Massive Open Online Courses.

Third, the dividing line between manufacturing and services firms is blurring. More firms do both to support their competitiveness and offer consumers higher levels of quality, specificity, and variety. Manufacturing firms contract out the provision of services inputs but there is evidence they are also selling more services. As Lodefalk (2017: 75) notes:

‘Contemporary manufacturing firms often import, use, produce and export services… Likewise, services firms export a significant amount of goods. Firms can differentiate themselves by adding services to products, bundling them with products, or offering them in connection with the sale, during the life or at the end of the life of a manufactured product.’

As 3D printing develops, the reorganisation of manufacturing will accelerate, as will the nature of international trade. This shift may happen in some sectors sooner than in others, which is a topic for further work.

Fourth, services are becoming more tradable. By the nature of the transaction (adding value to others or items belonging to others), providing services involves contact between buyers and sellers, which appears to limit tradability. However, there are different modes of trade, for example when consumers or producers move, and the application of digital technology is making it easier for these parties to interact in other ways. Trade has productivity improving effects. This includes the traditional gains from international specialisation, since services production involves value-adding activities different forms of which employ labour and capital in varying proportions. Thangavelu, Ing, and Urata (2015) found a significant positive relationship of exports on services productivity: the stock of human capital also contributes to services productivity. Other channels by which trade contributes are through the addition to competition (Park and Shin, 2013) and technology transfer. Trade in all its forms also adds capacity and variety in domestic markets. That is, all the familiar arguments for integration across borders apply in services markets.
Fifth, manufacturing goods have services contained within them. This occurs in a variety of ways, including through the contracting out process. Services also support the development of value chains in the manufacturing and agriculture sectors. The different components of these chains are connected by services links. The more efficiently those links are operated, the more extensive the chains can become. Hoekman and Shepherd (2017: 512) found that

‘Insofar as an increasing share of global trade in manufactures is organized through supply chains, with inputs being processed and value added by specialized firms located in different countries that require access to a variety of producer services (including in particular efficient transport, distribution, and logistics services), the productivity of such services will be a determinant of the ability of companies to participate in international production’

When only cross border transactions were reported, services was thought to account for about 20% of world trade, but the new data on trade in value added, which identifies the services contained within the gross value of exports, finds that more than half of world trade involves a services component.

Sixth, services too will benefit from the evolution of their own value chains, which will in turn promote productivity growth. There is evidence of a ‘trade slowdown’, one explanation of which may be the exhaustion of the opportunities for breaking out of value chains in manufacturing. Mattoo (2015) argued that the same conditions that prompted the value chain process in manufacturing, such as falling trade barriers and the application of digital technologies as well as falling transport costs, now apply to services.

In conclusion, the productivity pessimism associated with services has been too great and there are opportunities to capture a significant positive contribution from services to growth. The ‘revolution’ with respect to technology and tradability, which is underway, facilitates this contribution. The opportunities include productivity growth in services itself and its contribution to the performance of the rest of the economy, including value chains in other sectors and from the application of value chains within the sector itself. In addition, there are opportunities from the application of digital technology and from capturing the gains from trade and investment in services.

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2 Presentation to APEC meetings in CEBU in 2015.
Capturing the Opportunity

The question is how to capture the opportunities identified in the previous section. A number of points apply.

First, access to ICT is valuable. Access is not the same as the local production of those technologies or goods and services that embody them. In this context, a commitment to free trade in technology related products is valuable as well as the infrastructure that supports the application of digital technology. An instrument for the former purpose is the Information Technology Agreement. Services policy itself is relevant to the second element.

Second, the scope for contracting out is critical to the opportunity to procure services in competitive markets from specialist providers. The willingness to contract out depends on the confidence in contracting, which as noted above is related to institutional quality.

Third, promoting the tradability of services is important – it includes both exports and imports. In a value chain world the phrase that applies to goods producers applies also to services, that is, ‘exporters are importers’. As already noted, trade and investment in services is productivity promoting. Removing barriers to trade and investment in services is important.

Fourth, services will make a better contribution when they are provided in competitive markets. Users of services are more likely to contract out the provision of services, and capture the benefits of doing so, when those markets are competitive so that prices are lower, innovation is greater, and variety is wider. There is scope for a virtuous circle in which competitive markets beget a greater willingness to contract out, which also adds to the scale of markets and the scope for competition amongst providers.

The third and fourth points involve removing restrictions on the services sector and by implication impediments to its performance. Recent research has developed measures of ‘restrictiveness’ that apply to services, with respect to both competition and to trade. Both the Organisation for Economic Co-operation and Development and the World Bank have undertaken this work. The methodology involves identifying policies relevant to particular sectors, scoring the actual application of policy by its degree of restrictiveness, and then producing an overall indicator or index of restrictiveness.

There is evidence that higher degrees of restrictiveness are associated with poorer performance in services. He and Findlay (2012) examined the determinants of the share of services in the gross value of exports. A smaller share is interpreted as evidence of a
poorer performance by the services sector. Explanatory variables include the Services Trade Restrictiveness Index (STRI) and the costs of contracting out, and control variables such as GDP/capita and the composition of exports. They found that STRI values explain more of the variation in the services share in exports compared with other variables. Export composition was the next most significant variable followed by the costs of contracting out. Hoekman and Shepherd (2017) also assessed the impact of variations in STRI values. They found that a higher STRI value is negatively correlated with manufactured exports and the main channel of effect is via the impact of policy on foreign direct investment in services. As expected from earlier comments, decreasing services trade restrictiveness would also have a positive indirect impact on the manufacturing sectors that use services as intermediate inputs in production. This result was also found by Beverelli, Fiorini, and Hoekman (2017) who reported that countries with high institutional capacity (and therefore the ability to contract out) benefit the most from services trade policy reforms in terms of increased productivity in downstream industries. This result reinforces the value of a focus on institutional quality in the design of strategies for the services sector.

The indices provide a useful method for any economy to benchmark its policy settings and to identify the scope for gains from reform. As yet, these indices are not available for all ASEAN economies and there is value in widening their coverage.

Fifth, access to skilled labour is important for the emergence of specialist services providers, who generate these benefits. The significance of skills was evident in the discussion above of the origins of the surge in the services share of output at higher income levels. Access to skilled labour also supports the ability of local firms to respond to competition in more open markets and a greater confidence in being able to compete is one factor that reduces the resistance to reform and to opening up services markets.

Sixth, infrastructure quality is a contributor to the performance of the services sector. The Asian Development Bank (ADB, 2012) stressed its contribution to productivity growth in services, alongside the features of the policy settings (‘a good regulatory environment’) and access to human capital. Nasir and Kalirajan (2016) offered a test of the relative importance of these factors. They observed that ASEAN countries that are performing well in manufacturing are less efficient in terms of realisation of their export potential in modern services such as computer and information services, business and professional services, and telecommunications services. They say that

‘Improvements in the business environment, regulatory reforms and provision of modern infrastructure can reduce ‘behind the border’ constraints ... modern services do not depend heavily on physical infrastructure such as
port facilities (but) the poor quality of infrastructure, such as power shortages and chaotic urban transportation, hamper the growth of these services.’ (Nasir and Kalirajan, 2016: 24)

With respect to human capital they observe that

‘Appropriate training and improved standards of graduates in IT and related disciplines are also important for the growth ... of modern services exports from developing countries...An increase in the stock of graduates and the adoption of ICT technologies (has) a significant and positive impact.’ (Nasir and Kalirajan, 2016: 24)

This assessment is consistent with the earlier presentation on the stages of services growth, the importance of group three services in the later stages, and the skill mix of employment in that sector, which is evident in Table 1.

These last two contributors are elements of the services sector themselves and the earlier points about removing impediments to trade and investment, and to competition, are part of the mechanism to generate the contribution by infrastructure and human capital.

**Conclusion**

There are opportunities for services to contribute to growth, including through improvements in productivity. Those opportunities can be captured by reducing barriers to access to modern ICT, building institutions that support the procurement of services through market transactions, removing barriers to trade and investment, reducing restrictions on competition in domestic markets, and providing access to human capital and to relevant infrastructure.

This is a useful checklist for services sector strategy, but challenges remain. One is the risk already identified that the trends in the development of the services sector reinforce the hollowing out of the labour market that is evident in manufacturing. The response to this issue is a topic for further work amongst the ASEAN members and is related to the strategy for human capital investment and labour market integration in the region. Another is that policy reform, which is key to capturing the benefits that services offer especially in the context of the revolution underway, is difficult. The remainder of this conclusion is focused on this issue.
There are real risks of market failures in the services sector, which are related to the nature of the transaction. These include problems of lack of information and of competition. Services consumption and production occurs at the same time, so consumers may find out too late their provider is not actually qualified or not providing the service they thought they were buying. Nor are services produced and stocked and stored: service producers create and hold the capacity to offer services instead, since the production and consumption have to be simultaneous. This characteristic of the sunk investment in a lump of capacity means a big benefit to first movers in some services markets, leading to barriers to entry by new competitors. There is in other words risk of market failures because of lack of information and issues around competition. The policy responses to these situations are complex and often difficult to assess. For example, many options are available for responding and the best is choice is made where there is no alternative measure that resolves the market failure issue but with lesser effects on trade and competition. Application of this criterion, however, is difficult, since it requires a lot of data and analysis and requires constant review since the answer can change over time as technology changes. This is a demanding situation for policymakers.

Other factors that make reform difficult include the following (Findlay and Pangestu, 2016):

- The benefits of reform for the competitiveness of other sectors are not sufficiently appreciated, including the scope to participate in global value chains. Empirical research such as that reported above in relation to the impact of STRI values on services performance indicators is valuable.
- There are sensitivities and resistances due to the consequences of adjustment by incumbents including professionals, who are articulate and politically well-organised through their accrediting bodies. Opening up sectors dominated by state-owned enterprises such as transport, banking, infrastructure related services, and fixed-line telecommunications is especially difficult. Confidence in the ability of local firms to compete with foreign providers is also a talking point in many economies, responses to which include the focus on reform in the infrastructure sector and which involves investment in human capital.
- Institutional quality also matters. The link to the willingness to contract out was noted above. There is also a link from institutional quality to the capacity to manage reform: Van der Marel (2017) reports for a sample of OECD countries that those with higher regulatory barriers in services also have less capability to manage reform. In addition, complex coordination is usually required across agencies, which is costly to organise. Trade ministries, for example, have to take on new roles of coordinating the expert input of other agencies, which is challenging.
In this context, international cooperation offers support for reform, through the benefits of joint efforts, through peer pressure, and through capacity building. ASEAN has had formal agreements on trade in services since 1995. In the context of the 2006 AEC Blueprint, the goals include faster progress in some priority sectors and in some modes of support (where consumers move and in cross border transactions) plus the relaxation of limits on foreign equity participation. Assessments are that performance can be improved.

- The ASEAN Framework Agreement on Services (AFAS) has made improvements in the number of sectors included (called the extensive margin) and within sectors (called the intensive margin). However, commitments lag actual policy (Dee, 2015).
- AFAS has made significant progress towards meeting its commitments but its ambitions are modest (and it falls short of the liberalisation provided by many trade agreements). To make progress on liberalisation, attention will have to be given to regulatory barriers to trade and investment (Ahsan et al., 2015).
- Two areas in which services integration in ASEAN has been noticeable are air transport and the development of mutual recognition agreements for professional services (Ahsan et al., 2015). Mutual recognition agreements have been completed in engineering, nursing, architectural services, medical and dental services, accountancy, and hospitality. Standards have been agreed on, and all these subsectors are establishing certification frameworks. The movement of professionals has yet to be tested, however, because domestic rules and regulations on permission to work still apply.

Some barriers to trade and investment are the result of deliberate decisions to discriminate, such as limits on licenses available to foreign providers. Others are the response of independent decision-making which, for historical reasons and in the context of the complexity of policymaking in this sector just outlined, leads to incompatible systems of regulation designed to deal with the information or competition issues outlined above. The APEC Economic Committee (2016) argued that attention to regulatory barriers will require a new approach to cooperation. In some cases, policy may not even exist and the lack of a policy can be an impediment to new providers entering a market. These are not matters for the incremental exchange of degrees of market access. They are about the recognition and coordination of the processes of regulation employed in different economies. That will also involve sharing of experience and capacity building to be successful. In this situation ASEAN has an important contribution to make.
References


The Promises of Bank Integration in ASEAN: Is There a Catch?

Maria Socorro Gochoco–Bautista
Professor of Economics, School of Economics
University of the Philippines

Eli M. Remolona
Chief Representative for Asia and the Pacific
Bank for International Settlements

In recent years, regional bank integration has been on the rise and is evidently the ‘new normal’. The Association of Southeast Asian Nations (ASEAN) region, along with other regions such as Central America and the Commonwealth of Independent States, has seen banks headquartered in the region assume a stronger regional orientation, especially in the post Global Financial Crisis (GFC) period of 2008–2009. Given the historical dominance of bank-based finance in ASEAN, this seems to be the obvious next step in a natural progression of regional economic integration. What is perhaps less understandable is ASEAN’s enthusiastic efforts to further accelerate the process of regional bank integration in light of the risks made apparent by a similar process in Europe.

The ASEAN Bank Integration Framework (ABIF) and its Guidelines were endorsed by the ASEAN Central Bank Governors in December 2014. Three months later, in March 2015, the ASEAN Finance Ministers signed the Protocol to implement the 6th Package of Commitments, which contains a provision to enable ABIF’s implementation. Under ABIF, so-called ‘Qualified ASEAN Banks’, or QABs, in one member’s jurisdiction are allowed to operate freely in others. Arrangements regarding QABs are currently being pursued amongst ASEAN members on a bilateral basis.

The underlying premise of ABIF is that banking integration in ASEAN will contribute to both economic growth and financial inclusion in the region. An integrated regional banking system is expected to confer greater efficiency through economies of scale, network externalities, and greater competition through the entry of foreign banks.
These would make possible lower costs and greater diversity in the types of services offered and expanded opportunities for risk sharing. These advantages would promote increased trade and investment via greater access to finance, especially by the currently ‘unbanked’ masses and small and medium-sized enterprises.

However, regional banking integration is a two-edged sword – it comes with risks as well as benefits. Remolona and Shim (2015: 130) identified: potential sources of risk to financial stability arising from the presence of common and concentrated lenders within the region, and through foreign branches and subsidiaries; liquidity risk arising from the preference for using foreign currency funding by regional banks; and the shortening of the tenor of foreign currency loans. Perhaps more importantly, the ASEAN initiative favours banks from within the region over banks from other regions and would thus increase the regional concentration of cross-border banking activity. The Asian Financial Crisis (AFC) of 1997–1998 shows that such concentration can be a source of contagion within the region. Van Rijckeghem and Weder (2003) found that when a bank is exposed to a crisis country, it reduces its lending to other countries. This is how a regional concentration of cross-border lending becomes a mechanism for contagion.

In the coming years, the expectation is that banking groups headquartered in ASEAN will continue to expand and to make their regional presence more strongly felt. They would increase their intra-regional share of foreign bank ownership and their share of portfolio investment in the region (CGFS, 2014: 1). As this process unfolds, it can also be expected that the risk profiles of these regionally based banking groups will change. The sheer size of their balance sheets gives them a capacity for expansion, and the business models they adopt will make them systemically more important, rivalling the large globally active banks headquartered in advanced economies that lend to the region currently.

In this chapter, we attempt to assess the current state of banking integration and examine the forces that propel as well as constrain banking integration in ASEAN. By understanding the evolution of integration and the implications of these forces for the calculus of potential benefits and potential costs of banking integration in ASEAN, we would be able to suggest ways in which authorities in ASEAN can improve the trade-offs between the benefits from banking integration in ASEAN and its risks.
The Importance of the Global Financial Cycle

To discuss how ASEAN has arrived where it now finds itself in terms of financial integration or, more specifically, banking integration, it helps to understand the global context in which this process has been taking place. This process in Asia represents the regional dimension of what Rey (2015) called the global financial cycle. In the boom part of the cycle, emerging markets, in general, and emerging Asia in particular, receive a flood of capital flows. In the bust part of the cycle, the flows recede and sometimes even reverse. What drives the cycle is a common global risk factor. What we see is not a tug-of-war between so-called push factors related to global developments and pull factors related to country-specific developments. Instead, as Amstad, Remolona, and Shek (2016) showed, we see a division of labour, in which the global risk factor drives what happens over time, while country-specific factors influence what happens in the cross-section in terms of the degree to which the global factor affects different countries.

In the wake of the GFC, the central banks of the United States (US), Japan, and Europe attempted to avoid a depression by driving interest rates down to the zero lower bound and then by drastically expanding their balance sheets with massive asset purchases. All this led to a flood of global liquidity and a rise in global investors’ risk appetites. These underlay a common factor that sent prodigious amounts of capital flows into emerging markets as whole.

It has become imperative for authorities in recipient countries to respond in a way to try to constructively deal with large cross-border flows and the attendant potential risks to financial stability. The existence of a common component in the global financial cycle amongst asset prices, risk appetite, and credit, implies that, to a large extent, global factors dictate the direction and pace of cross-border flows, the behaviour of global banks and investors, and the creation of credit and asset booms. That the global financial cycle responds mostly to global factors and is not necessarily synchronous with domestic business cycles is a problem for domestic monetary authorities who may want to use independent monetary policy to address them, but are constrained by their inability to counter the adverse effects of the global financial cycle on their individual economies’ financial and real sectors.

Cross-border flows driven by global factors have been a fact of life for some time. However, the GFC of 2008–2009 was a particular watershed event that highlighted the vulnerability of banking systems in recipient or host countries such as those in emerging economies in Asia, including those in ASEAN. Using Bank for International Settlements (BIS) data, Figure 1 shows the rise in cross-border bank claims to the Asia–Pacific region...
in US dollars between 2002 and 2007, particularly in the years immediately prior to the GFC. There was a pronounced decline in cross-border bank claims to the Asia–Pacific region during the GFC, from US$230 billion in September 2008 to US$190 billion in March 2009, and then a dramatic acceleration in cross-border bank claims after the GFC beginning in March 2010 at US$240 billion to US$620 billion as of March 2015. Cross-border bank flows into the Asia–Pacific region, including ASEAN, are many times larger today than they were at any time prior to the GFC.

Figure 1: Cross-border Claims (Asia–Pacific)

Trillion US dollars

Source: Basic data from BIS.

The Role of Banks

The central role that global banks play as creditors to emerging market economies (EMEs) as well as the volatility of bank flows cannot be emphasised enough. In what Shin (2013) referred to as the ‘first phase of global liquidity’, global banks increased their leverage to provide cross-border lending primarily in US dollars. The sheer magnitude of these global banking flows, especially to non-residents outside the US, opened up opportunities for banks, as the flows required intermediation activities, even as the existence of such flows also presented challenges to monetary authorities particularly in EMEs with less-than-mature financial systems.
Globally, several characteristics of global credit to non-residents stand out, as shown in Figure 2, based on data from the BIS. First, bank credit is by far the most important source of credit to non-residents in the non-bank sector. Second, the amount of US dollar credit to non-residents in the non-bank sector dwarfs that of credit to the same sector in either euros or Japanese yen. Third, US dollar bank credit largely dictates the trend in total credit in any of the three currencies. Since the GFC, yen credit in debt securities has declined. Bank lending in each type of currency has generally followed a rising trend since the GFC, although in the case of euro credit, bank lending has been overtaken post-GFC by debt securities.

Van Rijckeghem and Weder (2003: 484) pointed out that banks constituted the single largest group of creditors to EMEs before the AFC of 1997–1998, but that bank lending, relative to other types of private capital flows, was also the most volatile component of capital flows during the crisis. According to the statistics they cite, roughly a third of all private inflows, amounting to US$120 billion into 29 EMEs in 1996 prior to the AFC, were net bank flows. However, these net bank flows dropped to only about 9% of total private inflows in 1997, and actually turned into net outflows of about US$30 billion by 1998, illustrating the large volatility of bank flows especially when a financial crisis occurs.

Rising Bank Integration in ASEAN

One of the factors propelling cross-border expansion by banks in ASEAN appears to be the reduced opportunities for expansion that ASEAN banks face in increasingly saturated domestic markets. Banks in ASEAN are also operating within a more competitive environment in which the focus continues to be on retail banking and deposit funding, but with higher capitalisation ratios even prior to the GFC and which made them resilient to the crisis. All these provide a rationale for and the ability of overseas expansion by regional banks.

Another important factor is the retreat of European banks after the GFC. Prior to the GFC, European banks were the largest creditors in all regions during the AFC. Most of the cross-border bank lending activity in the Asia–Pacific region then was in US dollars and intermediated by European banks (Remolona and Shim, 2015: 119). From 2001–2007, European banks intermediated mostly US dollar flows coming from the US to Europe and then to Asia–Pacific.
Figure 2: Credit to Non-residents (Non-bank Sector)

Euro Credit to Non-residents (Non-bank Sector)

US Dollar Credit to Non-residents (Non-bank Sector)

Japanese Yen Credit to Non-residents (Non-bank Sector)

Source: Basic data from BIS.
The subprime crisis that began in the US and culminated in the GFC hit European financial institutions hard, as 40% of the securities backed by US subprime mortgages were held by European financial institutions (Litan, 2011). With the GFC and the retreat of European banks, a good opportunity arose for banks headquartered in the region to take their place and expand within the region. Not only did banks from within the region come in, they soon dominated cross-border activity. The pattern of financial intermediation in cross-border banking activity in the Asia–Pacific region has changed in the post GFC period as the bulk of financial intermediation now occurs within the region.

The regional banking framework adopted by ASEAN is expected to give further impetus to this growing intra-regional banking trend. Asian economies excluding Japan appear to be more regionally integrated than other regions as they obtain financing from other economies within the region. While these funds may actually originate from outside the region, they are in large part intermediated through two banking centres in Asia – Hong Kong and Singapore. In other words, the presence of regional banking centres facilitates cross-border bank financing in Asia. Singapore-based banks, for example, which used to source funds from within the region for lending outside the region, became net borrowers from advanced economies in the post GFC period from June 2012 to September 2014. In this period, Singapore-based banks lent an average of US$163 billion a month to emerging economies in Asia (Remolona and Shim, 2015).

The role of the composition of lenders may be an important factor in explaining spillovers through banking centres, according to Van Rijckeghem and Weder (2003). They found that international bank lending flows are predicted by banks’ exposures to a crisis country following the Mexican and Asian financial crises. They cite the fact that, unlike North American banks, which merely shifted their lending from Asia to Latin America and Europe during the AFC, or European banks, which continued to lend to Asia and other regions and only shifted their lending to Latin America and Europe in the first half of 1998, Japanese banks withdrew from Asia and reduced their claims from US$124 billion in mid-1997 to US$86 billion by end 1998, with average flows being smallest for Japanese banks during the AFC (Van Rijckeghem and Weder, 2003). This is because Japanese banks suffered the more significant losses on account of their large exposure to the region during the AFC, with exposures of 70% of capital in four crisis countries – the Republic of Korea, Indonesia, Malaysia, and Thailand (Van Rijckeghem and Weder, 2003).
Figure 3: International Claims on Emerging Asia
(by home region or creditor bank, in US$ billion)

Figure 3 shows the international bank claims on Emerging Asia in billions of US dollars by home region of the creditor bank, based on BIS data. The data show that on the eve of the AFC, banks from within the region accounted for US$171.6 billion or 47% of exposures to Emerging Asia while euro area banks accounted for US$117 billion or 32%. Six years after the AFC, banks from the region still accounted for only US$105.7 billion or 35% of exposures while euro area banks accounted for US$107.9 billion or 36% of exposures. This suggests the presence of lingering supply effects of the crisis, which hit Asian banks harder than euro area banks. By contrast, on the eve of the 2008 crisis, banks from within the region and banks from the euro area both accounted for 31% of exposures to Emerging Asia at US$264.0 billion and US$263.2 billion, respectively. Six years after the GFC, in 2014, banks from within the region accounted for US$1,207.3 billion or 59% of exposures to the region, while euro area banks accounted for a mere US$269.1 billion or 13% of exposures, again reflecting supply shocks in which euro area banks were hit harder by the GFC. In terms of market concentration, Ehlers and Wooldridge (2015) found that exposure to the three largest creditor banking systems in the Asia-Pacific has increased since 2007, with New Zealand, Thailand, and Malaysia experiencing especially large increases in concentration.
Not only do banks from the region account for more than half of total exposures to the region, some Asia-based banks also joined the ranks of global systemically important banks (GSIBs) as of November 2015. Using a 5-indicator-based measurement approach consisting of different equally weighted categories – cross-jurisdictional activity, size, interconnectedness, substitutability/financial institution infrastructure, and complexity – seven banks in Asia of 30 globally have been identified as GSIBs, according to Remolona (2016). These seven banks are Mitsubishi UFJ, Agricultural Bank of China, Bank of China, China Construction Bank, ICBC, Mizuho, and Sumitomo Mitsui. Of the seven Asian-based GSIBs, three are Japanese banks and four are Chinese banks. Japan has long been a regional creditor, but Chinese banks are a new major regional creditor. Surprisingly, despite the roles of Hong Kong and Singapore in intermediating flows in ASEAN, none of the regional SIBs are based in ASEAN. In any case, the large concentration of international bank lending in the region in these Japanese and Chinese GSIBs may lead to financial contagion and a drying up of bank flows to countries in the region were there to be a crisis in any of the countries in the region or in either Japan or China that would drive these regional and global SIBs to withdraw from the region, as Japanese banks did during the AFC.

This may be a legitimate cause for concern regarding Chinese banks especially, as there are indications that the bulk of bank lending by outside banks has gone to borrowers in China, as suggested by the increase in the total assets of Chinese banks’ foreign offices in Asia (Remolona and Shim, 2015). Of the US$2.5 trillion cross-border bank claims on EMEs as of 2012, half of these went to the Asia-Pacific region, with the majority of the increase accounted for by lending to China, Brazil, and Russia (CGFS, 2014).

Figure 4 shows international bank claims on selected Asian countries as a percentage of gross domestic product in two periods – Q2 1997 and Q3 2015. China is the only country where bank lending to banks and non-banks in Q3 2015 was larger than in Q2 1997, although Figure 4 also shows that this ratio is lowest in China relative to the other Asian economies.

In terms of the share of short-term claims in all international claims on emerging Asia-Pacific, Figure 5 shows that Asia-Pacific banks, alongside US banks, have been lending increasingly short-term within the region. In 2014, the share of short-term loans of Asia-Pacific banks amounted to 70% (Remolona and Shim, 2015). Figure 5 also shows that China’s share of short-term borrowing has been on a sharp rising trend since around 1999, declining only during the GFC, but China’s share of short-term borrowing rose to almost 80% as of 2014 from about 30% to 60% in the period between the AFC and the GFC (Remolona and Shim, 2015). This share is much higher than those of Indonesia, Malaysia, the Philippines, Thailand, and the Republic of Korea, although their shares of short-term debt rose slightly in the same period.
Figure 4: International Bank Claims on Selected Asian Countries (as % of GDP)

GDP = gross domestic product; MAL = Malaysia; THA = Thailand; KOR = Republic of Korea; INO = Indonesia; PHI = Philippines; PRC = People’s Republic of China.
Source: Remolona (2016).

Figure 5: Share of Short-term Claims\(^a\) in All International Claims on Emerging Asia–Pacific (%)

UK = United Kingdom; US = United States.
\(^a\) Maturity equal to or less than one year.
\(^b\) Includes outside area banks, i.e. those that do not report to BIS consolidated banking statistics at a given point in time, on the assumption that outside area banks lending to emerging Asia-Pacific economies are headquartered in Asia-Pacific. Also includes: Japanese banks (from Q2 1990); Taiwan and Singaporean banks (from Q4 2000); Indian banks (from Q4 2001); Australian banks (from Q4 2003); Hong Kong banks (from Q2 2005); Republic of Korea banks (from Q4 2011).
\(^c\) Indonesia, Republic of Korea, Malaysia, the Philippines, and Thailand.
Sources: Remolona and Shim (2015: 129); BIS consolidated banking statistics (immediate borrower basis); authors’ calculations.
In summary, the exposure of Asia-based banks to the region accounts for more than half of total exposures; several Japanese and Chinese banks have become regional and global SIBs; China has become the top borrower or destination of international bank claims in the region; and the bulk of this borrowing, some 80% in China’s case, is short-term. The phenomenon of having a large share of short-term borrowing appears to be largely confined to China as there are differences in the degree to which the different Asian economies rely on short-term foreign currency liabilities.

**Potential Risks**

One potential risk to bank integration is the risk to financial stability arising from contagion. Banking centres may become conduits for financial contagion at the system and institutional levels. There are two possible reasons for this: a ‘common lender’ effect and a ‘wake up call’ effect (Van Rijckghem and Weder, 2003: 484).

Under a ‘common lender’ effect, when a home bank’s balance sheet is adversely affected, it spills over to a host country or many host countries as losses incurred in a host country leads the home bank to reduce exposures elsewhere. Contagion occurs as a bank creditor withdraws from one country in which it holds a position to restore capital adequacy ratios, meet margin calls, acts according to the dictates of its Value-at-Risk model, etc., when it experiences a loss in another country. Under a ‘wake-up call’ effect, the withdrawal of a bank creditor from a country is due to a change in perceptions for an entire class of assets following a crisis, or to a general rise in risk aversion.

Given the previous discussion of the findings in Van Rijckghem and Weder’s (2003) study, there is historical evidence of contagion through a ‘common lender’ effect in the case of Japanese banks’ lending to Asia during the AFC given their large exposure to at least four crisis-hit Asian countries. They found a statistically significant ‘common lender’ effect in which for each additional dollar of exposure to Thailand, on average, flows per Emerging Market fell by four cents (Van Rijckghem and Weder, 2003; Ehlers and Wooldridge, 2015). In addition, we have presented evidence that indicates that regional lending has become more concentrated in that over half of total exposure of Asia–Pacific banks is to the Asia–Pacific region, and that seven Japanese and Chinese banks have become not only regional SIBs but GSIBs as well. It may also be the case that bank operations of foreign-based banks account for a large share of host country banking system assets, in which case the foreign-based bank may have a systemic role in the host country even if relative to the size of its global operations, operations in the host country are not large.
Thus, the risk of contagion through spillover effects arising from potential losses of these important regional bank lenders were there to be a crisis somewhere that would cause them to withdraw from the region is a real one.

A second source of potential risk from bank integration is liquidity risk related to foreign currency funding in US dollars, given the limited depth of local markets to provide local currency liquidity and to distribute such liquidity more evenly across domestic banks. Much of the US dollar funding of regional banks is obtained from global wholesale markets and derivatives markets and lent through cross-border flows. Cross-border flows are a less stable source of foreign currency financing than are foreign claims extended through affiliates of foreign banks (CGFS, 2014; Ehlers and Wooldridge, 2015). The foreign currency loan-to-deposit ratio of regional banks is typically in excess of 100% and in some cases has been declining recently. In time of stress, foreign currency funding is less stable than local currency funding, most of which comes from core deposits (Remolona and Shim, 2015). The lack of local currency funding by foreign banks in a host jurisdiction is seen in their having a local currency funding gap, i.e. their local currency liabilities are less than their local currency assets. Banks could convert US dollars into local currency to fill this gap, but then they would also face exchange rate risk, also given the limited opportunities for hedging such risk in light of the relative underdevelopment of capital markets in the region.

A third potential source of risk to financial stability from bank integration is the shortening of the tenor of foreign, mostly US dollar, loans extended to non-banks intra-regionally by Asia–Pacific banks largely due to the reliance on inter-bank markets as a funding source. Any breakdown in inter-bank market operations would jeopardise the ability to continue to secure funding even on such short-term tenor or roll over existing debt. In the case of a potential ‘wake up call’ kind of contagion effect in which protection from contagion entails lengthening the maturity structure of debt and reducing the reliance on debt, this is a potentially serious problem ex ante. As was the case during the AFC, it is also possible for there to be maturity structure mismatches in foreign currency borrowing and lending.

There are other important potential sources of financial instability from bank integration. The current system of national regulation of foreign bank branches may not be optimal with rising regional bank integration. A regulatory framework reliant on home country regulation of foreign bank branches may not be conducive to the recognition of systemic risk in home countries. Ehlers and Wooldridge (2015) pointed out that in many countries, bank branches, unlike domestic banks and foreign subsidiaries, face a different set of capital and liquidity requirements. There may thus be an incentive for regulatory arbitrage by foreign bank branches. And foreign bank branching is typically the preferred mode of expansion as is it less costly to set up relative to setting up a foreign subsidiary.
Measures to Address Potential Risks

There is a need to improve the regulatory environment in the region through greater cooperative efforts and action. It is important for regulatory authorities in the region to cooperate with each other to better recognise the presence of systemic risk, take steps to mitigate such risk, prevent the failure of regionally active banks, and act promptly, decisively, and in a cooperative and coordinated way to allocate losses and deal with the failure of regionally active banks. Perhaps it is time to consider the benefits of a regional and coordinated approach to recognising and dealing with systemic risks given more concentrated and common lender banks based in the region and the regulatory trade-off with respect to supervisory independence now accorded national authorities in dealing with regional banks active in the region. These efforts could be undertaken and cooperation and information sharing could be enhanced within the Executives’ Meeting of East Asia Pacific Central Banks (EMEAP).

Regional authorities must learn to better decipher potential channels of systemic risk and financial contagion. Given the increased concentration of lenders in the region, the possibility of a ‘common lender’ effect is heightened. One way to reduce this type of potential risk to financial stability is to diversify the region’s sources of funding and assess the vulnerability of the different regional economies by monitoring the region’s vulnerability to shared bank creditors and to certain banks that have large exposures to countries in the region, and taking prompt collective action. The good news is that we know who the regional and global SIBs from Asia–Pacific are, that the amount of exposure of Asia–Pacific banks in the region is large, and that the bulk of lending is short-term, sourced from inter-bank markets and delivered through cross-border bank flows by regionally active banks. These are good starting points for monitoring purposes. That said, countries also need to be willing to share data and information more readily to enhance their and the region’s ability to deal with systemic risk.

Even in the absence of ‘wake-up call’ effects of potential contagion, it would be prudent to try and reduce the amount of short-term borrowing from regional banks, especially in US dollars. Since the source of funds lent short-term tend to be inter-bank markets, ways must be found to increase the amount of high-quality assets in the region and reduce the risk of dysfunction in inter-bank markets and to provide stable sources of local-currency funding for regional banks. This can be promoted by deepening local financial and capital markets, especially local currency bond markets. Gochoco–Bautista and Remolona (2012) proposed, amongst others, extending the Chiang Mai Initiative Multilateralization (CMIM) into a regional repo market in which central banks agree to accept cross-border collateral in the form of government and corporate bonds from within ASEAN+3. It would turn CMIM into a facility that provides a daily source of local-currency liquidity rather than one that operates only during a crisis.
Monetary authorities in the region should also learn lessons from dealing with previous crises in which there was a drying up of liquidity (in US dollars). Developing a system of currency swaps in regional currencies may be a more effective safety net that will have the added benefit of promoting the development of local currency capital markets.

References


ASEAN’s Regulatory Reform Imperative and Future Prospects

Peter Carroll
University of Tasmania

Derek Gill
New Zealand Institute of Economic Research and Victoria University of Wellington

Ponciano Intal, Jr.
Economic Research Institute for ASEAN and East Asia*

This paper explores the different experiences of countries with regulatory reform and the imperatives that drove regulatory reform in the Association of Southeast Asian Nations (ASEAN) and the wider region. It then explores the lessons learnt from different countries on their journeys to reform and their implications for the ASEAN Economic Community (AEC). It concludes with a discussion of the possible approaches to international regulatory cooperation (IRC) while the Appendices discuss the lessons about regulatory reform in the Philippines and Good Regulatory Practice principles.

Background: The Paths Taken So Far

The experiences of the ASEAN and ASEAN+ countries on the long and winding journey to high-performing regulatory systems highlight the different starting points and paths taken.

The different starting points reflect the diversity of the region in terms of levels of economic development, legal systems, ethnicity, and history. Table 1 illustrates these starting points using the World Bank’s Worldwide Governance Indicators for regulatory quality.

* The opinions expressed in this paper are the sole responsibility of the authors.
Table 1 shows the scores and percentile ranking of the ASEAN+6 countries and some corresponding global averages from the early 2000s to the early 2010s. Singapore, New Zealand, and Australia rank amongst the highest in the world for regulatory quality, followed closely by Japan, the Republic of Korea (henceforth, Korea), Brunei Darussalam, and Malaysia. The rest trail behind, starting with Thailand and the Philippines and the Lao PDR and Myanmar at the end. As can be seen, progress on regulatory governance indicators is not linear: there are setbacks and apparent retrogressions, but also some noteworthy improvements in the percentile ranking during 2003–2013, in particular for Malaysia and Indonesia.

### Table 1: Regulatory Quality Scores and Percentile Rankings

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ASEAN = Association of Southeast Asian Nations; Lao PDR = Lao People’s Democratic Republic.
The different country experiences shown in Table 1 lend support to the concept of equifinality, a notion that suggests that in open systems a goal or target can be reached by several means, taking rather different paths. Singapore’s experience, for example, has been very different from that of Viet Nam, which, in turn, has been very different from that of Malaysia, and those of Myanmar and the Lao PDR have only just begun.

There is, however, some unity within the diversity of country experiences. A joint study by the Economic Research Institute for ASEAN and East Asia and the New Zealand Institute of Economic Research (Intal and Gill, 2016) looked at the development of regulatory management systems (RMS) in 10 countries in the Asia-Pacific region. Appendix A contains the lessons about regulatory reform drawn from the Philippines experience but they seem much more widely applicable. Figure 1 presents a classification of the selected countries in the study.

**Figure 1: Classification of Countries According to the RMS Stages**

<table>
<thead>
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<th>RMS = regulatory management system.</th>
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1 A regulatory management system is the meta system that shapes how regulations are developed in each country. For a longer discussion, see Gill (2016a).
Figure 1 uses a typology of the stages or levels of the regulatory management system:

- Starter or Informal – ad hoc practices specific to the context, sector, organisation, and person undertaking the regulatory quality management function.
- Enabled – regulatory quality management processes have been put in place but, while the intention is there, regulatory quality management does not happen consistently.
- Practiced – enacted in some sectors and often reliant on a few key people in selected institutions.
- Embedded – practices are part of public sector culture and not reliant on key institutions.

As indicated in Figure 1, Singapore, New Zealand, and Australia are in the embedded RMS stage. Indonesia, the Philippines, and Thailand are still in the starter or informal stage while Viet Nam is in the enabled stage. Malaysia, Japan, and Korea are in the transition process, moving to the embedded stage. Note that, based on the experiences of New Zealand, Australia, Singapore, and Korea, development toward a well-performing RMS is a process that takes decades, as indicated in the figure.

A key implication of Table 1 and Figure 1 is that the future journeys of the countries will be similarly varied. However, to an increasing degree, there will be greater regulatory convergence as their economies become more highly integrated, both within the region and with the global economy. We turn now to a discussion of the imperatives for regulatory reform in ASEAN and the wider region, suggesting how those imperatives are likely to change.

**Imperatives for Regulatory Reform**

Domestic and international factors drive the focus on improving regulatory performance and vary across time and by country. For example, the country studies undertaken as part of the Economic Research Institute for ASEAN and East Asia/New Zealand Institute of Economic Research project identified a range of economic drivers for regulatory reform. They ranged from an economic crisis (e.g. Korea), a realisation of a secular loss of competitiveness (e.g. New Zealand), and a national drive at improving investment attractiveness consistent with deeper international linkages (e.g. Viet Nam), as well as competitiveness amidst rising wage rates (e.g. Malaysia, Singapore). These different drivers provided the impetus for sustained programmes aimed at improving regulatory policies.
The drivers of regulatory reform for ASEAN and its members fall into two broad groups: those that are largely common in nature, impacting upon all members, though to varying extents, over varying periods, and those that are more specific in nature and spring from the unique socio-economic and cultural circumstances of each member. In this paper, we focus primarily on those that are common and international in nature, what we describe as international regulatory cooperation.

The 1997 Asian financial crisis and the 2007–2008 global financial crisis, for example, experienced in common by all ASEAN members, were important drivers for both national and regional regulatory reform, as ASEAN and its member states attempted to remedy the impacts of the crises on their domestic economies. The 2007–2008 crisis similarly accelerated the development of ASEAN’s mutual recognition agreements on professional services and added weight to the Organisation for Economic Co-operation and Development’s (OECD) 1997 Policy Recommendations on Regulatory Reform, and ASEAN’s Good Regulatory Practice Guide (2009). Appendix B discusses GRP principles in more detail. Similarly, the 2016 Trans-Pacific Partnership Agreement, which includes several ASEAN members, stresses the importance of good regulatory practices and regulatory cooperation, with its signatories committed to developing improved regulatory regimes with common characteristics, and establishing the Committee on Regulatory Coherence, an oversight body, to consider issues related to implementation and the setting of future priorities. At the time of writing the future of the agreement is in doubt, so the hope for improvement in regulatory quality might not eventuate.

Another common imperative is, of course, the ASEAN Economic Community Blueprint 2025 (AEC Blueprint 2025), the agreement that aims for a unified market and production area by 2025. While broader in intent than regulatory reform, it is a key driver of regulatory reform for ASEAN members. It represents an agreed goal to which each member is formally committed and will work to achieve, although at differing rates. It is a key driver of reform as its achievement will require the development of increasingly complementary sets of well-performing regulations and regulatory regimes with the capacity to enable a unified market and production area.

While regulatory reform is a key driver for the AEC Blueprint 2025, the emphasis on regulation is not new for ASEAN. ASEAN has previously recognised the importance of effective regulations and regulatory regimes with the ASEAN Policy Guideline on Standards and Conformance (2005) and the ASEAN Good Regulatory Practice Guide (2009), both aimed at improving the consistency and transparency of regulations. However, the AEC Blueprint 2025 adds greater weight and intensity to regulatory reform, with its focus on ‘Effective, Efficient, Coherent and Responsive Regulations, and Good Regulatory Practice’ (pp. 76–77) as a key element of ASEAN’s drive for a
‘Competitive, Innovative and Dynamic ASEAN’ (p. 70). The AEC Blueprint 2025 also stresses the importance of firmly embedding good regulatory practice so as to reduce the costs of non-tariff measures.

Similar related drivers of regulatory reform are in the form of advice and support for policy transfer made available for several years to ASEAN (discussed in Box 1) and its members by major international organisations and groupings, such as the OECD (e.g. the 1997 OECD Policy Recommendations on Regulatory Reform, the 1995 OECD Recommendation on Improving the Quality of Government Regulation, and the joint ASEAN–OECD Southeast Asia Regional Policy Network on Good Regulatory Practice). A number of drivers have come from the Asia–Pacific Economic Cooperation (APEC), their weight and influence reinforced by the partially overlapping membership APEC has with ASEAN (e.g. the 1999 APEC Principles to Enhance Competition and Regulatory Reform and the joint APEC–OECD Co-operative Initiative on Regulatory Reform that provided a forum for the exchange of experiences on good regulatory concepts, policies, and practices). In some jurisdictions, the goal of attaining membership of the World Trade Organization and, subsequently, conformance with its disciplines and transparency requirements, has provided an imperative for regulatory reform.

Another driver is the slowly increasing number of mutual recognition agreements by ASEAN members that, for example, tend to result in a degree of increasing regulatory competition between them, in turn encouraging them to develop least-cost, more effective regulation to attract and retain businesses. The link between regulatory competition and mutual recognition is that the latter creates situations where regulatory competition can function without imposing upon firms and individuals the costs of having to satisfy more than one set of regulations, particularly where those regulations change as states engage in regulatory competition (Carroll, 2006; Nicolaidis, 1992; and Nicolaidis and Trachtman, 2000).

A final ‘external’ driver may be future trade agreements along the lines of the Trans-Pacific Partnership Agreement with commitments to regulatory coherence. For example, TPP requires each signatory, no later than one year after the date of entry into force of the agreement, to determine and make publicly available the scope of its covered regulatory measures, with the aim of achieving significant coverage. Four ASEAN members (Brunei Darussalam, Singapore, Malaysia, and Viet Nam) are signatories to the agreement and their leaders are well aware of the pressure from other members for them to produce acceptable evidence of their movement toward good regulatory practices as defined in the agreement. In turn, they may increase the pressure for regulatory reform on their fellow ASEAN colleagues, as did membership in APEC for Indonesia, the Philippines, and Thailand. In light of the likely impact of external factors
such as AEC, Trans-Pacific Partnership (TPP), and other TPAs and the lessons learnt from different countries on their journeys to regulatory reform, we now move to a discussion of insights as to the future of ASEAN regulatory reform.

### Box 1: Regulatory Reform and ASEAN

ASEAN members have undertaken regulatory reform on a national basis as well as a wide range of activities and agreements related, in whole or in part, to regulatory reform. While space prevents a full listing of ASEAN's regulatory activities, the following provide an illustration of their type and extent, mindful of the fact that several fall into more than one category.

#### Activities aimed at improving specific types of regulation within member states
- ASEAN Statement on Strengthening Forest Law Enforcement and Governance (2007)
- ASEAN Corporate Governance Initiative (2011)

#### Activities aimed at assisting members in improving their regulatory management systems
- ASEAN Policy Guideline on Standards and Conformance (2005)

#### Activities aimed primarily at the reform of cross-border impacts of regulation
- ASEAN Trade in Goods Agreement (2009)
- ASEAN Free Trade Area (1992)
- ASEAN Mutual Recognition Agreements (various dates)
- ASEAN Policy Guideline on Standards and Conformance (2005)

#### Activities aimed at the development of the ASEAN Economic Community
- ASEAN Comprehensive Investment Agreement (2009)
- ASEAN Capital Market Infrastructure (2014)
- ASEAN Economic Community Blueprint (this specifies a wide range of regulatory reforms)

#### Agreements with non-member states having regulatory implications
- ASEAN–China Free Trade Area (2002)
- ASEAN–Japan Free Trade Area (2008)

#### Agreement Establishing the ASEAN–Australia–New Zealand Free Trade Area (2009)
- ASEAN–India Free Trade Area (2009)
- ASEAN–Republic of Korea Free Trade Area (2009)

ASEAN = Association of Southeast Asian Nations.
Implications for Regulatory Reform in ASEAN and the Wider Region

Some insights as to the future of ASEAN RMS can be gained by an examination of the lessons learnt from different countries on their journeys to regulatory reform.

The first is that, as noted above, the continuing journey will take time, most likely several decades, even for those countries with better-performing RMS. Early starters on regulatory reform such as Australia and New Zealand have by no means completed their journey, and for those such as Myanmar many challenges lie ahead as they introduce and modify regulatory instruments and institutions to suit their socio-economic environment (Intal and Gill, 2016, Chapter V). Hence, patience is needed and the immediate benefits of reform should not be ‘oversold’, or it can lead to a decline in the needed political support if benefits are slow to be achieved.

The second is that major regulatory reform is a political decision and one that, if it is to be successful, requires domestic credibility and substantial and ongoing commitment and support from a country’s top leadership, not merely symbolic gestures. It involves, at least in total, significant change to processes, institutions, regulatory designs, and, importantly, the distribution of power and authority – changes not likely to be welcomed by those who will lose power and the ability to influence policy and administrative outcomes. In such a challenging context, it is important to foster and promote cultural change in the bureaucracy to achieve attitudes and actions supportive of regulatory change. Credibility can be enhanced by pointing to examples of regulatory success in other ASEAN countries, by the united commitment of its members, and by drawing on the evidence of the correlation between improved regulatory practices and socio-economic development.

The third is the need for embedded systems of consultation with key economic actors, notably those in the business sector, whose active and ongoing support will provide a very necessary basis for reform. In other words, the journey to high-performing regulatory systems should be collaborative, not simply imposed from above. This is not to suggest that large businesses should dominate or ‘capture’ the consultation and regulatory design process. Moreover, it can be useful to assist key economic actors such as business groups to also engage in the process of international regulatory cooperation, parallel to government actors.

The fourth is the need to carefully consider the type of reform processes to be instituted. Typically, it is politically more sensible to focus on areas of reform that aim at the greatest, relatively rapid financial and economic return – a sectoral approach – for these
will not only increase income and wealth but provide an important ‘demonstration’ effect that will increase the credibility of reform-minded governments, garnering support for later efforts. Similarly, the occasional opportunities for broader, system-wide reform need to be seized rapidly, as proved to be the case, for example, in Korea with the Asian financial crisis, leading to an acceleration of microeconomic and macroeconomic reforms that might not otherwise have been possible.

The fifth is the growth in the share of services in the economy, discussed in the accompanying paper by Christopher Finlay, on bringing ASEAN into the global services network. If countries are to participate in the services revolution, regulatory reform will have an important role to play in removing the behind-the-border regulatory barriers.

The sixth is that regulatory regimes will need to respond to the greater economic integration within ASEAN associated with continued globalisation. As an example, the growth in global supply chains limits the ability of individual states to regulate across whole chains because the reach of powers of the regulators often do not extend beyond one country’s borders. This makes it difficult to design, monitor, and enforce compliance with a regime in another country with the domestic powers that regulators have. Moreover, with global chains, there is increased potential for regulatory failures to spread across national boundaries, although such failures can provide an incentive to cross-national improvements in regulatory coherence. In the concluding section of the paper, therefore, we explore the role for international regulatory cooperation in shaping regulatory reform in ASEAN+ countries.

In Appendix B, we present a proposed consolidated set of GRP principles for ASEAN that draws on the lessons learnt by its members and others.

### The Role of International Regulatory Cooperation

The aim of international regulatory cooperation is to improve regulatory coherence and connectivity by improving the design and execution of the operation of regulations on goods or services as they cross national boundaries. It is an approach that emphasises how greater regulatory connectivity can be used to achieve a range of goals including reduced technical barriers to trade, improved regulatory quality, or wider geo-political integration. IRC is being driven, in particular, by concerns about non-tariff barriers to

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2 This section of the discussion draws upon Gill (2016b).
trade generally as well as the specific inclusion of technical barriers to trade provisions in bilateral Free Trade Agreements (FTAs) and Regional Free Trade Agreements (RTAs), aimed at overcoming regulatory barriers and decreasing their costs. IRC has become very topical in recent years with TPP and various bilateral and regional initiatives that include IRC provisions.

Driven forward by initiatives such as AEC and TPP, practice is leading theory in the field of IRC. Theory is lagging as frameworks are still being developed to adequately characterise the dimensions of IRC and the possible approaches it can entail. These frameworks are an important foundation for organising the evidence about what works and the balance of risks with each approach. As Correia de Brito et al. (2016: 13) observed, at present ‘the choice among various cooperation approaches is not informed by a clear understanding of benefits, cost and success factors of diverse IRC options’.

The implication for ASEAN countries is that they will need to consider the full range of regulatory cooperation options, rather than assuming that the only options are a conformity assessment-type MRA or full harmonisation. This section outlines the IRC choice set facing ASEAN+ countries and some of the factors that will need to be taken into consideration in making these choices.

IRC can be seen as a continuum with full autonomy at one end, through informal cooperation, then through formal cooperation (such as mutual recognition), to full harmonisation and integration at the other end. It can occur at a number of levels: that of policies, the practices of regulatory agencies (apart from enforcement), and judicial and quasi-judicial enforcement and adjudication.

At each level in Figure 2 is a continuum in the range of levels of intensity of integration. At the informal end of the spectrum is the creation of communities of practice whereby regulators from a range of jurisdictions discuss emerging practices and share lessons learnt, sometimes resulting in greater regulatory convergence. Over time, this can evolve into more formal cooperation arrangements such as exchanges of staff and information and explicit coordination in the development of regulatory policies and practices.

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3 A classic example of a non-tariff barrier for fresh products are delays in border clearance procedures. Non-tariff barriers include technical barriers to trade such as technical regulations, mandatory standards, and related conformity assessment procedures as well as the divergence in countries’ regulatory policies and practices. The lack of regulatory coherence arising from the interaction of regulations within and between countries can combine to produce unintended and unnecessary barriers to trade.
The important point is that IRC does not imply that the goal is full harmonisation as there are a number of potential stopping points along the way. Moreover, separate decisions are needed on the degree of integration at each level of policy integration, regulatory practices, enforcement, and adjudication, resulting in a wide range of possible approaches and no simple ‘silver bullet’ solutions. IRC thus offers opportunities because it encompasses a wide range of alternative approaches, with a key challenge for governments being the choice of the right approach to achieve the desired objective in their particular circumstances. The key policy choices that countries engaged in IRC need to address include decisions on:

- Objectives – Be clear about what the specific goals are, for example, reducing particular non-tariff barriers, improving regulatory quality, augmenting regulatory capability, or managing international spill-overs.
- Focus – Work on coordination of new policies rather than existing provisions, as the existing practices of regulators are harder to change once embedded, although successful cooperation on new policies can encourage later changes to existing policies through a process of emulation.
- Locus – Look to work on regulatory practices as well as policies to avoid unintended barriers (see Marshall School of Business, 2008).
Parties involved – Start with private codes such as coordinated standards developed by private standards organisations, which in some cases then can be incorporated into law by reference. Also, where possible, harmonise to international not bilateral rules and standards, working with international standard-setting bodies.

Breadth – Focus on sectors where the gains are highest, such as international value chains, and avoid long-standing trade irritants where positions are too entrenched to make cooperation possible in the short or medium term.

Reach – Use the least demanding form of IRC required to achieve the objectives rather than shoot for the moon.

The best approach will vary, depending on the goals, the contexts in the respective countries, and the balance of risks with each approach. The key policy implication is that countries should consider the full range of regulatory cooperation approaches, and use the least demanding form of IRC required to achieve their objectives. More ambitious cooperation will follow as mutual trust and understanding of the positions of partners grow over time.

Unilateral action to achieve regulatory convergence is an important tool for countries to consider first as it is technically the easiest option to implement, often based on the informal transfer of policy ideas and instruments from other sources. IRC is, in this sense, only a part of the suite of approaches to achieving regulatory coherence. Strengthening domestic regulatory management systems by commitment to greater transparency and good regulatory practice will also contribute to greater regulatory connectivity.

The experience of New Zealand and Australia with the development of ‘Closer Economic Relations’ discussed in Box 2 suggests the potential for countries to move over time beyond traditional free trade agreements to more intensive, specific, international regulatory cooperation arrangements. Free trade agreements, for example, often create informal regulatory cooperation bodies, which can lead to deeper relationships and promote greater understanding and trust. As a result, more informal cooperation provides the foundation for deeper cooperation arrangements over time.

A key issue in the drive to regulatory reform in ASEAN is the importance of a platform of trust and adequate levels of capability to support deeper levels of integration. The New Zealand and Australian joint experience highlights the difficulties of achieving a single economic market even with a shared history, similar culture and institutions, and high political commitment. As the extent of successful integration (Figure 2) increases, the costs increase as the additional benefits at the margin are more limited.
Box 2: Australia and New Zealand: From a Limited Free Trade Area to a Single Economic Market?

Australia and New Zealand have a shared history, language, and values; a similar culture, political, legal, and economic institutions; and a high political commitment to greater integration. This has provided a solid platform of mutual understanding and trust on which to build a closer economic relationship. The free trade area established by a closer economic relations agreement in 1983 led over time to further integration under a goal of the single economic market. In some areas, integration has advanced well. The intergovernmental arrangement relating to Trans-Tasman Mutual Recognition includes recognition of respective regulatory regimes as well as conformity assessment procedures. The European Union is the only other jurisdiction with mutual recognition of regulatory regimes.

However, progress in other areas has been slower. In a joint study by the Australian Productivity Commission and the New Zealand Productivity Commission, it was observed (2012) that ‘[i]mplementing agreements to reduce behind the border barriers typically regulatory in nature is more complicated than reducing tariffs’. While work on strengthening trans-Tasman economic relations has occurred over a number of years, in some cases integration has not proceeded at all. In relation to competition policy and consumer protection regimes, the decision not to integrate more deeply reflected the results of an analysis that the costs of doing so would outweigh the benefits (APC, 2004). A joint therapeutic products regulatory agency was first agreed in 2000, a Treaty was signed in 2003, and the detailed design work was completed in 2015, but the concept has been abandoned. As a result, there are no joint regulators to cover the full spectrum of policies, practices, and enforcement.

However, in food safety standards, New Zealand has essentially joined the Australian body with minor modifications to the governance arrangements. In the case of the Joint Accreditation System of Australia and New Zealand, a separate (international) body was created to provide for a joint accreditation system for conformity assessment bodies. However, the actual administration and enforcement of any joint standards remain with the respective domestic agencies.

New Zealand and Australia show what can be achieved through a combination of political commitment and sustained bureaucratic effort when built on a foundation of trust, but ‘It should be acknowledged that it will be exceedingly difficult for other countries to imitate this model of mutual recognition due to the context as well as its ambition’ (Correia de Brito et al., 2016: 68).

Similarly, the more diverse the countries seeking to cooperate and the more disparate the level of capability are, the higher the cost of collective action and the shallower the level of integration within the club will be.

IRC is sometimes criticised for the loss of autonomy that can result from the exercise of regulatory sovereignty on a cooperative basis, a potentially valid concern particularly as the degree of cooperation becomes more intensive. However, the critical question is: Does the proposed initiative adversely impact on the effective exercise of sovereignty?
IRC offers the scope for more effective exercise of national regulatory sovereignty through the adoption of international standards and norms backed by support from regulators in other jurisdictions. It is a voluntary exercise of sovereignty that, where successful, increases the regulatory capacity of those cooperating while they retain the authority to press for changes to what has been agreed.

Conclusion

The key conclusion from this discussion of IRC is that ASEAN+ countries should consider the full range of regulatory cooperation options and, consistent with Occam’s razor, use the least demanding form of IRC required to achieve their objectives. Deeper integration is hard to achieve and sustain. Broadening IRC through softer, more informal cooperation between countries is easier to achieve and support, particularly when countries vary greatly in their socio-economic characteristics. Improving IRC takes time as it is a long game that involves a series of small steps along the road.

More intensive regulatory cooperation arrangements could enable regulatory reform to become a factor for improving ASEAN’s competitiveness with other economies in the region. Future regulatory cooperation by ASEAN and ASEAN+ needs to take account of the varying context of each of the members. There is a range of models to draw from in addition to the European Union’s approach of developing common regulatory regimes. Examples include the Australasian model of a single economic market and the United States–Mexico High Level Economic Dialogue introduced as part of the North American Free Trade Agreement. As cooperation is a long game, AEC has an opportunity to identify the first initial steps that need to be taken. Softer, more informal cooperation between countries is easier to achieve and support.

In summary, AEC can play an important role by strengthening national regulatory policy frameworks, advancing international regulatory cooperation through selected initiatives, and addressing the risk of trade diversion and regulatory exclusion. As the range of possible approaches to IRC is wide, it is important to be clear about the objectives sought, the potential gains from international regulatory cooperation, and be realistic about the capability to implement the desired approach.
References


Appendix A

As part of the ERIA/NZIER Regulatory Management, Gilberto Llanto, the author of the Philippines country case study, offered the following lessons about regulatory reform that are also relevant to other countries (pp. 47–48):

‘1. **Transparency leads to competitiveness.** In 2011 and 2012, public infrastructure spending went down as the new administration wanted to review all infrastructure projects and procurement procedures. Public infrastructure spending picked up in the subsequent periods under better governance and some control over corruption. Investor confidence rose in response to better governance and transparency.

‘2. **Work in progress is not good enough... [and] it’s all about execution and delivery.** In competitiveness, the country is only ranked and scored when the job is completed and implemented.

‘3. **Teamwork is important; avoid silos.** Not one government agency can solve interconnected problems. Coordination and commitment to reform are crucial.

‘4. **Focus on multiple fronts and not just one single variable.** There is no single bullet, single solution to complex problems. Coordination is important to deal with multiple, complex issues.

‘5. **The competition never sleeps.** For instance, Singapore, one of the highest-ranking countries in the world, is always on a continuous improvement program.

‘6. **The bar always rises.** A competitive world raises the bar all the time, and the country should be ready for it.

‘7. **Speed-to-reform should be the new mantra.** Action plans more than feasibility studies.

‘8. **Maintain momentum.** The Philippines cannot afford to slow down the pace of reform. In fact, it should accelerate the reform process.

‘9. **Embed and institutionalize change.** Executive orders, legislations, laws are necessary for institutionalization. But more important are actual practice, reform mindset, and culture of the country.

10. **Public–private collaboration is important and effective.** The public and private sector have their respective strengths and it is important to harness these for regulatory reform.’
Appendix B

ASEAN Good Regulatory Practice (GRP) Principles

Regulations are essential for the proper functioning of society and economy. However, when they are poorly designed, are inconsistent with other regulations, or are not administered and enforced well, regulations can impose greater burdens on companies and the citizenry than necessary, especially on small enterprises which comprise the bulk of ASEAN businesses, and thereby inhibit productivity (MPC, 2014: 12).

The challenge for ASEAN Member States is to ensure that the regulations effectively address the identified problems while minimising the cost of compliance with, and preventing unwarranted distortions and inconsistency arising from, the regulations in each member. In addition, differences in regulatory requirements amongst ASEAN Member States that impose substantial and unnecessary barriers to intra-ASEAN movement of goods, services, investment, capital, and skilled labour would need to be addressed.

Indeed, the drive towards a competitive, dynamic, innovative, and robustly growing ASEAN requires that the regulations and the regulatory regimes involved are non-discriminatory, pro-competitive, cost-effective, coherent, relevant, transparent, responsive, and accountable. In the process, robust entrepreneurship, innovation, trade, investment, and job creation is engendered in the region. In equal measure, social security, inclusive prosperity, rule of law, and citizen’s well-being will also be enhanced.

Good Regulatory Practices (GRPs) powerfully address the regulatory concerns raised above and promote good governance. ASEAN has recognised the importance of GRP in the ASEAN Policy Guideline on Standards and Conformance (2005), and the ASEAN Good Regulatory Practice (GRP) Guide (2009) aimed at improving the consistency and transparency of technical regulations. More forcefully, the AEC Blueprint 2025 includes ‘Effective, Efficient, Coherent and Responsive Regulations, and Good Regulatory Practice’ (pp. 76–77) as a key element of ASEAN’s drive for a ‘Competitive, Innovative and Dynamic ASEAN’ (p. 70). In addition, the AEC Blueprint 2025 emphasises embedding GRP to minimise compliance cost of meeting non-tariff measure requirements and in the preparation, adoption, and implementation of standards and conformance rules, regulations, and procedures (p. 63).
Good Regulatory Practice (GRP) Principles

GRP principles in the design and implementation of regulations ‘are a useful toolkit for measuring and improving the quality of regulation and its enforcement, setting the context for dialogue between stakeholders and government’ (UK Better Regulation Task Force: 1). Regulations are construed as all written legal and quasi-legal instruments including laws, decrees, secondary regulations, guidelines, circulars, codes, standards, and others (MPC, 2014: 2). The principles help identify where unnecessary regulatory burdens on business could be reduced (MPC, 2014: 5).

No clear and agreed complete set of good regulatory practices has been used by governments and analysts. Nonetheless, a number of commonly emphasised principles can be considered as the core GRP principles. The following list of core GRP principles draws from or are taken from the GRP principles of Malaysia, APEC, OECD, ASEAN GRP Guide, Australia, New Zealand, and the United Kingdom.

**Principle No. 1: Ensure regulations have a proportionate and effective response to the risk being addressed**

This proportionality principle highlights the fact that most regulations address risks to society, economy, and the environment that are not adequately addressed by individuals or the market; e.g. environmental pollution, food borne illnesses, fraud, fire, etc. (MPC, 2014: 17). At the same time, as the ASEAN GRP Guide puts it, the regulatory response ‘... produces benefits that justify costs [imposed on firms and citizens],... serves clearly defined policy objectives, and be effective in achieving those objectives.’ (ASEAN GRP Guide, 2009: 1) In effect, the problem should be clearly stated and the regulatory response justifiable and appropriate (APEC, 2010: 3).

The proportionality principle means regulatory agencies (and other government bodies including the legislature) intervene only when it is necessary and socially beneficial. This implies the importance of a clear empirical understanding of the risk(s) to be addressed and the corresponding appropriate risk management regulatory approach to undertake. That is, the nature of the regulation is commensurate to the severity of the risk, taking into consideration the various regulatory and non-regulatory options. Generally, this means a greater reliance on outcome-based (or performance based) regulatory and non-regulatory measures rather than prescriptive regulations except where risks are severe. Proportionate response also implies that greater attention be given to the impact of regulations on small and medium businesses, which tend to be disproportionately burdened by the regulations compared
with large firms. Finally, this implies that a range of feasible options (regulatory, non-regulatory, co-regulatory) as well as the benefits and costs are considered (Council of Australian Governments, 2007: 4).

**Principle 2: Minimise adverse side effects and market distortions**

Under GRP, a regulation and its implementation needs to minimise adverse side effects to only what is necessary to achieve regulatory objectives at least cost (MPC, 2014: 6) and does not lead to market distortions by unnecessarily limiting competition and by being discriminatory against other domestic and foreign firms. The exception to the introduction of regulations that limit competition is when ‘...the benefits of the restrictions to the community as a whole outweigh the costs, and the objectives of the regulation can only be achieved by restricting competition.’ (Council of Australian Governments, 2007: 4)

Minimising the adverse side effects requires that regulations and their implementation are targeted and focused on the regulatory problem of concern, and that the regulators are more concerned with activities that give rise to the most serious risks (UK Better Regulation Task Force: 6). Similarly, regulations need to be as least trade restrictive as possible in meeting the desired objectives (ASEAN, 2009: 2).

**Principle 3: Aim for consistency and coherence of regulations and predictability of implementation of regulations**

Consistency and coherence of regulations mean no conflicting or duplication of regulations. This calls for, amongst other actions: (OECD, 2012: 17)

- appropriate coordination mechanisms among concerned agencies or regulatory institutions, as well as between levels of government on regulatory policies and practices;
- information sharing and greater transparency between levels of government to address asymmetric information and promote complementarities among regulations;
- identification and reform of overlapping regulations in regulatory issues that cut across levels of government.

Consistency also implies that enforcement agencies apply regulations consistently across the country (UK Better Regulation Task Force: 5).
Consistency and coherence of regulation is central to a genuine whole of government ownership of GRP. Thus, the critical importance of appropriate coordination mechanisms amongst concerned agencies and regulatory institutions. In all of our bureaucracies, vertical accountability incentives and disciplines are so powerful that making GRP a reality requires a very strong countervailing commitment to looking and working across agency silos. The predilection of bureaucracies for working in silos that are largely isolated from each other is one of the main obstacles to regulatory practices that create a better experience for the regulated.\(^1\) Indeed, a business enterprise faced with multiple licenses, permits, and approvals from various agencies in its operations requires effective coordination amongst agencies together with streamlined regulatory requirements and simplified systems and work procedures if it is to be efficient and if society is to reap the benefits (Seman and Bahari, 2016: 7). Hence, it is important that regulations be reviewed from the perspective of the operations of a business enterprise, a process that animates the initiatives of Malaysia’s PEMUDAH Task Force.

Of importance for the ASEAN Economic Community is the minimisation of regulatory differences amongst members, both in terms of the regulations themselves and in the implementation of the regulations. This is because regulatory differences can become significant barriers to trade, investment, and labour flows within the region. That is why, for example, the ASEAN GRP guide calls for regulations ‘...to be based on international standards, or on national standards that are harmonized to international standards, except where legitimate reasons for deviations exist’ (ASEAN, 2009: 2). The drive towards minimised regulatory differences and greater regulatory coherence amongst members also calls for, as the ASEAN GRP Guide emphasises, equal treatment for products of national origin and like products imported from other members.

The predictability of the implementation of regulations engenders a greater sense of certainty to regulated entities about regulatory compliance risks, both now and in the future, and thereby provides a more conducive environment for investment. The predictability and certainty of the regulatory regime is enhanced by clear decision-making criteria that are publicly known as well as by taking into consideration in the design of regulatory regimes the fact that firms need predictability and certainty to take long-term investment decisions (Mumford, 2011: 38).

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\(^1\) Mark Steel, personal communication.
Principle 4: Ensure transparency and stakeholder participation in the design, implementation, monitoring, and review of regulations

Transparency ‘...addresses many of the causes of regulatory failures, such as regulatory capture and bias toward concentrated benefits, inadequate information in the public sector, rigidity... and lack of accountability. [It] encourages the development of better policy options, and helps reduce the incidence and impact of arbitrary decisions in regulatory implementation. Transparency is also rightfully considered to be the sharpest sword in the war against corruption.’ (OECD, 2002: 65–66).

Transparency measures include the following:

- Public access to information on the regulations and quasi-regulations such as laws, policies, circulars, rules, guidelines, decisions, and procedures together with, where appropriate, expected service standards (e.g. duration of processing of license applications), and where practicable, such information should be available online. Preferably, the information should include guidance to regulated parties on their expected compliance requirements, how to comply with legal requirements and how regulators will assess applications (MPC, 2014: 40).

- Regulations, rules, and procedures should be clear, simple, well organised, and written in plain language, ‘...recognizing that some measures address technical issues and that relevant expertise may be needed to understand and apply them.’

- As in the case of Thailand’s Royal Decree on Review of Law, transparency is also enhanced by the requirement that regulations are translated into English so that they are easily available to foreign stakeholders.

Effective consultation and stakeholder participation involves a continuous process of engagement and communication with affected stakeholders from a wide variety of perspectives and interests at all the stages of the regulatory cycle. In addition, the stakeholders should be provided with reasonable time to make considered responses and on how the results of the consultation process have been taken into account in the decisions on the design, implementation, and revision of regulations and quasi-regulations. Effective consultation with, and engagement by, stakeholders can be expected to: help ensure that those who are affected by the concerned regulation have a good understanding of what the regulation is and how it addresses the problem

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2 Trans-Pacific Partnership Agreement, Chapter 25 on Regulatory Coherence, p. 7.
of interest; help provide suggestions on alternative options, allowing regulators to assess competing interests; help identify interactions between different types of regulations; help provide a means to check on regulator’s cost assessment; and may enhance voluntary compliance with the regulation (Council of Australian Governments, 2007: 6).

**Principle 5: Ensure that there is a robust review mechanism to ensure the continuing effectiveness of the regulations in a changing economic and social environment**

Given dynamic market, technological, and other developments globally, regionally, and nationally, regulations over time can become wholly or partly redundant, which may call for their termination or, more commonly, their revision or, if possible, their replacement by non-regulatory options. Thus, it is important to have a robust review mechanism that ensures that existing regulations remain relevant and effective. The review and evaluation of regulations and the regulatory regime also aims to ‘...improve the performance of regulatory quality tools and institutions – measured in terms of their ultimate goal of increasing the effectiveness and efficiency of regulation over time’ (APEC, 2010: 6).

A more systematic and systemic review mechanism is to build in a review requirement to each regulation, or even to introduce a ‘blanket’ policy or law that requires the regular review of all or most regulations, e.g. as is required every 7 years under Malaysia’s National Policy on the Development and Implementation of Regulations, and every 5 years by Thailand’s Royal Decree on Review of Law. This approach suggests the establishment of a central oversight institution charged with monitoring the performance of regulations and the review process, e.g. Malaysia’s National Development Planning Committee supported by the Malaysian Productivity Corporation, and Thailand’s Council of Ministers supported by the Law Review Commission.

Several ASEAN Member States, some with the assistance of the Asian Development Bank, have focused on both: one, reviews of existing regulation, e.g. RURB (Reducing Unnecessary Regulatory Burden), which has been implemented systematically in Malaysia; and two, RIA (Regulatory Impact Assessment), which focuses primarily on proposed new regulations. In both, consultation with, and engagement of, affected and concerned stakeholders is critical. In both, some estimation, either quantitatively or qualitatively, of costs and benefits is vital and, at least for more sophisticated RIAs, this should be on an economy-wide basis to aid in the prioritisation of decision-making on actual regulations and alternative regulatory options and refinements.
Principle 6: Accountability, probity, and responsiveness in the enforcement of regulations by regulators

The quality of enforcement of the regulations by, and indeed the overall compliance strategy of, the regulators can affect the willingness of affected entities and individuals to comply voluntarily with the regulations. A critical concern for regulators is how to deploy limited resources in the most efficient way such that regulations are effectively administered to meet the objectives of the regulations at least cost to business and citizens (APEC, 2010: 27). A responsive and ‘incentivised’ compliance strategy and enforcement of regulations together with accountability and probity of the regulators contribute towards good enforcement of the regulations.

A responsive approach to enforcement of regulations means ensuring that the tools or instruments to be used in enforcement are aligned with the likely or actual behaviour of the regulated entities or individuals. For example, regulators should help facilitate compliance by those who are willing to comply but sometimes unable to comply, while, in contrast, use the full force of the law against entities and individuals who do not want to comply (APEC, 2010: 28–29). Accountability demands that the enforcement of regulations by regulators is not arbitrary and there are recourse and appeal mechanisms in cases when regulators unfairly penalise a business. The probity of regulators will also help address corruption in the implementation of regulations.

Regulatory agencies need to have clear lines of accountability to Ministers, the Parliament, and to the public. Accountability is enhanced when there are clear standards for judging the performance of regulators, and means for explaining how and why final decisions have been made. It is also enhanced with an accessible, fair, and effective complaints and appeals process (UK Better Regulation Task Force: 4). Similarly, strong governance mechanisms need to be put in place to help protect regulatory agencies from any undue or improper influence, as well as from ‘regulatory capture’, by firms or industries.

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Legal Barriers to Supply Chain Connectivity in ASEAN

Locknie Hsu
Professor, School of Law, Singapore Management University*

ASEAN at 50: Overview of the Legal Landscape

The Association of Southeast Asian Nations (ASEAN) was formed in 1967 by five founding states – Indonesia, Malaysia, the Philippines, Singapore, and Thailand – with a view to promoting regional peace and stability.1 With this goal still in mind, ASEAN has evolved over the past decades towards the promotion of greater integration. In the economic sphere, formal integration treaty-making began in earnest in the 1990s, with an agreement to form an ASEAN Free Trade Area to promote trade and investment liberalisation, with efforts to eliminate tariff and non-tariff barriers to intra-ASEAN trade.2 The legal process to realise these objectives took place in 1992 with the introduction of a Common Effective Preferential Tariff (CEPT) system for the then members.3 Plans for an ASEAN Investment Area were established in 1998.4 In 2009, ASEAN members signed a landmark ASEAN Comprehensive Investment Agreement (ACIA).5 In 2008, aiming to strengthen the legal architecture of the Association, ASEAN members adopted the ASEAN Charter, setting out the Association’s purpose and objectives, the legal framework of its institutions, and provisions for dispute settlement.6

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* E-mail: lockniehsu@smu.edu.sg
1 The founding document is the ASEAN Declaration, also known as the Bangkok Declaration, signed on 8 August 1967, available at: http://www.asean.org/news/item/the-asean-declaration-bangkok-declaration
3 The members in 1992 were Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Cambodia, the Lao PDR, Myanmar, and Viet Nam subsequently joined ASEAN in 1999, 1997, 1997, and 1995, respectively.
Apart from the increasing use of binding legal instruments in ASEAN, there has also been an increase in explicit references to good governance and rule of law in the region’s documents. These developments demonstrate a growing emphasis on the role of law in ASEAN members’ economic relations. Over the past 2 decades, ASEAN has also made greater use of binding treaties in its economic relations with external partners.

ASEAN integration has proceeded through three pillars: the ASEAN Economic Community (AEC), the ASEAN Socio–Cultural Community (ASCC), and the ASEAN Political–Security Community (APSC). In recent years, ASEAN has accelerated economic integration to establish the ASEAN Economic Community (AEC) by 2015 to establish ASEAN as a single market and production base.

To advance the AEC goals, ASEAN has taken a number of specific trade facilitation actions. For example, ASEAN Member States agreed in 2005 to work towards the establishment of an ‘ASEAN Single Window’ (ASW) to increase trade facilitation in the ASEAN Economic Community, by integrating national customs windows for goods clearance. An intra-ASEAN certificate of origin supports the operation of the ASW. As of September 2015, five ASEAN members had joined the initiative – Indonesia, Malaysia, Singapore, Thailand, and Viet Nam. Over the past several years, ASEAN has established various legal instruments to facilitate trade in goods, trade in services, and the flow of investments into and within ASEAN.

In tandem with these developments, members of ASEAN also engaged in bilateral and regional trade liberalisation and integration initiatives, by way of free-trade agreements (FTAs) and bilateral investment agreements (BITs). ASEAN’s major regional trade partners include China, India, Japan, the Republic of Korea, Australia, and New Zealand. ASEAN has pursued trade and investment liberalisation arrangements with each of these partners, and is currently negotiating a pan–region Regional Comprehensive Economic Partnership (RCEP) agreement with all six partners.

As ASEAN looks to the next 10 years, the new Economic Blueprint for 2025 aims to chart the course for new targets in trade and investment. While this is an important

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8 The original target for the AEC was 2020; the members decided in January 2007 at the 12th ASEAN Summit in Cebu, Philippines, to bring forward this date to 2015. The ASEAN Economic Community Blueprint (2008) is available at: http://asean.org/wp-content/uploads/archive/5187-10.pdf. In 2015, the ASEAN Economic Community Blueprint 2025 was adopted; see http://www.asean.org/storage/images/2015/November/aec-page/AEC-Blueprint-2025-FINAL.pdf (accessed 18 October 2016).
guide, it will be necessary to view the targets against the wider context of evolving geopolitical developments, advancements in technology and financial instruments, and other regional and global economic alignments/re-alignments. Examples of the last category of developments will be other significant trade and investment coalitions such as the Trans-Pacific Partnership agreement (TPP),\(^{11}\) the RCEP,\(^{12}\) and possibly, a Free Trade Area of the Asia-Pacific (FTAAP).\(^{13}\) Another example will be the changing economic relationships resulting from the United Kingdom’s expected departure from the European Union (popularly known as ‘Brexit’).

Supply Chains and Production Networks in ASEAN and Beyond

Businesses in ASEAN Member States play a role in regional and global supply chains and production networks.\(^{14}\) Realising the need to enhance connectivity to further promote such participation, the AEC Blueprint 2025 makes explicit mention of this, setting aims such as the following:

‘6.iii. Foster robust productivity growth through innovation, technology and human resource development, and intensified regional research and development that is designed for commercial application to increase ASEAN’s competitive edge in moving the region up the global value chains (GVCs) into higher technology and knowledge-intensive manufacturing and services industries;

A.1
4. Explore alternative ways to addressing NTMs such as sectoral or value chain approaches to deal with NTMs.

\(^{11}\) Singapore, Brunei Darussalam, Malaysia, and Viet Nam signed the TPP agreement in February 2016. This agreement is awaiting ratification and implementation. Another trade arrangement which Singapore – as a member of APEC – may participate in is the Free Trade Area of the Asia-Pacific. See APEC, http://www.apec.org/Groups/Other-Groups/FTA_RTA.aspx (accessed 6 March 2016). See also generally President Obama’s meeting with ASEAN leaders in the United States in early 2016: http://asean.usmission.gov/factsheet02172016.html and the President’s remarks at the US–ASEAN Press Conference, Sunnylands, California, United States, 16 February 2016, at: https://www.whitehouse.gov/the-press-office/2016/02/16/remarks-president-obama-us-asean-press-conference (accessed 24 March 2016).

\(^{12}\) The 15th round of RCEP negotiations was held in China in October 2016; see http://fta.mofcom.gov.cn/list/rcepn/encateinfo.html


A.2

11. The objective is to further broaden and deepen services integration within ASEAN, ASEAN’s integration into the global supply chains in both goods and services, and enhance ASEAN Member States’ competitiveness in services. A strong services sector facilitates industrial development, innovation, and efficiency. The end result is the maximisation of potential contribution of the services sector to economic development and growth.

A.6. Enhancing Participation in Global Value Chains

D.1

69. iii. Enhance market access and internationalisation by extending and developing support schemes for market access and integration into the global supply chains including promoting partnership with multinational corporations (MNCs) and large enterprises to increase market access and opportunities; promote the use of e-Commerce; and enhancing measures to promote exports through mechanisms such as export clinics, advisory services and ROO utilisation…”

These objectives should be viewed against the broader context of a recent Chinese initiative to promote economic cooperation between China and its neighbours. In 2013, President Xi Jinping of China announced the One Belt, One Road Initiative, comprising a land-based connectivity plan based on the ancient Silk Road route linking Europe, Central Asia, China, South Asia, and ASEAN countries, and a maritime ‘Belt’ connection linking South Asia, North Asia, ASEAN, and Eastern Africa. ASEAN countries have since been exploring possible roles in this evolving new configuration for economic and cultural collaboration. This initiative, which places emphasis on developing infrastructure and connectivity within the Belt and Road region, offers opportunities for ASEAN participation in infrastructure improvement, new supply chains, production networks, investments, and markets. ASEAN will therefore need to actively study and address legal barriers not only within ASEAN, but also in the wider region where these new opportunities will lie.

15 ASEAN already enjoys a trade and investment relationship with China through its Framework Agreement and Investment Agreement. The parties are in the process of reviewing and improving these agreements. The ASEAN–China economic relationship could form a building block within the One Belt, One Road structure as it evolves. The One Belt, One Road initiative has been further elaborated upon by the Chinese government. The plan has significant implications for ASEAN businesses, particularly in the areas of infrastructure (including transport, logistics, customs processes, and distribution of goods), maritime commerce, e-commerce, investment, energy, and other collaborative ventures. Given its broad economic and geographical scope it will also encompass issues requiring clear policies, such as security, privacy, sustainability, and other cross-cutting matters. In the near term, the priority placed within the initiative on physical connectivity is expected to dovetail with the ASEAN Master Plan on Connectivity and its national implementation actions; see http://asean.org/storage/2016/09/Master-Plan-on-ASEAN-Connectivity-20251.pdf
Legal Obstacles

The AEC Blueprint and the 2025 version contain specific target outcomes for each member to address trade and investment legal obstacles. Some general observations on such obstacles are apposite here.

First, the barriers to trade and investment activity may take the form of existing laws and legal processes that pose challenges, or a lack of laws. Existing laws may be impediments because of a lack of clarity. For example, the pre-establishment or pre-investment laws and requirements may be unclear in some countries, leading to avoidance or delays in investor activity.\(^{16}\)

Secondly, existing laws may also provide for exclusion of, or high thresholds for, foreign investor activity or capital ownership. For example, while the ASEAN Comprehensive Investment Agreement (ACIA) provides for liberalisation of foreign investment rules in a ‘built-in agenda’, member states still have a significant number of barriers preserved in their Reservation Lists.\(^{17}\) The AEC Blueprint 2025 recognises the need to address these reservations, and the member states aim to:

> [‘i]dentify appropriate approaches or mechanisms for the phasing out and/or reduction of the ACIA Reservation Lists’\(^{18}\)

For trade in goods, non-tariff measures (not all of which are illegal trade barriers) continue to exist. Examples exist in the form of legal requirements as to product standards, customs requirements, and transport-related requirements.

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\(^{16}\) See e.g. ASEAN: AEC, One Belt, One Road, to be Growth Drivers for Frontier Markets, 4 May 2016, Asia Insurance Review, at: http://www.asiainsurancereview.com/News/View-NewsLetter-Article?id=35820&Type=eDaily (accessed 7 July 2016):

‘The CLMV markets are revising insurance and related regulations to enable faster sector growth. For example, a new insurance Law in Cambodia took effect from February 2015. In Myanmar, where the insurance market has been in state hands since 1963, 12 private companies were in 2013 granted conditional approval to provide insurance services. While all CLMV markets allow foreign participation, there is lack of clarity over establishment rules.’ (CLMV refers to Cambodia, the Lao PDR, Myanmar, and Viet Nam. Italic emphasis added.)


\(^{18}\) At para. 15.ii.
Efforts to remove those that have been identified as barriers have been made, but much remains to be done. Relevant initiatives include the ASEAN Single Window, the ASEAN Customs Transit System (ACTS) pilot project, and the ASEAN Trade Repository.

Thirdly, while ASEAN has established agreements to facilitate transport of goods in the region, the participation and implementation has been uneven. These are:

- the Framework Agreements for Transport of Goods (AFAFGIT, in force from 2000, Protocols at various stages of ratification);
- the ASEAN Framework Agreement on Multimodal Transport (AFAMT; signed in 2005, in force in C, P, T, V); and
- the ASEAN Framework Agreement on the Facilitation of Inter-State Transport (AFAFIST; signed in 2009, in force in C, L, P, T, V).

For air and maritime transport integration, there are two further agreements – the ASEAN Roadmap for Integration of Air Travel Sector (RIATS) and the Roadmap Towards an Integrated and Competitive Maritime Transport in ASEAN (RICMT).

Fourthly, there is a diversity of legal systems and laws in ASEAN. This will be discussed further below, in the context of issues of cross-border dispute settlement of ASEAN businesses. Generally, there is a need to help businesses reduce transaction costs through clear and certain laws. For instance, harmonisation of certain commercial laws within ASEAN can contribute to ease of understanding and application of such laws by the business community. An example of a useful instrument for such harmonisation, which has been adopted by some ASEAN countries, is the United Nations (UN) Convention on Contracts for the International Sale of Goods (CISG).

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20 See ASEAN, at: http://atr.asean.org/
23 Ibid.
E-Commerce: Gaps in Laws and Harmonisation

E-Commerce is an area of strong interest for ASEAN as electronic business levels certain inequalities, such as geographic ones. Due to the rapidity of changes in technology, forms of user access and availability to even small and medium-sized enterprises (SMEs) to tap into, e-commerce holds much economic promise. However, ASEAN members do not presently have a common set of laws and regulations governing cross-border e-commerce. The legal gap needs to be filled with clear and effective laws to provide the business community with certainty and confidence, allowing e-commerce to grow further. A suite of laws is required to properly address this area, including those raised in the AEC Blueprint 2025, part C.3. The aim under the Blueprint is to develop an ASEAN Agreement on e-Commerce, which includes implementing the following strategic measures:

1. Harmonisation of consumer rights and protection laws;
2. Harmonisation of legal framework for online dispute resolution, taking into account international standards;
3. Development of inter-operable, mutually recognised, secure, reliable, and user-friendly e-identification and authorisation (electronic signature) schemes; and
4. Development of a coherent and comprehensive framework for personal data protection.26

Instruments that promote harmonisation include the UN Convention on the Use of Electronic Communications in International Contracts,27 which provides a system of regulating electronic communications in international commerce (such as the use of electronic mail for offers and acceptances of contracts), and the UNCITRAL Model Law on Electronic Commerce,28 which provides guidance to countries wishing to enact new laws to regulate electronic commerce. Not all ASEAN members have signed the Convention or adopted the Model Law. This means that within ASEAN a diversity of laws still exists in the area of electronic communications and e-commerce.

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26 At para. 53.
In the area of supply chain security, efforts are being made to address this through initiatives such as the Safe Authorised Economic Operator (AEO) laws in ASEAN and through the use of mutual recognition agreements. The AEO programme is already operational in Indonesia, Malaysia, Singapore, Thailand, and Viet Nam, and in the Philippines new rules were recently enacted to implement it.29

In other areas affecting e-commerce, there is presently no common, ASEAN-wide legal approach on important matters such as e-transactions security, applicable law, and dispute resolution mechanism in case of a dispute arising from an e-transaction between ASEAN parties, personal data protection, taxation of incomes derived from e-commerce activities, the import and export of dual-use goods, use of drone technology in cross-border trade, and the use of crowd-funding.30

Dealing Effectively with Cross-border Commercial Disputes in the AEC

The diversity in legal systems and laws in ASEAN Member States poses certain challenges to businesses. While such diversity represents a rich legal heritage, it can also mean added transaction costs for businesses. Differences in laws and legal processes in each member state translate into legal and time costs, since it is necessary to navigate through the differences, whether in individual transactions or in case of a dispute. Taking one example, enforcement of contracts – particularly the ease and speed of doing so – is a matter that interests business parties everywhere. A related matter is one of certainty of the law, which assists businesses in the planning of their economic dealings. If a business has to enforce a judgment given in one ASEAN member in another, differences in legal requirements and procedures, and uncertainty in laws of another member state, can lead to delays and added costs. Cross-border arbitration, which has flourished in Asia in the last few decades, provides some advantages that some domestic court systems may not offer, such as speed, efficiency, cost-effectiveness (sometimes), and privacy. More pertinently, arbitration awards are also relatively easily enforced across borders where the venue for enforcement is a signatory to the New York Convention. However, within ASEAN, while all member states are party to the

30 See e.g. Singapore’s agreements with Canada and the Republic of Korea: http://www.customs.gov.sg/~media/cus/files/insync/issue09/index.html. For a discussion on legal and other issues relating to the use of drones, particularly in supply chains, see e.g. https://channels.theinnovationenterprise.com/articles/105-5-problems-with-using-supply-drones
New York Convention, not all members have adopted the UNCITRAL Model Law on International Commercial Arbitration, which provides a set of harmonised arbitration rules to promote greater clarity and ease of operation for businesses.\textsuperscript{31} To complement the role of arbitration, specialist courts – such as the Singapore International Commercial Court (SICC) – now exist to handle cross-border commercial cases.\textsuperscript{32} As part of a court structure, such specialist courts provide published judgments and an opportunity to appeal. This presents ASEAN business parties with another useful option for dispute resolution.

The ASEAN Secretariat also provides avenues for resolving trade/investment problems of commercial parties. An example of a recent initiative is the ASEAN Solutions for Investments, Services and Trade (ASSIST) mechanism, to be launched in August 2016.\textsuperscript{33} ASSIST is intended to be a non-binding, online problem-solving avenue for commercial parties registered in ASEAN, which may wish to submit a complaint regarding particular measures or laws of another ASEAN country. The system will be administered by the ASEAN Secretariat as its Central Administrator and the system provides for clearly published timelines for responses and actions. The country against which a complaint is made may ‘accept’ or ‘reject’ a complaint. If it accepts the complaint, it will generally have 30 working days to find and provide a solution (by way of an online response). This may be a good first stop for commercial parties; how effective and how frequently it will be used remains to be seen. The success of such newer, relatively faster dispute settlement systems would assist smaller businesses. Other means of cost-saving dispute settlement mechanisms are likely to emerge, even as the AEC Blueprint 2025 calls for consideration of online dispute settlement systems.\textsuperscript{34}

\textsuperscript{31} For signatory states of the New York Convention, see http://www.newyorkconvention.org/countries and for countries which have adopted the UNCITRAL Model Law, see http://www.uncitral.org/uncitral/en/uncitral_texts/arbitration/1985Model_Arbitration_status.html. Within ASEAN, the Lao PDR, Indonesia, and Viet Nam, for example, have not adopted the UNCITRAL Model Law.

\textsuperscript{32} The SICC was set up in January 2015; see generally, www.sicc.gov.sg. As of September 2016, four written judgments had already been delivered by the SICC; the judgments are available online at http://www.sicc.gov.sg/HearingsJudgments.aspx?id=72. Separately, the enforcement of judgments across borders in ASEAN is another area where more work can be done, since businesses would benefit from greater ease and efficiency in such enforcement of their contract-related judgments. In this context, Singapore adopted the Hague Convention on Choice of Courts Agreement in 2016 to promote greater ease of enforcement of judgments amongst Convention parties; see https://www.mlaw.gov.sg/content/minlaw/en/news/press-releases/singapore-ratifies-hague-convention-on-choice-of-court-agreement.html

\textsuperscript{33} See http://assist.asean.org/

\textsuperscript{34} Para. 53 of the Blueprint on E-commerce provides for the following possible strategic measure to be put in place in ASEAN:

‘ii. Harmonised legal framework for online dispute resolution, taking into account available international standards ...’.
Conclusion

Looking ahead, ASEAN policymakers will not only have to ensure steady and incremental implementation of AEC 2025 goals within set time frames, but will also have to consider a myriad of new issues, as the regional and global geopolitical landscape evolves and as technological advancements march forward. They will need to keep abreast of the complex amalgam of new technologies, new business models, and new trade and investment opportunities – and possibly, new barriers that develop along with these – to design and implement timely and effective laws and regulations, and explore new legal and policy areas of cooperation and harmonisation.

More specifically, it is recommended that a set of priority actions be targeted in addressing various legal issues and gaps to further facilitate ASEAN trade and investment. These include the following:

1. Full implementation of national Single Window arrangements with a view to full implementation of the ASEAN Single Window;
2. Full implementation of the various transport facilitation agreements;
3. Prompt establishment of modalities and timelines for achieving the goal in the AEC Blueprint 2025 to eliminate/reduce existing investment reservations under the ACIA;
4. Implementation of AEO programmes in all ASEAN Member States;
5. In the area of commercial law harmonisation and enforcement, promotion of:
   - adoption of international instruments promoting commercial law harmonisation, such as the CISG, the UNCITRAL Model Law on Commercial Arbitration;
   - instruments promoting more efficient cross-border enforcement of commercial judgments and arbitration awards;
   - knowledge of newer systems (such as the SICC) and more established systems (such as regional dispute settlement centres and their services) within ASEAN, which can help promote coherence and uniformity in commercial law principles, and systems which may help resolve disputes speedily (such as ASSIST);
6. Establishment of timelines and implementation steps to provide a transparent and coherent set of policies and ASEAN-wide rules on e-commerce transactions.35

35 These need, of course, to be considered in tandem with ongoing ASEAN efforts to promote inter-connectivity and internet penetration in the region. See further discussion below.
In this regard, priority should be placed on the areas set out in the AEC Blueprint 2025, as follows, and with attention being paid to the necessary precursor steps identified below:

a. harmonisation of consumer rights and protection laws
   - recommended step: promptly study existing national consumer protection laws in the area of e-commerce in all ASEAN Member States, with a view to such harmonisation;

b. harmonisation of a legal framework for online dispute resolution, taking into account international standards
   - recommended step: promptly undertaking a study of existing international mechanisms and standards on online dispute settlement, to identify and consider the features, systems, and rules most suited to ASEAN e-commerce dispute settlement;

c. development of inter-operable, mutually recognised, secure, reliable, and user-friendly e-identification and authorisation (electronic signature) schemes
   - recommended step: prompt undertaking of a comprehensive study of existing national laws and bilateral/regional system linkages within ASEAN to develop robust, secure, and efficient schemes;

d. development of a coherent and comprehensive framework for personal data protection:
   - Recommended steps: prompt undertaking of a comprehensive study of existing national data protection laws, particularly insofar as they affect electronic transactions, in all ASEAN Member States, to develop a common ASEAN legislative template for protection of personal data.
   - Two related issues are cyber-security, and the regulation of collection and use of ‘big data’ in ASEAN Member States, both areas of intense interest to businesses and government.
   - A possible starting point for consideration, which could help accelerate action in this area, would be the negotiation and preparation of a Framework Agreement on ASEAN personal data protection for e-commerce transactions. Such a framework agreement can spur the crystallisation of thought, prioritisation of areas of work, and negotiation of a timetable for concerted, concrete action.

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In addition to these four areas identified in the Blueprint, it is suggested that a fifth be studied – security issues in cross-border e-commerce, in which the AEO schemes, import and export policies on dual-use or strategic goods, with a view to formulating a common ASEAN policy on trade in such goods.

Some of the above areas are already being addressed in greater specificity and with more speed than others. For example, the ASEAN ICT Masterplan 2020 already sets a number of relevant timelines for the harmonisation of ICT regulations (scheduled for implementation in 2017), while information security (comprising data security, network security best practices, critical information infrastructure coordination, and cyber incident collaboration) are scheduled to be implemented in 2017–2018. An Open Data, Big Data Framework is also scheduled for 2018 under the Masterplan.38

The above are some priority steps that may be taken to address both the existing gaps in ASEAN-wide law and policy, and the lag in implementation of existing initiatives, both of which will go some way to provide traders and investors with greater legal certainty and security.

Beyond intra-ASEAN integration, the next 10 years will also require the bloc to consider – in the face of new, large regional trade alliances and initiatives – how best to leverage on ASEAN’s existing economic integration initiatives, systems, and instruments to ‘plug into’ the wider regional (and global) context so as to generate even more trade and investment for the member states. An example is the Belt and Road initiative, which shares many of ASEAN’s economic and developmental aspirations. Balancing the member states’ prerogative to regulate with investor-protection guarantees offered to foreign investors will also be a matter of keen interest.39 In the global context, developments in the World Trade Organization, the UN’s Sustainable Development Goals, and the Paris Agreement on Climate Change are areas which need to be continually considered in formulating trade and investment policy formulation and updating, as ASEAN moves towards its next decade, and indeed, its next 50 years.

38 See ASEAN ICT Masterplan 2020, note 36 above, at page 29.
39 See, for example, the tone and emphasis in the recent G20 Guiding Principles for Global Investment Policymaking, requiring a balance of protection and regulatory powers, at: http://www.oecd.org/investment/g20-agrees-principles-for-global-investment-policymaking.htm. Although not an ASEAN document, the issue of balance is increasingly on the minds of policymakers and treaty negotiators in various Asian countries.
Building Dynamic Industrial Agglomerations in ASEAN: Connectivity to Build Up Innovative Capability

Fukunari Kimura
Chief Economist, Economic Research Institute for ASEAN and East Asia (ERIA)
Dean, Graduate School of Economics, Keio University

Yasushi Ueki
Economist, ERIA

Introduction

The economies of the Association of Southeast Asian Nations (ASEAN) Member States (AMS) have followed a unique development path that has involved aggressively utilising global value chains (GVCs). It has been manufacturing-led economic development with massive introduction of foreign direct investment. The utilisation of GVCs has been steadily upgraded from simple and slow international industrial linkages to participation in quick and time-sensitive production networks, and further to the formation of industrial agglomerations with thick connection to GVCs. Participation in production networks has so far been achieved by only a limited number of least developed countries (LDCs) in the world, including most of the AMS, China, several Central and Eastern European countries, and a few Latin American countries such as Mexico and Costa Rica. The formation of industrial agglomerations with international production networks has been observed in just a few countries including Singapore, Malaysia, Thailand, China, and perhaps Mexico.

Participation in production networks has already been highlighted in both the academic and non-academic literature. The fragmentation theory (Jones and Kiezowski, 1990) and the concept of the second unbundling (Baldwin, 2011) have convinced people about qualitative differences between simple and slow links. The formation of industrial agglomerations, however, has so far not attracted much attention. Perhaps industrial
Building Dynamic Industrial Agglomerations in ASEAN: Connectivity to Build Up Innovative Capability

Agglomeration in LDCs is still regarded as an old phenomenon under the infant industry protection or the import-substituting development strategies. The authors believe that the formation of industrial agglomerations with fragmentation is a novel and important step in economic development for the current LDCs. As Baldwin claims, the information and communications technology revolution removes the ‘glue’ that used to keep all production processes and tasks together in one place and unleashes production blocks for the fragmentation of production. However, we still have some glue that demands geographical proximity for some of the activities. What we have observed is the simultaneous development of fragmentation and agglomeration in production. Our view is that the formation of efficient industrial agglomerations is the key for LDCs, particularly AMS, to moving up from simple production fragmentation to thicker domestic and international industrial linkages, as is nurturing innovative capabilities to move up to the full development stage.

This chapter focuses on two important elements in the formation of industrial agglomerations: connectivity and innovation. Connectivity is regarded as a necessary condition for production networks, and the importance of both physical and institutional connectivity is emphasised by the Master Plan on ASEAN Connectivity (ASEAN Secretariat, 2010; 2016). Discussion about connectivity in ASEAN sometimes over-emphasises middle- to long-distance connectivity and tends not to attribute sufficient importance to connectivity in geographical proximity, i.e. within an industrial agglomeration, which is also crucial. To take advantage of positive agglomeration effects and limit congestion, industrial agglomerations should be grown up to a certain size with proper infrastructure in a metropolitan area. Middle- to long-distance connectivity must also support a tight link of industrial agglomerations to GVCs.

Innovation deeply depends on industrial agglomerations (Carlino and Kerr, 2014). Production networks include not only the flow of goods but also the flow of knowledge and ideas. Production networks are designed and operated mainly by multinational enterprises (MNEs), and technology and managerial know-how partially move through foreign direct investment and outsourcing from developed countries to LDCs. But there are large technological gaps between MNEs and local firms in LDCs. One of the main channels for local firms to get access to modern technology and managerial know-how is the interaction with MNEs in industrial agglomerations. Geographical proximity provides opportunities for local firms to participate in production networks run by MNEs, which triggers a chain reaction of technology transfer and spillovers. Furthermore, industrial agglomerations should eventually turn into innovation hubs to move up to the last stage of economic development.
A key claim of this chapter is about the importance of industrial agglomerations in development strategies through aggressive use of GVCs. Connectivity enables countries to build up efficient industrial agglomerations, and innovation is generated and upgraded in industrial agglomerations.

The chapter plan is as follows: the next section presents the tier structure of utilising GVCs in AMS and shows how the improvement of connectivity allows countries to move up the stages of development. The third section argues that industrial agglomeration generates process and product innovation. The last section concludes.

The Tier Structure in Utilising GVCs and Connectivity

AMS have aggressively utilised GVCs in their economic development. Figure 1 illustrates the tier structure of utilising GVCs.1 In most developing economies, the connection to GVCs is still like in Tier 3 where a country simply hooks up with a relatively slow value chain in the international industrial linkage. In AMS, some industries such as garment, footwear, and natural-resource-based industries still conduct Tier 3 type operations while the modern manufacturing sector, particularly machinery industries, has successfully moved up to Tier 2 where quick and time-sensitive value chains are designed and operated in the form of the second unbundling. Furthermore, forerunners in AMS start forming industrial agglomerations (Tier 1a). Some advanced countries start thinking of Tier 1b, where an innovation hub must be created and highly educated people should be attracted by appealing urban amenities, to move up to a fully developed economy.

Figure 1: The Tier Structure of Utilising Global Value Chains


1 The original version of the Comprehensive Asia Development Plan (CADP) (ERIA, 2010) conceptualises three-tiered development stages. The CADP 2.0 (ERIA, 2015) updates the tier structure by introducing two separate steps, Tier 1a and Tier 1b, in the last step of economic development.
Such a tier structure is observed only after the 1980s, and AMS and China are pioneers in applying it to their development strategies. Figure 2 shows the shares of machinery final products (FP) and parts and components (P&C) in total exports/imports in East Asian economies from 1970–2010. Machinery industries, which include general machinery, electric machinery, transport equipment, and precision machinery, are major manufacturing sectors in the second unbundling, and the trade pattern of FP and P&C reveals the degree of participation in international production networks. The second unbundling is detected in the form of back-and-forth transactions of machinery P&C. The figure indicates that machinery P&C transactions were small in 1970 and 1980, which means that the second unbundling was not dominant in the international division of labour. The trade pattern changed dramatically in 1990 and 2000. A very large portion of exports and imports in a number of East Asian economies was occupied by machinery P&C. This corresponds to Tier 2 and Tier 1a. In Tier 2, countries are
connected to quick and time-sensitive international production networks, but the link to GVCs is relatively thin, as can be seen in largely enclave export processing zones. As Tier 1 type operations come in, the international link becomes thick together with sophisticated vertical division of labour in industrial agglomerations. The recent trade data analysis on extensive margins, i.e. the number of exported machinery P&C, also provides evidence that the thickness of international linkages backed up by industrial agglomerations is about to be prepared in AMS (Obashi and Kimura, 2016).

Tier 1a type operations lead to the industrialisation of the whole economy and provide a certain level of stability in industrial structure. At the same time, once the vertical division of labour is developed within industrial agglomerations, a large amount of employment is created in the manufacturing and surrounding services sectors. A smooth movement of labour from rural/traditional/informal sectors to urban/modern/formal sectors is important for continuous industrialisation as well as poverty alleviation (Kimura and Chang, 2017).

Connectivity is a key element for a country to move up the ladder of the tier structure. Required levels of connectivity differ with each tier (Table 1). From Tier 3 to Tier 2, connectivity must be upgraded to cater for quick and time-sensitive operations. Jones and Kierzkowski (1990) called the connections between production blocks service links, the cost of which must be low enough to make production fragmentation economically viable. The cost includes not only a monetary cost but also a time cost and the reliability of logistics links. As for physical connectivity, Tier 3 needs just medium-grade transport infrastructure while Tier 2 requires high-grade transport infrastructure. As for institutional connectivity, although Tier 3 just needs minimal trade liberalisation such as a generalised system of preferences (GSP), Tier 2 must be supported by tariff removal and trade facilitation, at least for machinery industries.

Connectivity enhancement to move up from Tier 2 to Tier 1a calls for further efforts. In Tier 2, links with international production networks are relatively thin, and thus we need to provide connectivity only for limited industrial estates and in specified areas. On the other hand, in Tier 1a production networks expand to multiple industrial estates as well as factories outside specified estates and start covering a number of industries for deeper industrial linkages. Industrial agglomeration must generate positive agglomeration effects while keeping negative agglomeration, i.e. congestion, minimal. Therefore, thick connectivity with international production networks and short-distance within-agglomeration connectivity are required. As for physical connectivity, a large-scale port and airport are essential to connect to international production networks. Within industrial agglomerations, an efficient metropolitan transport system must be constructed. For institutional connectivity, overall trade liberalisation and facilitation
must be aimed for to cater for complicated industrial linkages. GVC-supporting services such as finance, telecommunication, transport, distribution, and professional services should be liberalised and strengthened. In Tier 1b, even higher connectivity would be required to nurture an innovation hub and urban amenities to attract highly educated people.

### Table 1: The Tier Structure of Utilising GVCs and Required Connectivity

<table>
<thead>
<tr>
<th>Tier 3: Hook up with GVCs</th>
<th>Tier 2: Participate in production networks</th>
<th>Tier 1a: Form industrial agglomeration</th>
<th>Tier 1b: Create an innovation hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical connectivity and infrastructure</td>
<td>- Transport infrastructure development (medium grade)</td>
<td>- Economic infrastructure services (for SEZs and others)</td>
<td>- Urban amenities: (1) Varieties of consumption (services, consumption goods), (2) Aesthetics and physical setting (culture/art, smart city), (3) Public policy (education, security), (4) Speed (urban transport, international exchange)</td>
</tr>
<tr>
<td></td>
<td>- Transport infrastructure development (high grade, especially medium distance)</td>
<td>- Transport services development (turnpike quality, metropolitan transport network, full-scale port/airport)</td>
<td></td>
</tr>
<tr>
<td>Institutional connectivity</td>
<td>- Usage of generalised system of preferences (GSP)</td>
<td>- Tariff removal (especially machineries)</td>
<td>- NTB removal (SPS, standard and conformance, and others)</td>
</tr>
<tr>
<td></td>
<td>- Tariff removal (especially machineries)</td>
<td>- Trade facilitation (e-customs, customs clearance, trucks across borders, and others)</td>
<td>- Services liberalisation (general)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Investment liberalisation (especially machineries)</td>
<td>- Investment liberalisation (especially manufacturing in general, production-supporting services)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Movement of natural persons (especially businessman)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Legal system and economic institutions (reducing transaction costs)</td>
</tr>
</tbody>
</table>

GVCs = global value chains; IPR = intellectual property; NTB = non-tariff barrier; SEZs = special economic zones; SOE = state-owned enterprise; SPS = sanitary and phytosanitary measures; TBT = Technical Barriers to Trade. Source: Authors.
AMS have made tremendous efforts to enhance connectivity. As for physical connectivity, AMS have steadily invested in logistics and other economic infrastructure. The World Bank’s World Development Indicators show that world gross capital formation remained at the level of 20% of gross domestic product (GDP) from 1970 to 2010. However, the ASEAN-5 invested 30% or a higher portion of their GDP in capital formation, except for the Philippines, and a certain proportion of the investment was allocated to infrastructure development. In history, a large share of official development assistance has also targeted the development of logistics infrastructure. As for institutional connectivity, clean tariff removals as well as various forms of trade facilitation under the ASEAN Economic Community (AEC) initiative have helped AMS upgrade the utilisation of GVCs though some parts of liberalisation including services are delayed. In the end, the logistics performance indices compiled by the World Bank are relatively high in AMS, except for some latecomers, after controlling for income levels, which has obviously supported AMS’ participation in GVCs (Figure 3). Forerunners have largely achieved the level of connectivity for Tier 2 type operations while latecomers follow suit.

**Figure 3: The Logistics Performance Index and GDP per capita**

LPI 2012

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ASEAN = Association of Southeast Asian Nations; CLMV = Cambodia, Lao PDR, Myanmar, and Viet Nam; GDP = gross domestic product; Lao PDR = Lao People’s Democratic Republic; LPI = Logistics Performance Index. Source: ERIA (2015). LPI is from the World Bank website.
However, some forerunners still struggle with establishing proper connectivity for Tier 1a. Figure 4 presents satellite pictures of night-time lights for Bangkok, Jakarta, and Manila in 1992 and 2012. The colours in 63 grades represent the brightness, and each map covers an area with a diameter of 130 kilometres. Although all show rapid growth of urban and suburban areas in 20 years, the spatial structure indicates that the efficiency of industrial agglomerations differs widely. The Bangkok metropolitan area is largely well designed. Forty industrial estates are scattered over a wide metropolitan area, connected with the highway system. Large-scale ports and airports secure the connection with international production networks. Just-in-time production systems with less-than-2-hour inventory stocks can work. On the other hand, in Jakarta and Manila, factories are located in narrow areas, and negative agglomeration effects – such as congestion – are obvious. The establishment of efficient industrial agglomerations is still a challenge for some AMS. Furthermore, connectivity for Tier 1b will be an important issue in the near future for AMS that will reach upper middle-income levels. Although the construction and operation of subways and urban transport have just started in some of the AMS, it will take some time to achieve ‘speed’ for creating charming urban amenities.

ASEAN and surrounding East Asia are well connected. Figure 5 presents a simulation result of the Geographical Simulation Model developed by the Institute of Developing Economies in cooperation with ERIA. The simulation scenario includes three different types of trade and transport facilitation measures: (i) development and improvement of hard infrastructure such as roads, railways, sea routes, ports, airports, and border posts; (ii) special economic zones (SEZ) development in the ‘CLMV countries’ – Cambodia, the Lao PDR, Myanmar, and Viet Nam – which raises the productivity parameter of the specific region in the model; and (iii) non-tariff barrier reduction. Economic effects are shown in terms of cumulative gains in real GDP in 2021–2030 as a percentage of real GDP in 2010. The result indicates that the further enhancement of connectivity will bring large economic gains not only for countries and regions with projects but also for countries connected with international production networks.

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2 On the academic use of nightlight information, see Keola, Andersson, and Hall (2015).
3 Chapter 4 of ERIA (2010), Kumagai and Isono (2011), and Kumagai, Isono, Ishida, Gokan, Souknilanh, and Hayakawa (2015) provide more details on the IDE/ERIA GSM.
4 For more details on the IDE/ERIA GSM and simulation results, see Chapter 6 in CADP 2.0 (ERIA, 2015).
Figure 4: City Size with Night-time Light from Satellite

**Bangkok 1992**  
**Bangkok 2012**

**Jakarta 1992**  
**Jakarta 2012**

**Manila 1992**  
**Manila 2012**

Industrial Agglomeration, Urban Development, and Innovation

Although development strategies that utilise GVCs have been proven to accelerate industrialisation, heavy dependency on MNEs and a lack of national champions in the economic scene may remain features of AMS for quite some time. This is one of the important differences with Japan, the Republic of Korea, or Taiwan, where slow
nurturing of local firms was possible in the pre-globalisation era. However, in the latter half of industrialisation, innovation is going to be crucial. MNEs are not necessarily motivated to bring innovative capabilities into LDCs. How to create innovation capabilities by utilising GVCs is a big challenge for AMS. Here again, industrial agglomeration is going to be important.

In Tier 1a, we observe that process innovation would be accelerated in industrial agglomerations. Outsourcing or subcontracting is a form of production fragmentation in which local firms have opportunities to participate in production networks within industrial agglomerations. Local firms may subcontract/outsource material processing, component and product assembly, and other tasks to outside suppliers. Subcontracting by MNEs provides opportunities for local firms to obtain from MNEs advanced knowledge about products, production process, and management techniques, and achieve innovation.

Knowledge transfer in the GVCs is realised through various forms of informal and formal relationships between buyers and suppliers (Crone and Roper, 2001; Giroud, 2007). More formal is a licensing agreement between buyers and subcontractor suppliers. Other forms of knowledge transfer are product drawings/specifications and manuals that are necessary for suppliers to fulfil buyer’s requirements, comply with product and production-related regulations, and satisfy social responsibilities and market demands. Regular supplier audits, in which buyers evaluate performances of their suppliers, provide a periodic opportunity for suppliers to receive feedback from their buyers. Suppliers also communicate and cooperate with their buyers on a daily or as-needed basis, which involves knowledge transfer. Suppliers’ established long-term relationships with their buyers increase their credibility and opportunities for knowledge transfer. In addition to such cooperative buyer–supplier relationships, competitive pressures motivate suppliers in the GVCs to achieve innovations.

However, the vast majority of local SMEs in ASEAN and other developing countries cannot succeed in establishing buyer–supplier relationships with MNEs. It is necessary for local firms to satisfy buyers’ minimal criteria in supplier selection. Buyers evaluate in their screening process potential suppliers’ financial status, production capacity, adoption of ISO (International Organization for Standardization) and other management systems, and their ability to meet corporate social responsibilities and comply with buyer specifications (i.e. quality, cost, and delivery – QCD). In particular, local firms do not have sufficient capabilities and resources to satisfy such criteria, especially in terms of quality control. Local firms that adopt quality management methods are more likely to receive technical assistance from buyers (Machikita, Tsuji, and Ueki, 2016). There are some successful cases in which the public and private sectors jointly developed supplier
development programmes, such as the Penang Skills Development Centre in Malaysia (Mohan, 2010) and the Technology Promotion Association (Thailand–Japan) in Thailand (Intarakumnerd, Gerdsri, and Teekasap, 2012).

Knowledge transfer enforces agglomeration forces when the flow of knowledge depends on distance. Face-to-face communication is effective in transferring tacit knowledge (Machikita and Ueki, 2013; Norasingh, Machikita, and Ueki, 2015). Distance affects trip time and the frequency of the movement of people. Intra- and inter-firm knowledge transfers are associated with physical proximity between buyers and suppliers in ASEAN, whereas technology transfers from outside are also important sources of technological information (Kimura, Machikita, and Ueki, 2016). Proximity enables firms to communicate face-to-face more frequently, share more knowledge and experiences, and interact to create new knowledge.

Knowledge can be transferred beyond the boundaries of a firm or a single value chain. People employed by a firm have opportunities to communicate with various people even without business relationships. Knowledge of a firm embodied in its employees is transferred to other firms when the employees leave the firm to work for other firms often located within the same commutable area. Knowledge transfer also occurs when employees establish their own firms. Full-size industrial agglomerations and urban areas provide better business environments for manufacturing and services that accumulate and generate a wide variety of knowledge and innovative activities (Audretsch and Feldman, 2004).

How about the prospects for upgrading innovation in Tier 1b? In most of the AMS, national innovation systems are under-developed, and ratios of research and development expenditure to GDP are still very low. However, there have already been some notable trials.

Some AMS introduce policies for promoting industrial upgrading, value-added services, and science and technology that are closely linked with urban development. Singapore released its IT2000 Plan in 1992 with the aim of transforming the city-state into an intelligent island where information technologies are utilised to enhance the quality of life and keep national competitiveness as a regional hub. Malaysia launched the initiative of the Multimedia Super Corridor (MSC) in 1996 to attract knowledge-based industries in the corridor stretching from Kuala Lumpur City Centre (KLCC) to Kuala Lumpur International Airport (KLIA) and accomplish Vision 2020, which aims to transform Malaysia into a fully developed country by the year 2020 (Yamada, 2003). In 2006, Malaysia launched the development of Iskandar on the shore opposite to Singapore to take over talents and value-added business activities from Singapore.
AMS have gradually built up the innovative capacity over time. The number of patents filed in the United States Patent and Trademark Office by inventors in some AMS has increased considerably (Table 2). The number of patents by inventors in Singapore rose sharply from 232 in 1990–1994 to 5,219 in 2010–2014, and in Malaysia and Thailand they increased from 91 to 1,561 and from 43 to 646, respectively. Singapore also experienced a sharp increase in the number of patents by assignees in Singapore from 73 to 5,077 during the same period. However, the increase in the number of patents by assignee in Malaysia and Thailand was moderate: from 28 to 321 for Malaysian assignees and from 14 to 142 for Thai assignees. The gaps between the number of patents by inventors’ country and by assignee country indicate that more resident inventors in AMS are involved in international collaborations, although domestic firms need to develop the capacity to play leading roles in achieving inventions.

Table 2: The Number of United States Patents

(1) By Inventors’ Country

<table>
<thead>
<tr>
<th></th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990–1994</td>
<td>34</td>
<td>91</td>
<td>39</td>
<td>232</td>
<td>43</td>
<td>0</td>
</tr>
<tr>
<td>1995–1999</td>
<td>57</td>
<td>175</td>
<td>98</td>
<td>725</td>
<td>126</td>
<td>7</td>
</tr>
<tr>
<td>2000–2004</td>
<td>107</td>
<td>474</td>
<td>175</td>
<td>2,373</td>
<td>298</td>
<td>16</td>
</tr>
<tr>
<td>2005–2009</td>
<td>127</td>
<td>1,002</td>
<td>187</td>
<td>2,793</td>
<td>277</td>
<td>22</td>
</tr>
<tr>
<td>2010–2014</td>
<td>120</td>
<td>1,561</td>
<td>330</td>
<td>5,219</td>
<td>646</td>
<td>62</td>
</tr>
<tr>
<td>2015</td>
<td>36</td>
<td>382</td>
<td>86</td>
<td>1,368</td>
<td>178</td>
<td>24</td>
</tr>
</tbody>
</table>

(2) By Assignee Country

<table>
<thead>
<tr>
<th></th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990–1994</td>
<td>7</td>
<td>28</td>
<td>2</td>
<td>73</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>1995–1999</td>
<td>23</td>
<td>18</td>
<td>0</td>
<td>327</td>
<td>52</td>
<td>0</td>
</tr>
<tr>
<td>2000–2004</td>
<td>52</td>
<td>109</td>
<td>5</td>
<td>1,246</td>
<td>53</td>
<td>1</td>
</tr>
<tr>
<td>2005–2009</td>
<td>44</td>
<td>184</td>
<td>13</td>
<td>2,699</td>
<td>69</td>
<td>1</td>
</tr>
<tr>
<td>2010–2014</td>
<td>18</td>
<td>321</td>
<td>35</td>
<td>5,077</td>
<td>142</td>
<td>7</td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
<td>80</td>
<td>17</td>
<td>1,624</td>
<td>36</td>
<td>6</td>
</tr>
</tbody>
</table>


In the globalisation era, we may need to consider development strategies for innovation that are different from those that have been adopted by existing developed economies. Corporate activities are extended beyond national borders, and human resources, particularly highly educated people, can also move internationally. Although strong
Agglomeration forces may dictate path-breaking innovation in the world, ‘networks’ of innovation at satellites for research outsourcing and local application seem to work to some extent from the European experience (Meijers, Burger, and Hoogerbrugge, 2016). Capital cities in AMS must become such windows open to worldwide innovation.

The expected urbanisation in AMS will provide necessary conditions for promoting innovation. Urban areas with more than 5 million people (i.e. the size of Singapore) can be considered to have a high potential of growing into full-sized agglomerations. In 2030, such large populated places will be in Indonesia (Jakarta), Malaysia (Kuala Lumpur), Myanmar (Yangon), the Philippines (Manila), Singapore, Thailand (Bangkok), and Viet Nam (Hanoi, Ho Chi Minh City) (United Nations, 2015). In addition to these mega cities, major urban areas will be developed not only on the continent of ASEAN but also on islands outside metropolitan regions in Indonesia and the Philippines. However, policy efforts are needed to generate positive agglomeration forces and reduce negative ones to develop national and local innovation systems and transform these urban areas into innovation hubs.

Considering the mobility of highly educated people in the globalisation era, urban amenities will surely become important in building up a critical mass of human capital in a city. The large amount of human resources indigenous to the country now resides abroad; we would like some of them to come back and contribute to local innovation. Foreigners are also mobile to an increasing extent; we must provide comfortable urban environments for them to stay long for innovation. A seminal work by Glaeser, Kolko, and Saiz (2001) proposed four elements of urban amenities to attract highly educated people for innovation: (i) the presence of a rich variety of services and consumer goods available for consumption, (ii) aesthetics and physical setting, (iii) good public services, and (iv) speed. Ultimately, human capital creates innovation. How to attract human capital will be a very important part of the policy agenda for AMS.

Conclusion

ASEAN, together with China, has been a pioneer in applying development strategies of aggressively utilising GVCs and has had considerable success in terms of rapid and sustained economic growth as well as quick and steady poverty alleviation. In the process of industrialisation, the role of industrial agglomerations has also been crucial. Tight connection with GVCs is certainly important, but the role of industrial agglomerations in taking advantage of globalisation must also be emphasised. Particularly in Tiers 1a and 1b, the construction of efficient industrial agglomerations and urban development are essential, and strong policy effort is needed.
Studies on urban development in the context of LDCs used to apply a rather passive approach, focusing on the clearance of slums, the reduction of traffic congestion and pollution, etc. Urban development should now adopt a more positive approach. Efficient industrial agglomerations that are tightly linked to GVCs are essential to development strategies we applied in AMS. Urban amenities to attract human capital for innovation will become a key issue soon. These are uncharted areas in development economics. ASEAN should take a lead in writing up the latter half of its development strategies.

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Innovation Policy in/for ASEAN

Masahito Ambashi
Economist, Economic Research Institute for ASEAN and East Asia (ERIA)

Introduction

It is widely acknowledged that innovation is a primary source of sustainable economic development and inclusive growth, not only through productivity improvements in firms, industries, and macro economies, but also through the expansion of consumption, investment, and exports stimulated by innovation. This recognition of the efficacy of innovation has, no doubt, been prevailing in developed countries, but there still seems to be some scepticism in developing countries (Fagerberg et al., 2010). That is, ‘Is innovation a significant factor for economic development of developing countries?’ or ‘Is it beneficial to consider innovation as an important policy target for developing countries?’ Such questions are frequently answered negatively on the grounds that high-tech firms and industries would emerge only in well-advanced economies. So far, Association of Southeast Asian Nations (ASEAN) Member States (AMS) have not on the whole been exceptions to this sceptical viewpoint.

This scepticism possibly stems from a high ideal of what innovation should be. The current popular definition of innovation is affected by Schumpeter (1934), who advocated the concept of ‘new combination’.1 Influenced by Schumpeter’s work, the Oslo Manual, the guideline for data collection on and interpretation of innovation formulated by the Organisation for Economic Co-operation and Development (OECD, 2005), defines innovation as: ‘the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations’. Although this definition of innovation excessively emphasises the element of ‘new’, it is highly likely that most actual innovation steps start with ‘imitation’.

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1 In his early writings Schumpeter employed the term ‘new combination’ rather than innovation. He categorised new combinations into five types: (1) launch of a new product or new version of an already known product, (2) application of new methods of production or sales of a product, (3) opening of a new market, (4) acquiring of new sources of supply of raw material or semi-finished goods, and (5) new industry structure such as the creation or destruction of a monopoly position. He stressed, therefore, that innovation in the economy is not led by consumers but by producers.
For example, Japan and the Republic of Korea (henceforth, Korea), when they were less developed countries that possessed only infant technologies, were eager to imitate superior Western technologies through licensing and reverse engineering. This suggests there is much room for developing countries to advance their technologies through diverse activities: learning by doing, imitation, and technology transfer, not just through original inventions or innovations at the initial development stage.

Innovations diffuse from developed to developing countries as if water flowed from high to low places and, as a result, development levels would converge between these countries. But this discreet, passive view captures only one aspect of innovation in developing countries. Another more important aspect highlights innovation policies or systems for proactive, provocative technological development undertaken or put in place by governments of developing countries, which could be conducive to innovation in contrast to ‘laissez-faire’ market approaches (Fagerberg et al., 2010). Successful examples of East Asian countries, such as Japan, Korea, China, and Singapore, which have somehow achieved their own innovation, to varying degrees, demonstrate that they systemically formulated and implemented innovation policies not only to carefully address market failure,2 but also to aim to audaciously close innovation gaps with developed countries. From this viewpoint, it is therefore indispensable for AMS and ASEAN to develop their own effective innovation policies.

Innovative Activities in ASEAN

Before investigating in detail possible innovation policies for ASEAN, it is useful to review the current status of innovative activities conducted in the region. Although, in general, it is difficult to accurately evaluate the degree of innovative activities, the following measures provide some approximations.

Innovation Capability

How countries achieve innovation depends on their intrinsic capability, which is frequently referred to as ‘innovation capability’ in the literature. Intuitively, innovation capability provides a country with the foundation for creating innovation by itself, and thus, it can take on physical, intangible, and institutional characteristics.

2 Since innovators typically find it difficult to appropriate their innovation outcomes but for intellectual property rights such as patents, a free-ride problem caused by other innovators is inevitable (Arrow, 1962).
AMS need to enhance their innovation capability to achieve autonomous and sustainable economic development based on innovations so as not to be overdependent only on foreign direct investment (FDI) and official development aid. Innovation capability also matters for AMS to escape the so-called ‘middle-income trap’, meaning that developing countries that attain a certain middle income owing to given advantages such as abundant natural resources become stagnant and stay at that level. For ASEAN to be competitive, dynamic, and innovative, as well as maintain its centrality in the global economy, developing the innovation capability of AMS through effective policies is its key challenge.

To make the concept of innovation capability more concrete, Fagerberg and Srholec (2008) presented comprehensive measures in accordance with four different types of capabilities: innovation system, governance, political system, and openness. The innovation capability we now focus on mostly corresponds to their innovation system. According to the result of their factors analysis, an innovation system includes the United States Patent and Trademark Office (USTPO) patents, science and engineering articles, International Organization for Standardization (ISO) 9000 certification, fixed line and mobile phone subscribers, internet users, secondary and tertiary school enrolment, and so on. By employing scores for the innovation system evaluated by using these measures, Fagerberg and Srholec (2008) identified a clear-cut positive relationship between the innovation system and economic development evaluated by gross domestic product (GDP) per capita across countries. Based on a regression analysis on 115 countries from 1992 to 2004, the authors also found that the innovation system is positively associated with and of particular importance for economic development.

To summarise, we can see that having better innovation capability strengthened by various tangible and intangible factors is of significant importance for developing countries to move ahead with their economic development agendas. In what follows it is argued that most AMS are still in the midst of building their innovation capability, an assessment based on data relevant for innovative activities.

Data on Innovative Activities in ASEAN

R&D intensity
Let us take a look at data on innovative activities in ASEAN. In the first place, research and development (R&D) expenditure should be a main indicator of how innovation progresses in a country. Table 1 presents R&D intensity per GDP for AMS, China, India, Japan, and Korea. It shows that most AMS except Singapore have a quite low (and largely stagnant except for Malaysia) share of investments in R&D to GDP,
as compared with Japan and Korea, which have continued to record over 3% of R&D intensity in recent years. The trend of R&D expenditure in Malaysia has been rapidly upward and the R&D intensity has reached over 1%, but it has not attained the level of Japan and Korea. China's R&D expenditure, on the other hand, has skyrocketed recently, in line with its strong economic development.

### Table 1: R&D Intensity (per GDP, %)

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<td>0.02</td>
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<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.79</td>
<td>1.01</td>
<td>1.04</td>
<td>1.03</td>
<td>1.09</td>
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<td>0.16</td>
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<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
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<td>n.a.</td>
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<td>0.13</td>
<td>n.a.</td>
<td>0.11</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.11</td>
<td>n.a.</td>
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<td>n.a.</td>
<td>0.12</td>
<td>n.a.</td>
<td>0.14</td>
</tr>
<tr>
<td>Singapore</td>
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<td>2.07</td>
<td>2.03</td>
<td>2.10</td>
<td>2.16</td>
<td>2.13</td>
<td>2.34</td>
<td>2.62</td>
<td>2.16</td>
<td>2.01</td>
<td>2.15</td>
<td>2.00</td>
<td>2.00</td>
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<td>0.25</td>
<td>0.24</td>
<td>0.22</td>
<td>0.23</td>
<td>0.20</td>
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<td>0.36</td>
<td>n.a.</td>
<td>n.a.</td>
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<td>0.18</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.19</td>
<td>n.a.</td>
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<td>China</td>
<td>0.90</td>
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<td>1.06</td>
<td>1.13</td>
<td>1.22</td>
<td>1.32</td>
<td>1.38</td>
<td>1.46</td>
<td>1.68</td>
<td>1.73</td>
<td>1.79</td>
<td>1.93</td>
<td>2.01</td>
<td>2.05</td>
<td></td>
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<tr>
<td>India</td>
<td>0.74</td>
<td>0.72</td>
<td>0.71</td>
<td>0.71</td>
<td>0.74</td>
<td>0.81</td>
<td>0.80</td>
<td>0.79</td>
<td>0.84</td>
<td>0.82</td>
<td>0.80</td>
<td>0.82</td>
<td>n.a.</td>
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<td>n.a.</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>2.18</td>
<td>2.34</td>
<td>2.27</td>
<td>2.35</td>
<td>2.53</td>
<td>2.63</td>
<td>2.83</td>
<td>3.00</td>
<td>3.12</td>
<td>3.29</td>
<td>3.47</td>
<td>3.74</td>
<td>4.03</td>
<td>4.15</td>
<td>4.29</td>
</tr>
</tbody>
</table>

GDP = Gross domestic product; Lao PDR = Lao People's Democratic Republic; n.a. = not available; R&D = research and development.

Source: UNESCO Institute for Statistics.

### Patent applications

The same trend can be observed with regard to the number of patent applications in each country, as shown in Table 2. Patent applications are positively associated with inventions. Table 2 indicates that although the number of direct patent applications has tended to increase in all AMS, it is still smaller than in developed Asian countries.

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3 In 2000, the European Union formulated the ‘Lisbon Strategy’, which aimed to leverage R&D investments to boost its economies. This strategy was followed by an action plan, ‘Investing in Research’ in 2003, which laid out an ambitious goal of achieving 3% R&D investment to GDP by 2010 (the so-called ‘3% Barcelona target’). This goal is currently regarded as a numerical criterion that developed countries are encouraged to achieve.
Innovation Policy in/for ASEAN

Somewhat surprisingly, even Singapore does not produce sufficient patent applications. This suggests that AMS have much room to improve their patent systems as an indicator of innovation capability.\(^4\)

| Table 2: Direct Application of Patents (per million population) |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Brunei Darussalam            | 5.53 | 0.00 | 26.71| 5.25 | 5.17 | 83.90| 25.03| 64.12| 75.33| 88.65|
| Cambodia                     | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.07 | 0.00 | 0.07 | 0.33 |
| Indonesia                    | 1.12 | 1.32 | 1.31 | 1.67 | 1.83 | 2.21 | 2.31 | n.a. | 2.77 | 2.92 |
| Lao PDR                      | 0.00 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Malaysia                     | 34.11| 36.40| 40.29| 42.61| 58.46| 59.92| 50.33| 51.62| 56.91| 66.28|
| Myanmar                      | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Philippines                  | 3.09 | 3.19 | 3.53 | 3.24 | 2.48 | 2.72 | 2.95 | 2.87 | 3.16 | 4.91 |
| Singapore                    | 326.55| 372.84| 490.35| 471.75| 412.63| 469.59| 501.19| 524.05| 548.23| 609.17|
| Thailand                     | 15.11| 17.18| 16.68| 16.12| 17.37| 20.06| 15.96| 17.26| 18.16| 17.70|
| Viet Nam                     | 2.21 | 2.42 | 2.72 | 2.50 | 3.06 | 3.61 | 3.49 | 4.41 | 5.14 | 5.71 |
| China                        | 73.55| 96.66| 119.45| 150.72| 177.40| 224.51| 314.65| 402.86| 526.96| 597.39|
| India                        | 5.30 | 6.24 | 7.12 | 7.49 | 8.12 | 9.81 | 10.21| 11.60| 12.97| 14.40|
| Japan                        | 3,721.06| 3,541.24| 3,423.09| 3,388.88| 2,997.56| 2,936.34| 2,954.83| 2,950.25| 2,758.97| 2,685.61|
| Republic of Korea            | 3,244.67| 3,410.01| 3,415.54| 3,296.41| 3,203.18| 3,339.24| 3,484.29| 3,728.97| 4,068.01| 4,152.37|

Lao PDR = Lao People’s Democratic Republic; n.a. = not available.
Source: WIPO Global Brand Database and World Bank Database.

Somewhat surprisingly, even Singapore does not produce sufficient patent applications. This suggests that AMS have much room to improve their patent systems as an indicator of innovation capability.\(^4\)

**Number of R&D researchers**

Finally, Table 3 presents the number of R&D researchers per million population in major AMS. Educated human resources are without doubt a fundamental driving force of innovation. As of 2014, Malaysia had the highest number of the AMS (2,051.7) except for Singapore (6,658.5), but it is small compared with Japan (5,386.2) and Korea (6,899.0). Singapore is considered to be a dedicated country that has focused its limited human resources on R&D activities. These figures suggest that at least the quantity of R&D researchers is not sufficient in most AMS. Hence, the effort required to produce more talented R&D researchers who excel in science and technology (S&T) through a higher education system (e.g. universities, national research laboratories, etc.) is a pressing issue for AMS to achieve their own innovation.

\(^4\) These tendencies of innovative activities concerning patents can also be reaffirmed by observing data on patent filling of AMS in the United States.
Table 3: Number of R&D Researchers (full-time equivalent; per 10,000 population)

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</tr>
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<td>280.4</td>
<td>286.5</td>
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<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
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<td>n.a.</td>
<td>n.a.</td>
<td>17.6</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
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<td>n.a.</td>
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<td>89.5</td>
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<td>5,156.8</td>
<td>5,360.2</td>
<td>5,387.0</td>
<td>5,377.7</td>
<td>5,157.8</td>
<td>5,147.8</td>
<td>5,152.6</td>
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<td>5,083.7</td>
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<td>Republic of Korea</td>
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<td>5,853.3</td>
<td>6,361.6</td>
<td>6,456.6</td>
<td>6,899.0</td>
</tr>
</tbody>
</table>

Lao PDR = Lao People’s Democratic Republic; n.a. = not available; R&D = research and development.
Source: UNESCO Institute for Statistics.

Efforts towards Innovation in ASEAN

ASEAN has recognised the importance of improving the capability for developing S&T. It has made many efforts to produce innovation and address the challenges on the way to an ‘Innovative ASEAN’ (ASEAN Secretariat, 2015). Science and technology cooperation in ASEAN in fact started in 1971 with the establishment of the ASEAN Permanent Committee on Science and Technology (PCOST), which was followed in 1978 by the ASEAN Committee on Science and Technology (ASEAN COST) with the objective of cooperating to develop S&T and related human resources and encouraging technology transfers within and outside ASEAN.

ASEAN considers Science, Technology, and Innovation (STI) as a major foundation for attaining the ASEAN Vision 2020 set out in 1997. The goal is to transform ASEAN into a technologically competitive ASEAN, competent in strategic and enabling technologies, with an adequate pool of technologically qualified and trained manpower, and strong networks of scientific and technological institutions and centres.

5 The ASEAN Vision 2020 was issued during the 2nd ASEAN Informal Summit in Kuala Lumpur on 15 December 1997. It is available at http://asean.org/?static post=asean-vision-2020
of excellence’. In October 2016, the ‘ASEAN Plan of Action on Science, Technology and Innovation (APASTI): 2016–2025’ was formulated together with the vision, goals, and thrusts after the launch of the ASEAN Economic Community (AEC) 2015. This new comprehensive action plan aims to promote ‘A Science, Technology and Innovation-enabled ASEAN, which is innovative, competitive, vibrant, sustainable and economically integrated’ towards 2025. In other words, the goals stress the active involvement with collaboration between the public and private sectors (especially small and medium-sized enterprises [SMEs]), mobility of talents, deep awareness of STI, an innovation-driven economy, active R&D collaboration, technology commercialisation, entrepreneurship, and so on. In response to concern about how to implement the strategic thrusts, the APASTI also puts forward detailed actions to be taken in each thrust.

**Typology for Innovation Policy in ASEAN**

There exists a large discrepancy in the levels of innovative activities amongst AMS, so innovation policies for individual AMS should vary. The wide discrepancy can be seen in the Global Innovation Index (GII) published by Cornell University, INSEAD, and the World Intellectual Property Organization. According to the latest results of the GII in 2016 (Dutta et al., 2016), the rankings of AMS range from Singapore’s 6th rank to Cambodia’s 95th rank.

Similarly, the Technology Achievement Index (TAI) of the Asian Development Bank (2014) also assesses a country’s technological development level. The TAI provides an indication of how well a country can create and use technology, rather than simply reflect the value of inputs such as the number of scientists and R&D expenditure. The TAIs of Asian countries including AMS from 1999 to 2008 suggest that, in terms of technology and innovation, AMS can be roughly classified into two categories: Singapore (which is comparable to Japan and Korea) and the rest of ASEAN (along with China and India); nonetheless, they significantly improved their levels of technological development and innovation during 1999–2008, especially Viet Nam and China (Figure 3.7, p. 116). And yet, looking at ASEAN as a whole, technological development, innovation capability, and resulting innovation achievements have not progressed as rapidly as economic growth.

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7 Other than these two countries, the AMS rankings of GII in 2016 are: Malaysia, 35th; Thailand, 52th; Viet Nam, 59th; the Philippines, 74th; and Indonesia, 88th. The results of Brunei Darussalam, the Lao PDR, and Myanmar are not available.
Hence, when it comes to drawing up innovation policies for each AMS, a certain typology of technology and innovation is useful as a compass to guide individual AMS given that AMS are at very different stages of innovation. Following the analyses of Intal et al. (2014) and the Japan Science and Technology Agency (2015), we can divide the AMS into several groups:

- **Singapore** is the only ASEAN member in the ‘Frontier’ phase of innovation, and its innovation capability, based on solid domestic R&D, is almost at the same level as that of developed Western countries.
- **Malaysia** is in the ‘Catch-Up’ phase and its innovation capability is relatively high, just behind that of Singapore.
- **Indonesia, Thailand, the Philippines, and Viet Nam** are in the ‘Learning’ phase, which is characterised by the acquisition process of innovation capability. These countries are assumed to have significant potential to improve their innovation capability as their economies grow in the future. In particular, Thailand is the most likely to catch up with Singapore and Malaysia, which are in the upper development stage. In this regard, Thailand could well be in the ‘Catch-Up’ phase, like Malaysia.
- **Cambodia, the Lao PDR, and Myanmar** are in the ‘Initial Condition’ phase, which means they still need to establish nation building infrastructures and relevant institutions to set up their innovation capability.
- **Brunei Darussalam** is difficult to place in any of these categories because the country has been depending on its particular economic model driven by natural resources. But the country is now aware of the necessity for industrialisation through innovation.

Intal et al. (2014) provided a useful matrix table to illustrate the development stages of each AMS and the necessary policies in accordance with the above-mentioned innovation phases (Figure 4.5, p. 199), which is reproduced in Table 4. This kind of typology is quite analogous to ERIA (2015), which proposes development strategies, mainly for manufacturing industries, in relation to the quality of infrastructure and participation in production networks in East Asia (Figure 1.1, p. 4). In ERIA (2015), it is suggested that developing AMS should steadily advance their development stages at the country, city, and regional levels. In this regard, the implication of Table 4 for AMS is the same as ERIA (2015) – it is important to understand at what innovation stages AMS are (i.e. what their level of innovation capability is), and to move up this ‘technology ladder’ accordingly, step by step, based on effective strategic and systemic policies. In other words, the best way for developing AMS to grow out of conventional industrial structures that depend on low-end products is to nurture their innovation capability.

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8 This table is substantively built on the idea of Rasiah (2013).
Table 4: Typology of Policy Framework for ASEAN

<table>
<thead>
<tr>
<th>Phase</th>
<th>Initial Conditions</th>
<th>Learning</th>
<th>Catch-up</th>
<th>Advanced</th>
<th>Frontier</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) Cambodia, Lao PDR, Myanmar</td>
<td>(2) Thailand, Philippines, Indonesia, Viet Nam</td>
<td>(3) Malaysia</td>
<td>(4)</td>
<td>(5) Singapore</td>
</tr>
<tr>
<td><strong>Basic Infrastructure</strong></td>
<td>Political stability and efficient basic structure</td>
<td>Strengthening of basic infrastructure with better customs and bureaucratic coordination</td>
<td>Smooth links between economic agents</td>
<td>Advanced infrastructure to support meeting demands of economic agents</td>
<td>Novel infrastructure developed to save resource costs and stimulate short lead times</td>
</tr>
<tr>
<td><strong>High-tech Infrastructure</strong></td>
<td>Emergence of demand for technology</td>
<td>Learning by doing and imitation</td>
<td>Creative destruction activities start here through imports of machinery and equipment, licensing and creative duplication</td>
<td>Developmental research to accelerate creative destruction activities</td>
<td>Basic research R&amp;D labs to support creative accumulation activities</td>
</tr>
<tr>
<td><strong>Network Cohesion</strong></td>
<td>Social bonds driven by the spirit to compete and achieve</td>
<td>Expansion of tacitly occurring social institutions to formal intermediary organisations to stimulate connections and coordination between economic agents</td>
<td>Participation of intermediary and government organisations in coordinating technology inflows, initiation of commercially viable R&amp;D</td>
<td>Strong participation of intermediary and government organisation in coordinating technology inflows, initiation of commercially viable R&amp;D</td>
<td>Participation of intermediary organisation in two-way flows of knowledge between producers and users</td>
</tr>
<tr>
<td><strong>Global Integration</strong></td>
<td>Linking with regional and global markets</td>
<td>Access to foreign sources of knowledge, imports of material and capital goods, and FDI inflows. Integration in global value chain</td>
<td>Licensing and acquisition of foreign capabilities</td>
<td>Upgrading synergies through technology imports</td>
<td>Connecting to frontier nodes of knowledge, and competitive export of high-tech products</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; FDI = foreign direct investment; R&D = research and development; US = United States.

at every stage, to achieve basic innovation from the ground up, and to realise steady industrial development through the innovations.⁹

Table 4 also suggests a typology of policy frameworks required for AMS in terms of basic and high-tech infrastructures, network cohesion, and global integration. For example, the ‘Learning’ phase, where most AMS are situated, emphasises basic approaches to innovation, such as learning by doing and imitation, social institutions connected to formal intermediary organisations, and access to foreign sources of knowledge and FDI inflows. We need to note that this angle of policies for AMS is merely a typical framework, which signifies that policymakers should formulate actionable innovation policies.

National and Region-wide Innovation Policies

From the discussion so far, it seems clear that AMS need to develop their national innovation policies in various dimensions, such as R&D incentives, human resource development, and industrial and trade policies. Policymakers need to find a balance between market-oriented and government intervention approaches depending on their country’s specific situation. This is particularly important for AMS that have just started industrialisation on the basis of innovation. As a regional institution, ASEAN also needs to consider what region-wide policies to implement and how to synergise them with national innovation policies in each AMS. This relationship between national and region-wide innovation policy is conceptually described in Figure 1.

National Innovation System (NIS)

How did leading Asian countries succeed in building their innovation capability? In retrospect, these countries formulated effective national innovation policies with the strategic use of foreign technologies and knowledge as a driving force for domestic innovation supported by industrial and trade policies, and thus achieved dramatic economic development. To avoid the middle-income trap and become competitive in the global market, as leading Asian countries did, AMS need to have in place ‘systematic’ innovation policies to move up the stages of innovation (Table 4). The experience of leading Asian countries offers valuable lessons for AMS that aspire to achieve innovation on their own.

⁹ Schumpeter (1942) advocated a concept of ‘creative destruction’ that induces industry dynamics, exemplified by entry and exit of firms through lively innovative activities. Although activating industries is indispensable for AMS as well, this concept seems more applicable to developed countries. It is open to discussion whether it is possible for developing AMS to ‘leapfrog’ development stages through revolutionary innovation in the modern era of information and communication technologies.
What leading Asian countries have in common is that they successfully established their own effective and functional national innovation systems (NISs) and their governments functioned as active agents in coordinating these systems to make them work well. According to Soete et al. (2010), an NIS can be defined as a continuous process controlled by a government, where institutions, learning processes, and networks play a central role in generating technological change and innovation via the intentional, systemic interactions between various components.

There seem to be two prominent types of NISs that have been used by leading Asian countries as a strategic way to catch up with Western developed countries – one emphasises domestic industrial resources to be utilised for innovation; the other relies on technologies and skills transferred from foreign countries through FDIs. Specifically, the former type of NIS was adopted by Japan and Korea, the latter by China and Singapore as well as by many AMSs more recently (Figure 2).

**Japan**

With regard to the first type of NIS, Japan was the first Asian country that caught up with Western developed countries, as the leading country of the ‘flying-geese-pattern’ of economic development in the Asian region. Just after World War II, the Japanese government and firms formed implicit strategies of importing technologies and knowledge via licensing agreements and alliances concluded with Western firms, and inventing through reverse engineering. Japanese firms imitated Western products and made new, but not always unique, products around them.
This type of innovation, which was combined with relatively highly educated low-wage human capital, generated highly competitive products. In contrast to the second type of NIS, the Japanese government did not depend on FDI for technologies and knowledge; instead, it implemented a number of industrial policies such as domestic industrial promotion, export-incentive schemes, and R&D incentives.

**Republic of Korea**

This kind of NIS was also adopted by Korea. In a similar vein, the country formulated a catch-up policy in reference to Japan’s experience. It did not depend too much on FDI or multinational foreign firms, but used industrial policies that aimed to accelerate innovation conducted by large domestic firms (i.e. home-grown conglomerates). Like Japan, Korea also succeeded in achieving its own innovation mainly by utilising domestic resources, but also by purchasing technologies from developed countries.

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10 Fagerberg et al. (2010) pointed out that Taiwan also adopted the first type of the NSI, which succeeded in changing a main engine of the economy from labour-intensive industries to high-tech industries, such as electric and electronics, based on export-oriented industrial policies.
China
After its long-time isolation from the global economy, China started transforming its economic system into a socialist market economy in the 1970s. Above all, the ‘openness policy’, initiated in 1978, aggressively courted FDI. Special Economic Zones and National Economic and Technological Development Zones were established with the aim of assimilating foreign technologies. China was admitted as a member of the World Trade Organization (WTO) in December 2001. This accelerated the reform and opening up of the Chinese economy, providing access to the global market and attracting more investment. Intal et al. (2014) argued that both central and local governments provided strong support to form industrial clusters that enabled China’s rapid growth led by exports. They concluded that the success of Chinese industrial clusters was due in large part to local governments’ institutional, comprehensive, responsive, and dedicated support systems through addressing market failure, regulatory reforms, monetary incentives for R&D, financial assistance to SMEs, and innovation research centres in collaboration with local universities and research institutes.

Singapore
Singapore aggressively engaged in the second type of NIS, where FDI played a critical role as an important channel of technology and knowledge transfer. Singapore has made a great deal of efforts to set up industrial estates and clusters in association with both FDI and innovation-friendly domestic policies. For example, Singapore established modern research parks that are represented by biotechnology clusters, where the Singapore government, industries made up of domestic and multinational firms, and universities cooperate to encourage high-value added innovation in the field of biotechnology (Asian Development Bank, 2014). Moreover, Singapore has willingly accepted high-quality immigrants with a view to profiting from their high skills and advanced knowledge. Singapore’s superior higher education system also complements its NIS, being biased towards attracting more domestic and foreign students into science and engineering.

Possible directions of NISs for AMS
For AMS, the second type of NISs adopted by China and Singapore that have actively courted FDI seems to be more plausible than the first type of NISs in the current free trade system based on rules agreed amongst countries. This is because countries have found it more difficult to use restrictive trade and investment policies under the current WTO system, which is totally different from the rules in the past (for instance, the Agreement of Trade-Related Aspects of Intellectual Property Rights under the WTO specifies strict rules of intellectual property right issues). Alternatively, FDI can be a key to innovation creation because it is a major channel of technology spillovers into AMS from other developed countries. However, excessive reliance on FDI may not
necessarily stimulate innovation. This is confirmed by the experiences of China and Singapore, which effectively combined their domestic industrial promotion policies with openness policies to reap the benefits of FDI. Some AMS have also tried to establish their own NISs based on industrial clusters in conjunction with FDI. For example, Thailand’s automobile cluster around Bangkok and Malaysia’s Penang electronic cluster are considered successful cases where technologies and knowledge are successfully transferred from multinational firms (Intal et al., 2015; Nishimura et al., 2016). It is essential for AMS, including the CLMV countries (Cambodia, the Lao PDR, Myanmar, and Viet Nam), to promote cluster formation that builds a foundation for moving to the next stage of innovation through technology and knowledge spillovers.

A broad range of ‘systemic’ policies are required in AMSs to nurture innovation capability and boost innovation. To achieve this objective, it is necessary to create stable microeconomic and macroeconomic conditions, improve business climates, construct hard and soft infrastructures, develop human capital (especially R&D and science researchers), secure financial accessibility for entrepreneurs, maintain good governance, and arrange systematic university–industry institutions (Asian Development Bank, 2014).

As one of the characteristics of NISs, innovation policy should be closely coordinated with human capital development policies, especially for scientists who are essential for conducting R&D in both public and private organisations. Moreover, according to the systemic notion of the NIS focusing on the linkage between universities and industries, universities should be given a more important role as a major source of innovation. This is because they can sow the seeds for unique innovations that may be used by commercial industrial sectors. All in all, infrastructures, human capital, education systems, industrial policies, and the ability to assimilate innovations should be promoted in an integrated manner. Figure 3 illustrates that this systemic innovation framework involving all actors is likely to transform individual small steps into great achievements, which could be a strategy undertaken by AMS that seek to create a new innovation dynamic.

It should be noted, however, that NISs also have a limitation. Government interventions can sometimes lead to ‘government failure’, which may cause a more serious problem than market failure. Therefore, it is desirable to utilise market mechanisms to promote

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11 ‘Absorptive capacity’ is regarded as indispensable for effectively assimilating positive economic impacts of FDI. Cohen and Levinthal (1990) interpreted absorptive capacity as an ability of firms to recognise the value of new, external information, assimilate it, and apply it commercially. Hence, this absorptive capacity to receive FDI critically affects the innovation capability.

12 I would like to thank Dr. Anbumozhi Venkatachalam (Senior Energy Economist of ERIA) for kindly providing the original material for Figure 3.
innovations if appropriate, whereas governments would best concentrate on issues that cannot be resolved by market mechanisms alone, and enhance complementarity with the market. In addition, when learning from successful cases of NISs adopted by other countries, AMS need to recognise the differences in environments, times, and histories from those of others. Hence, since institutions and systems including NISs are strongly affected by the ‘path dependency’ of the country (David, 1985; David, 1994), AMS would be wise to investigate what elements of NISs can still be effective for establishing their own NISs.

**ASEAN Region-wide Innovation Supporting Policies**

It might not be sufficient for us to consider innovation policy solely inside the framework of NISs in the globalisation era. ASEAN region-wide innovation policies are very much needed to enhance the presence of ASEAN in the world, to create a ‘competitive and dynamic ASEAN’ in the global economy. Aside from the existing project of developing STI policies discussed under the ASEAN COST (see Section 3), I would like to provide the following policy recommendations from another perspective.
Reinforce trade, investment, and service liberalisation

Strengthening market competition in both domestic and foreign markets is expected to make ASEAN local firms more productive and innovative. As for the competition effect on innovation, a project undertaken by ERIA (Hahn and Narjoko, 2010) found some results regarding the relationship between competition and innovation in AMS. Anh et al. (2010) empirically demonstrated that innovation such as new products and new production processes in Vietnamese SMEs are strongly associated with competition with foreign firms generated by trade liberalisation. Also, with regard to Philippines manufacturing firms, Aldaba (2010) maintained that trade liberalisation led by a reduction in tariff rates has a significant positive impact on innovation through fierce competition that promotes industrial ‘refreshment’. In this way, trade liberalisation, such as a reduction in tariffs and non-tariff barriers, exposes local firms to fiercer market competition, which in turn inspires them to improve their productivity through innovation to survive the competition.

The aforementioned studies make a reference to goods trade liberalisation, but investment and service liberalisation within ASEAN also has a significant potential to spur innovation in the region. In reality, service industries account for more or less 50% of GDP in most AMS (Table 5). According to a recent study by Duarte and Restuccia (2010), the productivity difference across sectors in service industries is larger than in manufacturing industries, which suggests that innovation leading to productivity improvement in services industries will enhance the economic performance of AMS that seem to be suffering from a low-productivity problem. In spite of its considerable potential, services trade liberalisation encounters many challenges in contrast to goods trade liberalisation in ASEAN; hence, there still is much leeway for international services trade liberalisation through negotiation in the AEC and ASEAN-plus-one FTAs.

Promote movement of natural persons

The free movement of natural persons (Mode 4 of the General Agreement on Trade in Services) is also significant in terms of creating innovations. According to surveys, technology and knowledge spillovers are brought about by people, especially scientists, who are related to R&D investments (Almeida and Kogut, 1999; Appleyard, 1996). It is also revealed that the introduction of immigrants is positively associated with labour productivity of domestic workers (Lewis and Peri, 2015); therefore, highly skilled immigrants are more likely to have positive economic impacts especially on developing countries because, in most cases, immigrants and domestic workers complement each other.
The movement of human resources in higher education is also an important challenge. Human capital development is an indispensable component of operationalising an innovation-friendly system centred on universities. While AMS have traditionally sent their students to Western (e.g. US, United Kingdom, and Australian), Japanese, and Korean higher education institutions, they have also increased exchange students within ASEAN in recent years. ASEAN needs to reinforce the existing ASEAN University Network (AUN), designed to promote the movement of students and researchers amongst affiliated universities, as it could create new university-originated innovations that transcend countries’ boundaries.\(^\text{13}\) In addition to intra-ASEAN human movement, interaction between and exchange of academic researchers and students is necessary between ASEAN and outside universities. For these reasons, ASEAN should make greater efforts to improve entrance mechanisms and educational environments for students and researchers.

\(^\text{13}\) The AUN was established in 1995 with as its objective to ‘hasten the solidarity and development of a regional identity through the promotion of human resource development so as to further strengthen the existing network of leading universities and institutions of higher learning in the region’ (the 4th ASEAN Summit in 1992). The ASEAN Charter signed in 2007 delegated a task to the AUN – to be a key implementing agency of ASEAN in the socio-cultural pillar. For more details, see the website of the AUN, available at http://www.aunsec.org/index.php

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**Table 5:** Industrial Structures of ASEAN Members in 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>Agriculture (%)</th>
<th>Manufacturing (%)</th>
<th>Service (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>0.8</td>
<td>15.9</td>
<td>32.4</td>
</tr>
<tr>
<td>Cambodia</td>
<td>30.5</td>
<td>16.3</td>
<td>42.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>13.7</td>
<td>21.6</td>
<td>43.3</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>23.9</td>
<td>8.1</td>
<td>42.5</td>
</tr>
<tr>
<td>Malaysia</td>
<td>9.2</td>
<td>24.2</td>
<td>49.8</td>
</tr>
<tr>
<td>Myanmar</td>
<td>27.9</td>
<td>19.9</td>
<td>37.7</td>
</tr>
<tr>
<td>Philippines</td>
<td>11.3</td>
<td>20.5</td>
<td>57.5</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.0</td>
<td>18.4</td>
<td>75.0</td>
</tr>
<tr>
<td>Thailand</td>
<td>10.5</td>
<td>27.7</td>
<td>52.7</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>18.1</td>
<td>17.5</td>
<td>43.4</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; Lao PDR = Lao People’s Democratic Republic. Source: United Nations statistical database.
Introduce a peer review system of innovation capability

Comparison amongst AMS’ innovation policies by introducing a peer review system is worth considering to be able to assess at what innovation stages countries find themselves and how fast their innovation capability is advancing. It is likely that the peer review would motivate each AMS to accelerate the establishment of its own NISs. In formulating the system amongst AMS, it is also important to take into account at what innovation stage each AMS is, as discussed in Section 4. Furthermore, the peer review system would allow AMS to learn best practices from innovation policies of other countries.

Concluding Remarks

The objective of this chapter is to discuss what innovation policy is needed in each AMS and for ASEAN as a whole. While existing studies point to the importance of enhancing innovation capability in each country to achieve its own innovations, AMS have not made much progress in terms of R&D intensity, patent applications, and the number of science researchers, which heightens concerns that some AMS may be stuck in the middle-income trap. It is important for them to steadily move up the stages of innovation and to formulate appropriate policies in accordance with the typology of stages. To this end, NISs employed by countries can be an effective policy tool to achieve home-made innovation as such systems organise innovation policy in a systematic manner, emphasising an active coordinating role for governments. Furthermore, it is important to encourage ASEAN region-wide policies to promote innovation that push individual AMSs through, for example, service trade liberalisation, freer movement of natural persons, and the establishment of a peer review system of innovation policy.

References


Whither the ASEAN Economic Community in 2025–2035?

Ken Itakura
Professor, Graduate School of Economics
Nagoya City University

In December 2015, 10 Association of Southeast Asian Nations (ASEAN) Member States officially established the ASEAN Economic Community (AEC). As envisioned in the AEC Blueprint 2025, this single market and production base will make the AEC a highly integrated and cohesive economy, and bring about competitive, innovative, and dynamic ASEAN Member States (AMS) through enhanced connectivity and sectoral cooperation (ASEAN Secretariat, 2015).

With AEC’s aim of strengthening the economic prospects of the AMS, one might wonder if it would function as an integrated market and production base. According to the International Monetary Fund’s (IMF) World Economic Outlook Database April 2017, the economic growth of ASEAN is faster than world growth: 4.6% compared to 3.1%. Its projected growth rate for 2017 is 4.7% compared to 3.5% for the world (Table 1). With its 3.2% average annual growth between 2012 and 2017, ASEAN’s share in the world economy has been continuously increasing. If this level of growth is sustained by productivity rises, ASEAN’s economic size could double by 2040. Of course, this is an optimistic assumption; conversely, there could be no productivity growth at all in the region. If the latter is the case, then ASEAN’s annual gross domestic product (GDP) growth rate would decelerate over time as its population grows older.

We conduct counterfactual simulation experiments of economic growth in the AMS through a computable general equilibrium (CGE) model of global trade. Based on the CGE model involving 24 countries and 25 sectors, we construct four simulation scenarios from 2018 to 2035, and we then consider the simulation results on real GDP, productivity growth, production structure, and wage rates for ASEAN. In addition, we consider the potential impact of the AEC and the Regional Comprehensive Economic Partnership (RCEP), another regional free trading area amongst the ASEAN Plus Six countries. In the next section, we briefly describe the database and CGE model used in this study as well as the simulation scenarios. Results are shown in Section 3, followed by a concluding summary.
Table 1: GDP Growth Rate in ASEAN and World, and ASEAN’s Share in World, 2012–2017

<table>
<thead>
<tr>
<th></th>
<th>ASEAN</th>
<th>World</th>
<th>Share in World</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>5.9</td>
<td>3.5</td>
<td>3.2</td>
</tr>
<tr>
<td>2013</td>
<td>5.1</td>
<td>3.4</td>
<td>3.2</td>
</tr>
<tr>
<td>2014</td>
<td>4.6</td>
<td>3.5</td>
<td>3.3</td>
</tr>
<tr>
<td>2015</td>
<td>4.5</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>2016</td>
<td>4.6</td>
<td>3.1</td>
<td>3.4</td>
</tr>
<tr>
<td>2017</td>
<td>4.7</td>
<td>3.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; GDP = gross domestic product.
Note: Real GDP, annual % change, for growth rates. Share in %.
Source: IMF WEO 2017 and author’s computation based on GTAP Data Base v9.0.

Analytical Framework

In this study, we use the recursively dynamic CGE model of global trade as developed by Ianchovichina and McDougall (2001) and Ianchovichina and Walmsley (2012), and which is an extension of the comparative static Global Trade Analysis Project (GTAP) model (Hertel, 1997; McDougall, 2003). Standard assumptions in the GTAP model are constant returns to scale in production technology, a perfectly competitive market, and product differentiation by country of origin. A representative regional household allocates income for private consumption expenditure, government consumption expenditure, and savings. Expenditure shares are almost constant because the Cobb–Douglas type preference is assumed for the representative household as well as the adjustment for the non-homotheticity in the constant difference elasticity function applied to the private household expenditure. The dynamic GTAP model incorporates capital accumulation, international capital mobility, and ownership in terms of domestic and foreign equity. For the time dimension in this study, the dynamic GTAP model spans the period of 2011 to 2035, and is calibrated to 2011 base year using version 9.0 of the Dynamic GTAP database (Aguiar et al., 2016).
Table 2: List of Countries and Regions


Note: RoSEAsia is rest of Southeast Asia, which includes Myanmar and Timor-Leste. ROW is for rest of the world. ASEAN is defined as an aggregate from Brunei to RoSEAsia.
Source: Author’s aggregation from GTAP Data Base v9.0.

Table 2 lists the 24 countries and regions for these simulation experiments. The AMS are Brunei Darussalam, Cambodia, Indonesia, the Lao PDR, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. Because of data limitations, Myanmar is grouped together with Timor-Leste as Rest of Southeast Asia (RoSEAsia). Table 3 lists the 25 sectors aggregated from the original 57 sectors of the GTAP Data Base (Aguiar et al., 2016).

Construction of simulation scenarios begins by generating a hypothetical state of the global economy that is consistent with key projections obtained from international organisations. Projections for total population and working-age population – defined as 15–64 years old as proxy for endowments of labour – are obtained from the United Nations (UN) World Population Prospects (2015) based on the medium projection variant. In this study, the UN’s projections for 1950–2100 are available for all countries (Table 2). Another set of projections, for 1980–2022, is obtained from the IMF’s World Economic Outlook (2017) for real GDP. Assumed to be the high-case scenario (H), we extrapolate the real GDP growth rates in 2022 to the end of the simulation period in 2035. Given the projections for total population, working-age population, and real GDP for 2011–2035, the model can compute the Hick’s neutral technological change, a measure of productivity we use in this study, for the high-case scenario. As for the low-case scenario (L), we assumed that the productivity growth
rates are zero for the AMS for 2018–2035. Also, we assumed that the lower-middle-case scenario (LM) restricts the productivity growth rates in ASEAN to be one fourth of the high case for 2018–2035, whereas the middle-case scenario (M) halves the productivity growth rates.

Table 3: Sectoral Aggregation

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>GTAP 57 Sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Primary</td>
<td>Paddy rice; Wheat; Cereal grains nec; Vegetables, fruits, nuts; Oil seeds; Sugar cane, sugar beet; Plant-based fibres; Crops nec; Cattle, sheep, goats, horses; Animal products nec; Raw milk; Wool, silk-worm cocoons; Forestry; Fishing; Minerals nec; Meat: cattle, sheep, goats, horse; Meat products nec; Vegetable oils and fats; Dairy products; Processed rice; Sugar; Food products nec</td>
</tr>
<tr>
<td>2.</td>
<td>Energy</td>
<td>Coal; Oil; Gas</td>
</tr>
<tr>
<td>3.</td>
<td>BvrgTbcc</td>
<td>Beverages and tobacco products</td>
</tr>
<tr>
<td>4.</td>
<td>Textile</td>
<td>Textiles</td>
</tr>
<tr>
<td>5.</td>
<td>Apparel</td>
<td>Wearing apparel</td>
</tr>
<tr>
<td>6.</td>
<td>Leather</td>
<td>Leather products</td>
</tr>
<tr>
<td>7.</td>
<td>Wood</td>
<td>Wood products</td>
</tr>
<tr>
<td>8.</td>
<td>Paper</td>
<td>Paper products, publishing</td>
</tr>
<tr>
<td>10.</td>
<td>Chemical</td>
<td>Chemical, rubber, plastic products</td>
</tr>
<tr>
<td>11.</td>
<td>Minerals</td>
<td>Mineral products nec</td>
</tr>
<tr>
<td>12.</td>
<td>FerrousMetal</td>
<td>Ferrous metals</td>
</tr>
<tr>
<td>13.</td>
<td>OtherMetal</td>
<td>Metals nec</td>
</tr>
<tr>
<td>14.</td>
<td>MetalProduct</td>
<td>Metal products</td>
</tr>
<tr>
<td>15.</td>
<td>Motorvehicle</td>
<td>Motor vehicles and parts</td>
</tr>
<tr>
<td>16.</td>
<td>TrnsprtEquip</td>
<td>Transport equipment nec</td>
</tr>
<tr>
<td>17.</td>
<td>ElecEquip</td>
<td>Electronic equipment</td>
</tr>
<tr>
<td>18.</td>
<td>Machinery</td>
<td>Machinery and equipment nec</td>
</tr>
<tr>
<td>19.</td>
<td>OthMnfct</td>
<td>Manufactures nec</td>
</tr>
<tr>
<td>20.</td>
<td>Utilities</td>
<td>Electricity; Gas manufacture, distribution; Water</td>
</tr>
<tr>
<td>21.</td>
<td>Construction</td>
<td>Construction</td>
</tr>
<tr>
<td>22.</td>
<td>Trade</td>
<td>Trade</td>
</tr>
<tr>
<td>23.</td>
<td>TransComm</td>
<td>Transport nec; Sea transport; Air transport; Communication</td>
</tr>
<tr>
<td>24.</td>
<td>FinsBusi</td>
<td>Financial services nec; Insurance; Business services nec</td>
</tr>
<tr>
<td>25.</td>
<td>OthSrvc</td>
<td>Recreation and other services; PubAdmin/Defence/Health/Education; Dwellings</td>
</tr>
</tbody>
</table>

Source: Author’s aggregation from GTAP Data Base v9.0.
**Scenarios for 2018–2035**

High-case scenario (H): the AMS sustain the real GDP growth rates as shown in Table 4.

Middle-case scenario (M): productivity growth rates for the AMS are 50% of the high-case scenario.

Lower-middle-case scenario (LM): productivity growth rates for the AMS are 25% of the high-case scenario.

Low-case scenario (L): No productivity growth rates for the AMS.

There is no difference in simulation results when the model tracks the time path given by the historical data estimated for population, GDP, productivity, and investment from 2011 to 2017. Only after 2018 can we observe differences between the simulation scenarios.

**Simulation Results**

Table 4 shows the average annual growth rates of total population, working-age population, and real GDP for the AMS as well as the ASEAN aggregate. Population growth rates are set to be same across the four scenarios. For ASEAN as a whole, working-age population grows by 0.7%, slightly less than the total population growth of 0.8%, suggesting that population ageing is in progress. Table 4 shows that the real GDP growth rates reflect the corresponding four scenarios. If the productivity growth in ASEAN is simulated at 3.9% as reported in Table 5, then real GDP in ASEAN can grow by 5.2%. In other words, ASEAN needs to keep raising productivity by 3.9% to keep the real GDP growth rate at 5.9%. This is the high-case scenario for ASEAN and its implication for the productivity growth that agrees with the real GDP projection in Table 5. It should be noted that lack of positive productivity growth computed within the model leaves out Singapore’s real GDP from varying across the scenarios.

The time path from 2011 to 2035 of ASEAN’s real GDP level is depicted in Figure 1. Real GDP in ASEAN grew from US$2.2 trillion in 2011 to US$2.9 trillion in 2017. Depending on the scenario, the time path diverges after 2018 and resulted in US$7.3, US$5.6, US$5.0, and US$4.4 trillion in 2035, respectively, from the high scenario to the low scenario.
### Table 4: Growth Scenario for the ASEAN, 2018–2035
(average annual growth rate, %)

<table>
<thead>
<tr>
<th></th>
<th>Total Population</th>
<th>Working-Age Population</th>
<th>Real GDP</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>H</td>
<td>M</td>
<td>LM</td>
<td>L</td>
</tr>
<tr>
<td>ASEAN</td>
<td>0.8</td>
<td>0.7</td>
<td>5.2</td>
<td>3.6</td>
<td>2.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Brunei</td>
<td>0.9</td>
<td>0.6</td>
<td>6.1</td>
<td>4.9</td>
<td>4.4</td>
<td>3.8</td>
</tr>
<tr>
<td>Cambodia</td>
<td>1.2</td>
<td>1.4</td>
<td>6.4</td>
<td>4.3</td>
<td>3.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.8</td>
<td>0.8</td>
<td>5.5</td>
<td>3.6</td>
<td>2.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>1.3</td>
<td>1.8</td>
<td>6.8</td>
<td>4.5</td>
<td>3.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.0</td>
<td>0.9</td>
<td>4.8</td>
<td>3.4</td>
<td>2.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>1.3</td>
<td>1.4</td>
<td>7.0</td>
<td>6.1</td>
<td>5.7</td>
<td>5.2</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.7</td>
<td>–0.3</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Thailand</td>
<td>–0.1</td>
<td>–0.7</td>
<td>3.1</td>
<td>2.0</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>0.7</td>
<td>0.4</td>
<td>6.2</td>
<td>3.2</td>
<td>1.8</td>
<td>0.3</td>
</tr>
<tr>
<td>RoSEAsia</td>
<td>0.7</td>
<td>0.7</td>
<td>7.5</td>
<td>3.9</td>
<td>2.3</td>
<td>0.7</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; GDP = gross domestic product; H = high-case scenario; L = low-case scenario; Lao PDR = Lao People’s Democratic Republic; LM = lower-middle-case scenario; M = middle-case scenario; RoSEAsia = Rest of Southeast Asia.

Source: Author’s simulation.

### Table 5: Productivity Growth Scenario for ASEAN, 2018–2035
(average annual growth rate, %)

<table>
<thead>
<tr>
<th></th>
<th>Productivity</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
<td>M</td>
<td>LM</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td>ASEAN</td>
<td>3.9</td>
<td>1.8</td>
<td>0.8</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Brunei</td>
<td>2.5</td>
<td>1.3</td>
<td>0.6</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>5.5</td>
<td>2.8</td>
<td>1.4</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.7</td>
<td>1.9</td>
<td>0.9</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>4.8</td>
<td>2.4</td>
<td>1.2</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>3.5</td>
<td>1.7</td>
<td>0.9</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>2.2</td>
<td>1.1</td>
<td>0.5</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.7</td>
<td>1.3</td>
<td>0.7</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>6.5</td>
<td>3.3</td>
<td>1.6</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>RoSEAsia</td>
<td>6.0</td>
<td>3.0</td>
<td>1.5</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; H = high-case scenario; L = low-case scenario; LM = lower-middle-case scenario; M = middle-case scenario; RoSEAsia = Rest of Southeast Asia.

Source: Author’s simulation.
Having simulated the four scenarios, it is possible to observe the change in sectoral outputs in ASEAN. Table 6 shows ASEAN’s sectoral outputs in the benchmark year of 2011 and the sectoral output change by 2035. The sectoral production structure in ASEAN is characterised by large shares of primary, trade, and other services industries, which are about 15% (US$727 million over the total), 10%, and 11%, respectively. Looking at the changes in sectoral output captured by the ratio from 2011 to 2035, it is clear that all sectors expand for all scenarios. However, by comparing the sectoral production ratio with the total, it can be inferred that the share of primary industry becomes smaller in 2035; the sectoral production ratio in primary industry under the high-case scenario is 2.8, as compared to the total ratio of 3.3. Thus, the total output in 2035 becomes 3.3 times larger than in 2011 while the sectoral output of primary increases by 2.8 times, resulting in a shrinking share in the economy. Similarly, textile, apparel, and leather see their share shrink. On the other hand, under the high-case scenario, the sectoral outputs in manufacturing industries (minerals, metals, motor vehicles, and transport equipment) expand as well as in construction boosted by increased investment. A shift in production structure from the primary and the light manufacturing industries towards the heavy manufacturing and machinery industries can be inferred from the changes in sectoral production ratios.
### Table 6: Effect on Sectoral Outputs of ASEAN, 2035

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>H</td>
</tr>
<tr>
<td>Primary</td>
<td>727</td>
<td>2.8</td>
</tr>
<tr>
<td>Energy</td>
<td>153</td>
<td>3.4</td>
</tr>
<tr>
<td>BvgTbcc</td>
<td>45</td>
<td>2.7</td>
</tr>
<tr>
<td>Textile</td>
<td>77</td>
<td>1.9</td>
</tr>
<tr>
<td>Apparel</td>
<td>49</td>
<td>2.0</td>
</tr>
<tr>
<td>Leather</td>
<td>34</td>
<td>1.5</td>
</tr>
<tr>
<td>Wood</td>
<td>45</td>
<td>3.3</td>
</tr>
<tr>
<td>Paper</td>
<td>54</td>
<td>3.1</td>
</tr>
<tr>
<td>PetCoProduct</td>
<td>188</td>
<td>2.5</td>
</tr>
<tr>
<td>Chemical</td>
<td>342</td>
<td>3.3</td>
</tr>
<tr>
<td>Minerals</td>
<td>60</td>
<td>4.1</td>
</tr>
<tr>
<td>FerrousMetal</td>
<td>37</td>
<td>4.2</td>
</tr>
<tr>
<td>OtherMetal</td>
<td>43</td>
<td>4.7</td>
</tr>
<tr>
<td>MetalProduct</td>
<td>96</td>
<td>4.0</td>
</tr>
<tr>
<td>Motorvehicle</td>
<td>94</td>
<td>3.7</td>
</tr>
<tr>
<td>TransrtEquip</td>
<td>41</td>
<td>3.8</td>
</tr>
<tr>
<td>ElecEquip</td>
<td>288</td>
<td>2.9</td>
</tr>
<tr>
<td>Machinery</td>
<td>192</td>
<td>3.4</td>
</tr>
<tr>
<td>OthMnfct</td>
<td>47</td>
<td>2.3</td>
</tr>
<tr>
<td>Utilities</td>
<td>103</td>
<td>3.0</td>
</tr>
<tr>
<td>Construction</td>
<td>391</td>
<td>5.0</td>
</tr>
<tr>
<td>Trade</td>
<td>502</td>
<td>3.6</td>
</tr>
<tr>
<td>TransComm</td>
<td>354</td>
<td>2.8</td>
</tr>
<tr>
<td>FinsBusi</td>
<td>368</td>
<td>2.8</td>
</tr>
<tr>
<td>OthSrvc</td>
<td>555</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>4,884</td>
<td>3.3</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; H = high-case scenario; L = low-case scenario; LM = lower-middle-case scenario; M = middle-case scenario.

Note: Change in sectoral output volume is based on constant price in 2011.

Source: Author’s simulation results.
The effect on wage rates for unskilled labour and skilled labour in ASEAN is shown in Table 7. Under the high-case scenario, the average annual growth rate of the unskilled labour’s wage rate is 4.2% and 3.5% for skilled labour for the 2018–2035 period. They are about the same for the middle-case scenario: 1.7%. The growth rate of unskilled labour becomes smaller than that of skilled labour under the lower-middle-case scenario, and worsens to negative in the low-case scenario. These results suggest that the gap in wage rate between unskilled and skilled labour would widen if productivity growth were to stagnate at a lower rate.

Table 7: Effect on Wage Rates for Unskilled and Skilled Labour in ASEAN, 2018–2035 (average annual growth rate, %)

<table>
<thead>
<tr>
<th></th>
<th>H</th>
<th>M</th>
<th>LM</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unskilled labour</td>
<td>4.2</td>
<td>1.7</td>
<td>0.8</td>
<td>-0.1</td>
</tr>
<tr>
<td>Skilled labour</td>
<td>3.5</td>
<td>1.7</td>
<td>1.1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; H = high-case scenario; L = low-case scenario; LM = lower-middle-case scenario; M = middle-case scenario.

Note: Change in wages rates is based on constant price in 2011.
Source: Author’s simulation results.

We experimented with the four scenarios in this study. Although there are numerous ways of constructing different future scenarios, it might be worth considering the full completion of the AEC and RCEP as one more assumption to append to the existing scenarios. While the AEC is the regional integration amongst the AMS, RCEP is another large regional free-trade pact of 16 countries in which all AMS are participating in the negotiation process. We can consider the additional effects of the AEC and RCEP by incorporating into the scenarios import tariffs removal, logistic improvement of merchandise trade, and services trade liberalisation, adopting the implementation similar to Itakura (2014). These liberalisation components are gradually phased into the scenarios over the 2018–2027 period.

Table 8 shows the resulting effect of the AEC and RCEP on top of the existing scenarios for the AMS. As compared to Table 4, ASEAN’s average annual growth rate is increased by 0.2% points for the high-case scenario, and by 0.3% points for the other scenarios. These differences can be understood as the effect of the AEC and RCEP pushing up the growth path. Cambodia shows the highest gain in growth rate, about 1.5% point, because its relatively high bilateral import tariffs are completely removed.
### Table 8: Effect of AEC and RCEP on Real GDP Growth, 2018–2035
(average annual growth rate, %)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Real GDP</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H+</td>
<td>M+</td>
<td>LM+</td>
<td>L+</td>
</tr>
<tr>
<td>ASEAN</td>
<td>5.4</td>
<td>3.9</td>
<td>3.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Brunei</td>
<td>6.2</td>
<td>5.1</td>
<td>4.5</td>
<td>3.9</td>
</tr>
<tr>
<td>Cambodia</td>
<td>7.9</td>
<td>5.7</td>
<td>4.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.6</td>
<td>3.7</td>
<td>2.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>7.3</td>
<td>5.1</td>
<td>3.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5.1</td>
<td>3.7</td>
<td>3.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Philippines</td>
<td>7.2</td>
<td>6.3</td>
<td>5.9</td>
<td>5.4</td>
</tr>
<tr>
<td>Singapore</td>
<td>2.9</td>
<td>2.8</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Thailand</td>
<td>3.7</td>
<td>2.7</td>
<td>2.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>6.6</td>
<td>3.7</td>
<td>2.2</td>
<td>0.7</td>
</tr>
<tr>
<td>RoSEAsia</td>
<td>7.5</td>
<td>3.9</td>
<td>2.3</td>
<td>0.8</td>
</tr>
</tbody>
</table>

AEC = ASEAN Economic Community; ASEAN = Association of Southeast Asian Nations; GDP = gross domestic product; H = high-case scenario; L = low-case scenario; LM = lower-middle-case scenario; M = middle-case scenario; RCEP = Regional Comprehensive Economic Partnership; RoSEAsia = Rest of Southeast Asia.

Source: Author’s simulation results.

### Figure 2: ASEAN’s Real GDP for 2011–2035 for AEC and RCEP
(trillion US$, 2011 constant price)

AEC = ASEAN Economic Community; ASEAN = Association of Southeast Asian Nations; GDP = gross domestic product; H = high-case scenario; L = low-case scenario; LM = lower-middle-case scenario; M = middle-case scenario; RCEP = Regional Comprehensive Economic Partnership.

Note: The sign ‘+’ denotes the scenario with AEC and RCEP.

Source: Author’s simulation results.
Figure 2 updates the growth path for ASEAN’s real GDP. It can be clearly seen that implementing the AEC and RCEP raises the time path above the scenarios shown in Figure 1. By the end of the simulation period in 2035, ASEAN’s real GDP reaches US$7.6, US$5.9, and US$4.6 trillion, respectively, for the high-, middle-, and low-case scenarios with the AEC and RCEP.

Summary

In this study, we use the recursively dynamic GTAP model to conduct counterfactual simulation experiments by constructing scenarios with different productivity growth for the AMS. Additionally, we include the AEC and RCEP components in the simulation scenarios. The simulation results show that ASEAN’s real GDP would register average annual growth rates ranging from 2.2% to 5.2% over the 2018–2035 period, depending on the scenarios. The sectoral outputs also increased significantly, and the results reveal the structural change in production by shifting from primary and light manufacturing towards heavy manufacturing, machinery, and construction. Growth in wage rates of unskilled labour surpasses that of skilled labour under the high-case scenario. However, under the low-case and the lower-middle-case scenarios, the gap in the wage rates between unskilled and skilled labour would become wider. From the additional components of the AEC and RCEP, the simulation results clearly show that the AEC and RCEP increase the economic growth of ASEAN as a whole. Also, gains in real GDP for the AMS are confirmed in the simulation results. Because of the relatively high import tariffs to be removed, Cambodia’s gain in real GDP stands out as the largest. If the AEC and RCEP were implemented on top of the scenarios, then ASEAN’s real GDP level would reach US$7.6 trillion under the high-case scenario and US$4.6 trillion under the low-case scenario.

Key data inputs of projections are taken from the UN’s World Population Prospects and the IMF’s World Economic Outlook. The benchmark data set and the CGE model are drawn from the GTAP Database and the Dynamic GTAP model. It may be obvious that the simulation results will be affected by changes in the data inputs and the model, not to mention the remaining errors of the author.
References


ASEAN Secretariat (2015), ASEAN Economic Community Blueprint 2025. Jakarta: ASEAN.


