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Regional Integration in Indo-Pacific: Connectivity, Cooperation, and New Supply-Chain Linkages

Edited by

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Executive Summary

The evolving economic architecture in the Indo-Pacific rests squarely on the post-war construct of the Asia-Pacific, which has been in existence for 6 decades but is undergoing changes in the established patterns of economic integration and supply chain linkages. The Indo-Pacific faces opportunities and challenges in the new policy alignments around Trade, Global Value Chain (GVC) Integration, and Economic Cooperation. The raison d'être of building a new construct lies in the re-evaluation of the existing trade and investment linkages – in Asia, between Asia and the Pacific, between Asia and Europe, and between Asia and Africa – and in the re-calibration of these linkages, along with economic and technical cooperation activities, to reflect the emergent economic and strategic alignments amongst countries and regions, including the Pacific Island states. This study traces the stages of economic growth in Asia-Pacific and the convening of regional platforms such as the Association of South East Asian Nations (ASEAN), Asia Pacific Economic Cooperation (APEC), ASEAN+3, and East Asia Summit to aid the regional economic integration. The emergence of the Indo-Pacific construct thereafter is explained by evaluating the strategic importance of regional value chains and the global competitiveness for dominating the new technologies that influence both the existing and new centres for the production and consumption of goods and services. The economic construct is specifically explained along the important verticals of:

- Connectivity infrastructure for supply chains;
- Role of ASEAN in the new architecture;
- Trade Integration amongst major partners of Indo-Pacific;
- Cooperation for digital economy;
- Human resources capacities and movement of people;
- The Pacific Islands in an inclusive Indo-Pacific; and
- Development and cooperation.

The transformational changes in global governance, international relations, the aspirations of the young demography, technological connectivity, and the future of work are driving the current discourse on connectivity. For this reason, connectivity infrastructure plans that underwrite the economic architecture in the Indo-Pacific are seeking greater emphasis on governance, standards, transparency, and accountability. Connectivity plans that cater to new supply chain linkages, whether for trade in goods or services, or for the digital economy, will be subject to efficiencies and markets. At the same time, the global discourse on balanced, sustainable, and inclusive growth shifts the emphasis on economic corridors that can stimulate two-way trade between economic agglomerations within Asia, and between Asia, Africa, and Europe. The COVID-19 pandemic has revealed the vulnerability of connectivity and GVCs. Connectivity between new production locations and markets will strengthen the resiliency of inter-regional connectivity and the GVCs, and improve trade integration. In the post-COVID-19 phase, it will also support restructuring and diversification of supply chains and markets. Indo-Pacific has high stakes in the new supply chain-led connectivity projects. Restructuring, understanding, and preparing for a connected Indo-Pacific will ensure stable and inclusive growth in the region.

South-East Asia is indeed becoming more confident in the Free and Open Indo-Pacific approach, which emphasises development and connectivity, and expansion of supply chains. ASEAN has crafted the *ASEAN Outlook on the Indo-Pacific* to support ASEAN's position and to maintain its centrality by standing together and keeping its economies convergent. ASEAN feels that 'the ASEAN way' — that

is, non-interference — is a vital strategy for ASEAN to remain relevant, agile, and flexible in the new economic architecture. ASEAN is interested in the peace dividend in the region and must apply its open, soft, free, and inclusive principles to build peaceful market mechanism-based trade in the Indo-Pacific.

The degree of economic integration, through GVCs, of Indo-Pacific countries including ASEAN, is the bedrock of Indo-Pacific economic architecture. An Indo-Pacific trade and economic cooperation plan must consider China and face the inevitability of supply chain integration between ASEAN and China, and the European Union (EU) and China, amongst others. The question before policymakers is whether the new economic architecture – the Indo-Pacific – can be developed in a highly trade-integrated Asia; even when the strategic cooperation amongst Indo-Pacific members mostly excludes China from their deliberations and dialogues.

The Pacific Island Countries (PICs) may be geographically located at the heart of the Indo-Pacific region but suffer from the tyranny of distance with expensive air and sea connectivity. PICs have grown on important fronts, such as telecommunications infrastructure and regulation, e-commerce, and cooperation on product standards. Their small market size and high trade costs, however, are challenges for integration into global supply chains. Infrastructure and institutional support from important regional economies for their supply chains will make the Indo-Pacific an inclusive architecture. PICs prioritise climate change and development as their most pressing needs. However, drawing them into the emergent rules and practices of the Indo-Pacific economic architecture is foundational to the achievement of their priorities as well as to the prosperity, peace, and security in their region.

Digitalisation is key to 21st century GVCs. The rapid growth of digital trade and its rising importance in the world economy have urged the Indo-Pacific region towards international common rules to level the playing field and provide a rules-based ecosystem to support market openness, innovation, and fair competition. Trust building is the priority for an open, resilient, development-friendly ecosystem for the Indo-Pacific digital economy in which issues of privacy, cybersecurity, and intellectual property rights are balanced with market openness, flow of data, taxation and legal frameworks, and political systems.

Human capital will increasingly become the main driver of broad-based economic growth and will be a key area for international cooperation in the Indo-Pacific. As technologies transform the structure of economic activity, human capital development fits neatly within the economic construct of the Indo-Pacific. A mutual agenda of greater connectivity must include preparing the workers for changes in the locus and mode of economic activity, greater penetration of the digital economy, and transformation of production networks. Indo-Pacific countries cannot ignore the need for skills development if they want to maximise the benefits of greater trade and investment flows within the region. The level of human capital varies across the Indo-Pacific, hence cooperation for capacity development, movement of skilled workers, and new mechanisms for labour movement in digital economy must be built in the new economic architecture.

Without a clearly identified geography, the Indo-Pacific economic architecture can arch over an economic cooperation strategy in which bilateral and trilateral cooperation for development are common to Infrastructure, digitalisation, strengthening of supply chains, maritime cooperation, etc., which are considered the drivers of economic growth and prosperity in the Indo-Pacific region. All the existing schemes of bilateral and trilateral cooperation within the geography of the Indo-Pacific – such as the Indian Ocean Rim Association, ASEAN, Australia–Japan–India Supply Chain Resilience Initiative, Quadrilateral Security Dialogue, ASEAN–India Connectivity, India–European Union Strategic Partnership, India–EU Connectivity Partnership, India–Japan Comprehensive Economic Partnership

Agreement, India–Australia Comprehensive Strategic Partnership, and EU–ASEAN Strategic Partnership, amongst others – manifest the larger economic vision of the Indo-Pacific.

Trade and investment policies will assume more significance in the coming years and nurturing the business environment will also play a role in structuring trade relations in the Indo-Pacific. The trade agreements of the Regional Comprehensive Economic Partnership, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, and the Indo-Pacific Economic Framework for Prosperity will be expected to play a crucial role in trade integration and investments in the Indo-Pacific region.

An Indo-Pacific trade and economic cooperation plan must consider China. Closely integrated value chains between China and ASEAN have cast a shadow on some trade and investment partnerships with ASEAN, e.g. with Japan, the EU, and most noticeably with India. The negotiations on trade in goods in the RCEP reflected these concerns at several points before the conclusion of the FTA. It is also an important reason why India stayed out from the conclusion of the RCEP. The emerging economic architecture in the Indo-Pacific, in which ASEAN has a central role, will also face the inevitability of supply chain integration between ASEAN and China, and the EU and China, amongst others. The lessons from the pandemic and the advent of the digital economy underline both the scope of, and immediate need for, efficient and trusted partners. Equally, value chains of the green economy, high-tech production, research and development, and financial markets are other strong prospects for the Indo-Pacific region. Investments in infrastructure for the digital economy and cybersecurity are the two most pressing needs in the region for it to grow as a digital economy hub. The Indo-Pacific region should be ready and able to fulfil both the capacity needs and trust issues required in these areas of cooperation.

The Indo-Pacific region is home to some of the most open markets for both trade and investment. Its economic dynamism is becoming contemporary and future-ready through the cooperation plans for new GVCs and investments, and rules of engagement. Such economic dynamism is left vulnerable to a unilateral interpretation of the status quo in the South and East China Sea. The strategic activities in the two seas have caused several ripple effects on the economic linkages in Southeast and East Asia. The deep GVC connectivities amongst East and Southeast Asian countries and China created a ground for dissatisfaction with the existing economic architecture, notwithstanding the ensured economic returns from existing trade integration in the region and the complexity involved in unravelling the backward–forward integration of exports in several important sectors.

To say that the evolution of the Indo-Pacific economic architecture is for the containment of China is a simplistic explanation. The Indo-Pacific no doubt addresses China centrality in production sharing in the region, and the dependency of the EU and the US on the supply chains of China. From a policy research perspective, the evolution of this architecture is a preparation for new economic demands before all countries in the region. Structural transformation and employment generation policies in developing Asia and the Pacific must understand, prepare, and respond to the new digital economy, as the latter will affect the patterns and geographical location of industries, employment, trade, and economic growth. Increased industrialisation and participation in GVCs are important for growth and employment generation in several less developed countries.

Geographical inclusiveness is an important aspect of the Indo-Pacific architecture. The role of smaller countries – especially the Pacific Island countries, which are new entrants to the regional connectivity plans – is particularly recognised in this study and for the future monitoring of economic performance in the Indo-Pacific. Human resources and the movement of people are equally linked with the new digital economy, as well as the future of work. Interweaving these elements of cooperation into economic cooperation in the Indo-Pacific will prepare the region for the future.

The Indo-Pacific economic architecture responds to the different policy and plan needs of developing and developed parts of Asia and the Pacific. Along with the need for achieving high and sustained growth in developing countries and least developed countries in the region, there is greater recognition of ensuring equitable, spatially even, and inclusive economic growth amongst all stakeholders. The Indo-Pacific economic architecture is linked to restoring multilateralism that recognises diversity yet leaves no one behind. The challenge is not to maintain a rules-based system, but to create and operate institutions that evolve and sustain rules in the face of change, and the relationships must all be inclusive.

This study explains the building blocks of the new economic architecture in the Indo-Pacific that are already in operation, with the caveat that there are several opportunities, some certainties of success, and a few unknown gaps that will shape progress towards the future.

Chapter 1

Emerging Economic Architecture in Indo-Pacific: Asia and the Pacific at the Center of Trade, GVC Integration, and Economic Cooperation of Future

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Emerging Economic Architecture in Indo-Pacific: Asia and the Pacific at the Center of Trade, GVC Integration, and Economic Cooperation of Future

Anita Prakash

The evolving economic architecture in the Indo-Pacific rests squarely on the post-war construct of the Asia-Pacific, which has been in existence for 6 decades but is undergoing changes in the established patterns of economic integration and supply chain linkages. There are without doubt opportunities and challenges in the new policy alignments for institutional support, and (different levels of) willingness amongst governments over such changes in the supply chain linkages and investments – both in Asia and outside Asia – to materialise a newer construct of trade and economic cooperation. The raison d'être of building a new construct lies in the re-evaluation of the existing trade and investment linkages – in Asia, between Asia and the Pacific, between Asia and Europe, and between Asia and Africa – and in the re-calibration of these linkages, along with economic and technical cooperation activities, to reflect the emergent economic and strategic alignments amongst countries and regions. The economic dynamism of Southeast and East Asia, and now increasingly of South Asia, has been at the centre of all economic and strategic cooperation plans, both bilateral and plurilateral, amongst countries in the region and with interregional partners such as the United States (US), the European Union (EU), the United Kingdom (UK), Canada, and even some parts of Africa. Added to this is the opportunity of including the Pacific Island states in the economic linkages in a more vibrant and inclusive manner. To understand the emergent economic architecture in the Indo-Pacific, it is important to evaluate the current state of trade and investment in the wider region from a growth perspective, as well as the strategic importance of regional value chains and global competitiveness for dominating the new technologies that influence both the existing and new centres for the production and consumption of goods and services.

1. Indo-Pacific: A Long Way from the Far East, East Asia, and Asia-Pacific

In Urata et al. (2019) in the seminal research study *ASEAN Vision 2040* (Tay et al., 2019), the authors described in great detail the evolution of trade and supply chain linkages in the Asia-Pacific, which are based on the trade and investment policies of the major economic players and reflect changes in the strategic interests of the countries in Southeast and East Asia.

In the post-war period, when leadership of world affairs rested in the North Atlantic region, the countries of Southeast Asia were often seen simply as part of the 'Far East'. In the third quarter of the 20th century, the Association of Southeast Asian Nations (ASEAN), then with six members, played a key role in making familiar the concept of the 'Asia-Pacific' (Urata et al., 2019). The Asia-Pacific was understood in different combinations of countries and regions. Urata et al. (2019) elaborated on the different understandings of the geography of the Asia-Pacific in terms of economic linkages, trade and investment, and movement of people, although political history and strategic interests prevail upon these linkages to varying degrees. The Japanese word order was 'Pacific Asia', which included the

eastern and south-eastern edge of Asia, Australia and New Zealand, and the US, due to the importance of its security relationship with the region. Canada was also included, by analogy with the US, and Mexico and South America came later, mostly as a by-product of the North American Free Trade Agreement and the subsequent trade agreement with Chile. The American understanding of 'Asia-Pacific' was similar, along with the identification of the US as a Pacific power after World War II. The British and European understanding of the Asia-Pacific was more likely to include India, while in Australia and New Zealand it was usually read as 'Asia and the Pacific' to include the Pacific islands.

The Asia-Pacific, however, was more than a geographical understanding (which is also true for the current theme of economic cooperation in the Indo-Pacific – a concept that lacks geographical continuity but professes cooperation over trade and investment, and infrastructure and institutional connectivity). The Japanese-led economic integration in the region was characterised by business leadership and diplomatic and official processes ensuring several trade and investment facilitation measures, followed by business decisions on investment and the location of operations. Japan's experience with export-led growth was quite unlike the prevailing policies in most Asian economies, which favoured import substitution. This growth model was soon followed in the Republic of Korea (henceforth, Korea), Taiwan, Singapore, and Hong Kong in the renowned 'flying geese' formation.[1] Thailand, Indonesia, and other Southeast Asian countries followed. China was too big to be a single goose in a flock, and its opening to international integration after 1978 ushered in a new phase of regional growth. This growth experience was located in the 'Asia-Pacific'.

The founding of ASEAN in 1967 helped shape the conception of the region from being the 'Far East' – far away from the global centre (the North Atlantic) – to the more familiar 'East Asia', which is increasingly seen as the global centre of manufacturing, and consumption of goods and services. The institutional basis for the Asia-Pacific was supported to varying degrees by the non-official Pacific Economic Cooperation Council (founded in 1980) and the Asia-Pacific Economic Cooperation (APEC) process, which was established in 1989 and extended to leader-level summits in the early 1990s.

ASEAN played an important role in the early history of APEC. Its members were crucial in the endeavour to develop a governmental process from the Track II processes of the Pacific Economic Cooperation Council. The six ASEAN Member States (AMS), which represented half the membership of APEC, initially staged half the annual meetings, and generally provided one of two co-chairs for all significant APEC committees. The inclusion of China, Hong Kong, Taiwan, and Latin American members diluted the role of ASEAN and, although Viet Nam became a member of APEC, other new members of ASEAN – i.e. Cambodia, the Lao People's Democratic Republic, and Myanmar – did not (Urata et al., 2017).

The Asian financial crisis in 1997 reshaped the intra-regional relations to a great degree. The dissatisfaction of ASEAN with financial agencies such as the International Monetary Fund and the World Bank extended to institutional platforms such as APEC, even though financial issues were not central to the role of APEC. The Asian members found the cooperative principles and assistance from

[1] 'Flying geese pattern of development' was coined by Kaname Akamatsu in 1930s articles in Japanese, and presented to world academia after World War II in 1961 and 1962 articles in English. The flying geese model explains the catching-up process of the industrialisation of latecomer economies from the intra-industry aspect (product development within a particular developing country, with a single industry growing over three time-series curves, i.e. import (M), production (P), and export (E)); inter-industry aspect (sequential appearance and development of industries in a particular developing country, with industries being diversified and upgraded from consumer goods to capital goods and/or from simple to more sophisticated products); and international aspect (subsequent relocation process of industries from advanced to developing countries during the latters' catching-up process).

other members missing during the crisis. APEC soon ceased to be the unrivalled institutional platform for economic cooperation in the Asia-Pacific, as ASEAN created its own regional trade and economic cooperation mechanisms for strengthening its own economic community objectives, as well as driving the regional economic integration process in Southeast and East Asia region from a position widely known as 'ASEAN centrality' in the post-crisis years.

ASEAN and the three North Asian economies – China, Japan, and Korea – explored the potential of an ASEAN+3 grouping in December 1997 and institutionalised it in 1999 when the leaders issued a Joint Statement on East Asia Cooperation at the Third ASEAN+3 Summit in Manila (ASEAN, 2012). Besides the consensus on economic cooperation, social and human development, and development cooperation, this grouping was the basis for monetary and financial cooperation in what eventually became the Chiang Mai Initiative Multilateralisation. The Chiang Mai Initiative Multilateralisation was implemented with a total of $120 billion by the end of 2009 and set up an independent regional surveillance unit – the ASEAN+3 Macroeconomic Research Office. The 12th ASEAN+3 Summit in Cha-am, Hua Hin, Thailand in October 2009 established the Credit Guarantee and Investment Mechanism with initial capital of $500 million under the Asian Bond Markets Initiative to support the local currency-denominated corporate bond in the region (ASEAN, 2021).

The onset of the study on an East Asia Free Trade Agreement under the aegis of ASEAN+3 soon intensified the setting up of the ASEAN+6 grouping – the East Asia Summit (EAS) – which included the original ASEAN+3 and India, Australia, and New Zealand. The first EAS meeting in 2005 was convened within the ASEAN Summit mechanism, and the EAS remains within the ASEAN Summit process. This new regional formation was the institutional response to balance the trade and economic cooperation and supply chain linkages, initially in East Asia but soon extending to the US. Since Australia and New Zealand were some of the oldest Dialogue Partners of ASEAN in the region, and India was a major emerging market, the EAS became a more useful platform for trade, economic, and technical cooperation in the region. The EAS was also the first response mechanism where China centrality in regional value chains, new markets for production and consumption, and the strategic interests of several important economies in the Asia-Pacific were underlying to varying degrees in its subsequent meetings. The inclusion of the US and Russia in the EAS membership in 2010 under Viet Nam's chairmanship of ASEAN was a none-too-subtle pointer in this direction. In 2006, the Japanese leadership promoted a study on an ASEAN+6 Comprehensive Economic Partnership for East Asia, extending membership to India, Australia, and New Zealand. This became the basis for EAS-led trade and economic cooperation in the region. After several rounds of competing presentations on the East Asia Free Trade Agreement and the Comprehensive Economic Partnership for East Asia in the ASEAN+6 Economic Ministers' Meetings, the amalgamation of the two studies and the streamlining of ASEAN+1 free trade agreements (FTAs) became the basis for initiating the Regional Comprehensive Economic Partnership (RCEP) in 2011.

The EAS remains an extension of the ASEAN ministerial and leaders' meetings with ASEAN Dialogue Partners. The dichotomy between trade and investment and regional cooperation issues on one side and strategic and security issues on the other in the EAS was made visible by US leaders who made repeated attempts to characterise the EAS as a 'political and security' institution and APEC as the 'premier regional economic institution', though there was/is no such distinction in the thinking of the original members of the ASEAN+6 EAS. The EAS and its associated economic cooperation agreements have made 'East Asia' rival the 'Asia-Pacific' as a component of international affairs.

Japanese leadership is once again seen in bringing the parallel narratives of the Asia-Pacific and East Asia closer to address the changing economic and strategic landscapes in the region. Exploring new markets and centres of production, investments in new supply chains, and securing strategic interests

through increased cooperation with friendly partners was in the background of Prime Minister Shinzo Abe's speech at the United Nations General Assembly in October 2017. Even till as late as 2018, when the Economic Research Institute for ASEAN and East Asia (ERIA) was writing *ASEAN Vision 2040*, most contributing authors agreed that the Asia-Pacific cannot sufficiently represent the current economic linkages in East Asia. Still, the Indo-Pacific was not generally acceptable to many writers of *ASEAN Vision 2040*, as they believed it to represent security connotations, primarily led by the US. Therefore, *ASEAN Vision 2040* settled for the term 'Indo-Asia-Pacific' instead. In 2018, Prime Minister Abe's speech at the United Nations General Assembly brought the focus on economic linkages and cooperation in this region, albeit aligned with strategic interests. He emphasised that a 'Free and Open Indo-Pacific' would be the platform for all economic cooperation and connectivity in the region, between Asia and Africa, and between Asia and Europe. He separately revived the Quadrilateral Security Dialogue, commonly known as the Quad, bringing in the US as a major economic partner in the region – underplaying the security partnerships of the US and actively engaging with Australia and India, with ASEAN playing an important link in between though not at the table.

ASEAN lost no time since then in bringing out the ASEAN Outlook on the Indo-Pacific at the 34th ASEAN Summit in Bangkok, Thailand in June 2019 (ASEAN, 2019). The ASEAN Outlook on the Indo-Pacific was endorsed by the EAS in 2019. It recognises ASEAN's centrality in the new architecture of the Indo-Pacific, just as ASEAN had driven the ASEAN+1, ASEAN+3, and EAS meeting process. In practice however, ASEAN's centrality in the Indo-Pacific requires greater scrutiny, given that the ASEAN-led EAS could not balance the strategic interests of either the AMS or the Dialogue Partners.

It may be worthwhile considering the role of India in the East Asia narrative and its growing importance in the Indo-Pacific construct, both from an economic and a strategic perspective. India's participation in the EAS highlights the looseness of the term 'East Asia' and was indeed used by some EAS members, both in ASEAN and the plus 6, to question India's inclusion in the economic construct of East Asia and the EAS. Despite deep historical and cultural linkages with Southeast and East Asia, and a dialogue partnership with ASEAN since 1999, India's trade integration with this region was weak. With a growing economy and its then 'Look East' policy,[2] however, India was ready to join regional institutional arrangements and the EAS fulfilled this objective. The Framework Agreement on Comprehensive Economic Cooperation Between India and ASEAN had been concluded in 2005, and the ASEAN–India Free Trade Area negotiations commenced the same year. In view of its huge negative balance of trade with China and close trade integration between ASEAN and China, and considering its domestic market and industries, India negotiated and concluded a conservative rule of origin and tariff elimination schedule for trade in goods with ASEAN in 2009. India's rate of growth remained impressive in the following years, attracting the interest of East Asia, especially that of Japan, Korea, Indonesia, Singapore, and Thailand, which had closer trade and bilateral relations with India. The increasing trade imbalance with China, and India's unresolved strategic interests, gave India the impetus to participate actively in regional dialogue on economic and strategic cooperation, first in the EAS and now in the Indo-Pacific. India has also promoted its bilateral relations with Japan, Indonesia, Singapore, and Viet Nam, amongst others, to forge a layered trade integration that actively supports its strategic interests in the region. While most members of East Asia share oceanic distance, India is the only country that shares a land border with China with a history of border conflicts. India's inclusion in the East Asia group and its leading role in the Indo-Pacific (and the Quad) is therefore more complex than the tick boxes of contiguous geographical or oceanic region and the extent of trade integration. This complexity is further deepened by the US's strategic interests in South and West Asia and the Indian Ocean.

[2] Renamed the 'Act East' policy in 2014.

2. Framing the Shift in Economic and Strategic Outlook

Before the Indo-Pacific captured the imagination of observers from across the globe, policy researchers covering this region had explained the essence of the EAS as a first political attempt to balance China centrality in the supply chains of Southeast and East Asia and to forge a rules-based partnership in the East Asia region. ASEAN centrality and the ASEAN Summit, as the drivers of the EAS, were a conscious decision by all members of the EAS to create this balance in an inclusive manner – where no member country could claim exclusion or be singled out. Between 2005 and 2010 – the year the US and Russia became EAS members during Viet Nam's chairmanship of ASEAN – the cooperation element was predominant in the EAS.

The following years of the EAS witnessed three important features. First, China's economy grew at an average of 10% during this decade as it rapidly climbed the value chains of production. Several AMS, as well as Japan, the US, Korea, and the EU, were closely integrated with supply chains in China. The Australian economy thrived largely due to commodities exports to China. These economic linkages were, however, being tested by the strategic interests (and intents) of China in the South and East China Sea through unilateral measures of infrastructure development and economic activities. Second, the US had returned its attention to this region after its prolonged engagement and preoccupation with West Asia. The renaming of its US Pacific Command to the US Indo-Pacific Command in 2018 was a significant signal of its intent for the region, although its strategy was as yet un-delineated. From a trade and economic cooperation perspective, this gave policy watchers an opportunity to link the Indo-Pacific with US security interests in the region, and as a potential threat to the existing economic dynamism of East Asia. It has taken the US a decade to arrive at a more nuanced version of the Indo-Pacific, served by its huge foreign direct investment in the region. The US is now more integrated with the region than before. Japan's efforts to link the Indo-Pacific with economic cooperation in East Asia and with partners outside Asia notwithstanding, the US's participation in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (eventually pulling out from the final agreement during the Trump presidency), and the launch of the Indo-Pacific Economic Framework for Prosperity negotiations signify the alignment of the US's economic and strategic interests in the region. The arrival of the digital economy and technology platforms has made the US's presence in East Asia more keenly felt than ever before. Third, the unravelling of globalisation since 2016, when 'Brexit' and 'America First' echoed in other economies, has affected policy sentiment in most countries. The US–China trade tensions, which were initially confined to tariffs, have escalated to control of the technologies that underlie the manufacturing value chains. This narrative was compounded in recent years by the onset of the coronavirus disease (COVID-19) pandemic, which originated in China and created severe supply chain disruptions, at least in the initial few months of the pandemic in 2020. Social and health measures in most countries sustained these disruptions for longer. The existing supply chain dependency and efficiency are therefore being re-examined and sometimes rebuilt with bilateral and trusted partners. New policy watch words such as 're-shoring' and 'friend-shoring' are used extensively, and bilateral and trilateral relations are being explored to alter supply chains and investments in favour of friendly countries. In its inception phase, the emergent economic architecture of the Indo-Pacific reflects some or all these phenomena in varying measures.

The reality, however, is that the Indo-Pacific region is an economic construct along the Indian Ocean, in which several alternative plans and groups of countries are working on their mutual relations and combined strengths. The new plans aim to create new or alternative supply chains or to strengthen existing ones – in order to address changing political and economic needs in Asia, incorporate the opportunities arising from the digital economy and Industry 4.0, expand the location of the global

value chains (GVCs) and new markets, ensure inclusive growth, bridge the fault lines in supply chains exposed during the pandemic, and accommodate partners' interests from within and outside Asia. The presence of the US as the largest economic and strategic partner is meant to be a guarantor of these objectives and consensus-based changes in the region.

3. Imperatives for Indo-Pacific Coming from Outside of East Asia

Japan's efforts to draw the economic landscape of the Indo-Pacific were complementary, and even necessary, to address the unilateral changes in the status quo in the South and East China Sea by a rising China. Abe's call for a Free and Open Indo-Pacific struck a chord with several major trading partners of China, whose reliance on Chinese imports and their greater trade integration (and value chain dependency) with China were being challenged in the political realm, if not by the businesses themselves. As stated above, after the general recovery from the global financial crisis, and especially since 2015 when China announced the Belt and Road Initiative for infrastructure development, the political and public discourse on China centrality in regional supply chains, principles of reciprocity and fair competition, market access, problems of overcapacity, and protection of intellectual property were uppermost in the policy platforms of major economies in Asia and Europe, and in the US, including those in Southeast and East Asia. The EU's current approach towards China, set out in the 'Strategic Outlook' Joint Communication of 12 March 2019 remains valid (EEAS, 2022). The EU continues to deal with China simultaneously as a partner for cooperation and negotiation, an economic competitor, and a systemic rival.

With the EU, the changing nature of China's supply chains and China's ascent of GVCs also affected EU member states' integration with each other in terms of trade in intermediate goods. In fact, while the size of the intra-EU value chain has shrunk (countries are more loosely bound to each other in their exports of intermediate goods), EU member states were increasingly linked to China for intermediate goods (EU, 2020). The EU, therefore, has shown open support for the new policy discourses in East Asia and has stopped using the term Asia-Pacific in its leadership statements. Ursula von der Leyen, President of the European Commission, attended the Asia–Europe Meeting in Cambodia in November 2021. She referred to the region only as Indo-Pacific in her speech. The leaders of all the EU member countries addressed the summit using the same nomenclature. The EU has also put in place its Global Gateway programme, which is covered in the chapter on Supply Chain Connectivities in Indo-Pacific in this volume.

Indo-Pacific is a well-established term in discussions on international security in venues such as the ASEAN Regional Forum and its Council for Security Cooperation in the Asia Pacific. The significance of the Strait of Malacca and its role as a fulcrum between the Indian Ocean, the South China Sea, and the Pacific Ocean make Indo-Pacific a natural term of discussion in Southeast Asia. This is especially true for Indonesia, but also for other AMS that have territorial issues in the South China Sea, with contestations of free movement of goods in the oceans surrounding the ASEAN region. A school of thought regards the current use of Indo-Pacific as a rather transparent effort to create a forum for the promotion of leadership in Asia, excluding China. This study evaluates this claim in the context of the evolution of the Asia-Pacific; the expansion of East Asia; the robust supply chains in East Asia, and between East Asia and the EU and the US; and the balancing of economic and strategic interests amongst these economic partners. In a real sense, the Indo-Pacific is the quest for more inclusive and rules-oriented trade and economic cooperation where places of production and consumption are diversified and advantageous for all stakeholders.

4. Trade and Investment: Hallmarks of Indo-Pacific Economic Architecture

Southeast Asia and East Asia are at the centre of the Indo-Pacific's economic vibrancy. This region has, over the years, provided buoyancy to international trade and has been the largest recipient of investment (Table 1.1). The RCEP agreement estimates that the 15 member countries[3] of Southeast and East Asia contribute $26.3 trillion to global gross domestic product (GDP). If India were added, this region would account for nearly one-third of global GDP. It is no surprise, then, that important global economies such as the US and the EU (and the post-Brexit UK) are keen on an Indo-Pacific partnership that allows for sharing the economic dynamism of the region through its production facilities, markets, and vast human resources capacity. The Indo-Pacific emerges as a plurilateral component of the international economy. Nobody is thinking in terms of a 'bloc'. The development of production networks, including the third unbundling, likely makes the blocs of earlier eras impossible. A plurilateral Indo-Pacific would simply be a region that finds it mutually advantageous to work cooperatively.

[3] The RCEP consists of 15 member countries: the ASEAN 10, Australia, China, Japan, Korea, and New Zealand. India's participation in the RCEP is on hold until certain demands from India and the rest of the members are resolved to their mutual satisfaction.

Table 1.1: Trade in Goods amongst the Major Economies of Indo-Pacific (USD Billion)

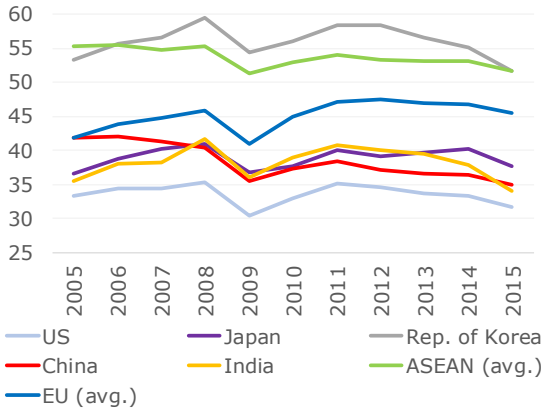
	ASEAN	China	Japan	Korea	India	Australia	NZL	EU	US	UK	EAC	South Africa
ASEAN		417.81	238.91	191.25	91.83	80.96	11.15	282.01	373.79	32.27	3.67	10.66
China	417.81		371.35	362.29	125.65	230.11	24.72	828.48	758.10	112.68	15.27	54.09
Japan	238.91	371.35		84.69	19.01	67.53	5.70	155.86	219.06	17.39	1.87	12.48
Korea	191.25	362.29	84.69		23.66	42.66	3.46	129.63	169.93	11.77	0.61	3.62
India	91.83	125.65	19.01	23.66		22.02	0.88	104.89	112.90	17.12	7.19	17.06
Australia	80.96	230.11	67.53	42.66	22.02		13.55	50.26	37.67	8.79	0.39	1.66
NZL	11.15	24.72	5.70	3.46	0.88	13.55		10.56	8.81	2.10	0.01	0.22
EU	282.01	828.48	155.86	129.63	104.89	50.26	10.56		771.61	390.23	7.20	53.41
US	373.79	758.10	219.06	169.93	112.90	37.67	8.81	771.61		118.95	2.00	21.46
UK	32.27	112.68	17.39	11.77	17.12	8.79	2.10	390.23	118.95		1.21	12.50
EAC	3.67	15.27	1.87	0.61	7.19	0.39	0.01	7.20	2.00	1.21		1.96
South Africa	10.66	54.09	12.48	3.62	17.06	1.66	0.22	53.41	21.46	12.50	1.96	

ASEAN = Association of Southeast Asian Nations, Korea = Republic of Korea, EAC = East Africa Community, EU = European Union, NZL = New Zealand, UK = United Kingdom, US = United States.

Source: International Trade Centre (2022).

As with trade, the supply chains in the Indo-Pacific are equally vibrant and the China centrality in the supply chains is visible in most sectors of production. Countries' participation in GVCs, as measured by the value added generated in a country that crosses at least two borders in international trade relative to gross exports, reached a peak at the global level in 2008 and declined progressively afterwards.[4] This feature also included Asian economies and the ASEAN region (Figures 1.1 and 1.2). The ASEAN example is particularly important as it provides a snapshot of trade integration between the largest economy in Asia and an economic community of member states that have differently sized economies, industrial bases, and levels of participation in the regional value chains. Moreover, ASEAN has been the fulcrum of trade and investment linkages from partners within and outside Asia. It is one of the most open economic regions in the world, and its economies are growing faster than the rest of the world and are converging in terms of production capacity as well as purchasing power.

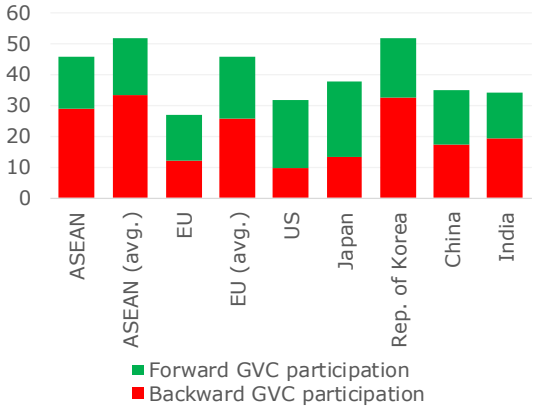
Figure 1.1: GVC Participation by Economic Area
(% of gross exports)



ASEAN = Association of Southeast Asian Nations, avg. = country weighted average, EU = European Union, GVC = global value chain, US = United States.

Notes: ASEAN refers to eight of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. EU refers to the member countries as of 2013–2019.
Source: OECD (2018).

Figure 1.2: GVC Participation by Economic Area and Type, 2015
(% of gross exports)



ASEAN = Association of Southeast Asian Nations, avg. = country weighted average, EU = European Union, GVC = global value chain, US = United States.
Notes: ASEAN refers to eight of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. EU refers to the member countries as of 2013–2019.
Source: OECD (2018).

The ASEAN+3 region – comprising the 10 AMS, China, Japan, and Korea – provides the most vibrant GVC integration in the Indo-Pacific region. Indeed, these economies exemplify what are called regional value chains. ASEAN integration with the main developed economies has declined since its peak in the late 2000s, maintaining a steady negative trend vis-à-vis the US and Japan, but there has been a partial recovery with respect to the EU. On the other hand, ASEAN has become increasingly integrated with

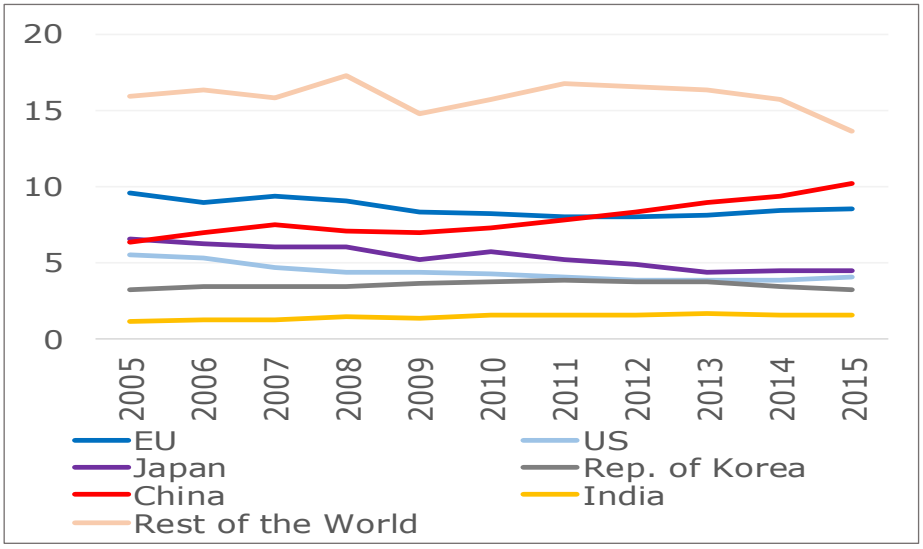
[4] The GVC database used in this chapter covers 2000–2015. Unfortunately, data for the GVC analysis are published with a substantial delay, and the available sample does not allow a thorough analysis of recent trends – particularly the effect of the COVID-19 outbreak. For the latter, higher-frequency but indirect and partial metrics are used in Chapter 5 to provide insights on potential GVC reshuffling originated by the pandemic.

the two largest Asian economies, particularly with China, which has become the main individual partner in GVCs.

ASEAN integration has progressively shifted away from developed to developing economies, particularly reflecting what is known as 'China centrality' in GVCs (Figure 1.3). With developed economies, a steady negative trend has been observed for ASEAN integration with the US and Japan since its peak in the late 2000s. In contrast, a partial recovery has taken place in recent years with respect to the EU, which remains the main integration partner for ASEAN amongst developed economies.

Figure 1.3: GVC Participation of ASEAN, by Partner

(% of Gross Exports)



ASEAN = Association of Southeast Asian Nations, EU = European Union, GVC = global value chain, US = United States.
Notes: ASEAN refers to eight of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data were available for the Lao PDR and Myanmar). EU refers to the member countries as of 2013–2019.
Source: OECD (2018).

The China centrality in the GVCs was evident during the outbreak of the COVID-19 pandemic in Wuhan, which later spread to the rest of the world. The first instance of supply shocks emerged from China, especially for medical supplies, leading to a breakdown of entire production and consumption lines in Asia and the rest of the world. While the GVC participation rates had slowed since the global financial crisis in 2008, the COVID-19 experience of supply and demand shocks has given impetus to further balancing of GVCs and investments in supply chains in terms of distance, reliability, and vertical integration. These aspects of GVC participation predate the US–China trade tensions and the COVID-19 related shocks to supply chains. The latter two have only intensified policy actions amongst governments to establish a network of trade and investment in the Indo-Pacific which integrates the strategic and economic interests under similar if not the same rules of engagement.

This, effectively, is the antithesis of economic integration with China, and in the larger Indo-Pacific region. When China joined the World Trade Organization in 2001, the labour dividend in China was available to regional economies as well as businesses in developed markets. China's vertical integration leads to China's reduced dependence on Asian regional value chains. As discussed in the

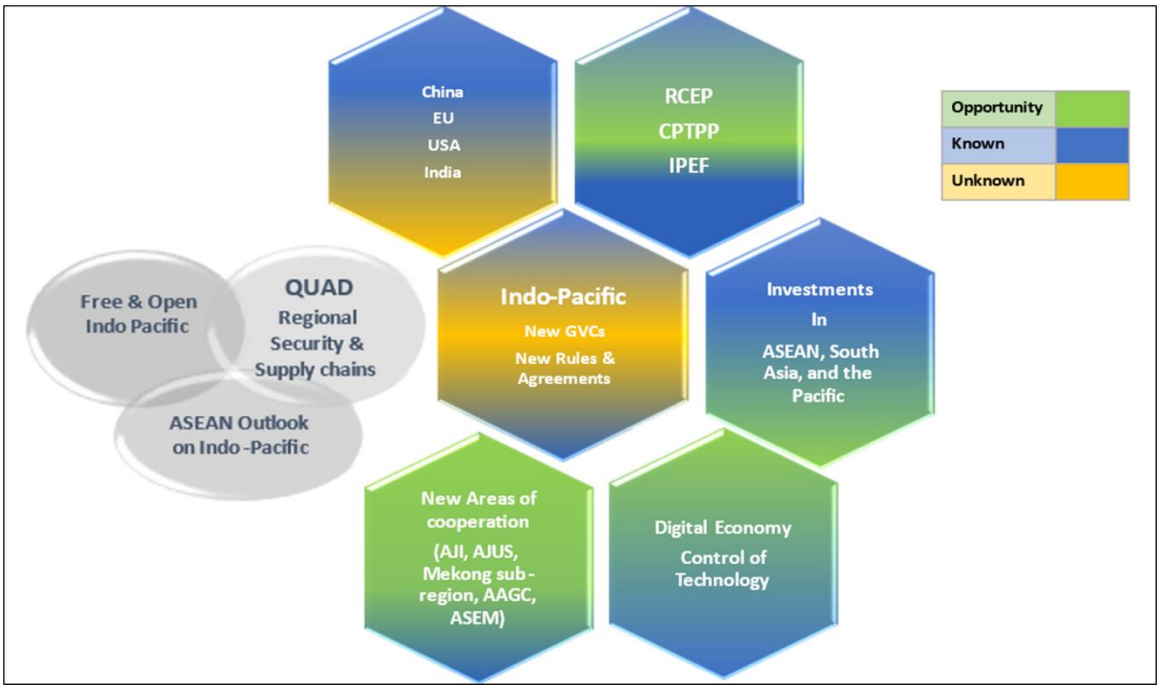
previous parts of this chapter, Europe's value chain became increasingly dependent on China at the expense of its own regional integration. The US encountered rising dependency on Chinese intermediates while facing declining exports of intermediates not only to China but also the rest of the world. Reshuffling of supply chains to Southeast Asia in response to China's vertical integration has been the intermediate response, as seen in the increased investments of the EU and the US in ASEAN since 2010 (Herrero, 2019).

The Indo-Pacific economic architecture is therefore a longer-term response for the balancing of trade and investment partnerships amongst the major economies of the world, with Southeast Asia, East Asia, and the Pacific at the core. The Indo-Pacific is also differentiated by a larger role of South Asia, especially India, in the alignment of strategic and economic interests with the rest of the major players in the architecture. When seen as an oceanic construct, the Indo-Pacific also envisages trade integration and production sharing with countries along the eastern seaboard of Africa as well as the major economies in East, North, and South Africa (Chaturvedi, Prakash, and Dash, 2020).

5. Raising the Indo-Pacific Architecture on Firm Grounds

The Indo-Pacific economic architecture builds upon existing capacities in manufacturing, innovation, trade, and investment – leading to new policy alignments over strategic interests, new production locations, and markets. COVID-19 and the US–China trade tensions have given a new impetus to the rule-setting process around trade and investment (Figure1. 4).

Figure 1.4: Building Blocks for the Indo-Pacific Economic Architecture



AAGC = Asia Africa Growth Corridor, AJI = Australia Japan India Supply Chain Resilience Initiative, AJUS = Australia Japan US Trilateral Partnership, ASEM = Asia–Europe Meeting, CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership, EU = European Union, IPEF = Indo-Pacific Economic Framework for Prosperity, GVC = global value chain, RCEP = Regional Comprehensive Economic Partnership, Quad = Quadrilateral Security Dialogue, US = United States.
Source: Author.

Supply chains in ASEAN, East Asia, and South Asia are likely to remain intact in the post-COVID-19 period. It is still early to say to what extent GVC integration has been affected by the COVID-19 pandemic, as rigorous data will only be released after a delay of some years (Shepherd and Prakash, 2021). Besides the policy conversation (and agreements) for restructuring of supply chains along elements of distance and reliability, and an increased policy weightage to domestic production centres, the Indo-Pacific economies are now more engaged in rebuilding and rebalancing trade and investment. The region is also aware of the major potential change in conditions facing GVCs in the rise of the digital economy, environmental products, electric vehicles, or goods suited for increasingly carbon-neutral societies. Recovery programmes in high-income markets will favour this shift through incentives and other measures. East and Southeast Asia is well positioned to take advantage of these opportunities, with some important incentives of retooling. Keeping markets relatively open, an effective supplier network, and integrated GVCs could be an important advantage for the Indo-Pacific region in developing the GVCs of the future.

The ASEAN and East Asia region has shown, so far, that supply chains have been able to withstand the supply and demand shocks emanating from the pandemic-induced disruptions and delays. The implications of the pandemic are mainly macroeconomic, with some difference across sectors. From a supply chain integration standpoint, technology (digital, robotics, and automation) has the potential to move production closer to the location of final consumption. The pandemic experience will likely lead to a reassessment of the risks associated with dispersed production and just-in-time management practices. The US–China trade tensions over control of technologies and redistribution of investments, together with new rules of economic engagement, will likely facilitate a rebalancing of GVCs amongst the trading partners, and the Indo-Pacific will represent these changed dynamics of cooperation and change.

Trade and investment policies will assume more significance in the coming months as they determine the ability of firms to contest markets or to source intermediate inputs from foreign suppliers. For ASEAN, East Asia, and South Asia, trade and investment facilitation will be crucial as it can increase backward and forward linkages and deepen trade integration. Nurturing the business environment will also play a role in structuring trade relations in the Indo-Pacific. The trade agreements of the RCEP, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, and the Indo-Pacific Economic Framework for Prosperity will be expected to play a crucial role in trade integration and investments in the Indo-Pacific region.

An Indo-Pacific trade and economic cooperation plan must consider China. In 2019, China became ASEAN's largest trading partner (surpassing intra-ASEAN trade) and is now the fifth largest investor in the region. Closely integrated value chains between China and ASEAN have cast a shadow on some trade and investment partnerships with ASEAN, e.g. with Japan, the EU, and most noticeably with India. The negotiations on trade in goods in the RCEP reflected these concerns at several points before the conclusion of the FTA. It is also an important reason why India stayed out from the conclusion of the RCEP. The emerging economic architecture in the Indo-Pacific, in which ASEAN has a central role, will also face the inevitability of supply chain integration between ASEAN and China, and the EU and China, amongst others. The lessons from the pandemic and the advent of the digital economy underline both the scope of, and immediate need for, efficient and trusted partners. Equally, value chains of the green economy, high-tech production, research and development, and financial markets are other strong prospects for the Indo-Pacific region. Investments in infrastructure for the digital economy and cybersecurity are the two most pressing needs in the region for it to grow as a digital economy hub. The Indo-Pacific region should be ready and able to fulfil both the capacity needs and trust issues required in these areas of cooperation.

The Indo-Pacific region is home to some of the most open markets for both trade and investment. Its economic dynamism is becoming contemporary and future-ready through the cooperation plans for new GVCs and investments, and rules of engagement.

In the following chapter, readers will find evidence supporting the cooperation plans along several verticals of economic and strategic interests in the Indo-Pacific. The building blocks of the new economic architecture in the Indo-Pacific are already in operation, with the caveat that there are several opportunities, some certainties of success, and a few unknown gaps that will shape progress towards the future.

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Chapter 2

Connectivity Plans in Indo-Pacific: Infrastructure for Expanded Supply Chains and Resilient Growth

Chapter 2

Connectivity Plans in Indo-Pacific: Infrastructure for Expanded Supply Chains and Resilient Growth[5]

Anita Prakash

Popularisation of the term 'connectivity' in the context of trade and economic cooperation was especially linked to the Association of Southeast Asian Nations (ASEAN), leading to its Master Plan on ASEAN Connectivity (MPAC) adopted in Hanoi in 2011. Significantly, it has the subtitle 'One Vision, One Identity, One Community'. The link to community is not common in standard North Atlantic thinking. 'Connectivity' – like 'open regionalism', 'comprehensive and cooperative security', and even 'Asia-Pacific' – has become a concept with a substantial Asian origin (Hawke, 2007). The merits of such linkages continue with the Indo-Pacific too.

In the 21st century, all connectivity plans have Asia at its core. This is not a coincidence. Asia, particularly Southeast and East Asia, has been a model of trade and economic cooperation, and much of this region's prosperity is due to its hard and soft connectivity efforts.

Asia is the centre of pan-regional connectivity initiatives in the Indo-Pacific. The MPAC, Belt and Road Initiative (BRI), Asia–Africa Growth Corridor (AAGC), The EU's Global Gateway, and the Asia–Europe Meeting (ASEM) – all connectivity plans – aim to deepen Asia's economic dynamism and extend it to trans-regional partners. Mega-regional integration initiatives like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP) are also integral to this region. The European Union (EU) has also put in place building blocks for an EU strategy on connecting Europe and Asia, with concrete policy proposals and initiatives, including through interoperable transport, energy, and digital networks. The European strategy aims for sustainable, comprehensive, and rules-based connectivity. The initiatives aim to improve connections between Europe and Asia by establishing partnerships for connectivity based on commonly agreed rules and standards and contributing to address the sizeable investment gaps through improved mobilisation of financial resources and strengthened international partnerships. The United States (US) initiated the Infrastructure Transaction and Assistance Network to improve capacities in partner countries' project evaluation processes and project implementation, provide advisory services to support sustainable infrastructure, and coordinate US assistance support for infrastructure in the region. The Asia Reassurance Initiative Act, 2018 is an important part of US connectivity policy in Asia.

The challenge before Asia, and the Indo-Pacific region, is how to ensure greater cooperation amongst the connectivity initiatives in the region, i.e., 'connecting the connectivities'. The importance of 'connecting the connectivities' is not limited to converging different connectivity plans in Asia, between Asia and Africa, and between Asia and Europe around the principles of governance and accountability, quality and sustainable financing, and alignment with national and regional plans. An important

[5] This chapter is a modified version of the original chapter 'Connecting the Connectivity Plans in Asia and Beyond: International Cooperation for Expanded Supply Chains and Resilient Growth' published in the Economic Research Institute for ASEAN and East Asia's research publication 'Comprehensive Asia Development Plan 3.0' in 2022.

economic justification lies in the fact that the connectivity plans will aid the deepening of the supply chain networks, create new efficiencies for trade and movement of people, and help to construct the new economic architecture that is emerging in the Indo-Pacific.

1. Focus on Connectivity and Supply Chains since the COVID-19 Pandemic

The coronavirus disease (COVID-19) pandemic, which originated in China at the beginning of 2020, created an unprecedented crisis for connectivity in both the developed and developing world. What started as disruption and, in some cases, a temporary breakdown in the supply chain of goods and services due to the closure of factories in China soon became a test for the endurance of production networks and the movement of people across international borders. Factory production in ASEAN, Germany, France, and parts of the US came to a spluttering halt as the supply of parts and components was disrupted at one end – China. Movement of people for trade in goods and services have been restored in 2023 with some isolated instances of regulated movement of people. The threats to the connectivity of production networks or supply chains are now under the policy watch of Asia to ensure resilient supply chains that do not fall prey to disruptions. This includes investments in alternative connectivity plans. It also means that the connectivity plans are to be implemented not just as infrastructure plans but as the conduit of supply chains – for both goods and people – in the Indo-Pacific. Some connectivity plans can provide alternative supply chains during a crisis like the current pandemic. The China centrality of the supply chains in Southeast and East Asia is also an important reason why new connectivity plans centred around supply chain networks are being put in place in Asia and other parts of the world.

Acceleration in the implementation of connectivity infrastructure is also being influenced by trade tensions between the US and China. These trade disputes are prompting new supply chain connectivities, where new centres of production and consolidation of existing supply chains are emerging in Asia, Africa, and Europe. The emergence of the new supply chain linkages in Asia are an important addition to the existing connectivity plans in Asia.

The rise of new sectors and modes of delivery will further impact the connectivity plans. The digital economy and demand for environmental products will favour a shift towards connectivity plans that will help Asia, especially developing Asia, to take advantage of these opportunities in high-income markets.

2. Connectivity Plans in Asia

2.1. The Master Plan on ASEAN Connectivity

The MPAC 2015 is based on twofold objectives:

(i) Enhancing intra-regional connectivity will promote economic growth, narrow the development gaps by sharing the benefits of growth with poorer groups and communities, enhance the competitiveness of ASEAN, and connect ASEAN Member States (AMS) within the region and with the rest of the world.

(ii) The concept of ASEAN connectivity would complement and support integration within ASEAN and within the broader regional framework in East Asia and beyond. The deepening and widening of

connectivity in the region would reinforce ASEAN's position as the hub of the East Asian region and preserve the centrality of ASEAN.

The ASEAN approach to connectivity uses the context of community building and the objective of 'a well-connected ASEAN that will contribute towards a more competitive and resilient ASEAN, as it will bring peoples, goods, services and capital closer together' (ASEAN, 2011. p i). The MPAC contemplates physical, institutional, and people-to-people components. The MPAC 2025 broadens this vision to 'achieve a seamlessly and comprehensively connected and integrated ASEAN that will promote competitiveness, inclusiveness, and a greater sense of Community'. (ASEAN, 2017. p 7). Although the vision continues to operate under the three pillars listed above, the emphasis of its actions has greater economic and institutional connotations than those of the MPAC 2015. These actions are as follows: (i) sustainable infrastructure, (ii) digital innovation, (iii) seamless logistics, (iv) regulatory excellence, and (v) mobility of people.

The acknowledged goal of the MPAC 2025 is a seamlessly connected ASEAN. This may be more ambitious than the ASEAN Community Vision 2025, but may be a desirable goal for the ASEAN in next two decades. The previous emphasis on the movement of goods and services, mobility of skilled labour, and energy and rail connectivity is supplemented by emerging trends that will influence the ASEAN connectivity agenda. These trends include (i) a doubling of the number of ASEAN households that are part of the 'consuming class' over the next 15 years; (ii) the challenge of improving productivity to sustain economic progress as growth in the size of the workforce starts to slow; (iii) the movement of 90 million more people to cities within ASEAN by 2030; (iv) the need for infrastructure spending to more than double from historical levels; (v) the challenge of equipping the world's third-largest labour force with the skills needed to support growth and inclusiveness; (vi) the emergence of disruptive technologies; (vii) the opportunity to transform natural resources efficiency in the region; and (viii) the imperative to understand the implications for ASEAN as the world shifts towards a multi-polar global power structure. The MPAC 2025 is therefore clearly consistent with the objectives of the ASEAN Economic Community, and shares in the objective of a Socio-Cultural Community.

The infrastructure component in MPAC has been subject to budget constraints and competing demands for resources. To help accelerate investment in infrastructure in the region, the MPAC 2025 recommended the establishment of 'a rolling priority pipeline list of potential ASEAN infrastructure projects and sources of funds.' (ASEAN, 2016. p 7)

As an ASEAN regional process is not yet in place for identifying and prioritising infrastructure projects, the ASEAN Secretariat engaged the World Bank, with the support of the ASEAN–Australia Development Cooperation Program Phase II, to provide technical assistance in developing a rolling priority pipeline of potential ASEAN infrastructure projects across the transport, energy, and ICT sectors. The pipeline is intended to be a list of well-structured and economically viable physical infrastructure projects that enhances the movement of people, services, goods, and innovations within ASEAN; and that contributes to ASEAN's objectives of improving access to and increasing connectivity in and amongst the AMS.

2.2. The Trilateral Highway

Greater connectivity between India and ASEAN has long been both an economic and strategic objective for the ASEAN–India partnership. The Trilateral Highway (TLH) underlines ASEAN–India partnership in which trilateral connectivity between India, Myanmar, and Thailand is linked with ASEAN's connectivity plans. The TLH was conceived at the Trilateral Ministerial Meeting on Transport Linkages in Yangon in

April 2002, where India, Myanmar, and Thailand agreed to make efforts to establish trilateral connectivity by 2016. The Chair's Statement of the ASEAN–India Summits in 2010 and 2012 acknowledged the importance of linking the TLH with ASEAN's connectivity plans, and its extension to the Lao People's Democratic Republic (Lao PDR), Cambodia, and Viet Nam.

The original alignment of the TLH starts at Moreh in India, crosses Myanmar from northwest to southeast passing Mandalay and Yangon, and ends at Mae Sot in Thailand. A major part of the TLH is the road network in Myanmar, together with border crossing facilities at two terminals in India and Thailand. Although delayed, the upgrading work of a 120.74-kilometre (km) section between Kalewa and Yagyi has been in progress with assistance from India. This will serve as an alternative route connecting Kalay and Chaung-U in Myanmar. Looking beyond Moreh, the terminal point of the TLH in India, a 95 km section between Moreh and Imphal, including the section between Moreh and Palel, has been upgraded and expanded under assistance from the Asian Development Bank (ADB). Institutional arrangements have been improved as well.

Progress has been made in the development of the TLH, including the opening of the integrated check post at Moreh (India) in January 2019, which will upgrade the functions of the existing land custom station. Many of the original alignments of the TLH have been recently completed or upgraded – the bypass road connecting Myawaddy and Kawkareik (Thailand) and the second friendship bridge connecting Myawaddy and Mae Sot being the most important. Ongoing upgrading and repair of roads between Kalewa (India) and Monywa (Myanmar), the new Bago bridge (supported by Japan), and the construction of an arterial road connecting Bago and Kyaikto (by ADB) are significant indicators of progress in the TLH project. Matching the urgency for the replacement of 69 bridges along the Tamu–Kyigone– Kalewa road and upgrading the Thaton–Eindu road is required, although both are subject to prolonged litigation and disputes.

Border trade between Moreh (India) and Tamu (Myanmar) was normalised in 2015 by removing the positive list of tradable items for barter trade. Border trade potential between India and Myanmar, and with ASEAN, is yet to be unlocked. Myanmar is the gateway to and from ASEAN. Completion of the TLH is expected to generate new demand for trade through the land border, particularly via Moreh and Tamu. Furthermore, to facilitate cross-border transportation along the TLH, India proposed a motor vehicles agreement to Myanmar and Thailand, although it remains under negotiation. The TLH is still under construction, so its contribution to the economic growth and development of the region has not yet reached its potential.

2.3. The Trilateral Highway and its Extension to Cambodia, the Lao PDR, and Viet Nam

Following the ASEAN–India Summit Meeting of 2018, the Government of India commissioned the Economic Research Institute for ASEAN and East Asia (ERIA) to undertake a study on the feasibility of establishing a seamless, efficient, and end-to-end transportation corridor along the existing TLH and its extension towards Cambodia, the Lao PDR, and Viet Nam. The first phase of the study is complete; and it offers physical, institutional, and economic pathways, along with policy recommendations for the development of the TLH and its eastward extension. (Kimura, Umezaki, and Prakash, 2020)

Greater connectivity between India and ASEAN has long been both an economic and strategic objective for the ASEAN–India partnership. Based on the Thai proposal at the 16th ASEAN Highway Sub-Working Group Meeting in August 2018 and other existing initiatives – such as the Greater Mekong Subregion (GMS), Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy, MPAC 2025, and the ASEAN

Highway Network – as well as the recognition that connectivity to international ports is an important factor for the development of economic corridors, this study considered the original alignment of the TLH (Moreh–Tamu–Kalewa–Monywa–Mandalay–Nay Pyi Taw–Bago–Myawaddy–Mae Sot) with two possible routes for eastward extension:

- the northern route from Meiktila in Myanmar to Ha Noi and Hai Phong in Viet Nam via the Myanmar–Lao PDR Friendship Bridge; and
- the Southern route from Mae Sot to Aranyaprathet via Bangkok in Thailand to Phnom Penh/Sihanoukville–Bavet in Cambodia and Moc Bai−Ho Chi Minh City−Vung Tau in Viet Nam.

Except for one small section between Xieng Kok and Luang Namtha via Muang Sing in the Lao PDR, all sections of the suggested northern route are already designated as parts of transport corridor projects supported by ADB, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), and the MPAC 2025. All sections of the southern route of the eastward extension overlap with ADB's East–West Economic Corridor (EWEC), North–South Economic Corridor (NSEC), and Southern Economic Corridor (SEC). The TLH extension plans therefore imply close cooperation with international projects.

The southern extension route has been better developed as part of the GMS economic corridors, including the already well-developed road networks in Thailand and the construction of the Tsubasa Bridge over the Mekong River in Neak Loung, Cambodia. In terms of physical infrastructure, the southern route will not require a large amount of additional investment. However, large sections of physical infrastructure in Myanmar will require financial assistance from partner countries for construction/upgrading and maintenance.

The TLH, including its eastward extension, would primarily be a transport corridor as the vibrant economic agglomerations are mainly at one end (e.g. Bangkok, Ho Chi Minh City, and Ha Noi). In the current alignment, Myanmar occupies the longest length of the TLH and is the largest beneficiary of its development and eastward extension. From an inclusive growth perspective, both actual and potential impacts on India and member countries are important as infrastructure and connectivity provide longer-term development and economic returns. As a seamless transport corridor, the TLH and its eastward extension implies the importance of implementing policies beyond the scope of infrastructure development and institutional arrangements for cross-border transport facilitation (Kimura, Umezaki, and Prakash, 2020).

2.4. Mekong–India Economic Corridor

During an ASEAN+6[6] meeting, the Economic Ministers endorsed the idea of an East Asia Industrial Corridor (EAIC) to be studied by the ERIA as a model for the integration of East Asia. The EAIC is envisioned as a region-wide comprehensive development plan, affirming the importance of linking infrastructure development and industrial development planning.

The EAIC aims to facilitate and enhance economic growth by linking economies in East Asia. It is envisaged to be realised through the development of several interregional industrial belts such as the Delhi–Mumbai Industrial Corridor, the EWEC, and the SEC.[7] Linking India with the Mekong region is an

[6] ASEAN+6 refers to the AMS plus China, India, Japan, the Republic of Korea, Australia, and New Zealand.
[7] Conceptualised by ADB.

important component of the integration of East Asia under the EAIC umbrella project. The ERIA conceptualised the Mekong–India Economic Corridor (MIEC) as a step in this direction. Based on the SEC alignment (Ho Chi Minh City–Phnom Penh–Bangkok), the MIEC extends further to Dawei in Myanmar. With Dawei, it opens up on Andaman Sea and connects the Mekong region to India on its east coast. The MIEC is an important step towards realising the potential of the EAIC.

The MIEC involves the integration of four Greater Mekong Countries – Myanmar, Thailand, Cambodia, and Viet Nam – with India through its east coast. It proposes to connect Ho Chi Minh City (Viet Nam) with Dawei (Myanmar) through Bangkok (Thailand) and Phnom Penh (Cambodia), linking further to the east coast of India (Figure 2.1). The integration with India is likely to benefit the corridor development in view of the growing trade and investment linkages between India and the Mekong countries.

Figure 2.1: The Mekong–India Economic Corridor

Source: ERIA (2009).

The corridor will provide opportunities to Myanmar, Thailand, Cambodia, and Viet Nam to build a strong economic and industrial base as well as world-class infrastructure. The emphasis of the corridor is on expanding the manufacturing base and trade with the rest of the world, particularly India. The corridor will enable these economies to integrate further and emerge collectively as a globally competitive economic bloc.

The MIEC is expected to enhance trade with India by reducing the travel distance between India and the MIEC countries and removing supply-side bottlenecks.

2.5. The GMS Economic Corridor

The GMS countries adopted the economic corridor approach at the Eighth GMS Ministerial Conference in Manila in 1998 to accelerate subregional development. The EWEC, NSEC, and SEC were subsequently designated as flagship programmes under the 10-year GMS strategic framework, 2002–2012. Thus, complementary efforts such as trade and transport facilitation, border and corridor towns development, investment promotion, and enterprise development have mainly focused on the EWEC,

NSEC, and SEC. The development of GMS corridors as economic corridors continued to be at the centre of the GMS program under the GMS strategic framework, 2012–2022.

The original alignment of the TLH is a subset of the GMS NSEC. The primary considerations for including specific routes as part of the EWEC, NSEC, and SEC in the current configuration were their potential to become trade, investment, tourism, and transit corridors; and the presence of significant sections that can be developed into hubs for regional trade, investment, and tourism. The GMS member countries and ADB are undertaking a review of their configuration. The review will ensure that (i) developments arising from the opening up of Myanmar are taken into account; (ii) corridors include and link all GMS capitals and major economic centres; (iii) corridors are connected to key GMS maritime gateways and industrial hubs; and (iv) major trade flows are reflected in the alignment of the corridors.

The GMS economic corridor is an integrated system of road, rail, and ports interconnecting (i) GMS country borders; (ii) production centres (manufacturing hubs, industrial clusters, and economic zones); (iii) demand centres (capitals and major urban centres); and (iv) gateways (important seaports used for intra-regional and international trade). The areas of influence of GMS economic corridors extend beyond a single route, encompassing an economic zone running in parallel with the main transport artery.

Economic corridors can attract investment in economic activities along and around their main routes, thus generating additional demand and increasing their viability. They are critical for economic integration in the GMS because they not only facilitate cross-border movement of people, goods and services, labour, and capital along the corridors, but also promote the development of areas that can be accessed through improved connectivity.

Operationally, the economic corridor approach is aimed at (i) extending the benefits of improved transport links to remote and landlocked locations in the GMS, which have been disadvantaged by their lack of integration with more prosperous and better located neighbouring areas; (ii) providing a spatial focus on GMS activities, with the main routes, growth centres, and nodal points serving as a catalyst to the development of surrounding areas; (iii) serving as a mechanism for prioritising and coordinating investments amongst neighbouring countries; (iv) opening up opportunities for various types of investment from within and outside the GMS; (v) enhancing the impact of subregional activities through the clustering of projects; and (vi) generating tangible demonstration effects.

The EWEC, NSEC, and SEC were designated as priorities for economic corridor development, as they (i) have the greatest potential to become foreign trade, investment, and tourist corridors; and (ii) have relatively significant sections that can be developed into hubs for regional trade, investment, and tourism.

2.6. Asian Highway Network

The Asian Highway Network is a regional transport cooperation initiative aimed at enhancing the efficiency and development of road infrastructure in Asia, supporting the development of Euro–Asia transport linkages, and improving connectivity for landlocked countries. It comprises more than 141,000 km of roads passing through 32 member countries. The network extends from Tokyo in the east to Kapikule (Turkey) in the west and from Torfyanovka (Russia) in the north to Denpasar (Indonesia) in the south.

The Asian Highway project was initiated in 1959 with the aim of promoting the development of an international road transport system in the region. From 1960 to 1970, potential routes were identified and analysed. However, the progress was slow until political and economic changes in the region spurred renewed interest in the network in the late 1980s and early 1990s. Under a renewed UNESCAP initiative, the Asian Land Transport Infrastructure Development Project was launched in 1992. The project provided a framework for the development of a region-wide integrated transport network comprising road and rail networks. A series of studies for the development and formulation of the Asian Highway Network, covering all subregions, was conducted between 1994 and 2002. These studies, together with a series of meetings of the member countries at the subregional level, helped to build consensus on an agreed network.

The formalisation of the network was initiated in 2002. The UNESCAP Secretariat worked with national governments to develop the Intergovernmental Agreement on the Asian Highway Network, which was adopted on 18 November 2003 and entered into force on 4 July 2005. The agreement includes a list of Asian Highway routes and classification and design standards.

The major benefits of the agreement are that it:

- provides a basis for the coordinated development of road networks at the regional, subregional, and national levels;
- creates interest in greater connectivity at the regional/subregional level, which has led to the development of subregional networks;
- develops common design and technical standards for highway development for regional roads, which many subregional organisations have adopted;
- enhances domestic and road transport connectivity, which has supported the growth of national economies and inter-country trade;
- offers a better negotiating position for member states to secure financing from development banks as well as to maintain minimum design standards; and
- increases development banks' interest in financing road projects of regional importance.

UNESCAP maintains the Asian Highway Database, which includes detailed information on the road conditions.

2.7. ASEAN Highway Network

The 'Ministerial Understanding on the Development of the ASEAN Highway Network Project' was signed during the Fifth ASEAN Transport Ministers' Meeting in Hanoi in September 1999. The network consists of 23 designated routes, totalling about 38,400 km. It comprises the Asian Highway under UNESCAP, which passes through AMS, as well as several additional routes. While all ASEAN Highway Network links have been completed, the total length of roads that are still below the class III ASEAN standard is 2,454 km, mostly in Myanmar and the Lao PDR.

The ASEAN Highway Network Database has been developed and maintained through voluntary efforts of the Department of Highways, Ministry of Transport, Thailand. It has been updated occasionally and the latest update was done in 2015. No plan is indicated to update the database in the near future.

3. Trans-Asian Connectivity Plans

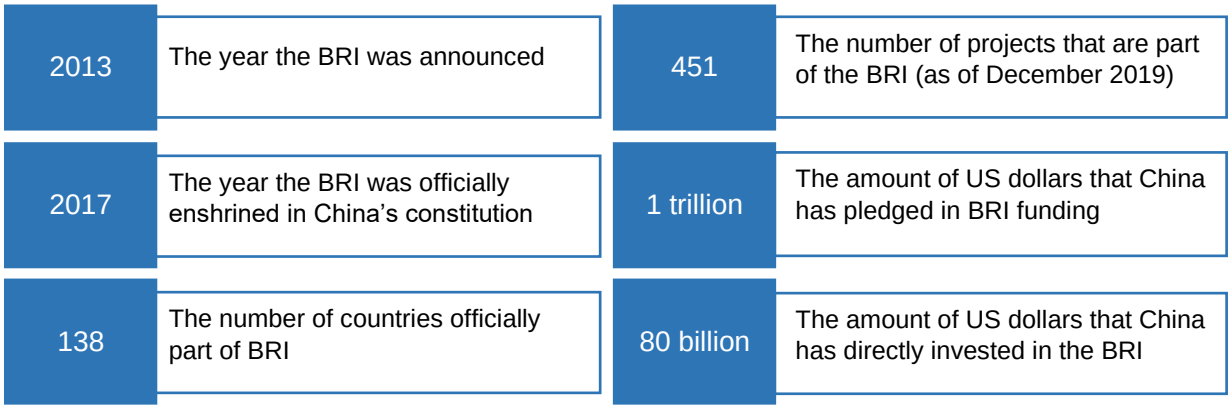
Regional connectivity is on the rise worldwide. Asia, Africa, Europe, and the other continents are becoming increasingly interlinked through pan-regional initiatives. Asia is the trailblazer in this regard, and most connectivity plans have Asia at its core. Asia is also the centre of pan-regional connectivity initiatives. The MPAC, BRI, Asia–Africa Growth Corridor, and Asia–Europe Meeting (ASEM) – all connectivity plans – aim to deepen Asia's economic dynamism and extend it to trans-regional partners. Mega-regional integration initiatives such as the CPTPP and the RECP are also integral to this region.

3.1. The Belt and Road Initiative

President Xi Jinping launched the BRI as a signature foreign policy initiative during his official visit to Kazakhstan in 2013. The BRI is envisioned as a grand development plan to increase global connectivity, with China at its centre. The BRI aims to promote connectivity amongst the Asian, European, and African continents and their adjacent seas. It also aims to establish and strengthen partnerships amongst the countries along the 'Belt and Road'; set up all-dimensional, multi-tiered connectivity networks; and realise diversified, independent, balanced, and sustainable development in these countries (Xinhua, 2017). The framework covers the area of the ancient Silk Road, but it is open to all countries.

The BRI has two components: (i) the land-based 'Silk Road Economic Belt', and (ii) the 'Maritime Silk Road'. It will focus on building a new Eurasian land bridge; and developing China–Mongolia–Russia, China–Central Asia–West Asia, and China–Indochina Peninsula economic corridors. To do so, it will take advantage of international transport routes, rely on core cities along the Belt and Road, and use key economic industrial parks as cooperation platforms. Many of China's bilateral infrastructure projects in Asia, Europe, Africa, the Indian Ocean islands, and the Pacific Islands have been brought within the BRI.

Figure 2.2: Belt and Road Initiative Snapshot



BRI = Belt and Road Initiative, US = United States.
Source: ERIA (2021).

The aim of improving connectivity across Asia–Europe is at the core of the initiative. Most of the projects and activities under the BRI focus on transportation infrastructure within and between Asia and Europe. Still, it should be noted that the BRI's geographic scope is near-global, as it also encompasses Africa, Oceania, and Latin America. Moreover, apart from transportation connectivity, energy and communication infrastructure are also key BRI sectors. The BRI has major implications for economic and

financial integration, multilateral governance, and people-to-people ties across Asia–Europe and beyond. Many, though not all, countries in Asia and Europe have concluded bilateral memoranda of understanding with China for closer cooperation on BRI-related activities (Green Finance and Development Center, 2020).

While the BRI is a top-level plan, as President Xi's signature foreign policy, it is not a centralised strategy. A central task force – the Leading Small Group on Advancing the Construction of the Belt and Road – was created in 2015 to improve BRI coordination amongst various Chinese actors involved in the BRI. However, despite these efforts, the BRI at times still suffers from coordination issues due to its scope and the multitude of actors involved.

The Belt and Road vision extends well beyond investment in economic infrastructure. The Action Plan on BRI published in March 2015 sets out five dimensions of connectivity: (i) policy coordination; (ii) high-quality transport, communications, and energy networks to facilitate international commerce; (iii) reducing the cost and risks of trade and other international economic transactions along supply chains; (iv) financial integration; and (v) people-to-people bonds.

Strong financial commitments from China support the BRI. China has launched a $40 billion Silk Road Fund, which will directly support the initiative. Additional financial resources for the initiative will be provided by the Asian Infrastructure Investment Bank (AIIB), which was primarily set up to address the infrastructure funding gap in Asia (estimated by ADB to total $8 trillion between 2010 and 2020) (ADB, 2017).

The scope of the BRI is unprecedented as it aims to link many of the economies of Asia and Europe and reach out to others. Trillions of dollars will need to be invested over several decades. If the BRI is implemented efficiently, many economies can become deeply integrated and engage successfully in global value chains (GVCs). The Chinese government has earmarked up to $1 trillion for investments. Decision-making on infrastructure projects is based on bilateral agreements with other governments. Many early investments are already under way, and focus on building on and improving existing infrastructure.

Activities under the BRI relating to transport infrastructure can be subdivided into financing and construction, rail transport, maritime transport, and air transport. In addition to transport infrastructure, the digital domain is a key connectivity feature of the BRI.

a. Transport Infrastructure Financing and Construction

From the announcement of the BRI in September 2013 to 2019, more than $500 billion of construction contracts for ports, railways, motorways, airports, bridges, power plants, and dams were signed (AEI, 2020). Annual financing peaked in 2014 at around $95 billion, then dropped somewhat to $76 billion in 2018. Many projects take longer than expected to complete. This trend has been more evident since the COVID-19 pandemic.

b. Transport Infrastructure Management and Use: Rail, Maritime, and Air

BRI rail freight has been operational between Asia and Europe since 2011. The main corridor connects multiple Chinese and European cities via Kazakhstan, Mongolia, Russia, and Belarus. Other corridors connect China to Europe via Central Asia and the Middle East. BRI rail freight between Europe and China

is heavily subsidised by central, provincial, and local Chinese governments, which helps the trains operate and establish new routes. More cargo is transported from China to Europe than vice versa.

Port development and terminal management along the Maritime Silk Road is the most important aspect of maritime projects in the BRI. Since 2015, aviation has officially been part of the BRI, though it is not a dominant feature (CAPA Centre for Aviation, 2018). China has become a major origin and destination of air traffic. Air transport passengers from China increased from 352.79 million in 2013 to 611.43 million in 2018 (World Bank, 2020b). The COVID-19 pandemic interrupted the former trend, while China–Europe air cargo has increased due to the transport of medical equipment and pharmaceuticals (Knowler, 2020).

c. Digital Infrastructure

The digital component of the BRI, or Digital Silk Road (DSR), was first announced in 2015. The DSR aims at improving global digital connectivity, with China at its centre, through building digital infrastructure and expanding e-commerce offerings, amongst others. Chinese actors play a dominant role here – as manufacturers of products sold through e-commerce, as e-commerce platforms, and as logistics and transport providers to BRI countries. The main players are Chinese private technology giants such as Alibaba, Tencent, JD.com, Baidu, Huawei, and ZTE, which are part of the DSR, promoting global e-commerce and digital infrastructure.

The Action Plan on the BRI notes that investments in physical connectivity should be backed up by policy development and capacity building to make international commerce amongst Belt and Road economies cheaper, easier, and faster; and should include cooperation to strengthen institutional and people-to-people linkages. Following early investments in new or existing transport, communications, and energy networks, the BRI is looking for sustainable cooperation amongst a diverse group of countries where political leaders and officials, both in China and in partner countries, are able to (i) create bilateral projects based on mutual benefit and mutual trust, (ii) agree on investments that are sustainable and achieve the stated objectives, (iii) effectively manage risks through transparency and responsible governance, (iv) converge the infrastructure projects and associated capacities with the development priorities of the partner countries, and (v) invest in sustainable infrastructure.

The early phase of the BRI has focused on investment in the hard infrastructure of transport, communications, and energy networks. The developmental and fiscal results in some of the countries hosting BRI projects has brought the BRI under immense global scrutiny, especially on its policy coordination role with the host country. The BRI needs to transform from an infrastructure programme to a connectivity programme by embracing the multidimensional aspects of connectivity.

The BRI process links participants that differ greatly in terms of the size of their populations and economies, forms of governance, institutional development, and productivity. Several decades of experience of economic cooperation indicate that successful and sustained cooperation amongst such a diverse group should be voluntary and based on the principles of openness, transparency, mutual benefit, mutual trust, mutual respect, and careful evolution. The challenge for BRI in the coming years is to put these sound guiding principles into practice, and to take BRI projects where they are needed. The BRI in the Indo-Pacific architecture must adhere to these principles and aim to avoid a hegemonic race for infrastructure projects.

3.2. Asia–Africa Growth Corridor

Asia–Africa relations are both historical in terms of their common past and contemporary in terms of their aspirations. They share past struggles, present efforts, and prospects for a bright future with enormous prospects for cooperation and growth. This bond is also apparent from their coming together on many occasions: bilaterally, sub-regionally, as global forces, and as the 'one voice' of the developing world on issues touching human concerns of every kind. The Indian Ocean is the natural link between the two regions, enabling trade and connectivity from time immemorial.

The Asian economy, especially that of East Asia, has demonstrated resilience and provided a robust drive for the global economy, and it continues to provide the tailwinds thereof. Africa, on the other hand, is on the path to growth. Its young demography and economy require integration and expansion into the GVCs of production that exist in Asia. The two regions account for 70% of the global population and 37% of global gross domestic product (GDP). Conjoined by the Indian Ocean, the two regions provide a renewed opportunity for partnership for sustainable development. As developing regions, both continents are committed to promoting strong, balanced, sustainable, and inclusive growth, at both the national and international levels.

The vision document of the AAGC – the 'Asia Africa Growth Corridor: Partnership for Sustainable and Innovative Development' – was presented at the African Development Bank annual meeting on 25 May 2017 in Ahmedabad, India. The AAGC foresees Africa's integration with Asia, in which South Asia, West Asia, Southeast Asia, East Asia, and Oceania play an important part. The AAGC proposes four major pillars of connectivity and cooperation to bring peoples, goods, services, capital, and institutions closer together to realise the objective of an Asia–Africa partnership for sustainable and innovative development. These pillars are (i) development and cooperation projects, (ii) quality infrastructure and institutional connectivity, (iii) enhanced capacities and skills, and (iv) people-to-people partnership.

These will facilitate and enhance economic growth by linking economies in Asia and Africa through the development of institutional and human capacity, connecting institutions and people, building capacities for planning and executing projects, facilitating trade, developing human resources, and improving the technology and infrastructure (ports, airports, industrial parks, telecommunications, and information technology) of the two continents. The AAGC emphasises capacity building and expanding the manufacturing base and trade between Africa and Asia. The aim is to transform the region into a growth corridor to embed development processes and value chains in Africa and Asia. It will enable the connected economies to integrate further and collectively emerge as a globally competitive economic region. The AAGC remains especially aligned with the 17 Sustainable Development Goals of the 2030 Agenda for Sustainable Development, and provides green projects with priority funding and implementation.

The AAGC provides new supply chain linkages between two developing regions and offers a multidimensional approach to industrialisation, trade, and integration in the regional and global value chains in which industrial development is matched with higher spending on education and the development of skills and training for adapting to digital age technologies and improved productivity. With improved productivity and rising wages in important East Asian economies, labour-intensive manufacturing jobs are likely to move to the developing regions of South Asia, Africa, and even Central Asia. The AAGC and the TLH together will provide the new economic linkages and GVC integration between Asia and Africa.

The AAGC strengthens Asia–Africa economic connectivity through development plans that are suitable for and in sync with the development priorities of countries in Africa, Asia, and the Asia-Pacific region. The AAGC, therefore, is not merely a plan for development and cooperation between Asia and Africa, but also encourages freedom of movement of people, goods, services, and capital in a geographical spread between the western edges of Africa to the eastern edges of Asia and Oceania. The AAGC is the first such attempt to prepare a growth plan that connects two continents, by which the development strengths of Asia can be shared and dovetailed with the development priorities of the countries and regions of Africa. The AAGC prioritises the prosperity of the people of Africa and Asia, and their development goals, in all plans and projects under its aegis.

3.3. **Europe–Asia Connectivity**

The European Commission proposed building blocks for an EU Strategy on Connecting Europe and Asia, with concrete policy proposals and initiatives to improve connections between Europe and Asia, including through interoperable transport, energy, and digital networks.

The EU–Asia connectivity strategy is built on the belief that the EU and Asia should ensure efficient and sustainable connectivity because it contributes to economic growth and jobs; global competitiveness and trade; and the movement of people, goods, and services across and between Europe and Asia. It has outlined concrete policy proposals and initiatives to improve connections between Europe and Asia, including through interoperable transport, energy, and digital networks. The EU promotes an approach to connectivity with Asia which is sustainable, comprehensive, and rules-based:

- Sustainable connectivity envisages that connectivity has to be economically, fiscally, environmentally, and socially sustainable in the long term.
- Comprehensive connectivity is about networks; and the flow of people, goods, services, and capital that pass through them. It emphasises the crucial human dimension and people's interests and rights, which should be at the core of connectivity.
- International rules-based connectivity is required for people, goods, services, and capital to move efficiently, fairly, and smoothly. Internationally agreed practices, rules, conventions, and technical standards – supported by international organisations and institutions – enable the interoperability of networks and trade across borders. (European Commission, 2018a).

In addition, the EU will engage with its Asian partners along three strands:

(i) by contributing to efficient connections and networks between Europe and Asia through priority transport corridors, digital links, and energy cooperation at the service of people and their respective economies;

(ii) by establishing partnerships for connectivity based on commonly agreed rules and standards, enabling better governance of flows of goods, people, capital, and services; and

(iii) by contributing to addressing the sizeable investment gaps through improved mobilisation of resources, reinforced leveraging of the EU's financial resources, and strengthened international partnerships.

For building efficient connections between Europe and Asia, the EU–Asia connectivity strategy envisages physical connectivity (air, land, and sea transport). The EU would work towards connecting

the well-developed Trans-European Transport Network (TEN–T) framework with networks in Asia. The EU has extended the TEN–T to the Western Balkans, and agreed on the extension of the TEN–T with six Eastern Partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine) (European Commission, 2018b). Both the north–south rail connections and the east–west rail connections could play an important role in the future. The EU–China rail connection, in particular, has been experiencing strong growth. The EU is supporting the Unified Railway Law initiative of the United Nations Economic Commission for Europe, which is seeking to unify the legal regime for the carriage of goods by rail across the Eurasian continent. The EU will work with relevant rail transport organisations to extend the application of the EU's technical specifications and safety management frameworks.

While the EU–Asia strategy covers air and sea connectivity in some measure, road transport receives more attention as it is deemed to make more sense over medium distances (such as to Central Asia) and as a secondary transport network in combination with other modes of transport. Promoting road safety by sharing best practices, furthering the exchange of customs information, and developing cooperation on transit (both bilaterally and through the World Customs Organization) are important policy measures for road transport.

Digital and energy connectivity are also envisaged as important for this plan. High-capacity network links are critical to support the digital economy. Backbone network links with Asian and other third countries will contribute to a fully meshed network, providing the required bandwidth and other quality criteria for this critical infrastructure. In its relations with Asian countries, the EU strategy promotes a peaceful, secure, and open ICT environment, while addressing cybersecurity threats and protecting human rights and freedoms online, including the protection of personal data. The EU–Asia connectivity has provisioned for a coherent regulatory approach in digital connectivity, as it is critical to support private and public investment in the digital infrastructure. It also underlines policies and incentives to bridge the digital divide, particularly in remote regions or landlocked countries. The EU's Digital4Development strategy in Asia will be pursued to promote digital technologies and services to foster socio-economic development.

The EU proposes to promote regional energy connectivity platforms that focus on market principles, encourage modernisation of the energy system and the adoption of clean (decentralised) solutions, promote energy efficiency, and support energy connectivity both amongst and with partners in Asia.

Some other important features of the EU's strategy for connectivity with Asia include actions that build on existing bilateral, regional, and international cooperation programmes and activities in Asia.

In the 2021 State of the Union Address by President von der Leyen, the EU has presented its new connectivity strategy called Global Gateway. (European Commission, 2021). In this strategy, the EU proposes to build Global Gateway partnerships with countries around the world, including Asia. The EU is offering investments in quality infrastructure for connecting goods, people, and services around the world.

The European strategy stands for sustainable and trusted connections to tackle the most pressing global challenges, from climate change and protecting the environment, to improving health security and boosting competitiveness and global supply chains. Global Gateway aims to mobilise up to Euro 300 billion in investments between 2021 and 2027 and it is expected that Asia will be an important beneficiary of this strategy. (European Commission, 2021b),

3.4. EU–Japan Partnership on Sustainable Connectivity and Quality Infrastructure

Japan's plan for quality infrastructure and sustainable development is the basis of its connectivity partnerships in the region. Quality infrastructure is central to all of Japan's infrastructure and connectivity initiatives. In 2019, Japan and the EU affirmed their commitment to establishing a connectivity partnership based on sustainability as a shared value, quality infrastructure, and their belief in the benefits of a level playing field. In the EU–Japan Partnership on Sustainable Connectivity and Quality Infrastructure, the EU and Japan intend to work together on all dimensions of connectivity, bilaterally and multilaterally, including digital, transport, energy, and people-to-people exchanges (Ministry of Foreign Affairs, Japan, 2019). The connectivity plans will fully take into account partners' needs and demands, and pay utmost attention to their fiscal capacity and debt sustainability. The EU and Japan will coordinate their respective cooperation on connectivity and quality infrastructure with partner third countries, notably in the regions of the Western Balkans, Eastern Europe, Central Asia, and the Indo-Pacific, as well as Africa.

In view of their commitment to promoting rules-based connectivity globally, both sides intend to cooperate in international and regional bodies, including international fora such as the G7, G20, the Organisation for Economic Co-operation and Development, the World Bank, the International Monetary Fund, the European Bank for Reconstruction and Development, and ADB. Together with the Japan–EU Economic Partnership Agreement, promoting regulatory cooperation for free, open, rules-based, and fair trade and investment is an important institutional component of this connectivity partnership. Both sides have underlined the positive contribution of sustainable connectivity to the implementation of the 2030 Agenda for Sustainable Development and recall their readiness to support partner countries in creating an environment that stimulates investment.

Both the EU and Japan have underlined digital connectivity as a powerful enabler of inclusive growth and sustainable development, including through digital and data infrastructure as well as policy and regulatory frameworks, in developing countries. Japan and the EU emphasise that the development of a digital economy depends on an open, free, stable, accessible, interoperable, reliable, and secure cyberspace; and on 'data free flow with trust' (as declared by the G20 leaders in Osaka). Japan and the EU intend to work together to further elaborate, promote, and operationalise the concept of 'data free flow with trust', including with a view to enhancing trust concerning data security and privacy, while respecting each other's respective regulatory framework.

Japan and the EU plan to use the existing Japan–EU Transport Dialogue as a framework for engaging in and cooperating on all modes of transport and horizontal issues. Enhancing sustainable transport connectivity – through deeper cooperation and synergies of regulatory frameworks, interconnection of transport corridors, and enhancement of safety and security of transport – will be central to this connectivity partnership. Cooperation plans and projects in the framework of the connectivity partnership will be identified through existing dialogues and cooperation frameworks, in particular in the Japan–EU Strategic Partnership Agreement and the Economic Partnership Agreement. The Joint Committee established under the Japan–EU Strategic Partnership Agreement will review the progress on a regular basis. Furthermore, the Japan–EU High Level Industrial, Trade and Economic Dialogue can function as a platform for strategic discussions under the connectivity partnership.

3.5. The US Initiative and Other Plans

The US initiated the Infrastructure Transaction and Assistance Network, which provides capacity building programmes to improve partner countries' project evaluation processes and project implementation capacities, advisory services to support sustainable infrastructure, and coordinate US assistance support for infrastructure in the region. The US has deployed the Transaction Advisory Fund and the Global Infrastructure Coordinating Committee in the region for technical assistance and development finance. The Asia Reassurance Initiative Act, 2018, providing $1.5 billion for 5 years until 2023, is an important part of US policy for the Indo-Pacific.

The Greater Tumen Initiative (GTI) (originally known as the Tumen River Area Development Program) is an intergovernmental cooperation mechanism amongst four countries – China; Mongolia; the Republic of Korea (henceforth, Korea); and Russia – supported by the United Nations Development Programme (Dulambazar, 2015). In 1995, the member governments signed agreements to establish the GTI mechanism, aimed at strengthening economic and technical cooperation, and attaining greater growth and sustainable development in Northeast Asia, especially the Greater Tumen Region (GTR). The GTI focuses on the priority areas of transport, trade and investment, tourism, agriculture, and energy, with environment as a cross-cutting sector.

The GTI effectively converges the BRI initiated by China, the Eurasia Initiative proposed by Russia, and the Grassland Road undertaken by Mongolia, in building the China–Russia–Mongolia transport corridor in the GTR. Some of the important projects in the Trans-GTR Transport Corridor are the Tumen Road Corridor, Tumen Rail Corridor, Suifenhe Transport Corridor, Siberian Land Bridge, Dalian Transport Corridor, Korean Peninsula West Corridor and East Corridor, and the China Land Bridge Transport Corridor connecting Asia with Europe via Kazakhstan. In 2013, two additional transport channels between Ulaanbaatar and Bichigt were added in the Tumen transport area. The GTI Common Fund, contributed by the member countries, is a United Nations Development Programme Trust Fund to finance the operation of the GTI Secretariat.

Similarly, the Central Asian Regional Economic Cooperation (CAREC) offers connectivity between Northern Asia and Central Asia. Korea's New Southern Policy leverages ASEAN and India as its key regional partners and as a strategic priority for Korea.

4. Funding the Connectivity Plans

Asia is one of the most dynamic and productive regions, but it is held back from realising its full potential by huge constraints in crucial infrastructure caused by a lack of investment. ADB has estimated that developing Asia will need to invest $26 trillion for infrastructure from 2016 to 2030, or $1.7 trillion per year. This would allow the region to maintain its growth momentum, eradicate poverty, and respond to climate change. Without climate change mitigation and adaptation costs, $22.6 trillion, or $1.5 trillion per year, will be needed (ADB, 2017).

Infrastructure investment varies considerably by sector (Table 2.1). The power and transport sectors require the largest investments, accounting for 52% and 35%, respectively, of total infrastructure investments. Telecommunications and water and sanitation are no less important for an economy or for individual welfare, and therefore require investment. Each of these sectors has varying levels of regulatory, governance, and sustainability challenges in different countries.

Table 2.1: Infrastructure Investment Needs by Sector in 45 ADB Developing Member Countries, 2016–2030

($ billion in 2015 prices)

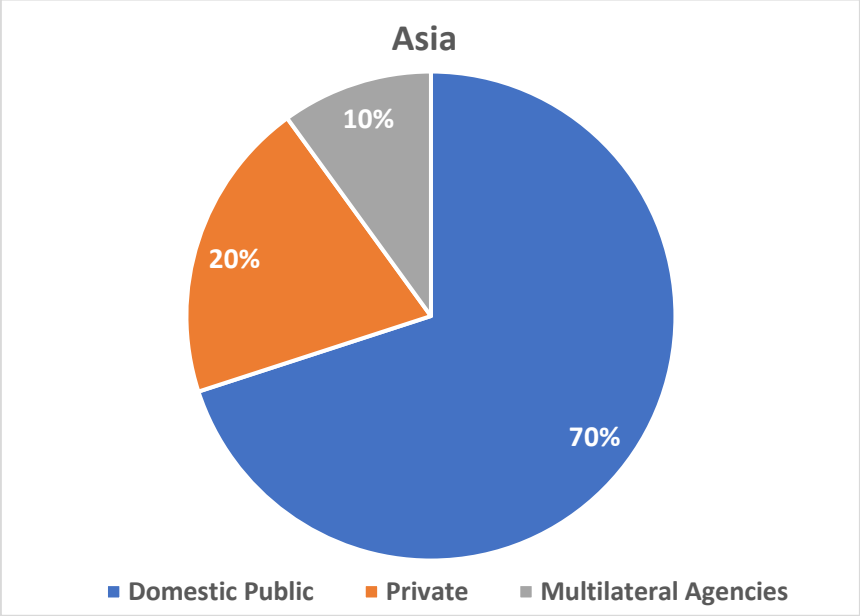
Sector	Baseline estimates			Climate-adjusted estimates			Climate-related investments (annual)	
	Investment needs	Annual average	Share of total	Investment needs	Annual average	Share of total	Adaptation	Mitigation
Power	11,689	779	51.8	14,731	982	6.76	3	200
Transport	7,796	520	34.6	8,353	557	6.56	37	-
Telecommunications	2,279	152	10.1	2,279	152	5.12	-	-
Water and sanitation	787	52	3.5	802	53	3.31	1	200
Total	**22,551**	**1,503**	**100.0**	**26,166**	**1,744**	**1.02**	**41**	

ADB = Asian Development Bank.
Note: Numbers may not total exactly because of rounding.
Source: Asian Development Bank estimates (2017).

5. Funding Agencies and Partnerships

Infrastructure projects focused on cross-border connectivity present significant investment opportunities and are vital for long-term growth in Asia. Much of the funding would continue to come from public resources, through better domestic revenue mobilisation, cost recovery, and better prioritisation of fiscal resources. Yet, it is also very clear that more private sector financing is required. While public spending still provides the bulk of needed infrastructure investments, fiscal constraints and debt sustainability considerations limit the extension of public finance (Figure 2.3). Various multilateral development banks (MDBs) have also made mobilising private capital a priority. ADB emphasises private participation in infrastructure and capital market development in its private sector operations framework. The World Bank also takes an approach of 'maximizing finance for development' to leverage all sources of finance systematically. The AIIB has a more focused mandate on infrastructure project financing and does not offer concessionary financing. It aims to create infrastructure projects as an asset class for private sector investors by increasing the level of data quality. This helps market participants to make informed financing decisions.

Figure 2.3: Composition of Infrastructure Financing



Source: Subhanij, 2018.

Besides the MDBs and public–private financing in Asia, the ASEAN Infrastructure Fund (AIF) promotes regional infrastructure financing and financial resilience to support the long-term development of the AMS. The AIF is dedicated to meeting some of the region's infrastructure investment needs. ADB has invested $150 million and administers the AIF and provides technical support.

Given the plethora of connectivity plans in Asia and their trans-regional nature, the future of financing of these projects may well remain in multilateral cooperation partnerships. The Multilateral Cooperation Center for Development Finance (MCDF) was set up through a memorandum of understanding between China's Ministry of Finance, the AIIB, ADB, the European Bank for Reconstruction and Development, the European Investment Bank, the New Development Bank, and the World Bank to promote infrastructure and connectivity. The MCDF will act as a platform to foster high-quality infrastructure and connectivity for developing countries. It multilateralises infrastructure financing and advocates for a transparent, non-discriminatory, and predictable financing environment, taking into account debt sustainability in mobilising finance. Information sharing, capacity building, and project preparation are the focus areas of the MCDF.

6. Addressing the Financing Gap

Project governance and sustainability increase the cost of infrastructure but are important for attracting financing from financial institutions (Prakash, 2020a). The financing gap for infrastructure is, in large part, the result of inadequate policies and processes and a lack of familiarity with projects. Governments play a central role in most infrastructure projects because infrastructure has strong public good characteristics, requires large-scale capital mobilisation, and is highly sensitive to local politics. However, the scale of infrastructure spending required over the next 10–15 years, coupled with widespread public sector fiscal constraints, means that private finance will be increasingly important. A positive 'enabling environment' – that is, one characterised by sound policies, effective institutions,

transparency, reliable contract enforcement, and other sector-specific factors – makes it easier to mobilise private finance. Conversely, a poor enabling environment – one characterised by distorting subsidies, unreliable counterparties, and flawed procurement processes – can raise the cost of private finance to the point where infrastructure projects are no longer economically viable (Bielenberg et al., 2016).

Trans-regional plans such as the BRI, AAGC, MPAC, and EU–Asia connectivity are seeking greater emphasis on governance, standards, transparency, and sustainability to varying degrees. Institutions such as the Asian Development Bank Institute and the African Development Bank have helped to further this objective by providing climate adaptation and mitigation adjusted costs for infrastructure. Transparency in project preparation and accountability in project execution are important global concerns emerging from the financing and implementation of infrastructure plans. Global attention has been drawn towards issues of planning and project design, financing and debt sustainability, territorial integrity, and people's choices.

7. Multilateral Cooperation for Investment in Connectivity Plans

A multilateral cooperation programme amongst Indo-Pacific countries and MDBs could facilitate global investment in infrastructure for connectivity by creating more efficient, informed, transparent, and predictable investment conditions around infrastructure plans and projects. Development banks feature prominently in this multilateral cooperation because they have the mandate, motivation, and means to influence financing flows and shape markets and have experience in infrastructure funding that could help other actors, such as private sector and institutional investors, in taking on the projects (Prakash, 2020b). Such cooperation works best when undertaken at a regional level, as is seen in the case of connectivity infrastructure projects in Asia and Africa. This is also important because it helps policymakers to find synergies between national and regional development strategies. Some examples of this are projects such as the BRI, AAGC, TLH, and Greater Tumen Initiative. However, the cooperation can extend to other regions too, as funds are expected to flow from near and far. The experience of members from other regions also matters (Prakash, 2020b). The measures undertaken for investment facilitation would include:

- Aggregation of information on pipelines of infrastructure projects in roads, railways, power interconnections and transmission lines, bridges, ports and airports, and ICT networks that are at an advanced stage of project preparation, have relatively robust economic cases, and are likely to be able to substantially mitigate risks, including environmental and social risks.
- Follow-up information on the pipeline of projects where the economic case is reasonably strong but may need further substantiation and/or have risks that appear to be manageable.
- Project preparation facilities and technical assistance to increase the 'bankability' of project pipelines.
- Improving regulatory transparency and predictability – such as the publication/notification of investment-related measures, and enquiry points/single window.
- Streamlining and speeding up administrative procedures – such as the procedural aspects of investment applications, approval processes, licensing and qualifications, and formalities and documentation requirements – as one-stop shop/single window services.

- Enhancing international cooperation and addressing the needs of developing members – such as the exchange of information amongst competent authorities and technical assistance and capacity building for developing countries and least developed countries.
- Environmental and social assessments of projects.
- Debt sustainability and fiscal risk assessments of the projects.

Some important initiatives of multilateral cooperation are already taking shape, and each is unique to the strengths and requirements of the members and partners. The MCDF initiated by the AIIB, the AAGC, and the MPAC 2025 are following the multilateral or trilateral cooperation framework for all or some aspects of infrastructure financing, project preparation, information sharing, and capacity building.

Multilateral cooperation for investment facilitation will improve the speed, scale, and pricing with which private capital could flow into infrastructure investment. It will lead and complement the capital markets' response towards infrastructure investments through streamlining of policy and regulatory rules, institutional conduct, and agency factors. Multilateral cooperation, supported by the EU, the G20, and other similar groups of economies, will encourage governments and MDBs to provide an informed, predictable, and transparent investment environment for institutional investors and get capital to flow into projects.

8. Supply Chains: New Drivers of Connectivity Plans in Indo-Pacific

ASEAN and East Asia are manufacturing hubs with close trade relations within the region, and with important markets in the EU and the US. Such trade integration has been achieved through supply chain efficiencies and market demands in which seamless connectivity plays an important role. Supply chains in ASEAN and East Asia rest on a stable foundation of trade and investment links. To the extent that there are risks, they are primarily at a micro level.

Four important events have brought the focus on new connectivity strategies that would help the supply chains in Asia remain resilient to changes in the international trade dynamics.

One, repeated natural disasters and the ongoing COVID-19 pandemic have reminded the world of the vulnerability of supply chains and risks to connectivity. In this context, the potential of connectivity plans such as the TLH lies in providing resilience to connectivity and supply chains, once it is well connected to other road networks (e.g. the GMS economic corridors) and the networks of other modes of transportation (e.g. railways, waterways, maritime, and air).

Two, the US–China trade tensions were forecast to affect supply chains, investments, and production locations in the region. International suppliers from the ASEAN region have remained resilient to such tensions. However, the China centrality of the supply chains in East Asia is driving new connectivity amongst Australia, Japan, India, and the US in the Quadrilateral Security Dialogue. Similar supply chain led connectivity plans are seen in South Asia. The AAGC is planned partly to provide alternative supply chain linkages in Asia. More recently, the India–Australia–Japan Supply Chain Resilience Initiative, signed on 27 April 2021, was launched to minimise supply chain disruptions and to diversify trade and investments, with a provision to expand the initiative to other regions (MOCI, 2021). The renewed emphasis on the Mekong Subregion in these new supply chain initiatives is leading to new connectivity drives in Asia which have trade integration at the core.

Third, the advent of the digital economy has brought an urgency to digital connectivity plans in Asia. Investments in infrastructure for the digital economy and cybersecurity are the two most pressing needs in ASEAN and other parts of developing Asia for it to grow as a digital economy hub. However, the development of ICT-related infrastructure in individual Asian countries is uneven and gaps remain across and within countries (Chen, 2020). The digital economy could also allow less developed countries/regions to skip certain stages and leapfrog to a higher level of development. With an appropriate set of skills, the digital economy enables possible leapfrogging from the pre-globalised world to active participation in trade through technology and connectivity. Digital connectivity plans with trusted partners in Asia and Europe would fulfil the scope and need for value chains of the digital economy in Asia. EU–Asia connectivity has a strong focus on connectivity designed for the digital economy.

Fourth, the slowdown in trade in goods reflects capacity overhangs in investment and production. However, the growth in trade in services remains high. There is a pressing need to create new supply chains that can utilise the young demography and labour force and cater to new markets. Manufacturing will not diminish in the digital economy. The geographic span of the GVCs will expand, and their concentration may also shift from current locations. The production and consumption of goods and services will occur in new locations and platforms. The AAGC is a good example in this regard. Similarly, ASEAN–UK cooperation and ASEAN–EU connectivity address new supply chains for trade in services. Connectivity and cooperation – through market access, facilitation, and rules – can upgrade the existing value chains for trade in goods and services, and create new ones.

9. Can the Connectivity Plans Converge?

The ASEAN notions of connectedness and community building, despite some differences, are compatible with European and African thinking and can therefore be used effectively in pan-Asia, Asia–Africa, and Asia–Europe connectivity. However, in a global milieu, connectivity plans are competing for space, influence, and results (usually for the promoting country).

Seeking convergence amongst competing connectivity plans is based on the notion that all connectivity plans have similar objectives. The contours of the MPAC, AAGC, BRI, and other connectivity plans will show that this is not always the case. There are inherent differences in each of these plans, given their origins, partnerships, resources, and the political and economic priorities of the promoters. Given these competitive differences, a consensus amongst governments, businesses, and people is emerging to set up governance mechanisms that would place different connectivity plans behind globally agreed development goals. This will help to create common objectives and create synergies amongst the different connectivity plans.

The transformational changes in global governance, international relations, the aspirations of the young demography, technological connectivity, and the future of work are driving the current discourse on connectivity. For this reason, a free and open Indo-Pacific, ASEAN–India connectivity, the AAGC, the BRI, and EU−Asia connectivity are seeking greater emphasis on governance, standards, transparency, and accountability.

The apparent commonality of objectives in connectivity plans and mechanisms is deceptive because the principal agents in each plan choose different pathways towards apparently common goals. Therefore, the results differ amongst various connectivity plans. Primarily, the financing of connectivity plans,

transparency in project preparation, and accountability in project execution are important global concerns emerging from the implementation of connectivity plans. The example of the BRI is important as it has drawn global attention towards issues of planning and project design, financing and debt sustainability, territorial integrity, and people's voices. Controversies in Pakistan, Sri Lanka, the Maldives, the Lao PDR, and Montenegro relate to debt sustainability and underline the disconnect between connectivity plans and development strategies. This emphasises the need for governance standards and processes which transcend bilateral arrangements and can be measured against generally accepted and globally agreed standards and norms for connectivity plans, especially infrastructure plans.

Finding the global standards for connectivity projects and activities is difficult but not impossible. Global development programmes and the impetus for multilateralism can provide a way to create greater interlinkages between connectivity plans through governments, and regional and multilateral institutions. The Bretton Woods framework monitored money and monetary institutions to foster peace and build growth in the post-war years. Similarly, with connectivity as the new international strategy for growth, it is essential that global governance reach and monitor its various aspects and actors. It is already evident in the MPAC, AAGC, and EU−Asia connectivity that triangular and multilateral cooperation on connectivity are producing more inclusive and sustainable plans due to greater oversight of project preparation processes and plan outcomes.

The practical aspects of trans-regional connectivity call for a unified or common regime for the carriage of goods and people across continents. Technical specifications, safety management frameworks, the social and economic well-being of workers in the sector, competition policy, and customs cooperation are some important beyond-the-border issues that require agreed standards and regulations, especially in rail and road transport. Air and sea connectivity have international rules but require calibration around new collaborations and routes. Digital connectivity is embedded in most plans, but promoting a peaceful, secure, and open ICT environment, including data protection, requires a coherent regulatory approach as well as policies and incentives to bridge the digital divide. Clearly, the synergy in different connectivity plans is incumbent on common rules and standards.

Global standards and governance rules for infrastructure-related connectivity plans can be drawn from the broad commitment to put people and their prosperity at the core of connectivity programmes. Employing good governance and accountability as drivers, the plans must work towards the goals of sustainable development and inclusive growth. When connectivity plans converge with regional, national, and global development priorities, monitoring of plans will likely become easier. Finally, the monitoring and regulatory mechanisms must ensure that connectivity plans are not used as a foil for regional leadership – nor can they be used to export debt problems in the promoter country or group of countries. Policymakers are working towards global standards on contemporary issues such as taxation, digital finance, the internet, data ownership and transfer, and artificial intelligence. A global consensus around climate change, the Sustainable Development Goals, multilateralism, and global trade is also being renewed. It is only logical that global (and regional) mechanisms for the monitoring and regulation of connectivity plans should ensure that these plans enhance economic and social well-being amongst people and create trust amongst partners.

Connectivity plans that cater to new supply chain linkages, whether for trade in goods or services, or for the digital economy, will be subject to efficiencies and markets. At the same time, the global discourse on balanced, sustainable, and inclusive growth shifts the emphasis on economic corridors that can stimulate two-way trade between economic agglomerations within Asia, and between Asia, Africa,

and Europe. The COVID-19 pandemic has revealed the vulnerability of connectivity and GVCs. Connectivity between new production locations and markets will strengthen the resiliency of inter-regional connectivity and the GVCs, and improve trade integration. In the post-COVID-19 phase, it will also support restructuring and diversification of supply chains and markets. Indo-Pacific has high stakes in the new supply chain led connectivity projects. Restructuring, understanding, and preparing for a connected Indo-Pacific will ensure stable and inclusive growth in the region.

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Chapter 3

Global Value Chain Integration in Indo-Pacific: Asia, Oceania, US, and the EU

Chapter 3

Global Value Chain Integration in Indo-Pacific: Asia, Oceania, US, and the EU

Alicia Garcia Herrero

1. Introduction

What was thought of as an unstoppable trend – globalisation – has recently halted, and worse still, it seems to have started reversing. A centrality of this process has been the development of global value chains (GVCs), pushed by transnational corporations as a way to reduce their costs of production through efficiency gains. More specifically, GVCs refer to international production sharing, a phenomenon where production is broken into activities and tasks carried out in different countries. The fragmentation of production and input goods traveling across global supply chains before a good is finalised and sold to the consumer is a GVC.

The ability of developing economies to tap into their comparative advantages of cheap labour markets through the liberalisation of trade and investment policy – not to mention lax environmental and labour regulations – has allowed them to gain more productive jobs and sticky capital investment and to tap into GVCs to raise productivity and to generate wealth. From Eastern Europe to China – and most recently Viet Nam – the process has lifted millions out of poverty. Indeed, GVCs have shaped the world beyond trade, from the increasing importance of efficiency as a key objective of the production process – and the development of new business models to accommodate it – to the surge in foreign direct investment to set up production plants overseas to produce parts and components.

There are a number of reasons why GVCs are important for trade, however. The first is how they shape the roles that countries play in moving up the ladder of value added in production. An increasingly significant role in the supply of parts and components – especially if accompanied with supporting innovation policies – helps countries move up in the value imbedded in production. This has clearly been the case for China, but other countries are following – even if in the far distance, either because of their smaller size, lack of necessary infrastructure, or, in the case of developed countries, high wages.

There are a number of relevant regions for GVCs, such as the European Union (EU) with its single market but also the Association of Southeast Asian Nations (ASEAN), which is closely intertwined with China in the Asian supply chain. A new geographical area, which is growing its geopolitical importance, is the Indo-Pacific. This concept was introduced by Japan as the 'Free and Open Indo-Pacific', and endorsed by the United States (US). It is security-related and are anchored in the Quadrilateral Security Dialogue, to which Australia, India, Japan, and the US have participated since 2007.

More recently, with President Joseph Biden, Jr.'s official 2022 visit to Asia, the concept of the Indo-Pacific has been expanded in terms of the countries involved through the *Indo-Pacific Economic*

Framework for Prosperity (IPEF)[8] and towards a more economic domain – although it falls short of a trade and investment deal. The countries that have signed on to the IPEF in Asia are Australia, Brunei Darussalam, India, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and Viet Nam, as well as the US.

This chapter aims to understand the degree of economic integration, through GVCs, of Indo-Pacific countries. Four countries – Australia, India, Japan, and the US – are first examined, as well as their relations with ASEAN, as many countries signing on to the IPEF are Members of ASEAN.

China is key when it comes to measuring countries' integration into supply chains, especially in Asia. China has been able to massively increase its manufacturing capacity and to intertwine its production with that of other economies by liberalising access. As a result, China's global market share in manufactured goods is more than 19%[9], but foreign investors do not enjoy the same privilege for Chinese domestic markets; the liberalisation of trade and investment is only targeted towards tradeable sectors. The question, thus, is whether a new economic area – the Indo-Pacific – can be developed in Asia with growing trade and investment relations amongst its members, even if China is not part of this geography.

2. Developments in Global Value Chains and the Indo-Pacific

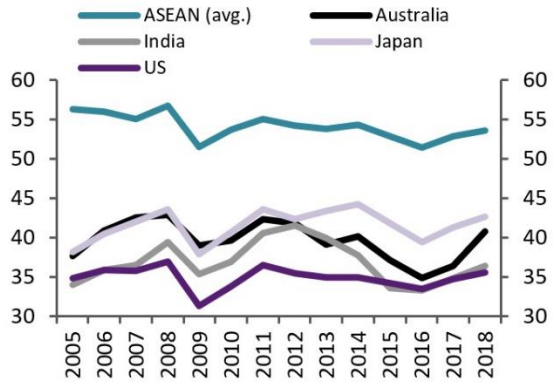
The size of GVCs peaked in 2008, during the global financial crisis, and has shrunk since. Regarding the key economies of the Indo-Pacific, their participation in GVCs stagnated before a rebound in 2016. Amongst them, the speed of recovery also diverges. Australia has been accelerating its integration in GVCs and quite quickly, jumping above 40% of its gross exports as of 2018, which is the most recent input–output data available to measure supply chain integration (see Appendix for details about this dataset and definitions). The other members of the Indo-Pacific, such as India, Japan, and US, have seen moderate improvements since 2016, but less than Australia. As for ASEAN Member States, many of which are now members of the IPEF, the trend is similar, but their level of integration into GVCs is much higher than for all Indo-Pacific members (Figure 3.1a).

Outside of the region, the EU is very integrated into GVCs, nearly as much as ASEAN, and its participation has remained stable, with the global financial crisis creating only a short impact. This contrasts with the much lower participation of the US and China (Figure 3.1b).

[8] ''Statement on Indo-Pacific Economic Framework for Prosperity,'' The White House, accessed September 15, 2022, https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/23/statement-on-indo-pacific-economic-framework-for-prosperity/.

[9] Data from ''UN Comtrade Database,'' United Nations, accessed September 19, 2021, https://comtradeplus.un.org/.

Figure 3.1a: GVC Participation by Economic Area
(% of gross exports)



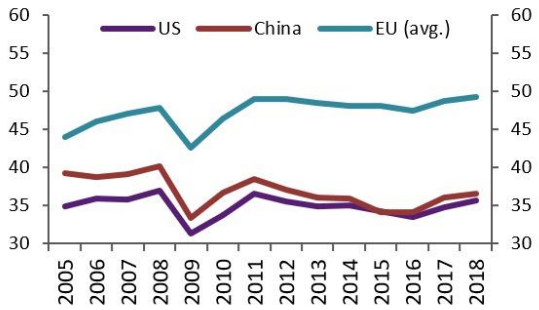
ASEAN = Association of Southeast Asian Nations; avg. = country weighted average, GVC = global value chain, US = United States.

Notes:

1. Data for ASEAN include intra-region trade.
2. See Box 1 for the definition of GVC participation. ASEAN refers to eight of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data available for the Lao People's Democratic Republic and Myanmar).

Source: OECD (2022).

Figure 3.1b: GVC Participation by Economic Area
(% of gross exports)



EU = European Union; avg. = country weighted average, GVC = global value chain, US = United States.

Notes:

1. Data for EU include intra-region trade.
2. See Box 1 for the definition of GVC participation. EU refers to the member countries as of 2013-2019.

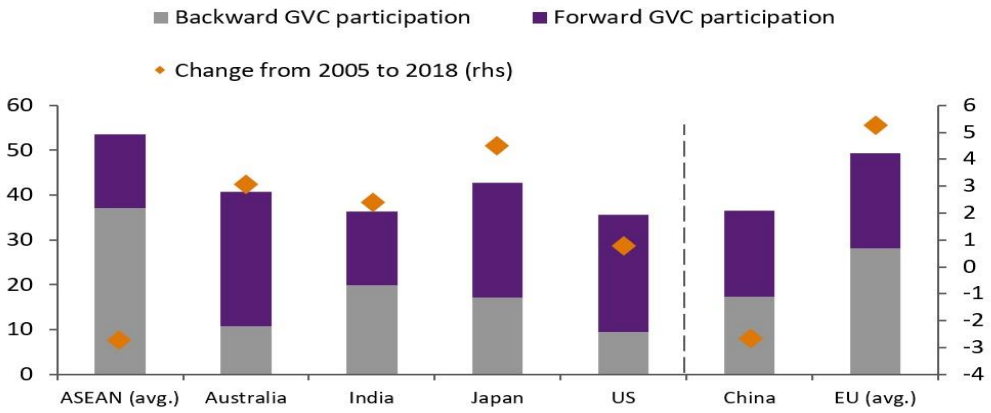
Source: OECD (2022).

Participation in GVCs, however, can come from two different angles. The first occurs from the foreign value added in exports (FVA), also called backward participation, which is the share of exports that stems from imports of intermediate goods and for which there is no domestic value added imbedded. The second is the mirror of the FVA – the domestic value added in exports (DVX), also called forward participation. Countries able to produce higher value-added goods will tend to have a larger share of forward participation in GVCs, as they do not need to import as many intermediate goods to be able to export.

As Figure 3.2 below shows, the key difference between ASEAN and the EU is not the level of participation in GVCs – which is similarly high – but the composition, as downstream participation is much more pervasive for ASEAN than for the EU. The share of backward participation is also higher for the EU and India than for Australia, Japan, or the US. It is important to note that China's forward participation is higher than ASEAN or India although still much lower than the US.

Thus, the core Indo-Pacific countries are relatively less integrated into GVCs than ASEAN or the EU – but are in line with China. At the same time, relatively large shares of the value of their exports are produced domestically, especially for the US. That makes ASEAN complementary to Indo-Pacific countries, as their participation in GVCs is mostly through exports of imported intermediate goods. Finally, all economies of interest have seen an increase in their GVC participation from 2005 to 2018, except for China whose degree of participation has fallen by a stunning 20%; in stark contrast, ASEAN and the EU have increased their integration by as much as 10%, respectively (Figures 3.3a and 3.3b).

Figure 3.2: GVC Participation by Economic Area and Type, 2018
(% of gross exports)

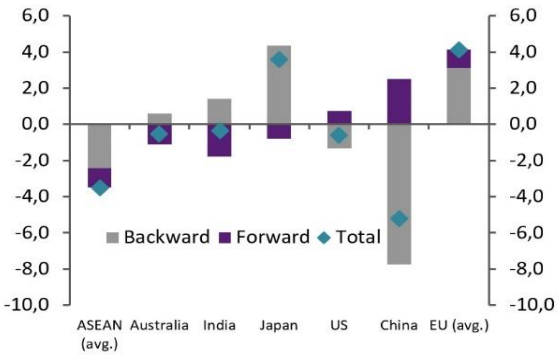


ASEAN = Association of Southeast Asian Nations; EU = European Union; avg. = country weighted average; GVC = global value chain; US = United States.
Notes:

1. Data for ASEAN and EU include intra-region trade.
2. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports. Backward participation means foreign value-added in domestic exports.
3. ASEAN refers to eight of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data available for the Lao PDR and Myanmar).EU refers to the member countries as of 2013-2019.

Source: OECD (2022)

Figure 3.3a: Change of GVC Participation by Economic Area and Type, 2005–2015
(% of gross exports)



ASEAN = Association of Southeast Asian Nations; avg. = country weighted average, GVC = global value chain, US = United States.
Notes:

1. Data for ASEAN and EU include intra-region trade.
2. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports. Backward participation means foreign value-added in domestic exports.
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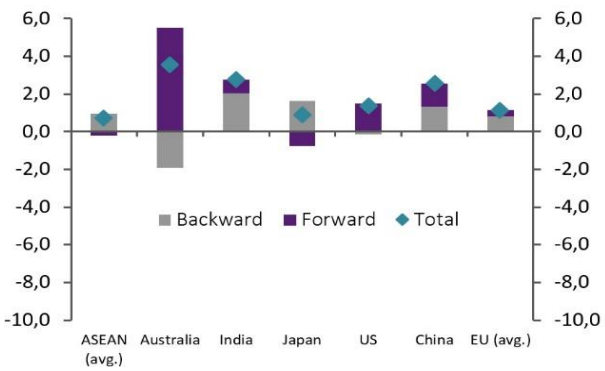
Source: OECD (2022).

Figure 3.3b: Change of GVC Participation by Economic Area and Type, 2015–2018
(% of gross exports)



ASEAN = Association of Southeast Asian Nations; avg. = country weighted average, GVC = global value chain, US = United States.
Notes:

1. Data for ASEAN and EU include intra-region trade.
2. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports. Backward participation means foreign value-added in domestic exports.
3. ASEAN refers to eight of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data available for the Lao PDR and Myanmar).EU refers to the member countries as of 2013-2019.

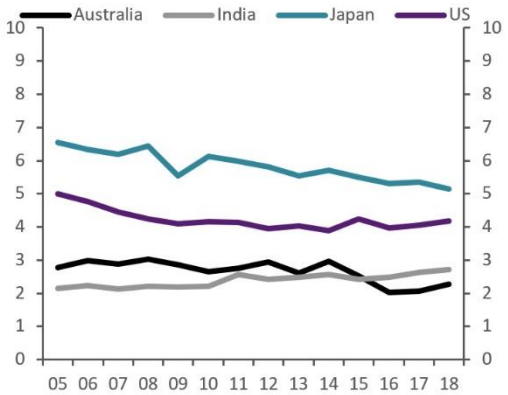
Source: OECD (2022).

3. ASEAN

Given the importance of ASEAN in the IPEF – as well as the potential complementarities between core Indo-Pacific countries and ASEAN, – ASEAN's bilateral participation in GVCs with other key players is examined. ASEAN has been reducing its integration with developed economies' supply chains since 2005, and especially with Japan and Australia, although the trend is slightly better with the EU and US (Figures 3a and 3b). This trend contrasts with ASEAN's rapidly increasing integration with China's supply chains, which nearly doubled during 2005 to 2018. India, too, has been increasing its bilateral integration with ASEAN but from a very low level, which makes it hardly relevant compared to China. In fact, ASEAN's integration with India remains minimal at 2.7% of ASEAN's total exports (Figures 3.4a and 3.4b).

Figure 3.4a: GVC Participation of ASEAN, by Partner

(% of gross exports)



ASEAN = Association of Southeast Asian Nations; avg. = country weighted average, EU = European Union; GVC = global value chain; US = United States.

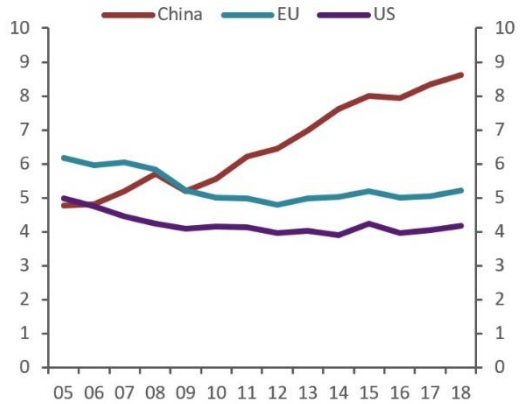
Notes:

1. See Box 1 for the definition of GVC participation.
2. ASEAN refers to 8 of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data available for the Lao PDR and Myanmar).EU refers to the member countries as of 2013-2019.

Source: OECD (2022).

Figure 3.4b: GVC Participation of ASEAN, by Partner

(% of gross exports)



ASEAN = Association of Southeast Asian Nations; avg. = country weighted average, EU = European Union; GVC = global value chain; US = United States.

Notes:

1. See Box 1 for the definition of GVC participation.
2. ASEAN refers to 8 of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data available for the Lao PDR and Myanmar).EU refers to the member countries as of 2013-2019.

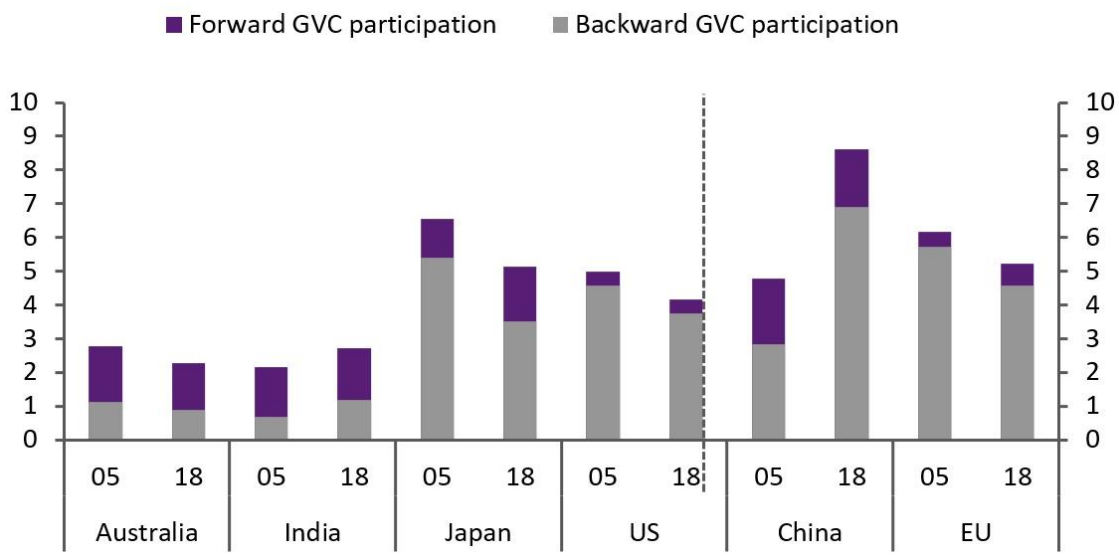
Source: OECD (2022).

When focusing on the type of GVC integration that ASEAN conducts with different countries, ASEAN's GVC integration predominantly corresponds to the backward direction – especially so with the US and EU. In simple terms, ASEAN tends to import a relatively large share of intermediate goods for re-export from the West, while its exports of intermediate goods for other countries to re-export are small with the West and somewhat larger with Australia and India. ASEAN integration has been more balanced with China in the past, but the bulk of the increment so far comes from ASEAN's larger backward participation, which means that ASEAN is again importing more intermediate goods for its exports (Figure 3.5).

It is clear that ASEAN is mostly an assembly platform, as its backward participation dominates global supply chains. This is particularly the case of ASEAN's trade with the US, EU, and, to a lesser extent,

Japan and China. ASEAN Member States' linkages with Australia and India are more balanced, as ASEAN's forward participation is greater than its backward (Figure 3.5). The reason for a more balanced pattern with Australia and India may be related to the lack of a key industry that integrates ASEAN with these two countries rather than a strong performance in exporting products with large domestic value added – the generally low share of exports of intermediate goods between ASEAN and Australia or ASEAN and India clearly points in this direction. Finally, ASEAN's increasing integration with China is obvious in these data but with the same pattern – a lot of value added in exports from ASEAN into China and mostly imports of intermediate goods from China for re-export.

Figure 3.5: GVC Participation of ASEAN, by Partner and Type
(% of gross exports)



ASEAN = Association of Southeast Asian Nations; EU = European Union; avg. = country weighted average; GVC = global value chain; US = United States.
Notes:

1. Data for ASEAN and EU include intra-region trade.
2. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports. Backward participation means foreign value-added in domestic exports.
3. ASEAN refers to eight of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data available for the Lao PDR and Myanmar).EU refers to the member countries as of 2013-2019.

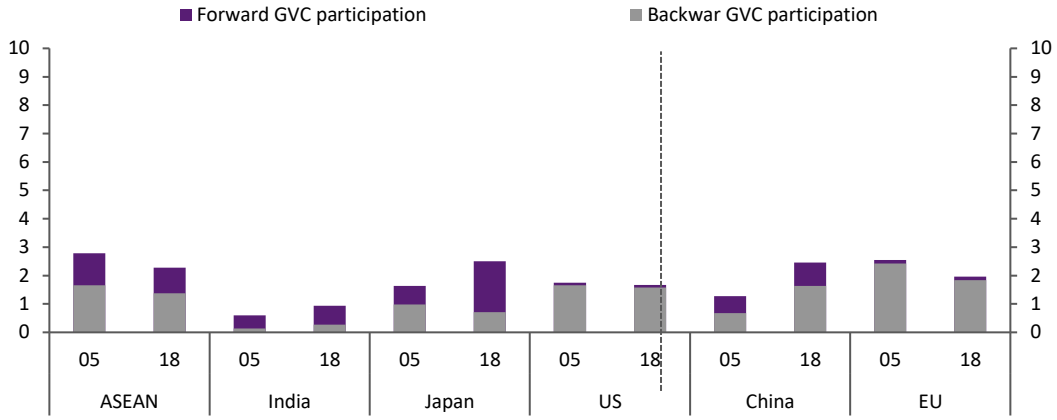
Source: OECD (2022)

4. Australia

For Australia, the much lower level of bilateral integration in other countries' supply chains is noted. Within such a trend, integration with ASEAN used to stand out but decreased from 2005 until 2018. The opposite is true for Japan, with which Australia now has the largest bilateral integration in terms of supply chains. Most of the increase came from Australia's value added in Japanese exports, meaning that Australia is stepping up to be a major upstream supplier for Japan. China is also crucial for Australia, with rapid growth like Japan and with a very similar pattern – Australia's exports of its own value added to China. This pattern is the same for India but at a lower level. Integration with other

members of the Indo-Pacific, like the US, remains very low and is mostly backward. This means that Australia is only importing intermediate goods from the US or EU for re-export, but it is not exporting its own value added to these two economies. (Figure 3.6).

Figure 3.6: GVC Participation of Australia, by Partner and Type
(% of gross exports)



ASEAN = Association of Southeast Asian Nations, EU = European Union, GVC = global value chain, US = United States.
Notes:
1. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports. Backward participation means foreign value-added in domestic exports.
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Source: OECD (2022).

5. India

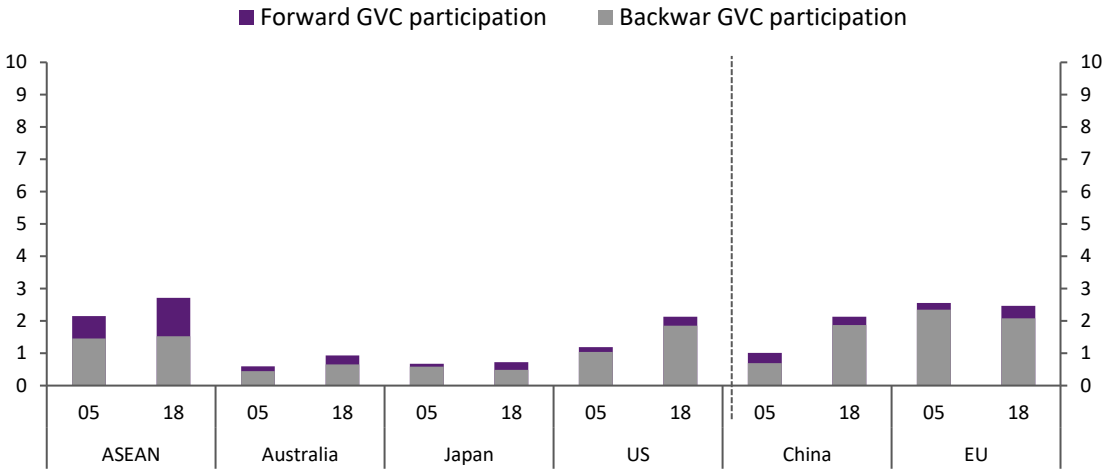
India has been increasing its bilateral integration with all of the countries except those of the EU, although these countries remain more important than the US. Interestingly, India's supply chain exchanges with ASEAN are now the largest – even bigger than that of China – although the speed at which supply chain linkages are growing is faster for India–China bilateral trade. For all other countries, India's backward participation plays a predominant role in all of its bilateral integration, although less so for ASEAN (Figure 3.7).

In contrast to India, Japan's bilateral integration with other Indo-Pacific economies has been flagging over the period – except with Australia. This is because Australia is playing an increasingly important role in Japan's upstream supply, a nation that requires raw materials to manufacture its exports of intermediate goods. Japan is also experiencing a moderate increase in its bilateral supply chain relations with the EU, while they remain stagnant with the US. In both cases, such relationships are dominated by Japan's imports of intermediate goods from both the EU and US for re-export.

In contrast to these trends, a sharp decrease can be seen in Japan's bilateral trade linkages with ASEAN, as far as intermediate goods are concerned. Such a reduction in Japan's participation in GVCs is also

occurring for China. Finally, Japan's trade with India, in terms of intermediate goods, remains extremely low. All in all, Japan's supply chain integration with South-East Asia is not advancing as many expected (Figure 3.8).

Figure 3.7: GVC Participation of India, by Partner and Type
(% of gross exports)



ASEAN = Association of Southeast Asian Nations, EU = European Union, GVC = global value chain, US = United States.
Notes:
1. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports. Backward participation means foreign value-added in domestic exports.
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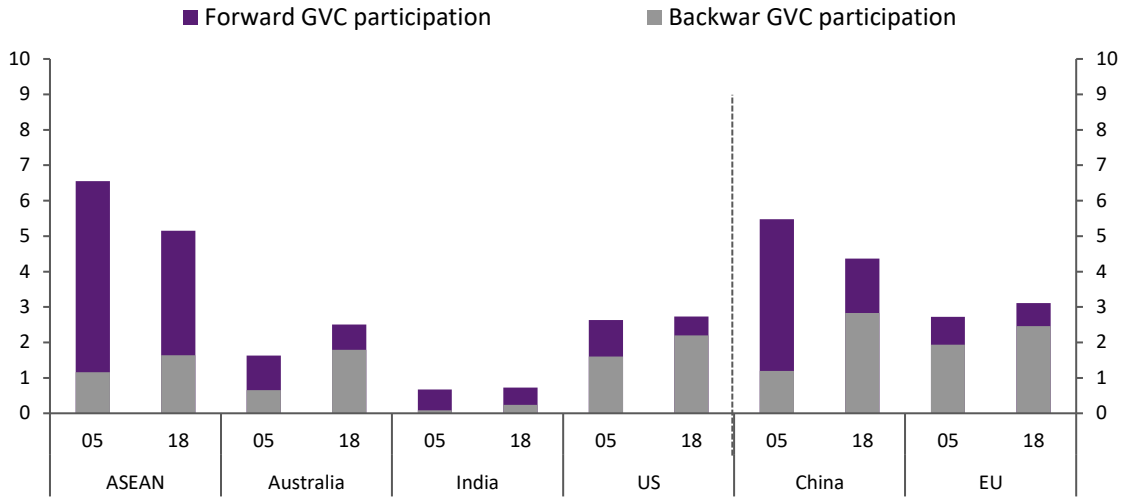
Source: OECD (2022).

Figure 3.8: GVC Participation of Japan, by Partner and Type
(% of gross exports)



ASEAN = Association of Southeast Asian Nations, EU = European Union, GVC = global value chain, US = United States.
Notes:
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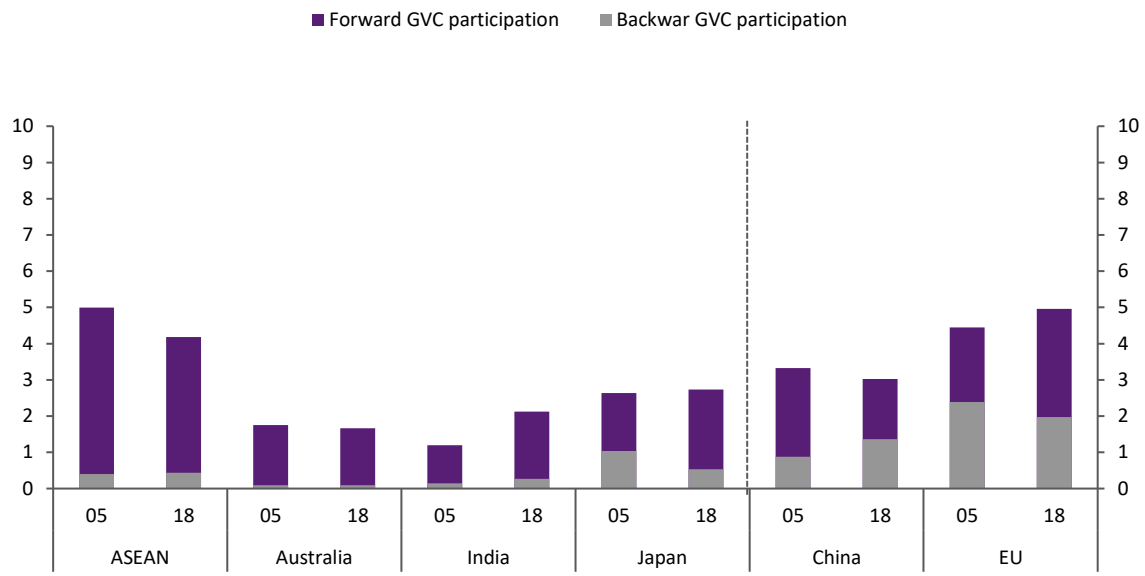
Source: OECD (2022).

6. United States

The US's bilateral linkages, in terms of global supply chains, with Indo-Pacific countries, China, and the EU were generally stable during 2005 to 2018, with slight declines seen with ASEAN and China and a sharp increase with India. Interestingly, the decrease in the US's GVC integration with China is in forward participation, which points to China adding a lot of value to its production, reducing its dependence on intermediate goods from the US. This also contrasts with the fact that the US has been increasing its forward integration with other high-value adders such as Japan and the EU (Figure 3.9). The US does not seem to be losing value added in its exports with other Indo-Pacific partners, but its commercial relationship with China seems different from that.

Figure 3.9: GVC Participation of US, by Partner and Type
(% of gross exports)



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Notes:
1. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports. Backward participation means foreign value-added in domestic exports.
2. ASEAN refers to 8 of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data were available for the Lao PDR and Myanmar). EU refers to the member countries as of 2013–2019.

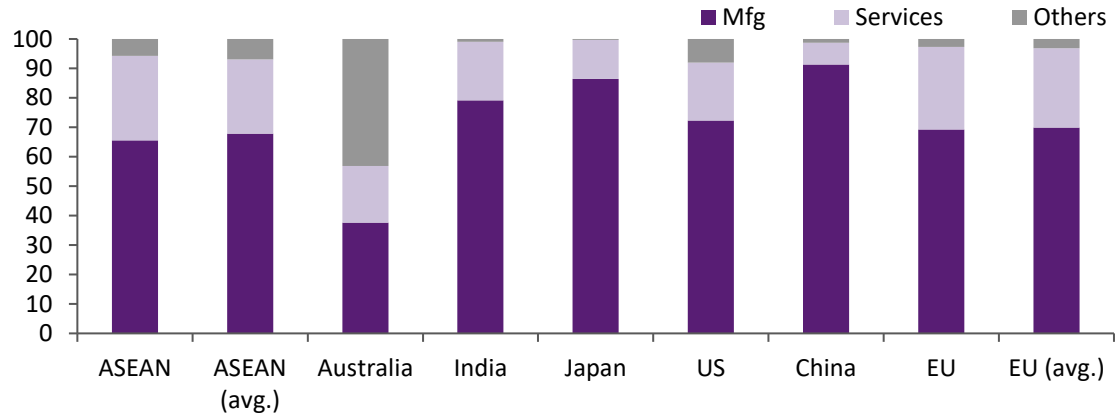
7. Sectoral Trends

It is important to distinguish between the exports coming from imports of intermediate goods (i.e. backward participation) and those stemming from domestic value added (i.e. forward participation). For backward participation, the manufacturing exports concentrate the majority of GVC participation across all economies of interest, except for Australia, 60% of whose mainly stems from business services and other sectors. This means Australia is less in demand of foreign inputs for manufacturing products, as it is mostly focussed on exporting raw materials. Regarding forward participation, Australia stands out for its high integration with global supply chains. In other words, Australia's manufacturing manages to create large value added in its exports for other countries' re-exports.

Amongst the remaining countries, China and Japan have the highest shares of manufacturing for backward participation, showing their massive purchases of industrial materials as inputs for manufacturing. India is trying to move up in the global manufacturing value chain by increasing its backward integration, but India's forward value added of manufacturing sectors is still lagging behind. India is not yet able to add a lot of value to its production, which is then imported by other players to re-export. Meanwhile, ASEAN and the US are more balanced between the two extremes of Australia and India (Figure 3.10 and 3.11).

Figure 3.10: Sectoral Composition of Backward GVC Participation, by Economic Area, 2018

(%)



ASEAN = Association of Southeast Asian Nations, avg. = country weighted average, EU = European Union, GVC = global value chain, US = United States.

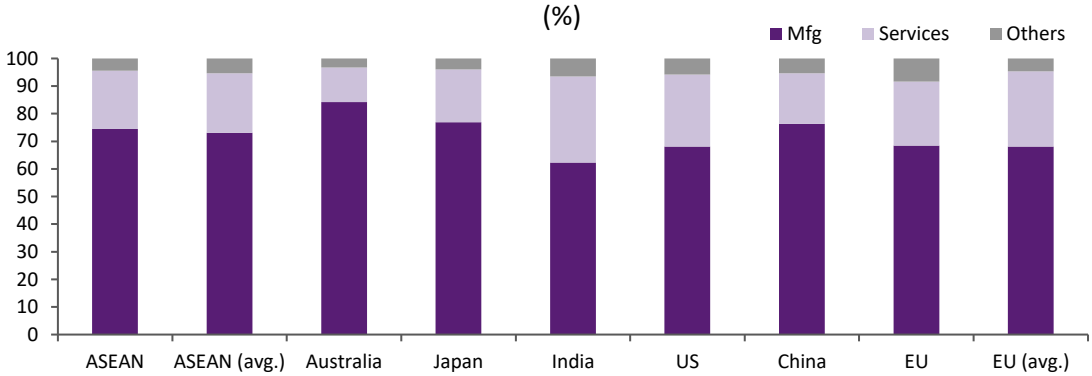
Notes:

1. Weighted averages include intra-region data.
2. See Box 1 for the definition of GVC participation. Backward participation means foreign value-added in domestic exports.
3. ASEAN refers to 8 of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data were available for the Lao PDR and Myanmar). EU refers to the member countries as of 2013–2019.

Source: OECD (2022).

Figure 3.11: Sectoral Composition of Forward GVC Participation, by Economic Area, 2018

(%)



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2. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports.
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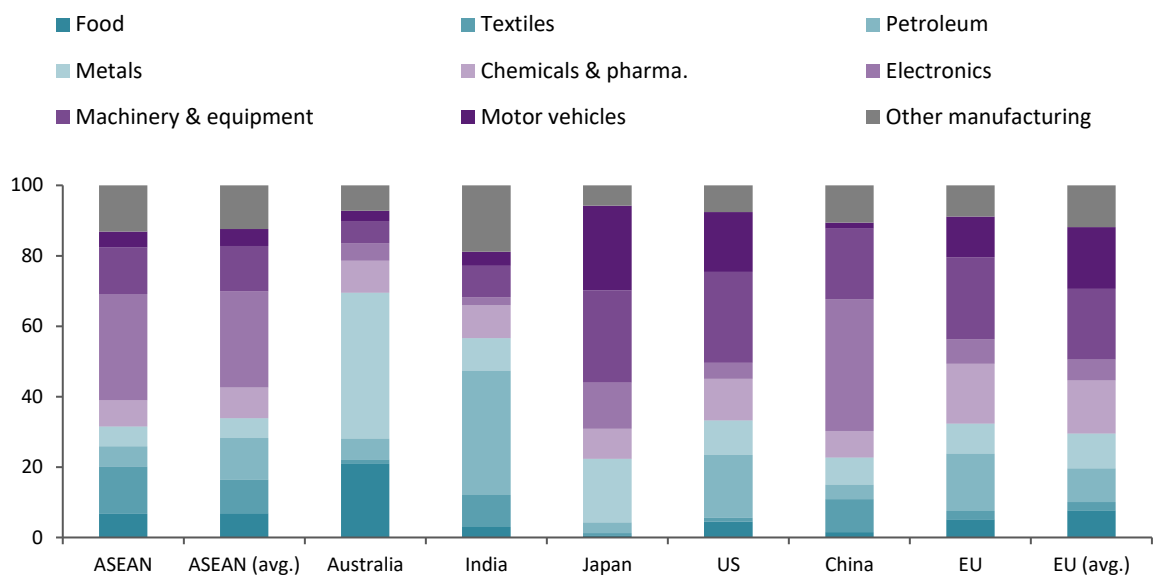
Source: OECD (2022).

Higher-skilled manufacturing, such as machinery and equipment, electronics, and motor vehicles, explain most of the backward participation for Japan and the US. For the EU and China, there is more heterogeneity across sectors. The exceptions are Australia and India. Regarding backward participation, Japan, the EU, and US specialise in motor vehicles, while China and ASEAN focus on electronics. Australia leads in metals in backward trade, and India imports a huge amount of value added via crude and raw petroleum products.

In regards to forward participation, specialisation patterns are less intense. The EU and US still lead in motor vehicles, but China and India are catching up. Electronics takes up as much as 31% of Japan's forward GVC integration, reflecting the industry's dominance amongst Japan's manufacturing sectors. China and ASEAN remain significant in electronics, and India shows a very balanced structure (Figures 3.12 and 3.13).

Figure 3.12: Sectoral Composition of Backward GVC Participation in Manufacturing Exports, by Economic Area, 2018
(%)



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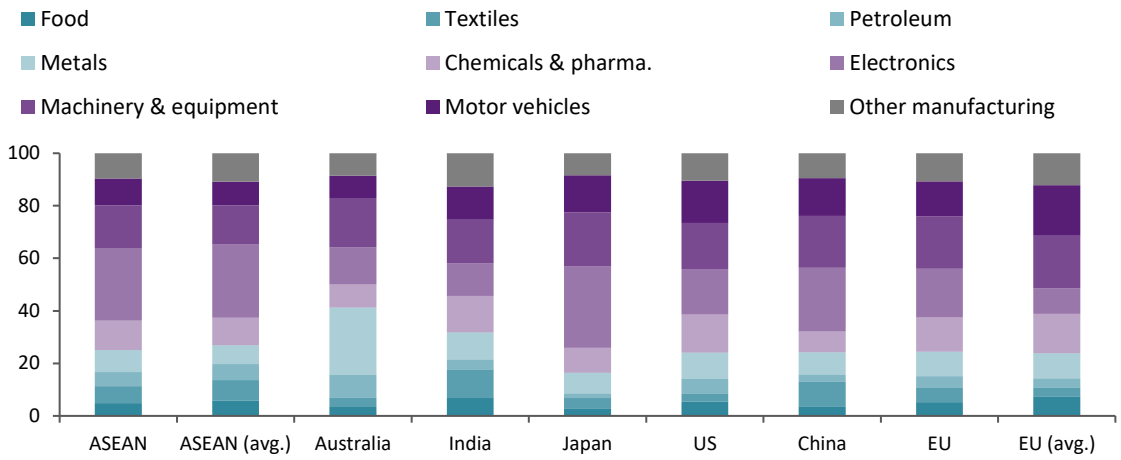
Notes:
1. Weighted averages include intra-region data.
2. See Box 1 for the definition of GVC participation. Backward participation means foreign value-added in domestic exports.
3. ASEAN refers to 8 of its 10 Member States: Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam (no data were available for the Lao PDR and Myanmar). EU refers to the member countries as of 2013–2019.
Source: OECD (2022).

Figure 3.13: Sectoral Composition of Forward GVC Participation in Manufacturing Exports, by Economic Area, 2018

(%)



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Notes:

1. Weighted averages include intra-region data.
2. See Box 1 for the definition of GVC participation. Forward participation means domestic value-added in foreign exports. 3.

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Source: OECD (2022).

Box 1: The RCEP – A Regional Trade Agreement with Asian Linkages Only

After 8 years of negotiations, the Regional Comprehensive Economic Partnership (RCEP), comprising 15 Asian countries as parties, was announced in November 2020. The trade deal is expected to tighten ties amongst Asian countries in terms of key liberalisation measures and the value chain in Asia.

As the largest trade agreement so far, the RCEP links 15 Asia-Pacific economies in trade liberalisation – the 10 Association of Southeast Asian Nations (ASEAN) Member States, Australia, China, Japan, the Republic of Korea, and New Zealand. The signatories make up nearly one-third of the world's total population and nearly 29% of global gross domestic product (GDP).

The aim of the RCEP was even bigger when the negotiations started in 2012. Not only was the geographical coverage larger – with India, the third-largest economy in Asia – but so was the scope in terms of liberalisation. India withdrew from the negotiations because of the potential negative impact on its local industry development from Chinese imports. Furthermore, when the RCEP started as a response to the Trans-Pacific Partnership (TPP), the strategic competition between the United States (US) and China was beginning; now, it is pulling RCEP members in different directions. The best example is the ongoing trade friction between China and Australia, which started almost immediately

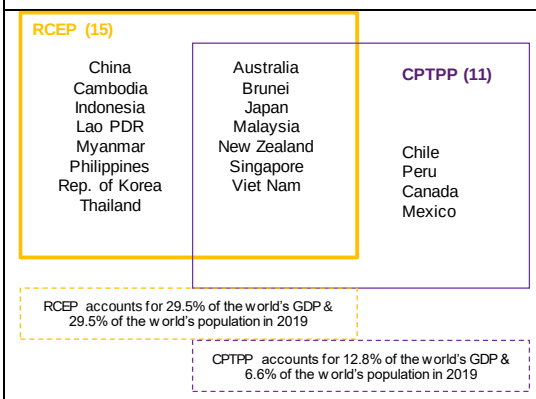
after the RCEP was concluded. Although the US is not a member of the RCEP, increasingly pervasive US sanctions against China will affect the RCEP's performance.

The importance of the RCEP is apparent on both economic and political fronts. The RCEP is expected to reduce tariffs over a 20-year period, streamline customs procedures, and replace a number of bilateral trade agreements in the region with one set of rules. The unique value of the RCEP is in simplifying and minimising different rules of origins, thus equating the requirements for all players. The RCEP is not as broad an agreement as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), because it focusses only on trade in goods, excludes services, and does not mitigate the influence of state-owned enterprises in the economy (Figure A). Still, it is a valuable regional structure, as it links the major economies in the Asia-Pacific region and tightens the bond amongst Asian countries, particularly in a time of de-globalisation and post-pandemic recovery, without the involvement of the US or Europe.

The impact from the RCEP is believed to be incremental, as the existing trade agreements have already pushed tariffs low. In fact, the current average tariff is 4.4% amongst the members of the RCEP and only 2.7% amongst the members of the CPTPP, yet the GDP per capita of CPTPP members is 1.5 times higher than that of the RCEP members (Figure B). For the RCEP to enter into force, at least six ASEAN Member States and three non-ASEAN countries need to ratify the agreement. By the end of April 2021, China, Singapore, and Thailand had completed procedures for ratification, while Japan is in the process of completion.

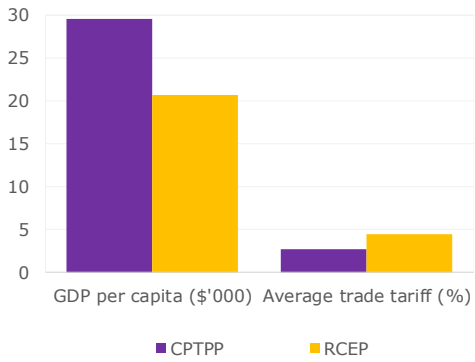
Beyond the economic benefits – which may not be obvious in the short term, as tariffs are already low – the high point of the RCEP may be simplifying different rules into a single set of rules of origin, equating the requirements for all players.

Figure A: Membership of the RCEP and CPTPP



CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, RCEP = Regional Comprehensive Economic Partnership.
Source: Natixis and WDI.

Figure B: Characterisation of the RCEP and CPTPP

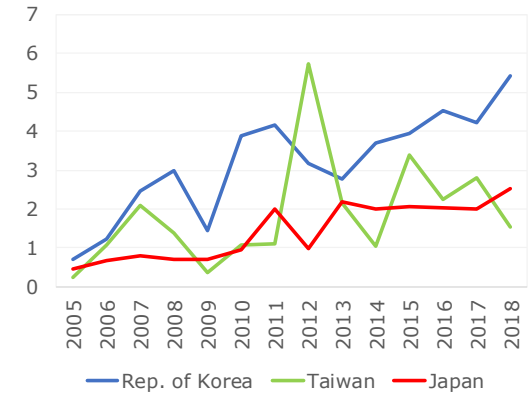


CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership, Lao PDR = Lao People's Democratic Republic, RCEP = Regional Comprehensive Economic Partnership.
Source: Natixis and WDI.

ASEAN has been receiving increasing manufacturing foreign direct investment (FDI) from Japan, Korea, and Taiwan (Figure C), and the amount has already been larger than to China (Figure D). This is in

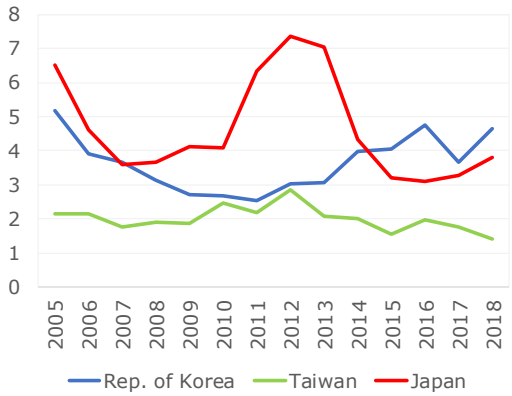
response to the increasingly high labour costs in China compared with the rest of ASEAN, and the need to diversify the risks from a value chain that remains overly concentrated in China. With the increasing amount of FDI – and the ease of the RCEP rules – ASEAN will be able to grow its manufacturing capacity to serve the massive market of North Asia. China's ageing population makes this trend even more meaningful.

Figure C: FDI in ASEAN
($ billion)



ASEAN = Association of Southeast Asian Nations, FDI = foreign direct investment.
Source: Natixis and CEIC.

Figure D: FDI in China
($ billion)



FDI = foreign direct investment.
Source: Natixis and CEIC.

The RCEP and CPTPP will shape regional economic architecture, but the RCEP poses challenges for the CPTPP and for the influence of the US and the European Union (EU) in the Indo-Pacific region. If the US re-joins the CPTPP, participation in the CPTPP will require a higher level of commitment than the RCEP, as it covers more areas of trade and investment beyond tariff reduction. In addition, existing members have potential veto power – offering less negotiation room for newcomers to alter existing rules. As such, the CPTPP is poised to receive attention from several countries, especially after the closure of the RCEP negotiations, but the actual expansion of its membership may not be as fast.

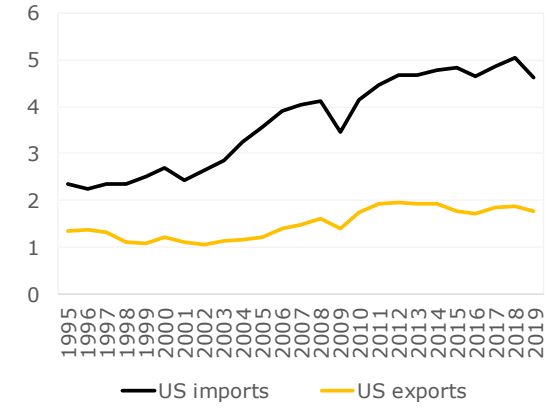
Multi-regional trade between the US and EU with Asian countries has been evolving, with increases in both imports and exports. Both the US and EU have incorporated heavy trade relations with Asian countries beyond the RCEP (Figures E and F), particularly with China, Japan, and Korea.

Since the US and EU are not yet part of either trade deal, the RCEP may tilt economic reliance towards China – reducing Asian dependence on the US market. The RCEP covers all of East Asia, which is a hub for the supply-chain networks of major manufacturing companies. The gradual shift of manufacturing from China to more cost-efficient South-East Asia could enable China to accumulate more cost-competitive exporting power to the US. On the other hand, the RCEP includes key US allies – Australia, Japan, Korea, and New Zealand. Tighter economic ties with these countries could provide leverage for any aspiring member of the RCEP.

The EU has concluded the Comprehensive Agreement on Investment with China and free trade agreements with Japan, Korea, Singapore, and Viet Nam. Amongst the existing economic relations, the RCEP could benefit the EU through a reduction in costs under rules of origin, as European companies participate in intra-Asian supply chains or subsidiaries. On the other hand, the cost-competitive manufactured products from Asian countries could threaten EU manufactured goods with

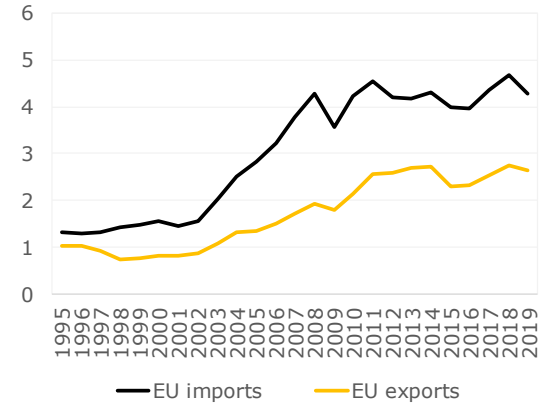
more intense competition. That said, the impact of the RCEP on EU–Asia economic relations will be seen incrementally in the long term.

Figure E: US Trade with RCEP Countries as a Share of GDP
(%)



GDP = gross domestic product, RCEP = Regional Comprehensive Economic Partnership, US = United States.
Note: In 2015 constant prices.
Sources: Natixis and UNCTAD.

Figure F: EU Trade with RCEP Countries as a Share of GDP
(%)



EU = European Union, GDP = gross domestic product, RCEP = Regional Comprehensive Economic Partnership.
Note: In 2015 constant prices.
Sources: Natixis and UNCTAD.

The Government of the United Kingdom (UK)'s *Global Britain in a Competitive Age: Integrated Review of Security, Defence, Development and Foreign Policy* spells out the global role of the UK as an open economy and a maritime-trading nation with a large diaspora. It identifies the Indo-Pacific as one of the dynamic regions of the world, and the deepening of connections with the economic architecture of this region will enhance the UK's future prosperity. ASEAN is at the centre of the Indo-Pacific, and UK cooperation with ASEAN will be crucial to any prospective participation in the RCEP and CPTPP. The UK has important trade linkages with the 10 ASEAN Member States of the RCEP, as well as the other 5 – Australia, China, Japan, Korea, and New Zealand. The RCEP and CPTPP will also provide pathways for the UK to adapt to the intricate regional value chains in the Indo-Pacific and the balance of power, while working with existing structures.

To attain the objectives under the strategic framework, stronger diplomatic and trading ties are envisaged with several countries in the region such as China, India, and Japan; and to extend to others including Indonesia, Korea, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. Although closer relations through existing institutions, such as ASEAN and the CPTPP (the UK has applied for accession to the CPTPP), are clearly spelled out in the strategic framework, UK–ASEAN relations may also find a unique synergy through the RCEP.

Chapter 20 (Final Provisions) of the RCEP sets out the relationship between the RCEP and other international agreements, a general review mechanism, procedures to amend the agreement, and an accession provision. The RCEP is open for accession by any state or separate customs territory 18 months after its entry into force.[a] The Depositary[b] for the RCEP will be responsible for receiving and disseminating documents to the acceding state or customs territory, including any notifications; requests for accession; and instruments of ratification acceptance, approval, or accession. The

provision on entry into force provides that the RCEP needs signatory states, including at least six ASEAN and three non-ASEAN signatory states, to deposit their instruments of ratification, acceptance, or approval for the RCEP to enter into force. The UK still has time to consider its accession plans to the RCEP.

[a] This agreement is open for accession by India, as an original negotiating state, from the date of its entry into force, without waiting 18 months.
[b] The RCEP has designated the Secretary-General of ASEAN as the Depositary for this agreement and any amendment thereto. The Depositary will accept the instruments of ratification and notice for withdrawal and accession, amongst other functions.
Source: CPTPP, RCEP, Great Britain, UNCTAD, WDI, Authors.

8. Conclusions

GVCs – which have been key to the process of rapid economic globalisation of the last few decades – are being reshuffled. The role of China has changed drastically to become much more central and oriented towards adding more Chinese value to other countries' re-exports (i.e. forward integration), but China's dependence on other countries' imports for its own exports is clearly waning.

Against such a background of increasing economic competition from China, it is important to review the economic linkages of Indo-Pacific members, especially their supply chain integration. The linkages are clearly not uniform, with ASEAN more integrated relative to India, and with the US and China dominating in their own value added into other countries' exports (i.e. forward integration).

Much more integration can be possible with a trade agreement or framework – like the IPEF – which facilitates trade exchanges, amongst other objectives.

Box 2: Data Description and Definitions

Definitions

Products that are traded internationally are composed of inputs from different countries and sectors around the world, creating global production chains. Conventional measures of international trade (e.g. gross exports and imports) do not capture these complex relationships.

Studying the global macroeconomy with its country and cross-sectoral linkages, by using global input–output data, has become a widely used approach since the pioneering work of Hummels, Ishii, and Yi (2001). Broadly speaking, the input–output accounting structure comprises all economic transactions between the possible combinations of producing sectors and countries, differentiating between production used for further processing (i.e. intermediate demand) and production used for final consumption or investment (i.e. final demand).

Global value chain (GVC) analysis refers to the study of how value added is generated and distributed through global production chains (from upstream to downstream activities), making use of the relationships defined in the input–output framework.

The degree to which a country is integrated in GVCs is usually captured by a metric called GVC participation, which is the sum of two components: foreign value added in exports (FVA or backward participation) and domestic value added in exports (DVX or forward participation). In other words, GVC participation accounts for value added generated in a country that crosses at least two borders in international trade relative to gross exports. In terms of specialisation, a country that is backwardly integrated in a GVC corresponds to an economy that relies on foreign inputs for its exports to the rest of the world and is positioned downstream within value chains, while a country that is forwardly integrated in GVC supplies inputs to other economies for their exporting activities and is positioned upstream within value chains.

Participation or integration in value chains can also be applied to narrower economic areas or bilateral relations between countries. For instance, a regional value chain corresponds to transactions between members of a common economic area. The forward and backward participation of each country within the regional value chain could be evaluated with the aforementioned metrics.

Alternatively, if a regional bloc is considered as a single economy, the regional participation in a GVC accounts for both the use of inputs sourced out of the regional bloc that are later exported out of the common area (i.e. backward participation) and the supply of inputs to a non-member for its exports to a third country (i.e. forward participation).

A global production chain encompasses a number of participating activities from different sectors. Accordingly, the sectoral characterisation of GVC participation can be defined in many ways. The criterion used is centrality and takes as a reference the sector of the exporting activity located midstream of the value chain, i.e. the sector that uses foreign supplies for exports when analysing backward participation and the sector to which supplies are sold for re-export in the case of forward participation.

Alternatively, the sectoral composition of GVC participation can be analysed considering the sector where the value added being traded across borders was originally generated, i.e. the sector selling

supplies used for exports in a different country, both in terms of backward and forward participation. However, this approach looks very similar to the standard analysis of sectoral specialisation in bilateral gross trade.

Data

Annual data in nominal United States (US) dollars are sourced from OECD (2018). Country coverage includes, amongst others, all 27 European Union (EU) member countries, United Kingdom (UK), US, China, Japan, India, the Republic of Korea, and 8 of the 10 Association of Southeast Asian Nations (ASEAN) Member States (i.e. Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam).

Sectoral data correspond to two-digit codes from United Nations (2008). Sectors are first defined broadly and divided into three categories: manufacturing activities (ISIC codes 10–33); business services (45–82); and other activities (including agriculture, mining, utilities, construction, and public services). Manufacturing activities are then disaggregated into food products (10–12), textiles (13–15), petroleum products (19), chemicals and pharmaceuticals (20–21), metals (24–25), electronics (26), machinery and equipment (27–28 and 30), motor vehicles (29), and other activities (other manufacturing). In turn, business services are disaggregated into trade activities (45–47), transport (49–53), information and communication technology services (58–63), and other activities (other business services).

Source: OECD, United Nations, Authors.

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Chapter 4

An Enhanced Role for the Pacific in the Indo-Pacific Economic Architecture?

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An Enhanced Role for the Pacific in the Indo-Pacific Economic Architecture?

Ben Czapnik

1. Introduction

The Pacific island countries (PICs) of Melanesia, Micronesia, and Polynesia span the Western Pacific region. Although their maritime jurisdiction covers huge tracts of the Pacific Ocean, most PICs have small populations and land masses with correspondingly small economies. PICs have recently undertaken a rebranding exercise, in which they conceive of themselves as 'large ocean countries and territories' due to their enormous exclusive economic zones (EEZs) rather than as 'small island states' because of their small land masses and economies (PIFS, 2019a). In reality, both identities remain highly relevant. While PICs possess large swathes of maritime jurisdiction, they often lack the capacity to fully take advantage of their ocean resources or to enforce their jurisdictions.

While PICs may be geographically located at the heart of one of the most dynamic and integrated regions in the world, they nonetheless suffer from the tyranny of distance. Many airplanes and ships transit their jurisdictions, but air and sea connectivity remains infrequent and expensive. Due to their small market size and high trade costs, integration into global supply chains remains difficult.

However, there is some cause for optimism. PICs have been making progress on some important fronts, such as telecommunications infrastructure and regulation, e-commerce, and cooperation on product standards. Integration amongst PICs has also become increasingly institutionalised in recent years, although the architecture remains somewhat fragmented.

Despite these practical difficulties, PICs are taking steps to improve their integration with the Pacific region, including with traditional partners (i.e. Australia, New Zealand, and the United States [US]), as well as newer partners, especially in Asia. Indeed, there are even examples of increased engagement with the 'Indo' part of the Indo-Pacific, as India seeks to increase its footprint in the region and as PICs look for strategic cooperation with Indian Ocean small island states.

However, to the extent that the Indo-Pacific is perceived in geopolitical terms as a hedge against Chinese expansionism — or as a requirement to choose sides in a struggle between great powers — PICs are wary. They continue to adopt a 'friends to all approach' and seek to engage with, and benefit from, strong relations with all key partners.

Depending on how these broader geopolitical tensions evolve in the coming years, PICs may find it increasingly difficult to manage all of these partnerships. PICs have moved closer to China in recent decades, but deeper integration is hampered by the fact that some countries continue to provide diplomatic recognition to Taiwan. Moreover, the region remains wary, especially amongst the general population, that economic cooperation with China carries more benefits than risks. One positive impact of China's increased interest has been to encourage traditional partners, such as Australia and New Zealand, to 'step up' or 'reset' their commitments to the region. There are even signs that the US is looking to pay more attention to PICs, but it is unclear if this will translate into meaningful or sustained engagement.

2. The Pacific Region

To understand how PICs engage in integration with the rest of the world, it is necessary to understand the dynamics of integration within the region. The key regional body driving integration, the Pacific Islands Forum (PIF), has been bringing the countries of the region together for a leaders' meeting for over 50 years. The PIF is supported by a secretariat based in Suva. In addition to its primary role of organising the annual Leaders meeting, the Secretariat has taken on a range of other roles over the years, including convening regular ministerial meetings (for economic, foreign affairs, and trade ministers), arranging dialogues between PICs and other partners, coordinating regional positions in certain multilateral negotiations, and providing technical assistance to members. Convening the annual leaders' meeting remains the Secretariat's core task, which includes the preparation of policy briefs and other documents to guide discussions as well as an outcomes document following the meeting.

The PIF has 18 member countries: 14 PICs from the sub-regions of Melanesia, Micronesia, and Polynesia; the developed countries of Australia and New Zealand; and the French territories of New Caledonia and French Polynesia, which became full members in 2016.[10]

As a regional political and economic community, the PIF is unique insofar as it brings together both developed and developing countries. For certain purposes, Australia and New Zealand are considered fully integrated members of the region, although they are also deeply integrated into other regional economic groupings such as Asia-Pacific Economic Cooperation (APEC), Association of Southeast Asian Nations (ASEAN)+ arrangements, and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). They are also involved in the Quad (i.e. the Quadrilateral Security Dialogue, consisting of the US, Australia, India, and Japan); Australia, New Zealand, and US Security Treaty (ANZUS); and AUKUS. Depending on the context, references to the 'region' may include Australia and New Zealand, or it may have a narrower meaning focussed on the PICs only.

Defining the region's membership can be further complicated by the fact there are a range of other states and territories that are not members of the PIF, but who nonetheless play an important role in regional cooperation. For example, the regional body responsible for customs cooperation, the Oceania Customs Organisation, has a broader membership than the PIF, as it includes American Samoa, Guam, Northern Mariana Islands, and Wallis and Futuna.[11] These territories are not PIF members based on the traditional view that membership be reserved for independent or self-governing states, although the criteria for membership has become more amorphous since the French overseas territories were admitted in 2016.

Timor-Leste can also be classified as part of the region by external actors, although it lacks a shared culture and history with the PICs and is not normally described or referred to as a PIC. The European Union (EU), for example, groups Timor-Leste with PICs for its engagement on matters such as the negotiation of a regional economic partnership agreement, post-Cotonou negotiations, or the programming and administration of the EU's large regional aid programme (i.e. the European Development Fund). China also included Timor-Leste in Foreign Minister Wang Yi's eight-nation tour of the Pacific in 2022.

While PICs are generally perceived as relatively small on the world stage, including in the Pacific Small Island Developing States grouping at the United Nations, there is an important distinction within the region between larger players and the 'Smaller Island States (SIS). Papua New Guinea (PNG) has the largest economy and population in the region, although Fiji arguably plays a more important role,

[10] PIF Secretariat, https://www.forumsec.org/
[11] OCO Secretariat, https://www.ocosec.org/

including by serving as a hub for air and sea transport. The PIF therefore contains dedicated mechanisms to ensure that the voices of the SIS states are taken into account in regional discussions, including through the annual SIS leaders meeting, although this does not always prevent these countries from feeling that their voices are marginalised in regional discussions.

PICs share a common history and identity and, through the Blue Pacific narrative — which was officially adopted at the 48th PIF Leaders Meeting in Apia in 2017 — they have expressed a desire to both strengthen their regional identity and to cooperate on issues of shared concern, especially those relating to the large tracts of Pacific Ocean over which they have maritime jurisdiction (PIF Secretariat, 2019a). Regional cooperation and integration is further guided by *The Framework for Pacific Regionalism* (PIF Secretariat, 2014b) and the 2050 Strategy for a Blue Pacific Continent (PIF, 2022). While the PIF generally seeks to speak to the rest of the world with a single voice based on the principle of consensus (i.e. the 'Pacific Way'), there are some important areas of divergence worth noting.

First, there are important instances of sub-regional integration, which arguably go deeper than the region-wide integration projects pursued through the PIF and other regional bodies. Most notably, the Melanesian Spearhead Group (MSG) has established a free trade agreement (FTA) which includes the economic heavyweights in the region, Fiji and PNG, as well as Solomon Islands, and Vanuatu. In addition to these four states, the MSG has a fifth member, the Kanak and Socialist National Liberation Front, a political party that represents the interests of New Caledonia's Melanesian population.

Second, there can often be significant tensions within the region. In February 2021, the five Micronesian PIF members submitted their notifications to withdraw from the PIF over a supposed breach of a 'gentlemen's agreement' that the next Forum Secretary-General would come from their sub-region (The Guardian, 2022). This slight opened deeper wounds, as northern SIS states feel they are marginalised in regional decision-making processes. While the intensity of feeling after the Secretary-General election was exacerbated by failures of diplomacy and communication, there are substantive reasons why these countries feel less connected to the region.

The Federated States of Micronesia (FSM), Palau, and Republic of the Marshall Islands (RMI) have a unique history compared to the rest of the region. Following World War II, the US was responsible for the administration of these territories. When they subsequently became independent states, they elected to enter into a Compact of Free Association, which established a close security and economic relationship with the US, including by bringing them under the American security umbrella and creating a right for their nationals to live and to work in the US. While this compact brings significant benefits to its Micronesian parties, it also acts as a barrier to greater integration with the rest of the region, including through the Pacific Agreement on Closer Economic Relations (PACER Plus) FTA.

The rift between Micronesia and the rest of the PIF was seemingly resolved through regional diplomacy under the Suva Agreement in 2022, which included some meaningful concessions for Micronesian states, but this did not prevent Kiribati from making the surprising decision to formally withdraw from the PIF (The Guardian, 2022). It chose not to attend the Leaders' Meeting in July 2022, and it remains unclear whether or how it will be reintegrated into the region.

Third, there is significant divergence in the region over diplomatic recognition for China and Taiwan. In 2019, Solomon Islands switched its recognition to China following 36 years of diplomatic recognition towards Taiwan. This was a highly controversial decision, which has been rejected by Malaita, the country's largest province and a lead player in the 'tensions' that ravaged the country during 1998–2003. This has led to ongoing diplomatic frictions, including when the governor of Malaita accepted Taiwanese aid for COVID-19 and publicly thanked the 'country' of Taiwan for support fighting the 'Wuhan virus' (Lowy, 2020).

The PIF remains split on the question of the diplomatic recognition of Taiwan. Taiwan is still recognised diplomatically by four SIS states; Kiribati has switched recognition multiple times and most recently switched back to China in 2019. This divergence within the membership makes it difficult for the region to engage with China in a unified manner and can also create diplomatic or even protocol issues regarding how the PIF manages relations with both China and Taiwan, especially when the annual leaders meeting is hosted by a member that does not diplomatically recognise China. In 2018, Nauru refused to let Chinese representatives enter the country with official passports; its president, Baron Waqa, later accused a Chinese official of trying to 'bully us' when he stormed out of a dialogue partners' meeting after not being given the floor (Guardian, 2018).

This split also makes it difficult for China to truly engage with PICs through regional diplomacy. While China has generally preferred to take a bilateral approach, in 2022 it started engaging in some regional diplomacy by proposing a 10-country 'regional' agreement covering trade, police cooperation, and disaster resilience (*ABC News*, 2022). Not surprisingly, this proposal was strongly opposed by those countries that recognise Taiwan, while others suggested that Chinese efforts at regional diplomacy should be channelled through the PIF. These efforts have so far been rebuffed, although there is scope for China to continue consultations with a view to achieving a meaningful outcome in future.

Fourth, there are some important divergences regarding how different PICs engage with the rest of the world. The Compact countries seek closer association with the US in contrast with the rest of the region, which is more deeply integrated with Australia and New Zealand, especially Cook Islands and Niue whose citizens have full residency and working rights in New Zealand.

Perhaps the most striking example of national divergence is PNG, as it is the only country in the region with a land border. PNG's border with Indonesia arguably brings benefits by integrating it into South-East Asia, including as a member of APEC. In fact, PNG took advantage of its hosting of APEC in 2018 to improve engagement between APEC and the PICs by inviting PIC leaders to meetings in the margins of APEC Summit. New Zealand had plans to integrate PICs further during its hosting of APEC in 2021, but this was thrown into turmoil when the country completely shut its borders as part of a long-term COVID-19 strategy.

PNG's border with Indonesia is also a major source of tension due to the Free Papua Movement, which is strongly supported throughout Melanesia and has, at times, been supported by the PIF, including as one of the five 'priorities for regional action' identified by PIF leaders in 2017 under *The Framework for Pacific Regionalism* (PIF Secretariat, 2014b). Indeed, tensions around the status of West Papua may explain why Indonesia is actively undertaking the 'Pacific Elevation' to increase engagement with the region, including through an Indonesian-sponsored Pacific trade show and new bilateral cooperation agreements with Cook Islands and Niue.

Despite these divergences, there are also some major examples of successful PIC collective diplomacy. On the world stage, the PICs have achieved some success by collectively projecting their voices on issues of key concern. The United Nations Convention on the Law of the Sea negotiations secured massive EEZs for the region; PICs also successfully pushed for the Treaty of Rarotonga, which turned the South Pacific into a nuclear weapons-free zone (United Nations, 1982; United Nations, 1985). Most recently, PICs have played a key role in international negotiations on climate change and the oceans (i.e. Sustainable Development Goal 14), including through Fiji's presidency of the 23rd annual Conference of the Parties to the 1992 United Nations Framework Convention on Climate Change meeting in 2017.

There have been some significant instances of successful regional security cooperation as well. The Regional Assistance Mission to Solomon Islands (RAMSI, discussed further below) involved active

contributions from all PICs, including through the mobilisation of military, police, and civilian personnel. Due to their small size, PICs have sought to create regional infrastructure, including through the establishment of a regional university, the University of the South Pacific, with a main campus in Suva and satellite campuses throughout the region.[12] PICs have further sought to integrate their economies through a variety of regional trading arrangements, discussed further below.

Some observations are worth noting about the nature of the PIF as a system compared to other regional integration projects around the world. As far as regional decision making is concerned, the PIF is ultimately based on diplomatic engagement — the strength of personal relationships and political declarations by leaders and ministers — rather than hard legal commitments in the form of treaties or other constraints on national sovereignty. There have been exceptions, however, where PICs have sought to formalise their integration through legally binding treaties.

In the Pacific, regional institutions exist to facilitate engagement between members or to offer technical assistance rather than to enforce commitments. To the extent that members make political commitments to each other, implementation occurs at the national level, and there are no hard mechanisms to enforce implementation, although diplomatic pressure or development assistance can be used to encourage it. Regional institutions can also be used to provide soft 'enforcement' mechanisms, such as peer review or scorecards regarding implementation.

The non-prescriptive nature of regional cooperation can be illustrated by the RAMSI. While this example of regional security cooperation was underpinned by the Biketawa Declaration, the fact that it finally occurred in 2003 as a highly resourced military, police, and civilian intervention was ultimately due to changing political winds, including the commitment of the prime ministers of Solomon Islands and Australia. The Biketawa Declaration was not a sufficient condition for the RAMSI — and it was arguably not even a necessary condition — although it did facilitate political and diplomatic negotiations for the creation of the mission, as PIF members already had a shared vision and language for thinking about regional security concerns (PIF Secretariat, 2014a).

PICs also use regional institutions as a rallying point for collective diplomacy, so they can coordinate regional positions and speak to the rest of the world with one voice. This type of collective diplomacy has been employed in United Nations Framework Convention on Climate Change negotiations by pooling scarce diplomatic resources at the PIF joint mission to the World Trade Organization in Geneva or by facilitating various meetings with dialogue partners.

3. How Do the Pacific Islands Fit into the Indo-Pacific Region?

For the PICs, reconceptualising their geography as part of an Indo-Pacific region is counterintuitive, especially when their integration within the traditional Asia-Pacific region has not yet been fully realised. While the PICs lie at the heart of the Asia-Pacific in a geographic sense, they are largely marginalised from integration efforts led by Pacific Rim countries. Air and sea connectivity to PICs remains poor, and integration into value chains is stymied by their small economies of scale and high transport costs.

PICs are not demandeurs for the idea of a geostrategic realignment around the idea of the Indo-Pacific, but they also realise that these moves are taking place with or without their active engagement. For them, the current geostrategic changes bring both opportunities and risks.

[12] University of the South Pacific, https://www.usp.ac.fj/

Opportunities are arising because of growing interest from countries looking to engage with PICs, which has further sparked increased attention from traditional partners such as Australia, New Zealand, and the US. While most of the attention has focussed on China's growing interest in the region, PICs have also increased their engagement with APEC, especially under PNG's hosting in 2018, and with South-East Asia through the *ASEAN Outlook on the Indo-Pacific* (ASEAN, 2019).

The 'Indo' portion of the Indo-Pacific also has the potential to bring opportunities, even if geography places limits on the degree of integration. PICs have already forged strategic partnerships with small island states in the Indian Ocean to jointly advocate their interests, on issues like climate change and the oceans, in multilateral forums. Further, the region has some important historical and cultural links to India, most notably in Fiji where a large share of the population has roots in South Asia due to controversial indentured labour programmes dating back to the colonial era. India is actively seeking to cooperate further with PICs, including through its Indo-Pacific Oceans Initiative.

However, the heightened attention to PICs also creates risks for the region. Most notably, geopolitical developments may pressure PICs to abandon their 'friends to all approach' to choose sides in a battle between great powers.

4. Growing Interest in and Attention on Pacific Islands

In some respects, PICs are beneficiaries of the increased geostrategic competition in the Indo-Pacific region. For many years, the Pacific received little attention from Northern Hemisphere powers, while Australia and New Zealand were the only developed countries courting deep relationships consisting of trade, investment, movement of people, and establishment of diplomatic ties and large-scale aid programmes.

After being largely neglected by the most of the world, PICs are enjoying a moment where they are increasingly being courted by both the US and China. China has had a few wins in its battle with Taiwan for diplomatic recognition from countries in the region. Since the Solomon Islands and Kiribati switched to China in 2019, Taiwan is now only recognised diplomatically by four of the smaller countries in the region, although it continues to maintain representation and influence in countries that do not formally recognise it.

China has also been on a 'charm offensive', as typified by the recent tour of the region by Foreign Minister Wang. China has also entered into a range of bilateral agreements, which will increase its influence in the region. It also sought to change its diplomatic approach to engage with PICs through regional efforts aimed at complementing its bilateral diplomacy. While it has had some success upgrading its bilateral relationships — most notably its high-profile security and economic agreement with Solomon Islands — its call for a regional partnership with the Pacific was ultimately not successful. It is hard to assess how significant these new agreements will be in practice, as little detail has been provided publicly, but they are still symbolically important.

While the US established much goodwill during its Pacific campaign in World War II, it has largely been absent from Melanesia and Polynesia in recent decades, although it maintains close relations with the Compact states. The US has seemingly been content to let Australia and New Zealand carry the banner for the liberal international order in the Pacific region, but this has changed recently due to China's intense engagement.

In February 2022, Antony Blinken marked the first visit to Fiji by a US Secretary of State in 36 years. There, he announced the reopening of a US embassy in Solomon Islands (RNZ News, 2022). This was backed up a few months later when US Vice-President Kamala Harris, speaking via videoconference

to the PIFS Leaders' Meeting, announced that the US would be opening new embassies in Tonga and Kiribati and a new United States Agency for International Development (USAID) regional office in Suva. She further announced a $500 million assistance package for fisheries sustainability in the Pacific, the creation of a new US envoy post dedicated to the PIF, and the drafting of a national strategy on the Pacific Islands (ABC News, 2022c). While this reengagement by the US has created some goodwill, it does not directly respond to some long-standing irritants for PICs, including the US's failure to ratify the protocols to the Treaty of Rarotonga or to fully address the legacy of its nuclear testing programme in RMI.

Of course, increased interest by powerful countries does not necessarily translate into increased benefits for PICs. There are concerns that PICs lack the resources to effectively manage all of these relationships or to assess the risks that accompany these new opportunities, especially considering the limited capacities of their understaffed bureaucracies. This has played out most notably in debates around Chinese 'debt trap diplomacy'.

According to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), several countries in the region are at high risk of debt distress, including Kiribati, PNG, Tonga, and Tuvalu (ABC News, 2022b). The Asian Development Bank (ADB) is the major creditor in the region; however, amongst bilateral lenders, China has a huge footprint. In the case of Tonga, China holds over half of its debt, which is a troubling situation at a time when many of these countries are suffering from recessions, inflation, and a need for increased government spending to fight COVID-19 and climate change (ABC News, 2022b).

While PICs have become increasingly attracted to Chinese concessional loans because there are no strings attached — at least none related to governance — there are fears in some quarters that some of these infrastructure projects offer poor value-for-money or that they may even serve dual-use purposes (i.e. for the Chinese military).

PIC leaders insist that they have the diplomatic wherewithal to leverage the increased competition in the region to the advantage of their countries. They reject as condescending and arrogant the suggestion that they are poorly placed to play off China and the US, not to mention Australia and New Zealand. Indeed, there are signs that PICs are becoming increasingly selective about their use of Chinese loans to avoid debt traps. In Samoa, a country highly indebted to China, newly elected Prime Minister Fiamē Naomi Mata'afa followed through on her mandate by cancelling a Chinese-backed port project soon after her election on the basis that it did not offer sufficient value for the money.

In reality, the key question may not be whether PICs benefit from the increased attention coming from non-traditional partners but rather which actors within PICs extract the benefit. There are growing fears of China's diplomatic and aid resources being used for 'elite capture' in ways that ultimately undermine governance and democracy in the region. While the precise contents of China's security agreement with Solomon Islands has not been made public (although there have been leaked drafts), there are fears regarding its use by the Government of Solomon Islands to quell civilian unrest or even to prop up a government that does not have democratic support.

Indeed, on the question of relations with China, there seems to be a disconnect between the views of PIC governments and those of their people. Despite the lure of economic benefits that China can offer, there is often popular resistance to Chinese investment in the region, such as the Freesoul resort development on Malolo Island in Fiji, which attracted significant media attention and a High Court challenge due to illegal works leading to significant environmental damage (Fiji Village, 2022). Opposition politicians seem to see increased value in distancing themselves from China as well. After

the successful use of this strategy by Prime Minister Mata'afa during the 2021 Samoan election campaign, Fijian opposition leaders have adopted a similar line in 2022.

That said, PICs leaders can argue that their 'friends to all approach' has been successful at sparking renewed interest from traditional partners. The change of government in Australia in 2022 also bodes well for Australia–Pacific relations. Australia's monumental shift on climate change will improve its relations in the region, following the Leaders' Meeting in 2019 when Australia Prime Minister Scott Morrison was acrimoniously criticised by the rest of the region for his continued support of the coal industry. Indeed, within days of winning the election, Australia's newly appointed Foreign Minister Penny Wong visited Fiji as a top priority, partly to pre-empt any surprise announcements from China Foreign Minister Wang's visit through the region.

5. Risks: Picking Sides

It may become increasingly difficult for PICs to thread the needle with their 'friends to all approach'. Indeed, PICs are not alone in fearing that global politics may be moving in the direction of a new Cold War between the US and China, in which other countries are forced to pick sides. This would be far more serious for PICs than the original Cold War where they were far from the main military flashpoints and their alignment with the Western camp did not really isolate them from other potentially important partners.

Under a new Cold War scenario, PICs would face a serious dilemma. They have strong historical, economic, and cultural links with Western countries, especially Australia and New Zealand. They are major beneficiaries of the rules-based international order, especially since it guarantees their security and maritime jurisdiction, which is a major source of resources and revenue for most countries in the region. They also enjoy deep people-to-people links grounded in sports, education, tourism, and religion with the West.

At the same time, PICs rightly see significant benefits from their growing engagement with non-traditional partners. China has become an important trade partner, source of investment, and provider of development assistance. Chinese firms, including state-owned enterprises, are playing an increasingly important role in large construction projects throughout the region. While the people-to-people links with China are generally weaker, some countries in the region are home to a relatively large Chinese diaspora, which is a driver of economic development but also of ethnic tensions, as is the case in Solomon Islands.

The Pacific's 'friends to all approach' was on full display in May 2022 when Fiji warmly hosted China Foreign Minister Wang on his eight-nation tour of the region and entered into a number of bilateral agreements to grow their partnership — before becoming the first PIC to declare its participation in US President Joseph Biden's *Indo-Pacific Economic Framework for Prosperity* (The White House, 2022). There are immense benefits to be had if PICs can successfully maintain warm relations with all partners, but it is largely out of their hands whether this balancing act is sustainable or whether the world is heading for another Cold War.

6. Trade and Aid

Economic integration, including through formal FTAs, has historically focussed on integration amongst PICs, such as the *Pacific Island Countries Trade Agreement* (PICTA) (PIF, 2003). Despite strong ambitions to integrate economically as a region, the PICTA suffers from some important weaknesses, including non-ratification and non-implementation by a number of parties and the fact that trade flows amongst these countries are actually quite low.

Australia and New Zealand are also considered a key fixture in the regional architecture, dating back to the founding of the South Pacific Forum (as the PIF was originally known). They are the driving force behind the PACER Plus, a reciprocal FTA that seeks to attract region-wide buy-in.[13] While the PACER Plus has been ratified by a significant number of Pacific states, it has failed to attract support from the two leading economies in the region — Fiji and PNG — and the Compact states have legal constraints preventing them from engaging in deeper integration with the rest of the region.

The PACER Plus seeks to improve integration amongst PICs in addition to better connecting them to the Australian and New Zealand markets. It is likely to have a better record of implementation than the PICTA due to the establishment of a well-resourced implementation unit, based in Samoa, as well as a dedicated aid-for-trade programme to support domestic reforms. Part of the attraction of the PACER Plus is that it includes creative new labour mobility schemes that offer Pacific Islanders a chance to work in Australia and New Zealand where they can earn higher salaries, save money, and develop new skills.

These schemes originally targeted unskilled seasonal workers to undertake short-term contracts (i.e. less than 1 year), helping fill labour shortages on farms. Australia and New Zealand have since piloted and implemented newer programmes that allow semi-skilled workers to relocate, including with their families, for the purpose of long-term contracts (i.e. up to 4 years). Australia is also looking to replicate a successful model from New Zealand that will create dedicated pathways towards permanent residency for Pacific Islanders as well.

These labour mobility programmes have become a key pillar of economic development for a number of PICs. In Samoa, the programme is managed directly by the Prime Minister's office, while the Government of Solomon Islands has declared the goal of having 10,000 labour mobility workers by 2025 (Solomon Times, 2022).

These programmes have also proven to be highly resilient. During the COVID-19 lockdowns that saw Australia and New Zealand essentially close their borders to non-citizens, the governments showed political will to make exceptions for Pacific Island workers. Australia and New Zealand made special arrangements for in-country workers, some of whom were virtually locked out of their home countries due to de facto bans on inward travel to remain COVID-19-free pending widespread vaccination. The Government of Australia also introduced dedicated quarantine programmes to allow cohorts of new workers to arrive, even at a time when many overseas Australians were complaining about the difficulties of returning home due to the limited quotas in quarantine hotels.

Labour mobility was intended to serve as an incentive to attract Fiji and PNG to join the PACER Plus, but Australia and New Zealand have seemingly decided to delink these issues. Even without being signatories to the PACER Plus, Fiji and PNG have access to these schemes, and they are increasingly taking advantage of them. However, the exclusion of the two largest PIC economies from the PACER Plus does undermine its true potential as a driver of regional integration.

[13] PACER Plus Implementation Unit. https://pacerplus.org/

There are other important drivers of economic integration in the region apart from FTAs. The PIF has institutionalised annual meetings of trade ministers to address high-priority issues such as the World Trade Organization's fisheries subsidies negotiations and the economic implications of COVID-19. At this meeting in 2020, minsters adopted a regional aid-for-trade strategy that encourages a regional approach on e-commerce, trade facilitation, connectivity, and services trade (PIF Secretariat, 2020). The PIF Secretariat has also launched the ambitious Pacific Quality Infrastructure initiative to improve product standards in the region as well as the Pacific Regional Infrastructure Facility (PRIF) to facilitate donor coordination on infrastructure projects.[14] It is also pooling resources on trade promotion in key markets through the network of Pacific Trade Invest offices.

In addition to Australia and New Zealand, PIC exporters target other developed country markets, including those of the EU, US, and Japan. While PICs have benefitted from unilateral preferences into these markets, under Generalised System of Preference programmes for all developing countries or dedicated duty-free quota-free (DFQF) programmes for least-developed countries, attempts to formalise trading arrangements through reciprocal FTAs have produced more fragmentation than integration.

The EU sought to enter into a region-wide economic partnership agreement with the Pacific group of states (including Timor-Leste), but negotiations ultimately broke down, leading it to sign an interim agreement with Fiji and PNG who feared losing market access for priority products, including sugar and fish. The interim agreement has some appeal to those PICs who are graduating from least-developed country status and are thus scheduled to lose their DFQF access to the EU market under the Everything but Arms regime. However, it is unlikely to develop into a truly regional agreement in the near future.

Samoa and Solomon Islands have acceded to this interim economic partnership agreement, and other PICs have expressed interest, an outcome that risks creating further economic fragmentation in the region. However, trade with the EU remains so small that it has little scope to produce economic distortions, especially when most Pacific exports are primary products rather than processed products requiring sophisticated value chains across different countries. Since leaving the EU, the United Kingdom has also been engaged in a 'Pacific Uplift' campaign to raise its engagement with Commonwealth countries in the Pacific, including by opening new embassies in Samoa, Tonga, and Vanuatu.

While Australia, New Zealand, and the EU have sought deeper institutionalised trading arrangements with PICs, this does not necessarily mean that trade flows are growing with these countries. If integration is assessed based on trade flows rather than negotiated agreements between governments, China is clearly becoming an important partner. Trade between China and PICs has exploded since 2000, during a period where trade with Australia has largely stagnated even if it remains significant in absolute terms. The main driver of this trend is an increase of Chinese imports into the region, often at the expense of Australian imports, although exports from PICs to China have also grown.

That said, goods trade is becoming less important as an indicator of trade integration. There are many aspects of a healthy trade relationship that do not show up in trade statistics. In the case of Australia and New Zealand, labour mobility is a huge driver of remittances and economic development — even if it is hard to measure the precise benefits of such programmes.

[14] PIF Secretariat, Pacific Quality Infrastructure, https://www.forumsec.org/pacific-quality-infrastructure-pqi/; and Pacific Region Infrastructure Facility, https://www.theprif.org/

Tourism from these countries is also critical to the region. In Fiji, where tourism is one of the main export activities, the government made the painful decision to ban all inward travel in March 2020 to prevent the spread of COVID-19. By June 2020, well before vaccines had become available, it launched negotiations to create special travel corridors exclusively for Australian and New Zealand tourists because of their importance to the Fijian economy, even while remaining closed to the rest of the world. This exercise proved unsuccessful, and Fiji ultimately managed to reopen its borders to the world in late 2021 following a severe Delta outbreak and a widespread vaccination programme.

Despite PICs' diversification of goods trade in recent years, Australia and New Zealand continue to be key partners. In addition to strong trade ties, these countries can offer a level of deeper integration that is not truly available to other economic partners in Asia. Much of this comparative advantage relates to people-to-people links due to large PIC diasporas and the fact that Australia and New Zealand remain the partners of choice for Pacific Islanders seeking to study or work overseas. Other partners are making more scholarships available to Pacific Islanders, including Japan and China, but language and cultural barriers ensure that numbers remain relatively low.

7. Priorities and the Enhanced Concept of Security

There have also been some important examples of security cooperation in the region. The Biketawa Declaration, adopted by PIF leaders in 2000, addresses regional security as part of a broader context that also encompasses governance issues such as respect for democratic norms (PIF Secretariat, 2014b). The most noteworthy example of successful security cooperation was the RAMSI, which was predicated on the Biketawa Declaration and an explicit request by the Government of Solomon Islands for support.

PICs have generally been major beneficiaries of the peace dividend flowing from the liberal international order. Most PICs do not have a standing army, and those PICs that do are generally more concerned with disaster response or peacekeeping missions in the Middle East and Africa than with the prospect of any form of conventional warfare in their own region.

At the 2018 Leaders' Meeting in Nauru, PIF members collectively agreed to redefine their approach to regional security and negotiated the Boe Declaration (PIF, 2018). It was complemented 1 year later by an action plan agreed at the Leaders' Meeting in Tuvalu (PIF, 2019b). This regional approach is based on an 'expanded concept of security', which identifies climate change as 'the single greatest threat to the livelihoods, security and well-being of the peoples of the Pacific'. It further addresses human security and humanitarian assistance as well as environmental and resource security.

The Boe Declaration does recognise a number of security concerns in the narrower sense, such as transnational crime and cybersecurity, but traditional security concerns are not at the top of the regional agenda. Moreover, the Boe action plan fails to include international norms of non-aggression or respect for territorial integrity and maritime jurisdiction amongst its list of six priority security issues.

This appears a lost opportunity following the war in Ukraine and increasing signs of militarisation in the Taiwan Strait. The Boe Declaration formally supports the rules-based system in its preamble, but perhaps PICs took it for granted that respect for territorial integrity is an inviolable feature of the international system and that it would be a waste of their diplomatic voice to explicitly address these types of systemic issues as part of their priority security concerns. This reflects a deeper concern amongst PICs that an increased focus on traditional security threats may detract attention from their own priorities of climate change, development, and human security in the broader sense.

Arguably, the region should take conventional military threats more seriously. In 2017, 1 year before the Boe Declaration was negotiated, the PIF Foreign Ministers' Communiqué expressed concerns over North Korean threats to strike Guam with a missile (PIF, 2017). The region is home to US military bases, and it could become a frontline if tensions between the US and China escalate into open warfare.

Further, there are persistent but unconfirmed news reports of China negotiating with different countries in the region, including Vanuatu and Solomon Islands, to establish a military base. While this would represent a tectonic shift in the balance of military power in the region — and require all countries in the region to reassess their own security postures — there are currently no regional mechanisms that would act as a hard constraint against such an action. The decision to host military bases remains a sovereign choice for each individual government and is not limited by any legal or procedural constraints in regional agreements. While PICs are generally loathe to accept any constraints on their sovereign decision-making power, this seems like the type of issue where a regional agreement based on hard commitments — rather than mere exhortatory declarations — could produce significant positive externalities for all countries.

8. Pacific Values

Due to their physical proximity to Australia and New Zealand, as well as strong historical linkages, PICs share common values with the West. Most countries have parliamentary democracies, modelled on approaches from the United Kingdom or US, and embrace other liberal values such as freedom of speech. It was the protection of these values that was explicitly pursued in the Biketawa Declaration, one of the region's earliest expressions of solidarity on security issues and political governance.

PICs are also major beneficiaries of the rules-based international system that enables them to trust that their territorial integrity will be respected, even in the absence of any meaningful military capacity, and that accords them jurisdiction over massive EEZs.

However, these Western values do not sit seamlessly alongside traditional structures such as the influence of village chiefs, which means that officials can sometimes face uncomfortable quandaries when their obligation to uphold the rule of law or to pursue the national interest conflicts with traditional obligations to their communities. These traditional values can also hamper the adoption of certain liberal ideas that are now considered mainstream in the West, such as gender equality or LGBTQIA rights.

This tension within PICs can lead to the fragility of certain seemingly deep-rooted institutions. Samoa recently experienced a constitutional crisis due to the unwillingness of outgoing Prime Minister Tuila'epa Sa'ilele Malielegaoi to accept the transition of power to the new government led by Fiamē Naomi Mata'afa. This may be partly due to the US's own crisis of democracy following its 2020 election, but there is little doubt that China's model is admired by certain leaders in the region with autocratic inclinations.

During Foreign Minister Wang's May 2022 tour of the Pacific, there was extensive reporting of how easily PIC governments accepted China's calls to restrict media access to events or to tolerate heavy-handed tactics by Chinese security officials towards journalists. Even if PICs nominally support press freedom and permit it within their own societies, the willingness of their governments to make compromises to prevent diplomatic frictions with China is alarming. Indeed, in the months following the visit, several countries passed new laws that seem to reduce media independence, including the Government of Solomon Islands's decision to take ownership of the national broadcaster and to outlaw reporting critical of the government.

Finally, it is worth noting that for PICs, decision making at the regional level relies heavily on consensus, while discussions with the rest of the world generally only produce meaningful outcomes if they are based on deep engagement. Australia and New Zealand arguably upset others in the region when they shifted their posture towards an Indo-Pacific strategy without undertaking meaningful dialogue with PICs beforehand. This situation has since been partly rectified through deeper discussions about increased geopolitical tensions in the region and the potential consequences for PICs.

Indeed, China's first foray into regional diplomacy was largely a failure, perhaps because it underestimated the importance of meaningful dialogue rather than merely presenting a *fait accompli*. While China has had some success entering into bilateral deals on short notice and with little scrutiny — its security and economic deal with Solomon Islands even blindsided Australia's diplomats — it will soon learn that regional diplomacy progresses slowly, requiring patience and sustained engagement. PIC leaders may find that they have a stronger negotiating position when dealing with China together as a region, but it remains to be seen if China has the patience to continue engaging at a regional level — even if it raises the costs of diplomatic engagement while slowing down the realisation of substantive outcomes.

9. Conclusion

The reimagining of geopolitics in terms of the Indo-Pacific region represents a significant development for PICs. While there is some scope for them to increase their engagement with the 'Indo' part of the new region, the reality is that their security and economic interests primarily lie in the Pacific theatre. On the economic front, the increased attention and resources coming to PICs have the scope to make a meaningful contribution to development, provided that those resources target critical human and societal needs instead of being captured by elites.

PICs are right to prioritise climate change and development as their most pressing needs, but they should also recognise that the rules-based system, which is increasingly coming under threat, is foundational to the achievement of their priorities as well as to the maintenance of peace and security in their region and the world. PICs have scope to influence economic and strategic decisions by those major powers who are increasingly interested in the Pacific. This influence, however, may be undermined by insufficient political will and regional unity, especially as the PICs seek to sidestep politically difficult questions to maintain an increasingly fragile 'friends to all approach'.

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Chapter 5

The Indo-Pacific Partnership and Digital Trade Rule Setting: Policy Frameworks

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The Indo-Pacific Partnership and Digital Trade Rule Setting: Policy Frameworks

Lurong Chen

1. Introduction

The Indo-Pacific entered the arena of international relations as a concept of geopolitics and security – but not a proper geographic one. The term has been widely used in the Quadrilateral Security Dialogue (Quad), in which leaders from Australia, Japan, India, and the United States (US) meet periodically to exchange views on contemporary global or regional issues. Its roots can be traced back to 2004, when the four countries worked together to respond to the 2004 Indian Ocean earthquake and tsunami. Japanese Prime Minister Shinzō Abe's proposal of Asia's Democratic Security Diamond in 2012 and US President Donald Trump's commitment to the Free and Open Indo-Pacific in 2017 helped revive the Quad; since 2019, Quad leaders have met frequently. The term 'Indo-Pacific' is now signalling new trends of US foreign policy in Asia that will have deep implications for regional security, economy, and diplomacy.[15]

Since 2020, Quad members have begun to invite non-Quad countries to join in their dialogues; thus, the influence of the 'Indo-Pacific' has increased steadily with this expansion. In 2022, when the US officially launched the *Indo-Pacific Economic Framework for Prosperity* (IPEF), in addition to Australia, Japan, and India, nine non-Quad countries (i.e., Brunei Darussalam, Indonesia, Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and Viet Nam) also participated the Quad summit, showing their willingness to discuss a formal Indo-Pacific Partnership (IPP).

The launch of the IPEF demonstratews how an IPP will deliver real results to members by supplementing economic content with the original concept of the Indo-Pacific (Brownstein, 2022). IPEF partners plan to discuss future negotiations on four pillars: trade; supply chains; clean energy, decarbonisation, and infrastructure; and taxes and anti-corruption (The White House, 2022). Through these discussions, the IPP shows its inherent relationship to the Trans-Pacific Partnership (TPP), the geo-economic component of US President Barack Obama's 'Pivot to East Asia' regional strategy. Indeed, except India, all IPEF participants seemed to favour the TPP – nine are TPP founding members. The others – Indonesia, the Philippines, and Thailand – expressed interest in joining the TPP soon after the negotiations were concluded. Both the TPP and IPP aim to help set the rules for the 21st century.

The final text of the TPP listed sectors that were not addressed in the multilateral trade negotiations but should be covered by new rules and regulations, such as regulatory and competition issues, protection of investments, and standards for environmental protection and workers' rights (Chen et al., 2018). The IPP will probably inherit most of the issues covered by the TPP, refining targets by taking into account new trends of technology and global economic development.

[15] Medcalf (2020) saw the wide adoption of this concept as a signal of 'a significant change'.

The IPP was born from a global trend that has (re)oriented the centre of the world's economic gravity to the East.[16] The Quad and IPEF represent these geo-political and geo-economic components; behind the scenes is the rapidly expanding international production-sharing network and digital transformation that fuels Asia's rise and fosters the global shift. Indeed, the IPEF emphasises this global trend and states that '[i]n the long term, economic competitiveness will be largely defined by [the] ability to harness technology, promote innovation, [and] participate in the digital economy' (The White House, 2022). Specifically, negotiations on the trade pillar will 'seek to build high-standard, inclusive, free, and fair trade commitments and develop new and creative approaches in trade and technology policy', and IPEF partners will seek to cooperate in the digital economy (The White House, 2022).

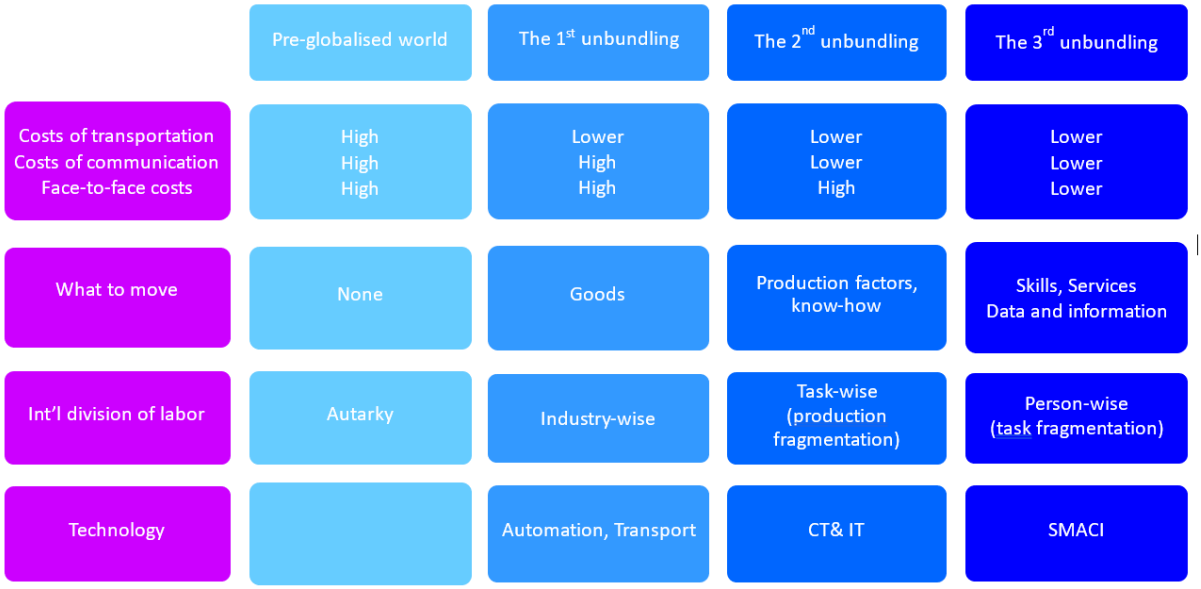
This chapter demonstrates how the IPEF should promote the setting of international rules on digital trade. It is organised as follows. Section 2 illustrates the importance of digital trade in 21st century global value chains (GVCs). Section 3 explains why the development of digital trade needs a rules-based trading system. Section 4 discusses policy with an emphasis on four areas that the IPEF should prioritise. Section 5 concludes.

2. Evolving Global Value Chains: Digitalisation and Servicification

Digitalisation is key to 21st century GVCs. The figure 5.1 below places technological progress and economic globalisation into the same box and shows how this spurred international trade and nurtured its development. One way that technological progress affects the international economy is via reduced trade costs, including those of transport, communication, and people-to-people connections. Throughout the process, one can see technological progress works to reduce costs and pushes economic specialisation. With the deeper unbundlings of globalisation comes the continuous effort of new technologies on finer international divisions of labour. This evolutionary process has been classified into three main episodes of unbundling: (i) the separation between production and consumption, (ii) international fragmentation of production, and (iii) further fragmentation within the tasks of production (Baldwin, 2016; Kimura and Chen, 2018; Chen, 2021)

[16] This pivot seems to indicate China, yet the rapidly expanding international production-sharing network fuels rising Asia and fosters the global shift (Chen, 2017).

Figure 5.1: Technological Progress in Global Value Chain Evolution



CT = communications technology, IT = information technology, SMACI = social media, mobile phone, artificial intelligence, cloud computing, and Internet of Things.
Sources: Baldwin (2016), Kimura (2018), Kimura and Chen (2018).

During the pre-globalisation era – when the cost of transport, communications, and people-to-people connections were all very high – production activities and consumption had to be geographically close to each other, simply because it was too costly to do business remotely. However, new technologies – especially steamships and railways – reduced the time and costs of long-distance transport. This created the first unbundling of globalisation, as production and consumption activities were separated. Consequently, technological progress managed to promote industry-wise division of labour and made mass production and economy of scale feasible. As production and consumption could locate in difference countries and be linked via international trade, countries started to trade more with each other. Yet at this stage, international trade was dominated by trade in goods, and the main content was final goods or raw materials.

The 20th century Information Revolution further drove down trade costs, by reducing transport costs as well as communication costs. A new way of organising international economic activities emerged, as it was not necessary for production to be an integrated process, and the market saw it as beneficial to fragment production internationally. Economically, this second unbundling lowered the threshold to join the international division of labour, allowing more firms – especially small and medium-sized enterprises (SMEs) – to join global production sharing.

For developing countries, such GVC participation provided new thoughts on development. The idea of trade and investment liberalisation became widely accepted, as the way to facilitate a country's involvement in GVCs was to pursue economic prosperity. To meet the needs for coordinating GVCs, service links – especially those of business and financial services – were making great strides forward as well. As a result, the global economy became further interconnected via GVCs. There was more to trade, and countries traded more. Today, this is evident in the growth of worldwide maritime trade, of which the transport volume has increased by nearly two times in the past 3 decades, from 4 billion tonnes loaded in 1990 to over 11 billion tonnes loaded in 2019 (UNCTAD, 2021).

The 21st century began a new chapter of economic globalisation – the third unbundling. As Bill Gates predicted 3 decades ago, 'The major changes [have been] in the way people communicated with each other' (Gates, 1995). The application of digital technologies have reduced the cost of people-to-people connections, particularly via enhancing connectivity in cyberspace. It is not that much different to communicate and to exchange ideas with people thousands of miles away than with those next door. Digitalisation and the internet of things (IoT) has extended the boundaries of international fragmentation of production and further unlocked the potential of GVCs.

Indeed, digitisation blurs boundaries between the different links of value chains and increases the information transparency to all participants. In addition to international fragmentation of production, firms can benefit from the low cost of people-to-people connections and further fragment tasks internationally. Moreover, the application of digital technologies and related business models into the services sector makes services more innovative and productive. Digital-empowering services links – either digitally enabled or digitally created – can improve the capacity of GVC coordination and motivate network extension, helping drive GVCs toward an ecosystem that is better connected, smarter, and more efficient.

Finally, the economic consequence of digitalisation can only be underestimated, as embracing digital technologies into businesses unquestionably creates new products, services, and markets. More and more, digital technologies will be combined with new materials and energies to create new market opportunities for development.

3. A Rules-based Playing Field for Digital Trade

The rapid growth of digital trade and its rising importance in the world economy have urged international common rules to level the playing field. These should consist of content covered by the current World Trade Organization (WTO) rule sets as well as topics that are WTO-plus or WTO-extra (Chen and Kimura, 2019). The former are topics that call for the extension of member *déjà fait* commitments at the multilateral level, while the latter are new issues that have not been yet covered by WTO. Both can undermine the long-term development of the digital economy; no rules or too-loose regulations may lead to market disorder, while too-restrictive policies may erect barriers to market access in digital trade.

The US defines digital trade as the trade of products and services over the internet, including transactions via e-commerce platforms and related services (USITC, 2017). The European Commission defines digital trade as commerce enabled by electronic means – by telecommunications and/or information and communications technology (ICT) services – and covers trade in both goods and services (European Commission, 2020). WTO has not yet given a clear definition for digital trade, but based on its definition of e-commerce, digital trade could refer to international production, distribution, marketing, sale, or delivery of goods and services by electronic means. The Organisation for Economic Co-operation and Development (OECD) defines digital trade 'digitally-enabled transactions of trade in goods and services that can either be digitally or physically delivered' (OECD, 2020). From these definitions, three agreed understandings on digital trade emerge. First, digital trade involves both trade in goods and trade in services.

In addition to its effect on enabling online trade and facilitating transactions, digitalisation has introduced new services activities and turned more non-tradable sectors to tradable sectors. As

Nakatomi (2022) pointed out, digital solutions expand the territory of services in economic activities. For instance, before the launch of Apple's iTunes, music lovers could buy physical albums from foreign suppliers, receiving the CDs from abroad. Later, via the iTunes platform, they could also choose to purchase the music online.

Moreover, digital solutions have brought about new sources of value added to businesses. In particular, digitalisation has sharpened the edge of competitiveness of data-driven business models such as servicification, with which the delivery of end-products is no longer the end of sale but merely a milestone that is followed by more producer–consumer interactions, including consumer feedback to the producer and a producer's customised service to the consumer. An often-cited story about the advance of servicification is that of Rolls Royce, which rents or sells its engines to aircraft manufacturers, receives data from the engine use, and then collects fees and provides technical support based on these data. Digitalisation has lowered the threshold – both technically and economically – for businesses to adopt servicification.

Second, digital trade includes the trade of final products as well as that of intermediate goods and services, which can be either the output of sub-stage activities or services links that facilitate the fragmented pattern of production. Progress in ICT has facilitated people's communications, and it will keep doing so. In international trade, the use of telecommunications tools, such as telephones, fax, and e-mail, led to the new pattern of the international division of labour by lowering the cost of services links to enable and to sustain international fragmentation of production (Jones and Kierzkowski, 1990). This contributed to the birth of GVCs and today fuels their rapid growth. New digitally enabled means of communications, such as social media, instant messaging, and videotelephony, are currently helping extend the coverage of GVCs and enrich their content. With this understanding, rules on digital trade should aim to govern the entire GVC, including trade of intermediate products and those service activities that are woven throughout the production network.

Third, cross-border data flows are vital to digital trade. These can facilitate other trade flows – from those of goods and services to those of international factor mobility – and turn some of these flows into other forms of international trade once new technology is ready. For instance, videotelephony has supported online meetings during the COVID-19 pandemic when social distancing and travelling restrictions were necessary. In the future, with the advance of related technology such as holographic displays, virtual events in cyberspace may further aid human mobility. Another example is the development and use of 3D printing technology. With the popularity of 3D printers and availability of materials, it is possible that when a buyer in a country purchases a machine from another country, he/she will receive not a tangible object but a blueprint and code from a seller that can instruct another 3D printer, which the buyer can own or rent, to print out the machine ordered.

Setting international rules on digital trade should consider these common understandings and include provisions to deal with both tariff and non-tariff measures (NTMs). NTMs concerning traditional trade-related measures, such as customs procedures and licensing, can extend to digital trade and lead to a discretionary pattern favouring certain local players (Wu, 2017). Since digital trade involves transactions of tangible products, legal disciplines and obligations established in the 1994 *General Agreement on Tariffs and Trade* (GATT) are relevant to prohibit customs duties and discrimination against trade in goods. The WTO *Information Technology Agreement* further expanded tariff exemptions to trade in technology products. (WTO, 1997) However, tariff barriers may still be imposed on products that are not covered by the GATT or *International Technology Agreement*.

NTMs can affect digital trade, especially that of services. They are often laws or red tape that hamper free trade or discriminate against foreign suppliers in market access, such as discriminatory regulations or local content rules (Fefer, Akhtar, and Morrison, 2019). Rules and commitments of trade in services are thus increasingly important in digital trade. The *General Agreement on Trade in Services* (GATS) has the most significance to digital trade amongst the existing WTO rule sets (Wu, 2017; Nakatomi 2019). However, when GATS was written in 1995, many products and services did not exist. Because it has remained unchanged for almost 3 decades and ICT has quickly progressed during this period, there are ambiguities and deficiencies in GATS provisions that touch on digital trade. Nakatomi (2019) summarised eight limitations of GATS: insufficient commitments, a positive list, obsolete classification, most-favoured nation exemptions, lack of clarity on general exceptions and security exceptions, lack of adaptation to technological changes, stalemate in progressive liberalisation and additional commitments, and undeveloped rules on domestic regulations.

The internet was developed to be borderless; rules and regulations on digital trade should thus work on preventing cyberspace from fragmentation with barriers. The goals of rules setting are to increase trust, ensure security, and facilitate doing business online. Since the GVCs behind digital trade cover both the physical world and cyberspace, rules, regulations, and legislation must exist in both spaces of the market (Chen, 2019; Chen and Kimura, 2019).

Non-discrimination between local and foreign suppliers should also be a core principle in digital trade rules. The principle of national treatment requires equal treatment of foreign and local supplies; that is, once foreign goods, services, or intellectual property enter domestic markets, they should be treated the same as those supplied locally. Rules on digital trade must therefore include explicit provision for non-discrimination and national treatment.

A similar principle should also apply to cross-border data flows as well as payments, investments, or labour movements related to IoT. Market access restrictions on international services and factor mobility – whether specific to digital trade or the ICT sector – are burdensome for foreign competitors to enter the market. When setting new laws or regulations, governments need to clarify their objectives, content, and scope to avoid possible discriminatory treatment of digitally traded goods and services and those traded offline.

As for tariff barriers, both non-duty practices on electronic transmissions and those of *de minimis* on cross-border e-commerce should be promoted. Many countries realise that unilateral tariff impositions on electronic transmissions can distort the market and discourage the development of the digital economy. This can be cost-prohibitive, technologically unfeasible, and incompatible with free trade under the WTO most-favoured national principle. With the 1998 WTO Ministerial Declaration on Global Electronic Commerce and the 1999 moratorium, member states promised to not impose customs duties on electronic transmissions. (WTO, 1998; ICC, 2019) Formalising this duty-free practice can help countries tap huge benefits from digital trade.

Pulling up the amount of *de minimis* can accelerate the growth of digital trade as well. Driven by the growth of international business-to-consumer activities, there are more low-value parcels in cross-border e-commerce. Exempting these low-value parcels from tariffs and other taxes can help cross-border e-commerce transactions expand. This can benefit individuals and SMEs (Hufbauer and Wong, 2011). Binding one-sided international standards would be helpful, as members would be required to set a floor of the maximum amount of *de minimis* but free to choose a higher amount under the non-

discrimination principle.[17] Given countries' various development stages and income levels, the required amount can be price-indexed to one or several development indicators.

The acceptance of electronic authentication and digital signatures makes businesses quicker and more efficient. Underlying models, algorithms, and solutions can, however, be different from country to country. A globally accepted technical standard/guidance would ensure interoperability across systems, enhance the security of data exchange, and provide useful references in dispute resolution.

In comparison, NTMs are numerous and varied. They contain policy interventions that affect international trade other than tariffs. Concerns on traditional trade-related measures need to extend to the digital sphere (Wu, 2019). Rules setting for digital trade in this regard can build upon the latest progress in NTM reduction and refer to existing principles on NTM regulations. For instance, the 2018 Asia-Pacific Economic Cooperation (APEC) Ministerial Meeting set up some cross-cutting principles (APEC, 2018): (i) information on NTMs, including that on processes of development, needs to be transparent; (ii) the consequence of imposing NTMs should be predictable, coherent, and non-discriminatory; (iii) NTMs should be non-discriminatory; (iv) NTMs should be based on relevant international standards; (v) NTMs need to be consistent with WTO commitments and obligations; (vi) NTMs need to be at a minimum and have precise legitimate objectives; and (vii) NTMs should not pose unwarranted barriers to technological progress and innovation.

Promoting the free flow of data should be the top priority. Accordingly, rules setting on digital trade must emphasise new barriers against the free flow of data, such as localisation requirements,[18] restrictions on cross-border data flows, intellectual property rights (IPR) infringement, forced technology transfer, web filtering or blocking, cybertheft, requirements for source code or algorithm disclosure, or forced technology transfer (Fefer, Akhtar, and Morrison, 2019).

It is worth noting that a country's regulations on the digital economy can have international ramifications. National policies on digitisation – even those not related to foreign trade – can have consequences spilling over to foreign markets. International agreements on new global norms on digital trade imply both at-the-border and beyond-the-border actions. Three potential conflicting policy goals pointed out by OECD (2020) need particular attention in policy design: (i) internet enabling, (ii) online and offline competition of e-commerce, and (iii) data privacy and consumer protection.

4. The Indo-Pacific Partnership in International Rules Setting on Digital Trade

The US views ensuring a free, open, rules-based global market as the top priority of its foreign policy. This has been extended to the cyberspace. The IPEF is an opportunity to deepen US ties with Indo-Pacific members, but it will be challenging to 'find a path to achieve a high-standard IPEF agreement, consistent with US domestic constraints, while providing sufficient benefits to attract US Indo-Pacific partners' (Meltzer, 2022).

[17] The higher the amount of *de minimis,* the more the consumers will gain.

[18] Some typical measures include requirements for the use of local servers for data storage or processing, requirement on the use of local technology, and regulations on privacy or consumer protection that may discriminate against foreign producers.

Accelerating digital transformation to harness gains from technology are in IPEF members' common interest. In this regard, the IPEF can provide a platform for the US to advance its interests in digital trade and to take the lead in developing global rules on the digital economy in line with US laws and norms[19] while allowing other IPEF members to become more involved.

However, there are fundamental disagreements on the global regime for digital trade even amongst major trading nations, who desire embracing digital technologies to facilitate trade (Pomfret, 2022). Amongst IPEF members, there are divisions over digital trade governance. The US and Japan prefer to leave more space for the market and industry to take the lead in regulations; countries like Indonesia tend to favour sovereign control over cyberspace; and Australia seems to emphasise more regulation on issues such as privacy, cybersecurity, and online consumer protection while promoting the free flow of data and digital service liberalisation (Mitchell and Mishra, 2018; O'Hara and Hall, 2018; Pomfret, 2022). Facing such gaps , negotiations on issues related to digital trade will be helpful even before reaching an agreement to build trust amongst participating countries, reduce market uncertainty, and facilitate doing business internationally.

4.1. No Customs Duty on Electronic Transmissions and *De Minimis*

No duties on electronic transmissions – and tariff waivers on low-value cross-border e-commerce – should be formalised in an agreement. Some developing countries worry that such a binding commitment could lead to potential loss in tariff revenue. Banga (2019) estimated that the WTO moratorium on the payment of customs duties could have lowered developing countries' tariff revenues as much as $10 billion.[20] Two IPEF members – Thailand and India – could have especially faced significant tariff revenue losses. However, OECD (2019) argued that the overall benefits of duty-free electronic transmissions outweigh the potential losses. Indeed, even for Thailand and India, the potential losses in tariff revenue may only account for 0.7% and 0.2% of their export revenues, respectively.

No customs duties on electronic transmissions is a good practice that has contributed to a free trading environment for the growth of digital trade. The Global Industry statement on the WTO moratorium, submitted by 89 industrial groups from around the world, showed the private sector's strong desire to continue the non-duty practices (Global Industry, 2022).

It will be easier for countries who are reluctant to commit to binding rules multilaterally to start with an agreement composed of a smaller group of important trading partners, like the IPEF. For instance, according to Banga (2019), India may have given up $500 million in tariff revenue due the WTO moratorium. In comparison, India's exports to other IPEF countries generated over $90 billion revenue in 2020. It could be in India's best interest, however, to have an agreement with other IPEF members on the moratorium to consolidate one-third of its total exports. Similarly, it is easier for a small group of countries to agree on how to apply *de minimis* in digital trade. The potential gain from trade facilitation and promotion will compensate the potential loss of tariff revenues, especially when taking into account technical difficulties and time spent on collecting customs duties on small, low-value parcels.

[19] In 2015, the US Department of Commerce launched the *Digital Economy Agenda* that identified four pillars: (i) promoting a free and open internet, (ii) promoting trust online, (iii) ensuring access to fast broadband networks, and (iv) promoting innovation (Government of the US, Department of Commerce, 2015).

[20] The estimations use 2011–2017 average bounded duties based on the trade statistics of 2017.

4.2. Trust Building for Free Flow of Data

GVCs need not only free trade and free factor movement but also the free flow of data. However, the 'ability to generate, collect, analyse and monetise data is surpassing our ability to consider the consequences that such advances hold for our economy, privacy or even national security' (Bolton et al., 2021). Thus, there are concerns on how new technologies can empower data. Technologies such as big data, cloud computing, machine learning, artificial intelligence, and IoT are now the reality; very likely, these will turn today's musings into tomorrow's reality.[21]

The gains from imposing restrictions on data – such as regulations limiting cross-border data flows and requiring local storage to deal with data security and related problems – cannot make up for losses in economic efficiency. For instance, data localisation will impose barriers on firms for big data and cloud computing in decision making and lower the efficiency of their operations, while policy measures of filtering, blocking, or impeding internet access will distort the market and increase the cost of cross-border transactions similar to how NTMs can affect international trade.[22] Indeed, many regulations that hinder the free flow of data can be seen as hidden industrial policies and protectionism.[23] In a rules-based regime, their purpose must be clarified to avoid overprotection (Kimura et al., 2019).

Setting a common floor for data security and privacy legislation can help trust building amongst IPEF members and facilitate cross-border data flow. There are two priorities:

(i) **Increasing transparency**. This will help improve mutual understanding amongst countries and pave the way for formal negotiations. Despite differences amongst members, the IPEF can become a forum for all parties to discuss technological progress, innovations, and data-related issues, especially those related to countries' geo-political and geo-economic concerns such as national security, IPR, and privacy.

(ii) **Setting the boundaries of data use**. This is a critical first step to make the free flow of data practicable. In this regard, IPEF negotiations should aim for an agreement on how to define different types of data, which then can be used to create rules on data governance that consist of general terms (i.e. applying to all data flows), specific terms (i.e. applying to specific types of data flows), and exceptions (i.e. applying to certain circumstances).

4.3. Cybersecurity

The advance of technologies in data storage, processing, transition, and monetisation can increase the likelihood of data being leaked, stolen, or misused. Cybersecurity has thus become one of the prime concerns in the digital economy for both governments and the private sector. Cyber threats have expanded from targeting digital devices and networks to infrastructure, services, and IoT. Economically, business operations and supply chains can be disrupted, and targets of large-scale

[21] For example, advanced encryption standards and triple data encryption algorithms are widely used as security guarantees of e-mail. As computing power increases, however, these solutions can lose their security.

[22] For instance, national standards that deviate significantly from international standards or requirements on local registration and testing could be *de facto* obstacles for foreign competitors to enter domestic markets.

[23] As Bolton et al. (2021) wrote, 'some [localisation policies] are designed to protect, favour, or stimulate domestic industries, service providers, or intellectual property at the expense of foreign counterparts and, in doing so, function as nontariff barriers to market access'.

internet attacks face the risk of reputational damage (ERIA and CyberGreen, 2022). Cybercrime[24] cost $6.0 trillion globally in 2021, and this figure is expected to reach $10.5 trillion in 2025 (Morgan, 2020).

Over time, cyber threats have increased in frequency, size, sophistication, and impact. Perpetrators have ranged from individuals to nation states. Increasingly, cyberattacks are organised transnationally. Even big countries or organisations with ample resources and expertise see cybersecurity as an enduring challenge (Bolton et al., 2021).

Fighting cybercrimes calls for enhancing collaboration amongst businesses, governments, international organisations, nongovernmental organisations, and other players. Limitations on data flows cannot improve cybersecurity, however. For example, requirements of data localisation, which force companies to use local servers, can create data silos that may be even more vulnerable to cyberattacks.

IPEF cooperation in cybersecurity should first aim for international security standards or cross-compliance recognition frameworks of design, testing, and certification to ensure the safety, reliability, and trust of critical infrastructure and improved security around digital technologies. To make this feasible, the policy design should also include technical support and capacity building. Furthermore, IPEF negotiations should focus on promoting the concept of international norms of behaviour in cyberspace and a higher degree of policy harmonisation in strengthening data security and fighting cybercrime (OECD, 2012). Imposing a common security floor can strengthen data security and the privacy regime. Negotiations should respect each member's fundamental values but be consistent with the need for an open and safe cyberspace with balanced concerns for the free flow of data, personal privacy, business interests, and national security.[25] With this, the goal is not a risk-free but a resilient[26] digital ecosystem in the Indo-Pacific.

4.4. Intellectual Property Rights Protection

By facilitating the international flow of data and information, digitalisation delivers a new set of tools to bolster services in GVCs. As a result, this intensifies the cross-border exchange of intellectual property and increases the prominence of IPR protection to endorsing cross-border technology transfer and innovation in GVCs.

Improving international cooperation in IPR protection has been a common issue for both technology-rich and -scared countries. On one side, digitalisation helps separate intellectual property ownership and the correct of use it, allowing owners and users to take different roles in GVCs and share the value-added generated. This leads to a win–win situation from the combination of international capital and know-how in some countries and abandoned production factors in others. However, digitalisation also makes IPR infringement easy, especially in online marketplaces.

The IPEF must think about robust IPR standards that are higher than that of the WTO *Agreement on Trade-Related Aspects of Intellectual Property Rights* (TRIPS) or other multilateral treaties, coupled with effective enforcement mechanisms. In principle, international rules on IPR protection should

[24] Cybercrime costs include productivity loss, revenue loss, disaster recovery, liability, and customer loss (Dübendorfer, Wagner, and Plattner, 2004)

[25] This could be key to maintaining trust in the digital environment and advancing international trade (Fefer, Akhtar, and Morrison, 2019).

[26] Resilience refers to the capacity of a system to continue operation notwithstanding technical problems (OECD, 2012).

ensure that both producers and consumers benefit from intellectual property protection, while such protection subsequently contributes to technology transfer and innovation.

However, countries' interests in IPR protection vary greatly, depending on their development stage and position in GVCs, making IPR protection one of the most controversial issues in international trade negotiations (Chen and Kimura, 2021). Within the IPEF, it is likely that intellectual property-exporting countries – like the US and Japan – will promote higher global standards, and intellectual property-importing countries – like India or those in the Association for Southeast Asian Nations (ASEAN) – will negotiate for terms that give them more space for technology substitution and incremental innovation.

Two precedents are useful for the IPEF when negotiating terms on IPR protection. Chapter 18 of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) introduces provisions that go beyond countries' commitments in multilateralism and surpass the level under TRIPS as well as the detailed obligations enforcing TRIPS-plus protection. According to Kato (2018), it can be seen as a model intellectual property chapter of 21st-century trade agreements. The Regional Comprehensive Economic Partnership (RCEP) considers the development gaps across countries and details country-specific schedules and technical assistance requests to smoothen the transition period. Both pay attention to the potential challenge of the internet and digitalisation to the enforcement of IPR protection and require signatories to treat online violation of copyrights, trademarks, and related rights equally to offline acts of infringement.

Since the late 1990s, the US has consistently promoted high-standard rules and regulations on intellectual property and related issues at the international level. The IPEF will not deviate from this strategy. Enhancing IPR protection can effectively improve the investment environment and be seen as part of the new entry requirements to become involved in GVCs. This could help compensate for the lack of US market access.

5. Conclusion

The sustained development of digitalisation needs a rules-based ecosystem to support market openness, innovation, and fair competition.[27] As a guideline, the World Bank (2016) suggested five policy areas: (i) establishing a digital favourable and competitive business climate, (ii) developing strong human capital, (iii) ensuring good governance, (iv) improving digital infrastructure, and (v) raising digital literacy. These objectives can be universally applied to policymaking for the digital economy.

The US and Asia are highly interdependent, and economic digitalisation tends to deepen their ties. The IPP will strengthen the economic links amongst members and set the tone for market openness and rules-based competition and cooperation in the region. To the US, Asia represents a large market – therefore, a main source of job creation and economic growth. US firms believe that the IPP can strengthen their links with Asia by securing the GVCs of their businesses with better access to foreign

[27] While the digital economy has the potential to support sustainable development and inclusive growth, conflicts between rapid technological changes and social values – such as privacy, consumer protection, and competition – are quickly emerging as well. Rules-making can help eliminate barriers to digital trade and support the achievement of a variety of regulatory goals, including consumer protection and privacy (Nakatomi, 2022).

markets and supply bases. Other advanced economies, such as Japan and Australia, have similar economic interests.

Developing countries in the region are motivated to prioritise their partnership with the US not only because of the advance of the US market, capital, and technology, but also due to their need for the US to be an external auditor in promoting domestic regulatory reforms.[28] For instance, the global consensus on regulating digital trade will require more beyond-the-border measures (i.e. modification of domestic laws and regulations to meet international commitments). The consequent social and economic adjustment and policy intervention in response call for collaboration between administrative and legislative agencies as well as cooperation amongst different government branches, particularly between foreign affairs departments and those in charge of domestic market regulations (Kimura and Chen, 2016).

The IPEF needs to ensure that members' commitments to high-standard trade rules will contribute to their digital transformation and facilitate their integration into the global economy. New global rules on free digital trade will be a policy priority, which covers the IPEF's four pillars: connected economy, resilient economy, clean economy, and fair economy.

The process of rules setting for digital trade will involve complementary and competing interests amongst stakeholders. Several issues have legislative and oversight implications (Fefer, Akhtar, and Morrison, 2019). Above all, any fruitful IPEF talks on digital trade need members to have clear objectives, which can only be obtained based on a full understanding of the economic impact of digital trade, potential trade barriers and their consequences, and internationally standardised or inter-operatable methods of measuring digital trade.

Trust building is the priority for an open, resilient, development-friendly ecosystem for the global digital economy. It is important to consider privacy; cybersecurity and trade secrets;[29] the trade-off amongst market openness, free flow of data, and policy with other socioeconomic goals (e.g. protecting privacy, supporting law enforcement, improving safety, and ensuring national security); and inclusion of different standards-setting practices that may have global reach. The different practices could be due to countries' various stages of development, legal frameworks, and political systems.

The four policy areas under discussion – trade liberalisation of electronic transmissions, free flow of data with trust, cybersecurity, and IPR protection – are fundamental to the regulatory system that the digital economy needs to support its long-term development; thus, they should be prioritised in the agenda of the upcoming IPEF talks.

[28] The capability or qualification of the US to play such a role is endorsed by its military, political, and cultural power as well.

[29] A reference for the IPEF is the US–China agreement on cybersecurity and trade secrets that was signed in 2015. It consists of (i) commitments on '[n]o conduct or knowingly support cyber-enabled theft of [intellectual property]', (ii) the establishment of a high-level joint dialogue mechanism on fighting cybercrime and related issues, (iii) a joint effort to identify and promote appropriate norms of state behaviour in cyberspace internationally, and (iv) promised timely responses to requests for information and assistance concerning malicious cyber activities (The White House, 2015).

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Chapter 6

Human Capital for Economic Growth and Resilience in the Indo-Pacific

Chapter 6

Human Capital for Economic Growth and Resilience in the Indo-Pacific

Rashesh Shrestha

1. Introduction

Human capital – which is increasingly becoming the main driver of broad-based economic growth due to technology's transformation of the structure of economic activity – is a key area for international cooperation. As an economic concept, human capital generally refers to the ability of individuals to transform inputs into outputs, which depends on the skills acquired through education, training, health, and job experience. For the Indo-Pacific region to deliver on its vision of working together to alleviate poverty and to elevate the living standards of millions of people, such cooperation is necessary to prepare its workforce. Indeed, human capital development is no longer just an issue to be handled domestically, for only when the majority of workers in the Indo-Pacific has the skills necessary can the region be stable, resilient, and integrated.

The issue of human capital development fits neatly within the vision of the Indo-Pacific as defined in the *Association of Southeast Asian Nations (ASEAN) Outlook on the Indo-Pacific* (ASEAN, 2020). Integration and interconnection amongst countries and areas in the Indian Ocean and Pacific Ocean require investments to build connectivity infrastructure, including physical, institutional, and people-to-people links (ASEAN, 2020: 4). Moreover, such cooperation will help prepare for the Fourth Industrial Revolution by facilitating the sharing of experiences and expertise on ways to benefit from – and address the challenges of – the digital revolution (ASEAN, 2020: 5).

As Indo-Pacific countries pursue this mutual agenda of greater connectivity, it is also essential to prepare its workers – for disruptions due to the locus and mode of economic activity, greater penetration of the digital economy, and transformation of production networks. The threat to underprepared workers from technological change has been growing over the past decade and has especially accelerated after the COVID-19 pandemic. Indo-Pacific countries cannot ignore the need for skills development if they want to maximise the benefits of greater trade and investment flows within the region.

Technology is enhancing economic activity by lowering production costs, improving efficiency, and increasing market access; in general, it is creating new job opportunities. Automation enables firms to be more efficient and thus offer products at a lower price. Likewise, digitalisation has been changing the mode of interactions between consumers and producers, teachers and students, employers and employees, and even citizens with their governments. It is benefitting traditional sectors (e.g. agriculture) and creating new economic activities (e.g. data science). Technology will determine the pattern of investment and supply chain formation amongst all regional groups, including the Indo-Pacific (Kimura, 2017).

As technology replaces many labour-intensive tasks, workers who can harness and complement digital technology will benefit, while others are at risk of being left behind. The Asian Development Bank (2018) noted that jobs that mainly comprise tasks that can be automated will soon no longer be available for humans. To benefit from technological change, therefore, workers require technical,

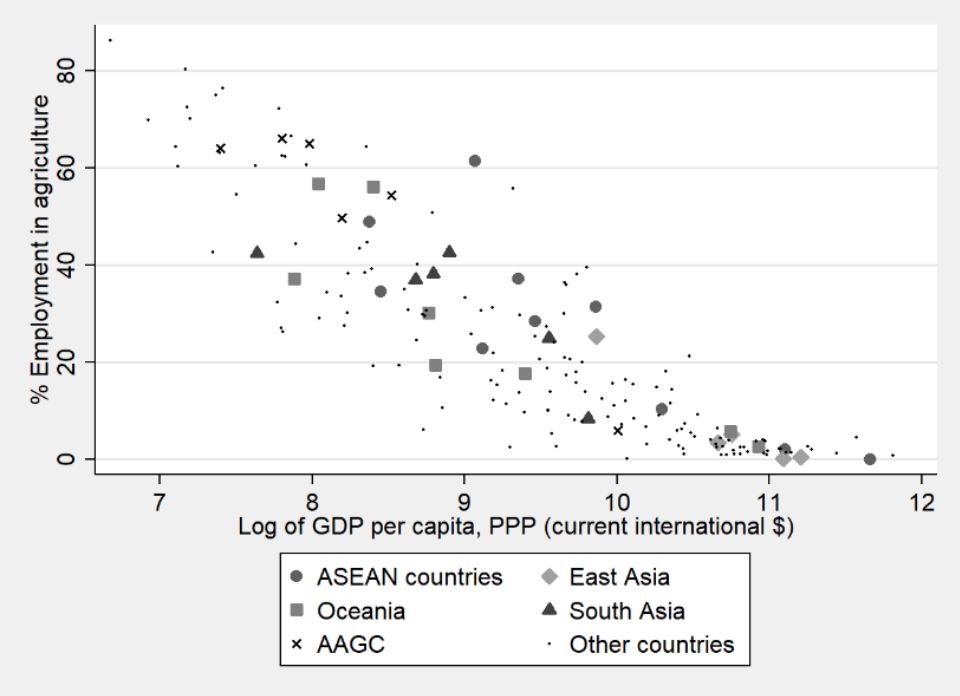
cognitive, and non-cognitive skills (World Bank, 2018). This, in turn, requires upgrading existing infrastructure for skills development by investing in the education system, providing training opportunities to reskill and upskill the workforce, reducing labour market rigidity, and revamping social protection.

As the demand for workers who complement digitalisation grows, their wages will also rise faster than those without such skills. In response, individuals will acquire the skills that are in high demand; this increasing supply will check the rise in wages while also enabling more people to benefit from digitalisation. Yet the ability of workers to respond to signals from the market will largely depend on their access to skills development systems. A system must be in place that will enable workers to inculcate highly valued skills in a digitalised world. While some Indo-Pacific countries are well prepared to make this adjustment, others need financial and knowledge support to accelerate this human capital development.

At present, Indo-Pacific countries have different human capital levels. In many, workers are not adequately equipped for the future labour market, and the jobs that they currently perform are at a high risk of automation. As seen in Figure 6.1, the share of agriculture employment is high in many Indo-Pacific countries. Many of these workers will need to find productive employment in modern sectors (including agriculture that is modernised through technology) and be able to harness opportunities to increase their human capital.

Figure 6.1: Agricultural Employment Share and Gross Domestic Product per Capita in the Indo-Pacific

(most recent year available)



AAGC = Asia–Africa Growth Corridor, ASEAN = Association of Southeast Asian Nations, GDP = gross domestic product, PPP = power purchasing parity.
Note: For geographic delineation of Indo-Pacific, see Annex.Ca
Source: Author's illustration from World Bank data. https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS

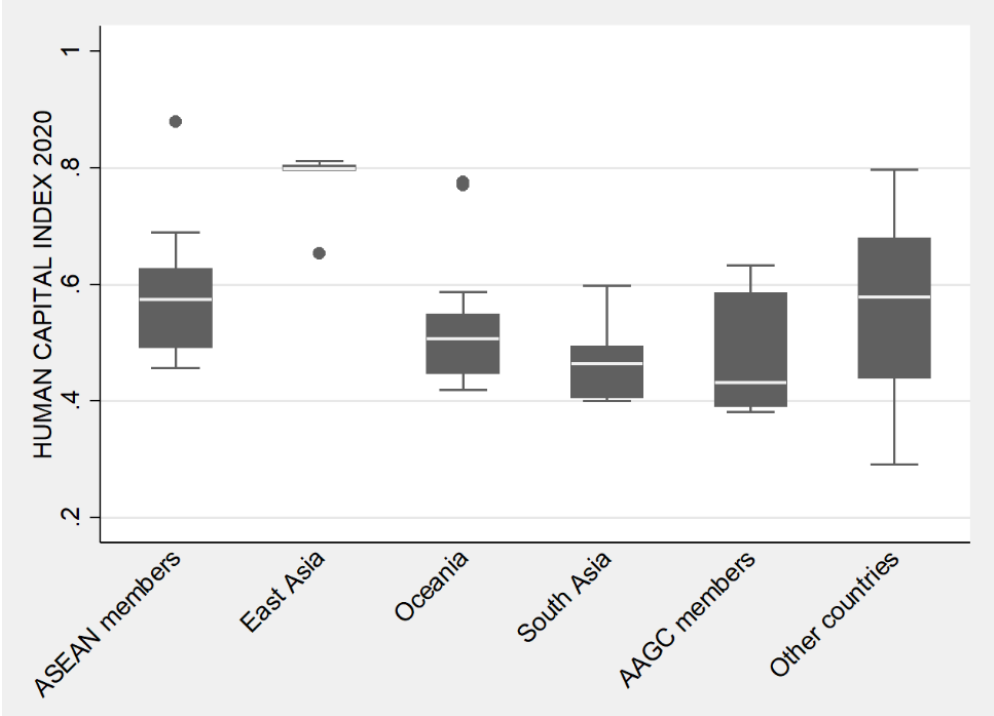
Widespread improvement in living standards occurs when new economic opportunities enable workers to apply their capabilities to higher-productivity jobs, which translate into higher wages. While this process – mostly through the creation of global manufacturing supply chains – has led to the rapid rise of living standards in many countries, modern technology makes such benefits to certain groups of workers less certain. Routine and non-cognitive jobs are under threat of automation. Not only are the machines – guided by artificial intelligence and computational power – more effective in performing these tasks, but also a few of them can produce output equivalent to a large number of workers. The process of structural transformation thus requires developing workers' abilities to excel in non-routine and cognitive jobs that are least likely to be automated in the near future.

2. Human Capital in the Indo-Pacific

2.1. Overall Human Capital

The level of human capital varies across the Indo-Pacific. Figure 6.2 shows the distribution of human capital in the Indo-Pacific after grouping countries into five categories based on geographic locations; the figure also includes the rest of the world for comparison. East Asia has high levels of human capital in general, as do a few countries in ASEAN and Oceania. The average level of human capital in ASEAN is similar to rest of the world, but those in Oceania, South Asia, and Africa are below average.

Figure 6.2: Human Development Index, 2020



AAGC = Asia–Africa Growth Corridor, ASEAN = Association of Southeast Asian Nations.
Note: For geographic delineation of Indo-Pacific, see Annex. Some countries may not be included due to lack of data.
Source: Author's illustration from World Bank. Human Capital Project.
https://www.worldbank.org/en/publication/human-capital

Another indicator of the level of human capital is the rate of tertiary educational enrolment (Table 6.1). Such enrolment varies widely amongst Indo-Pacific countries, ranging from 1.8% in Papua New Guinea to 114.0% in Australia. On average, East Asia has the highest rate of tertiary enrolment, followed by ASEAN, South Asia, Oceania, and Asia–Africa Growth Corridor (AAGC) members. Much variation exists within these sub-regions themselves, which indicates that Indo-Pacific countries are at different levels of readiness in coping with technological disruptions and structural change.

Table 6.1: Tertiary Gross Enrolment Rates in the Indo-Pacific

(%)

	Minimum	Median	Maximum	Obs
ASEAN Members	13.48	33.76	91.09	10
East Asia	26.83	71.41	113.09	6
Oceania	1.78	19.48	114.19	11
South Asia	10.56	22.22	34.12	6
AAGC members	4.12	8.88	44.26	7
Other countries	0.75	36.58	148.53	158

AAGC = Asia–Africa Growth Corridor, ASEAN = Association of Southeast Asian Nations.
Note: For geographic delineation of Indo-Pacific, see Annex. Some countries may not be included due to lack of data.
Source: Author's illustration from World Bank. Human Capital Project.
https://www.worldbank.org/en/publication/human-capital

Although there have been impressive gains in skills development through education in many developing countries in the Indo-Pacific, the quality of education still lags. Learning crises, normally applied to the education system, can also be applied to the low-quality of skills development opportunities (World Bank, 2017). Years of education do not always not translate into human capital improvement due to the low quality of education. Thus, to prepare workers for the future of work, both the quantity time invested in and quality of the education system need to be upgraded.

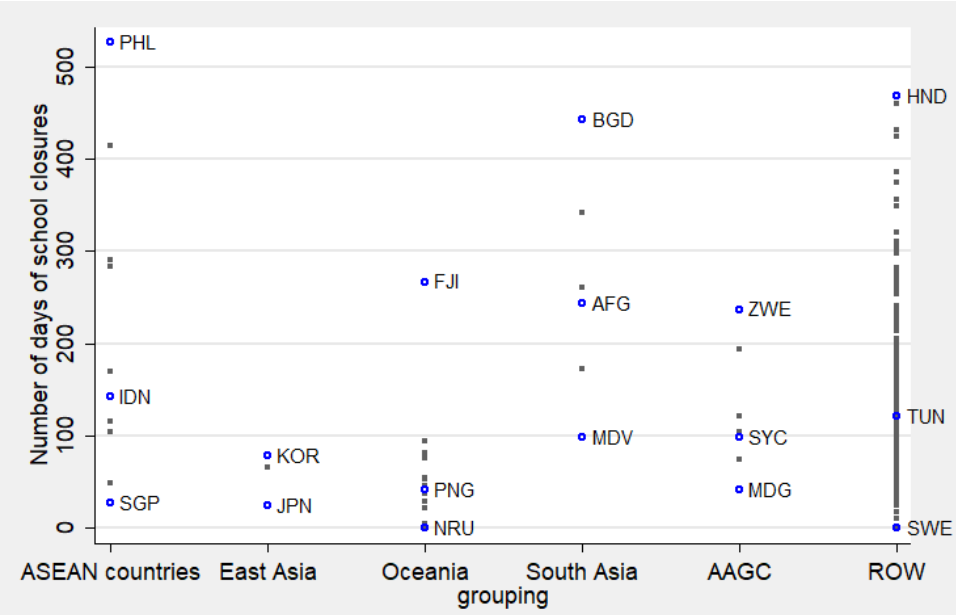
2.2. Impact of the COVID-19 Pandemic

2.2.1. School Closures

The formal education system plays a large role in human capital development. Given that almost everyone today enters the formal schooling system, this system must empower individuals to navigate the future labour market.

Figure 6.3 shows the number of days of school closures in the Indo-Pacific due to the COVID-19 pandemic. Schools closed for over 100 days during the pandemic in many countries and had to resort to online instruction. Due to variation in the digital infrastructure and teachers trained to deliver online learning, the pandemic is likely to have generated learning losses and reduced the human capital of many individuals (Patrinos, Vegas, Carter-Rau, 2022). Dealing with the long-term effects of school closures will require additional investment in education to equip schools and teachers with the ability to provide catch-up learning and to restructure the curriculum to fit the learning needs of students affected.

Figure 6.3: School Closures due to the COVID-19 Pandemic, March 2020–May 2022
(number of days)



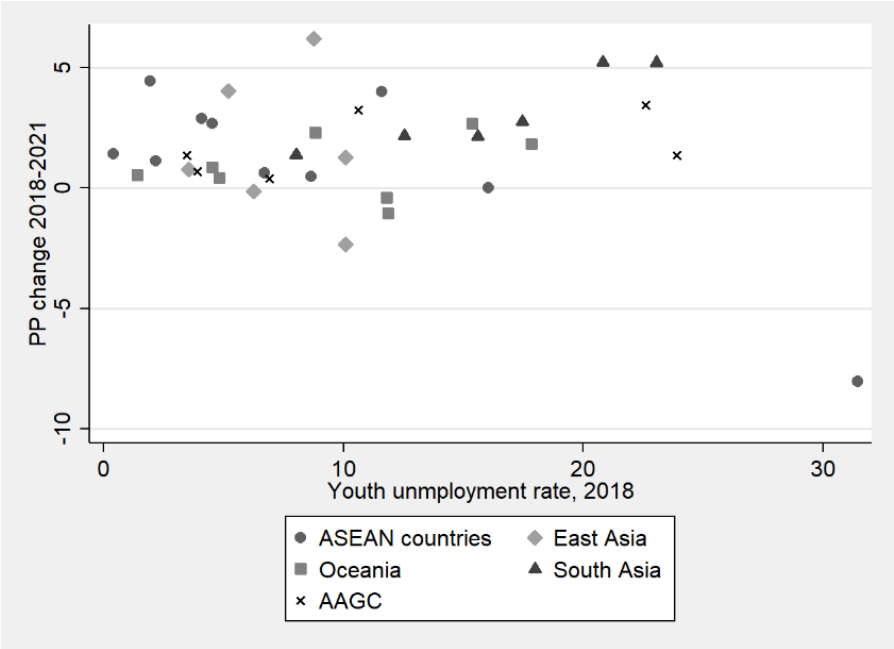
AAGC = Asia–Africa Growth Corridor, AFG = Afghanistan, ASEAN = Association of Southeast Asian Nations, AUS = Australia, BDI = Burundi, BGD = Bangladesh, FJI = Fiji, HND = Honduras, JPN = Japan, KOR = Korea, MDG = Madagascar, MDV = Maldives, PHL = Philippines, PNG = Papua New Guinea, ROW = rest of world, SGP = Singapore, SWE = Sweden, SYC = Seychelles, TUN = Tunisia, ZWE = Zimbabwe.
Note: For geographic delineation of Indo-Pacific, see Annex. Some countries may not be included due to lack of data.
Source: Authors' illustration from United Nations Educational, Scientific, and Cultural Organization (UNESCO) data. https://covid19.uis.unesco.org/global-monitoring-school-closures-covid19/.

2.2.2. Rise in Youth Unemployment

A smooth transition from school to the labour market is crucial for successful labour market outcomes, but this transition was also disrupted by the pandemic. Youth unemployment rose from 15.4% to 17.9% between 2018 and 2021 (Figure 6.4). In the Indo-Pacific, youth unemployment varies, ranging from 0.4% in Cambodia to over 31.0% in Brunei Darussalam, with a median value of 8.8% in 2018. Although this figure is better than the global average of 15.0%, in many Indo-Pacific countries, the young do not have adequate opportunities to start their careers on the right footing. The pandemic made the situation worse by lowering opportunities for gainful employment for youth, who bore the brunt of economic contraction. They were the first to lose their jobs and are amongst the last to be rehired.

Unemployment can have a long-term impact due to depreciation of human capital and discouragement from participating in the labour force. It may also bring about other social problems such as crime and political instability. It also represents wasted human capital, particularly when young people are, on average, the most digitally savvy.

Figure 6.4: Change in Youth Unemployment Rate, 2018–2021



AAGC = Asia–Africa Growth Corridor, ASEAN = Association of Southeast Asian Nations.
Source: Author's illustration from World Bank data. https://data.worldbank.org/indicator/SL.UEM.1524.ZS.
Note: For geographic delineation of Indo-Pacific, see Annex I. Some countries may not be included due to lack of data.

2.2.3. Remote Work

Thanks to digitalisation, remote work is now a greater possibility; the pandemic also accelerated this trend. Widespread adoption of such work arrangements has increased flexibility but also raises issues of digital equality. The feasibility of remote work varies greatly across industries and mostly favours white-collar jobs. Even in a developed country like the United States, researchers estimated that only 37% of work can be done remotely. This proportion is much lower in developing countries. Moreover, jobs with remote work possibilities tend to cluster within a firm, which means that the proportion of businesses that can fully operate remotely is even smaller. Since cognitive tasks are more amenable to being performed remotely, educated and high-income workers benefit the most.

Increased remote work also has implications for labour flows across countries. Many countries are changing their policies to offer digital nomad visas. According to one report, as many as 46 countries have implemented or are planning to implement visas for individuals engaged in remote work (Stillman, 2022). These open up new opportunities for workers to live and work in different countries, with mutual benefits for both countries.

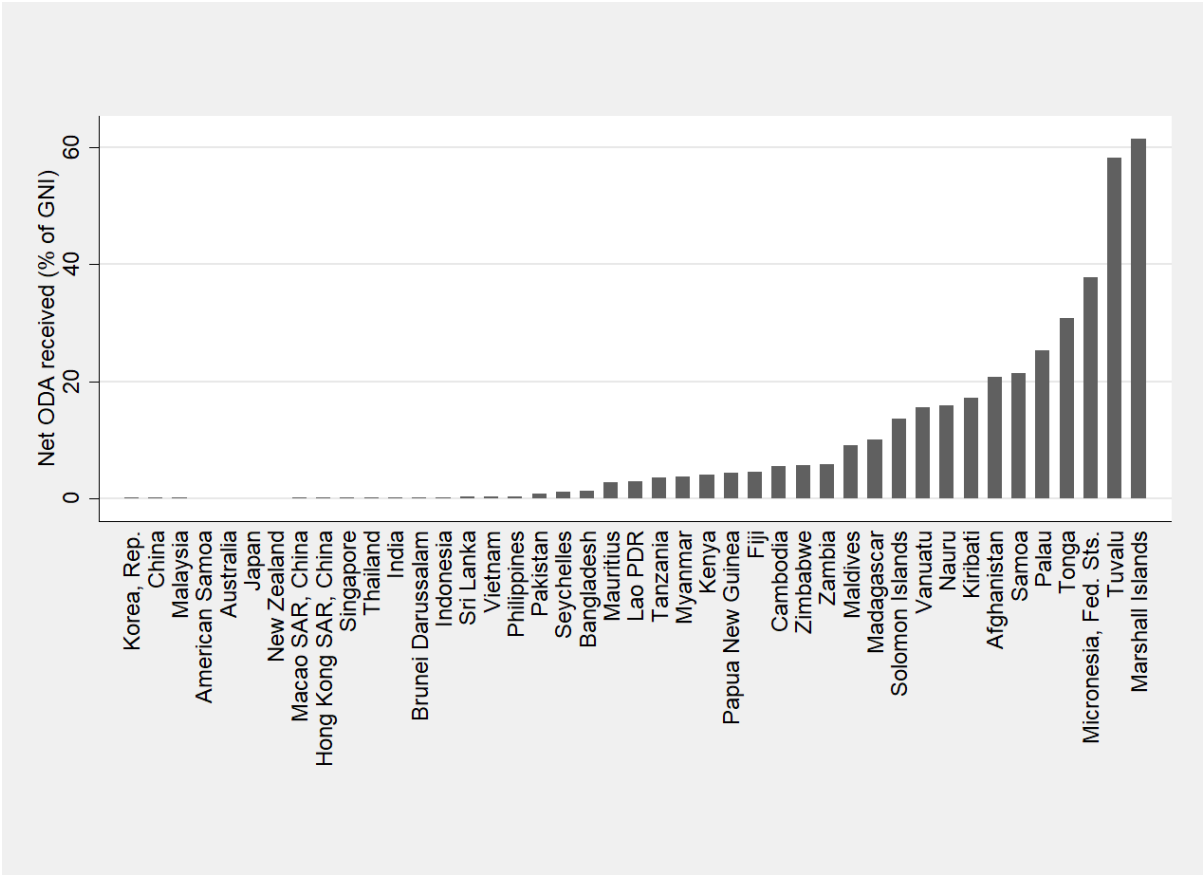
3. Cooperation Areas and Mechanisms

Trade and investment are often the most common mechanisms of cooperation between countries and across regions, with the most advanced trade agreements also incorporating elements of regulatory harmonisation and, increasingly, environmental issues. Although technology-transfer and capacity-building clauses are also commonly found in the text of international agreements between

developed and developing countries, cooperation in human capital development is rarely included. However, with technological changes afoot at almost every aspect of economic activity, countries – especially in the Indo-Pacific – have a vested interest in one another's level of human capital.

For many developing countries, education budgets are supported by international development aid. For many Indo-Pacific countries, aid still represents a substantial fraction of their national incomes (Figure 6.5). Building human capital in these countries will require investment of large fractions of their budgets in education, vocational training, skills development, and associated programs. While many bilateral and multilateral aid programs have focussed on skills development, greater success may be achieved by pooling resources and coordinating programs.

Figure 6.5: Aid Dependence in Indo-Pacific



Lao PDR = Lao People's Democratic Republic, ODA = official development assistance.
Note: For geographic delineation of Indo-Pacific, see Annex. Some countries may not be included due to lack of data.
Source: Authors' illustration from World Bank data. https://data.worldbank.org/indicator/DT.ODA.ODAT.CD

3.1. Movement of Workers

Fostering the movement of workers can be another important area of cooperation to generate mutual gain. In the more advanced economies of the Indo-Pacific, aging societies necessitate the injection of young workers, while less-developed countries need capital to improve living standards. Regions with more advanced integration architecture do have cooperation in human resources built in – but with varying degrees of implementation. The European Union is perhaps the most advanced in this regard, with free movement of people and student-exchange programs. ASEAN has developed mechanisms

for the movement of skilled workers through mutual recognition agreements, but these are limited to only a handful of occupations.

The Indo-Pacific region already has some elements of labour mobility through bilateral agreements. In particular, the movement of low- and medium-skilled workers is usually handled through government–government agreements. It is not uncommon for countries in the region to sign bilateral labour agreements, which specify conditions under which one party to the agreement (i.e. 'source' country) sends temporary workers to the other party (i.e. 'host' country) (Chilton and Posner, 2018). These agreements often contain legal protections for migrants in the host country as well as obligations for the source country. The University of Chicago Law School catalogued as many as 582 bilateral labour agreements between 1945 and 2015, with over half ratified between 1990 and 2015.[30]

Table 6.2 presents the number of bilateral labour agreements amongst the various sub-regions comprising the Indo-Pacific. Within the Indo-Pacific, six bilateral labour agreements are found in which an East Asian country is the host country and an ASEAN Member is the source country. East Asian countries also have five bilateral labour agreements with South Asian countries. Oceania has as many as 26 bilateral labour agreements but with only 3 countries in East Asia as source countries.

Table 6.2: Bilateral Labour Agreements between Indo-Pacific Countries

		Source Country					
		ASEAN	**East Asia**	**Oceania**	**South Asia**	**AAGC**	**Other Countries**
Host Country	**ASEAN**	10	0	0	3	0	0
	East Asia	6	2	0	5	0	2
	Oceania	0	3	0	0	0	26
	South Asia	0	0	0	0	0	0
	AAGC	0	0	0	0	0	0
	Other Countries	25	9	1	19	1	175

AAGC = Asia–Africa Growth Corridor, ASEAN = Association of Southeast Asian Nations.
Source: Author.

Further opening the labour markets in the Indo-Pacific could accelerate skills development there. One of the greatest incentives to acquire skills is the ability to obtain jobs that will utilise those skills. The prospect of moving to another country encourages many individuals to gain skills that may not be immediately employable domestically but may open up job possibilities elsewhere. This is the essence of 'brain gain' that arises due to increased opportunities abroad. Thus, greater skills mobility will not only help reduce the current skills gap but also encourage new skills. Skills and experience can also be gained in more advanced host countries, which can then be applied in the source country upon return – known as 'brain circulation'.

[30] University of Chicago Law School, Bilateral Work Agreements Dataset, https://www.law.uchicago.edu/bilateral-labor-agreements-dataset (accessed 20 July 2022).

Making skills more transferable across the Indo-Pacific will lead to efficiency gains. The specificity of a worker's skills is an important concept within labour economics. Workers possess both general skills (i.e. those that can be easily transported across different firms) and specific skills (i.e. that are more efficiently utilized within a specific firm). With piece-meal labour agreements governing the movement of workers across countries, workers usually focus on specific skills. If it were possible, however, to transfer skills more widely across multiple countries, there would be a tendency to gain more general skills.

3.2. Movement of Students

Opportunities to build human capital through educational opportunities vary widely across the Indo-Pacific. As living standards rise, there is an increasing trend of individuals seeking the best possible educational opportunities in more advanced countries. According to some estimates, international students – non-citizens who are pursuing tertiary education in a country – numbered over 5 million in 2017.[31] This flow is sometimes enabled by scholarships provided by developed countries (e.g. Australia Awards Scholarships or the United States Fulbright Program). The volume of official development assistance flows for scholarships in 2016 stood at $1,229 million. In fact, Sustainable Development Goal 4 includes a pledge to 'substantially expand globally the number of scholarships available to developing countries … for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries' (United Nations, 2020). The countries of the Indo-Pacific can support one another by facilitating the flow of international students through scholarships and by reforming immigration laws governing education and employment prospects in host countries.

7. Conclusion

Technology, especially digital technology, makes it three things easier – access to information, connectivity or exchange of information, and computation or processing of large amounts of information – which improves productivity and economic growth. Digital technology offers the opportunity for countries to revitalize their traditional sectors like agriculture and manufacturing and to enhance productivity. It does require workers to be ready to adapt by increasing their skills, however. Indo-Pacific countries can collaborate on this important area by further increasing aid for skills development, fostering labour mobility amongst countries in the region, and increasing the flow of students.

[31] IOM, 'International Students', Migration Data Portal, https://www.migrationdataportal.org/themes/international-students (accessed 28 July 2022).

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Chapter 7

The Indo-Pacific Seascape and ASEAN's Open and Convergent Economic Vision

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Abstract

The Indo-Pacific, as a seascape, complements the Asia-Pacific landscape. The strategic geographic position of South-East Asia makes the role of the Association for Southeast Asian Nations (ASEAN) in the Indo-Pacific essential. Because it needs export-oriented foreign direct investment inflows from ASEAN non-member states, ASEAN applies an 'open regionalism principle'. As for regional economic integration purposes, ASEAN adopts economic convergence as a sufficient condition for open economic integration. The combination of open and convergence principles is reflected in the ASEAN Community Vision 2025. ASEAN trade and investment integration require the manufacturing sector to be a vital sector. Amidst the Fourth Industrial Revolution, ASEAN must also strongly connect with the digital economy.

1. Introduction

The Indo-Pacific is a seascape that complements the landscape of the Asia-Pacific (Verico, 2021a). As a seascape, the Indo-Pacific holds a natural comparative advantage in the maritime pillar (Nabbs-Keller, 2020). In terms of global value chains (GVCs), the landscape concept of the Asia-Pacific relates to production networks (i.e. global production networks), and the seascape concept of the Indo-Pacific represents maritime-based services networks (i.e. global services networks) as well as logistics and sea transport connections.[32]

Member states of the Association of Southeast Asian Nations (ASEAN) are part of both the Indo-Pacific and Asia-Pacific; some are located in the Malacca Straits, one of the busiest straits in the world that connects the Indian and Pacific oceans (Acharya, 2019). This strategic geographic position of South-East Asia thus makes ASEAN's role in the Indo-Pacific essential.

A combination of macroeconomic identity equations, the Solow Growth Model, Harrod-Domar Model, and Cobb-Douglas production function demonstrates that economic growth acceleration necessitates a country's competitiveness as reflected in its net exports and long-term investment.[33] The formula

[32] GVCs are essential to economic growth, as they cover long-term investment flows (i.e. foreign direct investment [FDI]) and net exports (i.e. current accounts). They are not only concerned with the production side but also the services sector in general and logistics specifically.

[33] $\frac{\partial y_{nt}}{y_{nt}} = \frac{\left\{[I_{nt}+(X_{nt}-M_{nt})]-\left[\left(\partial_{nt}+\rho_{nt}+\frac{\partial E}{E}_{nt}\right).\sqrt{\frac{(K,k)_{nt}}{(L,l)_{nt}}}\right]\right\}}{c_{nt}}$ where:

$\frac{\partial y_{nt}}{y_{nt}} = real\ economic\ growth, country$ n $time$ t;

$I_{nt} = manufacturing\ strategies - based\ investment$;

$X_{nt} - M_{nt} = current\ account$; $\partial_{nt} = depreciation\ and\ depletion\ of\ environment$; $\rho_{nt} = population$;

shows that economic growth depends on additional capital that reflects the savings rate from foreign direct investment (FDI) and current accounts. A country requires both a net export surplus and FDI inflow, and a strong connection between the two grows its economy.

Moreover, a strong FDI inflow share in a country's exports indicates that the country has become a global production base (i.e. backward participation). The more significant the relationship between FDI inflow and net exports, the higher the backward participation of a country. Developing countries need to be a vital part of the global production network, which is evidenced by the strength of the country's backward participation indicator. The greater its strength in backward participation, the stronger its position in global production networks and its strategic position in global services networks.

ASEAN aims to be a global production base region, transforming itself from forward participation (i.e. dependent on raw materials and final product assembly) to backward participation (i.e. production of intermediate inputs). FDI inflows from outside of its 10 member states is thus needed because of ASEAN's donut-shaped economic form.[34] Therefore, ASEAN needs to adopt an open regionalism framework to receive FDI inflow from non-members to reach its export-orientation objective – a production-based region (Verico, 2017). This will help shift ASEAN from raw material export competitiveness to an intermediate input producer.

In terms of economic cooperation at the regional level, ASEAN also aims to increase equal economic growth with openness and convergence principles. The Indo-Pacific is a necessary platform to help ASEAN become a part of global production networks and GVCs, as ASEAN can be both a production-based and export orientation region. This paper aims to explain the relationship between ASEAN and the Indo-Pacific, including ASEAN centrality and its outlook on the Indo-Pacific.

2. The ASEAN Way: ASEAN Centrality and Outlook on the Indo-Pacific

To understand views towards the Indo-Pacific, a survey was conducted of 1,000 influential persons in South-East Asia (ASEAN, 2019). It revealed that more than 61% thought that the Indo-Pacific concept is 'unclear and needs further elaboration', and 25% perceived that the term 'Indo-Pacific' was designed to contain China.

The Free and Open Indo-Pacific campaign has thus increased, introduced by the United States (US) (Le Thu, 2020). South-East Asia is indeed becoming more confident in the Free and Open Indo-Pacific approach, which emphasises development and connectivity (Le Thu, 2020). It focusses on (i) developing an environment for international peace, stability, and prosperity, and sharing universal values; (ii) addressing global issues toward achieving the Sustainable Development Goals, and

$\frac{\partial E}{E}_{nt} = marginal\ productivity\ of\ labour$; $K_{nt}/L_{nt} = infrastructure\ availability$;

$k_{nt}/l_{nt} = level\ of\ technology\ (manufacturing\ strategy)$; $c_{nt} = ICOR$;

[34] That is, ASEAN does not have a centralised Member State. Its pattern of power looks like a donut, with nothing in the middle. Indeed, no ASEAN Member State has both a large economic size in terms of gross domestic product (GDP) and a significant high-income per capita. Indonesia has the largest economy, but it is not in the high-income group. Singapore has the highest income per capita but does not have a big economy.

promoting human security; and (iii) promoting economic diplomacy that targets quality growth together with developing countries and contributes to regional revitalisation.

However, during the 33rd ASEAN Summit in November 2018, Singapore Prime Minister Lee Hsien Loong stated that ASEAN sees growing geopolitical uncertainties with this concept. Each Member State has dynamic relations with different global powers, notably the US and China. Thus, amidst the increasing rivalry between the US and China, ASEAN has crafted the *ASEAN Outlook on the Indo-Pacific* to support ASEAN's position by absorbing potential geopolitical shocks (Pramono, 2021). As outlined by this document, ASEAN is working to maintain its centrality by standing together and keeping its economy convergent. It feels that 'the ASEAN way' — that is, non-interference — is a vital strategy for ASEAN to remain relevant, agile, and flexible.

In the Indo-Pacific context, China will continue to rise, albeit at a slower pace, while the US will stay engaged in the region despite being distracted by domestic and other global challenges. The Indo-Pacific aims to keep autonomy over alignment with these powers, as it has successfully done in recent years. Indeed, most Indo-Pacific countries adopted the principle of non-interference as far back as 1955, during the Bandung Conference. However, the most likely outcome in the Indo-Pacific is a multi-polar approach, continuing the dynamic relationship amongst countries (Levy and Thompson, 2010). Undoubtedly, South-East Asia is trying to obtain the best possible benefits from both China and the US, so it is pursuing a dual strategy — 'omni-enmeshment' — to attempt to balance the power influence (Goh, 2005).

The ASEAN way employs a regional organisation mechanism with a 'soft approach', allowing ASEAN to adopt consultation and consensus (*Musyawarah dan Mufakat*) in its decision-making processes, contrasted to a legally binding mechanism when member states vote (Goh, 2005). In the decision-making process, unlike the European Union (EU), which has a regional parliament that decides public policies for the region based on voting, ASEAN adopts consultation and consensus to make its regional decisions.

The open regionalism principle of the ASEAN way also aligns with ASEAN Plus One, ASEAN Plus Three, and ASEAN Plus Five, and the Regional Comprehensive Economic Partnership (RCEP), which involves several non-member states with the purpose of increasing FDI inflows and export values of ASEAN.

ASEAN is also applying not only a free but also inclusive principle to the Indo-Pacific, in line with the ASEAN way and converging with the idea of a Free and Open Indo-Pacific. This strategy means that ASEAN is open to all countries, as evidenced by the Plus agreements, so it must be pragmatic in developing regional economic integration. This requires secure, stable geopolitical circumstances to secure the region's economic situation.

At the 34th ASEAN Summit in June 2019, ASEAN leaders formally adopted this *ASEAN Outlook on the Indo-Pacific* (MOFA, 2017). This outlook aims to strengthen ASEAN's centrality in the concept of the Indo-Pacific, entrenching the ASEAN way principles of being open, soft, free, and inclusive. It adopts the principles of transparency, a rules-based framework, good governance, and respect for sovereignty through a non-interference principle according to the *Treaty of Amity and Cooperation in Southeast Asia*.[35]

[35] ASEAN, *Treaty of Amity and Cooperation in Southeast Asia,* https://asean.org/our-communities/asean-political-security-community/outward-looking-community/treaty-of-amity-and-cooperation-in-southeast-asia-tac/#:~:text=Publications-,Overview,in%20the%20region%20and%20beyond

ASEAN has complemented its principles towards existing cooperation frameworks under equality, mutual respect, mutual trust, mutual benefit, and respect for international law in the past. These frameworks include the United Nations Charter and various treaties and conventions, including the 1982 Convention on the Law of the Sea. The ASEAN Charter and other various treaties and agreements, as well as EAS principles, have likewise helped create mutually beneficial relations (ASEAN, 2019).

From the Indo-Pacific perspective, ASEAN is aiming to preserve its market mechanism-led instead of government-led tenets. It is also applying inclusive principles that adopt non-discriminative actions towards every economic partner's domestic political system. This focus on inclusiveness will also be a path forward for the digital economic development of ASEAN and the Indo-Pacific.

ASEAN's view of the Indo-Pacific has two characteristics that differ from other conceptions (Haruko, 2020). First, ASEAN recognises the Indo-Pacific as an aggregation of two existing regions of Asia —the Pacific and the Indian ocean regions — which have already regional or sub-regional mechanisms, rather than as an aggregation of the two oceans. Second, it puts the Asia-Pacific region first and the Indian Ocean region second, despite the Indo-Pacific word order.

In the Indian Ocean Rim Association (IORA) context, ASEAN has adopted a central geostrategic position across the Indian and Pacific oceans. IORA is the only region-wide body designed to facilitate regional dialogue at the government-to-government level. Countries, such as Australia, India, and Indonesia, have committed resources to revitalise the IORA to enhance its relevance and utility. ASEAN should consider joining the IORA as a dialogue partner to enable mutually beneficial sharing of information, experience, and ideas, and help emphasise Indo-Pacific maritime congruence.

ASEAN does adopt regional economic convergence as a sufficient condition for completing the open economic principle (Verico, 2021b, Verico, 2022). In the context of the Indo-Pacific, the RCEP offers a better opportunity for economic convergence than the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) (Verico, 2020a). Indeed, the combination of open and convergence principles is reflected in the *ASEAN Community Vision 2025* of unity and cohesiveness; this condition ensures that all member states join any mega-regional cooperation at the same time (Verico, 2020a). This guarantees that all ASEAN Member States will obtain benefits from its open regionalism approach by staying convergent in all Asia-Pacific or Indo-Pacific platforms.

3. ASEAN Enlargement: East Asia Summit Role in the Indo-Pacific

The Asia-Pacific landscape has potential to become a powerhouse in the unfolding ‘Pacific Century’ – a prosperous era for the Pacific in both the Asia-Pacific and Indo-Pacific. However, there are also risks of conflict, the most destructive of which are arguably territorial disputes (e.g. the South China Sea). As noted, tense US–China relations also complicate Asia-Pacific regional relations (Lai, 2013). Despite the overall perspective of safe and secure maritime activities in the Indo-Pacific, a vision of a peaceful Indo-Pacific may be difficult to achieve (Chauhan, De, Parmar, and Kuarasamy, 2020).

East Asia Summit (EAS) members have different opinions on the evolving Indo-Pacific architecture. China views it solely as a Western-driven narrative to contain its rise, while ASEAN argues that ASEAN-led mechanisms can guide it towards the above vision of a peaceful and prosperous Indo-Pacific (Ao, 2020).

As South-East Asia's largest economy and population, Indonesia has become central to ASEAN's politics and economy. This position makes Indonesia one of the Indo-Pacific's middle-power countries, along with the Republic of Korea and Australia (Parello-Plesner, 2009; Darmosumarto, 2013; Lee and Lee, 2017). Indonesia agrees with the non-interference principle for both the landscape of the Asia-Pacific and seascape of the Indo-Pacific. At the 13th EAS in November 2018, Indonesia President Joko Widodo proposed cooperation instead of rivalry in the Indo-Pacific and emphasised the importance of increasing maritime cooperation in the Pacific and Indian oceans (Office of the Assistant to the Deputy Cabinet Secretary for State Documents and Translation, 2018),

The table below shows that both China and the US are Indonesia's two strongest bond countries. If Indonesia's economic network figure is assumed as the closest to that of ASEAN, this table confirms that both countries have huge political and economic influence in ASEAN and the Indo-Pacific.

Table 7.1: Indonesia Top 12 Most Influential Countries, 2019

Top 12 Export Destination	Export Share	WCIM	Combination
China	15%	3.4	18.4
United States (US)	10%	4.7	15.0
Japan	11%	3.1	13.9
Singapore	7%	5.8	13.0
India	8%	3.1	10.7
Korea, Republic of	5%	3.7	9.0
Malaysia	5%	2.6	7.8
Thailand	4%	2.5	6.3
Philippines	4%	2.1	5.9
Viet Nam	3%	1.9	4.4
Australia	2%	2.3	3.8
Netherlands	2%	1.1	3.3

WCIM = weighted composite index measurement.
Notes:
1. Export share by country destination per total Indonesia’s exports.
2. WCIM was calculated based on Verico (2020b).
3. Combination represents the summation of export share in nominal value and WCIM.

Source: Author.

The table underscores that Indonesia must have a balanced relationship with the US and China. Even amid the global COVID-19 pandemic, China and the US remain Indonesia's top two major export destination countries, with the share of these exports to Indonesia's total exports to the world at

18.3% and 11.0%, respectively.[36] Both countries are also major sources of FDI inflows to Indonesia after Singapore and Malaysia and then Japan (Government of Indonesia, MOI, 2017).

Similarly, ASEAN cannot take sides in regard to the US or China; it should encourage and facilitate the convergence of views towards an open, transparent, inclusive, and rules-based regional architecture, including over leaders' joint statements, communiqués, or chair's statements during ASEAN summits or through direct diplomatic engagement. As an example, the ASEAN initiative on the RCEP fits with ASEAN characteristics of the soft and open regionalism of the ASEAN way (Verico, 2021b). During the 16th EAS on 27 October 2021, the chair stated that the EAS acknowledged the importance of ASEAN's role in the *ASEAN Outlook on the Indo-Pacific* and vice versa. ASEAN Member States are always open to non-members, yet EAS members actively participate in priority areas based on the *Manila Plan of Action to Advance the Phnom Penh Declaration of the East Asia Summit Development Initiative, 2018–2022* (Bolkiah, 2021).

The combination of open, soft, inclusive, and free regionalism principles and ASEAN centrality can guarantee that ASEAN will securely cooperate with any non-member, merge with any mega-regional cooperation agreement, and develop its own mega-regionalism such as through the RCEP. These activities require that ASEAN adopt more broad economic liberalisation to enhance potential FDI. Although this economic cooperation enlargement must be secure, ASEAN still must also keep economic convergent as its primary purpose. The latter can be achieved through supply-side convergence.

ASEAN's strong and sustainable regional value chains in the Indo-Pacific are key to the ASEAN Economic Community (AEC) (Ishikawa, 2021). The AEC theoretically is a way for ASEAN to transform its economic cooperation from the intra-trade focus of the ASEAN Free Trade Area to intra-investment — but in the absence of a customs union. Verico (2017) posited that the AEC is a way that ASEAN can increase intra-regional investment by implementing the ASEAN Plus frameworks to substitute for a customs union. Moreover, the AEC is an example of implementing open and soft regionalism as a necessary condition and economic convergent as a sufficient condition.

Further, the AEC platform with the ASEAN Plus frameworks will assist ASEAN in possessing a central economic role in the Indo-Pacific. This collaboration will generate a robust regional supply side in South-East Asia with East Asia, South Asia, and the Pacific. It will not only strengthen Indo-Pacific economic networks but also those in Asia-Pacific, as it fits with the Free Trade Area of Asia-Pacific (FTAAP).[37] Regional supply chains will connect ASEAN's trade and integration of investment (i.e. FDI inflows), making its manufacturing sector the most important and strategic sector (Verico, 2021c).

One 1996 study found that the proliferation of regional free trade arrangements, such as the integrated European market and the North American Free Trade Area, influences or even threatens ASEAN (Kodama, 1996). Such arrangements in other regions, including those in less-developed countries as in Latin America, tend to have the same effect. These influences on ASEAN can also affect the Asia-Pacific, such as through Asia-Pacific Economic Cooperation (APEC), which uses ASEAN's trade plan as a model.

[36] OEC. Indonesia, https://oec.world/en/profile/country/idn?yearSelector1=exportGrowthYear26 (accessed 30 September 2022).

[37] APEC, Pathways to FTAAP, 2010 Leaders' Declaration, https://www.apec.org/meeting-papers/leaders-declarations/2010/2010_aelm/pathways-to-ftaap

Regional economic convergency requires that all ASEAN Member States stick together, ensuring that no one is left behind in any enlargements, including in the landscape of the Asia-Pacific and seascape of the Indo-Pacific. As for regional geopolitical stability purposes, ASEAN-led mechanisms such as the EAS, ASEAN Regional Forum, and ASEAN Defence Ministers Meeting Plus must continue to facilitate talks between the global powers to avoid unnecessary miscalculations and understand each other's red lines (Kien, 2020).

4. The ASEAN Economic Network in the Indo-Pacific: Central Gravity

ASEAN must enhance its member states' forward and backward participation at the regional and global value chain levels through the manufacturing sector (Kien, 2020). This will transform its economy at the Member State level and achieve economic convergence at the regional level. ASEAN needs a peaceful market mechanism based on mega-regional economic cooperation, including in the Indo-Pacific. Therefore, ASEAN must apply its open, soft, free, and inclusive principles to build peaceful market mechanism-based trade in the Indo-Pacific. For this purpose, ASEAN should opt for security cooperation instead of military cooperation in the Indo-Pacific.

In addition to the Keynesian approach of multinational companies' roles in ASEAN economic integration, given the Fourth Industrial Revolution, ASEAN must also encompass the digital economy of fintech and e-commerce in its digital economic interconnection (*The Jakarta Post,* 2022). ASEAN sees the Indo-Pacific as necessary to empower the maritime economy (Kamaruddin, 2019). This cooperation will complete the role of the Asia-Pacific in enhancing ASEAN's connection to global production networks. The Asia-Pacific is the landscape for global production networks, while the Indo-Pacific is the seascape platform for global services networks such as logistics (i.e. maritime-related shipping services, customs administrative services and clearances, seaport interconnections, and mother vessel transport).

Both the Indo-Pacific and Asia-Pacific are necessary for ASEAN to have a solid and sustainable linkage to global production networks, which involves Asia and Pacific networks and African and European grids. These networks will help ASEAN become an innovative, competitive, and resilient region in the dynamic global economy. They are also valuable to ASEAN in enhancing its regional digital economic capacity and collaboration with non-members.

Indeed, ASEAN is striving to become the central institutional platform in the Asia-Pacific and Indo-Pacific. Fundamental challenges for ASEAN centrality still exist, however: (i) its neutrality, which means adopting the non-interference principle by not taking sides in the global power rivalry; and (ii) its multiple tracks of cooperation, in which ASEAN does not discriminate against any Member State's political system (Acharya, 2017)**.**

The non-interference principle proves that in South-East Asia, ASEAN Member States that are committed to multilateralism and strategic independence have fundamentally shaped the region's response to major power competition (Nabs-Keller, 2020). In keeping with its centrality, ASEAN must continue to balance a strategic commitment to both the US and China under the basis of peaceful dispute resolution and a web of regional multilateral fora. ASEAN must continue to adopt the multilateral approach of the ASEAN Regional Forum and EAS in preserving ASEAN's relevance and ability to balance the regional distribution of power (Goh, 2008).

5. Governance Tools for the Indo-Pacific: ASEAN and Indonesia's Perspective

ASEAN has adopted open and soft regionalism instead of the closed and hard regionalism of the EU. This means ASEAN can enlarge its membership to non-members through ASEAN Plus frameworks to increase investment inflows from non-members (Verico, 2017). Open regionalism also means that ASEAN does not interfere with external tariff rates between member states and non-members. Soft regionalism refers to non-legally binding consultation and consensus decision-making processes. Soft regionalism fits within the ASEAN format, as ASEAN does not have a regional parliament nor court of justice. Both open and soft principles help ASEAN enrich its regional economic cooperation amongst member states and between member states and non-members.

ASEAN also does not discriminate in its economic cooperation towards member states and non-members based on political systems. Therefore, in adopting the Free and Open Indo-Pacific process, ASEAN will continue to emphasise this inclusiveness, which should also encompass the digital enhancement economy in South-East Asia. Indeed, economic convergence is ASEAN's sufficient regional economic integration condition, freeing ASEAN from any potential economic divergence damages of its intra- and extra-regional cooperation (Verico, 2021b).

Concerning future regional architecture, Indonesia Foreign Minister Retno Lestari Priansari Marsudi stated that Indonesia will work with countries in the region to develop an Indo-Pacific cooperation umbrella, with ASEAN centrality as the primary focus (Government of Indonesia, Ministry of Foreign Affairs, 2018). This centrality carries both ASEAN's necessary and sufficient regional economic integration condition. Indonesia has also pushed the Indo-Pacific concept bilaterally within ASEAN. A September 2018 joint statement highlighted Indonesia's appreciation of Viet Nam's support for ASEAN's primary principles of centrality, openness, transparency, inclusivity, and respect for international law within the Indo-Pacific (*Vietnam+*, 2018).

6. Governance Rules for the Indo-Pacific: Trade and Investment Cooperation

Geopolitical stability is a necessary condition for ASEAN to achieve regional prosperity. The sufficient condition for achieving this objective is a practical approach to economic cooperation related to trade and investment competitiveness. However, such an approach can also affect a stable and secure geopolitical situation. It is therefore crucial that both necessary and sufficient conditions in this context are simultaneous, endogenous, and affect each other.

Despite its soft regionalism approach in both landscape of the Asia-Pacific and the seascape of the Indo-Pacific, official approval of proposed agreements must ensure that negotiated rules and principles are binding and durable. The US's Indo-Pacific allies and partners believe that US President Joseph Biden's *Indo-Pacific Economic Framework* will thus become a vital initiative (The White House, 2022). If implemented successfully, this framework will help remind the region of the enduring US commitment to the Indo-Pacific and a rules-based trading system that reflects high economic standards (Goodman and Reinsch, 2022).

In addition, both the EU and the Indo-Pacific are interconnected (European Commission, 2021). The EU holds over 70% of the global trade in goods and services and over 60% of FDI inflows. The EU's approach to the Indo-Pacific also fosters a rules-based international order, a level playing field, and

an open and fair environment for trade and investment, tackling climate change and supporting connectivity in the Indo-Pacific.

The US and EU aim to build more resilient and sustainable GVCs by diversifying trade and economic relations and developing technical standards and regulations. Yet these efforts must align with ASEAN values and principles.

Regarding ASEAN in Indo-Pacific strategy planning and implementation, external powers have gained the first-mover advantage. China's Belt and Road Initiative and the US's *Indo-Pacific Economic Framework* have already begun. In contrast, ASEAN has yet to effectively provide a policy framework or reform existing ASEAN-led institutions to address urgent regional issues in the Indo-Pacific (Hanada, 2019).

ASEAN is also eager for infrastructure initiatives from other sources, including Japan, Australia, and the US, due to the fear of overreliance on a single power. A series of Chinese initiatives, including the Asian Infrastructure and Investment Bank (AIIB) and Belt and Road Initiative, have been attractive to many ASEAN Member States, as they are developing infrastructure projects for economic growth and avoiding the middle-income trap. The total infrastructure investment needs in the region from 2016 to 2030 are estimated at $2.8 trillion (ADB, 2017). The Belt and Road Initiative promises to provide more than $90.0 billion for regional connectivity projects in addition to the AIIB investment of $4.2 billion in 2017 from a capital stock of $100.0 billion (Hillman, 2017).

ASEAN remains apprehensive about possible external interventions in domestic politics through the Free and Open Indo-Pacific initiative. If ASEAN wants to remain central with an open and soft approach but at the same time aim to promote a rules-based order, then ASEAN must contribute to the Free and Open Indo-Pacific initiative. ASEAN could enhance its unity and convergency by empowering its strategy, addressing regional security dynamics under the ASEAN way (Pramono, 2018).

The Indo-Pacific must promote its integration and synergise it with maintaining a free, open, inclusive, multilateral, and rules-based economic order (Hanada, 2019). In 2017, collectively, its members were their own largest economic partner. ASEAN holds an intra-ASEAN trade share of 24% of its total trade and an intra-ASEAN investment share of 15% of its total internal FDI (ASEAN, 2017). These shares may increase depending on the level of economic integration. The latter became more effective since the AEC started in 2015 as the further combination of the Bali Concord II and Bali Concord III.[38]

A study in 2018 explained that regional trading agreements could be a building block to multilateral agreements (Ji, Rana, Chia, Li, 2018). In the context of open regionalism, another study in 2021 found that a single track of the RCEP has higher beneficial impacts than those of the dual-track RCEP and CPTPP (Verico, 2021b). Between the two mega-free trade agreements that currently define the landscape of trade governance in the Asia-Pacific, relevant parties should prioritise the RCEP over the CPTPP (Ji, Rana, Chia, Li, 2018). The RCEP is the only multi-party trade grouping that brings ASEAN together with the largest non-members, unleashing more substantial gains. The RCEP provides a higher probability of achieving regional economic convergence than the CPTPP, because the RCEP includes all ASEAN Member States and acknowledges ASEAN's centrality.

[38] The AEC consists of four significant frameworks: (i) Trade in Goods Agreement, (ii) Framework Agreement on Services, (iii) Comprehensive Investment Agreement, and (iv) Agreement on the Movement of Natural Persons Based on the ASEAN Agreements: Outcomes and Benefits.

Verico also posited that the single-track RCEP provides more benefits with enough investment capacity and higher industrial integration (Verico, 2021b). Ji, Rana, Chia, and Li (2018) found that trade openness helps smooth regional economic transition from a ‘noodle bowl’ of preferential regional trade agreements to open regionalism. Open regionalism that extends preferential market accesses to the rest of the world will generate more significant economic gains than closed regionalism. Open regionalism with the implementation of the RCEP will make ASEAN economic integration stronger than before, and this achievement is beneficial to strengthening the Indo-Pacific economic network.

7. Enhancement of the ASEAN’s Economic Institutions: Indo-Pacific’s Stability and Prosperity

For regional stability, ASEAN's recent reaffirmation of the Zone of Peace, Freedom, and Neutrality (ZOPFAN) indicates that ASEAN desires stability in the Asia-Pacific region, softening the superpower rivalry between the US and China. ASEAN is working to avoid a potential 'new Cold War' in Asia (Westad, 2019). Yet, as a framework for regional security, the ZOPFAN needs further arms-length details. The concept of ASEAN centrality also needs an effective solution for containing any potential regional conflicts (Southgate, 2021).

Neutrality principles of the non-interference spirit have enabled ASEAN to enhance its regional economic cooperation centrally towards Australia, China, Japan, and 12 other Asia-Pacific nations that now form the world's largest single trading bloc (Jaknanihan, 2022). For the first time, China subscribed to the Indo-Pacific concept in a joint statement to commemorate 30 years of China–ASEAN dialogue. Beijing reaffirmed the principles of the outlook, recognising it as ASEAN's 'independent initiative,' which is 'open and inclusive.' The document represents a milestone for ASEAN in neutralising the Indo-Pacific discourse (ASEAN, 2021).

As for its market-based approach to achieving regional economic prosperity, ASEAN has adopted industrial projects that could encounter problems (Kodama, 1996). Governmental industrial policies always run the risk of harming private manufacturers. ASEAN's economic development has been primarily motivated by multinational firms' initiatives based on a market-led mechanism. Government intervention in industrial policy may negatively influence such flexible private economic activities, known as the ‘crowding-out effect’. Prosperity in ASEAN is in line with the economic convergence purposes, and this needs government action at the regional level. ASEAN must adopt a market-led mechanism as a necessary condition for its economic integration and keep market-friendly government intervention as a sufficient condition (Verico, 2017).

8. Conclusion

The seascape of the Indo-Pacific has been promoted as a free and open region by the US and its allies. Open principles work with the open regionalism principle adopted for many years by the EAS and ASEAN Member States. However, the free concept that refers to domestic political systems does not meet the open and fundamental principle of ASEAN. ASEAN does not intervene in its member states’ domestic matters, including their political systems.

The open principle of ASEAN works with the soft regionalism principle that ASEAN adopts for its decision-making process. Open and soft regionalism makes ASEAN cooperation flexible amongst

member states and between member states and non-members. These principles ensure that all economic partners feel secure and are not being discriminated against or even alienated. This becomes a vital factor in safeguarding and sustaining geopolitical stability.

ASEAN centrality with open and soft regionalism provides positive energy for the Indo-Pacific geo-economic architecture. ASEAN is very open to any initiative to expand cooperation to enhance its economic capacity in global production networks and global services networks. However, this openness must consider the economic convergence purposes of ASEAN. In other words, ASEAN needs to grow, but it must keep the economic convergence and equality amongst member states. Ensuring ASEAN centrality in any economic initiative from major economies outside of ASEAN is the first best necessary condition.

Furthermore, ASEAN's open, soft, free, and inclusive principles are necessary conditions for solid regional economic integration in South-East Asia with economic convergence as a sufficient condition. The latter is also the fundamental objective of ASEAN economic integration.

Stable geopolitical and practical prosperous economies simultaneously affect each other. In the Indo-Pacific context, stable geopolitics require open, soft, free, and inclusive principles. Meanwhile, a prosperous regional economy requires pragmatic and regional economic convergence. In sum, although the Indo-Pacific's geoeconomics have simultaneous relations, geopolitics have the necessary principles, while geoeconomics bring sufficient principles.

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Chapter 8

Cooperation amongst Governments: Ensuring Sustainable and Inclusive Growth in Indo-Pacific

Chapter 8

Cooperation amongst Governments: Ensuring Sustainable and Inclusive Growth in Indo-Pacific

Priyadarshi Dash

1. Introduction

The idea of the 'Indo-Pacific' has mobilised significant attention in the global community and is being viewed as the dominant geopolitical and economic construct of our time. As such, Indo-Pacific does not have a single (agreed) definition in terms of geographical coverage and sectors of focus. Different countries have come up with Indo-Pacific strategies which are neither homogenous nor very different in terms of approach and sectors, although the degree of emphasis on sectors differs. These permutations and combinations of Indo-Pacific strategies, especially their economic dimensions, have seen some sort of maturing in the past few years as public awareness about the Indo-Pacific has continued to grow. These permutations and combinations have been manifested in varying emphasis on different sectors such as maritime connectivity, infrastructure investments, and the blue economy. Essentially, it characterises a transition from the Quadrilateral Security Dialogue (the Quad), a security-driven configuration, to a viable economic cooperation proposition, with ownership beyond the Quad. While the Quad remains central to the foundation of the Indo-Pacific, the white papers (country positions) of the United States (US), the Association of Southeast Asian Nations (ASEAN), India, France, Germany, New Zealand, and Canada, amongst others, signify a broadening of the Indo-Pacific paradigm with very strong economic content. Factors such as infrastructure, digitalisation, strengthening of supply chains, maritime cooperation are considered the drivers of economic growth and prosperity in the Indo-Pacific region. All the existing schemes of bilateral and trilateral cooperation within the geography of the Indo-Pacific – such as the Indian Ocean Rim Association (IORA), ASEAN, Australia–Japan–India (AJI), Quad Plus, India–European Union (EU) Strategic Partnership, India–EU Connectivity Partnership, India–Japan Comprehensive Economic Partnership Agreement, India–Australia Economic Cooperation and Trade Agreement, EU–China Comprehensive Agreement on Investment, and ASEAN–EU Comprehensive Air Transport Agreement – find a way to express their unique strength. On the other hand, countries party to those agreements – particularly the US, India, Australia, France, Germany, and New Zealand – are keen to pursue the Indo-Pacific with each other, signifying a possible convergence in their Indo-Pacific vision.

The maritime space covering the Indian and Pacific oceans could unleash huge potential for sustained inclusive economic growth, which the world needs badly in the post-coronavirus disease (COVID-19) economic reset. India's Indo-Pacific Oceans Initiative (IPOI) envisages a strong maritime pillar of cooperation in the Indo-Pacific region. In addition, the low-hanging fruit of Indo-Pacific cooperation could leverage the digital economy both to enhance its spread (greater digitalisation) and address its unequal benefits (digital divide). Infrastructure would remain a key enabler of economic cooperation amongst the Indo-Pacific countries. Moreover, the agglomeration economy

effects of infrastructure on the local economies need to be factored in efficiently to development cooperation projects. The Indo-Pacific needs to recognise the strength and effectiveness of triangular cooperation as the post-COVID-19 world struggles to mobilise resources for funding development projects and falls short of financing the Sustainable Development Goals (SDGs). Official development assistance (or aid) still forms the core of development cooperation, although new innovative models of resource mobilisation such as blended finance, social impact bonds, and investment by institutional investors like sovereign wealth funds, need to deployed. Aid flows from the Organisation for Economic Cooperation and Development (OECD)-Development Assistance Committee countries to poor countries in the Indo-Pacific region could help countries overcome resource constraints.

This chapter is an attempt to highlight the roadmap for economic cooperation that the participating countries in the Indo-Pacific vision are embarking upon. Interestingly, all the major economies in the Indo-Pacific agenda, i.e. the US, the EU, India, Japan, and ASEAN, have stressed promoting cooperation on various aspects of the marine/blue economy, which seems to be the most substantive and viable economic proposition for cooperation amongst countries in the region. This chapter critically analyses the visions of the major players in the Indo-Pacific, examines the merits of leveraging those ideas given the economic challenges facing the region, and identifies a few important sectors as the tangible expressions of the Indo-Pacific economic vision. The Indo-Pacific, as a government-driven initiative, could possibly absorb the contribution of the private sector – not as a strategy partner, but as a source of capital, technology, and expertise.

The chapter looks at developing a scheme of economic cooperation amongst various stakeholders of the Indo-Pacific vision.

2. Indo-Pacific: A Reality or Hype

The Indo-Pacific Economic Framework for Prosperity (IPEF), launched by the US in May 2022, is one of the latest manifestations of the Indo-Pacific vision. It appears to be a feasible proposition, rather than rhetoric, as the IPEF has 13 countries (the US, Australia, Brunei Darussalam, India, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, and Viet Nam) as parties and four pillars – Trade (Pillar I), Supply Chain (Pillar II), Clean Economy (Pillar III), and Fair Economy (Pillar IV) – for substantive cooperation. Unlike the IPEF, other country papers on the Indo-Pacific open up the possibility for partners from the broader geographic areas of the Indian and Pacific oceans. Moreover, the priority areas – trade; supply chains; clean energy, fair economy, decarbonisation, and infrastructure; and tax an anti-corruption – are not binding for the members as a 'single undertaking', hence the flexibility to explore sector-specific cooperation amongst the parties. All 13 countries joining the IPEF represent a large political and economic influence in the Indo-Pacific region. The US strategy in the Indo-Pacific seems to be reactive to China, as it clearly refers to China's aggressive ventures in the Indian Ocean and South China Sea in the IPEF statement. On the other hand, the EU's vision of the Indo-Pacific is more balanced and neutral. The EU is not averse to working with China, India, and other emerging players, and does not position itself explicitly against China's growing dominance in global affairs, nor does the EU consider China the single largest threat to the world. Like the US, the sectors identified by the EU for Indo-Pacific cooperation broadly reflect contemporary opportunities and challenges. Similarly, the ASEAN Indo-Pacific vision is a neat and clean economic cooperation agenda. Promoting trade and investment,

maritime connectivity, and the digital economy, amongst others, within ASEAN centrality remain the top priorities for ASEAN. Australia, on the other hand, has adopted a balanced stand rather than a confronting position on China's rise in the region. Australia is more concerned about regional security than cultivating the China–US differences.

Infrastructure investment is central to almost all the country visions on the Indo-Pacific. ASEAN and the US focus on energy, infrastructure and connectivity, the digital economy, reciprocal trade, promoting business partnerships, and other areas of sectoral cooperation (ASEAN, 2021; Government of the US, 2022). India's Act East Policy and IPOI integrate the vision of a free, open, transparent, and inclusive Indo-Pacific as core principles (Government of India, 2019; 2020). In a certain sense, there is greater convergence amongst the different models of Indo-Pacific cooperation from the perspective of the scope of bilateral and transnational engagements.

The Free and Open Indo-Pacific (FOIP) enunciated by Japan in 2018 and reiterated by the US and India, sets out a vision for the common future of the people in the Indo-Pacific region. Recently, the QUAD leaders Conference help on 4 March 2022 and the Japan-India Summit Meeting of 19 March 2022 reiterated promoting efforts toward cooperation in the Indo-Pacific region. At the 19 March meeting, the Prime Ministers of India and Japan underscored the space for increased cooperation between IPOI and FOIP. Since the region is endowed with precious natural, mineral, and human resources, it is subject to strategic competition and geopolitics. To harness the potential of the region, a virtuous model of international development cooperation amongst the countries in the Indo-Pacific region is needed. By following the principles of development partnership, countries in the region could envision a common roadmap for attaining inclusive growth and development in the Indo-Pacific region.

3. Core Sectors for Indo-Pacific Investments

Investment is at the heart of the Indo-Pacific vision of all the major economies in the world. Besides trade, it has been a tangible component of regional cooperation across various regions. In fact, the coverage of investment issues in a new vintage of regional trade agreement (RTA) and free trade agreement (FTA) negotiations in which Indo-Pacific countries have participated is comprehensive and deeper. Investment in critical sectors across the Indo-Pacific region could form a strong basis for governments to explore cooperation and partnership in the Indo-Pacific, especially amongst the 13 countries joining the IPEF. Major fields of investment to originate and be directed within the Indo-Pacific may include the following.

Infrastructure

Despite being a traditional area of development cooperation, infrastructure in all its manifestations – e.g. physical, digital, and social – remains a top policy priority for all countries, including the advanced economies. Physical infrastructure gaps in roads, railways, ports, and airports can often impede trade, investment, and economic integration in the Indo-Pacific region. According to estimates, $0.7 trillion in new investments per year are required to close the infrastructure gap (Wilson, 2020). For the Indo-Pacific region, Asian Development Bank (ADB) estimates suggest an infrastructure investment requirement of €1.4 billion per year until 2030. During 2013–2017, the European Investment Bank invested €7.5 billion in infrastructure in the region (Government of Germany, 2020). The Government of France is of the view that

infrastructure is a highly competitive sector in the Indo-Pacific region. This prompted France to invest in the region by setting norms and standards; deploying multilateral tools for financing quality infrastructure; and promoting environmental protection, social inclusion, competition rules, transparency, and fiscal sustainability (Government of France, 2022). To meet the SDGs, building, operating, and maintaining sustainable and quality infrastructure need to be viewed as a comprehensive strategy. This would help ensure a transition to a more sustainable economy and efficient energy consumption. Besides maintenance, investment in ageing infrastructure and both preventive and predictive maintenance could help reduce maintenance costs, enhance energy efficiency, and promote ecology-friendly technologies (D20, 2021). Standardised design and construction processes also create the opportunity to save on long-term maintenance due to the use of similar replacement parts and equipment (World Economic Forum, 2016). Digital infrastructure is the new enabler of growth, diversification, and economic integration. Chaturvedi et al. (2021) showed how digital layers in governance could yield significant gains in developing countries.

Table 8.1 indicates the increasing portfolio of energy, information and communication technology, and human capital investments. These sectors not only attract greenfield investments but are also preferred sectors for international project finance. Given the magnitude of the infrastructure gap, public investment should crowd in private capital to harness the large pool of private savings seeking long-term investment. To this end, the development of infrastructure as an asset class is a helpful step. Lack of critical mass of bankable projects and insufficient data to track asset performance can hinder this process (OECD, 2018). A critical enabler is the need to leverage technology in a better way for infrastructure delivery. Operation and maintenance of critical infrastructure projects can be enhanced by using the internet of things (IoT) devices for a speedy response, leveraging data analytics capabilities for monitoring and supervision of projects, and using blockchain for online authentication and disintermediation. Technological transformation would also be the driver for crisis-proof infrastructure projects (KPMG, 2020).

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Table 8.1: Investment in Infrastructure Sectors

(US$ Million)

Sector	Greenfield Projects				International Project Finance Deals			
	2011	2019	2020	2021	2011	2019	2020	2021
Energy	4398 (3)	3483 (17)	7047 (24)	3260 (7)	93370 (14)	59267 (67)	18208 (49)	55855 (47)
Human Capital	177 (10)	201 (10)	43 (5)	244 (7)	387 (2)	130 (1)	351 (2)	216 (3)
ICT	1120 (27)	337 (19)	2248 (31)	1898 (31)	-	320 (2)	-	410 (2)
Natural Capital	12159 (44)	11214 (19)	3059 (10)	1568 (7)	-	181 (1)	-	-

Sector	Greenfield Projects				International Project Finance Deals			
	2011	2019	2020	2021	2011	2019	2020	2021
Private Sector Development	2322 (147)	1377 (108)	838 (45)	524 (31)	-	-	-	-
Structural Change	8488 (256)	14754 (232)	4078 (92)	3364 (72)	1844 (5)	314 (3)	992 (5)	858 (5)
Transportation	77 (5)	2413 (16)	-	509 (5)	1164 (3)	7164 (9)	12849 (4)	3135 (6)

ICT = information and communication technology.
Notes: Figures in parentheses indicate number of projects.
Source: UNCTAD (2021a).

There is also a growing need to incorporate environmental, social, and governance (ESG) criteria in infrastructure projects, especially in emerging markets and developing economies. In addition, it is imperative to bring in reforms to ensure cost-effective tariffs, transparent regulations, certainty, and predictability for infrastructure projects. The level of interest in emerging markets presents a great opportunity for governments to tap into this pot of funding. This would entail producing a clear pipeline of greenfield and brownfield projects via asset recycling, to offer them as an investable asset class for long-term investors such as pension funds, insurance companies, and infrastructure funds (KPMG, 2020). The COVID-19 pandemic required increased spending to address priorities such as digital connectivity, healthcare, welfare, pandemic-proofing of public services, and infrastructure such as transport. However, these infrastructure systems must be connected in a way that creates a seamless flow of services to society. Hence, achieving convergence between physical, social, and digital infrastructure is a novel way of harnessing existing infrastructure to achieve sustainability and resilience.

With the rising importance of the digital economy, the digital infrastructure financing gap in Asia is growing significantly and is projected to reach $512 billion by 2040. Financing gaps are still prevalent in middle- and low-income countries. More than 50% of the global digital infrastructure investment gap will be in Asia by 2040, with impacts predicted on economic growth. Digital infrastructure development (both soft and hard) is the foundation of the digital economy. This must be aligned with different maturity levels, where digital availability, access, appetite, and abilities should be considered holistically.

Institutional investors have substantial liquidity, so they are a significant source of capital. Amongst them, pension funds are important for infrastructure investment. Pension funds have long-term, annuity-type liabilities, and these funds have mandates to invest in long-term, low-risk securities with predictable income streams. The long-term nature of infrastructure projects and relatively stable returns from underlying assets (during the operating stage) is complementary to the requirements of pension funds, as revenue streams from infrastructure projects are comparatively stable and underpinned by long-term service contracts. However, pension fund investors usually have a low appetite for risk. Bonds could be another instrument for funding infrastructure projects. The advantage of project bonds as a means of debt financing is the flexibility they offer in structuring

the issue. They could have flexible or fixed interest rates and come in tranches that could be issued in different currencies for different tenors (AIIB, 2020).

Digitalisation

Governments across the world are establishing digital financial infrastructure to support publicly scalable financial inclusion platforms. At a basic level, such infrastructure promotes affordable and instantaneous payment services – enabling access of retail and small-scale individuals/firms to formal financial systems. At a deeper level, this infrastructure is disrupting the way in which governments have managed the delivery of public services in the economy. The notion of treating digital financial infrastructure as a digital public good has increasingly gained momentum. It presents both opportunities and responsibilities for the governments in the Indo-Pacific region. On the one hand, when viewed as a digital public good, governments find themselves at the forefront of financial technology (fintech) innovation. On the other hand, governments carry the additional responsibility of implementing fintech innovations in a safe, secure, scalable, and responsible manner. The challenge is the lack of global standards to enable governments to harness these opportunities and navigate through such issues efficiently.

From a policy perspective, global standards refer to the extent to which such designs should (i) leverage the national digital identity framework, (ii) promote the performance reliability of the digital financial infrastructure, and (iii) encourage scalable delivery of multiple public services. From a regulatory perspective, while implementing/operating this digital financial infrastructure, governments should focus on key considerations such as (i) new regulatory themes, (ii) new regulatory architecture, and (iii) new regulatory tools. Taken together, the policy issues and regulatory considerations must be translated into a comprehensive global standard that countries could eventually prescribe for guiding the design of digital financial infrastructure by governments as a public good. Such a standard would help governments realise their financial inclusion and public service delivery objectives in a safe, secure, scalable, and responsible manner.

Designing digital financial infrastructure as a public good presents governments with opportunities and responsibilities. Governments can nurture fintech innovation for public service delivery while leading from the front; at the same time, there is a need to implement such innovation in a safe, secure, scalable, and responsible manner. The twin objectives often work at cross purposes. Governments need a risk-seeking mindset to nurture innovation and a risk-averse mindset for its responsible implementation. The challenge is to strike a balance between these twin objectives while designing digital financial infrastructure.

Unfortunately, global standards are currently disaggregated across various domains such as sustainable development, financial inclusion, fintech policy, financial regulation, data privacy, and cybersecurity. A comprehensive global standard (covering all these aspects as well-connected building blocks for designing digital financial infrastructure) and taking into account learnings from the experience of countries that have initiated such an exercise, is currently not in existence. Such a standard would provide alternative approaches, comparative nuances, and possible pitfalls from which governments can draw guidance/inputs for designing and implementing digital financial infrastructure as a public good.

From the policy and regulatory perspective, the Indo-Pacific economic agenda could consider the following areas:

- ***Leverage the national digital identity framework*** (covering design choices for form, authentication, and operational aspects of digital identity).
- ***Promote the performance reliability of digital financial infrastructure*** (covering key parameters such as the extent of availability (24*7), ease of access, openness of the underlying architecture, and interoperability amongst service modules offered through the infrastructure).
- ***Encourage scalable delivery of multiple public services*** (range of public services for delivery through the infrastructure at the national, provincial, and municipal level).
- ***New regulatory themes:*** Apart from financial inclusion, digital financial infrastructure enables gradual proliferation of digital currencies in the economy. Concepts such as money, contracts, enforcement, and fairness are therefore undergoing several debates and discussions globally. While looking at digital financial infrastructure, governments should consider new regulatory themes such as non-fungible tokens, smart contracts, code as law/law as code, algorithm bias, and decentralised autonomous organisations. These themes are in addition to traditional themes such as promoting competition, conduct, and integrity in the online marketplaces created through digital financial infrastructure.
- ***New regulatory architecture:*** Regulation of the financial economy globally adopts a twin-peak model wherein the regulatory authorities attempt to regulate the prudential and market conduct aspects across different financial firms. In the context of digital financial infrastructure (especially with the recent fintech innovations), a triple-peak model of regulatory architecture can be envisaged. The regulatory focus under the third peak should cover the societal impact of digital financial infrastructure (covering a wide range of issues such as privacy, personal data protection, and interoperability at the *micro level*; and fairness, accountability, and transparency issues at the *society level*). Governments should therefore envisage the role of new regulatory authorities (for regulating privacy and personal data protection, digital lending, digital currencies, data exchanges, and decentralised finance service providers) in operating the digital financial infrastructure.
- ***New regulatory tools:*** Technology tools (e.g. RegTech and SupTech) have the power to harness regulation in an efficient and effect manner. Technology tools such as machine learning and distributed ledger technology enhance the quality of regulation and supervision for preventing financial crime. They further facilitate open source investigations, real-time monitoring, and the traceability of transactions. Governments should leverage these tools to ensure smart regulatory oversight without compromising the societal values of individual freedom and protection of privacy.

Digitalisation is not just a technological disruption – rather, a force of transformation and change. The positive effects of digitalisation are manifest in all sectors, most prominently in the spheres of financial inclusion, retail payment settlements, delivery of public services, e-commerce, and the Fourth Industrial Revolution (4IR). Moreover, with the rapid pace of digitalisation through mobile telephony, apps, and real-time access to information, the 'empowerment impact' of digitalisation is quite strong in developing countries and least developed countries (LDCs). During the long and frequent lockdowns due to the COVID-19 pandemic, the power of digitalisation in ordinary lives was

felt by households, businesses, and governments. It also provided direction for promoting the digital economy through digital public goods. The 2020 United Nations Secretary-General's Roadmap for Digital Cooperation has been a popular reference document on issues such as global connectivity, digital public goods, digital inclusion, digital capacity building, digital human rights, artificial intelligence, digital trust and security, and global digital cooperation (United Nations, 2020).

The United Nations views digital cooperation as a multi-stakeholder effort and, while governments remain at the centre, the involvement of the private sector, technology companies, civil society, and other stakeholders is essential. It is vital to engage with the private sector, the technical community, and civil society from the beginning if realistic and effective decisions and policies are to be made. The focus of such multilateral norms and standards on data governance should be to achieve greater transparency in the data-related functions of public and private entities and, in turn, ensure better quality of data. The Group of Twenty (G20) has recognised the importance of digitalisation for economic growth, industrialisation, and societal progress, and accordingly introduced several initiatives in the past presidencies to promote the digital economy, standardised rules and regulations governing digitalisation, leveraged digitalisation for development, and addressed associated policy and governance issues. The recent G20 presidencies have stressed the promotion of open, secure, and affordable digital access and bridging the digital divide. Besides the commercial use of digital technologies, the G20 presidencies of Germany (2017), Argentina (2018), Japan (2019), and India (2023) have underlined the importance of data for development.

Other key areas of focus of the G20 include (i) protection of intellectual property rights, respect for privacy, consumer protection, and applicable legal frameworks (Argentina, 2018); (ii) unlawful and arbitrary interference with privacy (Turkey, 2015) and cybercrime (Italy, 2021); (iii) measurement of the digital economy (China, 2016); (iv) digitalisation of micro, small, and medium-sized enterprises; small and medium-sized enterprises; and start-ups (Germany, 2017); (v) leveraging digitalisation for the achievement of the SDGs; (vi) digital trade and e-commerce (Germany, 2017) and digitalisation of business models (Saudi Arabia, 2021); (vii) development and use of market- and industry-led standards (Germany, 2017); (viii) free flow of data (Japan, 2019) and digital government (Germany, 2017; Argentina, 2018); and (ix) smart mobility (Saudi Arabia, 2020) and the G20 Innovation League (Italy, 2021).

G20 nations have also proposed the development of digital infrastructure to support digital economies, built on the principles of sustainability, resilience, and inclusivity. The G20 Guidelines for Financing and Fostering High-Quality Broadband Connectivity for a Digital World were developed based on the long-standing expertise of G20 members and the OECD (G20 Italy, 2021). As against the use of data for profit, India has been pushing the concept of data for development at the G20 to ensure that the benefits of technology outweigh its potential risks. The idea is also to ensure digital inclusion in various government initiatives that leverage technology, including those measures aimed at advancing social security benefits.

India has emerged as one of the largest digital economies – a powerhouse of digital solutions and a global leader in digital public goods that have a transformative impact as tools for responding to the pandemic and accelerating the SDGs. India has a preeminent claim to engage in rule-making and norm-setting on data for development, covering major domains such as digital public goods, digital inclusion and access to data, and the promotion of artificial intelligence as a welfare tool and mainstream open source data. Aadhar, CoWIN, Aarogya Setu, BHIM, RuPay, and UMANG are some

recent experimentations by India in the digital space, which can be replicated with locally customised solutions in other developing countries.

Fintech

Banks and financial institutions worldwide are increasingly adopting fintech solutions to create efficiency in financial intermediation and offer value-added financial services to a diverse range of customers, especially in developing countries. Despite significant development in the access to and usage of financial services (e.g. deposits, lending, and remittances), the unbanked population and gaps in financial inclusion are still large. According to the Global Findex Database 2021, 76% of adults globally had bank accounts with a bank or financial institution in 2021. Although bank account ownership increased by 50% over the 10-year period from 2011 to 2021, the remaining 24% of the global population were still outside the formal financial system during this period (World Bank, 2021). Since fintech solutions enable digital transactions and services linked to bank accounts, the unbanked population would remain excluded from the benefits of digitally empowered banking and financial services.

As illustrated in Table 8.2, people do have several financial worries which demand faster and efficient solutions preferably customised to the specific requirements of various sections of the population. For instance, adults from different regions participated in the survey by the World Bank for Findex Database indicates medical expenses as a major financial issue. More than 40% of the participants in low-income and upper middle-income countries cited medical reasons a major financial worry along with need for monthly expenses and money for old age. It is observed that demand for financial solutions is high in all countries and regions, perhaps with varying emphasis.

Table 8.2: Financial Issues Worrying People, 2021

(%)

Country category/region	Monthly expenses	School fees	Medical expenses	Money for old age	Not worried
High-income economies	13	6	23	31	27
Upper middle-income economies	12	9	40	16	21
Lower middle-income economies	18	19	32	20	9
Low-income economies	14	27	38	15	3
East Asia and the Pacific	8	11	41	16	22
Europe and Central Asia	16	9	40	19	14
Latin America and the Caribbean	25	9	34	21	10
Middle East and North Africa	15	11	42	19	11

Note: Views of the adults participating in the survey.

Source: Compiled World Bank (YEAR), Global Findex Database. https://www.worldbank.org/en/publication/globalfindex/Data (Accessed 20 February 2023).

The global fintech industry has grown dramatically over the years, with a good number of start-ups producing futuristic and customised financial solutions. Fintech is pervasive in certain market segments such as payments, credit, insurance, and wealth management. Equity investments in fintech have registered phenomenal growth in the last decade, reaching $1 trillion in more than 35,000 deals since 2010. Moreover, the capital raised by fintech was 5% of the global equity deals – marking a significant jump from 1% in 2010 (Cornelli et al., 2021). Large technology firms (BigTechs) are major players in the fintech industry, with more than $2 billion of investment in fintech companies in 2020 (Bains, Sugimoto, and Wilson, 2022). Fintech applications are not just used in the financial sector; rather, they have become a connecting thread for many solutions in other sectors. The ease of settling payments, faster customer identification, and creditworthiness assessments, amongst others, pave the way for a whole range of retail products by banks and financial intermediaries. India's experiment with digital payments is often viewed with interest. For instance, the United Payments Interface (UPI)-based retail payment revolution in India has demonstrated the scale and pace at which digitalisation can bring efficiency in the payment and settlement domain. The Aadhar platform enabled the Government of India to make fast and transparent execution of Direct Benefit Transfer (DBT) schemes during the COVID-19 pandemic. India has emerged as one of the fastest growing fintech markets in the world. It was ranked first in the Global FinTech Adoption Index in 2021 with an adoption rate of 87%, outperforming major fintech markets such as the United Kingdom (UK), Singapore, Switzerland, and the US.

The Jan Dhan–Aadhaar–Mobile (JAM) trinity was a major initiative driving the financial inclusion and fintech revolution in India. It has enabled large-scale implementation of DBT by the government to the poor and needy, solely through digital identity numbers. DBT schemes have eliminated intermediaries, brought transparency and accountability, and supported effective targeting of beneficiaries. This has allowed the government to target genuine and deserving beneficiaries, leading to estimated savings/benefits of ₹2.2 trillion (or $26.5 billion at a US dollar–Indian rupee exchange rate of $1.0 = ₹82.9 as on 22 February 2022). India's experience of Jan Dhan Yojana, MUDRA, and DBT through the Aadhaar-based digital medium is an example of new global practices for cost-effective access to credit by ordinary people. The evolution of India as a fintech nation is the result of various government initiatives aimed at building the digital infrastructure, to achieve greater financial inclusion and a cashless economy. This effort gave rise to India Stack, a set of open application programming interfaces (APIs) and digital public goods that aim to unlock the economic primitives of identity, data, and payments at the population scale. Although the name of this project bears the word India, the vision of India Stack is not limited to one country; it can be applied to any nation – developed, emerging, or LDC.

The benefits of fintech have been manifested vigorously in Africa. M-PESA in Kenya has transformed the financial sector in Kenya and other countries in the region, including Tanzania, Lesotho, Mozambique, and Ghana. As a result, sub-Saharan Africa has become the world leader in mobile money transfers, and fintech has proven to be a leapfrogging technology for inclusive development as traditional banking and financial infrastructure lacks scale, competition, and linkages (Sy et al., 2019). By conducting an empirical analysis for 52 countries, Sahay et al. (2020) demonstrated that digital financial services were faster and more efficient than traditional financial services during COVID-19, and have greater potential to reach out to lower-income households and small and medium-sized enterprises.

Fourth Industrial Revolution

Today, all the countries in the world are silently embracing the 4IR in an accelerated fashion. The growing spread of digital products and services will make this process irreversible, regardless of the development status of the countries. The Consolidated Strategy on the Fourth Industrial Revolution for ASEAN identified six enablers of 4IR for its Member States, which are applicable to emerging markets and developing economies: (i) digital infrastructure, (ii) capability development, (iii) cooperation and collaboration, (iv) institutions and governance, (v) resource mobilisation, and (vi) effective monitoring (ASEAN, 2021b). These enablers correspond to an integrated and mutually reinforcing ecosystem approach that addresses multiple facets of the 4IR transition in developing countries, such as digital readiness, enabling digital infrastructure, and skilled human resources. Likewise, Germany considers the demand for Industry 4.0 products in the Indo-Pacific to be high, and the region is an attractive market for Industry 4.0 products (Government of Germany, 2020).

Our assessment of digital readiness in various countries by their income status reveals interesting developments. For the mobile and internet indicators, the numbers look impressive for most of the country categories covered in Table 8.3. According to the International Telecommunication Union, mobile broadband subscriptions and the coverage of the 3G and LTE mobile network have increased rapidly across all groups. Additionally, the international bandwidth has increased incredibly for developed and developing countries.

Table 8.3: Digital Readiness in Countries by Level of Development

(per 100 inhabitants)

Indicators	World		Developed		Developing		LDCs		LLDCs		SIDS	
	2015	2020	2015	2020	2015	2020	2015	2020	2015	2020	2015	2020
Fixed telephone subscriptions	14.0	11.6	39.0	33.4	8.9	7.4	0.9	0.8	3.8	3.3	12.1	11.6
Fixed broadband subscriptions	11.4	15.8	29.5	34.6	7.6	12.1	0.8	1.4	1.9	2.9	6.7	8.0
Mobile cellular telephone subscriptions	97.3	107.0	124.5	133.0	91.6	101.9	67.5	74.7	70.4	76.7	80.4	84.8
Active mobile broadband subscriptions	44.6	77.3	89.2	127.1	35.4	67.5	14.9	36.3	19.7	40.0	31.8	54.4
Population covered by at least a 3G mobile network	78.3	93.6	94.0	97.8	75.0	92.8	53.3	79.0	49.8	78.6	61.5	87.8
Population covered by at least an LTE/WiMAX mobile network	43.4	85.0	85.4	98.0	34.7	82.4	15.4	44.1	12.3	41.9	34.9	65.4
International bandwidth (Tbit/s)	154.5	719.1	79.2	263.4	73.8	405.1	0.7	7.6	2.1	9.4	4.5	32.3
Households with internet access at home (%)	47.9	65.7	80.1	87.8	36.5	57.8	10.7	22.0	20.8	31	..	48.4
Individuals using the internet (%)	40.5	59.1	76.7	88.3	32.9	53.3	10.8	24.6	19.2	32.3	39.4	60.6

LDC = least developed country, LLDC = landlocked least developed country, SIDS = small island developing states, Tbit/s = terabits per second.

Source: ITU Statistics.(https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2020.pdf). Accessed in July 2022.

Trends in digital readiness in G20 countries suggest that all countries are catching up faster in digital infrastructure and the usage of digital services. This forms the backbone of the adoption of the 4IR. Considering the systemic changes happening across the world, the G20 could consider implementing certain measures for smooth and faster adoption of the 4IR.

Developing countries have mostly remained dependent on advanced economies for technology transfer even though significant efforts are under way for indigenous technology development. Hence, the pace of technological catch-up in developing countries is slower and often comes with a lag. Developing countries need to make significant progress in upgrading their economies by adopting past technological innovations as well as by embracing the 4IR. Given the rapid and disruptive nature of digital technology, no country – particularly developing countries – can afford to follow the traditional technology catch-up model that has occurred in previous industrial revolutions. The way to remain relevant today is to 'leapfrog' in the technology space rather than following the technology leader–laggard framework. As a result, countries such as India, South Africa, and Brazil can use leapfrogging to catch up with technologically advanced nations and reap the benefits of Industry 4.0. For example, instead of going through the stages of network development that developed countries did, such as analogue to copper and then to fibre optics, developing countries can choose to install fibre optics directly.

Open source technologies can provide a means of effective technology transfer and can help countries to leapfrog, thereby helping them to catch up with their developed counterparts. Various forums have been discussing and promoting the use of open source innovation. The United Nations Conference on Trade and Development (UNCTAD) has been promoting the use of open source technologies for many years. The United Nations Economic and Social Council has adopted a resolution on open source technologies for sustainable development (UNCTAD, 2021b). The United Nations Technology Innovation Labs (UNTIL) has launched an open source initiative to make technology, software, and intellectual property available to everyone, including developing countries (Karlitschek, 2019). The United Nations Children's Fund (UNICEF) has also developed various tools and platforms to operationalise its commitment to open source, including tools to foster open source collaboration, agreements to develop new solutions with vendors, and collaboration with UNICEF's partners. UNICEF has worked to progressively operationalise open source, for instance, an example of which is the UNICEF GitHub organisation (Bédi et al., 2020).

'Data free flow with trust' – which seeks to enable cross-border free flow of data while addressing concerns over privacy, data protection, intellectual property rights, and security – has been a priority of global digital policy coordination since the G20 first raised it during Japan's presidency of the G20 in 2019. The Italian presidency in 2021 underscored the importance of enhancing regulatory frameworks for workers on digital platforms, which have seen a monumental rise in this phase of 4IR. Data, which are widely regarded as the oil of the 21st century, have seen an exponential rise with global digitalisation. The production and storage of data in such large quantities is fraught with security challenges, especially in an increasingly connected world.

As data flows are fundamental to the growth of the digital economy and facilitate businesses across the global supply chain, the World Trade Organization should incorporate a horizontal obligation enabling cross-border data flows for conducting business transactions and prohibiting data localisation measures (Mitchell and Mishra, 2019). Privacy is a prerequisite for instilling greater digital trust. The current General Agreement on Trade in Services framework allows an exception for privacy

measures, but this exception is insufficient as data source countries are unlikely to accept one-sided limits on their right to protect privacy. In other words, to enable cross-border data flows, both data source and destination countries should have effective privacy frameworks. Therefore, World Trade Organization law should require all members to adopt a basic regulatory framework for the protection of personal information or privacy protection for ensuring free flow of data. Members should adopt a mandatory cooperation mechanism for addressing the transnational aspects of online consumer protection, including information-sharing and providing assistance for cross-border enforcement of consumer protection laws. Countries should adopt measures that they consider appropriate and necessary to protect the personal information of users.

Developing countries should try to develop resilient and adaptable labour markets that allow workers and countries to manage the transition to this new technological age with the least disruption. Investment in education and training should be made to skill and re-skill young people for the jobs of the future and for equipping them with appropriate skills to successfully navigate an ever-changing, technology-rich work environment. As part of upgrading educational and pedagogical methods to usher in the 4IR, digital learning platforms assume great importance. The onset of the pandemic reinforced this trend. Taking advantage of digital learning platforms, online open courseware or massive open online courses (MOOCs) have become a practical method to address the inefficiencies associated with conventional learning platforms. Many private sector companies have the unique value proposition of housing online training courses, aimed at supporting the workforce development needs of current employees. With the understanding that these trainings are proprietary, and often tailored to the specific customer and employee needs of the company, open source online courses also exist and can be leveraged for the business needs of the future. These could be particularly effective if accompanied by mentorship, coaching, and hands-on learning. Working with established mobile-enabled platforms, such courseware could be leveraged to promote cross-cultural education and global connectivity, supporting companies' development of fractured work cultures (Deloitte, 2018).

Blue Economy

The large maritime space of the Indo-Pacific – covering the IORA, the Pacific Ocean, the Pacific Island economies, etc. – offers huge scope for promoting the blue economy. With the current state of knowledge and technologies, the blue economy in the region has not been fully harnessed. It has gained more popularity than its sister concepts (e.g. the green economy) perhaps because of its unique proposition of intertwining the goal of economic maximisation with environmental and ecological sustainability. The conceptual foundation of the blue economy and the ideas surrounding its practical application sound feasible. It propagates a clear message that ocean resources that have been in use in different forms for food, biological and mineral resources, shipping, and other industrial applications for centuries, can be used more efficiently and sustainably than the current approach of extraction for maximising the utility of those resources for the present generation.

In that sense, the blue economy appears to be a more convincing paradigm which does not treat the economic interests of society differently from the parameters of sustainable development. This may be the biggest realisation amongst practitioners – that achieving environmental sustainability goals as a separate policy objective may not work, as the classical trade-off between higher economic growth and sustainability remains unresolved in that single-dimension framework. In other words,

integrating the optimisation of economic interests with the goal of the sustainability of the marine ecosystem promotes ownership amongst stakeholders, with promising outcomes. Since the Rio+20 Conference in 2012, the blue economy has attracted tremendous policy attention from coastal nations as well as multilateral institutions such as the United Nations, the Food and Agriculture Organization of the United Nations, the World Bank, the United Nations Environment Programme, UNCTAD, and several other institutions. Countries in the region can work collectively to use the ocean resources sustainably for growth, diversification, and employment generation.

Triangular Cooperation in the Indo-Pacific

As we argue above, investment in development projects could perhaps build attraction towards the Indo-Pacific as various countries are implementing competitive development cooperation schemes. These schemes cover a spectrum of projects in infrastructure sectors: Build Back Better (US), the IPEF (US), the Global Gateway (EU), the BRI (China), and other infrastructure initiatives and institutions such as the Partnership for Quality Infrastructure the US International Development Finance Corporation, ADB, the Asian Infrastructure Investment Bank, the Master Plan on ASEAN Connectivity 2025, the Greater Mekong Subregion, the APEC Framework on Connectivity, and numerous regional initiatives in South Asia, the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, and Africa. In addition, most of the countries implemented stimulus programmes in response to the COVID-19 pandemic in 2020 and 2021, a sizeable chunk of which was meant for infrastructure projects. Although the fiscal stimulus measures were primarily intended to stimulate domestic demand, they indicate the direction the countries are heading in the post-COVID-19 years. A study by Deb et al. (2021) observed that demand support policies should continue and are effective, especially in digital and green infrastructure.

From that perspective, the contribution of Indo-Pacific initiatives towards attracting foreign direct investment to the Indo-Pacific region and elsewhere in the areas of energy, the digital economy, and green infrastructure should be unique and attractive. The most pertinent question in this respect is whether the Indo-Pacific ambitions would prioritise the economic agenda over the geopolitical and strategic issues. Enhancing engagements amongst countries in the region on the economic pillars of Indo-Pacific cooperation – e.g. infrastructure, maritime cooperation, the blue economy, trade and investment, and digitalisation – could be a starting point for yielding strategic advantages later. The Indo-Pacific strategy of all major countries, such as the US, Germany, Canada, France, India, Australia, and New Zealand, as well as ASEAN indicates convergence in terms of sectoral priorities and instruments, e.g. capacity building, technical assistance, and financing. Most importantly, infrastructure, Industry 4.0, and digitalisation are viewed as sectors with great potential for investment, value addition, and job creation.

Unlike BRI projects, which are large and centred on physical connectivity projects, the Indo-Pacific development partnership could be people-centric and innovative. Indo-Pacific development projects should follow the principle of pooling finances, expertise, technology, and human resources by the participating countries. The Trilateral Partnership for Infrastructure Investment in Indo-Pacific, being jointly implemented by Australia, Japan, and the US, aims to follow this orientation. The Trilateral Partnership jointly finances projects, promotes global standards, encourages open procurement, ensures environmental sustainability, and addresses debt sustainability, amongst others. Likewise, AJI is a platform for joint action on common problems facing people in the Indo-Pacific region. In

addition, bilateral cooperation between major Indo-Pacific partners such as France, Germany, the UK, the US, Australia, New Zealand, and India could help identify projects within the spirit of triangular cooperation. Unilateral initiatives such as Export Finance Australia, an A$2 billion Infrastructure Finance Facility by Australia, support from the US International Development Finance Corporation, the Blue Dot Network, the Expanded Partnership for Quality Infrastructure of $200 billion by Japan, etc. are notable development cooperation efforts.

Mega regional Indo-Pacific initiatives – such as the IPEF; the IPOI of India; and the strategies of France, Germany, the UK, and the EU – strongly advocate peace, prosperity, and stability in the Indian and Pacific oceans, the geographical space of the Indo-Pacific. The FOIP and its subsequent expansion into the Free, Open and Inclusive Indo-Pacific by India marks a watershed moment in the development cooperation practice. These initiatives are not typical aid or South–South cooperation projects – rather, they represent a new and popular model of cooperation called triangular cooperation. The success of the Indo-Pacific economic vision, hence, would depend on innovative triangular cooperation projects. Chaturvedi, Prakash, and Dash (2020) demonstrated the strength of triangular cooperation in the context of the Asia-Africa Growth Corridor in terms of the growth triangle and growth quadrangle approaches.

4. Conclusion

The Indo-Pacific has been in vogue as a dominant foreign policy prism in recent years. Without a clearly identified geography, it has been viewed as a viable foreign policy strategy. Many believe that the Indo-Pacific is a competing initiative to the BRI by India and Japan, which remains an unsettled debate. In general, the Indo-Pacific strategies of the US, ASEAN, India, France, Germany, New Zealand, and Canada, amongst others, signify a broadening of the Indo-Pacific paradigm with very strong economic content. Infrastructure, digitalisation, strengthening of supply chains, maritime cooperation, etc. are considered the drivers of economic growth and prosperity in the Indo-Pacific region. All the existing schemes of bilateral and trilateral cooperation within the geography of the Indo-Pacific – such as the IORA, ASEAN, AJI, Quad Plus, India–European Union Strategic Partnership, India–EU Connectivity Partnership, India–Japan Comprehensive Economic Partnership Agreement, India–Australia Economic Cooperation and Trade Agreement, EU–China Comprehensive Agreement on Investment, and ASEAN–EU Comprehensive Air Transport Agreement, amongst others – manifest the larger economic vision of the Indo-Pacific.

The success of the Indo-Pacific economic vision, hence, would depend on innovative triangular cooperation projects. Triangular cooperation in the context of the Asia-Africa Growth Corridor in terms of the growth triangle and growth quadrangle approaches could yield substantive economic gains. Investment in infrastructure, including digital connectivity, could be a game changer for the Indo-Pacific region. Unlike the BRI, the focus should be on the sectors identified in the initiatives of the IPEF, the IPOI, etc. Governments and the private sector could work together for a peaceful, prosperous, free, open, and stable Indo-Pacific.

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Chapter 9

Indo-Pacific: A Balanced and Non-Hegemonic Economic Architecture for Trade, Investments, and Infrastructure Development

Chapter 9

Indo-Pacific: A Balanced and Non-Hegemonic Economic Architecture for Trade, Investments, and Infrastructure Development

Anita Prakash and Gary Hawke

Opportunities and disruptions arising in the Indo-Pacific region can be addressed through economic cooperation strategies that can recognise and include different stages of industrial development in countries in Asia, the Pacific, Africa, Europe, as well as the United States (US). The Indo-Pacific economic architecture responds to the different policy and plan needs of developing and developed parts of Asia and the Pacific. Along with the need for achieving high and sustained growth in developing countries and least developed countries in the region, there is greater recognition of ensuring equitable, spatially even, and inclusive economic growth amongst all stakeholders.

It is often said that change is a recognition of and adaptation to new needs. The Asia-Pacific represented the post-war construct of the economic rise and institutional maturing in several countries in East and Southeast Asia. The phenomenal economic gains of the Asian Tigers, the political and economic success of the Association of Southeast Asian Nations (ASEAN) Community, and the growing importance of the Pacific Island countries all contributed to the successful construct of economic cooperation in the Asia-Pacific region. During this phase, the US, and to a lesser degree the European Union (EU), have been important guarantors of the strategic and economic interests of most countries in the region.

Along this growth trajectory, the rise of China aided the economic dynamism of the region for nearly 2 decades. China's economy helped Asia remain a bright spot of growth even during the global financial crisis of 2008. Asia and the Pacific provided tailwinds to the global economy during this time. The 2008–2015 period was also when most developed economies took time out to offset the adverse effects of the financial crisis on their financial, political, and social institutions.

About the same time, developed and developing Asia, despite relative comfort in terms of growth and prosperity and trade openness, was left vulnerable to a unilateral interpretation of the status quo in the South and East China Sea. The strategic activities in the two seas caused several ripple effects on the economic linkages in Southeast and East Asia. The deep global value chain (GVC) connectivities amongst Southeast Asian countries and China, between Japan and China, and the exchange of investments amongst them – all created a ground for dissatisfaction with the existing economic architecture, notwithstanding the ensured economic returns from existing trade integration with China and the complexity involved in unravelling the backward–forward integration of exports in several important sectors. This evolution of purpose is captured in detail in Chapter 1 of this study.

The introduction of the Belt and Road Initiative Plan in 2015 (and its critical evaluation) could be taken as the policy convergence point for governments in Asia and Europe, and in the US, to mobilise support for the Indo-Pacific economic architecture in which strategic and economic interests are brought closer than what most trade economists would favour. In other words, the emergence of the Indo-Pacific economic architecture is similar to the conditions when Japanese and US investment initiatives

in Southeast Asia during the post-war period galvanised the Asia-Pacific. Policy and political leadership are the primary movers of the new architecture, which will eventually be supervised by economic returns.

To say that the evolution of the Indo-Pacific economic architecture is for the containment of China is a simplistic explanation. The Indo-Pacific no doubt addresses China centrality in production sharing in the region, and the dependency of the EU and the US on the supply chains of China. From a policy research perspective, the Indo-Pacific economic architecture is more than a reaction to the existing production networks and investment channels in the region. The evolution of this architecture is a preparation for new economic demands before all countries in the region. Structural transformation and employment generation policies in developing Asia and the Pacific must understand, prepare, and respond to the new digital economy, as the latter will affect the patterns and geographical location of industries, employment, trade, and economic growth. Increased industrialisation and participation in GVCs are important for growth and employment generation in several less developed countries. The future of work is vulnerable to decreased investments in manufacturing and jobs being replaced by automation, robotics, and artificial intelligence, especially for countries that are not deeply integrated in regional or global value chains.

Geographical inclusiveness is an important aspect of the Indo-Pacific architecture. The role of smaller countries – especially the Pacific Island states, which are new entrants to the regional connectivity plans – is particularly recognised in this study and for the future monitoring of economic performance in the Indo-Pacific. Human resources and the movement of people are equally linked with the new digital economy, as well as the future of work. Interweaving these elements of cooperation into economic cooperation in the Indo-Pacific will prepare the region for the future.

The coronavirus disease (COVID-19) pandemic has reinforced the need for more equitable distribution of infrastructure and capacities, and investments in new centres of production, supply chains, and consumer/supplier clients. While there are several interpretations of the effects of the pandemic on supply chains, two extreme examples underscore the need for a more enabled, equitable, and inclusive economic cooperation model for the region. The breakdown of the supply of medical equipment and kits from China during the pandemic and the regional distribution of vaccines produced in India in the later part of the pandemic are emblematic of the problems and solution before the Indo-Pacific economic architecture.

Trade and investment have underwritten the growth story in the Indo-Pacific. The digital economy is, however, here to stay. As industries, employment, trade, and economic growth continue to change under the influence of digitalisation, the Indo-Pacific region must reap the benefits of this progress. The Indo-Pacific architecture must ensure that digitalisation promotes inclusiveness, especially for youth and women. Asia, Europe, and the US have different levels of digital infrastructure. However, cooperation for the development of services, human capital, regulations for data protection, e-commerce, and taxation require greater institutional linkages amongst all stakeholders. The emergent supply chains and cooperation frameworks will bridge these needs in the Indo-Pacific.

1. Multilateralism, Global Actions, and a Rules-Based Indo-Pacific

The Indo-Pacific economic architecture is linked to restoring multilateralism that recognises diversity yet leaves no one behind. It is worth noting that multilateralism has provided stability and prosperity to a great number of countries for nearly a century. Global governance of connectivity is also a new challenge, as countries contest and compete for technology that provides interconnections. Managing the internet is most apparent, but the technology underlying electronic commerce and the financial system is much more significant. The traditional chapters of trade agreements – on goods, services, and investment – while still contentious, are now subordinate to the field of technology. The Indo-Pacific economic architecture has no choice but to undertake global actions which aim to resolve this challenge.

In the end, neither multilateralism nor global governance exist for their own sake. The ultimate test for both is for them to create prosperity that is inclusive and sustainable. The Indo-Pacific economic architecture must consolidate its initiatives, spell out the principles of cooperation, and provide action on its preferred aspects of plurilateral/multilateral economic cooperation and global governance.

This study is an attempt to consolidate information on the Indo-Pacific economic architecture along six important verticals – infrastructure, GVC integration, development cooperation, the digital economy, human resources and the movement of people, and geographical inclusiveness for the Pacific. The rebalancing of old elements of trade integration and the introduction of new elements of cooperation in which strategic and economic interests are brought closer to principles of governance, transparency, equity, and inclusiveness emerge as the core of the emergent architecture in the Indo-Pacific.

In conclusion, the Indo-Pacific is a plurilateral component of the international economy in which regions and countries find it mutually advantageous to work cooperatively. However, it brings the Atlantic and Pacific powers much closer to the Indian Ocean to emphasise cooperation and international production sharing that involve services as much as goods. The transformations brought about by this cooperation architecture must fulfil the objectives of mutual trust and mutual growth. The challenge is not to maintain a rules-based system, but to create and operate institutions which evolve and sustain rules in the face of change, and the relationships must all be inclusive. To that extent, ‘Connectivity, Cooperation, and New Supply Chain Linkages’ will be central to the agenda of the Indo-Pacific economic architecture.