BUILDING VALUE CHAIN: OPPORTUNITIES FOR INDIA AND ASEAN

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BUILDING VALUE CHAIN: OPPORTUNITIES FOR INDIA AND ASEAN

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EXECUTIVE SUMMARY

The Southeast Asian region has emerged as one of the fastest growing regions in the world, on the back of its strong manufacturing sector. The existing ecosystem in the region supports sourcing, manufacturing and shipping of finished goods from these markets. With its strategic location, and abundant natural resources, the Association of Southeast Asian Nations (ASEAN) is one of the major regional blocs in the world. The economic and geopolitical importance of ASEAN countries are large and growing.

Economy of ASEAN

Over the past 53 years since its formation, ASEAN has made significant progress both economically and socially, with deepened intra-ASEAN cooperation and narrowed developmental gap within and across the ASEAN region. At the same time, the region comprises countries of different sizes and scales. According to the World Bank's World Development Indicators, of the 10 ASEAN economies, two are classified as high income (Brunei and Singapore), three are upper middle income (Indonesia, Malaysia and Thailand), and the remaining five countries are classified as lower middle-income countries. Tourism, trade and international remittances are the three major drivers of economic growth in ASEAN economies. Moreover, ASEAN economies have a favourable current account balance.

The ASEAN economy has witnessed robust growth during the last five decades, reaching an estimated total GDP of US$ 3.2 trillion in 2019 - more than five times the level in 1999 (US$ 607.3 billion), when it first achieved the full membership of ASEAN-10. In 2019, the combined GDP of ASEAN, as a single economy, placed it as the 5th largest in the world and the 3rd largest in Asia. The GDP of ASEAN is estimated to have moderated by 4.0 percent in 2020 to US$ 3.1 trillion. The standard of living improved considerably in the ASEAN region, driven by rapid economic growth, with nominal GDP per capita averaging US$ 4,827.4 in 2019 for the ten ASEAN member countries, as compared to an average nominal GDP per capita of US$ 1,135 in 1999. The average economic growth of the ASEAN region has moderated to 4.7 percent in 2019, compared to 5.3 percent growth recorded in the previous year, mostly due to the economic slowdown in Singapore and Thailand.

There exist a wide disparity in GDP among ASEAN countries. Among the ASEAN economies, Indonesia has the highest GDP at US$ 1.1 trillion in 2019, accounting for 34.6 percent of the total GDP of ASEAN economies. In terms of GDP per capita, among ASEAN member countries, Singapore has the highest per capita income at US$ 65,233.9, while Myanmar has the lowest per capita income at US$ 1,299.2.

During 2020, the COVID-19 pandemic has affected key sectors in the ASEAN economies, particularly travel and tourism, and retail and other services sectors, affecting business operations and thus disrupting supply chains. The contraction in growth was highest among the Philippines, Thailand, Singapore and Malaysia. The services sector, especially tourism has been hit harder than the manufacturing sector in the region.

International Trade of ASEAN

ASEAN as a regional grouping is a combination of ten heterogeneous economies, having vast difference in geographical size, economic development, trade and investment. International trade has gained significance and has been growing rapidly in the region with the establishment of ASEAN Free Trade Area (AFTA), which has also resulted in increase in both amount and volume of intra-regional trade flows.

In 2019, ASEAN accounted for 7.4 percent of total global trade. Over the past decade, ASEAN's total trade witnessed an upward trend, increasing by 3.8 percent to US$ 2.8 trillion in 2019 from US$ 2.0 trillion in 2010, interspersed with a period of a relative slowdown in 2015 and 2019 in line with the moderating global trade. During the period, exports and imports followed a similar trend. ASEAN's exports stood at US$ 1,422.4 billion in 2019, increasing from US$ 1,054.1 billion in 2010, mainly driven by increased exports from Vietnam, Thailand and Singapore. As regards imports, ASEAN's total imports amounted to US$ 1,391.5 billion in 2019, a rise from US$ 953.2 billion in 2010. Among the ASEAN countries, Singapore has the largest volume of trade (accounting for 26.6 percent of the region's total trade), followed by Vietnam (18.4 percent) and Thailand (17.3 percent) in 2019. Brunei, Lao PDR, Cambodia and Myanmar contribute the least to the total trade volumes of the region. The trade balance has consistently recorded a surplus, though moderated, over the decade.

ASEAN as a region majorly exported electrical machinery and equipment (26.6 percent of total exports of the region in 2019), machinery and mechanical appliances (10.6 percent), mineral fuels, oil and products of distillation (10.0 percent), pearls, precious or semi-precious stones and metals (3.4 percent), vehicles other than railway or tramway and plastics and articles (3.3 percent each). The major imports from the ASEAN region in 2019 include electrical machinery and equipment (23.4 percent of total imports of the region), mineral fuels, mineral oils and products of distillation (14.7 percent), machinery and mechanical appliances (12.7 percent), plastics and articles (4.1 percent), transport vehicles and equipment and iron and steel (3.5 percent each).

Presently, ASEAN's top trading partners include China, the US, Japan and Germany. ASEAN's major export destinations in 2019 were China (14.2 percent of ASEAN's total exports), the US (13.0 percent), Japan (7.7 percent), Hong Kong (6.5 percent), Malaysia (4.7 percent), Singapore (4.5 percent) and South Korea (4.2 percent). On the other hand, ASEAN's major import sources were China (21.4 percent of ASEAN's total imports), Japan (8.1 percent), the US (7.8 percent), South Korea (6.8 percent), Taiwan (5.5 percent) and Malaysia (5.4 percent).

The share of intra-ASEAN exports in ASEAN's total exports has moderated between 2010 and 2019, from 25.2 percent to 23.3 percent, while the share of intra-ASEAN imports moderated even further over the same period, from 25.0 percent in 2010 to 21.6 percent in 2019. Singapore and Vietnam were the major extra-ASEAN trading countries in 2019, together accounting for 47.5 percent of extra-ASEAN exports and 46.0 percent of extra-ASEAN imports. Singapore and Malaysia were the major intra-ASEAN trading countries, accounting for 54.3 percent of total intra-ASEAN exports and 42.6 percent of intra-ASEAN imports in 2019.

Investment Scenario in ASEAN

FDI inflows to the ASEAN region have witnessed an increasing trend during the last decade, albeit with some slowdown in between due to global economic conditions. However, from a broader perspective, it is evident that FDI flows have significantly evolved from US$ 108.4 billion in 2010 to US$ 158.9 billion in 2019, witnessing an almost 50.0 percent increase. ASEAN countries such as Cambodia, Indonesia and Vietnam recorded the highest ever FDI inflows in 2019. Amongst the ASEAN economies, Singapore received the maximum FDI inflows in 2019, with a 58.0 percent share in ASEAN's total FDI inflows, followed by Indonesia and Vietnam. Singapore witnessed a 19.0 percent growth in FDI inflows in 2019, due to several large greenfield investments as well as mega-deal M&As in both the manufacturing and service sectors. Investments into Cambodia and Vietnam were majorly supported by the relocations of multinational enterprises (MNEs) from China due to recent US-China trade tensions as well as large investments into the manufacturing and services sectors from other ASEAN countries and Japan.

As regards sectors attracting investments in the ASEAN region, the manufacturing sector has been the largest recipient of FDI in 2019, with a 35.4 percent share in total FDI inflows. There has been a sharp rise in manufacturing FDI across ASEAN countries in recent years. Other major sectors to receive FDI in 2019 include financial and insurance activities (32.4 percent of total FDI), wholesale and retail trade, repair of motor vehicles and motor cycles (10.9 percent), and real estate activities (6.2 percent).

Until 2009, intra-ASEAN FDI remained at a low level. However, since 2010, intra-ASEAN investments have increased significantly. In 2010, intra-ASEAN FDI accounted for 14.3 percent in ASEAN's total inward FDI flows, and has peaked to 21.8 percent in 2016, though moderated henceforth to settle at 13.9 percent in 2019. The major sources of intra-ASEAN FDI in 2019 were Singapore, Thailand and Malaysia and major host countries were Indonesia, Thailand, Singapore and Vietnam. Other major sources of FDI into ASEAN economies include the US (with a 15.2 percent share in total ASEAN investment inflows in 2019), Japan (13.0 percent), EU-28 (9.7 percent), and China (5.6 percent).

As regards FDI outflows, total FDI outflows from ASEAN witnessed a moderation from US$ 63.3 billion in 2010 to US$ 56.0 billion in 2019. Singapore, Thailand and Malaysia recorded the highest FDI outflows from the region, with 59.4 percent, 21.1 percent and 11.2 percent shares, respectively in total FDI outflows from ASEAN during 2019. There were no outflows recorded from Brunei and Myanmar during the period of analysis.

India-ASEAN Trade: Current Trends

ASEAN is a strategic pathway for India to expand its economic interests and strategic outreach to the Asia-Pacific region. ASEAN and India together represent a combined population of 2.02 billion which is over a quarter of the global population and a GDP of over US$ 6.1 trillion, creating one of the largest economic spaces in the world. The combined GDP of ASEAN and India is expected to touch US$ 8.4 trillion by 2025. There exist a lot of complementarities between India and ASEAN countries. The ASEAN region has a shared border with India at the North East Region (NER), as Myanmar shares a land boundary of around 1,643 km with four Indian states including Manipur, Mizoram, Nagaland and Arunachal Pradesh. India's NER forms a strategic component of India's relationship with ASEAN countries by acting as a gateway to Southeast and East Asia.

In recent years, ASEAN has become one of the largest trading partners for India. India-ASEAN trade has significantly increased from US$ 7.7 billion in 2001 to US$ 52.6 billion in 2010, and further to US$ 91.3 billion in 2019. In the post-FTA period, trade in goods has emerged to be in favour of ASEAN, as India's exports have not witnessed a significant rise compared to ASEAN's exports to India. This is indicated by the rising trade deficit witnessed by India with ASEAN, which has increased from US$ 1.0 billion in 2001 to US$ 6.7 billion in 2010, and further to US$ 22.8 billion in 2019. While India's exports to ASEAN have grown at a compound annual growth rate (CAGR) of 4.5 percent between 2010 and 2019, India's imports from the region have grown by a CAGR of 7.5 percent during the same period.

The majority of India's exports to ASEAN have been directed towards Singapore, which accounted for 31.4 percent of India's total exports to the region. Other major export destinations include Malaysia (18.3 percent of exports), Vietnam (16.1 percent), Indonesia (13.2 percent) and Thailand (12.6 percent). Indonesia accounted for majority of India's imports from ASEAN during 2019, with a share of 27.3 percent, followed by Singapore (26.1 percent), Malaysia (18.2 percent), Vietnam (13.1 percent), and Thailand (12.3 percent).

The commodity composition of major traded commodities between India and ASEAN remained more or less the same in the last decade. Mineral fuel, with a 19.0 percent share in total exports, was the major exported commodity from India to ASEAN during 2019, followed by ships and floating structures, machinery, and meat and edible meat offal. Mineral fuels also remained the major imported commodity by India from ASEAN during 2019, followed by electrical machinery and equipment, machinery, and animal or vegetable fats and oils.

According to Export Potential Map of ITC Geneva, India currently has an untapped export potential of US$ 30.3 billion with ASEAN, with greatest export potential in diamonds; aluminium, not alloyed and unwrought; jewellery of precious metal; medicaments consisting of mixed or unmixed products for retail sale; and frozen boneless bovine cuts.

Though it is noteworthy that ASEAN-India Trade in Goods Agreement (AITIGA) has resulted in a sharp increase in total trade between India and ASEAN, for India, imports have risen at a much higher pace than exports. The widening trade deficit is a matter of concern for long term sustainability of bilateral trade relations. India is also facing significant non-tariff barriers in ASEAN countries, limiting its exports to the region. With the signing of the RCEP Agreement by the negotiating countries, except for India, the review of the existing AITIGA needs to be undertaken on an urgent basis. India and ASEAN, therefore, need to work together towards a mutually beneficial and more balanced trade.

ASEAN-India Bilateral Investment: Recent Trends and Prospects

Bilateral Investment relations between ASEAN and India is yet to be fully explored. Although Singapore and, to some extent, Malaysia have significant investments in India, the investment relations with other ASEAN countries remain rather untapped. In the ASEAN region, CLMV countries are receiving strong investment interest from India in recent years mainly due to their high-growth markets, low wage labour and natural resource reserves. However, considering ASEAN's closer proximity to India and the complementarities of the two economies, two-way investments are noticeably limited.

Among the ten ASEAN countries, Singapore has been the major investor in India, with a share of 94.0 percent in India's total FDI inflows from ASEAN, followed by Malaysia and Indonesia, with a share of 1.8 percent and 1.6 percent respectively. Singapore is again the major destination of India's FDI outflows to ASEAN, accounting for 97.6 percent of India's total outflows to ASEAN, followed by Malaysia and Indonesia, with a share of 0.9 percent and 0.5 percent respectively. Globally, Singapore is also currently the largest destination of FDI outflows from India, with a share of 21.2 percent in India's total overseas investment outflows. It is also the second largest source of FDI inflows to India, after Mauritius with a share of 21.7 percent in India's total FDI inflows.

According to the fDi Markets database, ASEAN's FDI flows to India have primarily been in the real estate sector, which has a share of 38.0 percent in India's total FDI inflows from ASEAN during 2011-2020, followed by coal, oil and natural gas sector, with a share of 16.0 percent. Other major sectors which attracted FDI from ASEAN to India include renewable energy, chemicals, transportation and financial services, among others. During the period 2011 to 2020, a major portion of India's outward FDI to ASEAN is directed towards the coal, oil and natural gas sector, followed by software and IT services, metals sector, and business services.

Trends in Global Value Chains in ASEAN, India and China

ASEAN as a grouping has made remarkable progress towards economic integration not only within the grouping but also in the greater Asian region. The influence of ASEAN has been steadily increasing in recent years, especially with the ASEAN and its FTA partners, except for India, entering into the RCEP Agreement. The uncertainties from the US-China trade disputes and the emerging need of MNEs to diversify supply sources are expected to result in an increasing shift of FDI to ASEAN economies and in particular CLMV countries.

An analysis of international trade in ASEAN countries, India and China in terms of technology-based exports revealed that while 57.5 percent of Chinese exports and 51.3 percent of ASEAN exports belong to mid- and high-tech items; only 32.9 percent of Indian exports have been concentrated in the mid- and high-tech items. An increased integration into Global Value Chains (GVCs) make it easier for India and some of the ASEAN countries to move away from export reliance on resources and low technology products and to become major exporters of mid- to high-tech manufactured goods and services.

The main indicators used in the study to analyse the nature of value added in a country's exports include - foreign value added (FVA) embodied in gross exports, which are value added of foreign goods and services that are used as intermediates to produce goods and services for exports, and domestic value added (DVA) embodied in gross exports, which are produced in the domestic country, i.e. the part of exports that contributes to GDP, which together equates to gross exports. We also analyse indirect domestic value added (DVX) or value added incorporated in other countries' exports, which indicates the extent to which a country's exports are used as inputs to exports from other countries.

A comparative analysis in terms of value added exports shows a higher contribution FVA in the case of ASEAN compared to that of India and China, while India and China have higher contents of DVA in their value added exports compared to that of ASEAN. In 2018, 35.7 percent of total value added exports of ASEAN contain imported inputs, and the rest 64.3 percent of value added was created domestically. In the case of China, 12.9 percent of its value added exports contain imported inputs, and the rest 87.1 percent of value was created domestically. Similarly for India, 14.1 percent of value added exports were produced using imported inputs, and the balance 85.9 percent of value added exports were created domestically.

The summation of the FVA and DVX, when expressed as a share of gross exports, gives the GVC participation of a country (a country's exports that is part of a multistage trade process), which indicates the extent to which a country's exports are integrated into global production networks. The larger the ratio, the greater the intensity of involvement of a country in GVCs. While FVA is considered a measure of "backward participation", as it measures imported intermediate inputs used to generate output for exports, DVX is considered a measure of "forward participation", as it measures exports of intermediate goods that are used as inputs to produce exports of other countries.

GVC participation in ASEAN, while witnessing an increase compared to 1990 levels, remained lower than rates in 2000 and 2010. While all the ASEAN countries witnessed a fall in GVC participation rate in 2018 as compared to 2010; Brunei, Indonesia, Malaysia and Vietnam witnessed an increase compared to 2000. India's GVC participation rate has also declined from 45.0 percent in 2010 to 41.4 percent in 2018.

Using foreign value added content of gross exports as a parameter to measure the extent of participation in GVCs through backward linkages, it is observed that India's integration in GVC is low. India had observed an increase in FVA share of gross exports from 6.9 percent in 1990 to 10.7 percent in 2000 to 14.4 percent in 2010, indicating growing integration with world production network and higher import content of Indian exports. However, India's foreign value added content of exports moderated in recent years, going down to 14.1 percent in 2018. On the other hand, ASEAN has witnessed high backward linkages, with FVA components accounted for as much as 35.7 percent of gross exports in 2018. Share of FVA in exports or backward participation is high for economies like Singapore or Vietnam as they are heavily reliant on foreign inputs for their exports.

In terms of the forward participation, Myanmar was found to be the highest among ASEAN, India and China at 44.8 percent in 2010. However, it has declined to 38.8 percent in 2018 as Myanmar is transitioning from a commodity exporter to an exporter of manufactured or processed products. Currently, Brunei, Indonesia and Myanmar have high levels of forward linkages among the ASEAN countries as high portion of domestic value added of these countries are being used in other countries' exports.

For India, while the backward participation in 2018 was 14.1 percent, the forward participation was 27.3 percent. India has emerged as an assembly hub for foreign owned companies from the US, Japan, China and Republic of Korea, which have invested in the country to gain market access. China's forward participation or domestic value added share in exports has increased sharply in the last three decades.

Comparing GVC participation of India and China with ASEAN revealed that China with its large and diverse manufacturing base, and extensive presence in assembling and processing high-tech products, procure intermediates in large scale from ASEAN countries. China is the largest source of imported inputs for gross value added exports for ASEAN, with its share increasing from 2.7 percent in 1990 to 15.6 percent in 2018. India was the 12th largest source of imported inputs for ASEAN exports, with its share increasing from 0.7 percent in 1990 to 2.3 percent in 2018.

China contributed 15.7 percent of imported inputs/intermediaries used in ASEAN's primary sector exports, 15.1 percent in secondary sector and 11.9 percent of foreign value added in tertiary sector exports in 2015 (latest available sectoral data is as of 2015). The highest sub-sector using Chinese inputs was motor vehicles and other transport equipment, with a 30.6 percent share in its foreign value added. India's share ranged from 1.0 percent to 3.8 percent in various sub-sectors during the same year.

Development of Value Chain between India and ASEAN: Key Sectors

Development of value chains offers great opportunity to scale up India's engagement with ASEAN countries. Creating a Regional Value Chain (RVC) at different stages of industrial manufacturing between India and ASEAN countries would facilitate the relocation of production bases at various stages across India and ASEAN seamlessly. Some of the strategic sectors for development of an RVC between India and ASEAN countries are analysed here.

Electronics Sector

Indian electronics industry manufactures a wide range of goods across the entire spectrum of electronics and ICT, from entry level to state-of-the-art electronic products. At the same time, electronics is one of the industries where India has registered huge trade deficit of over US$ 40 billion, and the figure is expected to grow further. India's biggest challenge in the electronics industry arises from the fact that it is hugely dependent on China for imports.

Several ASEAN countries have strong manufacturing base in the electronics sector. Moreover, electronic companies in ASEAN are well diversified producing electronic parts and components to producing mid tech to high technology products and is involved in both capital and labor intensive stages of electronics manufacturing, with all aspects of production being operated simultaneously. An advantage of ASEAN electronics component companies are their absorptive capacities to imbibe the best technology and process, leading to increased productivity.

India is increasingly trying to diversify into the manufacturing of electronic products and electrical parts. Indian companies could try to establish manufacturing assembly units in ASEAN countries, including Vietnam. Medical electronics devices segment has been receiving increased attention in the recent times, which is of equal importance to ASEAN countries as well. Increased investments from ASEAN, through long-term partnerships in the electronics sectors and setting up manufacturing in India would support in building local capabilities in India, in order to source strategic electronic goods domestically. Another area for collaboration between India and ASEAN economies are R&D and skill development in electronics, semiconductors and materials, as well as in areas such as 5G, automated manufacturing robotics, etc.

Automobiles and Auto-components Sector

The ASEAN automotive sector over the years has emerged into a major production hub and dominant market for both original equipment manufacturers (OEMs) and auto-components suppliers due to a rapidly growing consumer market, integrated supply chains and comparatively lower labor costs. Most of the global auto firms have their presence in ASEAN, following a regional production networks strategy, however, auto-components are still imported in large scales into these producing countries, offering opportunities for suppliers from India. The growing automobile industry in ASEAN countries offers vast opportunities for investments for Indian manufacturers and distributors of automobile components. Several ASEAN countries are also major natural rubber producers and exporters, with several opportunities for tyre manufactures.

ASEAN economies would be able take advantage of India's relative competitiveness in design and engineering, and manufacturing skills. India has a very large market in both four wheeler and two wheeler passenger vehicle segments. However, there is considerable dependence on imports of certain auto-components such as drive transmission, steering, electricals, interiors, engine components, and alloy wheels from China, which could be locally produced or diverted to ASEAN economies through integration in a RVC.

Collaboration with ASEAN component makers and designers through JVs and technical alliances could support India to bring advanced technologies in a shorter time, while over the long run, it could support India’s plan to develop technology locally through increased in-house R&D, and hence support in developing local supply chains. India and ASEAN countries could look into increased investment in production of electric vehicles, as well as setting up factories for nickel production.

Healthcare and Medical Products

India and ASEAN countries face several common health challenges including growing geriatric population and an increasing prevalence of non-communicable, chronic and lifestyle diseases, resulting in growing healthcare expenditures. Increased cooperation among India and ASEAN countries through capacity development and joint research activity in healthcare has acquired renewed importance especially in the current COVID-19 scenario.

Local production of pharmaceuticals and medical equipment in several ASEAN countries are unable to meet their domestic demand. For instance, as per the Myanmar Pharmaceutical Industrial Enterprise, local production in the country could meet only 10.0 percent of domestic demand in 2018. While India is the leading producer of generic medicines in the world, ASEAN companies heavily relay on both China and India for meeting their API requirements. Accordingly, there exist increased investment and collaborative opportunities between ASEAN and India to produce API ingredients within the region through partnership with multinational life science companies.

India with its strong healthcare sector, skilled health professionals and affordable and quality medicines could play a major role in ASEAN's healthcare and pharmaceutical sector. India could support ASEAN to enhance local production to meet the growing demand of medical products at cheaper costs, as well in building their capacity to produce essential medical products, including vaccines, antibiotics, medical equipment or personal protective equipment. Collaboration with ASEAN countries in areas such as strengthening health systems, access to care, safe and good quality medical products, medical devises, affordable quality medicines (traditional and complementary medicines), where India's strengths are more visible could be a way forward, while India could learn from the successful universal health coverage scheme in ASEAN countries such as Thailand, as well as collaborate with ASEAN companies in providing e-consultation and telemedicine services.

Agribusiness and Food Processing

India and ASEAN are predominantly agriculture based economies, with the sector having a large contribution to the region's GDP. ASEAN countries have been successful in building export industries around their natural resources, especially agricultural products. Despite these developments, ASEAN has very limited arable land area, in addition to other challenges such as unavailability of bio inputs for organic production, inconsistent supply, high production cost and farmers' capacity as well as processing level issues. Realizing its limitations, ASEAN economies are aiming for the sustainable development of agriculture sector through sustainable organic value chains.

Indian companies can cooperate with private sector in several ASEAN countries and provide their expertise in terms of technological know-how as well as marketing services. By mapping each other's complementarities in the agricultural and food products, India and ASEAN countries can strengthen their comparative advantages and increase their supply of agricultural products. The COVID-19 pandemic has also disrupted the agri-supply chain and innovative solutions are needed to ensure an efficient agri-supply chain mechanism in India and ASEAN countries. This would require joint cooperation and collaboration across all segments of the agri-food supply chain including raw material, production, harvesting, storage, infrastructure, logistics, marketing, technology as well as agri-finance. Processing of non-food agricultural products (tobacco, rubber, wood etc) is another area with huge scope of cooperation between India and ASEAN countries. Strategically planned collaboration between India and ASEAN economies have the potential to uplift agriculture sector in both regions to expand the RVCs and became a major part of GVC.

Thus, the fundamental idea behind building supply chains across India and ASEAN countries would be to optimally utilize the comparative advantage each country offers at different stages of production. By positioning themselves strategically in the GVCs, ASEAN and Indian economies not only can effectively cater to the foreign final demands of their own people, but can also play a crucial role in the value addition in the production processes at the Asian regional level.

1. ECONOMIC OVERVIEW OF ASEAN COUNTRIES

The Southeast Asian region has emerged as one of the fastest growing regions in the world, on the back of its strong manufacturing sector. The existing ecosystem in the region supports sourcing, manufacturing and shipping of finished goods from these markets. With its strategic location, and abundant natural resources, the Association of Southeast Asian Nations (ASEAN) is one of the major regional blocs in the world. ASEAN was established on August 8, 1967, in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the founding members, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand, also known as ASEAN-5. Later, Brunei Darussalam joined on January 7, 1984, Vietnam on July 28, 1995, Lao People's Democratic Republic (Lao PDR) and Myanmar on July 23, 1997, and Cambodia on April 30, 1999, making up its ten member countries. ASEAN was proclaimed a Community through a Declaration signed by ASEAN Leaders at their 27th Summit in Kuala Lumpur on November 22, 2015. This declaration charts the path for ASEAN Community building over the next ten years. It is a forward-looking roadmap that articulates ASEAN's goals and aspirations to realise further consolidation, integration and stronger cohesiveness as a Community. The economic and geopolitical importance of ASEAN countries are large and growing.

The ASEAN Free Trade Area (AFTA), which was established on January 28, 1992, made significant progress in the lowering of intra-regional tariffs through the Common Effective Preferential Tariff (CEPT) Scheme of AFTA. Within this region, the CLMV (Cambodia, Lao PDR, Myanmar and Vietnam) countries have begun attracting greater attention of the global economic community, given their huge potential for future development, along with the recent global developments including US-China trade disputes and pandemic associated supply chain disruptions.

Economy of ASEAN

Over the past 53 years since its formation, ASEAN has made significant progress both economically and socially, with deepened intra-ASEAN cooperation and narrowed developmental gap within and across the ASEAN region. At the same time, the region comprises countries of different sizes and scales. According to the World Bank's World Development Indicators, of the 10 ASEAN economies, two are classified as high income (Brunei and Singapore), three are upper middle income (Indonesia, Malaysia and Thailand), and the remaining five countries are classified as lower middle-income countries. Tourism, trade and international remittances are the three major drivers of economic growth in ASEAN economies. Accordingly, ASEAN economies have a favourable current account balance.

The ASEAN economy has witnessed robust growth during the last five decades, reaching an estimated total GDP of US$ 3.2 trillion in 2019 - more than five times the level in 1999 (US$ 607.3 billion), when it first achieved the full membership of ASEAN-10. In 2019, the combined GDP of ASEAN, as a single economy, placed it as the 5th largest in the world and the 3rd largest in Asia. The GDP of ASEAN is estimated to have moderated by 4.0 percent in 2020 to US$ 3.1 trillion. The standard of living improved considerably in the ASEAN region, driven by rapid economic growth, with nominal GDP per capita averaging US$ 4,827.4 in 2019 for the ten ASEAN member countries, as compared to an average nominal GDP per capita of US$ 1,135 in 1999. The average economic growth of the ASEAN region has moderated to 4.7 percent in 2019, compared to 5.3 percent growth recorded in the previous year, mostly due to the economic slowdown in Singapore and Thailand **(Table 1.1).**

The moderation in economic growth in Singapore was mainly due to a contraction in the manufacturing sector, especially decline in electronics, chemicals, precision engineering and transport engineering clusters. Similarly, Thailand witnessed a slowdown amid a cyclical downturn due to a weakening external environment marked by moderation in external demand for both goods and tourism services.

Table 1.1: ASEAN Economy – Select Indicators

Indicators	2014	2015	2016	2017	2018	2019	2020^{e}
GDP (US$ billion)	2,596.7	2,522.7	2,643.7	2,851.0	3,054.7	3,234.7	3,106.2
Real GDP growth (% change)	4.7	4.8	5.0	5.4	5.3	4.7	-4.4*
GDP per capita	4,103.5	3,932.3	4,086.5	4,367.7	4,616.8	4,827.4	-
Population (US$ million)	620.9	628.4	635.5	642.4	649.1	655.5	662.2
Current account balance (US$ billion)	73.0	77.2	84.8	82.7	59.6	87.8	59.8
International reserves (US$ billion)	770.6	730.8	765.1	868.0	874.9	932.9	1,076.2

Note: ^{e}- estimates, including Timor Leste*
Source: ASEAN Secretariat, Asian Development Bank and IMF WEO October 2020 database

There exist a wide disparity in GDP among ASEAN countries. Among the ASEAN economies, Indonesia has the highest GDP at US$ 1.1 trillion in 2019, accounting for 34.6 percent of the total GDP of ASEAN economies. In terms of GDP per capita, among ASEAN member countries, Singapore has the highest per capita income at US$ 65,233.9, while Myanmar has the lowest per capita income at US$ 1,299.2 **(Table 1.2).**

During 2020, the COVID-19 pandemic has affected the key sectors in the ASEAN economies, particularly travel and tourism, and retail and other services sectors, affecting business operations and thus disrupting supply chains. The contraction in growth was highest among the Philippines, Thailand, Singapore and Malaysia. The services sector, especially tourism has been hit harder than the manufacturing sector in the region. The major industries located in these economies are shown in **Table 1.3.**

Table 1.2: Macroeconomic Snapshot of ASEAN Countries

Country	Nominal GDP (US$ bn)			Real GDP Growth (%)			Inflation (%, avg)			GDP per capita (US$)			Population (mn)		
	2019	2020[e]	2021[f]	2019	2020[e]	2021[f]	2019	2020[e]	2021[f]	2019	2020[e]	2021[f]	2019	2020[e]	2021[f]
Brunei	13.5	10.6	12.1	3.9	0.1	3.2	-0.4	0.3	0.5	29,314	23,117	26,274	0.5	0.5	0.5
Cambodia	26.7	26.3	28.5	7.0	-2.8	6.8	2.0	2.5	2.9	1,620	1,572	1,680	16.5	16.7	17.0
Indonesia	1120.1	1088.8	1167.2	5.0	-1.5	6.1	2.8	2.1	1.6	4,197	4,038	4,287	266.9	269.6	272.2
Lao PDR	19.1	18.7	19.3	5.2	0.2	4.8	3.3	6.5	4.9	2,661	2,567	2,614	7.2	7.3	7.4
Malaysia	364.7	336.3	380.3	4.3	-6.0	7.8	0.7	-1.1	2.4	11,193	10,192	11,378	32.6	33.0	33.4
Myanmar	68.6	70.9	77.2	6.5	2.0	5.7	8.6	6.1	6.2	1,299	1,333	1,441	52.8	53.2	53.6
Philippines	376.8	367.4	398.3	6.0	-8.3	7.4	2.5	2.4	3.0	3,512	3,373	3,602	107.3	108.9	110.6
Singapore	372.1	337.5	362.5	0.7	-6.0	5.0	0.6	-0.4	0.3	65,234	58,484	62,113	5.7	5.8	5.8
Thailand	543.6	509.2	536.8	2.4	-7.1	4.0	0.7	-0.4	1.8	7,807	7,295	7,675	69.6	69.8	70.0
Vietnam	329.5	340.6	369.5	7.0	1.6	6.7	2.8	3.8	4.0	3,416	3,498	3,759	96.5	97.4	98.3

Note: [e]- estimates; [f]- forecasts

Source: IMF WEO October 2020 database

Table 1.3: Major Industries in ASEAN Countries

Country	Major Industries
Brunei	Petroleum, petroleum refining, liquefied natural gas, construction, agriculture and aquaculture
Cambodia	Garments, construction, rice milling, fishing, wood and wood products, rubber, cement, gem mining and textiles
Indonesia	Petroleum and natural gas, textiles, automotive, electrical appliances, apparel, footwear, mining, cement, medical instruments and appliances, handicrafts, chemical fertilizers, plywood, rubber, processed food and jewelry
Lao PDR	Mining (copper, tin, gold, gypsum), timber, electric power, agricultural processing, rubber, construction, garments and cement
Malaysia	Rubber and oil palm processing and manufacturing, petroleum and natural gas, light manufacturing, pharmaceuticals, medical technology, electronics and semiconductors, logging and timber processing, and agriculture processing
Myanmar	Agricultural processing, wood and wood products, copper, tin, tungsten, iron, cement, construction, pharmaceuticals, fertilizer, oil and natural gas, garments, jade and gems
Philippines	Semiconductors and electronics assembly, business process outsourcing, food and beverage manufacturing, construction, electric/gas/water supply, chemical products, radio/television/ communications equipment and apparatus, petroleum and fuel, textile and garments, non-metallic minerals, basic metal industries and transport equipment
Singapore	Electronics, chemicals, financial services, oil drilling equipment, petroleum refining, biomedical products, scientific instruments, telecommunication equipment, processed food and beverages, ship repair and offshore platform construction
Thailand	Textiles and garments, agricultural processing, rubber, sugar, rice, fishing, cassava, beverages, tobacco, cement, light manufacturing (jewelry and electric appliances), computers and parts, integrated circuits, furniture, plastics, automobiles and automotive parts, agricultural machinery, air conditioning and refrigeration, ceramics, aluminum, chemical, glass, granite and marble, leather, machinery and metal work, petrochemical, petroleum refining, pharmaceuticals, printing, pulp and paper, tungsten and tin
Vietnam	Food processing, garments, shoes, machine-building, mining, coal, steel, cement, chemical fertilizer, glass, tires, oil and electronics

Source: Central Intelligence Agency (CIA)

Strategic Significance of ASEAN Countries

Since its formation in 1967, ASEAN has contributed enormously to regional stability and prosperity in Asia. It is one of the fastest growing regions in the world, and its economic and geopolitical importance have been expanding continuously. With the signing of the Regional Comprehensive Economic Partnership (RCEP) Agreement, the strategic importance of ASEAN is expected to witness a further rise.

Box 1.1: Regional Comprehensive Economic Partnership Agreement

Introduced during the 19th ASEAN Summit, the Regional Comprehensive Economic Partnership (RCEP) Agreement is a free trade agreement (FTA) between 10 ASEAN member countries and five FTA partners (Australia, China, Japan, South Korea and New Zealand). The RCEP negotiations were formally launched in November 2012, at the 21st ASEAN Summit in Cambodia, with the objective of achieving a modern, comprehensive, high-quality, and mutually beneficial economic partnership agreement among the ASEAN member countries and ASEAN's FTA partners. The RCEP negotiation includes: trade in goods, trade in services, investment, economic and technical cooperation, intellectual property, competition, dispute settlement, e-commerce, small and medium enterprises (SMEs) and other issues.

The RCEP Agreement is expected to have immense potential to deliver on new economic opportunities including job creation that are much needed in today's world of uncertainty and expressed shared commitment to work collectively and in a cooperative manner, to progress the negotiations in an accelerated way, and achieve a modern, comprehensive, high-quality and mutually beneficial agreement that addresses and balances the aspirations and sensitivities of participating countries. The RCEP Agreement is expected to have the potential of delivering significant business opportunities in the East Asia region, given the fact that the participating countries account for 48.0 percent of the world's population, contributing about 30.0 percent of global GDP and exports. As per a study by the Peterson Institute for International Economics, the RCEP is expected to add about US$ 186.0 billion to the world economy and 0.2 percent to its members' GDP.[1] The United Nations Conference on Trade and Development (UNCTAD) has estimated that RCEP would result in boosting exports of members by over 10.0 percent by 2025.[2]

Though India was party to the initial negotiations, India has decided to abstain from joining the RCEP Agreement during the 35th ASEAN Summit in Bangkok in 2019, due to various concerns that may be detrimental to Indian manufacturers. Its decision was mainly to safeguard the interests of sectors such as agriculture and dairy which may be affected by a surge in imports and to give an advantage to the country's services sector. Moreover, India has been experiencing a trade deficit with most of the RCEP participating countries. Meanwhile, member countries have endorsed that the RCEP remains open for India.

Source: RCEP Secretariat and various news sources

According to the ASEAN Investment Report 2019, many Asian MNEs are shifting their production from China to the CLMV countries mainly due to competitive production costs and the rising trade tensions between the US and China. Among the ASEAN countries, Cambodia, Indonesia, Myanmar, the Philippines, and Thailand are beneficiaries of the Generalized System of Preferences (GSP) from the US. India has been terminated from the US' list of developing country beneficiaries under GSP based on market access in June 2019.[3] ASEAN countries are also GSP beneficiaries from other GSP offering countries.[4] Cambodia, Lao PDR and Myanmar, as LDCs, are also beneficiaries of several other trade schemes. **Chart 1.1** shows the major recipients of GSP benefits extended by the US during 2019 in absolute terms. India's share of exports to the US stood at 5.0 percent under GSP, whereas Cambodia's share of exports under GSP stood at 29.9 percent, the Philippines at 14.6 percent, Thailand at 14.5 percent and Indonesia at 13.4 percent in 2019.

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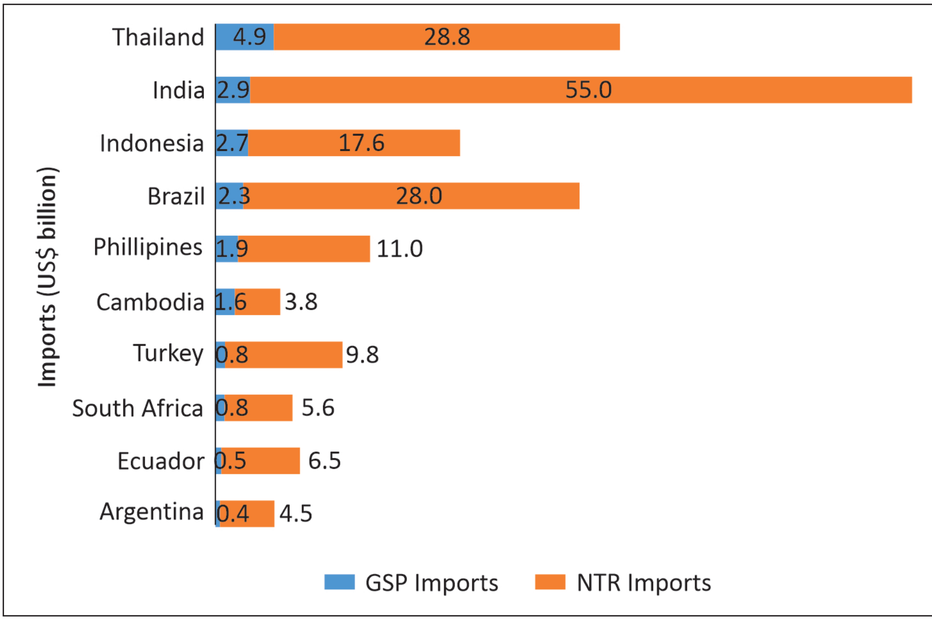
[1]East Asia Decouples from the United States: Trade War, COVID-19, and East Asia's New Trade Blocs, Peter A. Petri and Michael G. Plummer, Peterson Institute for International Economics, June 2020.

[2]RCEP Agreement: A Potential Boost for Investment in Sustainable Post-Covid Recovery, Global Investment Trend Monitor, No. 37, UNCTAD, November 2020.

[3]Generalized System of Preferences (GSP): Overview and Issues for Congress Updated January 7, 2021 Congressional Research Service.

[4]Generalized System of Preferences, List of Beneficiaries, UNCTAD, September 2018.

Chart 1.1: Top 10 US GSP Beneficiaries in 2019



Note: NTR Imports -Normal Trade Relations imports; Turkey (as on May 2019) and India (June 2019) are no longer GSP beneficiaries.

Source: US International Trade Commission Data and India Exim Bank Analysis

Economic Outlook in ASEAN

The first COVID-19 case in the region was recorded in Thailand in January 2020, with the pandemic spreading to other countries in the region soon after. ASEAN countries and institutions in the region responded rapidly to the situation, putting numerous measures and restrictions in place, the spread remained much lower compared to other regions. The disruptions in the global supply chain, travel and tourism and trade have resulted in an economic shock in the region. The estimated average GDP of the region contracted by 4.4 percent in 2020, with the economic growth of all the countries witnessing a declining trend. The Philippines, Thailand, Singapore, and Malaysia have witnessed large negative shocks, followed by the rest of the countries in the region. The growth slowdown witnessed in 2020 is expected to significantly affect the ASEAN region in the next few years. It is, therefore, unlikely that the economic output of the region will return to the pre-pandemic levels in 2021.

As seen from **Table 1.4,** by 2022, ASEAN countries are expected to overtake their pre-COVID growth rates, with countries such as Vietnam and Cambodia leading. It is expected that among ASEAN economies, the CLMV region is expected to outpace ASEAN's aggregate growth forecast in the coming years. This may be largely attributed to the catch-up growth because of the existing income and development gap between the CLMV countries and other ASEAN member countries. However, it also reflects their advantageous geographical locations and comparatively stable governments, which remain attractive to foreign investors.

Table 1.4: Economic Growth Outlook for ASEAN Countries

Country	2019	2020^{e}	2021^{f}	2022^{f}	2023^{f}	2024^{f}	2025^{f}
Brunei	3.9	0.1	3.2	3.7	2.3	2.0	1.8
Cambodia	7.0	-2.8	6.8	7.3	7.4	7.4	6.9
Indonesia	5.0	-1.5	6.1	5.3	5.2	5.1	5.1
Lao PDR	5.2	0.2	4.8	5.6	5.8	5.8	6.1
Malaysia	4.3	-6.0	7.8	6.0	5.7	5.3	5.0
Myanmar	6.5	2.0	5.7	6.2	6.4	6.5	6.5
Philippines	6.0	-8.3	7.4	6.4	6.5	6.5	6.5
Singapore	0.7	-6.0	5.0	2.6	2.6	2.5	2.5
Thailand	2.4	-7.1	4.0	4.4	4.3	4.3	3.7
Vietnam	7.0	1.6	6.7	7.4	7.2	6.9	6.6

Note: ^{e}- estimates; $^{f-}$ forecasts

Source: IMF WEO October 2020 database

2. ASEAN: RECENT TRENDS IN FOREIGN TRADE AND INVESTMENT

ASEAN as a regional grouping is a combination of ten heterogeneous economies having vast difference in geographical size, economic development, trade and investment. International trade has gained significance and has been growing rapidly in the region with the establishment of ASEAN Free Trade Area (AFTA), which has also resulted in an increase in both amount and volume of intra-regional trade flows. The importance of international trade as a growth facilitator has been recognized by ASEAN countries and is evident from their growth performance in recent years. Despite this, ASEAN economies are at varying stages of development, with few countries depend heavily on natural resources and energy exports, while few countries are among the most dynamic trading nations globally. Among these economies, Singapore and Vietnam are having very high trade openness at 201.6 percent and 197.6 percent of respective GDPs in 2019. On the other hand, trade to GDP ratios of Indonesia and Myanmar remain very low at 30.3 percent and 47.8 percent of GDP respectively in 2019. While Vietnam is a major participant in the electronics global value chain, Singapore has one of the most diverse semiconductor industries in the Asia-Pacific and is a major global trading hub.

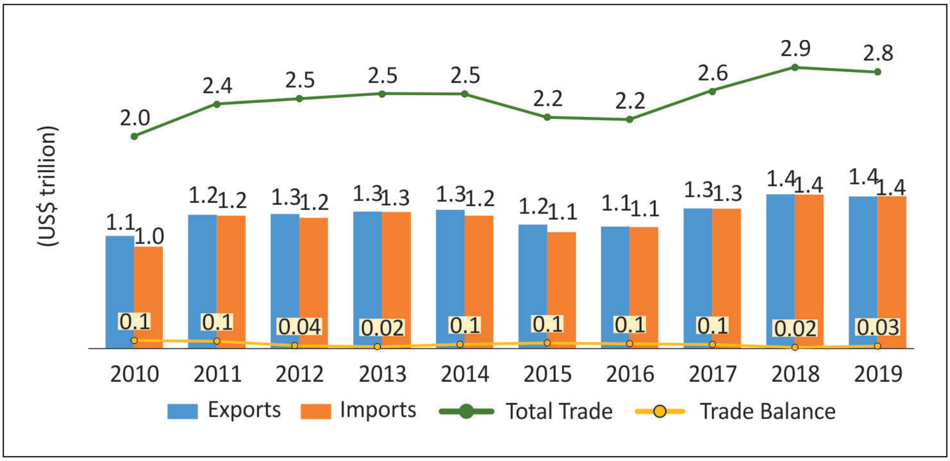
ASEAN economies are integrated into Asian value chains at different stages, with the trade patterns being heavily influenced by the various bilateral and multilateral trade agreements formed in the region. ASEAN has entered into free trade agreements with several Asian economies, including China, Republic of Korea and India. All these have contributed to the rapidly increasing trade and FDI inflows from FTA partner countries. The RCEP Agreement, a major trade promoting initiative in recent years, was signed in November 2020 by the 10

ASEAN countries and five ASEAN dialogue partners — Australia, China, Japan, New Zealand and South Korea. The RCEP is the world's biggest trading bloc, accounting for around 30.0 percent of global GDP and global trade.

In 2019, ASEAN accounted for 7.4 percent of total global trade. Over the past decade, ASEAN's total trade witnessed an upward trend, increasing by 3.8 percent to US$ 2.8 trillion in 2019 from US$ 2.0 trillion in 2010, interspersed with a period of a relative slowdown in 2015 and 2019 in line with the moderating global trade (**Chart 2.1**). During the period, exports and imports followed a similar trend. ASEAN's exports stood at US$ 1,422.4 billion in 2019, from US$ 1,054.1 billion in 2010, mainly driven by increased exports from Vietnam, Thailand and Singapore. As regards imports, ASEAN's total imports amounted to US$ 1,391.5 billion in 2019, a rise from US$ 953.2 billion in 2010. Among the ASEAN countries, Singapore has the largest volume of trade (accounting for 26.6 percent of the region's total trade), followed by Vietnam (18.4 percent) and Thailand (17.3 percent) in 2019. Brunei, Lao PDR, Cambodia and Myanmar contribute the least to the total trade volumes of the region. The trade balance has consistently recorded a surplus, though moderated, over the decade.

Chart 2.1: International Trade of ASEAN

(US$ trillion)



Source: ITC Trade Map and India Exim Bank Analysis

ASEAN as a region majorly exported electrical machinery and equipment (26.6 percent of total exports of the region in 2019), machinery and mechanical appliances (10.6 percent), mineral fuels, oil and products of distillation (10.0 percent), pearls, precious or semi-precious stones and metals (3.4 percent), vehicles other than railway or tramway and plastics and articles (3.3 percent each). The major imports from the ASEAN region in 2019 include electrical machinery and equipment (23.4 percent of total imports of the region), mineral fuels, mineral oils and products of distillation (14.7 percent), machinery and mechanical appliances (12.7 percent), plastics and articles (4.1 percent), transport vehicles and equipment and iron and steel (3.5 percent each).

Presently, ASEAN's top trading partners include China, the US, Japan and Germany. ASEAN's major export destinations in 2019 were China (14.2 percent of ASEAN's total exports), the US (13.0 percent), Japan (7.7 percent), Hong Kong (6.5 percent), Malaysia (4.7 percent), Singapore (4.5 percent) and South Korea (4.2 percent). On the other hand, ASEAN's major import sources were China (21.4 percent of ASEAN's total imports), Japan (8.1 percent), the US (7.8 percent), South Korea (6.8 percent), Taiwan (5.5 percent) and Malaysia (5.4 percent). Country-wise top traded commodities and trading partners are given in **Table 2.1.**

ASEAN trade is largely dominated by the trade between member nations. Intra-ASEAN trade is governed by the ASEAN Trade in Goods Agreement (ATIGA) which came into effect on May 17, 2010. ATIGA aims to achieve free flow of goods in the region, fewer trade barriers and deeper economic linkages among the member countries, lower business costs, increased trade, and a larger market and economies of scale for businesses. Through ATIGA, Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand have eliminated intra-ASEAN import duties on 99.65 percent of their tariff lines. Cambodia, Lao PDR, Myanmar, and Vietnam have reduced their import duties to 0-5 percent on 98.86 percent of their tariff lines.

However, the share of intra-ASEAN exports in ASEAN's total exports has moderated between 2010 and 2019, from 25.2 percent to 23.3 percent, while the share of intra-ASEAN imports moderated even further over the same period, from 25.0 percent in 2010 to 21.6 percent in 2019. Singapore and Vietnam were the major extra-ASEAN trading countries in 2019, together accounting for 47.5 percent of extra-ASEAN exports and 46.0 percent of extra-ASEAN imports. Singapore and Malaysia were the major intra-ASEAN trading countries, accounting for 54.3 percent of total intra-ASEAN exports and 42.6 percent of intra-ASEAN imports in 2019.

Table 2.1: International Trade of ASEAN Countries – Products and Partners, 2019

Country	Major Exports	Major Export Destinations	Major Imports	Major Import Sources
Brunei Exports: US$ 7.2 bn Imports: US$ 5.1 bn	• Mineral fuels, oils and distillation products (91.4%) • Organic chemicals (2.9%) • Machinery and mechanical appliances (2.0%) • Aircraft, spacecraft and parts (0.6%) • Articles of iron or steel (0.5%)	• Japan (33.4%) • Singapore (13.3%) • Australia (9.9%) • Malaysia (8.4%) • India (8.3%)	• Mineral fuels, oils and distillation products (33.7%) • Machinery and mechanical appliances (17.7%) • Articles of iron or steel (8.0%) • Vehicles other than railway or tramway (5.8%) • Electrical machinery and equipment (4.2%)	• China (13.1%) • Singapore (12.5%) • Malaysia (11.9%) • Germany (6.3%) • USA (6.3%)
Cambodia Exports: US$ 14.8 bn Imports: US$ 20.3 bn	• Apparel and clothing, knitted or crocheted (40.5%) • Apparel and clothing, not knitted or crocheted (15.4%) • Footwear, gaiters and parts (8.6%) • Articles of leather; travel goods and articles (7.4%) • Electrical machinery and equipment (3.9%)	• USA (29.8%) • Japan (7.7%) • Germany (7.3%) • China (6.8%) • UK (6.6%)	• Knitted or crocheted fabrics (13.2%) • Vehicles other than railway or tramway (11.7%) • Mineral fuels, oils and distillation products (11.7%) • Machinery and mechanical appliances (7.0%) • Electrical machinery and equipment (5.3%)	• China (37.4%) • Thailand (15.9%) • Vietnam (13.4%) • Japan (4.4%) • Taiwan (3.9%)
Indonesia Exports: US$ 167.7 bn Imports: US$ 171.3 bn	• Mineral fuels, oils and distillation products (20.3%) • Animal or vegetable fats and oils (10.5%) • Electrical machinery and equipment (5.4%) • Vehicles other than railway or tramway (4.9%) • Iron and steel (4.4%)	• China (16.7%) • USA (10.7%) • Japan (9.5%) • Singapore (7.7%) • India (7.1%)	• Machinery and mechanical appliances (15.7%) • Mineral fuels, oils and distillation products (13.7%) • Electrical machinery and equipment (11.7%) • Iron and steel (6.1%) • Plastics and articles (5.1%)	• China (26.2%) • Singapore (10.3%) • Japan (9.1%) • Thailand (5.5%) • USA (5.4%)

Country	Major Exports	Major Export Destinations	Major Imports	Major Import Sources
Lao PDR Exports: US$ 5.8 bn Imports: US$ 5.8 bn	• Mineral fuels, oils and distillation products (23.2%) • Ores, slag and ash (11.3%) • Copper and articles (7.5%) • Electrical machinery and equipment (6.9%) • Pulp of wood or fibrous cellulosic material (4.9%)	• Thailand (41.4%) • China (28.8%) • Vietnam (18.2%) • Japan (1.6%) • India (1.6%)	• Mineral fuels, oils and distillation products (16.1%) • Electrical machinery and equipment (13.6%) • Vehicles other than railway or tramway (9.0%) • Machinery and mechanical appliances (8.9%) • Articles of iron or steel (6.4%)	• Thailand (50.3%) • China (29.0%) • Vietnam (7.8%) • Japan (2.0%) • Singapore (1.5%)
Malaysia Exports: US$ 238.2 bn Imports: US$ 205.0 bn	• Electrical machinery and equipment (34.4%) • Mineral fuels, oils and distillation products (14.5%) • Machinery and mechanical appliances (9.1%) • Animal or vegetable fats and oils (4.8%) • Optical, photographic, medical or surgical instruments (4.2%)	• China (14.2%) • Singapore (13.9%) • USA (9.7%) • Hong Kong (6.7%) • Japan (6.6%)	• Electrical machinery and equipment (27.3%) • Mineral fuels, oils and distillation products (14.6%) • Machinery and mechanical appliances (10.1%) • Plastics and articles (4.4%) • Iron and steel (3.2%)	• China (20.7%) • Singapore (10.5%) • USA (8.1%) • Japan (7.5%) • Taiwan (6.7%)
Myanmar Exports: US$ 18.0 bn Imports: US$ 18.6 bn	• Mineral fuels, oils and distillation products (24.2%) • Apparel and clothing, not knitted or crocheted (21.0%) • Apparel and clothing, knitted or crocheted (7.0%) • Cereals (5.7%) • Edible vegetables, roots and tubers (5.4%)	• China (31.7%) • Thailand (17.9%) • Japan (7.9%) • USA (4.6%) • Germany (3.6%)	• Mineral fuels, oils and distillation products (19.8%) • Machinery and mechanical appliances (9.3%) • Electrical machinery and equipment (6.7%) • Vehicles other than railway or tramway (6.1%) • Iron and steel (5.0%)	• China (34.7%) • Singapore (18.2%) • Thailand (11.7%) • Malaysia (5.1%) • Indonesia (4.9%)
Philippines Exports: US$ 70.3 bn Imports: US$ 112.9 bn	• Electrical machinery and equipment (49.3%) • Machinery and mechanical appliances (15.1%) • Edible fruit and nuts (3.7%) • Optical, photographic, medical or surgical instruments (3.1%) • Pearls, precious or semi-precious stones and metals (2.3%)	• USA (16.3%) • Japan (15.1%) • China (13.7%) • Hong Kong (13.7%) • Singapore (5.4%)	• Electrical machinery and equipment (23.9%) • Mineral fuels, oils and distillation products (12.0%) • Machinery and mechanical appliances (11.1%) • Vehicles other than railway or tramway (7.5%) • Iron and steel (3.5%)	• China (22.8%) • Japan (9.5%) • South Korea (7.5%) • USA (7.3%) • Thailand (6.2%)

Country	Major Exports	Major Export Destinations	Major Imports	Major Import Sources
Singapore Exports: US$ 390.4 bn Imports: US$ 359.0 bn	• Electrical machinery and equipment (30.9%) • Machinery and mechanical appliances (15.2%) • Mineral fuels, oils and distillation products (12.3%) • Optical, photographic, medical or surgical instruments (5.4%) • Pearls, precious or semi-precious stones and metals (4.6%)	• China (13.2%) • Hong Kong (11.4%) • Malaysia (10.5%) • USA (8.8%) • Indonesia (7.0%)	• Electrical machinery and equipment (27.3%) • Mineral fuels, oils and distillation products (21.0%) • Machinery and mechanical appliances (16.2%) • Pearls, precious or semi-precious stones and metals (5.3%) • Optical, photographic, medical or surgical instruments (3.5%)	• China (13.7%) • USA (12.2%) • Malaysia (11.6%) • Taiwan (9.0%) • Japan (5.4%)
Thailand Exports: US$ 245.4 bn Imports: US$ 240.1 bn	• Machinery and mechanical appliances (16.4%) • Electrical machinery and equipment (13.8%) • Vehicles other than railway or tramway (11.8%) • Pearls, precious or semi-precious stones and metals (6.4%) • Rubber and articles (6.3%)	• USA (12.8%) • China (11.8%) • Japan (10.0%) • Vietnam (4.9%) • Hong Kong (4.8%)	• Electrical machinery and equipment (18.1%) • Mineral fuels, oils and distillation products (15.7%) • Machinery and mechanical appliances (12.4%) • Pearls, precious or semi-precious stones and metals (5.1%) • Iron and steel (5.0%)	• China (21.2%) • Japan (14.0%) • USA (7.4%) • Malaysia (5.5%) • South Korea (3.6%)
Vietnam Exports: US$ 264.6 bn Imports: US$ 253.4 bn	• Electrical machinery and equipment (36.7%) • Footwear, gaiters and parts (7.2%) • Apparel and clothing, not knitted or crocheted (5.7%) • Apparel and clothing, knitted or crocheted (5.6%) • Machinery and mechanical appliances (4.9%)	• USA (23.2%) • China (15.7%) • Japan (7.7%) • South Korea (7.5%) • Hong Kong (2.7%)	• Electrical machinery and equipment (30.7%) • Machinery and mechanical appliances (9.2%) • Plastics and articles (6.3%) • Mineral fuels, oils and distillation products (6.1%) • Iron and steel (4.5%)	• China (29.8%) • South Korea (18.5%) • Japan (7.7%) • Taiwan (6.0%) • USA (5.7%)

Source: ITC Trade Map and India Exim Bank Analysis

Impact of COVID-19 on ASEAN's Trade

As per the IMF estimates, except for Brunei, the rest of the ASEAN economies witnessed a contraction in the volume of exports and imports of goods during 2020 **(Table 2.2)**. The Philippines and Cambodia witnessed the highest decline in the volume of exports of goods during 2020, and the Philippines, Thailand and Indonesia witnessed highest contraction in volume of goods imported. As per an Organisation for Economic Co-operation and Development (OECD) report,[5] in the second half of 2020, ASEAN exports benefitted from a rebound in the Chinese economy, with several ASEAN economies witnessing double-digit growth in exports to China. The growth in ASEAN-China exports was partly supported by growth in exports of agricultural commodities, medical supplies and teleworking-related equipment. Notwithstanding this pick up in exports to China, COVID-19 is estimated to have weighed heavily on ASEAN's overall exports in 2020.

Table 2.2: International Trade of ASEAN Countries, 2020 (% Change)

Country	Volume of Merchandise Exports		Volume of Merchandise Imports	
	2019	2020^e	2019	2020^e
Brunei	15.3	12.2	16.4	12.6
Cambodia	15.0	-15.2	19.5	-5.8
Indonesia	-6.3	-10.6	-9.1	-15.0
Lao PDR	13.6	-11.7	-5.5	-8.7
Malaysia	-1.7	-10.2	-3.5	-7.5
Myanmar	-6.8	0.0	-14.5	-7.9
Philippines	6.4	-17.4	-3.4	-21.2
Singapore	-2.0	-6.8	-1.9	-2.1
Thailand	-3.5	-8.7	-5.6	-16.3
Vietnam	5.3	-	5.1	-0.9

Note: ^{e}-estimates
Source: IMF WEO October 2020 database

Investment Scenario in ASEAN

ASEAN has been recognized to be among the few regions in the world with remarkable growth in the inflows of FDIs even amidst global economic uncertainties. Despite few variabilities and fluctuations across various sectors and sub-sectors, FDI into the region as a whole continues to be buoyant. ASEAN countries pursue favourable national investment policies to develop an

[5]Economic Outlook for Southeast Asia, China and India 2021, OECD Development Centre, 2021.

attractive environment for FDI. Several ASEAN countries introduced investment liberalization measures in the last few years.

FDI inflows to the ASEAN region have witnessed an increasing trend during the last decade, albeit with some slowdown in between due to global economic conditions **(Table 2.3)**. However, from a broader perspective, it is evident that FDI flows have significantly evolved from US$ 108.4 billion in 2010 to US$ 158.9 billion in 2019, witnessing an almost 50.0 percent increase.

Table 2.3: Foreign Direct Investment Inflows to ASEAN Countries

(US$ billion)

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Brunei	0.6	1.2	0.9	0.7	0.6	0.2	-0.2	0.5	0.5	0.4
Cambodia	0.8	0.9	1.6	1.3	1.7	1.7	2.3	2.7	3.1	3.7
Indonesia	13.8	19.2	19.1	18.4	21.8	16.6	3.9	20.6	20.6	23.9
Lao PDR	0.3	0.5	0.3	0.4	0.9	1.1	1.1	1.7	1.4	0.8
Malaysia	9.2	12.0	9.4	12.1	10.9	10.2	11.3	9.3	7.6	7.7
Myanmar	2.2	2.1	1.4	2.6	0.9	2.8	3.0	4.0	1.6	1.7
Philippines	1.3	1.8	2.8	3.9	5.8	5.6	8.3	10.3	9.9	7.7
Singapore	57.5	39.9	60.1	56.7	73.3	59.7	68.8	83.6	79.7	92.1
Thailand	14.7	2.5	12.9	15.9	5.0	8.9	3.5	8.3	13.2	4.8
Vietnam	8.0	7.5	8.4	8.9	9.2	11.8	12.6	14.1	15.5	16.1
ASEAN	**108.4**	**87.6**	**116.8**	**121.0**	**130.1**	**118.7**	**114.6**	**155.0**	**153.1**	**158.9**

Source: ASEAN Secretariat

Amongst the ASEAN economies, Singapore received the maximum FDI inflows in 2019, with a 58.0 percent share in ASEAN's total FDI inflows, followed by Indonesia and Vietnam. Singapore witnessed a 19.0 percent growth in FDI inflows in 2019, due to several large greenfield investments as well as mega-deal M&As in both the manufacturing and services sectors. While the shares of Singapore, Indonesia, Vietnam, the Philippines, Cambodia and Lao PDR increased in the last decade, Thailand witnessed a sharp decline in FDI inflows to ASEAN (from 13.6 percent in 2010 to 3.0 percent in 2019). Similarly, the shares of Malaysia and Myanmar also declined.

ASEAN countries such as Cambodia, Indonesia and Vietnam recorded the highest ever FDI inflows in 2019. Investments into Cambodia and Vietnam were majorly supported by the relocations of MNEs from China due to recent US-China trade tensions as well as large inflows of investments into the manufacturing and services sector from other ASEAN countries and Japan.

Table 2.4: Foreign Direct Investment Inflows to ASEAN by Industry, 2012-2019

(US$ million)

Sector	2012	2019
Manufacturing	-8,169.1	56,272.4
Financial and Insurance activities	39,801.7	51,432.5
Wholesale and retail trade; repair of motor vehicles and motor cycles	38,317.8	17,348.2
Real estate activities	11,054.3	9,845.4
Other services activities	13,275.2	3,334.0
Construction	-256.4	2,974.8
Agriculture, forestry, and fishing	1,746.9	2,424.5
Human health and social work activities	293.4	2,318.8
Mining and quarrying	6,461.8	2,033.2
Electricity, gas, steam and air conditioning supply	192.2	1,528.0
Transportation and storage	3,622.5	1,472.3
Professional, scientific and technical activities	5,506.4	793.2
Water supply; sewerage, waste management and remediation activities	247.7	568.7
Administrative and support service activities	244.9	167.0
Arts, entertainment and recreation	119.1	66.0
Information and communication	2,407.6	44.9
Education	2.3	41.3
Public administration and defence; compulsory social security	0.0	11.4
Accommodation and food service activities	148.7	-54.5
Others	1,757.4	6,242.3
Total FDI Inflows to ASEAN	**1,16,774.4**	**1,58,864.4**

Source: ASEAN Secretariat

As regards sectors attracting investments in the ASEAN region, the manufacturing sector has been the largest recipient of FDI in 2019, with a 35.4 percent share in total FDI inflows **(Table 2.4).** There has been a sharp rise in manufacturing FDI across ASEAN countries in recent years. Other major sectors to receive FDI in 2019 include financial and insurance activities (32.4 percent of total FDI), wholesale and retail trade, repair of motor vehicles and motor cycles (10.9 percent), and real estate activities (6.2 percent).

Until 2009, intra-ASEAN FDI remained at a low level. However, since 2010, intra-ASEAN investments have increased significantly. In 2010, intra-ASEAN FDI accounted for 14.3 percent in ASEAN's total inward FDI flows, and has peaked to 21.8 percent in 2016, though moderated henceforth to settle at 13.9 percent in 2019 **(Table 2.5).** The major sources of intra-ASEAN FDI in 2019 were Singapore, Thailand and Malaysia and major host countries were Indonesia, Thailand, Singapore and Vietnam. Other major sources of FDI into ASEAN economies include the US (with a 15.2 percent share in total ASEAN investment inflows in 2019), Japan (13.0 percent), EU-28 (9.7 percent), and China (5.6 percent).

As regards FDI outflows, total outflows from ASEAN witnessed a moderation from US$ 63.3 billion in 2010 to US$ 56.0 billion in 2019 **(Table 2.6).** Singapore, Thailand and Malaysia recorded the highest FDI outflows from the region, with 59.4 percent, 21.1 percent and 11.2 percent shares, respectively in total FDI outflows from ASEAN during 2019. There were no outflows recorded from Brunei and Myanmar during the period of analysis.

Table 2.5: Major FDI Sources to ASEAN

(US$ billion)

Source Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Intra-ASEAN	15.5	15.8	23.9	18.5	22.2	20.8	25.0	25.9	24.2	22.1
Rest of the World	92.9	71.7	92.9	102.5	107.9	97.8	89.6	129.1	128.9	136.8
USA	15.4	8.2	18.9	11.5	21.1	22.9	15.7	26.8	-23.5	24.1
Japan	12.9	7.8	14.9	24.6	13.4	13.0	14.0	16.1	23.3	20.6
EU-28	21.0	24.4	-2.5	15.7	28.9	20.4	34.2	17.4	25.8	15.4
China	3.6	7.2	8.0	6.2	6.8	6.6	11.3	15.5	12.2	8.9
Canada	1.2	0.9	3.9	0.8	2.2	1.2	1.2	0.5	0.8	3.2
Australia	1.7	4.8	0.7	2.2	4.0	1.4	0.9	0.7	1.3	2.8
South Korea	5.6	1.8	1.3	4.3	5.3	5.6	6.3	4.6	5.5	2.4
India	4.4	-2.1	7.0	1.7	1.2	1.5	0.2	2.0	1.0	1.9
Russia	0.1	0.01	0.2	0.6	-0.1	-0.02	0.1	0.05	0.1	0.1
New Zealand	0.3	0.02	-0.9	0.3	0.5	-0.1	0.2	0.2	0.1	-0.1
Others	26.7	18.6	41.5	34.7	24.5	25.4	5.6	45.3	82.2	57.6

Source: ASEAN Secretariat

Table 2.6: Foreign Direct Investment Outflows from ASEAN Countries

(US$ million)

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cambodia	20.6	29.2	36.2	62.3	82.1	87.8	79.1	114.9	124.0	101.8
Indonesia	2664.3	7712.9	5421.7	6646.6	7077.3	5937.0	-12214.7	2077.2	8052.9	3380.4
Lao PDR	33.5	0.4	-16.9	-28.6	7.1	39.7	15.2	9.7	-	-
Malaysia	13399.2	15249.0	17143.2	14107.0	16369.2	10545.9	8011.2	5638.5	5114.5	6304.0
Philippines	2940.3	2386.0	3407.1	2189.5	6299.2	4346.9	1032.3	1751.8	769.6	658.1
Singapore	35407.1	31900.1	20480.4	45278.8	52477.5	45223.0	39967.6	48829.8	29761.1	33283.3
Thailand	7939.6	6072.4	10496.8	11678.6	5575.4	1687.3	12366.9	16962.7	18442.5	11846.8
Vietnam	900.0	950.0	1200.0	1956.0	1150.0	1100.0	1000.0	480.0	598.0	465.0
ASEAN	**63304.5**	**64300.0**	**58168.5**	**81890.2**	**89037.6**	**68967.5**	**50257.6**	**75864.5**	**62862.4**	**56039.5**

Note: "-" indicates nil/negligible

Source: UNCTADStat

3. INDIA'S TRADE AND INVESTMENT WITH ASEAN COUNTRIES

ASEAN is a strategic pathway for India to expand its economic interests and strategic outreach to the Asia-Pacific region. There exist a lot of complementarities between India and ASEAN countries. India has historically shared strong cultural and strategic ties with the ASEAN countries partly due to geographical proximity. India's 'Look East' Policy adoption in 1992 was an initiative towards developing extensive economic and strategic relationships with the ASEAN countries. Reflecting the Government's objective of enhancing India's economic and strategic partnership with ASEAN, the 'Look East Policy' has been transformed into "Act East Policy" in 2014. The ASEAN-India dialogue relations evolved into a sectoral dialogue partnership in 1992 and gradually grew into a full dialogue partnership in December 1995. Since then, India's engagements with ASEAN has progressed from being a dialogue partner to a strategic partner. The economic and trade linkages, which saw an expansion of trade volumes, demonstrate the intensity of economic engagements between India and ASEAN. In 2017, ASEAN and India commemorated 25 years of Dialogue partnership and 15 years of Summit level partnership.

The ASEAN region has a shared border with India at the North East Region (NER), as Myanmar shares a land boundary of around 1,643 km with four Indian states including Manipur, Mizoram, Nagaland and Arunachal Pradesh. India's NER forms a strategic component of India's relationship with ASEAN countries by acting as a gateway to Southeast and East Asia. In fact, the North-eastern states act as the land bridge as they share international borders with Myanmar and China. Therefore, increasing transport connectivity through this region can increase trade between India and ASEAN countries, as well as with East Asian countries. According to a study by the Research and Information System for

Developing Countries (RIS),[6] the north eastern states are likely to gain more in terms of economic growth with higher movement of freight from Kaladan Corridor, Trilateral Highway and the Myanmar India Corridor which would be part of the Bangladesh-China-India-Myanmar Economic Corridor or BCIM – EC. Kaladan Corridor and the India-Myanmar-Thailand Trilateral Highway are currently under implementation. Border infrastructure needs to be upgraded to facilitate connectivity between India and Myanmar, which acts as the gateway to the ASEAN region. Continuous engagement with the ASEAN countries at bilateral and regional levels also provide enhanced connectivity to the states of India's NER.

Additionally, India and five ASEAN countries namely, Cambodia, Lao PDR, Myanmar, Thailand and Vietnam are also cooperating under the aegis of another initiative called Mekong Ganga Cooperation (MGC), for cooperation in the fields of tourism, education, culture, transport and communication.

ASEAN and India together represent a combined population of 2.02 billion, which is over a quarter of the global population and a GDP of over US$ 6.1 trillion, creating one of the largest economic spaces in the world. The combined GDP of ASEAN and India is expected to touch US$ 8.4 trillion by 2025. India and ASEAN have been building stronger cooperation over the years by way of implementing various projects in the fields of agriculture, science and technology, space, environment and climate change, human resource development, capacity building, new and renewable energy, tourism, people-to-people contacts and connectivity among others.

ASEAN-India Comprehensive Economic Cooperation Agreement

The ASEAN-India Framework Agreement on Comprehensive Economic Cooperation was signed between India and ASEAN at the Second ASEAN-India Summit held on October 8, 2003 in Bali, Indonesia, to institutionalise a framework for future economic cooperation. The Agreement covered the following objectives –

- Agreement on Trade in Goods
- Agreement on Trade in Services and Investment

[6] RIS (2018), Assessing Economic Impacts of Connectivity Corridors: An Empirical Investigation, Prabir De, Sunetra Ghatak, Durairaj Kumarasamy, RIS, 2018.

Trade in Goods Agreement

The ASEAN-India Agreement on Trade in Goods came into force on January 1, 2010 in the case of Malaysia, Singapore and Thailand; June 1, 2010 for Vietnam; September 1, 2010 for Myanmar; October 1, 2010 for Indonesia; November 1, 2010 for Brunei; January 24, 2011 for Lao PDR; June 1, 2011 for the Philippines; and July 29, 2011 for Cambodia. Elimination or reduction of tariffs under the various tariff categories like Normal Tracks 1 & 2, Sensitive Track, Special Products and Highly Sensitive Track would be by 2019 for ASEAN non-CLMV barring the Philippines; 2022 for the Philippines; and 2024 for Cambodia, Lao PDR, Myanmar and Vietnam (CLMV). Tariff concessions in the Agreement are offered either through tariff elimination or tariff reduction. **Table 3.1** itemizes the agreed tariff reduction or elimination framework for different categories of tariff lines among the ASEAN member countries and India.

Under the Agreement, ASEAN countries and India have agreed to progressively eliminate tariffs on 80.0 percent of the tariff lines, accounting for 75.0 percent of the trade. India has excluded 489 tariff lines (HS-6 Digit level) from the list of tariff concessions and 590 tariff lines from the list of tariff elimination to address sensitivities in agriculture, textiles, auto, chemicals, petrochemicals, crude and refined palm oil, coffee, tea, pepper, etc. ASEAN countries have also maintained a country-wise exclusion list from the proposed tariff concessions or eliminations.

Table 3.1: ASEAN-India Tariff Reduction/Elimination Framework

Category	Brunei, Indonesia, Malaysia, Singapore, Thailand & India	Philippines & India	Cambodia, Lao PDR, Myanmar, Vietnam (CLMV) & India
Normal Track 1	Applied Most Favoured Nation (MFN) tariff rates to be reduced to 0% by 2013	Applied MFN tariff rates to be reduced to 0% by 2018	Applied MFN tariff rates to be reduced to 0% for India by 2013 and 0% for CLMV by 2018
Normal Track 2	Applied MFN tariff rates to be reduced to 0% by 2016	Applied MFN tariff rates to be reduced to 0% by 2019	Applied MFN tariff rates to be reduced to 0% for India by 2016 and 0% for CLMV by 2021

Category	Brunei, Indonesia, Malaysia, Singapore, Thailand & India	Philippines & India	Cambodia, Lao PDR, Myanmar, Vietnam (CLMV) & India
Sensitive Track	i. Applied MFN tariff rates to be reduced to 5% by 2016	i. Applied MFN tariff rates to be reduced to 5% by 2019	i. Applied MFN tariff rates to be reduced to 5% by 2016 for India and for CLMV by 2021
	ii. Other than 50 tariff lines, MFN rates to be reduced to 4.5% upon entry into force of the Agreement. Preferential Tariffs rates to be reduced to 4% by 2016	ii. Other than 50 tariff lines, MFN rates to be reduced to 4.5% upon entry into force of the Agreement. Preferential Tariffs rates to be reduced to 4% by 2019	ii. Other than 50 tariff lines, MFN rates to be reduced to 4.5% by 5 years for CLMV. Preferential Tariffs rates to be reduced to 4% by 2021
	iii. Applied MFN tariff rates on 4% of the tariff lines placed in the Sensitive Track (as will be identified by each Party) will be eliminated by 2019	iii. Applied MFN tariff rates on 4% of the tariff lines placed in the Sensitive Track (as will be identified by each Party) will be eliminated by 2022	iii. Applied MFN tariff rates on 4% of the tariff lines placed in the Sensitive Track (as will be identified by each Party) will be eliminated by 2024
Special Product* (Applicable for India)	MFN tariff rate to be reduced to 37.5% for crude oil, 50% for pepper, 45% for palm oil, coffee and black tea by 2019	MFN tariff rate to be reduced to 37.5% for crude oil, 50% for pepper, 45% for palm oil, coffee and black tea by 2019	MFN tariff rate to be reduced to 37.5% for crude oil, 50% for pepper, 45% for palm oil, coffee and black tea by 2019
Highly Sensitive Track (Not applicable for Brunei, Lao, Myanmar & Singapore)	MFN tariff rates to be reduced to 50% (Category 1), 50% (Category 2) and 25% (Category 3) by 2019	MFN tariff rates to be reduced to 50% (Category 1), 50% (Category 2) and 25% (Category 3) by 2022	MFN tariff rates to be reduced to 50% (Category 1), 50% (Category 2) and 25% (Category 3) by 2024

Category	Brunei, Indonesia, Malaysia, Singapore, Thailand & India	Philippines & India	Cambodia, Lao PDR, Myanmar, Vietnam (CLMV) & India
Exclusion List	Exclusion Lists shall be subject to an annual tariff review with a view to improving market access	Exclusion Lists shall be subject to an annual tariff review with a view to improving market access	Exclusion Lists shall be subject to an annual tariff review with a view to improving market access

** India's Schedule of Tariff Commitments consists of 40 items placed under Special Products. This is also referred to as India's Highly Sensitive List. These items belong to 5 products namely Crude Palm Oil (CPO), Refined Palm Oil (RPO), coffee, pepper and tea.*

Source: ASEAN – India Trade Goods Agreement, Ministry of Commerce and Industry, Government of India

Trade in Services and Investment Agreement

The ASEAN-India Trade in Services Agreement was signed on November 13, 2014 and came into effect from July 1, 2015. Select articles contained in the Services Agreement include transparency, domestic regulations, recognition, market access, and national treatment, increasing participation of developing countries, joint committee on services, review, dispute settlement and denial of benefits. The Investment Agreement primarily focuses on protection of investment to ensure fair and equitable treatment for investors, non-discriminatory treatment in expropriation or nationalisation, and fair compensation.

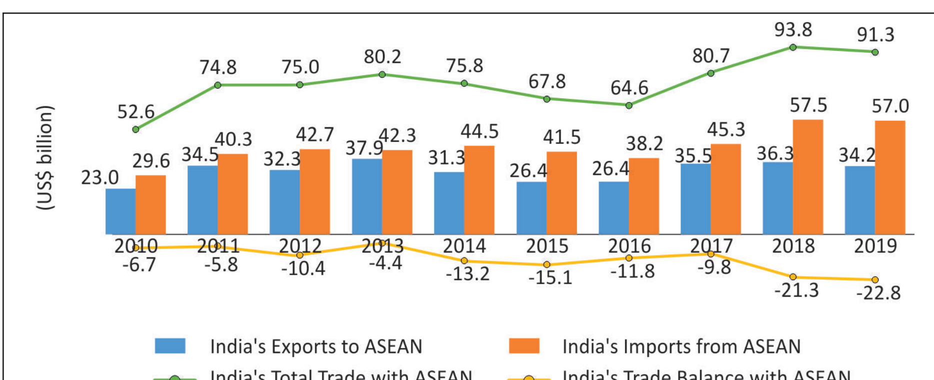
The ASEAN-India Agreement on Investment covers General Agreement on Trade in Services (GATS) plus commitments for different modes of supply of services. Each of the ASEAN countries have submitted individual schedule commitments, which would be equally applicable to all participating countries. Both India and ASEAN member countries have taken GATS plus commitments in various Services and modes of supply.

Additionally, India has entered into Comprehensive Economic Cooperation Agreements (CECA) with Malaysia and Singapore, and is currently negotiating with Indonesia and Thailand for entering into CECA.

India-ASEAN Trade: Current Trends

In recent years, ASEAN has become one of the largest trading partners for India. India-ASEAN trade has significantly increased from US$ 7.7 billion in 2001 to US$ 52.6 billion in 2010, and further to US$ 91.3 billion in 2019 **(Chart 3.1).** A major driving factor behind these increasing trade levels is India-ASEAN Agreement on Trade in Goods, in addition to the other bilateral agreements India is having with ASEAN countries. India's trade with ASEAN accounts for 11.4 percent of India's total trade in 2019, which is much larger than India's total trade with other Asian regional groupings such as BIMSTEC (4.5 percent of India's total trade) and SAARC (3.3 percent). In the post-FTA period, trade in goods has emerged to be in favour of ASEAN, as India's exports have not witnessed a significant rise compared to ASEAN's exports to India. This is indicated by the rising trade deficit witnessed by India with ASEAN, which has increased from US$ 1.0 billion in 2001 to US$ 6.7 billion in 2010, and further to US$ 22.8 billion in 2019. While India's exports to ASEAN have grown at a CAGR of 4.5 percent between 2010 and 2019, India's imports from the region have grown by a CAGR of 7.5 percent during the same period.

Chart 3.1: India's Bilateral Trade with ASEAN



Source: ITC Trade Map and India Exim Bank Analysis

The majority of India's exports to ASEAN have been directed towards Singapore, which accounted for 31.4 percent of India's total exports to the region (**Table 3.2)**. Other major export destinations include Malaysia (18.3 percent of exports), Vietnam (16.1 percent), Indonesia (13.2 percent) and Thailand (12.6 percent). Indonesia accounted for majority of India's imports from ASEAN during 2019, with a share of 27.3 percent, followed by Singapore (26.1 percent), Malaysia (18.2 percent), Vietnam (13.1 percent), and Thailand (12.3 percent).

Overall, Singapore remained India's major trading partner in the region, followed by Indonesia and Malaysia. As regards India's trade balance with ASEAN countries, India is experiencing trade deficits with all the countries except CLM countries (Cambodia-Lao PDR-Myanmar) and the Philippines. From ASEAN point of view, while exports to India accounted for 4.0 percent of ASEAN's total exports in 2019, imports from India accounted for a marginal 2.5 percent of ASEAN's total imports in 2019.

Table 3.2: India's Bilateral Trade with ASEAN Countries

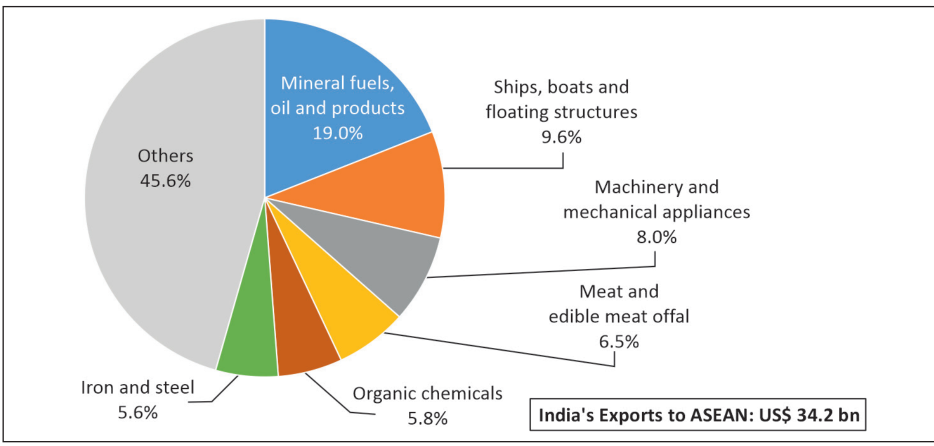
(US$ million)

Country	Exports		Imports		Total Trade		Trade Balance	
	2010	2019	2010	2019	2010	2019	2010	2019
Brunei	21.2	56.8	207.1	581.4	228.4	638.2	-185.9	-524.6
Cambodia	61.0	204.0	7.6	46.6	68.7	250.6	53.4	157.4
Indonesia	4557.1	4515.4	9695.3	15563.9	14252.4	20079.3	-5138.2	-11048.5
Lao PDR	8.2	29.3	20.1	2.6	28.3	31.9	-11.9	26.7
Malaysia	3555.3	6268.5	5995.9	10407.6	9551.2	16676.1	-2440.6	-4139.0
Myanmar	272.6	956.9	1122.1	506.7	1394.7	1463.6	-849.6	450.2
Philippines	801.6	1635.5	394.5	556.9	1196.1	2192.4	407.2	1078.6
Singapore	9066.2	10738.7	7263.1	14893.9	16329.4	25632.6	1803.1	-4155.2
Thailand	2139.6	4331.6	3940.8	7034.3	6080.4	11366.0	-1801.2	-2702.7
Vietnam	2475.6	5512.9	993.5	7446.1	3469.1	12959.0	1482.1	-1933.2

Source: ITC Trade Map and India Exim Bank Analysis

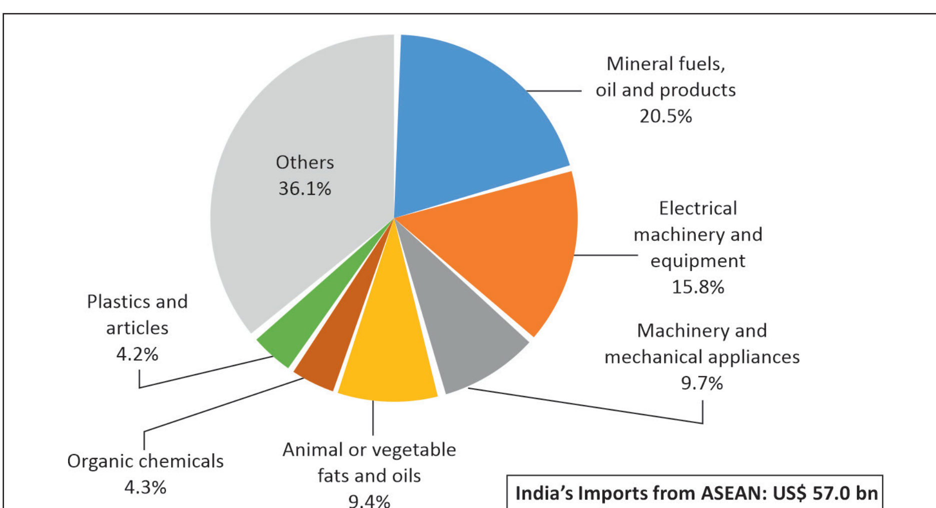
The commodity composition of major traded commodities between India and ASEAN remained more or less the same in the last decade. However, there are few changes in the shares of some of these major commodities. For instance, mineral fuels remained the major exported commodity during 2010 and 2019, while its share has decreased from 31.0 percent in 2010 to 19.0 percent in 2019 **(Chart 3.2).** In terms of imports, while the share of mineral fuel, which again is the largest imported item from ASEAN, decreased from 24.6 percent in 2010 to 20.5 percent in 2019, the share of electrical machinery and equipment, the second largest imported product, has increased from 10.1 percent in 2010 to 15.8 percent in 2019 **(Chart 3.3).** Moreover, India's exports to ASEAN is more diverse than India's import from ASEAN at the commodity level. The top 5 exported products accounted for 49.0 percent of total exports to ASEAN, while the top 5 imported products accounted for 60.0 percent of total imports from ASEAN.

Chart 3.2: India's Major Exported Commodities to ASEAN, 2019 (% Share)



Source: ITC Trade Map and India Exim Bank Analysis

Chart 3.3: India's Major Imported Commodities from ASEAN, 2019 (% Share)



Source: ITC Trade Map and India Exim Bank Analysis

India’s major traded commodities with ASEAN economies are provided in **Table 3.3.**

Table 3.3: India’s Trade with ASEAN Countries – Products, 2019

Country	Major Exports	Major Imports
Brunei Exports: US$ 56.8 mn Imports: US$ 581.4 mn	• Vehicles other than railway or tramway (31.5%) • Machinery and mechanical appliances (15.0%) • Meat and edible meat offal (14.1%) • Electrical machinery and equipment (3.9%) • Rubber and articles (3.7%)	• Mineral fuels, oils and distillation products (99.5%) • Organic chemicals (0.3%) • Machinery and mechanical appliances (0.1%) • Iron and steel (0.04 %) • Articles of iron or steel (0.02%)
Cambodia Exports: US$ 204.0 mn Imports: US$ 46.6 mn	• Vehicles other than railway or tramway (29.4%) • Pharmaceutical products (25.3%) • Man-made filaments (5.5%) • Raw hides, skin and leather (4.7%) • Electrical machinery and equipment (3.7%)	• Articles of apparel and clothing accessories, knitted or crocheted (31.0%) • Articles of apparel and clothing accessories, not knitted or crocheted (13.8%) • Electrical machinery and equipment (12.7%) • Footwear, gaiters and the like (11.2%) • Wood and articles of wood (6.1%)
Indonesia Exports: US$ 4.5 bn Imports: US$ 15.6 bn	• Ships, boats and floating structures (15.7%) • Organic chemicals (12.7%) • Machinery and mechanical appliances (9.1%) • Vehicles other than railway or tramway (8.9%) • Meat and edible meat offal (6.7%)	• Mineral fuels, oils and distillation products (46.0%) • Animal or vegetable fats and oils (17.3%) • Ships, boats and floating structures (6.3%) • Iron and steel (5.2%) • Miscellaneous chemical products (2.4%)

Country	Major Exports	Major Imports
Lao PDR Exports: US$ 29.3 mn Imports: US$ 2.6 mn	• Electrical machinery and equipment (22.0%) • Vehicles other than railway or tramway (20.1%) • Machinery and mechanical appliances (18.2%) • Pharmaceutical products (15.9%) • Residues and animal fodder (6.4%)	• Wood and articles of wood (35.2%) • Electrical machinery and equipment (31.2%) • Other base metals; cermets; articles (11.2%) • Coffee, tea, and spices (7.8%) • Man-made staple fibres (5.0%)
Malaysia Exports: US$ 6.3 bn Imports: US$ 10.4 bn	• Mineral fuels, oils and distillation products (24.2%) • Aluminium and articles (18.5%) • Organic chemicals (9.0%) • Meat and edible meat offal (5.5%) • Machinery and mechanical appliances (5.3%)	• Animal or vegetable fats and oils (22.2%) • Mineral fuels, oils and distillation products (22.2%) • Electrical machinery and equipment (8.0%) • Machinery and mechanical appliances (7.5%) • Copper and articles (5.9%)
Myanmar Exports: US$ 956.9 mn Imports: US$ 506.7 mn	• Pharmaceutical products (23.1%) • Meat and edible meat offal (11.5%) • Machinery and mechanical appliances (7.3%) • Electrical machinery and equipment (6.7%) • Vehicles other than railway or tramway (6.5%	• Edible vegetables, roots and tubers (68.0%) • Wood and articles of wood (15.7%) • Zinc and articles (2.9%) • Rubber and articles (2.2%) • Fish, crustaceans and aquatic invertebrates (1.9%)

Country	Major Exports	Major Imports
Philippines Exports: US$ 1.6 bn Imports: US$ 556.9 mn	• Vehicles other than railway or tramway (18.1%) • Pharmaceutical products (14.6%) • Machinery and mechanical appliances (10.7%) • Iron and steel (5.0%) • Meat and edible meat offal (4.9%)	• Machinery and mechanical appliances (26.5%) • Electrical machinery and equipment (21.5%) • Pearls, precious or semi-precious stones and metals (8.8%) • Residues and prepared animal fodder (5.1%) • Ores, slag and ash (5.1%)
Singapore Exports: US$ 10.7 bn Imports: US$ 14.9 bn	• Mineral fuels, oils and distillation products (42.8%) • Ships, boats and floating structures (22.2%) • Machinery and mechanical appliances (7.8%) • Pearls, precious or semi-precious stones and metals (6.0%) • Organic chemicals (3.4%)	• Electrical machinery and equipment (19.6%) • Machinery and mechanical appliances (18.5%) • Mineral fuels, oils and distillation products (10.5%) • Organic chemicals (8.6%) • Plastics and articles (7.6%)
Thailand Exports: US$ 4.3 bn Imports: US$ 7.0 bn	• Machinery and mechanical appliances (16.2%) • Pearls, precious or semi-precious stones and metals (14.8%) • Vehicles other than railway or tramway (6.4%) • Organic chemicals (6.3%) • Fish, crustaceans and aquatic invertebrates (5.1%)	• Machinery and mechanical appliances (18.7%) • Electrical machinery and equipment (12.9%) • Plastics and articles (12.0%) • Pearls, precious or semi-precious stones and metals (8.0%) • Organic chemicals (7.5%)

Country	Major Exports	Major Imports
Vietnam Exports: US$ 5.5 bn Imports: US$ 7.4 bn	• Meat and edible meat offal (23.5%) • Iron and steel (20.4%) • Fish, crustaceans and aquatic invertebrates (5.8%) • Vehicles other than railway or tramway (4.9%) • Cotton (4.2%)	• Electrical machinery and equipment (54.3%) • Copper and articles (6.5%) • Inorganic chemicals (5.7%) • Machinery and mechanical appliances (4.5%) • Rubber and articles (3.3%)

Source: ITC Trade Map and India Exim Bank Analysis

India's Export Potential with ASEAN

According to Export Potential Map of ITC Geneva, India currently has an untapped overall export potential of US$ 219.6 billion. ASEAN is the 5th largest market with the greatest potential for India's exports after North America, EU and West Europe, East Asia and Middle East. At 6-digit HS code level, the products with greatest export potential from India to ASEAN are diamonds, worked; aluminium, not alloyed and unwrought; jewellery of precious metal; medicaments consisting of mixed or unmixed products for retail sale; and frozen boneless bovine cuts. India currently has an untapped export potential of US$ 30.3 billion with ASEAN **(Table 3.4)**.

For ASEAN, India remains the fifth largest export potential market after China, the US, Hong Kong and Japan. ASEAN has an untapped export potential of US$ 29.3 billion with India. At 6 digit HS code level, the products with greatest export potential from ASEAN to India are crude palm oil; smart cards, electronic integrated circuits and LED lamps; parts of telephone sets and other transmission apparatus; palm oil (excluding crude) and fractions; and telephone sets and other voice/image transmission apparatus.

Though it is noteworthy that ASEAN-India Trade in Goods Agreement (AITIGA) has resulted in a sharp increase in total trade between India and ASEAN, for India, imports have risen at a much higher pace than exports. The widening trade deficit is a matter of concern for long term sustainability of bilateral trade relations. India is also facing significant non-tariff barriers in ASEAN countries, limiting its exports to the region. India and ASEAN have decided to review the 2010 AITIGA to simplify the FTA by making it more user-friendly, enhance effective utilization and facilitate business-to-business (B2B) trade. With the signing of the RCEP Agreement by the negotiating countries, except for India, the review of the existing AITIGA needs to be undertaken on an urgent basis. India and ASEAN, therefore, need to work together towards a mutually beneficial and more balanced trade.

Table 3.4: Export Potential of India with ASEAN as of 2019

(US$ billion)

Country	From India		To India	
	Export Potential	Untapped Potential	Export Potential	Untapped Potential
Brunei	0.1	0.1	0.001	0.001
Cambodia	0.5	0.3	0.1	0.1
Indonesia	7.7	4.7	13.4	6.5
Lao PDR	0.1	0.1	0.02	0.01
Malaysia	8.6	5.4	12.5	6.7
Myanmar	1.7	1.0	1.0	0.4
Philippines	3.3	2.2	0.8	0.6
Singapore	5.9	3.5	17.0	9.1
Thailand	7.5	4.3	11.3	5.8
Vietnam	12.9	8.7	11.2	6.8
ASEAN	**48.3**	**30.3**	**67.3**	**29.3**

Source: Export Potential Map, ITC Geneva

ASEAN-India Bilateral Investment: Recent Trends and Prospects

The ASEAN-India bilateral investment potential is yet to be fully tapped. Although Singapore and, to some extent, Malaysia have significant investments in India, the investment relations with other ASEAN countries remain rather untapped. An array of aspects, including regulatory factors, impacts such investment decisions. In the ASEAN region, CLMV countries are receiving strong investment interest from India in recent years mainly due to their high-growth markets, low wage labour and natural resource reserves. However, considering ASEAN's closer proximity to India and the complementarities of the two economies, two-way investments are noticeably limited. The emerging growth trajectories of India and ASEAN highlight major opportunities for the two regions to extend their investment footprints across the ASEAN region. **Table 3.5** summarizes trends in cumulative Indian FDI in joint ventures and wholly owned subsidiaries (FDI outflow) in ASEAN as well as approved FDI inflows from ASEAN economies to India over the past two decades.

Table 3.5: India's Bilateral FDI Flows with ASEAN Countries

(US$ million)

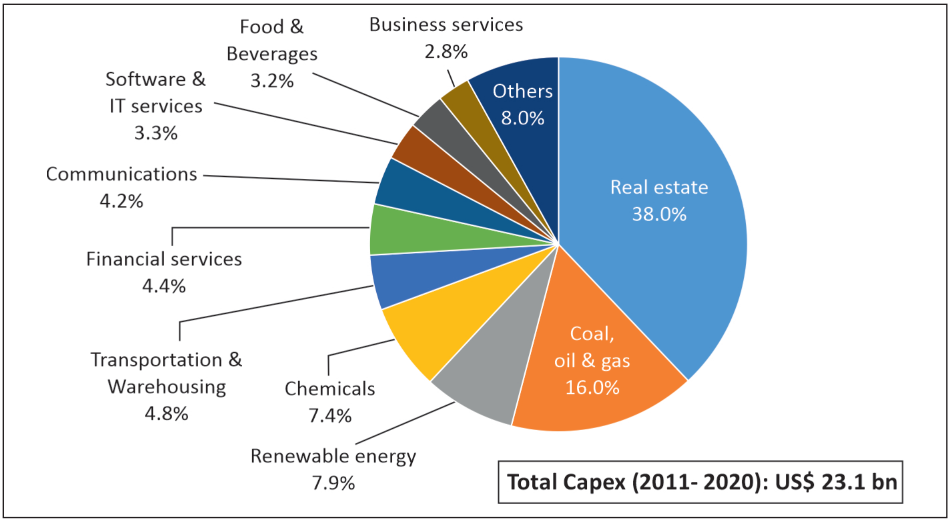
Countries	FDI Outflows from India (April 1996 to March 2021)	Share in India's total FDI outflows to ASEAN (%)	FDI Inflows to India (April 2000 to Dec 2020)	Share in India's total FDI inflows from ASEAN (%)
Brunei	2.3	0.003%	0.5	0.0004%
Cambodia	33.5	0.04%	50.2	0.04%
Indonesia	1,366.4	1.6%	638.6	0.5%
Lao PDR	16.8	0.02%	-	-
Malaysia	1,578.1	1.8%	1,096.0	0.9%
Myanmar	549.1	0.6%	9.0	0.01%
Philippines	318.7	0.4%	335.4	0.3%
Singapore	81,832.6	94.0%	1,13,386.3	97.6%
Thailand	657.1	0.8%	581.4	0.5%
Vietnam	745.8	0.9%	5.3	0.005%
ASEAN Total	**87,100.4**	**100.0%**	**1,16,124.7**	**100.0%**
Share of ASEAN in India's total Investments (%)	22.6%		22.3%	

Source: Reserve Bank of India and Department for Promotion of Industry and Internal Trade (DPIIT), Government of India and India Exim Bank Analysis

Among the ten ASEAN countries, Singapore has been the major investor in India, with a share of 94.0 percent of India's total FDI inflows from ASEAN, followed by Malaysia and Indonesia, with a share of 1.8 percent and 1.6 percent respectively. Singapore is again the major destination of India's FDI outflows to ASEAN, accounting for 97.6 percent of India's total outflows to ASEAN, followed by Malaysia and Indonesia, with a share of 0.9 percent and 0.5 percent respectively. Globally, Singapore is also currently the largest destination of FDI outflows from India, with a share of 21.2 percent in India's total overseas investment outflows. It is also the second largest source of FDI inflows to India, after Mauritius with a share of 21.7 percent in India's total FDI inflows.

According to the fDi Markets database,[7] ASEAN's FDI flows to India have primarily been in the real estate sector, which has a share of 38.0 percent in India's total FDI inflows from ASEAN during 2011-2020, followed by coal, oil and natural gas sector, with a share of 16.0 percent **(Chart 3.4).** Other major sectors which attracted FDI from ASEAN to India include renewable energy, chemicals, transportation and financial services, among others.

Chart 3.4: India's FDI Inflows from ASEAN – Major Sectors



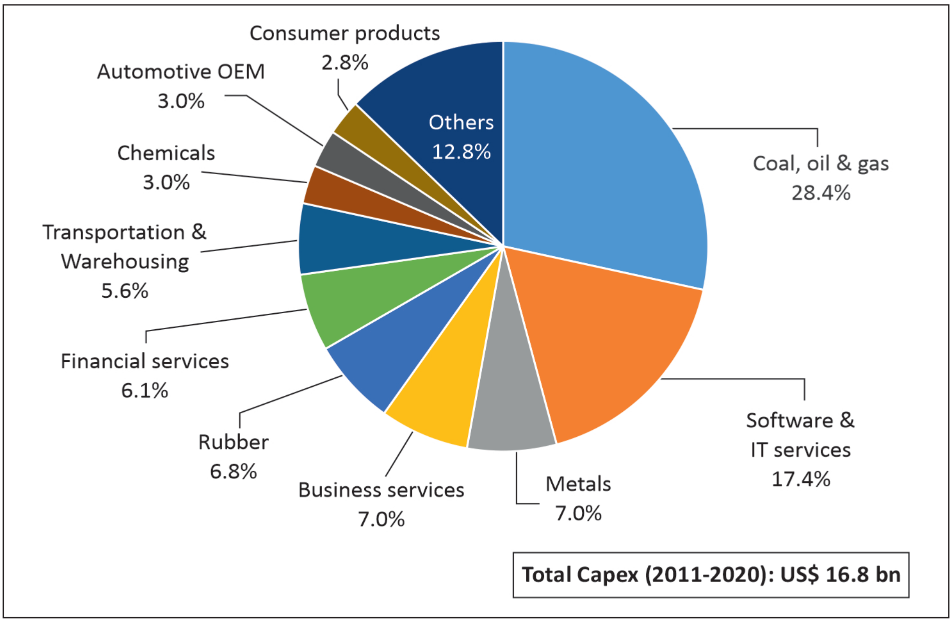
Source: fDi Markets and India Exim Bank Analysis

[7]Financial Times' fDi Markets tracks cross-border investment in a new physical project or expansion of an existing investment which creates new jobs and capital investment. This data differs from official data on FDI flows as company can raise capital locally, phase their investment over a period of time, and can channel their investment through different countries for tax efficiency.

Although India's FDI in some of the ASEAN countries have been on the rise over the recent years, their presence continues to remain marginal, in cumulative terms. Such contrasting presence is evident from the skewed investments in Singapore, which constitutes nearly 94.0 percent of India's total FDI outflows to ASEAN, with other ASEAN economies receiving only a minimal share of FDI from India.

During the period 2011 to 2020, a major portion of India's outward FDI to ASEAN is directed towards the coal, oil and natural gas sector, followed by software and IT services, metals sector, and business services **(Chart 3.5).** During the period, no Indian investments were made in Brunei.

Chart 3.5: India's FDI Outflows to ASEAN – Major Sectors



Source: fDi Markets and India Exim Bank Analysis

The major sectors of investments between India and ASEAN countries are listed in **Table 3. 6.**

Table 3.6: India's Bilateral Investments with ASEAN Countries - Major Sectors, 2011-2020

Country	Major Investments to India	Major Investments from India
Cambodia	–	• Automotive OEM (94.0%) • Pharmaceuticals (5.5%) • Hotels & tourism (0.6%)
Indonesia	• Software & IT services (79.2%) • Consumer products (20.8%)	• Coal, oil & gas (35.4%) • Metals (16.1%) • Rubber (13.6%) • Chemicals (9.4%) • Transportation & Warehousing (5.5%)
Lao PDR	–	• Rubber (89.1%) • Wood products (10.9%)
Malaysia	• Chemicals (50.1%) • Coal, oil & gas (14.5%) • Transportation & Warehousing (13.3%) • Metals (9.1%) • Financial services (3.1%)	• Transportation & Warehousing (26.8%) • Software & IT services (16.0%) • Chemicals (11.4%) • Business services (11.1%) • Pharmaceuticals (10.3%)
Myanmar	–	• Coal, oil & gas (67.6%) • Transportation & Warehousing (15.8%) • Financial services (8.8%) • Wood products (3.9%) • Pharmaceuticals (1.8%)
Philippines	• Renewable energy (94.0%) • Business services (6.0%)	• Business services (49.1%) • Metals (27.1%) • Software & IT services (16.7%) • Financial services (3.3%) • Transportation & Warehousing (2.8%)

Country	Major Investments to India	Major Investments from India
Singapore	• Real estate (47.8%) • Coal, oil & gas (17.6%) • Renewable energy (8.1%) • Communications (5.3%) • Financial services (5.0%)	• Software & IT services (58.6%) • Financial services (13.1%) • Consumer products (6.7%) • Leisure & entertainment (4.2%) • Communications (3.0%)
Thailand	• Food & Beverages (49.9%) • Leisure & entertainment (19.4%) • Rubber (11.0%) • Hotels & tourism (10.9%) • Chemicals (5.0%)	• Rubber (35.7%) • Plastics (19.1%) • Hotels & tourism (12.9%) • Leisure & entertainment (11.3%) • Financial services (5.5%)
Vietnam	• Software & IT services (98.3%) • Hotels & tourism (1.7%)	• Coal, oil & gas (82.9%) • Food & Beverages (8.0%) • Software & IT services (3.1%) • Financial services (2.7%) • Automotive components (1.3%)

Note: "-" indicates nil/negligible
Source: fDi Markets and India Exim Bank Analysis

4. TRENDS IN GLOBAL VALUE CHAINS IN INDIA AND ASEAN

The emergence of Asia as a global power and the high growth rates in emerging and developing economies have increased the size of world demand and boosted international trade. Asia has not just emerged as the factory of the world, but rising wages in the region has also led to new consumers who can afford a wider variety of products. By 2030, Asia is expected to contribute to 60.0 percent of global growth. Increased digitization has also resulted in providing additional access to previously unserved markets. As a result, trade in final goods and services have increased as much as trade in intermediates.

ASEAN as a grouping has made remarkable progress towards economic integration not only within the grouping but also in the greater Asian region. The influence of ASEAN has been steadily increasing in recent years, especially with the ASEAN and its FTA partners, except for India, entering into the RCEP Agreement. The uncertainties from the US-China trade disputes and the emerging need of MNEs to diversify supply sources are expected to result in an increasing shift of FDI to ASEAN economies and in particular CLMV countries.

The COVID-19 pandemic and the associated great lockdown have disrupted the global supply chain networks, hindering the supply of intermediate inputs and final goods across the world. The supply chain disruptions had a global impact and had multiple dimensions especially on businesses dependent on global sourcing due to high degree of integration and interdependence of value chains across the countries. The production stoppages, and shortages of raw materials, sub-assemblies and finished goods have reiterated the need for supply diversification, not only for continually driving down costs, but also for meeting local demands. With MNEs upscaling their investment in the resilience of their supply chains, few businesses started sourcing more of their needs locally, while a few have moved towards other Asian economies having favourable factors in terms of cost and availability of resources. The competitive conditions in ASEAN economies and India make them the favourite alternatives for MNEs trying to shift their production base abroad. India and ASEAN need to leverage these changing situations and back each other in their endeavours to build new and resilient supply chains.

Competitive Factors in ASEAN and India

A comparative analysis of indicative minimum wages in the industrial sector of the ASEAN countries suggests that several ASEAN countries, especially the CLMV countries have highly competitive wage rates **(Table 4.1).** Similarly, a recent publication by International Labour Organization (ILO)[8] reports that Indian workers have one of the lowest average wages, with the national floor level

Table 4.1: Minimum Wages in ASEAN Countries

(US$)

Country	Daily Minimum Wage	Monthly Minimum Wage
Myanmar	3.45	103.49
Lao PDR	3.99	119.72
Cambodia	6.33	187-190
Vietnam	5.68 – 6.41	170.54 – 192.30
Philippines	7.31 – 11.03	219.36 – 330.88
Indonesia	4.10 - 9.89	123.11 - 296.82
Malaysia	9.08 – 9.91	272.47 - 297.24
Thailand	10.40 - 11.16	311.90 - 334.82
Brunei	No minimum wage	-
Singapore	No minimum wage	-

Note: Minimum wage as of February 26, 2021

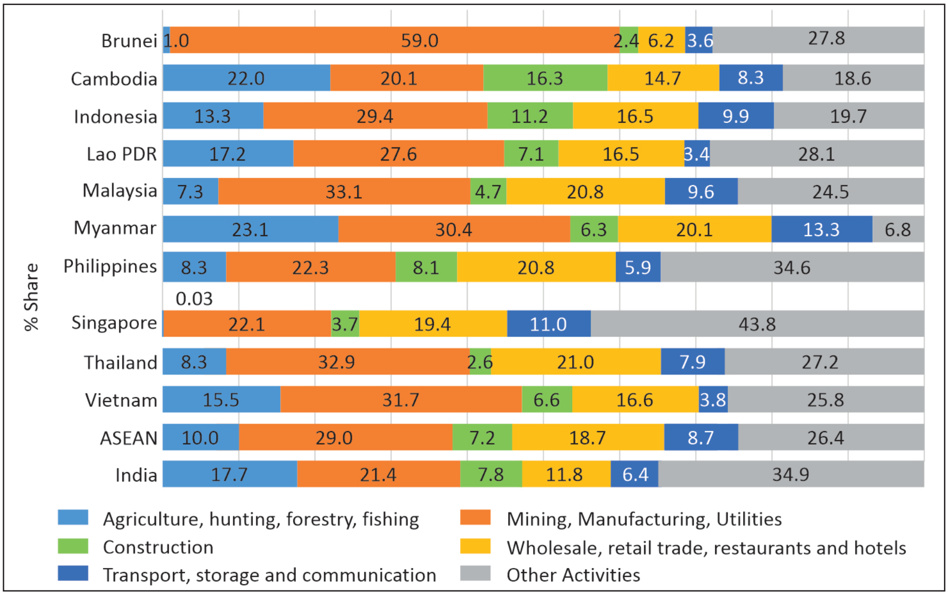
Source: Department of Labour and employment, National Wages and Productivity Commission, Government of the Philippines

[8]Global Wage Report 2020-21: Wages and minimum wages in the time of COVID-19 International Labour Office – Geneva: ILO, 2020.

minimum wage in India at ₹ 176/- per day (around US$ 2.5), and if the median of the minimum wages in different states is drawn, it would be ₹ 269/- per day (around US$ 3.75) in the country; which works out to ₹ 4,576 – ₹ 6,994 per month (US$ 64 – US$ 97).[9] Chinese monthly minimum wage rates stood at RMB 1500 per month (around US$ 234). Based on this, it can be concluded that India offers competitive labour costs compared to ASEAN economies.

Chart 4.1 shows the value added by different economic activities in the ASEAN countries and India during 2019. Mining, manufacturing and utilities remained the major value added activity in ASEAN countries as well as India. Thailand has the highest value added component in manufacturing across ASEAN, at 27.3 percent of total value added, followed by Myanmar at 24.0 percent and Malaysia at 21.7 percent. India's manufacturing value added as a percentage of total value added stood at 16.4 percent in 2019 compared to ASEAN's average of 21.4 percent.

Chart 4.1: Value Added by Economic Activity in ASEAN and India, 2019

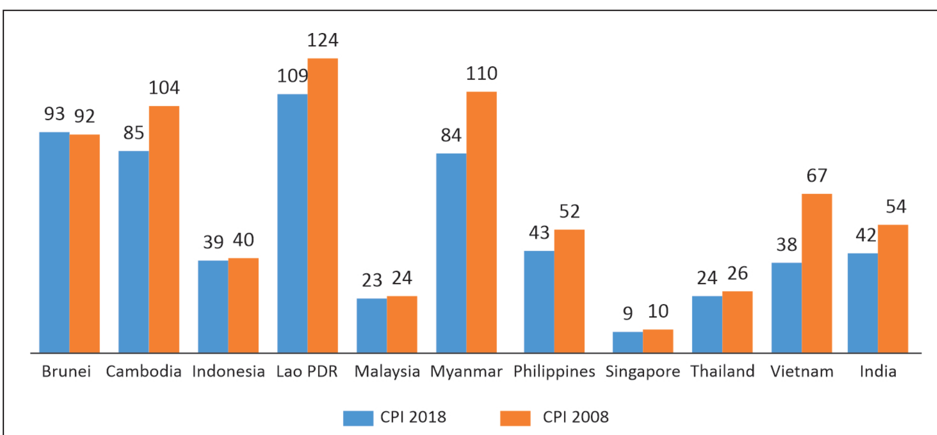


Source: National Accounts Main Aggregates Database, Statistical Division United Nations (unstats.un.org) and India Exim Bank Analysis

[9]ILO report on Indian Workers, Press Information Bureau dated March 17, 2021. Dollar figures are based on authors' calculations.

The United Nations Industrial Development Organization (UNIDO)'s Competitive Industrial Performance (CIP) index, which benchmarks the ability of countries to produce and export manufactured goods competitively, provides a graphical summary capturing the competitive performance of each of the 152 countries included in the CIP Index, relative to their performance in previous years and compared to that of the rest of the world. There are eight indicators used to construct the CIP index viz. manufacturing value added per capita, manufacturing value added share in total GDP, manufactured exports per capita, manufactured exports share in total exports, impact of a country on world manufactures trade, impact of a country on world manufacturing value added, medium and high-tech manufacturing value added share in total manufacturing value added, and medium and high-tech manufactured exports share in total manufactured exports. According to the CIP Index 2020 (based on 2018 data), Singapore with 9th rank globally has the highest rank among the ASEAN countries. ASEAN economies and India have made significant improvements in their positions as compared to their 2008 rankings **(Chart 4.2).**

Chart 4.2: Competitive Industrial Performance Index Rankings of ASEAN and India



Source: Competitive Industrial Performance Index (CIP), Edition 2020 UNIDO

Trends in Global Value Chains in ASEAN, India and China

According to the UNCTAD, trade in intermediate goods and services accounted for 60.0 percent of global trade, and value chains account for nearly 80.0 percent of global trade. Global value chains (GVCs) are an essential component in international production. GVCs can be defined as fragmented and geographically dispersed production processes where different stages are located across different countries. GVCs are coordinated by MNEs investing in productive assets worldwide and trading inputs and outputs intra-firm, at arm's length or through their network of non-equity mode (NEM) partners.[10] GVCs disseminate value addition and employment across countries on the globe and play a major role in accelerating income levels in developing economies. Integration of a country into the global economy is often closely linked to its active participation in the GVCs. Several academic and industrial research have shown that trade linkages to the GVC raise incomes and reduce poverty. The underlying idea of GVC is that a country trades products for which it has a comparative advantage to gain what it lacks.

The manufacturing sector plays a significant role in the economic development of any country. Today, manufacturing is a lot more globalized with production, trade, and investment being increasingly organized within the GVCs, where different stages of production are located across different economies of the world. With increased mobility of labour and capital, along with improvements in transportation and logistics facilities, newer methods and technology such as artificial intelligence, blockchain and digitalization of almost all aspects of production, supply and delivery, and cost factor have drastically reduced over the last century. Currently, countries are increasingly specializing in the various stages of GVCs, rather than producing from scratch to final product.

Moreover, manufacturing export-led strategy was the major reason behind the success of several high-income countries, while countries relying on exports of primary commodities generally face constraints in the long-run development process. Negative trends in terms of trade and uncertainty arising from price variability consequently lead to fluctuating export earnings. As economies develop, there is an ideal shift from resource-based exports to low-tech exports to medium and then gradually to high-tech intensive exports. Enhancing exports

[10]Improving the Analysis of Global Value Chains: The UNCTAD-Eora Database, Bruno Casella, Richard Bolwijn, Daniel Moran and Keiichiro Kanemoto, UNCTAD-EORA, December 2019.

from any country requires increased integration along with an increase in higher technology-intensive exports.

According to UNCTAD's ASEAN Investment Report 2019, there has been a gradual shift in the production capacities from China and elsewhere to ASEAN countries, mainly due to structural factors such as the increase in relative labour costs in China and the accelerated trade tensions between the USA and China. By positioning themselves strategically in the GVCs, the ASEAN economies not only can effectively cater to the foreign final demands of their own people but can also play a crucial role in the value addition in the production processes at the Asian regional level.

Though GVCs are a source of gains for many economies, the benefits from participation in value chains depend on the level of operations that any economy is undertaking. It can be seen in the current global scenario that while developed countries tend to participate at high-end manufacturing stages, developing countries tend to participate more in mid to low manufacturing and assembly stages.

According to the UNCTAD, a country is considered to be export-commodity-dependent, when commodities accounted for more than 60.0 percent of its total merchandise exports. The combination of a high concentration of exports and the large share of commodities in those exports have important implications for development. In particular, commodity dependence, indicated by export concentration on primary commodities, has long been conceptually and empirically linked with underdevelopment.

According to the UNCTAD's State of Commodity Dependence Report 2019,[11] three ASEAN economies, namely, Brunei, Lao PDR, and Myanmar are commodity-dependent economies. Brunei is dependent on fuel exports with its commodity exports accounting for 90.0 percent of its total merchandise exports and 40.4 percent of its GDP in 2017. Lao PDR is dependent on minerals with its

[11]State of Commodity Dependence 2019, UNCTAD, October 2019.

commodity exports accounting for 75.0 percent of total merchandise exports and over 20.0 percent of its GDP in 2017. Myanmar is found to be dependent on agricultural exports and its total commodity exports accounted for 68.0 percent of its merchandise exports and 14.0 percent of its GDP in 2017. Other ASEAN economies were commodity independent (primary commodities accounting for less than 60.0 percent of their overall merchandise exports).

Technology Intensity of Exports in ASEAN, India and China

Based on Lall (2000)'s methodology,[12] the UNCTAD has classified technological intensities of overall exports of economies. Following this, the technological intensities of exports of the ASEAN economies, along with India and China, are presented in **Chart 4.3**. As can be seen in the chart, ASEAN as a region has 30.9 percent of its exports concentrated in high technology items. The chart identifies that among ASEAN economies, the Philippines has the highest level of high technology manufacturing exports, at 57.0 percent of its total exports, followed by Singapore, Malaysia and Vietnam. However, Brunei, Lao PDR and Myanmar are largely dependent on primary commodity exports. At the same time, while China has 32.0 percent of exports in high technology manufacturing products, only 10.0 percent of India's exports belong to high technology manufacturing products**.** While the levels of high technology-based exports have increased to some extent in the case of India from 9.1 percent in 2009 to 10.4 percent in 2019, it has decreased in the case of several ASEAN economies (Singapore – 41.4 percent to 39.0 percent; the Philippines – 60.9 percent to 57.0 percent; Thailand 22.6 percent to 17.8 percent; and Indonesia – 5.9 percent to 4.7 percent). Vietnam, on the other hand, witnessed a sharp jump in its high technology exports from a marginal 8.5 percent in 2009 to 37.5 percent in 2019, even higher than that of China. Similar is the case with Lao PDR, whose high technology exports increased sharply from 0.7 percent in 2009 to 8.5 percent in 2019. Brunei, Cambodia, Malaysia and Myanmar also witnessed marginal increases in export of high technology manufacturing products.

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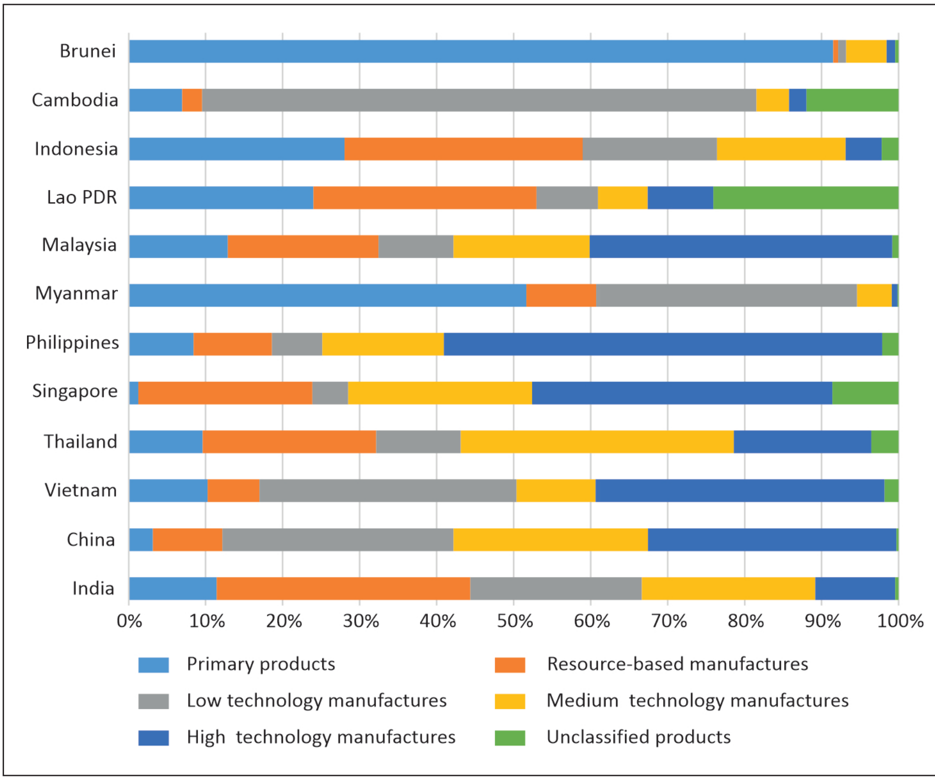
[12]The Technological Structure and Performance of Developing Country Manufactured Exports, 1985-1998, Sanjaya Lall, Oxford Development Studies, 2000.

Chart 4.3: Technology Intensity of Exports from ASEAN, India and China, 2019



Source: UNCTADStat and India Exim Bank Analysis

GVC Analysis of ASEAN, India and China

As seen above, while 57.5 percent of Chinese exports and 51.3 percent of ASEAN exports belong to mid- and high-tech items, only 32.9 percent of Indian exports have been concentrated in the mid- and high-tech items. However, GVCs make it easier for developing countries to move away from export reliance on unprocessed primary products and to become exporters of mid- to high-tech manufactured goods and services. GVCs allow countries to specialize in an activity and join the global production network.

The value chain participation and the position of ASEAN, India and Chinese economies are analysed in this section using the UNCTAD-EORA Global Value Chain database. The data for exports used in GVCs (value added exports) are estimated from each country's input-output tables and hence these data differ from merchandise exports data and national account statistics.

According to the OECD,[13] a country's integration in the global economy can be summarised in terms of the imports of value added required to meet its domestic final demand and produce its exports, and in terms of the extent to which its domestic value added is sustained by foreign demand, both directly, via exports of final goods, and indirectly, via exports of intermediates subsequently embodied in its partners' exports.

Accordingly, the main indicators used to analyse the nature of value added in a country's exports include - foreign value added (FVA) embodied in gross exports, which are value added of foreign goods and services that are used as intermediates to produce goods and services for exports, and domestic value added (DVA) embodied in gross exports, which are produced in the domestic country, i.e. the part of exports that contributes to GDP, which together equates to gross exports. We also analyse indirect domestic value added (DVX) or value added incorporated in other countries' exports, which indicates the extent to which a country's exports are used as inputs to exports from other countries.

As per the OECD, countries with relatively open and liberal trade regimes and high levels of foreign investment will typically have more foreign content in both their exports and their domestic consumption. Generally, large economies, which have significant mineral resources, or are relatively far from foreign markets and suppliers, tend to have higher domestic (and lower foreign) value added content in their exports than others. Similarly, countries that specialise in activities at the beginning of the value chain (upstream), such as mining and agriculture, or that specialise in services typically tend to have higher domestic value added content in their exports. A country's integration in GVCs can also be seen in the share of imported intermediate inputs embodied in its exports following their incorporation in the production of goods and services.

The entire value added exports in a country does not contribute to its GDP. Ideally, the more the domestic value added, the better for the country as it adds to its GDP. On the other hand, the higher the foreign value added, higher would

[13] OECD (2013), "Trade and global value chains", in OECD Science, Technology and Industry Scoreboard 2013: Innovation for Growth, OECD Publishing, Paris.

be the economic growth rates. Thus, there requires a proper balance between foreign value added and domestic value added in a country's exports.

A comparative analysis in terms of value added exports shows a higher contribution of FVA in the case of ASEAN compared to that of India and China, while India and China have higher contents of DVA in their value added exports compared to that of ASEAN. In 2018, 35.7 percent of total value added exports of ASEAN contain imported inputs, and the rest 64.3 percent of value added was created domestically. In the case of China, 12.9 percent of its value added exports contain imported inputs, and the rest 87.1 percent of value was created domestically. Similarly for India, 14.1 percent of value added exports were produced using imported inputs, and the balance 85.9 percent of value added exports were created domestically **(Table 4.2)**.

Table 4.2: Value Added Exports in ASEAN, India and China

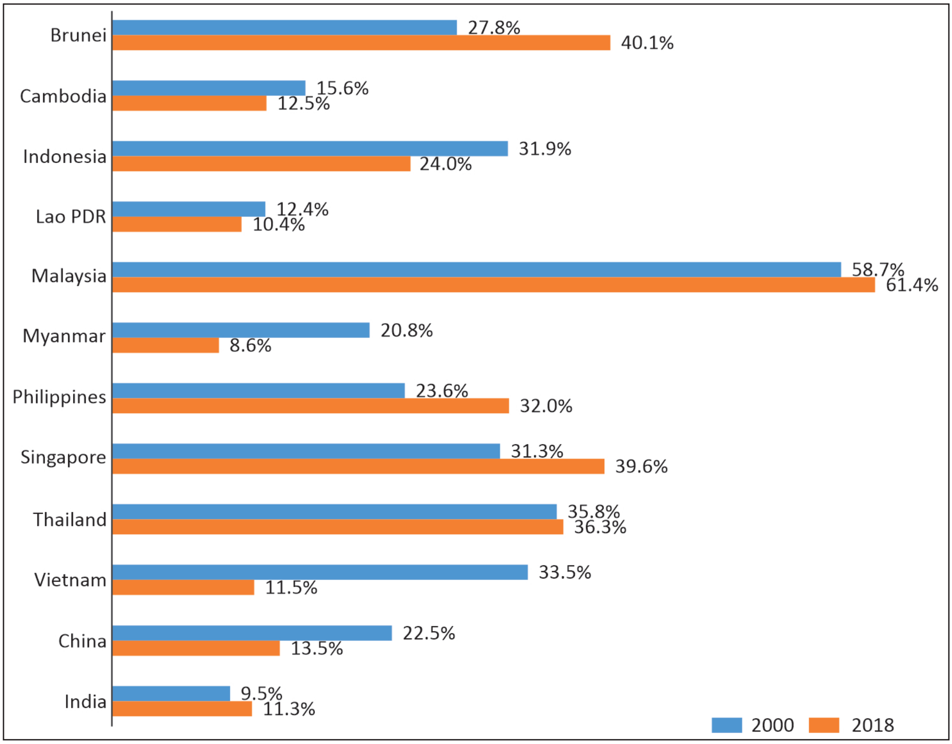
(US$ billion)

Country	Value Added Exports				Domestic Value Added Exports				Foreign Value Added Exports			
	1990	2000	2010	2018	1990	2000	2010	2018	1990	2000	2010	2018
Brunei	1.2	2.0	5.6	6.1	1.0	1.8	5.0	5.4	0.2	0.1	0.6	0.6
Cambodia	0.1	0.7	2.3	3.7	0.0	0.6	1.9	3.1	0.0	0.1	0.4	0.7
Indonesia	24.3	66.4	209.9	281.9	21.7	56.1	183.6	250.5	2.6	10.2	26.3	31.4
Lao PDR	0.1	0.2	1.3	2.0	0.1	0.2	1.2	1.9	-	-	0.1	0.1
Malaysia	27.7	91.6	267.9	341.2	16.8	55.1	164.9	220.4	10.9	36.6	103.0	120.8
Myanmar	0.6	1.8	3.6	6.4	0.6	1.8	3.6	6.3	-	-	-	0.1
Philippines	13.0	35.0	105.9	147.5	7.4	19.1	70.2	105.8	5.7	15.9	35.7	41.7
Singapore	35.0	92.1	310.9	388.1	12.6	30.0	118.7	148.0	22.4	62.1	192.2	240.1
Thailand	30.4	70.0	196.8	264.7	21.7	45.3	133.4	183.5	8.8	24.7	63.4	81.2
Vietnam	4.9	13.7	24.8	41.4	3.8	10.4	14.4	28.1	1.1	3.3	10.4	13.3
ASEAN	***137.4***	***373.5***	***1129.1***	***1482.9***	***85.7***	***220.5***	***696.7***	***953.0***	***51.7***	***153.0***	***432.3***	***529.9***
China	75.8	322.1	1479.2	2155.4	71.1	273.0	1204.9	1877.9	4.6	49.1	274.3	277.5
India	17.3	50.8	243.1	364.1	16.1	45.3	208.1	312.8	1.2	5.4	35.1	51.3

Source: UNCTAD-Eora Database and India Exim Bank Analysis

If we look at country-wise contribution of the domestic value added in exports to GDP between the years 2000 and 2018, the ratio remains significant in several ASEAN countries such as Malaysia, Brunei, Singapore, Thailand and the Philippines. At the same time, the ratio has witnessed a fall in the case of CLMV countries and Indonesia. The contribution of domestic value added of exports to GDP for ASEAN as a group was 31.9 percent in 2018. As regards India, the ratio stood at 11.3 percent in 2018, while that of China stood marginally higher at 13.5 percent during the same year **(Chart 4.4).**

Chart 4.4: Domestic Value Added in Exports as a percent of GDP



Source: UNCTAD-Eora Database, UNCTADStat and India Exim Bank Analysis

GVC Participation Rate and GVC Linkages

The summation of the FVA and DVX, when expressed as a share of gross exports, gives the GVC participation of a country (a country's exports that is part of a multistage trade process), which indicates the extent to which a country's exports are integrated into global production networks. The larger the ratio, the greater the intensity of involvement of a country in GVCs.

While FVA is considered a measure of "backward participation", as it measures imported intermediate inputs used to generate output for exports, DVX is considered a measure of “forward participation”, as it measures exports of intermediate goods that are used as inputs to produce exports of other countries.[14] The DVX share in exports tends to be higher for countries that are involved in upstream production, with the output and exports of that country feeding into the production and export of downstream producers. Developing economies tend to have a low FVA share in their exports or downstream component in their exports.

To further understand the relative “upstreamness” of a country in a value chain, Koopman et al. (2014) also defined GVC position index. It is defined as the log ratio of a country’s supply of intermediates used in other countries’ exports to the use of imported intermediates in its own production.[15] Countries with positive position index are relatively more upstream, i.e., they contribute more value added to other countries exports than other countries’ contribute to theirs.

However, two countries may have identical GVC position and yet have different degree of GVC participation, hence both parameters are used in conjunction to understand the importance of the global supply chain for the country. Countries with significant share of natural resources like oil, minerals or primary commodities in their exports, tend to have higher share of domestic value added trade, as such kind of exports are the “initial stages of GVC” and require hardly any foreign inputs. On the other hand, countries with a significant share of port trade as well as countries with processing trade sectors would have a higher foreign value added as a share of their exports. Countries that have a significant share of exports in highly segmented industries also have a higher share of foreign value added in their exports. An increased participation in global production network leads to fall in indirect domestic value added content of exports and increased share of foreign value added through higher trade in intermediates across globe.

[14]Aqib Aslam, Natalija Novta, Fabiano Rodrigues-Bastos (2017), Calculating Trade in Value Added, IMF Working Paper 17/178, International Monetary Fund, Washington.

[15]Koopman, Robert, Zhi Wang, and Shang-Jin Wei. 2014. “Tracing Value-Added and Double Counting in Gross Exports.” American Economic Review 104(2).

The following analysis shows the GVC Participation of ASEAN, India and Chinese economies during the last decade. GVCs have spread widely over the last three decades where firms specialize in a set of activities and may produce parts and components in another country. This phenomenon has led to the spread of the production process across various countries leading to an increase in trade. However, after the global financial crisis of 2008-09, the expansion of GVCs have relatively slowed down as a result of rising trade protectionist measures across the world.[16] According to the World Trade Organization (WTO), the stock of import restrictions imposed and still in force since 2009 has affected 7.5 percent of world imports in 2018, though there has been a sharp decline in trade restrictions by WTO members amidst the COVID-19 pandemic.[17]

GVC participation in ASEAN, while witnessing an increase compared to 1990 levels, remained lower than the rates in 2000 and 2010 **(Table 4.3)**. According to a

Table 4.3: GVC Participation Rate in ASEAN, India and China

Country	1990	2000	2010	2018
Brunei	35.5%	31.9%	45.6%	49.7%
Cambodia	35.4%	35.2%	36.3%	31.0%
Indonesia	38.8%	46.0%	51.3%	50.0%
Lao PDR	38.1%	43.0%	37.9%	32.0%
Malaysia	61.0%	63.4%	67.3%	64.0%
Myanmar	32.3%	44.0%	45.0%	38.9%
Philippines	62.5%	63.3%	63.3%	57.5%
Singapore	75.5%	79.1%	76.5%	75.5%
Thailand	44.7%	53.5%	54.4%	51.8%
Vietnam	40.8%	45.6%	61.6%	49.3%
ASEAN	***56.2%***	***61.3%***	***63.8%***	***60.8%***
China	29.5%	37.9%	46.8%	44.6%
India	30.4%	38.6%	45.0%	41.4%

Source: UNCTAD EORA Database and India Exim Bank Analysis

[16]Global Value Chain Development Report 2019, World Bank.

[17]WTO Trade Monitoring Report, December 2019 and Overview of Developments in the International Trading Environment, Annual Report by the Director-General, November 2020.

World Bank report,[18] GVC participation rate across all countries declined or remained stagnated after the Global financial crisis of 2009 as a result of a sharp slowdown in trade, which was seen reflected in the case of ASEAN countries. While all the ASEAN countries witnessed a fall in GVC participation rate in 2018 as compared to 2010; Brunei, Indonesia, Malaysia and Vietnam witnessed an increase compared to 2000. India's GVC participation rate has also declined from 45.0 percent in 2010 to 41.4 percent in 2018.

Table 4.4 shows the backward and forward participation of ASEAN, India and China during 2010 and 2018. Using foreign value added content of gross exports as a parameter to measure the extent of participation in GVCs through backward linkages, it is observed that India's integration in GVCs is low. India

Table 4.4: Backward Participation and Forward Participation as a share of Gross Exports (%) in ASEAN, India and China

Country	Backward Participation				Forward Participation			
	1990	2000	2010	2018	1990	2000	2010	2018
Brunei	14.3%	7.3%	11.2%	10.6%	21.1%	24.6%	34.5%	39.1%
Cambodia	8.9%	20.1%	19.3%	18.2%	26.5%	15.2%	17.0%	12.8%
Indonesia	10.7%	15.4%	12.6%	11.1%	28.1%	30.6%	38.8%	38.9%
Lao PDR	11.0%	10.2%	8.0%	6.7%	27.1%	32.8%	29.9%	25.3%
Malaysia	39.3%	39.9%	38.5%	35.4%	21.8%	23.5%	28.9%	28.6%
Myanmar	8.1%	0.7%	0.2%	0.1%	24.2%	43.3%	44.8%	38.8%
Philippines	43.4%	45.4%	33.7%	28.3%	19.1%	17.9%	29.6%	29.2%
Singapore	64.0%	67.4%	61.8%	61.9%	11.5%	11.7%	14.7%	13.6%
Thailand	28.8%	35.3%	32.2%	30.7%	15.9%	18.2%	22.1%	21.1%
Vietnam	22.6%	23.8%	42.0%	32.1%	18.2%	21.9%	19.6%	17.2%
ASEAN	***37.6%***	***41.0%***	***38.3%***	***35.7%***	***18.6%***	***20.4%***	***25.6%***	***25.1%***
China	6.1%	15.2%	18.5%	12.9%	23.4%	22.6%	28.2%	31.7%
India	6.9%	10.7%	14.4%	14.1%	23.6%	27.8%	30.5%	27.3%

Source: UNCTAD EORA Database and India Exim Bank Analysis

[18]Trading for Development in the Age of Global Value Chains, World Development Report 2020, World Bank.

had observed an increase in FVA share of gross exports from 6.9 percent in 1990 to 10.7 percent in 2000 to 14.4 percent in 2010, indicating growing integration with world production network and higher import content of Indian exports. However, India's foreign value added content of exports moderated in recent years, going down to 14.1 percent in 2018.

On the other hand, ASEAN as grouping has witnessed high backward linkages, with foreign value added components accounted for as much as 35.7 percent of gross exports in 2018. Share of foreign value added in exports or backward participation is high for economies like Singapore or Vietnam as they are heavily reliant on foreign inputs for their exports. Singapore, being a small open economy and a trading hub,[19] has the highest backward participation rate among ASEAN economies. Singapore's FVA components are mainly high-tech in nature and therefore, is at a downstream part of a value chain. According to the Asian Development Bank, Singapore has emerged as a major petrochemical manufacturing and refining hub using imported crude oil. In fact, except for Brunei, Indonesia, Lao PDR and Myanmar, other ASEAN countries have more foreign value added content of exports than that of India, as these economies majorly import intermediate goods from other countries as inputs in their global exports. Vietnam, Thailand and Malaysia are majorly part of mid-tech and high-tech industries with higher foreign import content in their exports, leading to having high backward participation in GVC. The growth experience of these economies reveals the importance of foreign intermediates in production, along with their ability to efficiently process and assemble products.

A notable case is that of Vietnam, which has the highest FVA in ASEAN after Singapore and Malaysia at 32.1 percent in 2018, with the country witnessing an increase in its FVA components in exports from 22.6 percent in 1990. Vietnam has been able to shift a significant proportion of its workforce over the years from a relatively less productive agricultural sector to a more productive manufacturing and services sectors. Vietnam is fast emerging as an assembly hub for electrical and optical equipment and other high technology manufacturing. By 2019, one-third of Vietnam's exports as well as imports consisted of electrical

[19]ASEAN Integration Report 2019, Jakarta: ASEAN Secretariat, October 2019.

and electronic equipment despite having a shortage of skilled labor force. This has been possible only by integrating into the GVCs in electronics and electrical equipment. Vietnam's remarkable progress in integrating itself to value chains can be partially attributed to the several trade agreements that Vietnam is part of, which led to the reduction in import tariffs and improvement in overall infrastructure to attract FDI. These policies have resulted in importing better quality inputs as well as related services and focusing on the stage of production (primarily assembling and processing), where the Vietnamese firms and workers have a comparative advantage.[20] Vietnam's close proximity to various regional suppliers of inputs has also facilitated its integration in GVCs.

Other economies like Indonesia have not seen much change in backward linkages as its specialization lies in natural resources and thus has strong forward linkages. Indonesia joined the global value chain in relatively upstream segments by locally generating value-added that is embedded in the production of other economies for their exports, and similar patterns have been followed by Brunei, Lao PDR and Myanmar. Since these countries are primarily commodity exporters, their gross exports are largely dominated by domestic value added. These countries supply inputs to foreign countries, which are further used in the production process of finished goods.

It may not be correct to analyse the GVC participation of a country entirely on the basis of it backward linkages as a country can link into GVCs through forward linkages also. While a country might be importing raw inputs to process and export (backward participation/ linkages), it also might be exporting inputs to a foreign country which further exports the finished goods (forward participation/ linkages). Forward participation are the domestic value added which goes into the exports of other countries (DVX), and is essentially the linkages between an exporting country and an importing country, the industries of exporting country provide inputs/intermediates into exports of the industries in importing country.

[20]WTO 2019, Global Value Chain Development Report 2019.

The forward participation of Myanmar was found to be the highest among ASEAN, India and China at 44.8 percent in 2010. However, it has declined to 38.8 percent in 2018 as Myanmar is transitioning from a commodity exporter to an exporter of manufactured or processed products. Currently, Brunei, Indonesia and Myanmar have high levels of forward linkages among the ASEAN countries, as high portion of domestic value added of these countries are being used in other countries' exports. With significant increase in exports of hydropower in the recent years, Lao PDR also has a high share of DVX in its exports or forward participation rate than backward participation rate. Since natural resources are the most upstream sectors, these economies tend to have much higher degree of forward GVC participation than backward GVC participation. Cambodia, which primarily produces and exports final or near-end garments and footwear has lower forward participation than backward participation. Malaysia and Thailand both started from similar stages of development and have integrated themselves over time in the electrical machinery, machinery and equipment, and automobile value chains. Both these countries have a high share of FVA and hence higher backward participation rates compared to forward participation rates.

For India, while the backward participation in 2018 was 14.1 percent, the forward participation was 27.3 percent. India has emerged as an assembly hub for foreign owned companies from the US, Japan, China and Republic of Korea, which have invested in the country to gain market access.[21] China's forward participation or domestic value added share in exports has increased sharply in the last three decades. China has a relatively upstream position, as with advancement in its technological capability, its scale has increased as well. In the initial years of economic reforms, China shifted from commodity intensive exports to assembling apparel and electronics using intermediates produced in other countries. As China advanced technologically in the last decade, the share of domestic value added went up as its share of high-tech goods produced domestically kept increasing.[22]

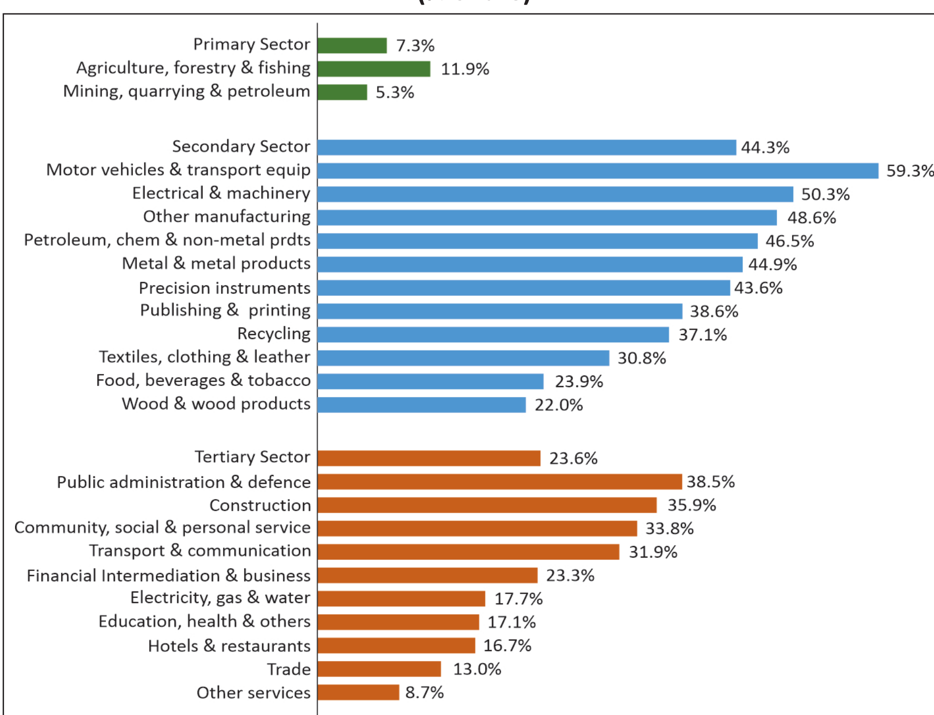
[21]UNIDO 2019, Global Value Chains and Industrial Development: Lessons from China, South-East and South Asia.

[22]Global Value Chain Development Report 2019, World Bank.

ASEAN GVCs: Key Industry-wise Analysis

GVCs play an increasingly important role in one country's resources /products getting connected to the final consumers in the other nations. The share of foreign value added in gross exports indicates a country's reliance on foreign inputs in its final exports. This reliance varies by country to country, and by industry to industry. Based on ASEAN-Japan Centre (AJC) database, secondary sector in ASEAN has the largest share of foreign value added in its gross exports, followed by tertiary sector and primary sector in 2015 (latest available sectoral data is as of 2015). This is mostly because of limited use of foreign inputs in the sector (agriculture production and mineral extraction). In the secondary sector, motor vehicles and other transport equipment, followed by electrical equipment and machinery hold the largest share **(Chart 4.5).**

Chart 4.5: Foreign value added in ASEAN Gross Exports by Sector, 2015 (% Share)



Note: Latest available data on industry-wise foreign value addition is as of 2015

Source: AJC-UNCTAD EORA database on ASEAN GVCs

China's forward as well as backward participation with ASEAN countries remain high. China with its large and diverse manufacturing base, and extensive presence in assembling and processing high-tech products, procure intermediates in large scale from ASEAN countries. Based on the AJC database, China is the largest source of imported inputs for gross value added exports for ASEAN. The share of China in ASEAN's FVA has substantially increased from 2.7 percent in 1990 to 15.6 percent in 2018 **(Table 4.5).** China was followed by Japan, the US and Malaysia. Major intra-ASEAN suppliers in 2018 include Indonesia, Singapore, Thailand and the Philippines. India was the 12th largest source of imported inputs for ASEAN exports, with its share increasing from 0.7 percent in 1990 to 2.3 percent in 2018.

Table 4.5: Major Sources for Foreign Value Added Exports from ASEAN

Country	FVA Exports from ASEAN (US$ billion)					Percent Share in ASEAN's FVA Exports				
	1990	2000	2010	2015	2018	1990	2000	2010	2015	2018
China	1.4	8.9	51.5	70.2	82.8	2.7%	5.8%	11.9%	14.6%	15.6%
Japan	12.1	31.9	59.8	54.0	57.4	23.5%	20.8%	13.8%	11.3%	10.8%
USA	7.9	24.4	49.3	49.9	53.9	15.3%	15.9%	11.4%	10.4%	10.2%
Malaysia	1.7	7.6	27.9	32.9	37.4	3.3%	4.9%	6.4%	6.9%	7.0%
Indonesia	1.3	6.1	25.0	30.4	34.8	2.6%	4.0%	5.8%	6.3%	6.6%
South Korea	1.5	6.2	17.6	21.5	23.8	2.9%	4.0%	4.1%	4.5%	4.5%
Germany	2.8	6.8	21.7	18.9	20.3	5.4%	4.5%	5.0%	3.9%	3.8%
Australia	1.6	3.8	13.0	15.1	16.4	3.1%	2.5%	3.0%	3.1%	3.1%
Singapore	1.0	3.5	12.9	14.0	15.4	1.8%	2.3%	3.0%	2.9%	2.9%
UK	1.6	5.3	12.4	14.2	15.2	3.2%	3.4%	2.9%	3.0%	2.9%
Thailand	0.7	2.9	9.9	11.9	13.3	1.4%	1.9%	2.3%	2.5%	2.5%
India	0.4	1.6	8.9	10.4	12.3	0.7%	1.1%	2.1%	2.2%	2.3%
Taiwan	5.7	8.7	10.2	9.2	10.4	11.0%	5.7%	2.4%	1.9%	2.0%
Philippines	0.3	1.2	7.0	8.6	10.1	0.6%	0.8%	1.6%	1.8%	1.9%
France	1.2	3.0	9.1	9.0	9.6	2.3%	2.0%	2.1%	1.9%	1.8%
Foreign Value Added (FVA)	**51.7**	**153.3**	**433.4**	**479.5**	**530.9**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: AJC-UNCTAD-Eora database on ASEAN GVCs

China contributed 15.7 percent of imported inputs/intermediaries used in ASEAN’s primary sector exports, 15.1 percent in secondary sector and 11.9 percent of foreign value added in tertiary sector exports in 2015 (latest available sectoral data is as of 2015). The highest sub-sector using Chinese inputs was motor vehicles and other transport equipment with a 30.6 percent share in its foreign value added. India’s share ranged from 1.0 percent to 3.8 percent in various sub-sectors during the same year.

5. DEVELOPMENT OF VALUE CHAIN BETWEEN INDIA AND ASEAN: KEY AREAS OF COLLABORATION

The recent pandemic has exposed several risks to global supply chains, including geographic concentration of production, overstretched supply chains of critical goods like medical supplies, and intermediate products and shortages of critical items due to the concentration of production.[23] These issues highlighted the advantages of production of critical products within one's borders (back-reshoring) or in close by countries (near-reshoring), thus strengthening the arguments for reshoring. With the changing dynamics world over, India, going forward would look to engage with nations on a global footing, more preferably on a win-win status quo. This in due course is expected to make India self-reliant more than ever before. With the aim of enhancing supply chains and realise self-reliance, India has initiated the Atmanirbhar Bharat Programme. However, a self-reliant India cannot be economically independent and needs to enhance its relation with other countries in the region.

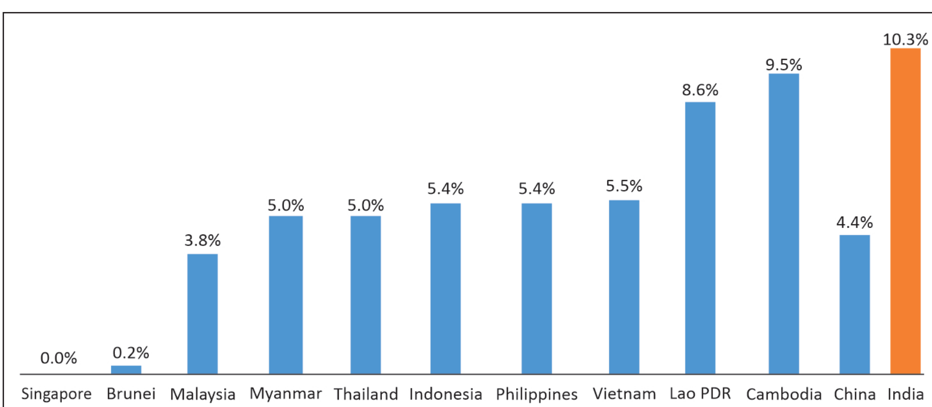
Increased participation in international trade is all about moving up in the value chain and enhancing export competitiveness of a country. Development of value chains offers great opportunity to scale up India's engagement with ASEAN countries. ASEAN countries had initiated and expanded GVCs in sectors ranging from textiles to machinery and automobiles and has greatly benefited from GVC participation. ASEAN is marked as a key growth hot spot in the world today. Moreover, intra-ASEAN trade and investment has seen increasing significantly in recent years. These intra-regional investment by the companies in the region has resulted in increased production fragmentation spreading across countries in the region. With its 10 diverse markets, of which a number are progressing

[23]Asian Economic Integration Report 2021, Asian Development Bank, February 2021.

to be developed nations and some are in the developing stage, there are wide business and investment opportunities.

Both India and ASEAN are striving for a major position in the shifting GVCs affected by the pandemic. As seen in the previous Chapter, India is currently behind several ASEAN countries in terms of GVC participation. GVCs tend to concentrate in countries with goods logistics, transparent and fast procedures and liberalised trade, as these trade, infrastructure and procedural barriers add to the cost of importing inputs which are needed for enhancing GVC participation. **Chart 5.1** shows that the trade-weighted Most Favored-Nation (MFN) tariffs for India is as high as 10.3 percent during 2020, much higher than most ASEAN economies. While AIFTA covers liberalization of around 80 percent of tariff lines (goods traded) between India and ASEAN countries, ASEAN Trade in Goods Agreement (ATIGA) has eliminated 99.65 percent of all tariffs lines among the ASEAN-6 (Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand). Cambodia, Lao PDR, Myanmar, and Vietnam have reduced their import duties to 0-5 percent on 98.86 percent of their tariff lines.[24] Hence, renegotiation of the existing AIFTA has become very relevant in this context.

Chart 5.1: Trade Weighted Average MFN Tariff – ASEAN, India and China, 2020



Note: Trade Weighted Average MFN Tariff for Cambodia is as of 2019

Source: World Tariff Profiles 2020, WTO and India Exim Bank Analysis

[24]Invest in ASEAN, the official investment promotion website of ASEAN.

Sustaining Business Reforms in ASEAN, India and China

According to the World Bank's Doing Business Report 2020, Singapore has the highest ranking globally amongst the ASEAN countries in the ease of doing business parameter, followed by Malaysia and Thailand. These three ASEAN countries ranked higher than China and India in ease of doing parameter, while the rest of the ASEAN countries trailed behind the two neighboring countries in terms of ranking **(Table 5.1)**.

Table 5.1: Doing Business Rankings of ASEAN, India and China, 2020

Country	Ease of Doing Business	Starting a Business	Dealing with Construction Permits	Registering Property	Trading Across Borders	Enforcing Contracts	Resolving Insolvency
Brunei	66	16	54	144	149	66	59
Cambodia	144	187	178	129	118	182	82
Indonesia	73	140	110	106	116	139	38
Lao PDR	154	181	99	88	78	161	168
Malaysia	12	126	2	33	49	35	40
Myanmar	165	70	46	125	168	187	164
Philippines	95	171	85	120	113	152	65
Singapore	2	4	5	21	47	1	27
Thailand	21	47	34	67	62	37	24
Vietnam	70	115	25	64	104	68	122
India	63	136	27	154	68	163	52
China	31	27	33	28	56	5	51

Source: Doing Business 2020, World Bank and India Exim Bank Analysis

As regards the time and cost associated with the logistical process of exporting and importing goods, border compliances for exports in India take almost six times longer than that of Lao PDR, which takes the least time to export in the ASEAN region **(Table 5.2)**. On the other hand, cost of documentary compliance for exports from India is lower than that of most ASEAN countries. Border management and logistics costs need to be substantially reduced for India and the ASEAN countries, especially CLMV countries to bolster value chains in the India-ASEAN region. Similarly, as per the Global Competitiveness Index, in terms of border clearance efficiency, India is as efficient as or more efficient than ASEAN countries.

Table 5.2: Comparison of Time and Costs for Trading Across Borders in ASEAN, India and China
(Cost in US$; Time in Hours; Efficiency 1-5)

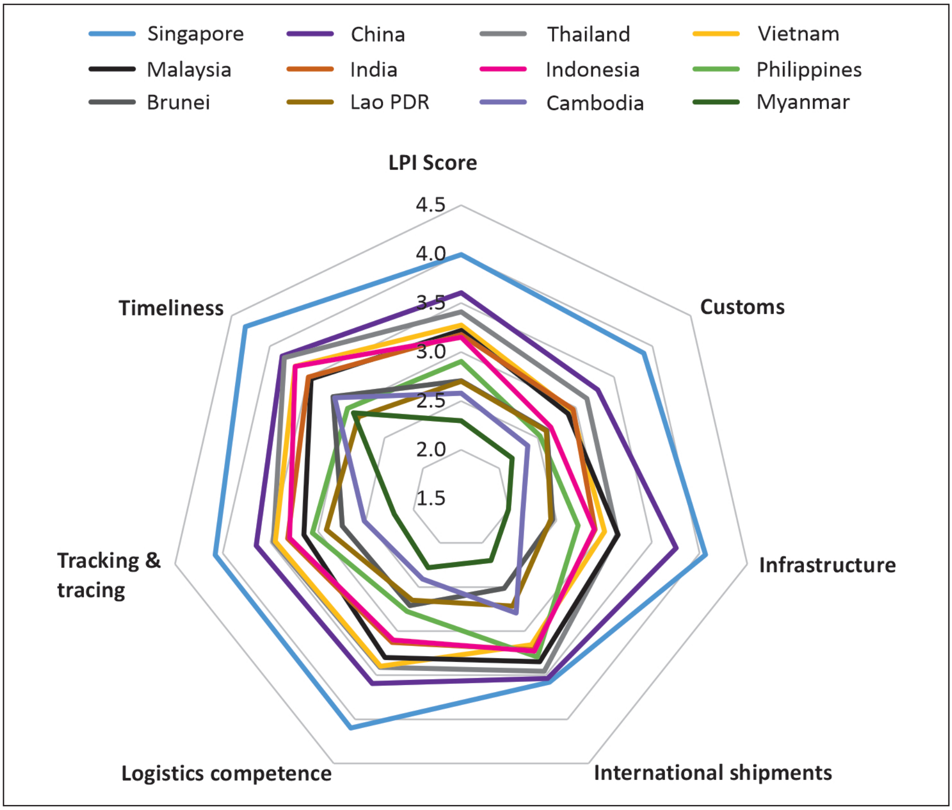
Country	Border Compliance				Documentary Compliance				Border Clearance Efficiency (1–5)
	Time to Export	Cost to Export	Time to Import	Cost to Import	Time to Export	Cost to Export	Time to Import	Cost to Import	
Brunei	117	340	48	395	155	90	132	50	2.6
Cambodia	48	375	8	240	132	100	132	120	2.4
Indonesia	56	211	99	383	61	139	106	164	2.7
Lao PDR	9	140	11	224	60	235	60	115	2.6
Malaysia	28	213	36	213	10	35	7	60	2.9
Myanmar	142	432	230	457	144	140	48	210	-
Philippines	42	456	120	690	36	53	96	68	2.5
Singapore	10	335	33	220	2	37	3	40	3.9
Thailand	44	223	50	233	11	97	4	43	3.1
Vietnam	55	290	56	373	50	139	76	183	3.0
India	52	212	65	266	12	58	20	100	3.0
China	21	256	36	241	9	74	13	77	3.3

Note: Doing Business measures the time and cost (excluding tariffs) associated with three sets of procedures—documentary compliance, border compliance and domestic transport—within the overall process of exporting or importing a shipment of goods; Border clearance efficiency: 1 = worst and 5 = best

Source: Doing Business 2020, World Bank and Global Competitiveness Index 4.0, 2019, World Economic Forum (WEF)

According to the World Bank Logistics Performance Index (LPI) Report 2018, improvement in the Logistics Performance Index by one position increases trade by 16.0 percent. Logistics sector plays a major role in connectivity, which in turn governs the trade costs incurred by a country. The LPI which ranks countries on six dimensions of trade, including customs performance, infrastructure quality, and timeliness of shipments, also indicate the need for an upgrade in the logistics infrastructure of several ASEAN countries. During 2018, India is positioned in the mid spectrum of ASEAN countries on the LPI, as also on the various determinants of the LPI— the efficiency of customs and border management clearance, transport infrastructure, the ease of arranging competitively priced shipments, the competence and quality of logistics services, the ability to track and trace consignments, and the frequency with which shipments reach consignees within scheduled or expected delivery times **(Chart 5.2).** India and ASEAN countries, especially the CLMV countries, need to improve their LPI and Doing Business rankings, which would improve their prospects to develop as potential destinations for value chain development.

Chart 5.2: Logistics Performance Index in ASEAN, India and China and its Determinants



Source: Logistics Performance Index 2018

India and ASEAN share several common growth factors such as favourable demographics, skilled and low cost labour, growing domestic market (middle class), rising disposable income, increased use of high technology in production process, etc. among others. Enhancing connectivity between India and ASEAN countries could act as an amplifier for both the regions to integrate their production and supply chains. Singapore remained a major investor in India in the recent times, strengthening intraregional connections through investment and production between the two sub-regions. Indian investors have already invested heavily in automobile sectors in several ASEAN countries.

As seen from previous chapters, India's GVC participation rate is low compared to several ASEAN economies. India and ASEAN could be part of a strong regional value chain (RVC), which will boost distributed manufacturing and final-goods production, resulting in resilience, sustainability and regional demands and ultimately better integration in GVC. RVCs bring the extremes of the value chains geographically closer, and tend to increase the geographical distribution of value added. RVCs apply the standard model of fragmented and vertically specialized value chains at the regional or local level. Moreover, RVCs would be able to channel knowledge and technology transfer within the region, and meet the development requirements. After the establishment of a successful RVC, it is easier for the finished goods to be exported globally, especially to developed countries supported by the possibility of high quality of the final product. According to the UNCTAD, digitalization plays a major role in facilitating the coordination of RVCs, and India and ASEAN countries with their high levels of digitalization are much suited to enter into a RVC.

Under the Make in India initiative, India has been relaxing several rules and regulations to attract increased investments into the country. To exploit the potential of a fast growing markets, several MNEs have started investing in India. Two way increased investment between India and ASEAN in each other's potential sectors would pave for a full-fledged RVC between both regions. RVCs/GVCs tend to concentrate in countries with goods logistics and transparent and fast procedures. Accordingly, governments in both regions have increased their focus on integrating logistics. For the RVC to take off, India needs to improve its border infrastructure, enhance trade liberalization through removal of tariff and non-tariff barriers and improve the standard and quality of its products, leading to an improvement in two-way trade. Complementarities in consumption and demand patterns between India and ASEAN countries tend to make a RVC more successful. Moreover, both regions need to come together and design supportive policy measures and incentives to attract more MNEs to the region, ensure local sourcing of inputs through local content requirements and necessary technology transfer to local industries. Thus, with the current pandemic changing the existing trade and investment paradigm, India and ASEAN could create a sustainable RVC network in the coming years.

Strategic Sectors for Enhanced Cooperation between India and ASEAN Economies

ASEAN and India have strong foothold in global manufacturing landscape. ASEAN as a region is characterized by the presence of strong production networks and RVCs both within and outside the region. Despite ASEAN's presence in GVCs to a large extent, CLMV countries lag behind other ASEAN countries in RVC integration as well as in capital and technical knowhow. India can play a major role in the progress of these countries by providing training and building local industrial capacity through enhanced investments, and thereby creating production linkages between Indian companies and ASEAN producers and suppliers. This would also support India to enhance its market access in varied sectors in these countries, ultimately resulting in RVCs in various sectors. An analysis on India's imports by end-use (capital, intermediate, and consumer goods) based on the UN Comtrade database[25] indicates that 82.5 percent of the imports by India in 2019 were intermediate goods, signifying the dependence of Indian industries on imported intermediates. On the other hand, during the same year, 47.3 percent of total exports from India fell under intermediate goods category. The import dependence of Indian manufacturing sector has increased in recent times, while its export orientation remained relatively low. India is almost left out of any significant regional value chains in its neighbourhood.

A recent study by RIS[26] revealed that there exists a strong RVC integration in the automobile sector between India and ASEAN countries. As per the report, intra-sectoral trade in parts and components (P&C) between ASEAN and India mostly take place in electrical equipment, industrial machines, road vehicles, power generating machines and telecommunications sectors, where India accounted for over half of P&C exports to and imports from ASEAN in respective sector's

[25]Based on Broad Economic Categories (BEC), Revision 4.

[26]ASEAN-India Development and Cooperation Report 2021: Avenues for Cooperation in Indo-Pacific, AIC -RIS, November 2020.

trade. With its geographic proximity and strong trading ties with China, India and ASEAN are considered as potential alternatives to build greater supply chain resilience globally. India and ASEAN could explore opportunities to cooperate and partner in mutually beneficial RVC networks. Creating a RVC at different stages of industrial manufacturing between India and ASEAN countries would facilitate the relocation of production bases at various stages across India and ASEAN seamlessly. Some of the strategic sectors for development of RVC between India and ASEAN countries are analysed here.

Electronics Sector

Indian electronics industry manufactures a wide range of goods across the entire spectrum of electronics and ICT, from entry level to state-of-the-art electronic products. Growth in India's exports of electronics, especially mobile phones, is indicative of the growing prowess of the country in the electronics segment. Electronics is one of the industries where India has registered huge trade deficit in recent years, and the figure is expected to grow further. India currently has a trade deficit of over US$ 40.0 billion in electronics. Electronics components, computer hardware & peripherals, consumer electronics, electronics instruments, and telecom instruments are some of the major segments contributing to the trade deficit in the electronics industry. India's biggest challenge in the electronics industry arises from the fact that it is hugely dependent on China for imports. In fact, under all the product categories within the electronics sector, China is the largest import source for India, which could be a concern for India in the long-term. Despite import dependence, there has been a steady increase in India's domestic capabilities. Telecom instruments sector has emerged as an area where domestic capacity building has gained significant traction over the recent period, at the same time exports from other categories of electronics such as electronic instruments, electronics components, and computer hardware, peripherals have also shown growth rates higher than the average growth in exports from India.

For India to become a leader in the electronics manufacturing industry, competitiveness in terms of costs and market access, along with achieving global production standards are important, necessitating large scale investments.

While several global electronic manufactures are already present in the country, their operations have been limited to assembly, as opposed to manufacturing across different stages of the value chain. In the aftermath of pandemic and its impacts on supply chains, India is planning to increase the production of semiconductors and electronics locally. The recent government initiatives such as Production Linked Incentive (PLI) Scheme for Large Scale Electronics Manufacturing and Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS) are attracting increased investments into the country. Apple's global contract manufacturers, Foxconn and Wistron, is investing heavily in India as part of gradual relocation of Apple from China, as well as to exploit growing domestic demand for mobile phones in the country.

Several ASEAN countries have strong manufacturing base in the electronics sector. Moreover, electronic companies in ASEAN are well-diversified, producing electronic parts and components to producing mid-tech to high technology products and is involved in both capital and labor-intensive stages of electronics manufacturing, with all aspects of production being operated simultaneously. The region has a well-developed RVC in the sector. ASEAN is a major exporter of computer data storage, including hard disk drives (HDD), a success story on transforming the region into a major global HDD production and supply chain centre. More than 80.0 percent of the world's hard drives are made in ASEAN. An advantage of ASEAN electronics component companies are their absorptive capacities to imbibe the best technology and process, leading to increased productivity.

Electronics production currently accounts for the majority of ASEAN exports. Singapore, Vietnam, Malaysia, the Philippines and Thailand are among the leading exporters of electronics globally. Vietnam has emerged as the ASEAN alternative to Chinese manufacturing, supported by an increasingly skilled workforce, improved infrastructure and pro-business policy decisions. Further, its proximity to China limits interruptions or delays to existing supply chains in China. Vietnam imports electronic integrated circuits, parts of mobile phones, and printed circuits. Duty concessions in FTAs make electronics imports from these countries even more competitive in the Indian market vis-a-vis the domestic production.

India is increasingly trying to diversify into the manufacturing of electronic products and electrical parts. Indian companies could try to establish manufacturing assembly units in Vietnam. Medical electronics devices segment has been receiving increased attention in the recent times, which is of equal importance to ASEAN countries as well. Increased investments from ASEAN, through long-term partnerships in the electronics sectors and setting up manufacturing in India would support in building local capabilities in India, in order to source strategic electronic goods domestically. Another area for collaboration between India and ASEAN economies are R&D and skill development in electronics, semiconductors and materials, as well as in areas such as 5G, automated manufacturing robotics, etc.

Automobiles and Auto-components Sector

The ASEAN automotive sector over the years has emerged into a major production hub and dominant market for both original equipment manufacturers (OEMs) and auto-components suppliers due to a rapidly growing consumer market, integrated supply chains and comparatively lower labor costs. Most of the global auto firms have their presence in ASEAN, following a regional production networks strategy. Due to the proximity of India with ASEAN countries, these global auto firms could target India by setting up plants in ASEAN countries to produce final assembly products by using local content requirements and expand their reach to Indian consumers, alongside ASEAN markets. Automotive MNEs are not only expanding the production of motor vehicles, many are also establishing R&D facilities in the region, thereby moving up in the value chains. ASEAN as a whole exported US$ 47.3 billion worth of vehicles and transport equipment in 2019, much higher than exports of US$ 29.8 billion in 2010, with the largest exporters being Thailand, Indonesia and Vietnam. These countries undertake the entire assembling of vehicles, through importing parts and components from partner countries, including within ASEAN, thus creating a developed RVC in the sector.

Thailand today is one of the leading vehicle and automotive components exporters. Over the years, Thailand has developed from an assembler of auto components into a top automotive manufacturing and a major automotive export hub. Thailand alone accounted for 61.0 percent of total vehicle transport equipment exports of ASEAN in 2019. The growing automobile industry in ASEAN countries offers vast opportunities for investments for Indian manufacturers and distributors of automobile components. ASEAN has the presence of many global suppliers and OEMs, however, auto components are still imported in large scales into these producing countries, offering opportunities for suppliers from India. At the same time, several ASEAN countries are also major natural rubber producers and exporters, with several opportunities for tyre manufactures. Moreover, to ensure continuity of their competitive edge in the automobile industry, many ASEAN countries are offering several stimulus packages, tax concessions and environment-friendly schemes such as the eco-car scheme in Thailand, providing a multitude of opportunities for foreign investors in ASEAN's automobile manufacturing industry.

ASEAN economies would be able to take advantage of India's relative competitiveness in design and engineering, and manufacturing skills. India has a very large market in both four wheeler and two wheeler passenger vehicle segments. India is trying to establish a well-developed auto-component industry, and being a major producer of steel brings about cost-effectiveness, supporting the automobile industry in the country. The large presence of global automobile OEMs in India has significantly increased the localization of their components in the country. India has become the preferred designing and manufacturing base for most global auto OEMs for local sourcing and exports. However, there is considerable dependence on imports of certain auto components such as drive transmission, steering, electricals, interiors, engine components, and alloy wheels from China, which could be locally produced or diverted to ASEAN economies through integration in an RVC.

Indian automotive companies could also explore the automobile manufacturing operations and the automotive assembly industry for making spare parts, assembly and distribution sales network as well as service centres. India currently has an overall trade surplus in the auto-component industry but depends significantly on China for its imports of certain critical components such as drive transmission and steering parts, cooling systems, suspension and braking parts. Collaboration with ASEAN component makers and designers through JVs and technical alliances (TAs) could support India to bring advanced technologies in a shorter time, while over the long run, it could support India's plan to develop technology locally through increased in-house R&D, and hence support in developing local supply chains.

The future of automobiles is expected to be electric vehicles. The electric vehicles industry in the country is at a nascent stage in India and represents less than 1.0 percent of the total vehicle sales in the country. Vietnam, with a 4.0 percent share is among the major destinations of India's exports of electric vehicles in 2019. Governments in ASEAN countries are providing tax exemption to investors for the production of low-cost, low-emission cars to reduce fuel consumption and to encourage the production of environmentally-friendly "low-cost green cars" (LCGC). Additionally, ASEAN economies such as Indonesia and the Philippines have vast reserves of nickel, which is a major metal used in EV batteries and the recent growth in EV markets are supporting increased mining of nickel in these countries. Indonesia aims to become a global hub in the EV industry supply chain and to make EV 20.0 percent of the country's car production by 2025, which has been further supported by investments from major global EV players. India and ASEAN countries could look into increased investment in the production of electric vehicles, as well as setting up factories for nickel production.

Healthcare and Medical Products

Although the country-wise situation varies, India and ASEAN countries face several common health challenges including a growing geriatric population and an increasing prevalence of non-communicable, chronic and lifestyle diseases, resulting in growing healthcare expenditures. Increased cooperation among India and ASEAN countries through capacity development and joint research activity in healthcare has acquired renewed importance, especially in the current COVID-19 scenario. India with its strong healthcare sector, skilled health professionals and affordable and quality medicines could play a major role in ASEAN's healthcare and pharmaceutical sector. India could collaborate with ASEAN countries in areas such as strengthening health systems, access to care, safe and good quality medical products, medical devices, affordable quality medicines (traditional and complementary medicines), where India's strengths are more visible, while India could learn from the successful universal health coverage scheme in ASEAN countries such as Thailand, as well as collaborate with ASEAN companies in providing e-consultation and telemedicine services.

Local production of pharmaceuticals and medical equipment in several ASEAN countries are unable to meet their domestic demand. For instance, as per the Myanmar Pharmaceutical Industrial Enterprise, local production in the country could meet only 10.0 percent of domestic demand in 2018. Among ASEAN countries, Thailand to some extent has succeeded in building a strong local pharmaceutical industry capable of complying with international quality standards. While India is the leading producer of generic medicines in the world, ASEAN companies heavily rely on both China and India for meeting their API requirements. Accordingly, there exist increased investment and collaborative opportunities between ASEAN and India to produce API ingredients within the region through partnerships with multinational life science companies. India could support ASEAN to enhance local production to meet the growing demand for medical products at cheaper costs, as well in building their capacity to produce essential medical products, including vaccines, antibiotics, medical equipment or personal protective equipment. Indian pharma companies can capitalize on the recent favourable government reforms in the pharma sector in ASEAN countries and through its high technology, strong knowledge base and expertise could set up formulation plants in the country through JVs with local partners.

On the other hand, ASEAN countries, in particular Malaysia, Thailand and Vietnam, are the largest exporters of personal protection equipment products in the world (Malaysia and Thailand export gloves, and Vietnam exports gowns, hair covers, masks and gloves). At the same time, Thailand and Vietnam were net importers of masks, while Cambodia and Indonesia were net importers of both goggles and masks. Several Indian companies have already invested in ASEAN countries in this sector.

The need for extensive collaborative research in healthcare is being felt now more than ever. Singapore has emerged as a strong pharma innovation base in the region. Extensive research is needed in areas such as the prevalence of diseases, causative factors, newer diagnostic and treatment modalities, clinical trials as well as prevention strategies for existing and new diseases, providing an opportunity for hospitals as well as research organisations to collaborate. Further, there is an opportunity for collaborative R&D for the pharma and biotechnology sectors. The pharmaceutical companies in India and ASEAN countries can increase levels of cooperation through increased R&D investment, licensing deals, acquisitions and other partnerships. India's expertise in generic drug segment, offering manufacturing expertise for outsourcing and streamlining of its supply chain for becoming an end-to-end supplier of pharma products, can be leveraged by other partners.

Introduction of innovative medical technology and techniques through increased healthcare investments in both regions can lead to greater collaboration and exchange of innovations in the healthcare and pharmaceuticals sectors. India and ASEAN countries could collaborate for bringing about digital transformation in their healthcare systems with enhanced usage of new technologies like Artificial Intelligence, Big Data, IoT and Cloud Computing, towards providing monitoring solutions, health issue identification and enhanced patient-centric healthcare delivery. Setting up of medical devices manufacturing capability, leveraging on telemedicine capacities in both regions, diagnostic medicine, and organising training and capacity building programs offer huge potential in this sector, as already seen during the breakout of the COVID-19 pandemic.

Medical tourism is another area offering lucrative opportunities for Indian investors, as both India and several ASEAN countries (eg: Thailand) are major medical tourist destinations. Indian generic brands are already having a significant presence in ASEAN's pharmaceutical market. Moreover, India is blessed with well-developed systems of traditional medicine which hold tremendous potential in the global health scenario. Traditional medicine particularly herbal medicine is considered as a major healthcare provider around the globe, particularly in rural and remote areas. Indian traditional medicinal systems like Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy have a very rich history of their effectiveness; modern research also acknowledged the importance of such medicine. Indian traditional medicine or medicinal plants are also considered a vital source of new drugs. India and ASEAN countries could enter into collaborative research, professional training, scientific capacity building and exchanges in the field of alternative medicines. There also exists unrealised potential trade between ASEAN and India on healthcare, pharma and medical devices products, which may be realized through an easing of trade procedures for pharma and medical devices products from both sides. The importation of medical goods and PPE in ASEAN has been constrained by tariffs and non-tariff measures (NTMs), requiring streamlining of NTMs and elimination of tariffs to lower the costs of imports from ASEAN's trading partners such as India.

Agribusiness and Food Processing Sector

India and ASEAN are predominantly agriculture-based economies, with the sector having a large contribution to the region's GDP. India is a global leader in the production of several agricultural products. ASEAN countries are leading producers and exporters of palm oil, coconut, rice, rubber and seafood. ASEAN countries have been successful in building natural resources-based export industries, especially agricultural products. Indonesia is the world's largest producer and exporter of palm oil and a major producer of cocoa. Similar is the case with Malaysia, the second largest exporter of palm oil. Thailand and Vietnam are major exporters of rice globally. Thailand, Malaysia, Indonesia and Vietnam are major exporters of rubber. Despite these developments, ASEAN has a very limited arable land area. Other challenges faced at the farm level are unavailability of bio inputs for organic production, inconsistent supply, high production cost and farmers' capacity. The challenges at the processing level include lack of technology for grading, packaging, storage, transportation and quality control, while at the marketing level, major challenges include limited market information.

Realizing its limitations, ASEAN economies are aiming for sustainable development of the agricultural sector through sustainable organic value chains. Support Asia For Sustainable Palm Oil (SASPO), an initiative founded in 2016 by seven founding members, namely, ASEAN CSR Network, Ayam Brand, Danone, IKEA, Unilever, Wildlife Reserves Singapore and WWF-Singapore, is the first and one of its kind business initiative in ASEAN focusing on sustainable palm oil. Adoption of modern and innovative technological applications in agriculture is critical for improving the productivity, and overall welfare of the sector in both regions.

Indian companies can cooperate with the private sector in several ASEAN countries and provide their expertise in terms of technological know-how as well as marketing services. By mapping each other's complementarities in the agricultural and food products, India and ASEAN countries can strengthen their comparative advantages and increase their supply of agricultural products. This will also help in ensuring an inclusive and sustainable development of this sector. The COVID-19 pandemic has also disrupted the agri-supply chain, and innovative solutions are needed to ensure an efficient agri-supply chain mechanism in India and ASEAN countries. This would require cooperation and collaboration across all segments of the agri-food supply chain including raw material, production, harvesting, storage, infrastructure, logistics, marketing, technology as well as agri-finance. Agriculture inputs, establishment of fertilizer or crop protection chemical factories, processing of local agricultural produce, establishing packaging or canning industries and farm equipment manufacturing are some of the potential areas of cooperation.

Processing of non-food agricultural products (tobacco, rubber, and wood) is another area with a huge scope of cooperation between India and ASEAN countries. Irrespective of having large quantities of rubber, which can be processed into a wide range of industrial products, most of Cambodia's rubber is exported as graded dry blocks. Strategically planned collaboration between India and ASEAN economies have the potential to uplift the agricultural sector in both regions to expand the RVCs and became a major part of GVC. India and ASEAN cooperation in developing agri-tech solutions could provide large opportunities in sustainable farming and ensuring efficient use of resources.

Thus, the fundamental idea behind building supply chains across India and ASEAN countries would be to optimally utilize the comparative advantage each country offers at different stages of production. A Study by the Ministry of Commerce and Industry, Government of India,[27] stressed the importance of integrating employment-intensive SMEs in RVCs through India-CLMV economic integration, which could be achieved with a three-pronged strategy: viz. by linking SMEs with large companies; linking SMEs with MNCs in CLMV; and linking SMEs on a

[27]India's Strategy for Economic Integration with CLMV, Dr. Ram Upendra Das, Department of Commerce Ministry of Commerce and Industry, Government of India, New Delhi, 2015.

stand-alone basis with their counterparts in CLMV. This may be followed in the case of other countries in the region also.

Regional Value Chains can be formed between India and ASEAN countries – Brunei, Lao PDR and Myanmar (Commodity Exporters having rich natural resources) - India, the Philippines, Thailand and Vietnam (mid-high tech technology product exporters) – Singapore (high-end technology, and at high-end process spectrum innovation, R&D) in various sectors. An RVC between India and ASEAN countries could lead to process upgradation (efficiency in production through reorganizing production or using superior technology), product upgradation (production of more sophisticated products), functional upgradation (acquiring new functions within a given value chain) and finally chain upgradation (integration into different value chains and GVCs) for India and ASEAN countries. India has been instrumental in facilitating investment in the ASEAN region mainly in connectivity projects. These could be strengthened by setting up funds to identify projects to develop viable and dynamic supply chains across South and Southeast Asia.

6. EXPORT-IMPORT BANK OF INDIA'S PRESENCE IN ASEAN COUNTRIES

As the apex financial institution in India for financing, promoting and facilitating India's international trade and investments, the Export-Import Bank of India (India Exim Bank), since its inception in 1982, has focused on promoting and supporting South-South cooperation, trade and investment. India Exim Bank operates a comprehensive range of financing, advisory and support programmes to promote and facilitate India's trade and investment. As a partner institution to promote economic development in developing countries and least developed countries (LDCs), the commitment towards building relationships and fostering cooperation among southern countries is reflected in the various activities and programmes, which India Exim Bank has set in place. Accordingly, Southeast Asia region has been a focus region for India Exim Bank, and thus form a critical component of the India Exim Bank's strategy to promote and support two-way trade and investment.

Lines of Credit

To promote bilateral and regional commercial relations, India Exim Bank extends Lines of Credit (LOCs) to governments, parastatal organizations, financial institutions, commercial banks and regional development banks to support export of eligible goods on deferred payment terms. Operative LOCs covering ASEAN countries extended by India Exim Bank, at the behest of the Government of India are given in **Table 6.1**.

Table 6.1: India Exim Bank's Operative Lines of Credit in ASEAN Countries (as on March 31, 2021)

Borrower (No. of LOCs)	Amount of Credit (US$ mn)	Key Sectors/Projects covered
Cambodia (4)	102.1	Electricity Transmission Line; Water Development Projects
Lao PDR (4)	153.8	Electricity Transmission Line project; Irrigation Project; Hydropower Projects
Myanma Foreign Trade Bank, Myanmar (9)	468.6	Railway Projects; Refinery Projects; Manufacturing Plant Projects; Transmission Lines; Irrigation System; Petrochemicals; Microwave Radio Link Project
Vietnam (4)	191.5	Hydro Power Project; Exports of Textile Machinery and Equipment

Supporting Project Exports

India Exim Bank extends both funded and non-funded facilities for overseas turnkey projects, civil construction, supplies as well as technical and consultancy service contracts across various sectors of the economy. India Exim Bank has financed several Indian project exporters in the region in various sectors including, among others, water resources development, power projects, irrigation, gas pipeline and hydropower projects. Such projects executed by assistance received from India Exim Bank, have contributed to the host country's developmental endeavours and have assisted in narrowing developmental gaps in such countries.

Buyer's Credit under National Export Insurance Account

The Buyer's Credit under National Export Insurance Account (BC-NEIA), introduced in April 2011, provides further impetus to project exports from India on a medium- or long-term basis, especially in the infrastructure sector. Under this programme, India Exim Bank facilitates project exports from India by way of extending a credit facility to overseas sovereign governments and government-owned entities for the import of goods and services from India on deferred credit terms. Indian exporters can obtain payment of eligible value from India Exim Bank, without recourse to them, against negotiation of shipping documents. NEIA is a Trust - set up by the Ministry of Commerce and Industry and administered by ECGC. All ASEAN countries except Brunei, Malaysia, Singapore and Thailand are featured among the positive list of 92 countries identified by ECGC for which Indian exporters can avail BC-NEIA.

Finance for Joint Ventures

To support Indian companies in their endeavour to globalise their operations, India Exim Bank operates a programme to support overseas investments by Indian companies through JVs/ WOSs. Such supports include loans and guarantees, equity finance and in select cases direct participation in equity along with Indian promoter, to set up such ventures overseas. As on March 31, 2021, India Exim Bank has sanctioned ₹ 111.5 billion to over 80 Indian companies for setting up ventures in Indonesia, Malaysia, Myanmar, Singapore, Thailand and Vietnam in diversified sectors.

Project Development Fund for CLMV Countries

Ministry of Commerce and Industry (MOCI), Government of India, engaged India Exim Bank for conducting a study for developing a framework to identify opportunities for India in trade and investments in CLMV countries. For this Study, India Exim Bank mounted a Mission to CLMV countries to gather inputs from all stakeholders in those countries and submitted the final report to MOCI. Subsequently, the Union Finance Minister in the Budget Speech for 2015-16 announced in the parliament that “in order to catalyze investments from the Indian private sector in this region, a Project Development Company will, through separate Special Purpose Vehicles (SPVs), set up manufacturing hubs in CLMV countries, namely, Cambodia, Lao PDR, Myanmar and Vietnam”.

In compliance with the then Finance Minister’s announcement and to catalyse Indian private sector investments in CLMV countries, under the ‘Act East Policy’ of the Government of India, a Project Development Fund (PDF) with a corpus of ₹ 500 crore has been created in August 2016. The PDF, housed in the Department of Commerce, will be operated through the India Exim Bank, which will act as the Empowered Institution under the Initiative. The PDF shall be governed by an Inter-Ministerial Committee under the chairpersonship of the Commerce Secretary. The primary objective of the PDF is to facilitate Indian investments and broaden the manufacturing base of Indian companies in CLMV countries. The PDF will be used to identify projects, which support the RVC and help integrate Indian companies into the RVC. The projects identified under the initiative, if found feasible/ viable, will be incorporated/ implemented through SPVs in CLMV countries.

Under this initiative, four projects, in sectors such as healthcare in Cambodia and Myanmar, education in Myanmar and pharmaceuticals in Vietnam, have been identified for the preparation of DPRs. The DPRs have since been finalized and the Bank is in the process of entering into Co-operation agreements with the relevant Ministries in the CLMV region as a step towards implementation of these projects.

India Exim Bank as International Consultant

India Exim Bank is well positioned to share its experience and expertise in the fields of capacity creation, institutional strengthening, export development and export capability creation. The Bank is thus well placed to provide a range of technical assistance in these fields. India Exim Bank has rendered consultancy services to a number of institutions in Southeast Asia region such as:

- Study on Regional Cooperation in Export Finance and Export Credit Guarantees for the Economic and Social Commission for Asia and Pacific (ESCAP) (includes CLMV countries);
- Strategy paper for SAARC Development Fund to promote intra-regional projects in the South Asian Region (including Myanmar);
- Expertise provided on developing a National Export Strategy of Myanmar; and
- Designing Export Marketing Seminars for SMEs in Vietnam.

Institutional Linkages

India Exim Bank has a wide network of alliances with financial institutions and investment promotion agencies, market promotion boards and service providers across the globe for assisting externally oriented Indian companies in their quest for excellence and globalization. In the ASEAN region, India Exim Bank has entered into an MOU with the PT Bank Ekspor Indonesia (Persero), Export-Import Bank of Thailand, Investment and Trade Promotion Centre, Vietnam to promote bilateral trade and investments among India and the respective countries.

Asian Exim Banks Forum

With a view to enhance cooperation and forge a stronger link among its member institutions, the Asian Exim Banks Forum (AEBF), a grouping of Exim Banks in the Asia-Pacific region, was conceived and initiated by India Exim Bank in 1996. Since 1996, the Forum meets every year at an annual event hosted by Export Credit Agencies (ECAs), in rotation. Members comprise ECAs from Australia, China, India, Indonesia, Japan, South Korea, Malaysia, the Philippines, Thailand, Turkey and Vietnam. The Asian Development Bank is a Permanent Observer.

The task of the Asian ECA Forum is to enhance cooperation and forge a stronger link among its member institutions, thereby fostering a long-term relationship within the Asian ECA community. The Annual meetings serve as a forum for discussing a wide range of issues focused on fostering common understanding as well as exchanging and sharing information. Together, the endeavour is to meet the challenges faced as an export credit agency in Asia and explore possible areas for further regional cooperation. Myanma Foreign Trade Bank has attended meetings of the AEBF as an Observer. A new website for AEBF, developed in-house by India Exim Bank was launched during the 24th annual meeting of the AEBF at Phuket, Thailand in November 2018.

Research Studies

India Exim Bank carries out research on areas related to bilateral trade and investment, sector/product/country and regional studies, as also policy issues related to the external sector with a view to enhancing competitiveness of

Indian exporters. The published research studies related to ASEAN include:

- Building Infrastructure in CLMV: Opportunities For India;
- India-CLMV: Building Supply Chains in Asia;
- Enhancing India's Engagement in Healthcare Sector of CLMV Countries;
- Act East: Enhancing India's Trade with Bangladesh and Myanmar Across Border;
- Strengthening ASEAN-India Partnership: Trends and Future Prospects;
- India's Engagements With CLMV: Gateway To ASEAN Markets;
- Act East: Enhancing India's Engagements with Cambodia, Lao PDR, Myanmar, Vietnam (CLMV);
- Enhancing India's Bilateral Ties with Cambodia, Lao PDR, Myanmar, Vietnam: A Brief Analysis;
- India's Trade and Investment Relations with Cambodia, Lao PDR, Myanmar, Vietnam (CLMV): Enhancing Economic Cooperation;
- Enhancing India-Myanmar Trade and Investment Relations: A Brief Analysis;
- ASEAN Countries: A Study of India's Trade and Investment Potential; and
- BIMSTEC Initiative: A Study of India's Trade and Investment Potential with Select Asian Countries.

Representative Offices

India Exim Bank has two representative offices in the ASEAN region - Singapore and Yangon. These offices seek to establish and maintain relationships with multilateral agencies, regional development institutions, trade and investment promotion bodies, international banks, chambers of commerce, government departments and institutions in various Southeast Asian countries and identify areas of cooperation. The representative offices play a key role in facilitating India's economic cooperation with ASEAN countries while keeping close coordination with Indian Missions in the region. The Bank's Representative offices project the Bank's capabilities in financing India's international trade and investment while also keeping the Bank abreast of the developments in the economic and banking/financial sectors of the Southeast Asian region.

India Exim Bank in East and North East Region

With a view to assisting entrepreneurs in harnessing the tremendous export potential of the East and the NER, India Exim Bank has in place regional offices at Kolkata and Guwahati. While the Kolkata Office covers India Exim Bank's activities in the states of Bihar, Chhattisgarh, Jharkhand, Odisha and West Bengal, the Guwahati Office covers the Bank's activities in the eight states of the NER, namely, Assam, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland, Sikkim and Tripura. These two offices are strategically placed to play vital roles in promoting exports from the Eastern and the North Eastern regions, with activities ranging from creating awareness of export potentials of the regions and capacity building to financing of exports and export oriented units. In order to enhance export potential of MSME in industrial clusters in the NER, India Exim Bank has also collaborated with the United Nations Development Programme (UNDP). The India Exim Bank-UNDP programme for the NER seeks to develop, among others, bankable export clusters in the NER, based on local resource availability and comparative advantage of the identified clusters.

In a Nutshell

In sum, India Exim Bank, with its comprehensive range of financing, advisory and support services, seeks to create an enabling environment for enhancing the two-way flow of trade, investment and technology between India and ASEAN. While promoting infrastructure development and facilitating private sector development in host countries, the various efforts of India Exim Bank, ensconced in its range of activities, also contribute towards institutional building in the countries in the ASEAN region.

ANNEXURE

GOI-supported LOCs Extended by India Exim Bank in ASEAN Countries

(As on March 31, 2021)

Sr. No	Country	Borrower	Amount of Credit (US$ mn)	Purpose
1	Cambodia	Government of Cambodia	35.2	Stung Tasal development project, purchase of water pumps, construction of electricity transmission line between Kratie and Stung Treng by WAPCOS
2	Cambodia	Government of Cambodia	15.0	Strengthening the capacity of transmission line project between Kratie and Stung Treng
3	Cambodia	Government of Cambodia	15.0	Completion of Stung Tasal Water Development Project
4	Cambodia	Government of Cambodia	36.9	Stung Sva Hab/Slab Water Resources Development Project
5	Lao PDR	Government of Lao PDR	17.3	Development of Irrigation schemes in the Champassack Province
6	Lao PDR	Government of Lao PDR	33.0	Paksong S/S – Jiangxai 115 KV, double circuit Transmission Line Project, Nam Song 7.5 MW hydropower project and Equipment for Rural electrification Phase 2 Project

Sr. No	Country	Borrower	Amount of Credit (US$ mn)	Purpose
7	Lao PDR	Government of Lao PDR	72.6	(i) 230 kV Double Circuit Transmission Line from Nabong to Thabok and substations (USD 37.30 million), (ii)Improvement and Expansion of 22kV distribution line in Vientiane capital city branches project [USD 35.25 million] in Lao PDR
8	Lao PDR	Government of Lao PDR	30.9	Construction of Storage Dams & Development of Irrigation Systems in four major provinces in Lao PDR
9	Myanmar	Myanma Foreign Trade Bank, Myanmar	56.4	Railway rehabilitation
10	Myanmar	Myanma Foreign Trade Bank, Myanmar	20.0	Renovation of Thanlyin Refinery
11	Myanmar	Myanma Foreign Trade Bank, Myanmar	60.0	Railway projects by RITES Ltd.
12	Myanmar	Myanma Foreign Trade Bank, Myanmar	20.0	Setting up an assembly/manufacturing plant for assembly and manufacturing of Tata vehicles
13	Myanmar	Myanma Foreign Trade Bank, Myanmar	64.1	(i) Oakshitpin – Thahtay Chaung – Taungup 230 kV Transmission Line and Substation Project; (ii) Taungup – Maei – Ann – Mann 230 kV Transmission Line and Substation project; and (iii) Maei – Kyaukpyu 230 kV Transmission Line and Substation project

Sr. No	Country	Borrower	Amount of Credit (US$ mn)	Purpose
14	Myanmar	Myanma Foreign Trade Bank, Myanmar	20.0	Upgradation of Thanbayakan Petrochemical Complex
15	Myanmar	Myanma Foreign Trade Bank, Myanmar	135.6	16 ongoing irrigation schemes and 2 rehabilitation schemes in the irrigation project in Myanmar
16	Myanmar	Myanma Foreign Trade Bank, Myanmar	86.3	Procurement of rolling stock, equipment and up-gradation of three major Railway Workshops by procurement of machinery
17	Myanmar	Myanma Foreign Trade Bank, Myanmar	6.2	Implementation of a Microwave Radio Link on the Rhi-Mindat route in Myanmar
18	Vietnam	Government of Vietnam	27.0	General purpose - Contracts approved include export of textile machinery, equipment and services for hydro power projects
19	Vietnam	Government of Vietnam	45.0	NAM Chien Hydropower Project (200 MW) at Son La Province
20	Vietnam	Government of Vietnam	19.5	Two projects
21	Vietnam	Government of Vietnam	100.0	Purchase of equipment / supplies
Total			**916.0**	

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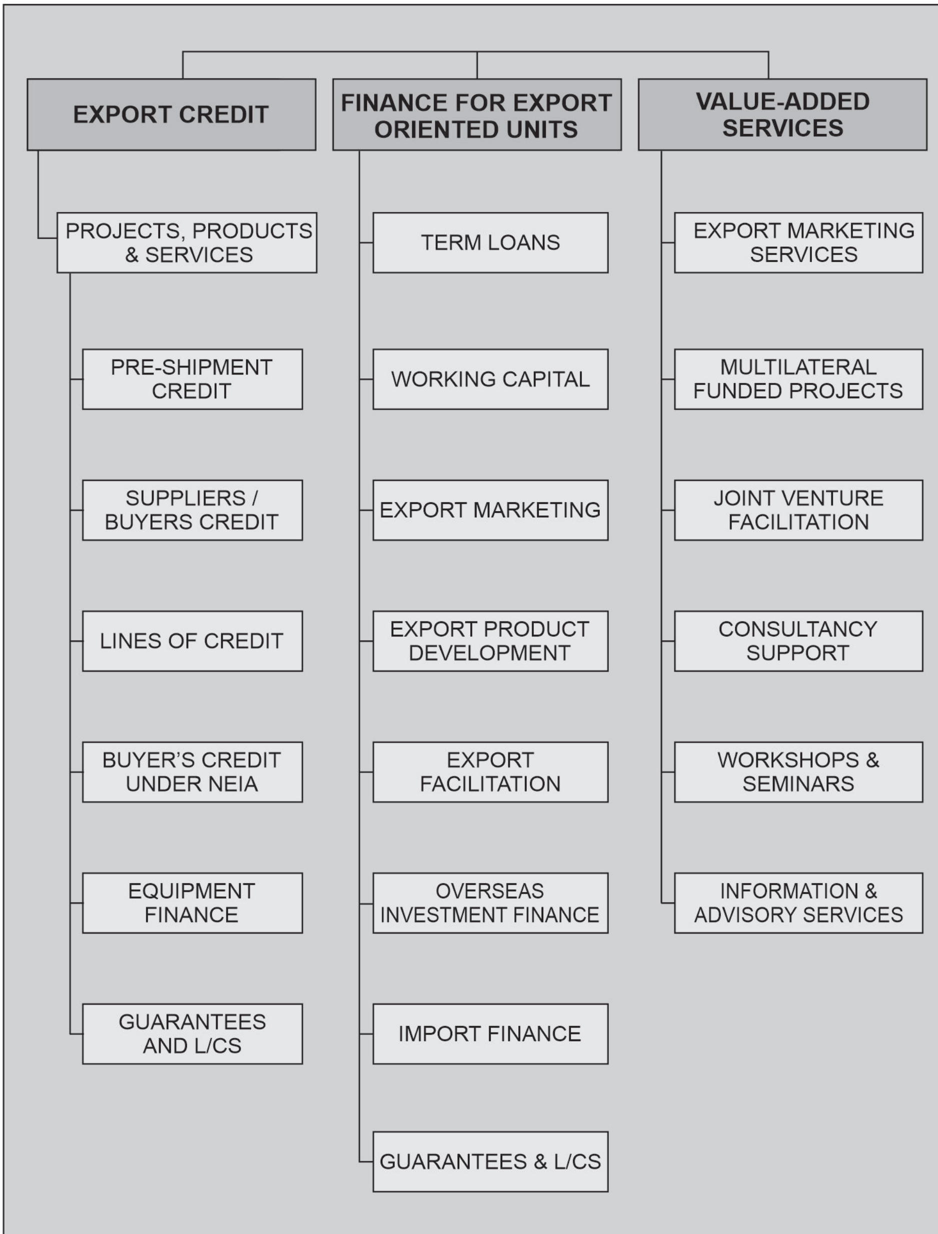

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