Enhancing India's Exports through Global Value Chain Integration

Sara Joy, Chief Manager

Research and Analysis Group, Export-Import Bank of India

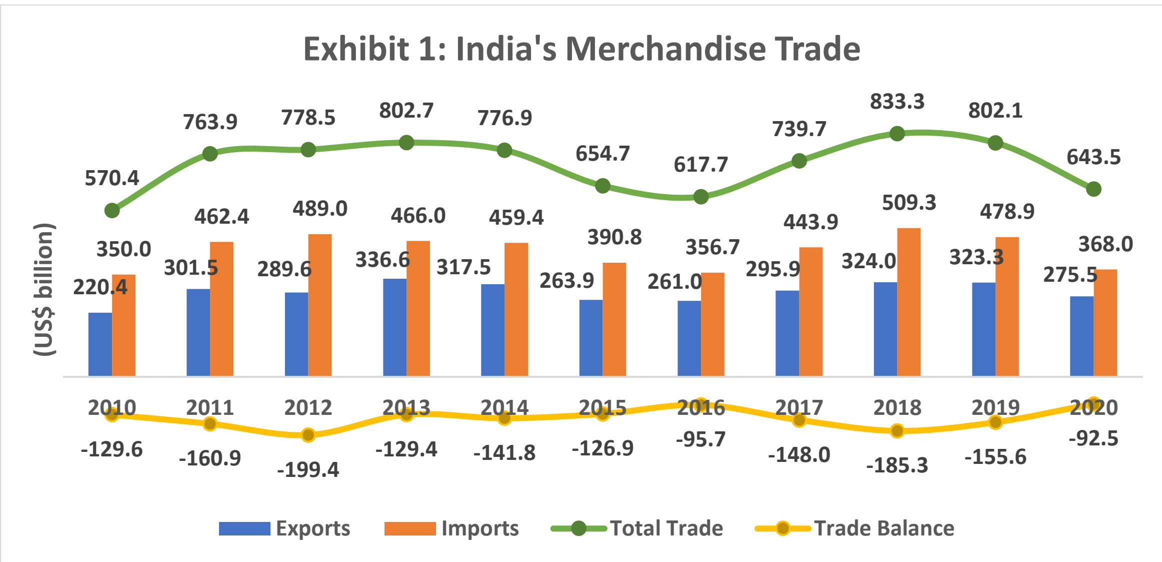
Introduction

India, the 6th largest economy in terms of nominal GDP and 3rd largest economy in terms of GDP purchasing power parity, is a major global economic power. Despite these, India's export performance has trailed other countries, with exports (merchandise and services) accounting for 18.7% of GDP in 2020. Merchandise exports alone accounted for around 11% of its GDP, however, India's share in global merchandise exports more or less remained stable at a marginal 1.6% in the last few years, lower than the share of economies such as China, South Korea, and Vietnam. India remains better in terms of services exports, being the 7th largest global services exporter and accounting for 4.1% share in global services exports.

India is aspiring to become a US$ 5 trillion economy by 2024-25 from the current levels of US$ 2.95 trillion, requiring a GDP growth of over 9% in the next few years. The COVID-19 pandemic put a dent to these ambitious plans with Indian GDP contracting by 6.6% during FY 2020-21. The GDP, however, is expected to rebound with an estimated 8.9% growth in the current fiscal.

India's International Trade: Current Scenario

India's merchandise exports have grown at an average annual growth of 4.8% over the last decade (2010-2019). India's merchandise exports which were US$ 323.3 billion in 2019, contracted by 14.8% in 2020 to US$ 275.5 billion in 2020, with almost all major commodities witnessing a decline except for pharmaceuticals, iron & steel, and cereals **(Exhibit 1).**



Source: Ministry of Commerce and Industry, Government of India

Moreover, even after 20 years of liberalization, share of medium and high-tech exports in India's manufactured exports remain lower than that in similar developing countries **(Table 1),** implying that skill development of labour force and specialization in India is yet to be picked up relative to these countries.

Table 1: Medium and high-tech exports (% manufactured exports)

Country	**2010**	**2019**
Brazil	36.5	39.3
Cambodia	7.9	9.0
China	60.5	60.3
Hong Kong, China	53.7	38.8
India	28.2	36.7
Indonesia	29.1	30.7
Malaysia	63.5	65.6
Philippines	73.1	81.2
Singapore	69.5	71.9
South Africa	45.7	46.0
South Korea	75.8	73.8
Thailand	61.8	61.1
Vietnam	28.0	54.0

Source: World Development Indicators 2021, World Bank

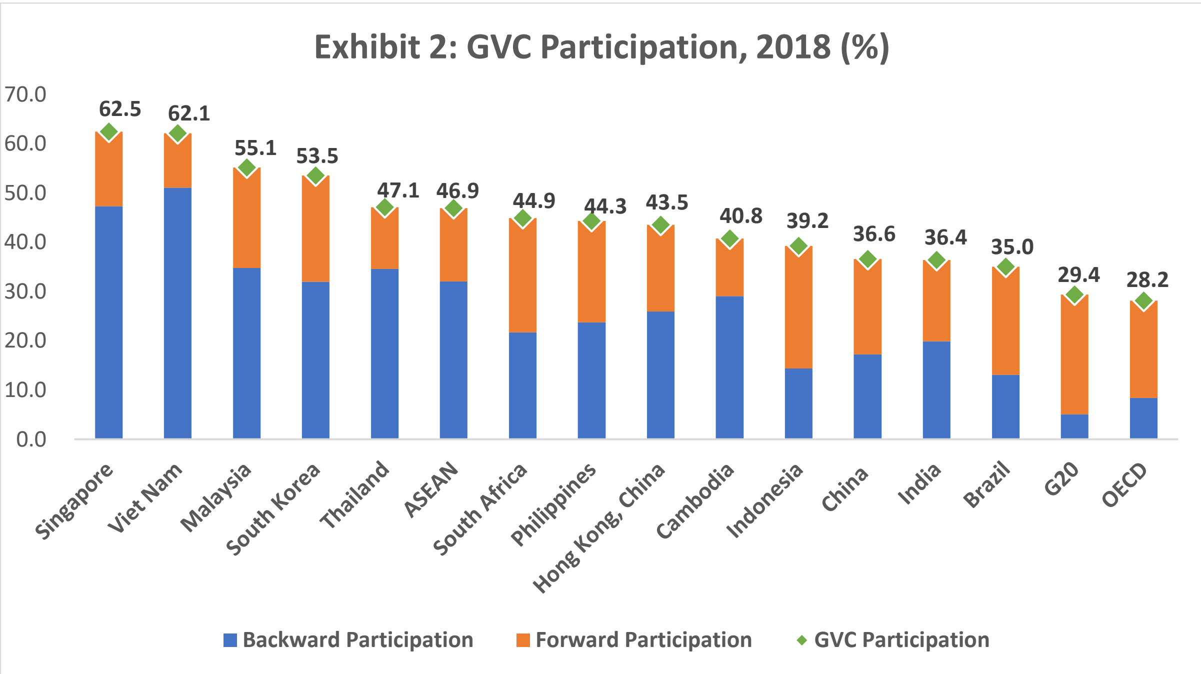
Despite these, India has shown tremendous turnaround in its merchandise trade in the current fiscal year, supported by stronger than expected global recovery, pent up global import demand and depreciating rupee which acted as a blessing in disguise as it makes Indian goods more competitive globally. Indian merchandise exports are on track of achieving the short-term target of US$ 400 billion in the current year, growing at around 43%. According to preliminary estimates, merchandise exports from India reached US$ 335.4 billion during April to January 2021-22, signifying a 46.5% year-on-year rise in exports compared to the corresponding period last year, thus achieving 84% of the targeted exports so far. It is evident that the increase being witnessed by Indian exports are not simply due to a low base-effect as merchandise exports were also an impressive 27% higher than the pre-Covid levels in the corresponding period of 2019-20.

However, to achieve the medium-term export target of US$ 2 trillion (US$ 1 trillion each of merchandise and services exports) requires India to enhance its participation in global value chains (GVCs). Since more than two-thirds of world trade now occurs through GVCs, where production is fragmented with activities/tasks being carried out in different countries, before final assembly (World Bank, 2019). Additionally, it has been estimated that a 1% increase in GVC participation is estimated to boost per capita income levels by more than 1% - about twice as much as conventional trade (World

Bank, 2020). The pandemic and its repercussions have necessitated economies to re-evaluate their participation in GVCs, especially in the context of necessity to create resilient supply chains and changing trade policies by various countries.

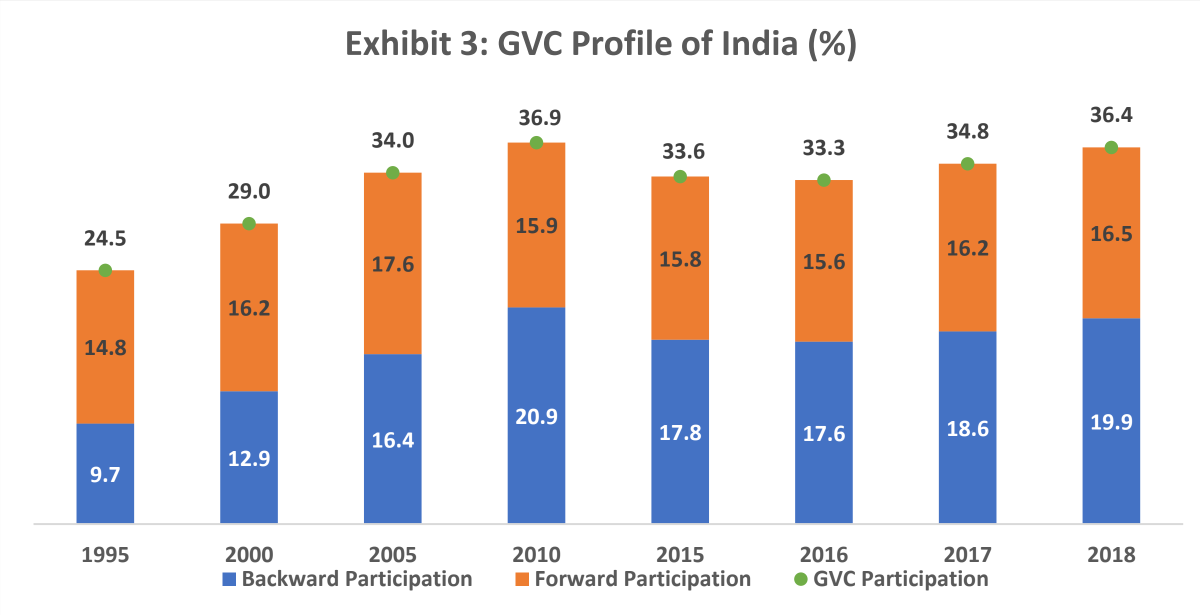
India and GVC Participation

Countries participate in GVCs by way of backward or forward participation. Backward participation refers to the foreign value-added contribution to an economy's exports, i.e., Country A imports intermediate products from Country B for domestic manufacturing which is further exported to Country C either as an intermediate or final good. Forward participation refers to domestic value-added embedded in the production of other economies for their exports, i.e., Country A supplies intermediate goods to Country B, where incremental value is added, and is further exported to Country C, where it is either consumed or again exported (ADB, 2020). GVC participation of a country would be the sum of its backward and forward linkages. GVC participation through exports of greatest value-adding stages such as product development, and the final stages of production yields the highest trade benefits.



Source: Author's Calculation based on OECD-TIVA Statistics, 2021

Countries with high intermediate imports have higher backward linkages, with Vietnam, Singapore, and Malaysia in the forefront, while countries such as Indonesia, South Africa, Brazil, and South Korea are at the forefront in terms of forward linkages, having high levels of domestic value added embedded in the export products of other countries **(Exhibit 2**). India trails behind most of these considered countries in terms of GVC participation. India has also witnessed a moderation in backward participation since 2010, while a marginal increase is seen in case of forward participation **(Exhibit 3).**



Source: Author's Calculation based on OECD-TIVA Statistics, 2021

Table 3: GVC Participation Rate of India, Disaggregated level (%)

	Backward Participation		Forward Participation	
Sector	**2015**	**2018**	**2015**	**2018**
Total	**17.8**	**19.9**	**15.8**	**16.5**
Agriculture, hunting, forestry, and fishing	3.4	4.1	0.3	0.3
Mining and quarrying	15.5	15.4	0.6	0.6
Total Manufacturing	25.4	28.9	9.9	10.3
Food products, beverages, and tobacco	7.6	8.7	0.7	0.7
Textiles, apparel, leather, and related products	16.0	18.7	1.1	1.1
Wood and paper products and printing	17.1	18.9	0.2	0.2
Chemicals and non-metallic mineral products	34.5	40.7	2.3	2.4
Coke and refined petroleum products	48.7	59.2	0.4	0.4
Chemicals and pharmaceutical products	19.5	20.9	1.3	1.4
Rubber and plastics products	23.2	24.7	0.4	0.4
Other non-metallic mineral products	20.5	22.9	0.1	0.1
Basic metals and fabricated metal products	26.5	25.8	1.1	1.1
Computer, electronic and electrical equipment	23.9	25.7	1.7	1.8
Machinery and equipment	21.3	22.1	0.8	0.8
Transport equipment	24.1	25.2	1.6	1.7
Manufacturing; repair and installation of machinery and equipment	29.0	34.6	0.5	0.5
Electricity, gas, water supply, sewerage, waste and remediation activities	23.5	32.5	0.0	0.0
Total Business Sector Services	8.0	9.2	4.8	5.2

Wholesale and retail trade; repair of motor vehicles	5.0	5.9	0.9	1.0
Transportation and storage	15.0	17.2	1.3	1.3
Accommodation and food service activities	4.5	5.3	0.2	0.3
Information and communication	7.1	7.9	1.0	1.2
Financial and insurance activities	5.5	7.5	0.6	0.6
Real estate activities	3.1	3.5	0.0	0.0
Other business sector services	11.0	12.8	0.7	0.8
Public admin, education, health and other personal services	7.9	8.7	0.2	0.2

Source: Author's Calculation based on OECD-TIVA Statistics, 2021

Although GVC participation rate in India has increased during 1995-2018, the participation has varied across sectors. **Table 3** shows that India's GVC participation in most manufacturing sectors has increased in 2018 compared to 2015 levels. The backward participation remains highest in case of coke and refined petroleum products, while the forward participation remains highest in case of computer, electronic and electrical equipment, followed by chemicals and pharmaceutical products. Services sectors also witnessed a rise in backward participation in 2018, with maximum increase witnessed in case of transportation and storage sector in backward participation. However, forward participation in services sectors remained more or less stable, while information and communication sector witnessed the highest rise.

Boosting GVC Participation for an Inclusive Growth

As seen from India's backward and forward participation in global GVC, it is clear the India mostly participates in GVC as an importer and exporter of intermediate products and not as a supplier of final products. Moreover, according to Asian Infrastructure Investment Bank, India is 7.4% points below the average GVC participation in emerging countries and out of 35 sectors, just two sectors in India accounted for over 5% of global GVC exports: coke and petroleum and renting of machinery and other business activities in 2019.

With the recent improvements in ease of doing business, low-cost labour, and recent initiatives to improve infrastructure facilities, India has the potential to become a major global GVC player, especially with Chinese economy transitioning from labour-intensive manufacturing to high-tech value-added sectors. India's comparative advantage as a low-cost manufacturer would enable India to emerge as an alternative manufacturing destination for several labour-intensive products. Additionally, Government of India has initiated several schemes with the aim of improving India's GVC participation, most important of which is the production linked incentive (PLI) scheme.

High technology exports are necessary for a country to integrate into the higher end of GVC participation. It is imperative that India builds better infrastructure especially connectivity and logistics related infrastructure, improves institutional quality, increase R&D investment to promote innovation and making Indian exports cost effective, along with ensuring product quality and adhering to global standards, while reducing level of intermediate imports and increased domestic manufacturing. Subsequently, there is a need for development of port infrastructure, with special emphasis on addressing container shortage and resultant increase in freight rates. Improvements in physical infrastructure would reduce the cost of production, improve productivity and thus leading to economies of scale. This would be made possible through leveraging the PLI scheme for the announced 14 major sectors and efficient implementation of schemes such as the Advance Authorization Scheme and the Export Promotion Capital Goods (EPCG) Scheme to enable duty-free import of raw materials and capital goods which are major high value exports. Additionally, efforts should be made to reduce the import tariffs of critical inputs needed for India's manufacturing sectors while entering into new trade agreements, along with renegotiating and reviewing the existing trade agreements to include tariff reduction of these critical inputs.

Conclusion

With increased fragmentation of production processes across the globe, participation in GVCs is no more optional to economies, especially the developing ones, for diversifying their exports and intensifying their integration into the global economy. This is more so in the case of India, to achieve its ambitious trade and development goals. Achieving US$ 2 trillion export target requires India to sharply increase its share of exports in GDP from 18.7% to around 30%. India is currently a small player in GVC, especially in the manufacturing sector. India needs to adopt a strategic integrated approach to enhance its GVC participation. With several MNEs adopting China Plus One strategy, India has great potential for attracting investment from MNEs which are looking towards diversifying/shifting their production facilities away from China. Moreover, to build supply chain resilience global companies are revamping their manufacturing and supply chain strategies. Besides improving its position in GVCs, India could also consider entering into/ make its own Regional Value Chains in those sectors, where India has regional advantages. India has a unique opportunity to become a global manufacturing hub by taking advantage of these positive developments by adopting deeper domestic policy reforms, pro-investment policies in its export sectors, and integrated efforts to ease the doing business process, build better logistics and infrastructure to reduce trading costs. Thus, there is a need to revitalize Indian export product sectors, where India can play a dominant role globally based on its advantages in terms of cost, quality, and innovation.

References

Asian Development Bank. 2020. ADB South Asia Working Paper Series: Drivers and Benefits of Enhancing Participation in Global Value Chains Lessons for India. Philippines.

Asian Infrastructure Investment Bank. 2021. Asian Infrastructure Finance 2021: Sustaining Global Value Chains. Beijing.

World Bank. 2019. Global Value Chain Development Report 2019: Technological Innovation, Supply Chain Trade and Workers in a Globalized World. Washington, DC: World Bank.

World Bank. 2020. World Development Report 2020: Trading for Development in the Age of Global Value Chains. Washington, DC: World Bank.