

“Local to Global” – Indian Exports Can Prove to be a Window of Opportunities for Economic Growth and Employment

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Abstract — *This research is an outcome of two month's Internship which was Carried out at the Foundation of Economic Development, a Part of the Convergence foundation, in Delhi while working as an economic research analyst in the year 2022 which is related the Indian Exports. This research paper constituted India's current international trade trends and its trade basket composition. It further discusses India's export under-performance vis-à-vis China and the reasons for China's extraordinary export achievement in relation to India are propelled by a set of complementary facets - an increased level of participation in GVCs, an outstanding degree of specialization in labor-intensive manufacturing business activities in network products, vast scale specialization in the selected industrial sectors and an increased level of export penetration in high income markets. It also provides a comparative study of net products exports from India versus Southeast Asian nations. The concluding statement discusses the way forward with suggestions on how to expand and diversify Indian exports, keeping in mind the export success story of Asian nations. The appendix section presents a graphical analysis of comparing the working age population in a nation with the exports in that particular nation.*

1. INTRODUCTION

“Every man lives by exchanging.” - Adam Smith

The economic benefits from participating in international trade are sufficiently ascertained. Post the Second World War several nations developed due to increasing investments and exports. For example, Japan, South Korea, China, Thailand and Malaysia, experienced economic transformations, as exports played a crucial role in navigating their growth. These nations realized that all inputs required for output manufacturing may not inevitably be the most cost-effective in their domestic markets, so their governments developed liberal trade rules to import raw materials.

Approximately 32% of India's imports comprise intermediate goods and approximately 70% of all anti-

dumping taxes are imposed on intermediate goods. This adversely impacts the pricing of final products, hampering our exports and eroding our competitiveness. The tariffs on intermediate goods should be negligible as these goods come into India and flow into goods manufactured for exports.

The background of these Asian countries demonstrates that imports and exports grow hand in hand. Also, during the period 2001 to 2010, our trade to GDP ratio nearly doubled from 26% to 49% and imports and exports grew at 20% during this period. An examination of China's international experience also demonstrates that imports and exports grew at similar rates and half of China's imports comprised intermediate products, which were instrumental in boosting their exports.

A crucial understanding from the Asian experience is that trade regimes should be liberal and incentives should guarantee greater relative profitability of exports as compared to the rest of the sectors. These incentive arrangements varied from subsidized bank credit facilities, export targets associated with long-term credit, export subsidies and incentives for research and development in this field. Also, import substitution should be gradually phased out as these nations expand their abilities and skills in labor-intensive industries and slowly move up the manufacturing value chain. Public investment in infrastructure and power generation helps to curtail logistics and energy costs. These experiences of Asia suggest that export promotion, rather than import substitution, navigates growth.

However, India was incapable of duplicating this prototype of export and investment led growth and expansion. According to the World Trade Organization,

India’s stake in worldwide merchandise trade stood at less than 2% in 2018, despite possessing the ingrained power and potential to perform much better.

Indian exports in the services sector have done well, but the manufacturing and exports expansion haven’t been broad-based as compared to other Asian countries. The manufacturing sector, as a share of GDP and employment, continued to be static from 1990 to 2020. While our exports have risen, they were nothing in comparison to China. Also, in the food processing sector where India has one of the biggest raw materials bases across the globe, our country scores 2% share in global exports. This is due to the lag in credit availability to the private sector, fragmented infrastructure, higher logistics costs and rigid labor laws. Also, India’s export basket is primarily traditional and doesn’t constitute cutting-edge commodities. About 70% of India’s exports target 30% of international trade comprising commodities with a dwindling global share.

There is a crucial requirement to stimulate our domestic production units to propel exports and expansion. Certain policy steps needed to be administered like reduction in corporate tax structure for existing as well as new manufacturing firms, the introduction of the Production-Linked Incentive (PLI) schemes in several key sectors, rationalization of labor laws and provide subsidies to MSMEs to assist domestic manufacturing achieve size and scale.

For the Indian economy, to steer onto the sharp recovery path it is crucial to provide a powerful focus on expanding the export sector. The golden chance of India merging itself into global value chains (GVCs) should be grabbed, as development of exports is the cylinder on which economic growth is fired for the foreseeable future.

2. INDIA’S CURRENT INTERNATIONAL TRADE TRENDS

The Indian exports services category has experienced a surge in growth and for the first time it accomplished US\$250 billion value from April-March 2021-22, demonstrating an optimistic growth of 21.31% over the financial year 2020-21. During the month of March 2022, the approximate value of exports under the services category is estimated at US\$ 22.52 billion, displaying a growth of 8.31% as compared to the same period last year - March 2021.

The Indian merchandise and services sectors combined exports for the period April-March 2021-22 are calculated to be US\$ 669.65 billion, reflecting a growth of 34.50% as compared to the previous year and a growth of 27.18% as compared to April 2019 to March 2020. The Indian merchandise and services sectors combined imports for

the period April-March 2021-22 are calculated to be US\$ 756.68 billion, demonstrating a growth of 47.80% as compared to the same previous year and a growth of 25.49% from April 2019 to March 2020. Refer to exhibit 1 which explains these trends in detail.

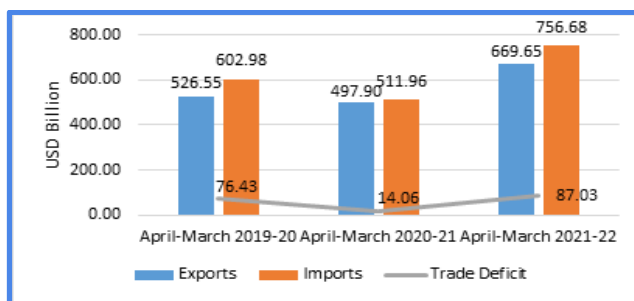
		April-March 2021-22 (USD Billion)	April-March 2020-21 (USD Billion)	April-March 2019-20 (USD Billion)	Growth vis-a-vis April-March 2020-21 (%)	Growth vis-a-vis April-March 2019-20 (%)
Merchandise	Exports	419.65	291.81	313.36	43.81	33.92
	Imports	611.89	394.44	474.71	55.13	28.90
	Trade Balance	-192.24	-102.63	-161.35	-87.32	-19.15
Services*	Exports	250.00	206.09	213.19	21.31	17.27
	Imports	144.79	117.52	128.27	23.20	12.88
	Net Services	105.21	88.57	84.92	18.80	23.89
Overall Trade (Merchandise+ Services)*	Exports	669.65	497.90	526.55	34.50	27.18
	Imports	756.68	511.96	602.98	47.80	25.49
	Trade Balance	-87.03	-14.06	-76.43	-518.87	-13.87

* Note: The latest data for services sector released by RBI is for February 2022. The data for March 2022 is an estimation, which will be revised based on RBI’s subsequent release. (i) Data for 2019, 2020 and April to December 2021 are revised on pro-rata basis using quarterly balance of payments data.

(Source: Indian Ministry of Commerce & Industry)

Exhibit 1: Trade during April-March 2019-22

Exhibit 2 graphically demonstrates the total exports and imports and the related trade deficit in India from April 2019 to March 2022.



(Source: Indian Ministry of Commerce & Industry)

Exhibit 2: Overall trade - export and import during April-March 2019-22

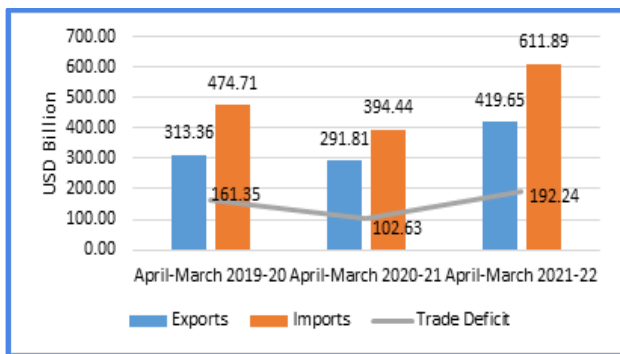
The Indian merchandise export sector for the duration April 2021 to March 2022 was valued at US\$ 419.65 billion as compared to April 2020 to March 2021 where it was valued at US\$ 291.81 billion, expressing an improvement of 43.81%. Also, from April 2019 - March 2020 to April 2021 - March 2022, the Indian exports sector demonstrated a development of 33.92%.

The Indian merchandise imports sector was valued at US\$ 611.89 billion for the duration April 2021 - March 2022, as compared to the time duration April 2020 to March 2021 at US\$ 394.44 billion, reporting a favorable expansion of 55.13%. Also, the merchandise imports sector in April 2021 to March 2022, expressed an

optimistic improvement of 28.90% from April 2019 to March 2020.

The Indian merchandise trade balance for the financial year April 2021 to March 2022 was valued at US\$ (-) 192.24 billion as compared to its value in April 2020 to March 2021, US\$ (-) 102.63 billion, which is registered as a decrease of (-) 87.32%. Also, in relation to April 2019 to March 2020 the trade balance was estimated at US\$ (-) 161.35 billion as compared to in April 2021 to March 2022 demonstrated an unfavorable growth of (-) 19.15%.

Exhibit 3 graphically demonstrates the merchandise exports and imports and the related trade deficit in India from April 2019 to March 2022.



(Source: Indian Ministry of Commerce & Industry)

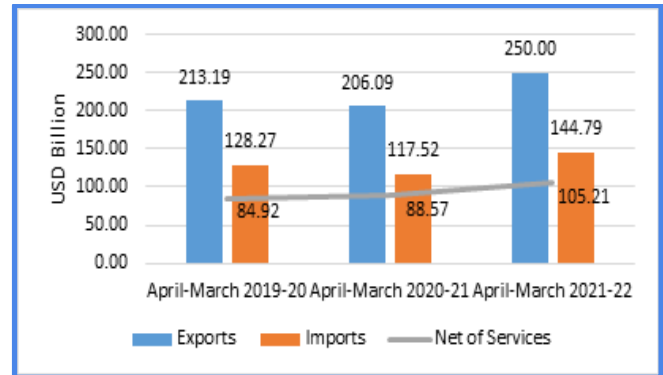
Exhibit 3: Merchandise Trade during April-March 2021-22

The computed value of the services sector in the export industry for the period April 2021 to March 2022 was estimated at US\$ 250.00 billion, displaying a favorable expansion of 21.31% as compared to its value in April 2020 to March 2021 at US\$ 206.09 billion and an optimistic development of 17.27% as compared to its value in April 2019 to March 2020 at US\$ 213.19 billion.

The calculated value of services sector in the imports industry for the period April 2021 to March 2022 was calculated to be US\$ 144.79 billion reflecting an improvement of 23.20% as compared to its value for the duration April 2020 to March 2021 at US\$ 117.52 billion and an optimistic development of 12.88% as compared to its value in April 2019 to March 2020 at US\$ 128.27 billion.

Also, the net of services for the duration of April 2021 to March 2022 was calculated at US\$ 105.21 billion as compared to the net of services value of US\$ 88.57 billion from April 2020 to March 2021, which was a surge of 18.80%, as compared to April 2019 to March 2020 valued at US\$ 84.92 billion and the net of services in April 2021 to March 2022 indicated a favorable improvement of 23.89%.

Exhibit 4 graphically demonstrates the services exports and imports and the related trade deficit in India from April 2019 to March 2022.



(Source: Indian Ministry of Commerce & Industry)

Exhibit 4: Services export and import during April-March 2019-22

Exhibits 5 & 6 depict the total exports and imports (both merchandise and services trade) and their growth pattern for March 2020, 2021 & 2022 in figures and graphically.

		March 2022 (USD Billion)	March 2021 (USD Billion)	March 2020 (USD Billion)	Growth vis-à-vis March 2021 (%)	Growth vis-à-vis March 2020 (%)
Merchandise	Exports	42.22	35.26	21.49	19.76	96.48
	Imports	60.74	48.90	31.47	24.21	93.00
	Trade Balance	-18.51	-13.64	-9.98	-35.72	-85.51
Services*	Exports	22.52	20.80	17.56	8.31	28.25
	Imports	13.16	12.26	10.09	7.33	30.46
	Net of Services	9.36	8.53	7.47	9.71	25.28
Overall Trade (Merchandise+ Services)*	Exports	64.75	56.05	39.05	15.51	65.80
	Imports	73.90	61.16	41.56	20.83	77.82
	Trade Balance	-9.15	-5.11	-2.51	-79.18	-265.14

* Note: The latest data for services sector released by RBI is for February 2022. The data for March 2022 is an estimation, which will be revised based on RBI's subsequent release. (ii) Data for 2019, 2020 and April to December 2021 are revised on pro-rata basis using quarterly balance of payments data.

(Source: Indian Ministry of Commerce & Industry)

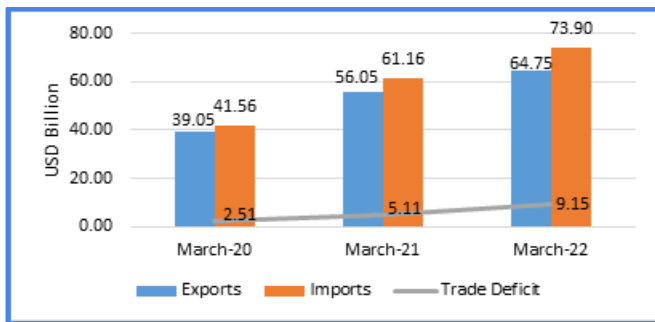
Exhibit 5: Trade during March 2022, 2021 & 2020

The exports merchandise category was valued at US\$ 42.22 billion in March 2022, as compared to US\$ 35.26 billion in March 2021, demonstrating a favorable development of 19.76%. Also, as described in this relation to March 2020, the Indian exports merchandise sector in March 2022 displayed an expansion of 96.48%.

The Indian merchandise imports sector in March 2022 was valued at US\$ 60.74 billion, which was an increment of 24.21% as compared to its evaluation at US\$ 48.90 billion in March 2021. The Indian imports sector in March

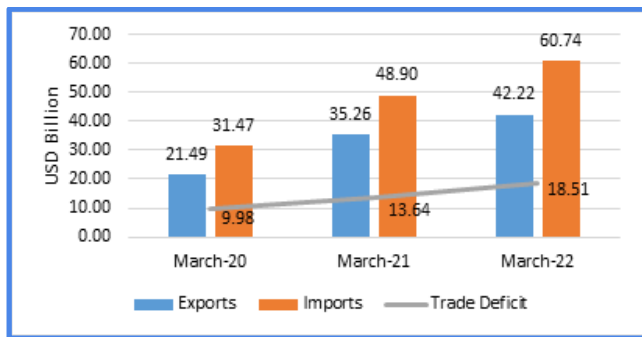
2022 reported an improvement of 93% as compared to March 2020.

The merchandise trade balance for March 2022 was totaled at US\$ (-) 18.51 billion as compared to US\$ (-) 13.64 billion in March 2021, which experienced a decrease of (-) 35.72%. Also, in March 2020 the merchandise trade balance was US\$ (-) 9.98 billion and vis-à-vis March 2022 it demonstrated an adverse growth of (-) 85.51%.



(Source: Indian Ministry of Commerce & Industry)

Exhibit 6: Overall trade - exports and imports during March 2020, 2021 & 2022



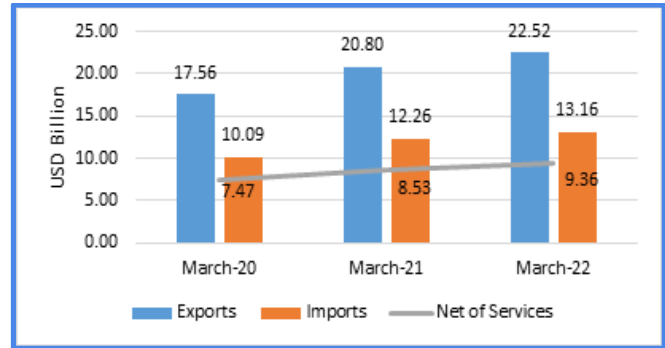
(Source: Indian Ministry of Commerce & Industry)

Exhibit 7: Indian merchandise trade during March 2020, 2021 & 2022

The computed value of the services sector in the export industry for March 2022 is US\$ 22.52 billion, demonstrating a constructive expansion of 8.31% compared to its value in March 2021 which was estimated at US\$ 20.80 billion and a favorable development of 28.25% as compared to its value in March 2020 which was estimated at US\$ 17.56 billion.

Also, the computed value of the services sector in the import industry for March 2022 was estimated at US\$ 13.16 billion ascertaining an optimistic expansion of 7.33% as compared to its value in March 2021 at US\$ 12.26 billion and an encouraging improvement of 30.46% as compared its value in March 2020 at US\$ 10.09 Billion.

The services trade balance during the period March 2022 is totaled at US\$ 9.36 billion, which is a growth of 9.71% over its value in March 2021 which was estimated at US\$ 8.53 billion and an enhancement of 25.28% compared to its value in March 2020 at US\$ 7.47 billion.



(Source: Indian Ministry of Commerce & Industry)

Exhibit 8: Export and import of the services trade during March 2020, 2021 & 2022

The merchandise trade of non-petroleum and non-gems & jewelry exports during the period April 2021 to March 2022 was estimated at US\$ 315.11 billion, which accounted for a 31.31% increment in the same exports sector for US\$ 239.98 Billion from April 2020 to March 2021 and a boost of 33.42% from April 2019 to March 2020 valued at US\$ 236.17 billion.

Also, the non-petroleum and non-gems & jewelry from April 2021 to March 2022 were estimated at US\$ 370.36 billion, documenting a favorable expansion of 43.85%, as compared to the estimated value of US\$ 257.47 billion from April 2020 to March 2021, with a favorable improvement of 27.38% for the duration April 2019 to March 2020 which the sector was valued at US\$ 290.74 billion.

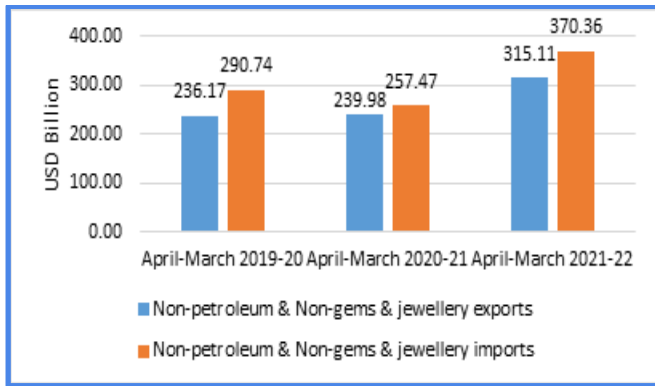
Refer to exhibits 9 & 10 to view trade excluding petroleum and gems & jewelry during April-March 2021-22 in figures and graphically.

	April-March 2021-22 (USD Billion)	April-March 2020-21 (USD Billion)	April-March 2019-20 (USD Billion)	Growth vis-à-vis April-March 2020-21 (%)	Growth vis-à-vis April-March 2019-20 (%)
Non-petroleum exports	354.21	266.00	272.07	33.16	30.19
Non-petroleum imports	450.82	311.75	344.16	44.61	30.99
Non-petroleum & Non Gems & Jewellery exports	315.11	239.98	236.17	31.31	33.42
Non-petroleum & Non Gems & Jewellery imports*	370.36	257.47	290.74	43.85	27.38

Note: Gems & Jewellery Imports include Gold, Silver & Pearls, precious & Semi-precious stones

(Source: Indian Ministry of Commerce & Industry)

Exhibit 9: Trade excluding petroleum and gems & jewelry during April-March 2021-22



(Source: Indian Ministry of Commerce & Industry)

Exhibit 10: Exports and imports of non-petroleum and non-gems & jewelry during April-March 2021-22

Under the merchandise trade sector the non-petroleum and non-gems & jewelry exports in March 2022 were estimated at US\$ 30.67 billion, reporting a favorable growth of 9.40%, as compared to exports of US\$ 28.03 billion in March 2021 for the same sector implying a positive growth of 80.90% in the sector over US\$ 16.95 billion in March 2020.

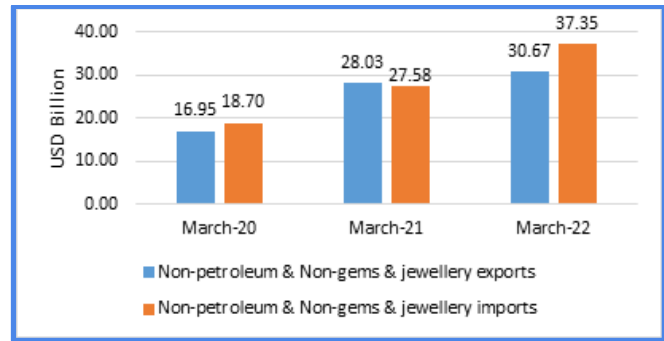
Also, the non-petroleum and non-gems & jewelry imports in March 2022, were estimated at US\$ 37.35 billion, indicating a favorable development of 35.44% over in March 2021 which was valued at US\$ 27.58 billion and an optimistic development of 99.77% in the sector over imports of US\$ 18.70 billion during March 2020. Refer to exhibits 11 and 12 which explain the trade of non-petroleum and non-gems & jewelry during March 2020, 2021 & 2022 in figures and graph formats.

	March 2022 (USD Billion)	March 2021 (USD Billion)	March 2020 (USD Billion)	Growth vis-à-vis March 2021 (%)	Growth vis-à-vis March 2020 (%)
Non-petroleum exports	34.45	31.65	18.97	8.85	81.57
Non-petroleum imports	41.95	38.63	21.42	8.59	95.79
Non-petroleum & Non Gems & Jewellery exports	30.67	28.03	16.95	9.40	80.90
Non-petroleum & Non Gems & Jewellery imports*	37.35	27.58	18.70	35.44	99.77

Note: Gems & Jewellery Imports include Gold, Silver & Pearls, precious & Semi-precious stones

(Source: Indian Ministry of Commerce & Industry)

Exhibit 11: Trade of non-petroleum and non-gems & jewelry during March 2020, 2021 & 2022



(Source: Indian Ministry of Commerce & Industry)

Exhibit 12: Exports and imports of non-petroleum and non-gems jewelry during March 2020, 2021 & 2022

3. INTERNATIONAL TRADE BASKET COMPOSITION

In 2021-22, India overshoots its export target and achieves US\$ 417.8 billion in exports. Non-petroleum exports observed a boost in their growth and engineering products exports witnessed 45.5% growth in 2021-22. Also, exports of wheat are inclined to outperform 10 million tons in 2022-23. The agricultural industry reflects a remarkable expansion and its annual exports are inclined to have reached US\$ 50 billion. Greater agricultural exports symbolize the proficiency of Indian agriculturist to meet the requirement of 1.35 billion populations and generate an extra to export worldwide, yet India is far behind its potential strength in this sector.

Apart from the assorted range of merchandise goods exported and imported during the period 2021-22, India’s merchandise exports have also observed substantial growth in trade to various nations, particularly, developed countries namely - exports to the USA, UAE, Bangladesh, Netherlands, Singapore, Hong Kong, UK, Belgium and Germany grew for the FY 2020-2021.

The micro small and medium enterprises (MSMEs) sector provides considerably to the Indian economy in terms of GDP, income and employment generation. According to the Directorate General of Commercial Intelligence and Statistics, the share of MSMEs related products in total value of exports from India during 2018-19 was 48.10%.

Listed here are export and import commodity groups and their positive and negative trends over the last two years.

Sl. No.	Commodities	(Values in Million USD)		% Change
		MAR'21	MAR'22	
<i>Commodity groups exhibiting positive growth</i>				
1	Petroleum Products	3609.36	7775.16	115.42
2	Leather & leather products	317.79	413.11	29.99
3	Electronic Goods	1400.67	1818.42	29.82
4	Cereal preparations & miscellaneous processed items	191.60	242.02	26.32
5	Other cereals	78.80	97.04	23.15
6	RMG of all Textiles	1425.95	1740.35	22.05
7	Organic & Inorganic Chemicals	2288.87	2793.18	22.03
8	Cotton Yarn/Fabs./made-ups, Handloom Products etc.	1105.05	1342.97	21.53
9	Plastic & Linoleum	719.54	850.71	18.23
10	Coffee	97.41	114.70	17.75
11	Engineering Goods	9298.36	10877.53	16.98
12	Man-made Yarn/Fabs./made-ups etc.	459.94	527.69	14.73

Exhibit 13: Export of commodity groups in March 2021 & 2022 and their positive percentage growth

13	Jute Mfg. including Floor Covering	44.48	49.29	10.82
14	Tea	53.38	58.27	9.16
15	Marine Products	554.25	598.23	7.93
16	Meat, dairy & poultry products	345.05	368.68	6.85
17	Gems & Jewellery	3613.01	3779.52	4.61
18	Ceramic products & glassware	323.45	337.79	4.43
19	Drugs & Pharmaceuticals	2295.05	2391.41	4.20
20	Tobacco	85.62	86.42	0.93

(Source: Indian Ministry of Commerce & Industry)

Exhibit 14: Export of commodity groups in March 2021 & 2022 and their negative percentage growth

Sl. No.	Commodities	(Values in Million USD)		% Change
		MAR'21	MAR'22	
<i>Commodity Groups exhibiting negative growth</i>				
21	Iron Ore	720.88	339.83	-52.86
22	Oil Meals	193.91	101.00	-47.91
23	Mica, Coal & Other Ores, Minerals including processed minerals	952.95	569.88	-40.20
24	Oil seeds	107.67	87.56	-18.68
25	Spices	447.78	388.16	-13.31
26	Rice	1116.54	1023.33	-8.35
27	Handicrafts excl. hand made carpet	176.71	174.26	-1.39
28	Carpet	157.17	155.09	-1.32
29	Fruits & Vegetables	377.10	372.72	-1.16
30	Cashew	40.44	40.09	-0.87

(Source: Indian Ministry of Commerce & Industry)

Exhibit 15: Import of commodity groups in March 2021 & 2022 and their positive percentage growth

Sl. No.	Commodities	(Values in Million USD)		% Change
		MAR'21	MAR'22	
<i>Commodity Groups exhibiting positive growth</i>				
1	Silver	9.85	124.98	1168.83
2	Fertilisers, Crude & manufactured	204.16	1656.78	711.51
3	Coal, Coke & Briquettes, etc.	1735.74	4594.32	164.69
4	Pulses	77.28	142.84	84.83
5	Petroleum, Crude & products	10271.38	18793.68	82.97
6	Medicinal & Pharmaceutical products	630.08	1148.93	82.35
7	Vegetable Oil	1076.81	1734.60	61.09
8	Pulp and Waste paper	91.38	146.03	59.81
9	Newsprint	17.54	27.74	58.15
10	Cotton Raw & Waste	40.42	61.97	53.32
11	Electronic goods	5864.15	8530.46	45.47
12	Pearls, precious & Semi-precious stones	2547.27	3428.31	34.59

13	Organic & Inorganic Chemicals	2102.57	2792.15	32.80
14	Metaliferous ores & other minerals	455.83	586.51	28.67
15	Leather & leather products	69.35	81.49	17.51
16	Fruits & vegetables	185.43	217.48	17.28
17	Iron & Steel	1328.44	1493.30	12.41
18	Non-ferrous metals	1400.11	1572.58	12.32
19	Artificial resins, plastic materials, etc.	1719.92	1928.57	12.13
20	Sulphur & Unroasted Iron Pyrites	27.82	29.59	6.36
21	Wood & Wood products	526.99	546.00	3.61
22	Machinery, electrical & non-electrical	3513.68	3546.06	0.92

(Source: Indian Ministry of Commerce & Industry)

Exhibit 16: Import of commodity groups in March 2021 & 2022 and their negative percentage growth

Sl. No.	Commodities	(Values in Million USD)		% Change
		MAR'21	MAR'22	
<i>Commodity Groups exhibiting negative growth</i>				
23	Gold	8493.69	1041.17	-87.74
24	Project goods	66.10	45.85	-30.64
25	Dyeing/tanning/colouring materials.	385.55	342.36	-11.20
26	Machine tools	355.36	325.05	-8.53
27	Transport equipment	2210.75	2032.72	-8.05
28	Professional instrument, Optical goods, etc.	560.18	532.08	-5.02
29	Textile yarn Fabric, made-up articles	167.98	163.41	-2.72
30	Chemical material & products	914.21	909.74	-0.49

4. COMPARISON ANALYSIS OF THE EXPORT PERFORMANCE OF INDIA VIS-A-VIS CHINA

Over the recent years, the international trade pattern presents to India a phenomenal chance to grow its economic opportunities like China and thereby create exceptional employment alternatives for our burgeoning youth community. By incorporating the concept of “Assemble in India for the world” into “Make in India”, our nation can generate 4 crore well-paid employment opportunities and boost its export market share to about 3.5% by 2025 and 8 crore employment opportunities boosting its exports market share to 6% by 2030. The incremental value added to the Indian economy from the targeted level of network products exports is anticipated to be US\$248 billion by 2025 and would account for approximately 25% of the rise required for making India a US\$5 trillion economy by 2025.

China’s extraordinary export accomplishment vis-à-vis India is propelled specifically due to evaluated specialization on a vast scale in labor-intensive business actions, particularly for network products, where output manufacturing exists across the Global Value Chains (GVCs) administered by multinational businesses. For example, network products industries include firms manufacturing and assembling parts globally for computers, electronic and electrical equipment, telecommunication equipment and automobiles.

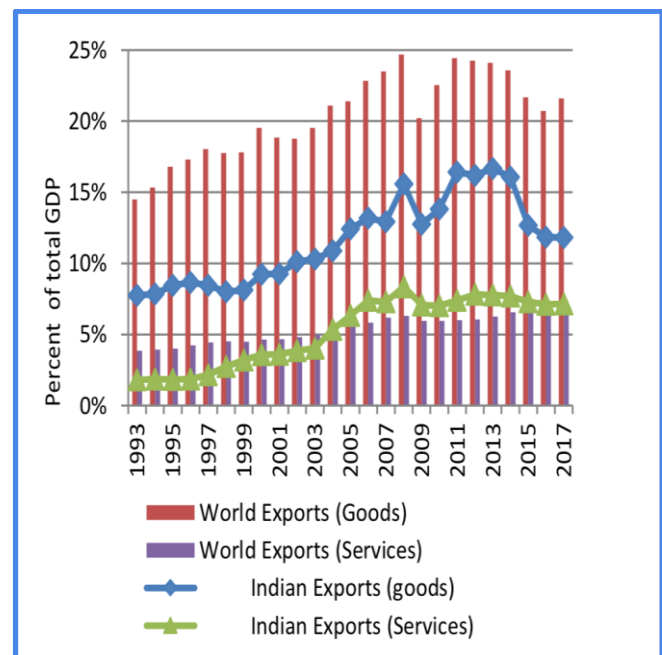
China’s emphasis was on facilitating assembling operations at an enormous scale in deliberate specialization in network products. By importing components and assembling them in China for global business, China created employment opportunities at a remarkable scale. Hence, India must concentrate on organization of network products industries, where manufacturing processes are globally fragmented and regulated by leading multinational corporations within their producer driven international output manufacturing systems.

As India suffers from trade deficits on the international trade front it must grab such chances and our trade policy must be focused in this direction. The expansion in exports will contribute to a much awaited course for employment innovation techniques in India. For example, from 2001- 2006 labor-intensive exports facilitated China to build 70 million employment opportunities for laborers who had attained only primary education.

The US–China trade conflict and the spread of the pandemic from China are resulting in crucial adjustments in Global Value Chains (GVCs) and multinational

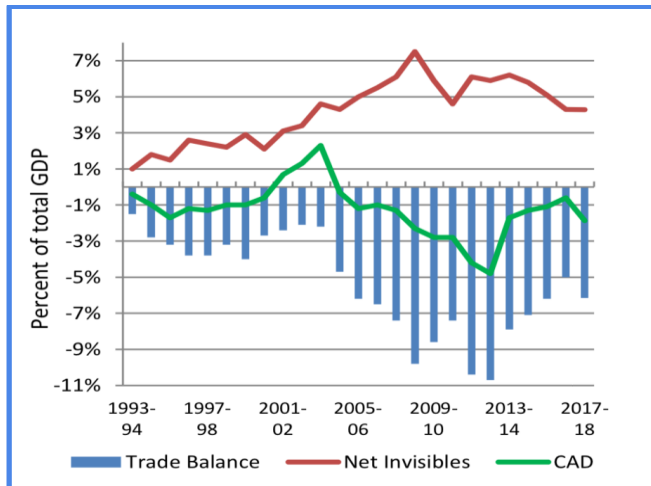
corporations are presently looking for alternative locations for their operations. Also, before the trade war commenced, China’s impression as a low-cost nation for final assembly of industrial commodities was quickly altering due to labor scarcities and rise in wages. These advancements present to India phenomenal opportunities to chart an analogous export trajectory as that was followed by China and establish unparalleled employment opportunities for its youth community and expand the labor-intensive export sectors.

After the economic liberalization reforms of 1991 in India, the country's share of merchandise exports has risen at 13.2% per annum and its share in global exports has boosted from 0.6% in 1991 to 1.7% in 2018. However, even by 2018, India’s global market share remains insignificant compared to 12.8% for China. Further, the share of Indian merchandise exports as a percentage of India's GDP persisted to be consistently low vis-à-vis the global average by a substantial margin as depicted in exhibit 17. The imports of merchandise have risen faster as compared to merchandise exports, at the rate of 14.9% per annum for the period 1993-2018, resulting in an increment in trade deficits as depicted in exhibit 18. However, the exports of services grew faster than imports of services, contributing some support to the current international trade account deficit.



(Source: UNCTAD Statistics and Survey Calculations)

Exhibit 17: Share of exports both goods and services as a percentage of GDP of India versus world from 1993 to 2018

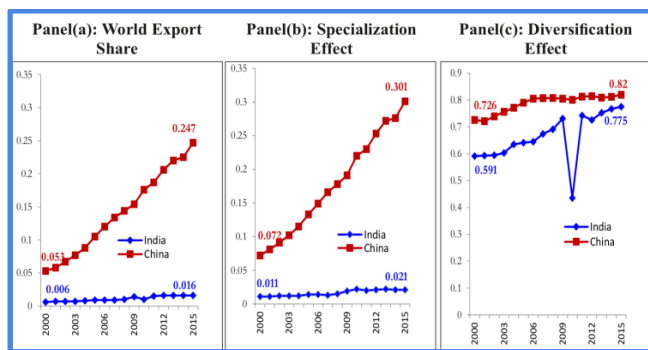


(Source: Reserve Bank of India and Survey Calculations)

Exhibit 18: India’s international trade balance, net invisible and current account deficit (CAD) from 1993-2018

4.1 Specialization versus diversification

Refer to exhibit 19 panel (a) where it can be viewed that the international exports market shares for India and China is a mirror image of exhibit 19 panel (b) which reveals the contribution of specialization. Therefore, the China-India gap in the world’s export market share is solely steered by the consequences of specialization. However, India is catching up with China in terms of diversification across export products and markets which are portrayed in exhibit 19 panel (c). Overall, the high diversification blended with low specialization indicates that India is spreading its exports thinly over multiple products and partners, leading to its lackluster performance vis-à-vis China.

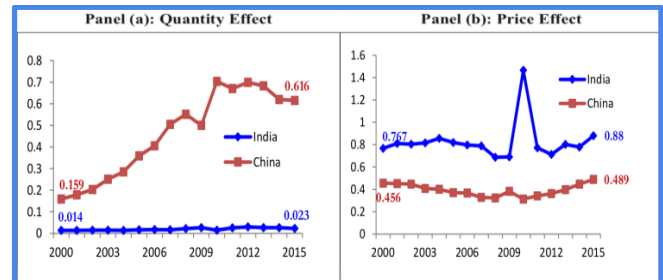


(Source: Veeramani, Aerath and Gupta (2018) based on UN-Comtrade (WITS) database)

Exhibit 19: Decomposition of the world’s export market share of India versus China into specialization and diversification effects of manufactured products from 2000 to 2015

Following Hummels and Klenow (2005) study, the specialization effect over time can bring about changes in the quantity and the prices of exported products. Hence, it

is in the interest of India to further decompose the specialization effect into quantity and price effects. Exhibit 20 displays that the China-India export gap concerning specialization has been propelled by the quantity effect. Therefore, if India yearns to evolve as a significant exporter, it should specialize more in the regions of its comparative advantage and accomplish substantial quantity growth.

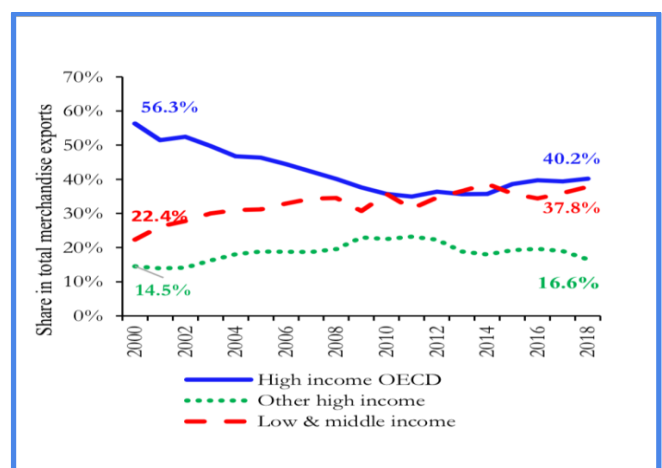


(Source: Veeramani, Aerath and Gupta (2018) based on UN-Comtrade (WITS) database)

Exhibit 20: Decomposition of specialization effect into quantity and price for both India and China from 2000-2015

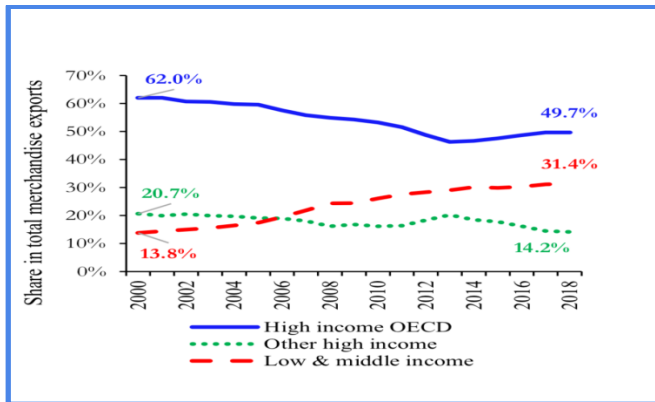
4.2 Inadequate market penetration of exports in developed nations

The prominence of capital-intensive products in India’s export basket along with an insufficient level of participation in GVCs have resulted in a disproportionate shift in India’s geographical direction of exports from high-income markets to other nations. On the other hand, the traditional rich OECD markets account for 49.7% of China’s exports in 2018 which is depicted in exhibit 22 and the related figure for India was 40.2% portrayed in exhibit 21; and high-income OECD and other high-income countries jointly accounted for 63.9% of China’s exports while that of India was 56.8%.



(Source: UN-Comtrade (WITS) database and Survey Calculations)

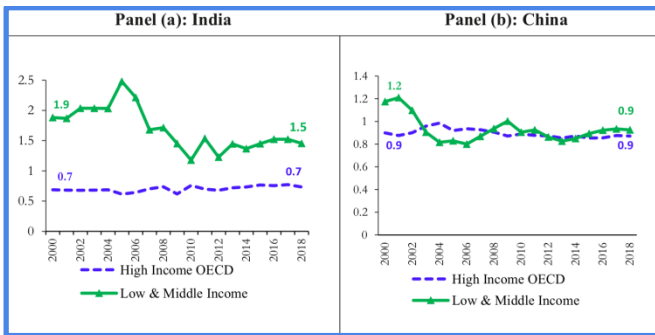
Exhibit 21: Exporting nations for India by income levels



(Source: UN-Comtrade (WITS) database and Survey Calculations)

Exhibit 22: Exporting nations for China by income levels

Also, as a general phenomenon, developing countries particularly those with insufficient level of participation in GVCs, find it incredibly tough to export capital-intensive products to the quality conscious markets in high-income nations. In contrast to capital-intensive commodities, developed rich nations normally function as a bigger market for India’s unskilled labor-intensive commodities. Also, China’s export products, irrespective of whether they originate as capital-intensive or unskilled labor-intensive, can infiltrate equally well in rich and low & middle-income nation markets, which is portrayed in exhibit 23. Actually for China, this structure is expected as it is an assembly center for the international markets, irrespective of who the client is.

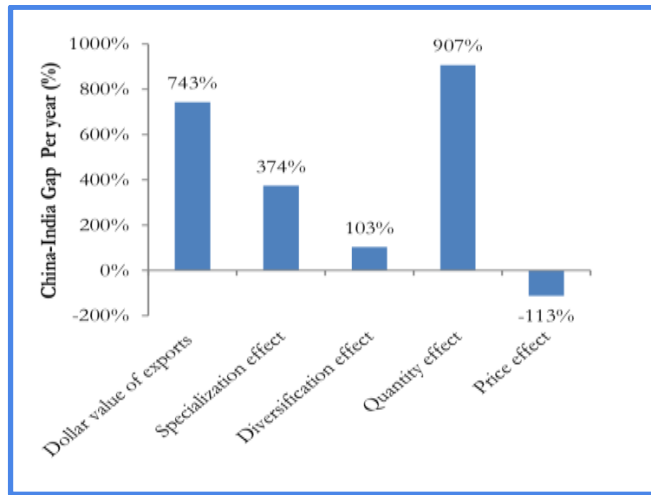


(Source: UN-Comtrade (WITS) database and Survey Calculations)

Exhibit 23: The share of capital-intensive exports as a ratio of the share of labor-intensive products across India and China partner country groups

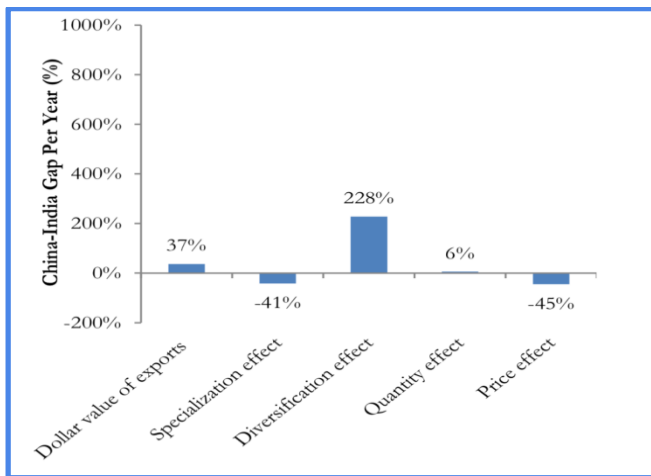
The magnitude of the China-India gap in terms of US\$ market value of total exports, specialization effect, diversification effect, quantity effect and price effect is depicted in exhibit 24. On an approximate average, China’s market export value in US\$ terms surpasses that of India by about 743% per year from the period 2000-2015. The majority of this gap is accounted for by specialization and quantity effects. Interestingly, the

China-India gap almost completely fades away once the effect of China’s high trade orientation with rich trading partners is not taken into account, which is portrayed in exhibit 25.



(Source: Based on regression results in Veeramani, Aerath and Gupta, 2018)

Exhibit 24: Estimates of the China-India export gaps in terms of percentage



(Source: Based on regression results in Veeramani, Aerath and Gupta, 2018)

Exhibit 25: China-India export gaps after controlling for China’s exports to high-income partner countries

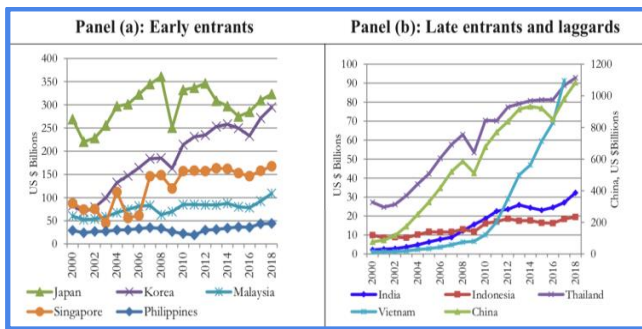
A widespread reasoning is that China’s monetary exchange rate policy primarily contributed to its export accomplishment. Nonetheless, India’s export under-performance prevailed over the last twenty years when India’s monetary exchange rate depreciated significantly. Also, the multivariate analysis using regressions, which are excluded for brevity, indicates that exchange rate doesn’t reasonably illustrate the China-India gap. China’s extraordinary export achievement described in relation to India is propelled by a set of complementary facets - an increased level of participation in GVCs, an outstanding

degree of specialization in labor-intensive manufacturing business activities, vast scale specialization in the selected industrial sectors and an increased level of export penetration in high income markets.

In a nutshell, propelled by the essence of its specialization, India has benefited from a robust windfall in relatively low and middle-income nation markets but at the price of forfeiting larger markets in wealthier nations. However, India can gain considerably by manipulating the potential opportunities from substantial trade with high-income markets; this needs a reorientation of our trade specialization towards labor-intensive product lines. This can be accomplished via particular emphasis on traditional labor-intensive industries namely textiles, particularly man-made fibers and a heightened participation in GVCs.

5. COMPARISON STUDY OF NET PRODUCTS EXPORTS FROM - INDIA VERSUS EAST AND SOUTHEAST ASIA

Exports of net products are highly significant to add to gross value to exports and generate income and employment for the exporting nation. Exhibit 26 illustrates the period when multiple nations in Asia commenced the export of net products and the value trends of these products from 2000 to 2018.

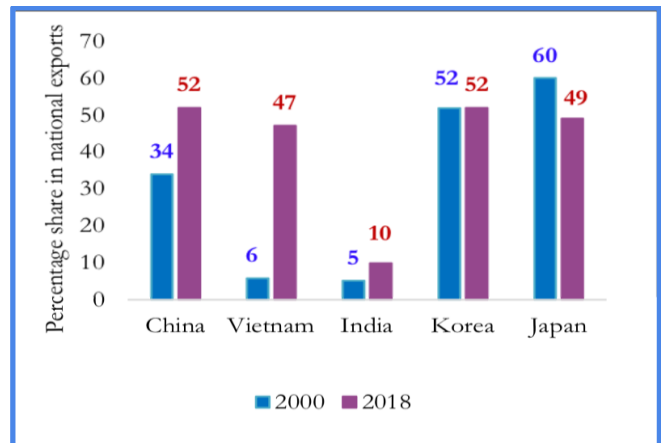


(Source: UN Comtrade (WITS) Database and Survey Calculations)

Exhibit 26: Exports of net products by Asian nations in US\$ Billions from 2000 to 2018

Even though India’s market value of export for network products improved from about US\$2 billion in 2000 to US\$32 billion in 2018, its participation in the exports of network products market remains tiny as compared to the performance of other Asian countries, as depicted in exhibit 27. It is apparent that, despite some rise, network product exports comprise a very insignificant share (10% in 2018) in India’s export basket. On the other hand, these products comprise about half of the total national exports of China, Japan and Korea. For the period 2000 to 2018,

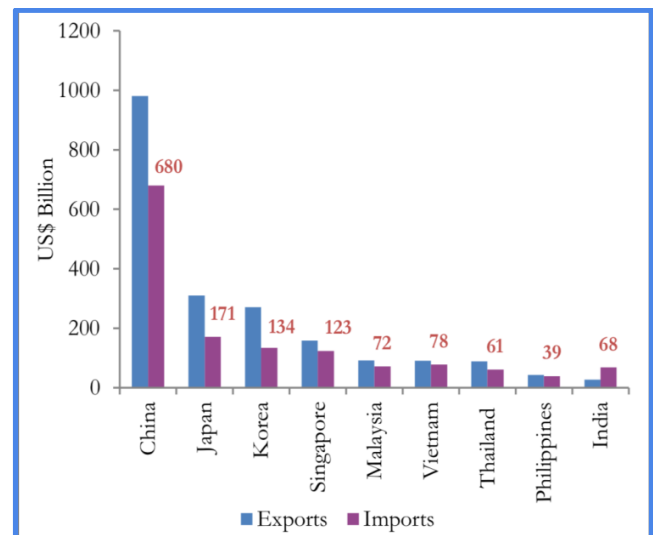
the share of network products in the export basket has improved by 41% for Vietnam and by 18% for China.



(Source: UN Comtrade (WITS) Database and Survey Calculations)

Exhibit 27: The share of network products in national merchandise exports for east and southeastern Asian nations

Amongst the major Asian nations, India and Indonesia are the only nations which experience a trade deficit in network products as demonstrated in exhibit 28. India had an import value of network products of US\$ 68 billion in 2017, which is greater than that of Thailand US\$ 61 billion and the Philippines US\$ 39 billion, even as the other two nations documented considerably elevated levels of exports as compared to India.



(Source: UN Comtrade (WITS) Database and Survey Calculations)

Exhibit 28: Export and imports of Among the major Asian countries, India is the only one with trade deficit in NP

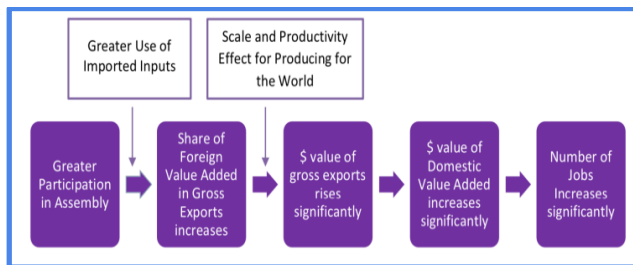
India’s network products exports comprise automobiles, electrical machinery, telecommunications, sound recording equipment and scientific equipment.

6. CONCLUDING STATEMENT: THE WAY FORWARD

India is now concentrating on exporting more value-added and high-end products. The top products exported from India include leather goods, electronics, engineering products, petroleum goods, gems and jewelry, chemicals, cereals and ready-made garments. Despite the high record of export figures, India’s merchandise exports to GDP ratio have been on a declining trend. It stood at 10.94% in FY21, slumping from 11.07% in FY 20 and 12.2% in FY19. Listed here are a few suggestions to boost Indian exports to generate economic growth and employment. India’s target is to go from local to global.

6.1 “Assembling in India” as part of “Make in India”

According to the Grossman and Rossi-Hansberg titled “Trading Tasks: A Simple Theory of Offshoring” report in 2008, an elevated degree of participation in GVCs for a nation indicates that the amount of foreign value added in gross exports is greater than when most inputs are sourced locally. Nevertheless, owing to the scale and productivity impacts of selling in global markets, participation in GVCs can steer greater absolute levels of domestic value added and domestic employment creation. Exhibit 29 explains the abstract structure illustrating this manifestation.



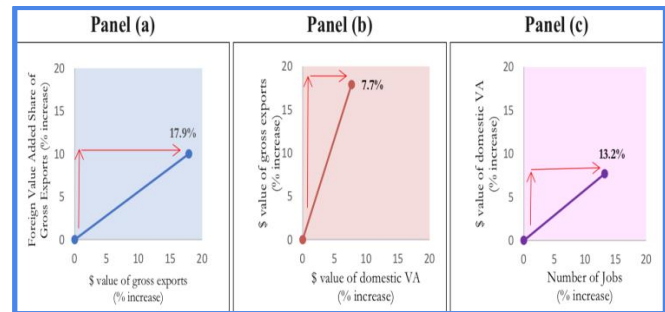
(Source: Economic Survey 2019-20 Volume 1)

Exhibit 29: The conceptual framework for benefits from “Assembling in India” as part of “Make in India”

6.2 Participation in GVCs

Multivariate calculation utilizing regressions ascertains that participation in GVCs, as computed by the sectorial ratio of foreign value added to gross value of exports, directs elevated absolute levels of gross exports, domestic value added and employment as depicted in exhibit 30. It is observed that a 10% rise in foreign value-added share of gross exports directs to a 17.9% boost in the US\$ value of gross exports as demonstrated in exhibit 30 panel (a), which further leads to domestic value added from exports to improve by 7.7% as portrayed in exhibit 30 panel (b) and eventually 7.7% gain in domestic value-added increases employment by 13.2%. These relationships are robust to various prototype specifications with an entire

set of control variables. Hence, India can earn wealthy dividends by adopting strategies strived at bolstering its participation in GVCs.



(Source: Based on regression results in Veeramani and Dhir (2019a) and Survey Calculations)

Exhibit 30: Benefits from participation in GVCs and empirical evidence for India’s manufacturing industrial sector

6.3 Industries in India should specialize in enhancing employment opportunities

India has a substantial unexploited export capacity in its traditional unskilled labor-intensive businesses namely - textiles, clothing, footwear and toys. The GVCs in these businesses are governed by consumer-propelled systems wherein the leading corporations that are established in advanced nations focus on greater value-added business activities such as product designing, branding and marketing techniques and physical output manufacturing is carried out through subcontracting arrangements by these companies in developing countries.

6.4 Strengthening India’s involvement in the network products export market

India has a vast ability to develop as an important center for the final assembly of network products. The GVCs in these businesses are governed by leading MNEs within producer driven systems. These products are not produced from the beginning to finishing stages within a given nation; multiple regions work in specific tasks or stages for the commodity manufacturing sequence. Within the output creation system, each nation specializes in a specific component of the manufacturing procedure; this specialization is based on the nation’s comparative advantage. Prosperous labor countries like India can specialize in low skilled labor-intensive phases of manufacturing and assembly while the developed nations specialize in capital and skill-intensive stages such as research and development. Therefore, the lead corporations possess skill, mastery and knowledge-intensive stages of production in developed countries but locate assembly units in developing nations.

The experience of developing countries like China and Vietnam demonstrates that they have attained quick and sustained export growth. This indicates that India can earn wealthy earnings by accepting strategies strived at bolstering its involvement in the export market for network products. Given the enormous workforce with moderately low skill, India’s current strength lies especially in the assembly of network products. While the immediate goal is the large-scale expansion of assembly businesses by making use of imported components, giving an upswing to domestic manufacturing of such parts and upgrading within GVCs should be the long-term motive. Assembly units are majorly labor intensive, which enables the creation of employment opportunities for the masses, while in the long-run domestic manufacturing of these components can build opportunities for high-skill jobs.

A significant question is whether participation in GVCs indicates that low-wage nations would continue to be permanently clasped at the bottom horizon of the output generating processes, but the case studies of India’s auto sector demonstrate that such uncertainties are unwarranted.

6.5 Zero or negligible import tariffs for intermediate goods and favorable FDI policies

For a nation to evolve into a desirable location for assembly units, import tariff rates for intermediate goods must be negligible or zero. Also, it is necessary to establish an ecosystem that will stem from the realignment of India’s specialization patterns towards labor-intensive procedures and product lines and conduct reforms to empower considerable flexibility in the labor markets. Favorable foreign direct investment programs are also crucial as multinational firms are the prominent engines for a nation’s entry into worldwide production systems while domestic companies act as subcontractors and suppliers of intermediate inputs to these big businesses. Assembly procedures require trainable low-cost unskilled labor and substantial middle-level supervisory management for this purpose. An interesting illustration explaining this is when Apple assigned 7,00,000 plant workers in China, it also employed 30,000 engineers to regulate the laborers’ tasks.

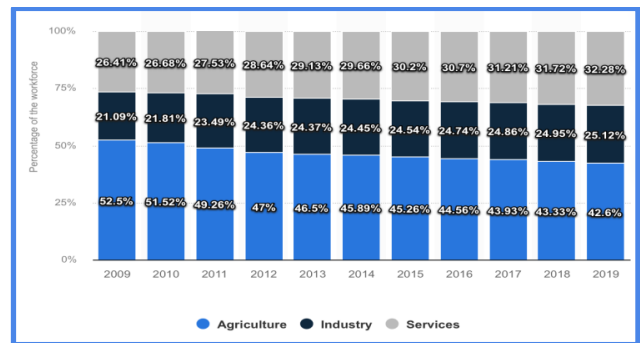
6.6 Low service link costs

Low level of expenditures associated with transportation, power generation, information technology and communication and other business activities is a pre-requirement for nations to bolster their participation in GVCs. Supply disturbances due to shipping holdups,

energy failure, political upheavals and labor conflicts can disturb the whole production chain.

7. APPENDIX SECTION: COMPARISON OF THE WORKING AGE OF POPULATION WITH EXPORTS IN A NATION

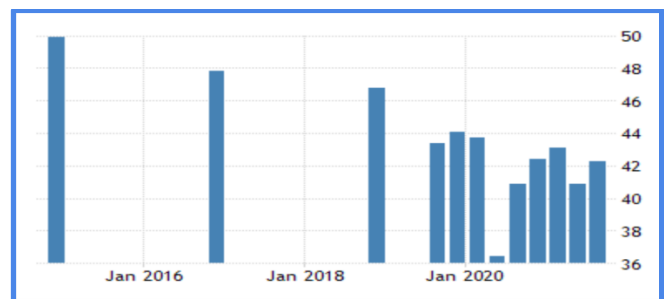
A boost in exports helps in generating employment. Refer to exhibit 31 which gives the distribution breakup of the Indian workforce. A majority of the workforce is employed in the agricultural sector but its contribution to GDP is the least compared to the three sectors. In fact the services sector which has the least percentage of the workforce contributes the maximum to GDP.



(Source: Statista)

Exhibit 31: Distribution of the Indian workforce across the three economic sectors

According to the Ministry of Statistics and Programme Implementation, “The employment rate in India increased to 42.30% in the third quarter of 2021 from 40.90% in the second quarter of 2021.” Exhibit 32 depicts the ratio of the working population to the total population and portrays that less than 50% of the population works in India.



Related	Last	Unit	Reference
Employed Persons	29579.00	Thousand	Dec 2012
Labor Force Participation Rate	47.30	percent	Mar 2022
Population	1380.00	Million	Dec 2021
Employment Rate	42.30	percent	Sep 2021
Youth Unemployment Rate	22.90	percent	Mar 2021

India Worker Population Ratio						
In India, Worker Population Ratio (WPR) is the percentage of persons employed among the persons in the population.						
Actual	Previous	Highest	Lowest	Dates	Unit	Frequency
42.30	40.90	50.80	36.40	2012 - 2021	percent	Quarterly

(Source: Trading Economics)

Exhibit 32: Indian working population ratio to total population

Listed below are a series of graphs which conduct a comparison analysis of the working age population in a nation with the exports in that nation for 2018 and within India there is a comparison for the same for a particular state. The line in the center of each graph is a linear relation between exports and working age population percentage and it is at a 45-degree angle bisecting the two axes. None of the countries lie on this line or are even close to it except China. Using the metric as US\$ 5 billion increase in exports per 1% increase in working age population (using unitary method), It was noticed that the 5 Indian states used for evaluation are behind their potential capacities - Tamil Nadu is US\$ 343 billion behind its capacity, Odisha is US\$ 318 billion behind its capacity, Uttar Pradesh is US\$ 292 billion behind its capacity, Telangana is US\$ 284.6 billion behind its capacity and Madhya Pradesh is US\$ 304.5 billion behind its capacity.

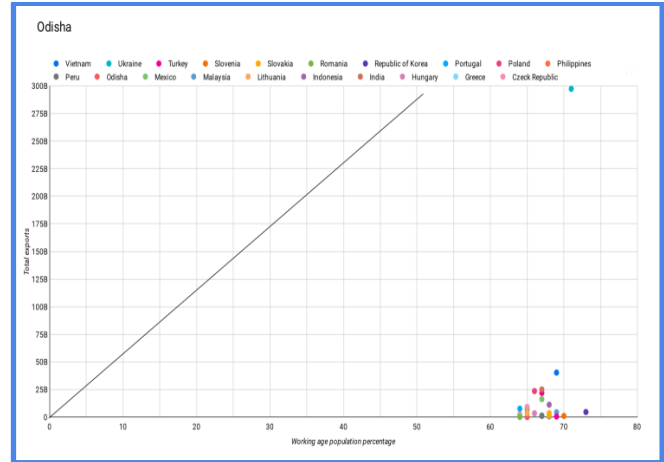


Exhibit 34: The comparison of the working age population in nation with the exports in that nation for 2018, in India the comparison is for the state of Odisha

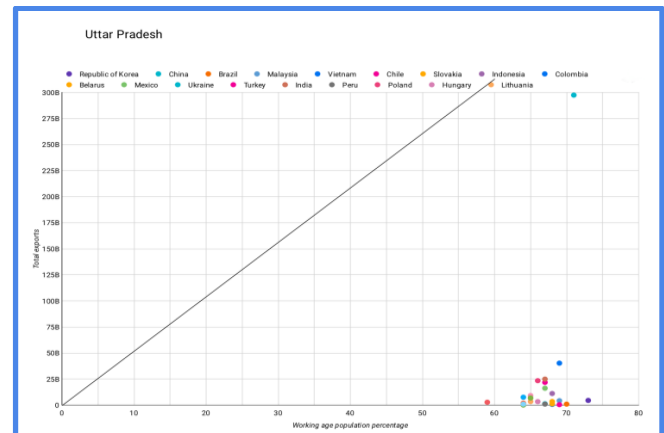


Exhibit 35: The comparison of the working age population in nation with the exports in that nation for 2018, in India the comparison is for the state of Uttar Pradesh

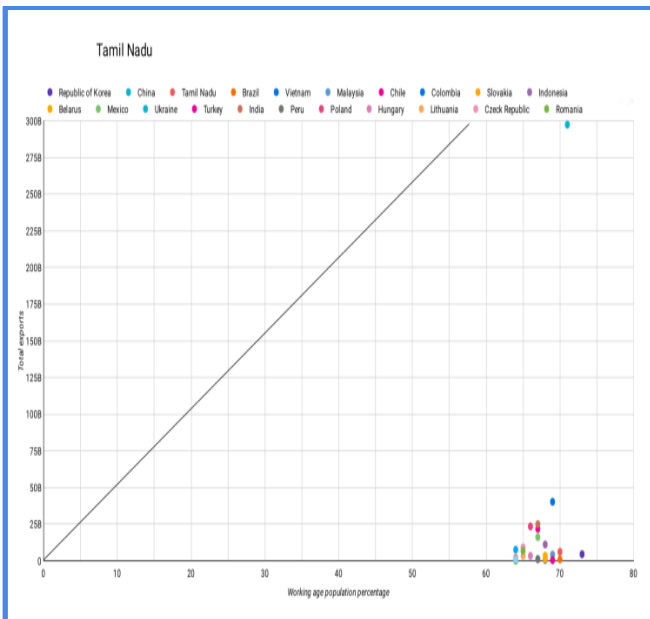


Exhibit 33: The comparison of the working age population in nation with the exports in that nation for 2018, in India the comparison is for the state of Tamil Nadu

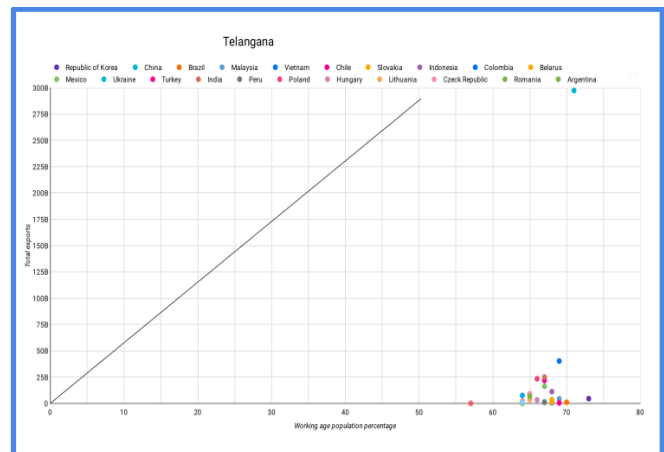


Exhibit 36: The comparison of the working age population in nation with the exports in that nation for 2018, in India the comparison is for the state of Telangana

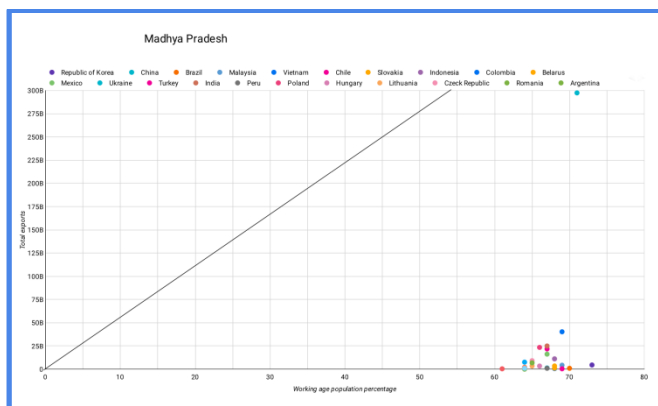


Exhibit 37: The comparison of the working age population in nation with the exports in that nation for 2018, in India the comparison is for the state of Madhya Pradesh

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