Delhi Policy Group

Advancing India's Rise as a Leading Power

DPG POLICY REPORT

Rejuvenating India-Japan Economic Relations: the Way Forward

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Indian Prime Minister Narendra Modi addressing Indian and Japanese business leaders in Tokyo, October 29, 2018. Source: Twitter/@MEAIndia

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List of Abbreviations

ASEAN	Association of Southeast Asian Nations
C&I	Commercial and Industrial
CAGR	Compound Annual Growth Rate
CAROTAR	Customs (Administration of Rules of Origin under Trade Agreements) Rules
CBIC	Chennai-Bangalore Industrial Corridor
CEPA	Comprehensive Economic Partnership Agreement
CII	Confederation of Indian Industry
COOL	Country of Origin Labelling
DAC	Development Assistance Committee
DMFC	Delhi-Mumbai Freight Corridor
DMIC	Delhi-Mumbai Industrial Corridor
DPD	Direct Port Delivery
DPE	Direct Port Entry
DPIIT	Department for Promotion of Industry and Internal Trade
EPA	Economic Partnership Agreement
EXIM	Export-Import
EY	Ernst & Young
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GAVI	Global Alliance for Vaccines and Immunisation
GDP	Gross Domestic Product
GVA	Gross Value Added
ICEGATE	Indian Customs Electronics Gateway
IDA	International Development Association
IPR	Intellectual Property Right
IT-ITES	Information Technology-Information Technology Enabled Services
JETRO	Japan External Trade Organisation
JICA	Japan International Co-operation Agency
JIS	Japanese Industrial Standard
JSG	Joint Study Group
JV	Joint Venture
LARR	Land Acquisition, Rehabilitation and Resettlement
LPI	Logistics Performance Index
METI	Minister of Economy, Trade and Industry
MFN	Most Favoured Nation
MMF	Man-Made Fibre
MNC	Multi-national Corporation
MRA	Mutual Recognition Arrangement

MRL	Maximum Residue Level
MSME	Micro Small and Medium Enterprises
NTB	Non-Tariff Barrier
NTM	Non-Tariff Measure
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
RCEP	Regional Comprehensive Economic Partnership
RMS	Risk Management System
SCRI	Supply Chain Resilience Initiative
SIA	Social Impact Assessment
SPS	Sanitary and Phytosanitary
STRI	Services Trade Restrictiveness Index
SWIFT	Single Window Interface for Facilitation of Trade
TBT	Technical Barriers to Trade
TCS	TATA Consultancy Services
TPP	Trans-Pacific Partnership
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
USA	United States of America
USTR	United States Trade Representative
WDI	World Development Indicators
WITS	World Integrated Trade Solution
WTO	World Trade Organization

Executive Summary

The economic and demographic profiles make the economic interests of India and Japan highly complementary with enormous potential to drive trade and investment relations between the two economies. The changing world economic order gives strategic dimension to the bilateral relations. With a clear realisation about the potential of bilateral relations, the political engagement between India and Japan has seen continuous up-gradation since the early 2000s, moving from 'Global Partnership' in 2000 to 'Strategic and Global Partnership' in 2006 and further to 'Special Strategic and Global Partnership' in 2014. These engagements have also been complemented by a number of bilateral economic pacts including the India-Japan CEPA, which came into effect in 2011. This study analyses recent trends and patterns in India-Japan economic relations and examines the barriers, particularly NTMs that hinder the growth of Indian exports to Japan. It also looks at the key factors that constrain Japanese FDI flows to India.

The study shows that the two-way merchandise trade, particularly India's export to Japan, has witnessed considerable fluctuations during the last one decade with value of India's export to Japan remaining almost same in 2019 at the level of 2010. India's services exports to Japan, on the other hand, have seen some growth but remain substantially below potential. India has also gained significance as an investment destination for Japanese companies during 2010-19 but India's share in Japan's total outward FDI stock lags behind that of many of its competitor economies in Asia like China, Thailand and Indonesia. There exists considerable scope to enhance Japanese investment into India.

The study observes that although tariff is not a major concern for Indian exports, there has been some deterioration in Japan's tariff regime in the recent past, which could be detrimental to the export of a significant number of tariff lines that are excluded from Japan's tariff commitment under CEPA. Japan's FTAs with some of India's competitor economies are a disadvantage in a few sectors of export interest to India. The study suggests that these issues should be taken up during the proposed review of the CEPA, but only after doing proper ground work.

The most challenging task for Indian exporters is to deal with the high incidence of NTMs in Japan. However, given that most NTMs are put in place with the stated objective of human safety and health, it is extremely difficult to ask for any compromise from the Japanese side. Therefore, the focus should be on enhancing co-operation with concerned Japanese agencies within the

framework of the CEPA and, more importantly, empowering our export industry to follow prescribed quality standards.

Some key factors that hinder services exports from India to Japan include linguistic barriers, Japan's unique industrial organisation system, lengthy visa procedures, lack of MRAs, etc. Here, both industry and government need to work together along with the Japanese government, agencies and industry to enhance co-operation in areas like Japanese language training, business friendly visa regime, MRAs, etc.

Key factors that limit FDI flows to India in general and from Japan in particular include trade facilitation, poor infrastructure, issues related to customs, poor logistics, etc. To stimulate Japanese FDI, the government has to continue its efforts to further improve all the ease of doing business parameters but with focus on enforcing contracts, registering property, starting a business and paying taxes in the country. Improved logistics; a more open, stable and consistent trade policy regime, and the establishment of a 'centralised single window clearance system' will increase India's attractiveness for Japanese investors.

Overall, India-Japan economic relation is still not in a self-driving mode and the governments of both countries need to further enhance their facilitating role to realise the full potential of bilateral economic engagements between Asia's 3rd and 2nd largest economies.

Rejuvenating India-Japan Economic Relations: the Way Forward

by
Durgesh K. Rai

1. Introduction

India and Japan have had a very long civilisational and historical link. A strong belief in democratic values motivates the two countries to expand and deepen the two-way engagement. The changing world economic order, where the dominance of western economies is declining and the centre of gravity of the world economy tilting towards Asia, especially China, has been driving the two countries to find a path of convergence in terms of strategic co-operation. An aging population and the high cost of labour in Japan is a contrast to India's demographic profile with its relatively young population and labour cost that is still low compared to that of many East and Southeast Asian countries. This makes the economic interests of the two nations highly complementary with enormous potential to drive trade, investment and co-operation between the two economies.

The complementarity of interests between the two countries has become even more amplified in the post-Covid-19 era. The Covid-19 pandemic induced supply chain disruptions have nudged Japanese policy makers to diversify production bases beyond China. India, on the other hand, is trying hard to augment its participation in global supply chains in general and regional supply chains in particular. India's 'Atmanirbhar Bharat' initiative and the Supply Chain Resilience Initiative (SCRI) involving Australia, India and Japan also underline the complementarity of interests between the two countries in the post-Covid-19 period.

As both countries have a clear realisation of the potential of India-Japan bilateral relations, the political engagement has seen continuous intensification over the last two decades. The India-Japan 'Global Partnership' was established in 2000 not only to strengthen bilateral relations between the two countries but also to work together regionally as well as internationally. In 2006, the bilateral engagement received another fillip through the establishment of a 'Strategic and Global Partnership' with focus on the strategic dimension. With Prime Minister Narendra Modi's official visit to Japan in August-September 2014, the bilateral relationship was further upgraded to a 'Special Strategic and Global Partnership'. The political engagement has been complemented by a number of bilateral economic pacts between the two

countries, including the India-Japan Comprehensive Economic Partnership Agreement (2011) and India-Japan Social Security Agreement (2016).

Official development assistance (ODA) is one of the best indicators to assess the political intent of a country to enhance its engagement with a partner country or region. India was among the first nations to receive a Japanese ODA loan in 1958. Japanese ODA to India has increased steadily in the last two decades, leading to India emerging as the largest recipient of Japanese ODA in the world in the recent past.

However, the growth in bilateral economic relations between the two nations seems to have been limited and remains at a sub-optimal level. This is in contrast to the political commitment from both sides that has seen a continuous up-gradation over the last two decades. Although India and Japan are the fifth and third largest economies of the world,[1] the importance of each economy in the other's trade and investment profile remains much below potential. For instance, while Japan was India's 12th largest trading partner in goods in 2019-20,[2] India was ranked as Japan's 21st largest trading partner in 2019.[3] Further, bilateral merchandise trade, especially Indian exports to Japan, has not shown the desired dynamism in the recent past, even after the implementation of the comprehensive economic partnership agreement (CEPA) in 2011. In the case of services too, bilateral trade remains below potential.

Bilateral investment relations, on the other hand, especially foreign direct investment (FDI) inflow from Japan to India, have developed at a faster rate compared to growth in trade in both goods and services. Japan had emerged as the third largest source of FDI for India by December 2019 compared to its sixth position in December 2010. However, despite this significant swell in FDI volume over the last decade, there exists considerable scope for further enhancing Japanese investment in India as the share of India in Japan's total outward FDI stock remains significantly lower as compared to investment outflows to many other Asian developing economies like China, Thailand and Indonesia.

[1] According to the World Bank, in 2019, while Japan was the world's third largest economy with a GDP of US$5.08 trillion, India was the fifth largest economy with a GDP value of US$2.88 trillion. Japan's share in global GDP was 5.8 per cent while India's share stood at 3.3 per cent.

[2] Export Import Data Bank (commerce.gov.in)

[3] Japanese Trade and Investment Statistics | Reports and Statistics - Japan External Trade Organization - JETRO

Overall, despite continuous up-gradation of political commitments from both sides to strengthen bilateral relations, economic interactions, especially in terms of Indian exports to Japan, have remained at a sub-optimal level. Given that the average tariff rate in Japan is low with CEPA in place and with the elimination/reduction of tariff on a substantial number of products, it is pertinent to examine the factors that constrain bilateral trade, especially Indian exports to Japan. A number of studies have comprehensively probed in detail several aspects of India-Japan economic relations but studies focusing on barriers to exports, especially non-tariff barriers (NTBs), in Japan are very sparse. This study is an attempt to fill this gap. The study is also very timely as CEPA will complete ten years of existence in 2021 and most tariff commitments are going to be fulfilled. The findings of the study could also be important as there is ongoing discussion to review the CEPA.

1.1. Objective of the study

Given this background, the main objective of this study is to analyse recent trends and patterns in India-Japan economic relations, and examine in detail the barriers, particularly NTBs, that limit Indian exports to Japan. The study also looks at the factors that constrain Japanese investment flows into India and suggests the way forward.

1.2. Methodology and data sources

The study is based mainly on analysis of secondary data and literature available on the subject in the public domain. However, an effort has also been be made to obtain inputs through consultation with some key stakeholders, such as Indian industry and Japanese agencies in India, to supplement the analysis and findings of the study.

The main source of merchandise trade data is the UNCOMTRADE database extracted from World Integrated Trade Solution (WITS). For trade in services, the data sources are the World Trade Organization (WTO) and the Organisation for Economic Co-operation and Development (OECD). Data on tariff has been acquired from the WTO. Data on NTMs have been extracted from the WITS database, which is jointly created by United Nations Conference on Trade and Development (UNCTAD) and WTO. Some specific NTBs in Japan are highlighted from the National Trade Estimate Report on Foreign Trade Barriers published by the office of United States Trade Representative (USTR).

Data on FDI has largely been taken from the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India. This has been further supplemented by statistics on

Japanese FDI made available by the Japan External Trade Organisation (JETRO). Official development assistance (ODA) data has been taken from the OECD and Japan International Co-operation Agency (JICA).

The study has four sections. Following the introduction, Section 2 analyses recent trends and patterns in India-Japan bilateral economic relations. Section 3 looks in detail at the challenges to India-Japan economic relations and, more specifically, highlights the factors that hinder the expansion of Indian exports to Japan and the constraints that limit Japanese FDI into India. Section 4 summarises the findings of the study and suggests the way forward.

2. India-Japan bilateral economic relations: recent trends and patterns

Being the third and fifth largest economies in the world, Japan and India occupy very important places in the global economy. In terms of their global trade profile, while Japan was the fifth largest trader of goods and services in 2019, India was at 12th position (WTO, 2020a). The nature of their engagements with the rest of the world as well as between themselves plays a crucial role in shaping the growth and direction of the world economy. However, as both countries are at different stages of economic development with contrasting demographic profiles, the change in their relative importance in global GDP and trade has moved in different directions over the past two decades. While the importance of India, both in terms of its share in global GDP and exports, has increased steadily, that of Japan has declined continuously. As Table 1 shows, India's share in global GDP has increased from 1.4 per cent in 2000 to 3.3 per cent in 2019, Japan's contribution to the world GDP has declined from over 14 per cent to less than 6 per cent during the same period. Similar trends can be observed in trade parameters as well. However, as the financial heft of Japanese multinationals has increased over time, their global investment footprint has also expanded, resulting in a continuous rise in Japan's share in outward stock of world FDI from 3.8 per cent in 2000 to 5.3 per cent in 2019. A similar trend is noticeable in the case of India although its share in world outward FDI stock remains much below one per cent.

Table 1: Shares (%) of India and Japan in the world economy

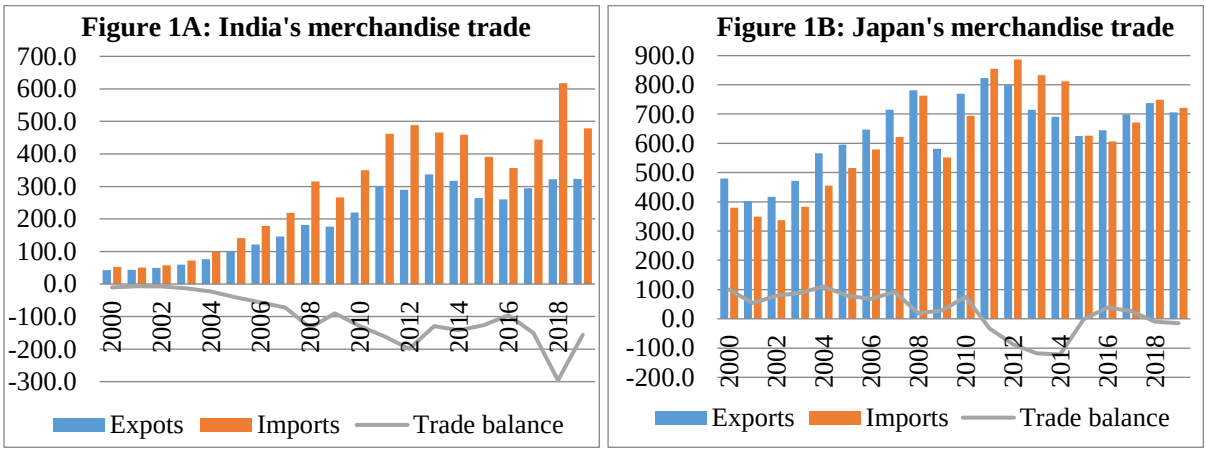
	India			Japan		
	2000	2010	2019	2000	2010	2019
World GDP	1.4	2.5	3.3	14.5	8.6	5.8
World merchandise export	0.7	1.5	1.7	7.4	5.0	3.7
World merchandise import	0.8	2.3	2.5	5.7	4.5	3.7
World manufacture export	0.7	1.4	1.8	9.6	6.8	4.8
World manufacture import	0.5	1.5	1.7	4.4	3.3	3.1
World services export	1.1	3.0	3.5	4.6	3.4	3.3
World services import	1.3	3.0	3.1	7.8	4.3	3.5
World outward FDI stock	0.02	0.47	0.52	3.76	4.06	5.26
World inward FDI stock	0.2	1.0	1.2	0.7	1.1	0.6

Source: WDI, WTO and UNCTAD

2.1. Merchandise trade

Although there has been a steady decline in Japan's share in global merchandise trade, the value of Japanese exports and imports is still substantially higher than India's. As can be observed from Figure 1, in 2019, while the value of Indian exports and imports were US$323 billion and US$479 billion respectively, Japan's exports and imports were valued at US$706 billion and US$721 billion respectively. It is worth mentioning that while India has had a negative trade balance in most during last two decades; Japan has remained a net exporter for a majority of the years during the same period.

Figure 1: Merchandise trade of India and Japan, US$ billion



Source: UNCOMTRADE, extracted from WITS

The compositions of goods traded by India and Japan are quite different. While India's export basket largely consists of mineral fuels, pearls and precious stones, machinery, organic chemicals, vehicles, pharmaceuticals, etc., its top import items are also from many of the same sectors. As can be seen from Table 2, in 2019, out of top 10 sectors of exports and imports, six are common and India was a net importer of goods in those six sectors. It also indicates the significance of intra-industry trade in India's international trade profile. Among top exports, India is a net exporter only in four sectors including vehicles, pharmaceuticals and articles of apparel.

Table 2: Composition of India's merchandise trade, 2019

India's export composition				India's import composition			
Share in total export	Export, US$ billion	HS code	Product description	Share in total import	Import, US$ billion	HS code	Product description
13.8	44.5	27	Mineral fuels, oils, distillation products	31.9	152.7	27	Mineral fuels, oils, distillation products
11.4	36.7	71	Pearls, precious stones, metals, coins	12.3	58.9	71	Pearls, precious stones, metals, coins
6.6	21.3	84	Nuclear reactors, boilers, machinery, etc.	10.5	50.5	85	Electrical, electronic equipment
5.6	18.2	29	Organic chemicals	9.3	44.7	84	Nuclear reactors, boilers, machinery
5.4	17.4	87	Vehicles other than railway, tramway	4.3	20.5	29	Organic chemicals
5.0	16.3	30	Pharmaceutical products	3.1	14.7	39	Plastics & articles thereof
4.6	14.9	85	Electrical, electronic equipment	2.5	11.8	72	Iron and steel
3.0	9.8	72	Iron and steel	2.1	9.8	15	Animal, vegetable fat & oil products
2.6	8.4	62	Articles of apparel, accessories, not knit/crochet	2.0	9.6	90	Optical, photo, technical, medical
2.4	7.9	61	Articles of apparel, accessories, knit/crochet	1.5	7.2	31	Fertilisers

Source: UNCOMTRADE, extracted from WITS database

The Japanese trade basket, on the other hand, is quite different from India's. As Table 3 shows, in 2019, transport vehicles with a share of more than 21 per cent was the largest contributor to Japanese exports followed by machinery (18 per cent), electrical & electronic goods (15 per cent), optical & medical apparatus (7 per cent) and goods not classified elsewhere (6 per cent). Japan was a net exporter in these five sectors, which alone constituted about two-thirds of its total merchandise exports. The top imports, on the other hand, were mineral fuels (22 per cent), electrical & electronic goods (14 per cent), machinery (10 per cent), optical & medical apparatus (4 per cent) and pharmaceutical products (4 per cent). These five sectors constituted about 53 per cent of Japanese imports. It is important to notice that among the top 10 export and import sectors, six were common, indicating the significance of intra-industry trade in Japan's global trade profile.

Table 3: Composition of Japan's merchandise trade, 2019

Japan's Export Composition				Japan's Import Composition			
Share in total export	Export, US$ billion	HS code	Product description	Share in total import	Import, US$ billion	HS code	Product description
21.1	148.8	87	Vehicles other than railway, tramway	21.6	155.7	27	Mineral fuels, oils, distillation products, etc.
17.8	125.6	84	Nuclear reactors, boilers, machinery	13.6	98.0	85	Electrical, electronic equipment
14.6	102.8	85	Electrical, electronic equipment	9.6	69.4	84	Nuclear reactors, boilers, machinery, etc.
7.2	50.7	90	Optical, technical, medical,... apparatus	4.2	30.2	90	Optical, photo, technical, medical,... apparatus
6.4	44.9	99	Commodities not elsewhere specified	3.8	27.2	30	Pharmaceutical products
3.7	26.1	72	Iron and steel	3.3	23.8	87	Vehicles other than railway, tramway
3.6	25.3	39	Plastics and articles thereof	3.1	22.2	26	Ores, slag and ash
2.5	17.9	29	Organic chemicals	2.3	16.3	39	Plastics & articles thereof
2.0	14.0	27	Mineral fuels, oils, distillation products...	2.2	16.1	29	Organic chemicals
2.0	13.8	89	Ships, boats & other floating structures	2.0	14.3	62	Articles of apparel, accessories, not knit/crochet

Source: UNCOMTRADE, extracted from WITS database

A comparative analysis of Tables 2 and 3 clearly indicates the complementarities between the global trade profiles of India and Japan.

2.1(i) India-Japan bilateral trade in goods

India-Japan bilateral merchandise trade has not exhibited the desired dynamism in the last two decades. In fact, Japan's importance in India's global trade profile has been declining since the early 2000s. Japan's position as one of India's export destination has continuously declined since the beginning of the new century and has continued even after the coming into force of the CEPA in 2011. Japan was the fifth largest destination for India's exports in 2000 but slipped to the eleventh position in 2010 and further to the seventeenth position in 2019. In terms of imports also, Japan was the sixth largest source for India's merchandise imports in 2000 but has declined to become the thirteenth largest supplier of goods to India in 2010. In 2019, however, there was a slight improvement in Japan's position as it became 11th largest source of merchandise imports for India.

India's significance in Japan's international trade profile, on the other hand, has had a mixed trend. While India's position in terms of Japan's export destination has improved over the last two decades, India's importance as a source of import has remained stagnant. In 2000, India was at 24th position in terms of Japan's export destinations. India's position has improved to reach the 17th position in 2010 and 14th in 2019. On the other hand, in 2000, India was at 28th position in terms of Japan's import sources. India's position saw a slight improvement in 2010 when it became the 26th major source of Japanese imports. India remained at the 26th spot in 2019.

Despite a mixed trend in terms of the relative importance of the two countries in each other's international trade profiles, there has been a significant increase in the total value of bilateral trade over the last two decades. As can be observed from Table 4, the value of merchandise trade between the two countries increased from about US$4 billion in 2000 to more than US$17 billion in 2019. However, while the two-way trade has increased substantially during the 2000s, it has witnessed significant fluctuations after 2010. During the period 2000 to 2010, total bilateral trade between the two countries increased by a CAGR of more than 12 per cent and exports to and imports from Japan grew at CAGRs of 10 per cent and 14 per cent respectively. After 2010, however, there has been limited and rather volatile growth in bilateral trade. During 2010-2019, two-way trade increased at a CAGR of 3.3 per cent but largely on account of growth in imports. While exports grew at a CAGR of only 0.02 per cent, imports increased at a CAGR of 4.9 per cent. Besides, while Indian imports from Japan peaked in 2018, exports are yet to touch the peak attained in 2013.

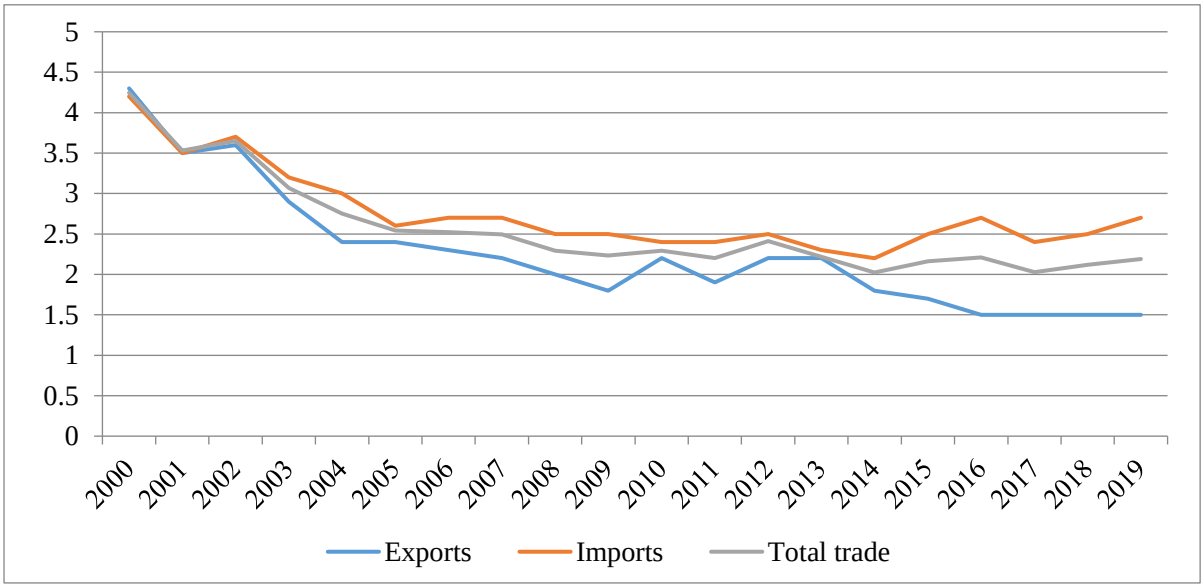
Table 4: India-Japan bilateral trade in goods

Year	Exports	Imports	Total trade	Trade balance
2000	1,827.7	2,218.8	4,046.5	-391.1
2010	4,805.1	8,265.1	13,070.2	-3,460.0
2011	5,592.6	11,218.3	16,810.9	-5,625.7
2012	6,415.6	12,363.0	18,778.6	-5,947.4
2013	7,325.5	10,489.8	17,815.3	-3,164.3
2014	5,756.9	9,964.0	15,720.9	-4,207.1
2015	4,529.7	9,635.2	14,164.9	-5,105.5
2016	3,827.3	9,808.5	13,635.8	-5,981.2
2017	4,498.0	10,469.2	14,967.2	-5,971.2
2018	4,738.1	15,181.3	19,919.4	-10,443.2
2019	4,815.6	12,744.5	17,560.1	-7,928.9

Source: UNCOMTRADE, extracted from WITS database

The growth in India's merchandise trade with Japan has substantially been lower than that of its growth in global trade during the last two decades. This has led a continuous decline in Japan's share in India's external trade. As Figure 2 shows, Japan's share in India's trade has declined from 4.2 per cent in 2000 to 2.3 per cent in 2010 to 2.2 per cent in 2019. However, the decline in Japan's share in India's foreign trade was less sharp during the 2010-2019 compared to that during 2000-2010. This is on account of the fact that the gap between the growth rates of India's trade with the rest of the world and India's trade with Japan has become narrower in the post-2010 period, which is also the period in which the CEPA has been in force. It is important to note that while Japan's share in India's merchandise exports has declined in the last 10 years, Japan's share in India's total imports has increased during the same period. It would be pertinent, therefore, to examine the changes in the composition of Indian exports to Japan that have led sluggishness in growth during the last decade.

Figure 2: Share (%) of Japan in India's foreign trade



Source: UNCOMTRADE, extracted from WITS database

2.1(ii) Changing composition of Indian exports to Japan

There has been substantial change in the structure of bilateral trade between the two countries in the last two decades. As can be observed from Table 5, in 2000, the top 10 sectors that constituted about 80 per cent of India's export to Japan were mainly from low value sectors. With an export value of US$516 million and a share of more than 28 per cent, fish and crustaceans were the largest Indian exports to Japan followed by pearls and precious stones (23 per cent), ores (8 per cent), articles of apparel (5 per cent), cotton (4 per cent) etc. By 2010, there were significant changes in the composition of the Indian export basket to Japan. With an export value of about US$2 billion and a share of 41 per cent, mineral fuels became the biggest component of Indian exports to Japan followed by iron and steel (8 per cent), residues and wastes of food industry (7 per cent), fish and crustaceans (6 per cent) and pearls and precious stones (6 per cent). India was also found to be exporting products from sectors like machinery (HS84), which are considered international production network intensive, indicating some improvement in India's participation in international production sharing.

In 2019, despite a substantial decline (from about US$2 billion in 2010 to US$579 million in 2019) mineral fuels remained the top most exports from India to Japan. With a share slightly less than 12 per cent, organic chemicals became the second most important contributor to Indian exports to Japan followed by fish and crustaceans (8.7 per cent), and pearls and precious stones (8.6 per cent). Interestingly, with a share of 6.3 per cent and 5.9 per cent of total merchandise exports, machinery and vehicles and parts thereof became the fifth and sixth

largest exports respectively to Japan. Products from these two sectors are considered not only high value but also international production network intensive. These developments underline some qualitative change in India's export basket to Japan.

Table 5: Composition of Indian exports to Japan, export in US$ million and share (%) in total exports to Japan

2000			2010			2019		
HS code	Exports	Share	HS code	Exports	Share	HS code	Exports	Share
03	515.9	28.2	27	1959.9	40.8	27	579.1	12.0
71	418.8	22.9	72	384.3	8.0	29	572.0	11.9
26	149.1	8.2	23	326.8	6.8	03	418.1	8.7
62	96.2	5.3	03	300.0	6.2	71	415.6	8.6
52	70.7	3.9	71	273.4	5.7	84	303.0	6.3
23	47.6	2.6	26	249.1	5.2	87	235.6	4.9
72	42.8	2.3	29	175.3	3.6	26	209.5	4.3
29	42.4	2.3	62	111.0	2.3	72	208.0	4.3
63	40.2	2.2	84	98.1	2.0	62	190.9	4.0
08	28.5	1.6	38	62.6	1.3	76	150.7	3.1
Above total	1452.2	79.5	Above total	3940.3	82.0	Above total	3282.6	68.2

Source: UNCOMTRADE, extracted from WITS database
Note: for description of HS code please refer to Appendix 1

Although overall exports to Japan have remained stagnant in 2019 vis-a-vis the level of 2010, there exist several sectors that have exhibited positive growth. Out of 99 chapters,[4] India was found to be exporting from 94 chapters in 2010. The number of chapters from which exports were being undertaken in 2019 remained almost the same at 93. There were a few chapters (HS 01, HS 02, HS 36, HS 47 and HS 89) present in the export list of 2010 (although their export values were almost negligible) that did not appear in the export list of 2019.[5] However, there were also a few chapters from which India was found to be exporting in 2019 but not in 2010. These include HS18, HS43, HS46 and HS79. While the export value of HS79 (zinc and articles thereof) was substantial at US$4.5 million, exports from the remaining three chapters were about equal or less than 0.1 million.

In 2010, there were 70 chapters from which the value of exports exceeded US$0.5 million. The number of such chapters became 75 in 2019. Out of 70

[4] Chapter and sector are used interchangeably.

[5] In fact, in 2010, while the export value of products from chapters HS02, HS36 and HS89 were just US$47653, US$9149 and US$80015 respectively; value of exports from the remaining two chapters were merely a few hundred dollars.

chapters from which export value exceeded US$0.5 million in 2010, 54 chapters registered positive growth during 2010-2019; the remaining 16 registered negative growth during the same period. And these 16 chapters are the key contributors to the sluggishness in overall exports to Japan from India during 2010-2019.

Table 6 highlights the key sectors[6] from which Indian exports to Japan registered a positive growth rate during 2010-2019. The strongest CAGR of over 32 per cent has been registered in the case of plastics and plastics articles sector, followed by sectors like vehicles and parts (25.1 per cent), footwear (22.2 per cent), pharmaceuticals (19.0 per cent) and leather goods (14.2 per cent). It is important to note that the growth rate of Indian exports in most of these sectors has been higher than India's exports to the world. Some other chapters that are not part of Table 6 (because their export value in 2010 were less than US$5 million) but have also gained significance in terms of export value in 2019 and registered high growth include wool and fabric thereof; ceramic products; manmade staple fibres and furniture, bedding, mattress etc.[7]

Another aspect that needs to be highlighted from Table 6 is that despite positive growth during 2010-19, India's share in Japan's imports in most sectors remains much below India's share in that sector in world imports. And this indicates the potential for further improvement in Indian exports to Japan. Some of the important sectors where there is substantial scope to increase India's exports to Japan include carpets and other textile floor coverings; other made up textile articles; lac, gums and resins; coffee and tea, and articles of apparel (knitted or crocheted) as India's share in Japan's imports of these goods were significantly lower than India's share in global imports.

[6] The chapters with export value of more than US$5 million in 2010.

[7] While wool and fabric thereof; ceramic products; manmade staple fibres and furniture, etc., grew at CAGRs of 24.7 per cent, 21.4 per cent, 11.8 per cent and 13.4 per cent respectively during 2010-19, their export values in 2019 were US$ 24.8 million, US$19.3million, US$10.9 million and US$10.7 million respectively.

Table 6: Indian exports to Japan (in US$ million) and their CAGR (%) during 2010-2019

HS Code	Product description	Export, 2010	Export, 2019	CAGR, 2010-19	India's share in Japan's import, 2019	India's Share in world's import, 2019
39	Plastics and articles thereof	9.1	113	32.4	0.69	1.19
87	Vehicles & parts thereof	31.5	235.6	25.1	0.99	1.18
64	Footwear	6.1	37.1	22.2	0.69	1.98
30	Pharmaceutical products	13.4	64.2	19.0	0.24	2.57
42	Articles of leather	11.9	39.3	14.2	0.62	3.11
29	Organic chemicals	175.3	572	14.0	3.55	4.15
84	Machinery & mech. appliances	98.1	303	13.4	0.44	0.98
76	Aluminium and articles thereof	53.7	150.7	12.2	1.88	3.04
61	Articles of apparel, knit or crochet	12.7	33.1	11.2	0.24	3.74
40	Rubber and articles thereof	10.7	26.5	10.6	0.57	1.74
38	Chemical product	62.6	141.8	9.5	2.40	2.46
32	Tanning or dyeing extracts	40.7	87.9	8.9	5.88	4.40
63	Other made up textile articles	28.1	60.3	8.9	1.58	8.83
85	Electrical machinery & parts	56.3	112.8	8.0	0.12	0.53
28	Inorganic chemicals	40.3	76.8	7.4	1.08	1.46
12	Oil seeds and oleaginous fruits	5.4	10.1	7.3	0.21	1.70
21	Miscellaneous edible preparations	5.1	9.2	6.7	0.55	1.09
73	Articles of iron or steel	25.8	45.8	6.6	0.60	2.48
90	Optical, photographic, etc.	38.7	68	6.5	0.23	0.52
08	Fruit and nuts	39.3	69	6.4	1.99	1.13
62	Apparel... not knitted/crocheted	111	190.9	6.2	1.33	4.05
71	Natural, cultured pearls; stones	273.4	415.6	4.8	3.25	5.74
03	Fish and crustaceans	300	418.1	3.8	3.80	5.36
25	Salt; sulphur; earths, etc.	30.7	40.7	3.2	2.51	3.92
33	Essential oils and resinoids	24.0	30.8	2.8	0.85	1.65
15	Animal or vegetable fats and oils	36.8	43.9	2.0	3.07	1.40
57	Carpets & other textile flr cvrings	17.6	20.2	1.5	3.30	12.48
13	Lac; gums, resins	21.6	24.3	1.3	6.79	12.12
35	Albuminoidal substances	13.5	15.1	1.2	1.18	0.75
68	Stone, plaster, cement etc.	8.5	9.1	0.7	0.59	3.50
09	Coffee, tea, mate and spices	43.4	44.1	0.2	2.51	7.22

Source: UNCOMTRADE, extracted from WITS database

It is also important to highlight that though some important sectors like coffee and tea, carpet and other textile floor coverings, etc., do appear in the list of sectors with positive growth, their growth rates during 2010-19 were not only low but much lower than the growth rate in their export to the world. For instance, while Indian's export of coffee and tea to Japan grew at a CAGR of only 0.2 per cent, its export to the world has increased at a CAGR of about 6 per cent. Similarly, the growth rates of Indian exports to Japan in other important sectors like fish and crustaceans; essential oils and resinoids; animal or vegetable fats and oils; carpets and other textile floor coverings were substantially lower than that of India's exports to the world market.

Table 7 highlights the key sectors[8] that have exhibited negative growth during 2010-2019 and dragged down the overall growth of India's merchandise exports to Japan. In terms of absolute amount, the maximum contraction has occurred in mineral fuels as their exports have declined from about US$1.96 billion in 2010 to US$579 million in 2019. There has also been a significant contraction in the exports of residues and waste from food industries including prepared animal fodder; iron and steel; ores, slag and ash; preparations of meat, fish or crustaceans; cotton; aircraft, spacecraft and parts thereof; textile fabrics; and raw leather in the post-2010 period.

It is pertinent to note that Indian exports from some sectors have grown faster than Japan's overall imports from the world, while in many sectors the decline has been despite an increase in Japan's imports of those items from the world. For instance, while exports of mineral fuels, iron and steel, and residues and waste from food industries from India to Japan have declined by CAGRs of -12.7 per cent, -6.6 per cent and -20.1 per cent respectively during 2010-19, Japanese imports of these goods from rest of the world have declined only by -2.7 per cent, -1.0 per cent and -1.5 per cent respectively during the same period. In several other key sectors like preparations from meat, fish and crustaceans; aircraft, spacecraft and parts thereof; animal originated products and textile fabrics, Indian exports have declined substantially during 2010-19 despite Japan's imports of these products having increased.

It is also important to note that out of these 11 key sectors that have witnessed negative growth in their exports to Japan during 2010-19, India's exports to world in six sectors including mineral fuels, iron and steel, preparations of meat and fish, textile fabrics etc. have witnessed positive growth. With respect to the remaining five sectors, while exports to Japan in four sectors contracted more than their contraction to world, there was only two sectors (ores and cotton)

[8] The chapters from which the export values were more than US$5 million in 2010.

where India's exports to Japan saw less shrinkage compared to the negative growth to the world market.

Table 7: Key exporting sectors with negative growth during 2010-19

HS Code	Product description	Exports, US$ million 2010	Export, US$ million 2019	CAGR (2010-19)	CAGR (2010-19), World
27	Mineral fuels	1959.9	579.1	-12.7	1.8
72	Iron and steel	384.3	208.0	-6.6	3.8
23	Residues & waste from food industries; prepared animal fodder	326.8	43.6	-20.1	-3.9
26	Ores, slag and ash	249.1	209.5	-1.9	-8.8
52	Cotton	61.1	56.0	-1.0	-1.5
99	Commodities not specified according to kind	41.4	1.9	-28.8	-28.3
16	Meat, fish or crustaceans, molluscs or other aquatic invertebrates; preparations thereof	30.3	7.2	-14.7	8.4
88	Aircraft, spacecraft and parts thereof	14.3	13.2	-0.8	-0.3
05	Animal originated products; not elsewhere specified or included	11.7	8.5	-3.5	3.7
59	Textile fabrics; impregnated, coated, covered or laminated; textile articles.. suitable for industrial use	9.4	6.4	-4.1	7.4
41	Raw hides and skins (other than furskins) and leather	5.0	3.3	-4.6	-3.8

Source: UNCOMTRADE, extracted from WITS database

The above analysis of the merchandise trade between India and Japan clearly shows the lack of consistent growth in bilateral trade. India's overall exports to Japan have witnessed considerable fluctuations during 2010-19 with value of exports in 2019 remaining almost at level of 2010. The sluggishness has mainly been on account of the very low growth rate or negative growth rate of exports from some key sectors during 2010-19. Given the fact that many of these sectors belong to employment intensive industries, it is vital to examine in detail the possible factors that hinder Indian exports to Japan despite the CEPA being in operation since 2011.

2.2. Trade in commercial services

Services sector is the most important constituent of both the Indian and Japanese economies. While the share of the services sector, excluding construction, in India's gross value added (GVA) was 55.1 per cent in 2019-20,[9] its share in Japan's GVA was 73 per cent in 2019.[10] India has performed well in the services sector in general, and trade in services in particular, over the last two decades. The increase in India's share in global trade in services has been higher than the gain from its share in goods trade. As highlighted previously in Table 1, India's share in global services exports increased from 1.1 per cent in 2000 to 3 per cent in 2010 to 3.5 per cent in 2019 against a decline in Japan's share from 4 per cent to 3.4 per cent to 3.3 per cent in the same period. And now, India exports more commercial services than Japan.

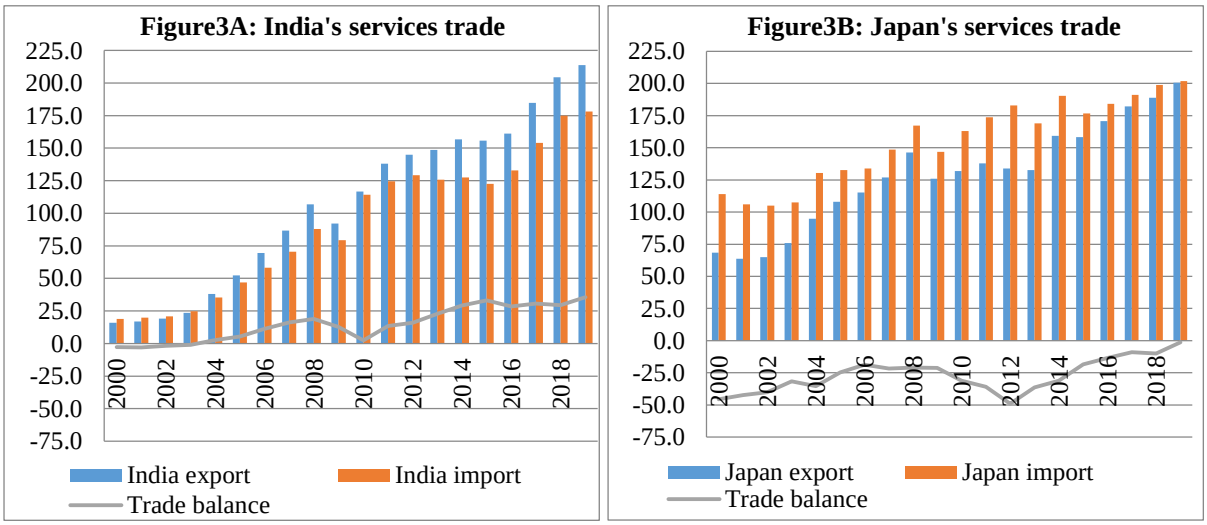
WTO data indicate that while Indian services exports have increased from US$16 billion in 2000 to US$116.5 billion in 2010 and further to US$213.7 billion in 2019, Japan's services exports increased from US$68.3 billion to US$131.8 billion to US$200.5 billion during the same years. In terms of growth, while India's exports have increased at a CAGR of about 22 per cent during 2000-2010 and 7 per cent during 2010-19, Japanese services exports have increased at a CAGR of 6.8 per cent and 4.8 per cent, respectively during the same period. There has been a surge in services imports too. While India's imports increased from US$18.9 billion in 2000 to US$114.2 billion in US$178.0 billion in 2019, Japan's imports stood at US$113.9, US$162.9 and US$201.7 billion respectively during the same years. As in the case of exports, in both countries, imports have increased less during 2010-2019 as compared to imports during 2000-2010. While imports to India and Japan increased at a CAGR of 19.7 per cent and 3.6 per cent respectively during 2000-2010, the growth rates were just 5 per cent for India and 2.4 per cent for Japan during 2010-2019.

Figure 3 shows trade in commercial services by India and Japan during 2000 to 2019. While India emerged as a net exporter after 2003 and net exports have continuously increased, Japan has remained a net importer. However, the value of Japan's net import has secularly declined over the last two decades to about US$1 billion in 2019. And this could cause concern to Indian service providers trying to enhance their presence in the Japanese services market.

[9] https://www.rbi.org.in/scripts/AnnualReportPublications.aspx?Id=1300

[10] https://www.esri.cao.go.jp/en/sna/data/kakuhou/files/2019/pdf/point_flow_en20201224.pdf

Figure 3: Commercial services trade of India and Japan, US$ billion



Source: WTO

The composition of the services trade basket has changed in the case of both India and Japan during 2010-19, as shown in Table 8. In the case of Indian services exports, exports from some important segments like travel, construction, charges on IPR and other business services have risen faster than the overall rise in commercial services exports, increasing their share in total services exports during 2010-19. Exports from sectors like transportation, insurance and pension, and telecommunication and computer services have registered positive growth rates below the overall growth rate of services exports. As a result, their shares in total exports have declined. There has been a decline in financial services exports during 2010-2019, reducing its share in total services as well. As far as imports are concerned, while both the value of imports and their share in total services imports have increased for sectors like travel, construction, charges for IPR, telecommunication and computer services, and other business services; imports of financial services have seen significant decline both in terms of value and share. Despite an increase in their imports the share of transport has declined in India's total services imports.

India's services exports are concentrated in a few sectors. In 2019, about 35 per cent of India's services export basket was occupied by 'other business services' followed by telecom and computer services (30.4 per cent), travel (14.4 per cent), transport (9.9 per cent) and financial services (2.3 per cent). On the other hand, with a share of about 38 per cent, transportation was the largest contributor to India's services imports. Other major constituents of the Indian services import basket include other business services (25.9 per cent), travel (12.9 per cent), telecom and computer services (5.4 per cent) and charges for IPR (4.4 per cent).

There has also been a significant change in the composition of Japan's exports and imports of commercial services between 2010 and 2019. While the shares of transport, construction and other business services in total exports of commercial services have declined, exports from sectors like travel, insurance and pension services, financial services, charges for IPR, and telecommunication and computer services have exhibited higher growth than overall growth in services exports and an increase in their share in total exports during 2010-2019. In the case of imports, while the shares of transportation, travel and construction services in total imports of commercial services have declined during the period; other services segments such as finance, charges for IPR, telecom and computer, and other business services have registered an increase in their share in total imports.

Unlike India, the export composition of Japan's commercial services is relatively more diversified. In 2019, with a share of about 23 per cent, the 'charges for IPR' were the largest contributor to Japan's exports of commercial services. This was followed by other business services (22.8 per cent), travel services (22.6 per cent), transportation (13.1 per cent) and financial services (6.9 per cent). On the other hand, with a share of 32.5 per cent, 'other business services' were the most important constituents of Japan's services imports followed by transport (16.9 per cent), charges for IPR (12.8 per cent), travel (10.5 per cent) and telecom and computer services (9.8 per cent).

The analysis above of the compositions of the Indian and Japanese trade baskets indicates the complementarity in trade in services between the two economies.

Table 8: Composition of trade in commercial services by India and Japan, US$ billion

Country	Sector	Export		Import	
		2010	2019	2010	2019
India	Commercial services	116.6 (100)	213.7 (100)	114.2 (100)	178.0 (100)
	Transportation	13.3 (11.4)	21.1 (9.9)	46.7 (40.9)	67.6 (38.0)
	Travel	14.5 (12.4)	30.7 (14.4)	10.5 (9.2)	22.9 (12.9)
	Construction	0.52 (0.5)	2.9 (1.4)	1.0 (0.9)	2.7 (1.5)
	Insurance and pension services	1.8 (1.5)	2.5 (1.2)	5.0 (4.4)	6.8 (3.8)
	Financial service	5.8 (5.0)	4.8 (2.3)	6.8 (5.9)	2.3 (1.3)
	Charges for intellectual property	0.13 (0.1)	0.87 (0.4)	2.4 (2.1)	7.9 (4.4)

Country	Sector	Export		Import	
		2010	2019	2010	2019
	Telecom, computer & info services	40.5 (34.5)	64.9 (30.4)	3.6 (3.2)	9.6 (5.4)
	Other business services	34.5 (29.6)	74.0 (34.6)	25.5 (22.3)	46.0 (25.9)
	Others	5.8 (5.0)	11.5 (5.4)	12.7 (11.1)	12.1 (6.8)
Japan	Commercial services	131.8 (100)	200.5 (100)	162.9 (100)	201.7 (100)
	Transportation	42.2 (32.2)	26.2 (13.1)	46.4 (28.5)	34.1 (16.9)
	Travel	13.2 (10.0)	42.2 (22.6)	27.9 (17.1)	21.1 (10.5)
	Construction	10.6 (8.1)	10.6 (5.3)	7.9 (4.8)	7.4 (3.7)
	Insurance and pension services	1.3 (1.0)	2.5 (1.2)	6.8 (4.2)	8.3 (4.1)
	Financial service	3.6 (2.7)	13.8 (6.9)	3.1 (1.9)	8.0 (4.0)
	Charges for intellectual property	26.7 (20.2)	46.7 (23.3)	18.8 (11.5)	25.8 (12.8)
	Telecom, computer & info services	1.8 (1.4)	6.7 (3.4)	4.6 (2.8)	19.9 (9.8)
	Other business services	31.7 (24.0)	45.8 (22.8)	37.9 (23.3)	65.5 (32.5)
	Others	0.5 (0.4)	2.8 (1.4)	9.4 (5.8)	11.3 (5.6)

Source: WTO
Notes: Data is based on BPM6. Figures in parentheses are percentage.

2.2(i) India-Japan bilateral trade in commercial services

Detailed and long-term data on bilateral trade in services is sparse. The OECD is the only one among major reliable sources that provides data on bilateral trade in services between its member economies and their trading partners. This study has used OECD data for the analysis of bilateral trade in services between India and Japan, where Japan has been taken as the reporting economy.

The bilateral trade in services between India and Japan has increased at a CAGR of more than 5 per cent during 2010-19. However, Japan's imports from India have increased significantly faster than its exports to India and have led a substantial decline in India's negative trade balance with Japan. While Japanese imports from India grew at a CAGR of 11.9 per cent, Japan's exports to India increased only at a CAGR of 1.8 per cent during 2010-2019. This has resulted into a notable decline in India's trade deficit in services with Japan

from US$1,348 million in 2010 to about US$440 million in 2019. While a relatively faster growth in imports has enhanced India's share in Japan's global imports of commercial services from 0.44 per cent in 2010 to 0.97 per cent in 2019, India's share in Japan's global exports has declined from 1.6 per cent to 1.2 per cent during the same period.

It is interesting to note that bilateral trade in services between India and Japan has increased faster than the bilateral trade in goods. Further, while India's exports of goods to Japan have witnessed fluctuations during 2010-19 against a notable step up in its goods imports from Japan, as noted previously, growth in India's services exports to Japan has been significantly higher than that of imports of services from Japan during the same period. Table 9 exhibits the trend in India-Japan bilateral trade in commercial services during 2010 to 2019.

Table 9: Japan's trade in commercial services with India, US$ million

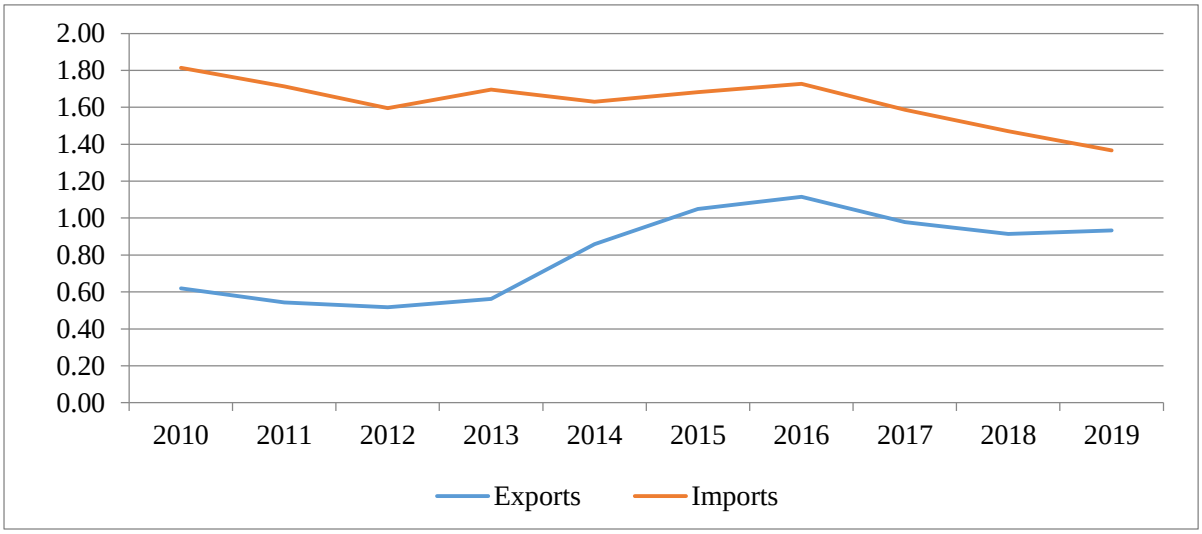
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total trade	2794.0	2882.0	2811.0	2968.0	3422.1	3697.4	4091.8	4251.2	4441.2	4427.8
Japan's export to India	2071.0	2132.0	2062.0	2133.0	2077.7	2064.4	2294.9	2443.3	2573.3	2434.1
Japan's import from India	723.0	750.0	749.0	835.0	1344.4	1633.0	1796.9	1807.9	1867.9	1993.7
Balance of trade for India	(-) 1348.0	(-) 1382.0	(-) 1313.0	(-) 1298.0	(-) 733.3	(-) 431.4	(-) 498.0	(-) 635.4	(-) 705.4	(-) 440.4

Source: OECD Stat, accessed on 16/03/2021 at https://stats.oecd.org/Index.aspx?datasetcode=TIVA_2018_C1
Note: 2013 data is estimated

However, the importance of Japan in India's global trade in commercial services still remains at a sub-optimal level. As Figure 4 shows, while Japan's share in India's total exports of commercial services has increased from 0.62 per cent in 2010 to 0.93 per cent in 2019, Japan's share in India's global imports has declined from 1.81 per cent in 2010 to 1.37 per cent in 2019. Moreover, trends in the growth of India's trade in commercial services with Japan have been different from that of its growth in global trade during 2010-2019. While India's exports to Japan have grown slightly faster than that its global exports, imports from Japan have grown at a relatively slower pace compared to India's global imports. This has led to an increase in Japan's share in India's global exports

and a decline in Japan's share in India's global imports of commercial services from the world.

Figure 4: Share of Japan in India's exports and imports of commercial services



Source: WTO and OECD.Stat

2.2(ii) Composition of bilateral trade in services

The basket of Indian services export to Japan is largely dominated by two sectors, 'telecom, computer and information services' and 'other business services'. These two sectors together accounted for more than 80 per cent of Japanese imports from India in 2019, as can be observed from Table 10. The 'other business services' along with 'telecom, computer and information services', which increased at CAGRs of 16.1 per cent and 21.8 per cent respectively during 2010 to 2019, have also been the key drivers of growth in Japanese services imports from India. However, despite robust growth, India's share in Japan's import of these two services segments remains significantly lower than India's share in the global export of these services. In 2019, while India's shares in global export of 'other business services' and 'telecom, computer and information services' were 5.3 per cent and 9.6 per cent respectively, India's contribution to Japan's imports of these services stood at just 1.3 per cent and 3.7 per cent respectively. Therefore, there still exists tremendous scope for increasing Indian exports to Japan in these two sectors. Another services segment where there has been substantive growth, especially in the last couple years, is 'charges for uses of IPR', although on a very low base. On the other hand, Japanese imports from some major sectors like transport, travel and construction have not only declined in terms of their shares in the total import of services from India but also in terms of the value of their imports during 2010 to 2019. Although the imports of financial services have increased

during 2010-19, their growth rate was substantially lower than the growth rate of total services imports. Japan's imports of construction services from India, on the other hand, saw steady growth during 2011 to 2016 but started declining thereafter. While growth during 2011-16 is almost akin to India's export of these services to the world, decline in Japanese imports from India after 2016 seems to be largely on account of fluctuations in demand for construction services in Japan.

Table 10: Composition of Japan's imports from India, US$ million

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	CAGR 2010-19
Transport	100 (13.8)	82 (10.9)	47 (6.3)	40 (4.8)	48 (3.6)	65 (4.0)	54 (3.0)	73 (4.0)	94 (5.0)	67 (3.4)	-4.3
Travel	141 (19.5)	131 (17.5)	167 (22.3)	130 (15.6)	128 (9.5)	107 (6.6)	128 (7.1)	132 (7.3)	170 (9.1)	126 (6.3)	-1.2
Manufac. services					1 (0.1)	2 (0.1)	0	1 (0.1)	13 (0.7)	13 (0.7)	
Construction	111 (15.4)	41 (5.5)	50 (6.7)	61 (7.3)	184 (13.7)	222 (13.6)	311 (17.3)	259 (14.3)	175 (9.4)	93 (4.7)	-2.0
Financial services	20 (2.8)	20 (2.7)	21 (2.8)	13 (1.6)	19 (1.4)	26 (1.6)	23 (1.3)	29 (1.6)	31 (1.7)	30 (1.5)	4.7
Charges for IPR uses	3 (0.4)	5 (0.7)	8 (1.1)	3 (0.4)	4 (0.3)	3 (0.2)	4 (0.2)	8 (0.4)	6 (0.3)	56 (2.8)	38.5
Telecom, computer, info	124 (17.2)	125 (16.2)	127 (17.0)	139 (16.6)	311 (23.1)	502 (30.7)	510 (28.4)	501 (27.7)	627 (33.6)	729 (36.6)	21.8
Other business services	228 (31.5)	341 (45.5)	351 (46.9)	449 (53.8)	641 (47.7)	702 (43.0)	758 (42.2)	798 (44.1)	747 (40.0)	876 (43.9)	16.1

Source: OECD.Stat, accessed on 16/03/2021 at https://stats.oecd.org/Index.aspx?datasetcode=TIVA_2018_C1

Note: Figures in parentheses are share (%) in commercial services

As can be observed from Table 11, with a share of more than 55 per cent, 'charges for IPR uses' was the largest contributor to Japan's total services exports to India in 2019. There has been significant rise in export value of 'charges for IPR uses' from US$ 714 million in 2010 to US$ 1344 million in 2019. This could largely be on account of robust growth in India's imports of "Charges for the use of intellectual property n.i.e' that have grown from 2.4 billion to US$ 7.9 billion during the same period. Other major constituents of Japanese exports to India include transportation (13.5 per cent), travel (11.6 per

cent), other business services (9.7 per cent) and construction services (6.2 per cent). In terms of growth rates, while Japanese exports of key services like 'telecom, computer and information services', travel, financial services and 'charges for IPR uses' have increased faster than the average growth rate of services export during 2010-19, some key services segments like 'other business services' and transport services have exhibited negative growth. Contraction in 'other business services' is the main factor responsible for the relatively sluggish growth in Japanese services exports to India. As can be noted from Table 11, Japan's exports of 'other business services' to India have declined from US$755 million in 2010 to US$236 million in 2019. This is despite the fact that India's total import of 'other business services' have surged significantly from more than US$ 25 billion in 2010 to about US$ 46 billion in 2019 and Japan's exports of these services have increased from about US$ 32 billion to nearly US$ 46 billion during the same period.

Table 11: Composition of Japan's exports to India, US$ million

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	CAGR 2010-19
Transport	345 (16.6)	365 (17.1)	467 (22.5)	421 (19.7)	361 (17.4)	443 (21.5)	374 (16.3)	439 (18.0)	347 (13.5)	329 (13.5)	-0.5
Travel	93 (4.5)	94 (4.4)	137 (6.6)	109 (5.1)	151 (7.3)	131 (6.3)	152 (6.6)	186 (7.6)	234 (9.1)	282 (11.6)	13.1
Construction	141 (6.8)	40 (1.9)	18 (0.9)	18 (0.8)	60 (2.9)	119 (5.8)	198 (8.6)	140 (5.7)	111 (4.3)	150 (6.2)	0.7
Financial services	20 (1.0)	39 (1.8)	18 (0.9)	23 (1.1)	72 (3.5)	41 (2.0)	24 (1.0)	23 (0.9)	26 (1.0)	39 (1.6)	7.6
Charges for IPR uses	714 (34.4)	839 (39.4)	1039 (50.0)	964 (45.2)	994 (47.8)	998 (48.4)	1221 (53.2)	1315 (53.8)	1545 (60.0)	1344 (55.2)	7.3
Tele, computer & info	10 (0.5)	24 (1.1)	17 (0.8)	30 (1.4)	46 (2.2)	66 (3.2)	102 (4.4)	122 (5.0)	84 (3.3)	46 (1.9)	18.3
Other business services	755 (36.3)	726 (34.1)	380 (18.3)	581 (27.2)	386 (18.6)	258 (12.5	214 (9.3)	211 (8.6)	217 (8.4)	236 (9.7)	-12.1

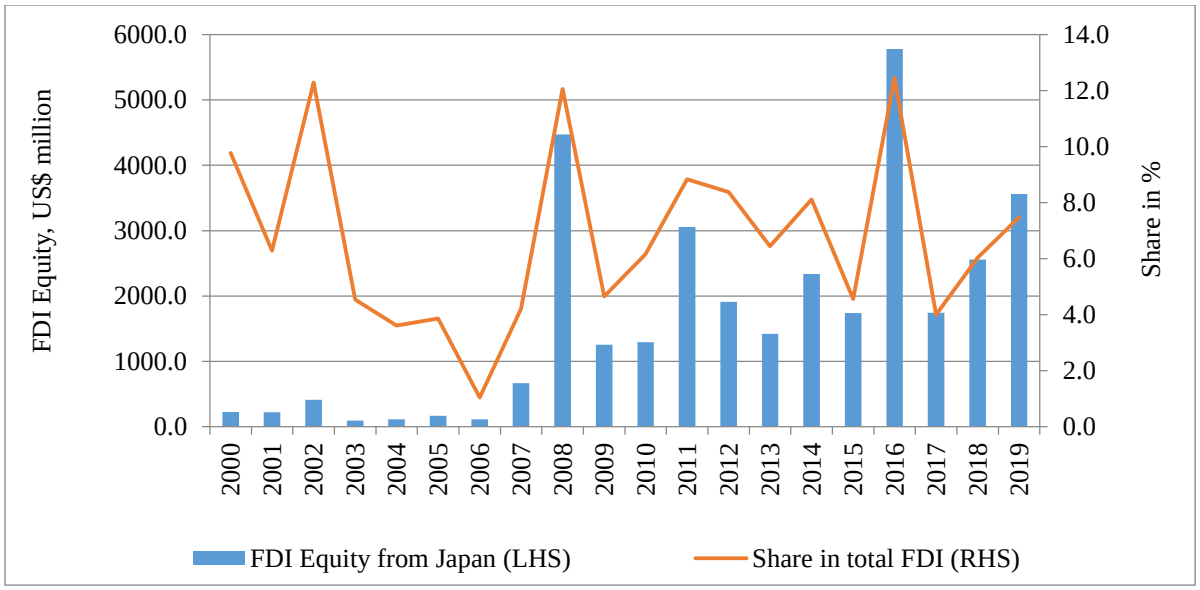
Source: OECD.Stat, accessed on 16/03/2021 at https://stats.oecd.org/Index.aspx?datasetcode=TIVA_2018_C1

Note: Figures in parentheses represent the share (%) in commercial services

2.3. India-Japan investment relations

The economies of India and Japan are also very complementary with regards to the flows of FDI. While India is one of the leading investment destinations in the world, Japan is among the top sources of FDI. As per OECD, in 2019, while India was ranked as the 6th largest recipient of FDI, Japan was the biggest source of FDI in the world.[11] There has been robust growth in India-Japan bilateral investment relations in the recent past. And, Japanese FDI to India has grown faster than total FDI inflows into India during 2010-19. Equity investment from Japan has increased at a CAGR of 18.9 per cent during 2000-2010 and 11.9 per cent during 2010-2019, whereas total FDI into India increased at 24.5 per cent and 9.5 per cent respectively during the same periods. As Figure 5 shows, the annual flow of FDI from Japan to India has increased from about US$229 million in 2000 to US$1,295 million in 2010 to more than US$3,561 million in 2019. Although Japan's share in total annual FDI flows to India has fluctuated during the last two decades, Japan has always remained among the top investors in India in the recent past. According to RBI data, Japan was the 5th largest source of FDI for India in 2018-19.[12] In terms of cumulative FDI, on the other hand, Japan was the 3rd largest supplier of FDI in the country between January 2000 and December 2019.[13]

Figure 5: FDI Equity flow to India from Japan



Source: DIPPT, FDI Synopsys on country Japan[14]

[11] http://www.oecd.org/investment/FDI-in-Figures-April-2020.pdf

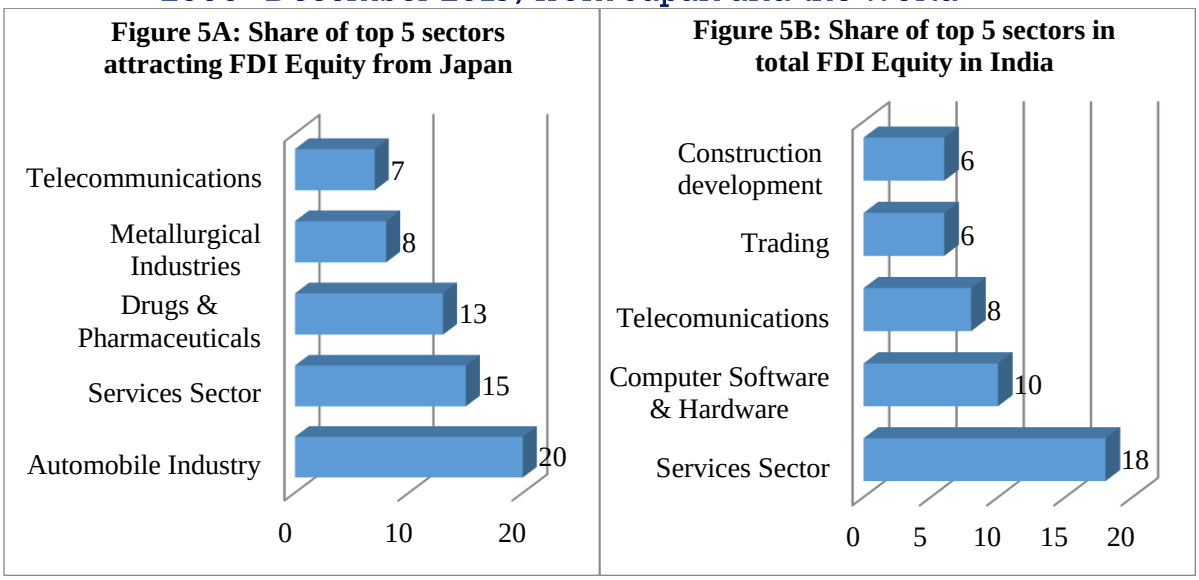
[12] 9TBD320A3F1D694E85AD647FC1DE7A0AFD.PDF (rbi.org.in)

[13] Japan_iii_2019.pdf (dipp.gov.in)

[14] Ibid

The composition of FDI equity from Japan into India is notably different from the composition of the total FDI equity received by the country from rest of the world. As Figure 6 shows, while the automobile industry (20 per cent) was the largest recipient of cumulative FDI inflows received during April 2000 to December 2019 from Japan, the services sector (18 per cent) was the main beneficiary of total FDI equity inflows into India from the rest of the world during the same period. Other sectors that have attracted significant proportions of FDI from Japan include services (15 per cent), drugs and pharmaceuticals (13 per cent), metallurgical industries (8 per cent) and telecommunications (7 per cent). It is pertinent to note that the composition of FDI from Japan is not only qualitatively different from that of total FDI received by the country from the rest of the world, it is also more suitable for India's desired goal of enhancing the manufacturing competitiveness of the economy. Out of the top five sectors that have attracted maximum FDI equity from Japan, three belong to manufacturing (automobile, drugs and pharmaceuticals, and metallurgical industries). On the other hand, all the top five sectors that received a major chunk of total FDI in the country largely belong to the services segment.

Figure 6: Top sectors attracting FDI Equity (cumulative inflow, April 2000–December 2019) from Japan and the World

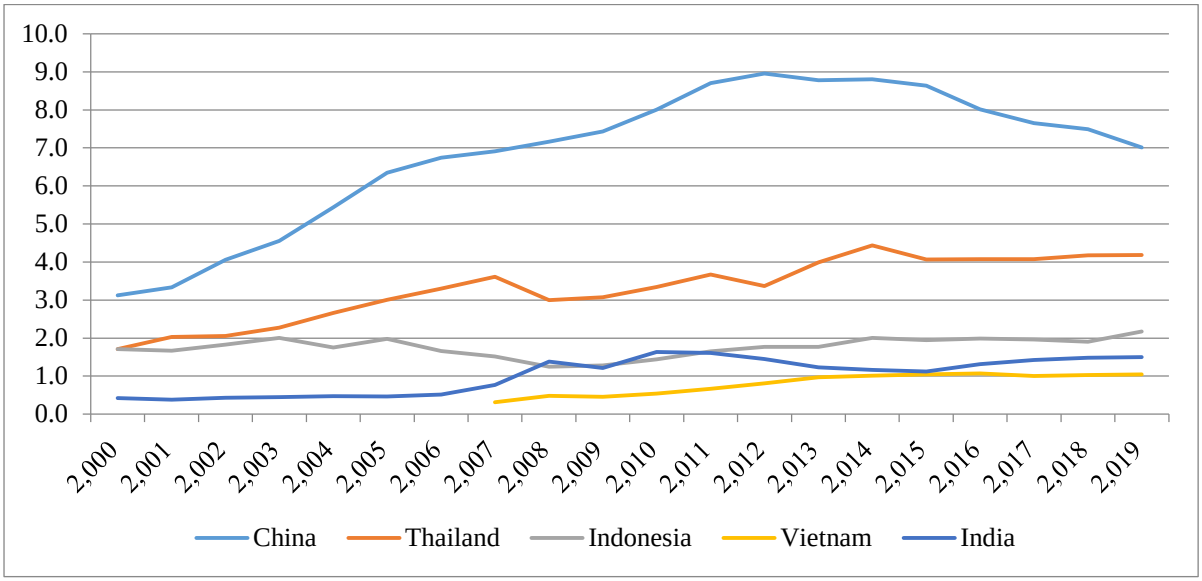


Source: DIPPT, FDI Factsheet December 2019 and FDI Synopsys on country Japan 13.12.2019

Although India has been gaining importance as an investment destination for Japanese companies in the recent past, the country's share in Japan's total outward FDI stock still remains significantly low, especially in comparison to many of its competitor economies in Asia. As Figure 7 shows, although India's share in Japanese FDI stock has increased from 0.4 per cent in 2000 to 1.5 per cent in 2019, India's share remains significantly lower than that of major

economies like China (7.0 per cent), Thailand (4.2 per cent) and Indonesia (2.2 per cent) in 2019. In terms of growth too, Japanese FDI stock in several Asian countries has increased at a much faster rate than the growth in India in the post-2010 period. While Japanese FDI to India increased by 106 per cent, FDI to Vietnam, Indonesia and Thailand increased by 333 per cent, 237 per cent and 180 per cent respectively between 2010 and 2019. This clearly indicates that there exists significant scope to further enhance the flow of Japanese FDI into India.

Figure 7: Share of major Asian economies in outward FDI stock of Japan



Sources: JETRO (2020)

The growing presence of Japanese investment in India is also reflected in terms of the increase in the number of Japanese companies in India in recent years. As can be observed from Figure 8, the number of Japanese companies registered in India has more than doubled between 2010 and 2020, increasing from 725 in 2010 to 1,455 in 2020. However, despite this significant rise, the number of Japanese companies in India is still considerably lower than that in many of its peer economies in Asia. For instance, the number of Japanese companies operating in China was about 32,000 (2017),[15] that in Thailand over 7,000 in 2014[16] and in Indonesia, over 1,800 in 2018.[17]

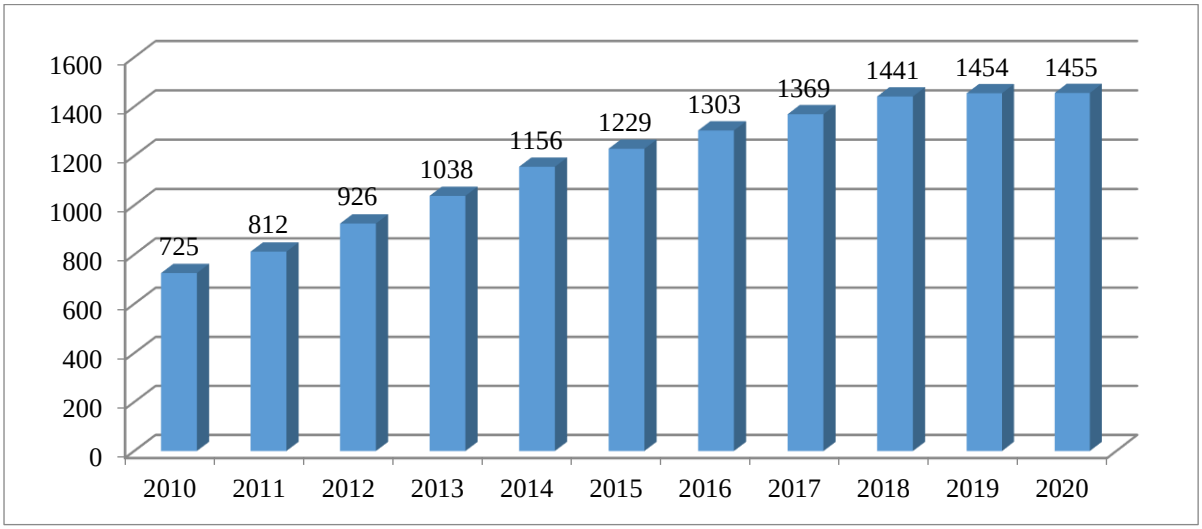
[15] https://www.boyden.com/media/japans-chinese-operations-14184548/index.html#:~:text=China's%20Communist%20Party%20granted%20the,biggest%20on%20the%20Chinese%20mainland.

[16] https://www.industryweek.com/expansion-management/article/21962493/thailand-still-top-asean-destination-for-japan

[17] https://info.japantimes.co.jp/international-reports/pdf/20180511-SMS-Indonesia.pdf

Another important Indicator of the growing Japanese presence in India is the number of overseas affiliates of Japanese companies, which has tripled from 219 in 2008 to 602 in 2018. During this period, India's share in the total number of overseas affiliates of Japanese companies has increased significantly from 1.2 per cent in 2008 to 2.3 per cent in 2018. However, despite this increase, India's share is notably lower than that of economies like China (24.9 per cent) and ASEAN (28.4 per cent)[18] and indicates the potential for further expansion of overseas affiliates of Japanese companies in India.

Figure 8: Number of Japanese companies registered in India



Source: Embassy of Japan in India and JETRO

2.4. Flows of Japanese ODA to India

Japan is one of the oldest and largest members of the Organisation for Economic Co-operation and Development – Development Assistance Committee (OECD-DAC) and one of the leading ODA providers in the world. In terms of volume, Japan was the 4th largest source of ODA among the DAC countries in 2019. The total ODA from Japan accounted for about 0.3 per cent of Japan's gross national income in 2019, though this was significantly lower than the DAC target of 0.7 per cent of GDP (OECD, 2020)[19].

OECD data indicates that Japan's ODA commitments and disbursements have fluctuated during the last two decades. While Japan's ODA commitments have ranged between US$10.7 billion in 2002 to US$25.2 billion in 2018, the amount of disbursement was at the lowest of US$12.2 billion in 2002 and the highest at US$22.2 million in 2013. While Japanese ODA commitments were slightly

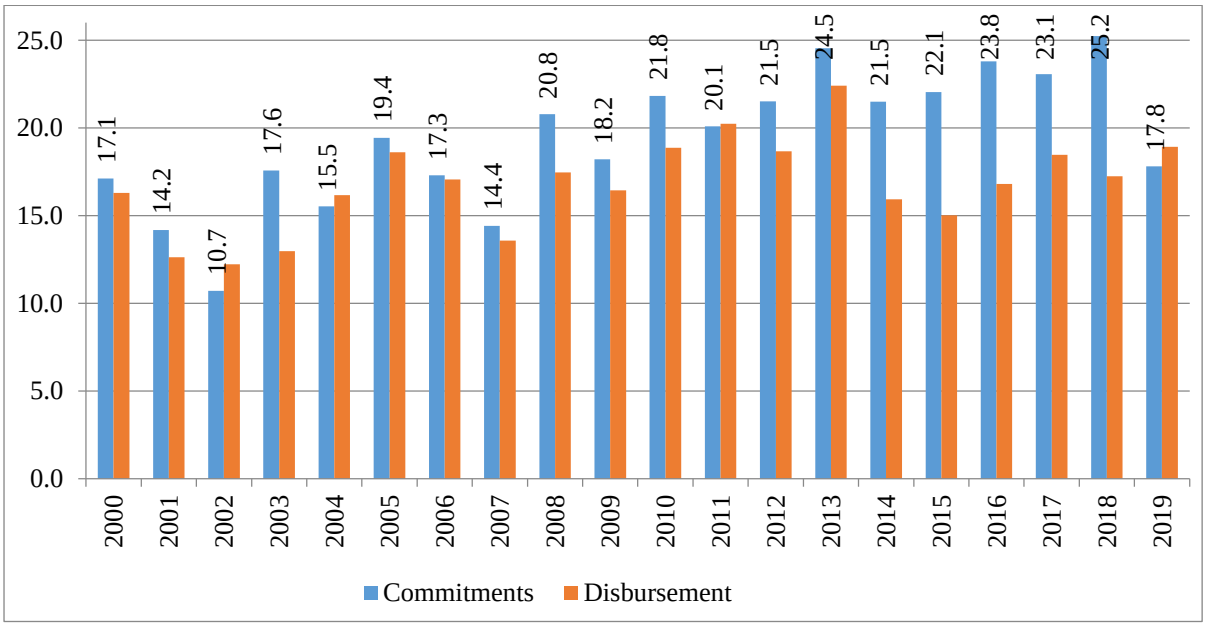
[18] JETRO 2020

[19] Development Co-operation Profiles 2020-Japan

higher in the 2010s as compared to the 2000s, the gap between commitments and disbursements has also been greater during 2010s. Figure 9 shows the total annual flows of commitments and disbursements of Japanese ODA between 2000 and 2019.

Another important aspect of Japanese ODA flows is that Japan's ODA flows as a proportion of global ODA has declined in line with a fall in Japan's share in global GDP and trade over the last two decades. For instance, while Japan's share in total ODA commitments by DAC countries has declined from 27.4 per cent in 2000 to 14.7 per cent in 2010 and further to 10.6 per cent in 2019, Japan's share in total disbursements has also shrunk from 27.1 per cent to 13.3 per cent to 11.7 per cent during the same years.[20]

Figure 9: Flow of ODA from Japan to developing countries, US$ billion



Source: OECD

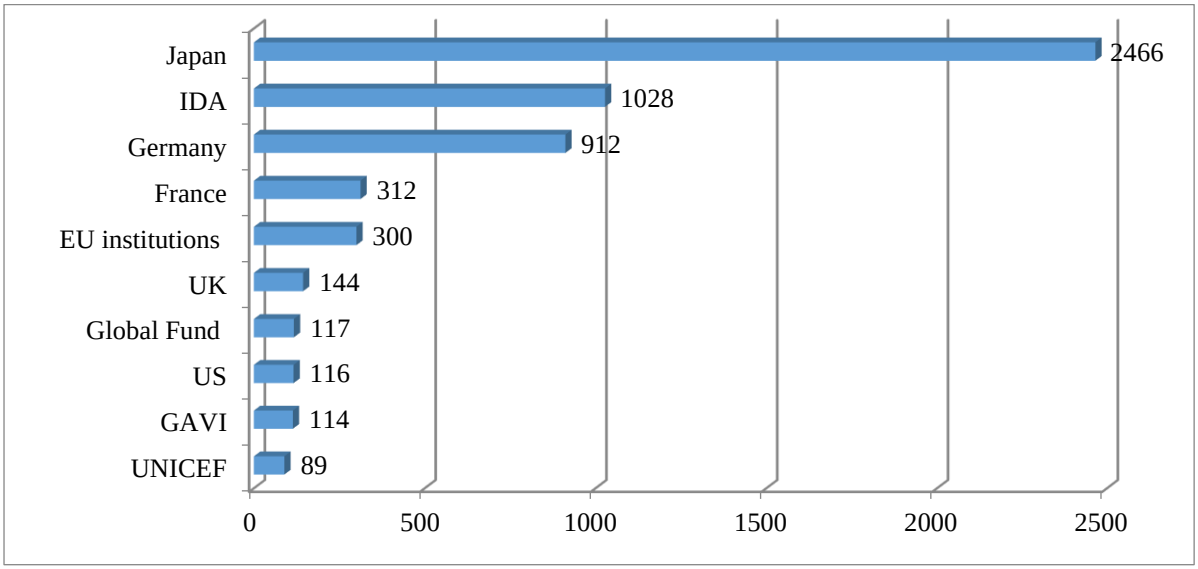
An important and distinct feature of Japanese ODA is its strong focus on economic infrastructure. Although other DAC countries, whose focus has been poverty and related aspects, have been critical of the Japanese ODA model, it suits the requirements of emerging countries like India that have been trying to enhance their economic competitiveness by focusing on the creation of good quality infrastructure.

India is one among the top ODA receiving countries in the world and Japan is the leading ODA provider to the country. In fact, India was among the first

[20] It is important to note that Japan was the highest donor country in the world during the 1990s (Kesavan, 2020).

countries to receive Japanese ODA in terms of loans and grants in 1958, as mentioned previously, and has become the principal recipient of Japanese ODA since 2005 (Kesavan, 2020). As figure 10 shows, Japan was also the largest source of ODA for India in terms of average ODA received during 2018-2019 (OECD-DAC).[21] It is pertinent to note that Japan was not only the top provider of ODA to India in the world; Japan's ODA contribution was also far greater than the second largest provider, i.e. the International Development Association (IDA).

Figure 10: Top ten donors of gross ODA for India, 2018-2019 average, USD million



Source: https://public.tableau.com/views/OECDDACAidataglancebyrecipient_new/Recipients?:embed=y&:display_count=yes&:showTabs=y&:toolbar=no?&:showVizHome=no

Note: IDA-International Development Association and GAVI – Global Alliance for Vaccines and Immunization

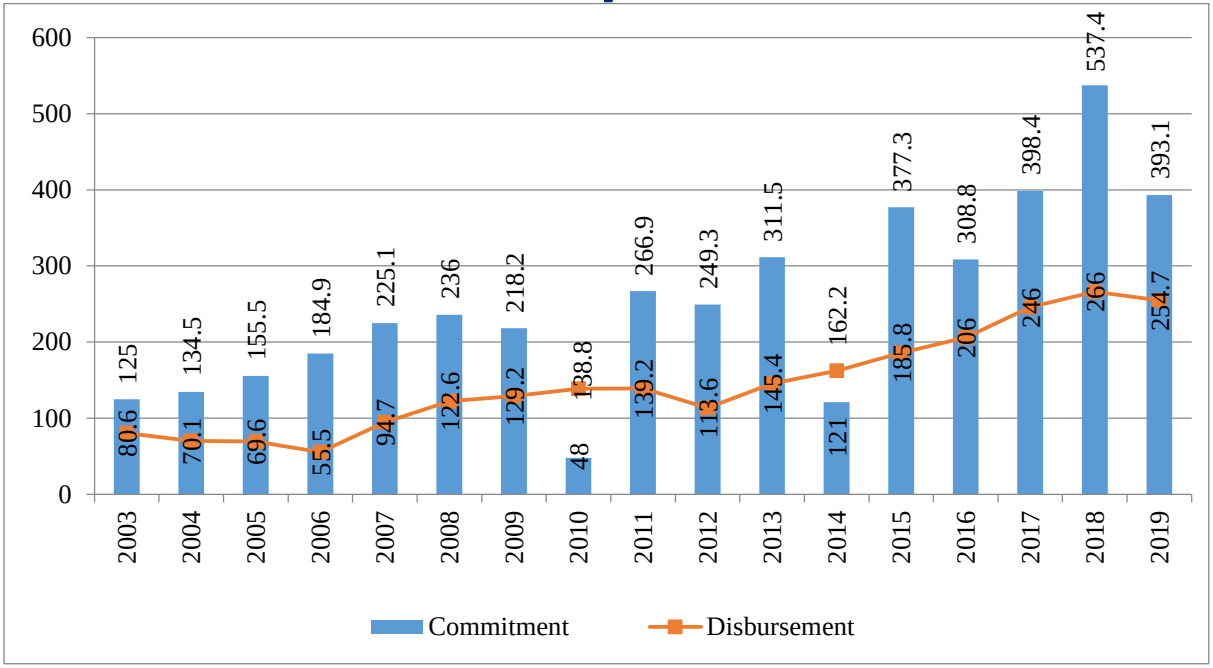
Japanese bilateral ODA is provided mainly under three heads: ODA loans, technical co-operation and grant aid.[22] ODA loans are the most important component of Japan's ODA programme to India. Japan's first ODA loan to India was provided in 1958, as mentioned previously and, since then, India has received a cumulative commitment of about ¥5,730 billion (approximately Rs.350,000 crore) of ODA loans for development across various sectors in the

[21] Workbook: OECD DAC Aid at a glance by recipient_new (tableau.com)

[22] The ODA loans are low interest, long-term and concessional funds to finance the development efforts of emerging countries; technical co-operation is extended for human resource development and the formulation of administrative systems of developing countries and grant aid is the provision of funds without obligation of repayment (JICA, 2021).

country (JICA, 2021). As can be seen from Figure 11, there has been a noteworthy step up in both the commitments and disbursements of Japanese ODA loans to India over the last 15 years. Growth has been significant, especially after 2014. However, despite some improvement in the last few years, there exists a notable and persistent gap between commitments and disbursements of ODA loans to India. And this gap with regards to India has been significantly higher than the gap between commitments and disbursements of overall Japanese ODA to all developing countries.

Figure 11: Trends in commitments and disbursements of Japanese ODA loans to India, in billion Japanese Yen

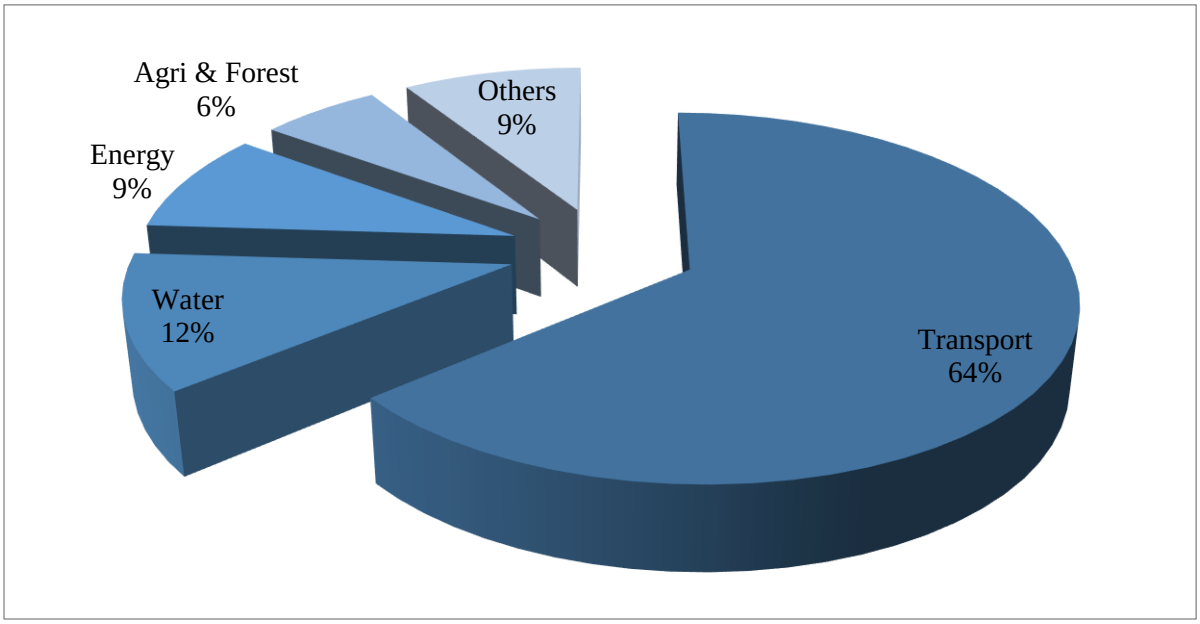


Source: JICA: Operations and Activities in India (various issues) and Matsumoto K. (2015) obtained from Seshadri (2016).

Note: Data for 2015 onwards is for financial years.

As far as the sectoral distribution of ODA loans from Japan to India is concerned, it is the transport sector that has been the largest beneficiary of Japanese ODA loans to India. As Figure 12 shows, the transport sector alone accounted for 64 per cent of ODA loans received by India during 2008/09 to 2017-18. This was followed by water, energy, and the agriculture and forestry sectors.

Figure 12: Sectoral distribution of Japanese ODA loans to India, 2008/09 – 2017/18



Source: Matsumoto (2018)

The dominance of the transport sector seems to have further increased in the last few years, as the latest data show that in 2019-20, the share of transport in ODA loan commitments to India was 67.5 per cent (JICA, 2021). This is a welcome development as an efficient and modern transport infrastructure is very critical to enhance India's overall economic competitiveness in general and the competitiveness of the manufacturing sector in particular. Some of the key projects supported by Japan that are likely to play a vital role in enhancing the competitiveness of India's industrial sector in a significant way include the Delhi-Mumbai Freight Corridor (DMFC), the Delhi-Mumbai Industrial Corridor (DMIC), Chennai-Bangalore Industrial Corridor (CBIC), Mumbai-Ahmedabad High Speed Rail Project, connectivity projects in the north-eastern part of the country under the 'India-Japan Act East Forum', etc. Japanese ODA has also supported some state governments like Gujarat and Tamil Nadu in their efforts to improve the business environment in their respective states.[23]

3. Challenges to India-Japan bilateral economic relations

The discussions above clearly highlight that despite a continuous up-gradation in political engagement between India and Japan over the last two decades, the level of economic interaction remains far below the potential. Although merchandise imports from Japan to India have increased, Indian merchandise exports to Japan have lacked dynamism after 2010, which is also the period

[23] Based on consultations with Mr. Kengo of JICA on April 23, 2021.

when the CEPA was implemented. In commercial services, although Japan's imports from India have increased faster during 2010-2019, India's share in total imports of commercial services by Japan remains at less than one per cent. Similarly, although there has been a significant step up in Japanese FDI to India in the recent past, India's share in Japan's total FDI outflow remains far below that of many of its competitor economies in Asia like China, Indonesia and Thailand. In this section, an attempt is made to examine in detail the major factors that limit India's exports to Japan and the flow of Japanese investment to India.

3.1. Barriers to Indian merchandise exports to Japan

Trade barriers are broadly categorised into two groups: tariff and non-tariff barriers (NTBs). While successive rounds of trade liberalisation and an increasing number of preferential trade agreements have led to a worldwide decline in average tariff rates over the last couple of decades, non-tariff measures (NTMs) have emerged as a dominant source of protection. According to the WTO (2012), "NTMs are almost twice as trade restrictive as tariffs".

Although the level of tariff is of less concern for Indian exports to Japan, it could still be useful to examine the current state of Japan's tariff regime, especially when there is a substantial number of products excluded from the India-Japan CEPA and Japan has preferential trade agreements with many of India's competitor economies in the East and South East Asian region. In this sub-section, the study first examines recent developments in Japan's tariff structure and then analyses the prevalence of NTMs in the Japanese market.

3.1(i) Tariff barriers

Japan is a low-tariff regime economy and hence, tariff is not a big barrier to exporters. However, there seems some deterioration in Japan's tariff structure over the last 10 years. As Table 12 demonstrates, not only has the MFN applied tariff on agricultural products inched upwards between 2010 and 2019, there has also been a notable rise in both domestic tariff peaks[24] from 6.6 per cent in 2010 to 6.9 per cent in 2019 and international tariff peaks[25] from 7.4 per cent to 7.9 per cent during the period. There has also been some increase in nuisance

[24] Domestic tariff peaks' are defined as those exceeding three times the overall simple average applied rate.

[25] International tariff peaks' are defined as those exceeding 15 per cent.

tariffs[26] from 1.3 per cent in 2010 to 1.6 per cent in 2019. In addition, the share of tariff lines with tariff quotas has also shifted upwards.

Table 12: Japan's MFN tariff structure, various years

		MFN applied		
		2010	2012	2019
1.	Simple average rate	5.8	6.3	6.3
	WTO agricultural products	15.7	17.5	17.9
	WTO non-agricultural products	3.5	3.7	3.5
2.	Duty-free tariff lines (% of all tariff lines)	41.4	40.5	40.5
3.	Simple average rate of dutiable lines only	10.0	10.7	10.6
4.	Domestic tariff "peaks" (% of all tariff lines)	6.6	6.6	6.9
5.	International tariff "peaks" (% of all tariff lines)	7.4	7.6	7.9
6.	Tariff quotas (% of all tariff lines)	1.8	1.8	2.0
7.	Nuisance applied rates (% of all tariff lines)	1.3	1.5	1.6
Number of lines		8,826	9,168	9,181
8.	Ad valorem	4,590	4,839	8,533
9.	Duty-free lines	3,652	3,714	3717
10.	Non-ad valorem	584	615	648
	Specific	207	236	247
	Compound	56	57	75
	Alternate	289	290	295
	Other	32	32	31

Source: WTO Trade Policy Review of Japan, 2013 and 2020

On account of the India-Japan CEPA being in operation since 2011, the tariff rate faced by Indian exports to Japan is even lower. However, the deterioration in Japan's MFN tariff structure could be detrimental to India's exports, especially with regards to 1,192 tariff lines (about 13.2 per cent of all tariff lines),[27] which are under the exclusion category in Japan's schedule with no commitment for tariff liberalisation. Many of these lines largely belong to important sectors like fish and crustaceans, animal or vegetable fats and oils, preparations of meat, etc., where the growth of Indian exports to Japan has either been lower than its global growth rate or negative during 2010-2019.

Another major tariff related issue that Indian exports face is a relatively lower level of tariff for many of India's competitor economies with whom Japan has free trade agreements (FTAs) in place. Table 13 highlights the summary of Japan's preferential tariff regime with some of India's key competitor economies in Asia. It is clear that on account of FTAs with Japan, tariffs are not

[26] Nuisance rates' are those greater than zero but less than or equal to 2 per cent.

[27] Seshadri (2016)

only lower for many of India's competitor economies like Vietnam, Thailand and Malaysia; they also enjoy significantly higher duty free rates both in the agricultural and non-agricultural sectors.[28] Japan's tariff regime has been further liberalised for these countries by virtue of a few economic partnership agreements (EPAs) like the ASEAN EPA and TTP11 becoming effective over the recent past. This would lead to further deterioration in India's exports competitiveness in the Japanese market vis-à-vis those from India's competitor economies in Asia.

Table 13: Japan's preferential tariff regime with respect to India and other key economies of Asia, in 2019

		Total		Agriculture		Non-agriculture	
		Average (%)	Duty-free lines (%)	Average (%)	Duty-free lines (%)	Average (%)	Duty-free lines (%)
RTAs							
	Malaysia	3.1	86.3	13.8	54.4	0.5	94.3
	Thailand	3.1	87.2	13.8	56.3	0.5	94.9
	Indonesia	3.3	85.9	14.6	54.7	0.5	93.8
	ASIAN	3.2	85.8	14.3	54.5	0.5	93.6
	Philippines	3.0	88.8	13.6	60.3	0.4	96.0
	Vietnam	3.2	86.5	14.3	55.3	0.4	94.3
	India	3.5	78.4	15.0	39.7	0.7	88.1
Memorandum							
	Malaysia*	2.5	88.4	11.7	57.0	0.3	96.2
	Thailand**	3.1	87.2	13.8	56.5	0.5	94.9
	Indonesia**	3.1	86.4	14.1	54.9	0.5	94.3
	Philippines**	3.0	88.9	13.6	60.4	0.4	96.0
	Vietnam*	2.5	88.2	12.0	57.4	0.3	95.9

Source: WTO Trade Policy Review of Japan, 2020

Note: *Based on the lowest rate applied from the country's EPA, the ASEAN EPA, and the TPP11. **Based on the lowest rate applied from the country's EPA and the ASEAN EPA.

Moreover, NTBs have increasingly become more problematic for Indian exports to Japan. As India's Foreign Trade Policy 2015-20 points out, "Access to the Japanese market remains constrained by NTBs". Besides, according to some newspaper reports, an internal analysis by the Ministry of Commerce

[28] However, the share of duty free lines likely to increase from current level of 78.4% to over 85% when tariffs for some more lines will be eliminated for India by Japan this year (2021).

and Industry had shown high prevalence of technical barriers to trade (TBTs) in Japan as well as in other RCEP countries like China, South Korea and Thailand compared to a significantly lower number of TBTs initiated by India (Pattanayak, 2020). The next sub-section examines the prevalence of NTBs in Japan that hurt Indian exports.

3.1(ii) NTBs in Japan

Before discussing the issue of NBTs, it is important to understand the terminologies of NTB and NTM, which are very closely associated and often used interchangeably by many. According to UNCTAD (2018) "Non-tariff barriers (NTBs) are defined as a subset of NTMs that have a protectionist or discriminatory intent, or where the trade restrictiveness exceeds what is needed for the measure's non-trade objectives, implying a negative impact on trade". NTMs, on the other hand, could be described as "policy measures, other than customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both" (UNCTAD, 2018).[29] Although NTMs are generally considered to have an adverse effect on international trade, they broadly consist of two sets of measures: measures that hamper trade and other measures that do not have protectionist intent (UNCTAD, 2020). However, since it is extremely difficult to distinguish between NTMs with protectionist intent and without, this study uses NTMs as a proxy to examine the prevalence of NTBs in Japan.

In order to assess the extent of NTMs faced by Indian exporters in Japan, Table 14 provides a comparative picture of the prevalence of NTMs in Japan and India. It is apparent that the incidence of NTMs in Japan is far greater than that in India. For instance, while about 60 per cent of total products imported by Japan are subject to one or more types of NTMs, only 41 per cent of products coming to India have to face any type of NTM in the country. Further, while about 32 per cent of products imported to Japan have to encounter three or more types of NTMs, less than three per cent of products imported to India are subject to three or more types of NTMs in the country.

[29] As per UNCTAD, NTMs are divided into 16 chapters: (A) sanitary and phytosanitary (SPS) measures (B) technical barriers to trade (TBT) (C) pre-shipment inspections and other formalities (D) contingent trade-protective measures (E) Non-automatic licensing, quotas, prohibitions and quantity-control measures (F) price-control measures, including additional taxes and charges (G) finance measures (H) measures affecting competition (I) trade-related investment measures (J) distribution restrictions (K) restrictions on post-sales services (L) subsidies (excl. export subsidies) (M) government procurement restrictions (N) intellectual property (O) rules of origin and (P) export-related measures. Chapters A to C are known as technical measures, chapters D to O are called non-technical measures and chapter P represents export-related measures.

Table 14: Prevalence of NTMs in Japan and India

Japan			India		
NTM type count	**Share**	**Number of NTM affected products**	**NTM type count**	**Share**	**Number of NTM affected products**
3+ types	31.70	1650	3+ types	2.75	139
2 types	11.95	622	2 types	23.20	1172
1 type	16.18	842	1 type	15.46	781
No NTMs	40.17	2091	No NTMs	58.59	2960

Source: UNCTAD and World Bank, extracted from WITS database[30]

Note: Products are categorised at the HS6 digit level. NTM year for Japan is 2015 and 2012 for India. Share is the ratio of the number of NTM affected products to total number of products.

In terms of the sectoral incidence of NTMs in Japan, Table 15 clearly shows that with more than 96 per cent of products attracting one or more type of NTMs, the food sector is the most NTM intensive sector[31] in that country. While 57 per cent of food products attract two types of NTMs, 38 per cent of food products are subject to three or more types of NTMs. And this highlights the challenge Indian exporters of food products have to face while exporting to the Japanese market. The compliance cost as a result of these measures is particularly onerous for India's MSME sector, which is a significant contributor to exports. The next most affected sector is 'vegetable products'. About 93 per cent of vegetable products imported to Japan are subject to one or more types of NTMs. Other sectors that are affected most by one or more types of NTMs in Japan include machinery and electrical goods (84.57 per cent), animal products (83.63 per cent), fuels (74.42 per cent), chemicals (74.08 per cent), textile and clothing (57.29 per cent), hide and skins (53.62 per cent) and transportation (52.31 per cent).

Further, within the NTM intensive sectors, there exist a number of sectors like machinery and electrical goods, chemicals, vegetable products, animal products, etc., where a significant proportion of products are affected by more than three types of NTMs. It is important to note that many of the chapters in which the growth rate of Indian exports to Japan has been negative or slower

[30] https://wits.worldbank.org/tariff/non-tariff-measures/en/type-count/country/JPN

[31] In this sub-section, sector is defined by clubbing different HS chapters together, as provided by UNCTAD and World Bank in the WITS database. For instance, food sector includes HS16 to HS24. Appendix 2 shows HS 2 digit wise composition of sectors.

than the exports to the world during 2010- 2019, as mentioned in tables 6 and 7, belong to the NTM intensive sectors indicated above.

However, some sectors like glass and stones, wood, minerals, metals and footwear are the least NTM intensive sectors, as the proportion of products that are subject to any type of NTM is very low.

Table 15: Share (%) of products affected by NTMs in different sectors in Japan

	3+ Types of NTMs	2 Types of NTMs	1 Type of NTMs	No NTMs
Animal (336)	48.51 (163)	21.1 (71)	13.99 (47)	16.37 (55)
Chemicals (787)	52.48 (413)	10.04 (79)	11.56 (91)	25.92 (204)
Food products (211)	37.91 (80)	57.37 (121)	0.95 (2)	3.79 (8)
Footwear (47)	0 (0)	0 (0)	27.66 (13)	72.34 (34)
Fuels (43)	37.21 (16)	13.95 (6)	23.26 (10)	25.58 (11)
Hides & Skins (69)	31.88 (22)	5.80 (4)	15.94 (11)	46.38 (32)
Mach & Elect (771)	80.03 (617)	1.17 (9)	3.37 (26)	15.43 (119)
Metals (563)	4.62 (26)	2.13 (12)	13.32 (75)	79.93 (450)
Minerals (105)	15.14 (16)	0.95 (1)	1.90 (2)	81.90 (86)
Miscellaneous (354)	21.75 (77)	3.67 (13)	20.34 (72)	54.24 (192)
Plastic or rubber (211)	6.16 (13)	38.86 (82)	2.37 (5)	52.61 (111)
Stone & glass (195)	2.56 (5)	9.74 (19)	2.56 (5)	85.13 (166)
Textile & clothing (796)	1.63 (13)	1.63 (13)	54.02 (430)	42.71 (340)
Transportation (132)	8.46 (11)	9.23 (12)	34.62 (45)	47.69 (62)
Vegetable (352)	49.43 (174)	42.05 (148)	1.42 (5)	7.10 (25)
Wood (235)	1.70 (4)	13.62 (32)	1.28 (3)	83.40 (196)

Source: UNCTAD and World Bank, extracted from WITS database[32]
Note: Figures in parentheses represent the number of products

[32] https://wits.worldbank.org/tariff/non-tariff-measures/en/type-count/country/JPN

Table 16 highlights the NTM frequency ratio[33] of different NTM intensive sectors in Japan. While SPS and TBT are the most important measures in terms of their use, the food and vegetable sectors are the most affected sectors by NTMs in Japan. TBTs are the most important NTMs for food products, machinery and electrical, fuel, chemicals, textile and clothing, and transport but for sectors like vegetable, animal, and hide and skins, SPS are the key NTMs. Another important point to note is with regards to machinery and electrical, fuel and chemicals, where price control measures are the second most important NTMs. Although export control measures are applied to all the NTM intensive sectors mentioned in Table 13, their product coverage is significant only in the cases of machinery and electrical goods, animal products and chemicals.

Table 16: NTM frequency ratio in key sectors in Japan

Sector/NTM Chapter	A	B	C	E	F	H	P
Food products	94.23	97.12	15.38	13.94	24.04	0.48	18.88
Vegetable	98.18	84.85	58.79	6.36	5.76	0.3	8.91
Mach & Elect		85.12	1.17		81.72		80.44
Animal	95.9	84.7	0.75	13.06	0.75		80.09
Fuel	2.78	77.78	16.67		69.44		41.18
Chemical	10.41	77.26	53.29	0.27	55.34		56.54
Textile & Clothing	1.64	57.18	1.64	0.25	1.64		1.41
Hide & Skins	41.18	39.71	1.47	25	1.47		44.83
Transport		48.8			24		8.94

Source: UNCTAD and World Bank, extracted from WITS database

The situation with regards to the high incidence of NTMs in Japan becomes even clearer if one compares the NTM coverage ratios[34] of India and Japan. As per WITS database,[35] while the NTM coverage ratio for imports in Japan was 76.18 per cent, for India, it stood at just 45.52 per cent. The Japanese NTM coverage ratio was not only greater than India's but also higher than the average of all 75 reporting countries, which was 71.98 per cent.

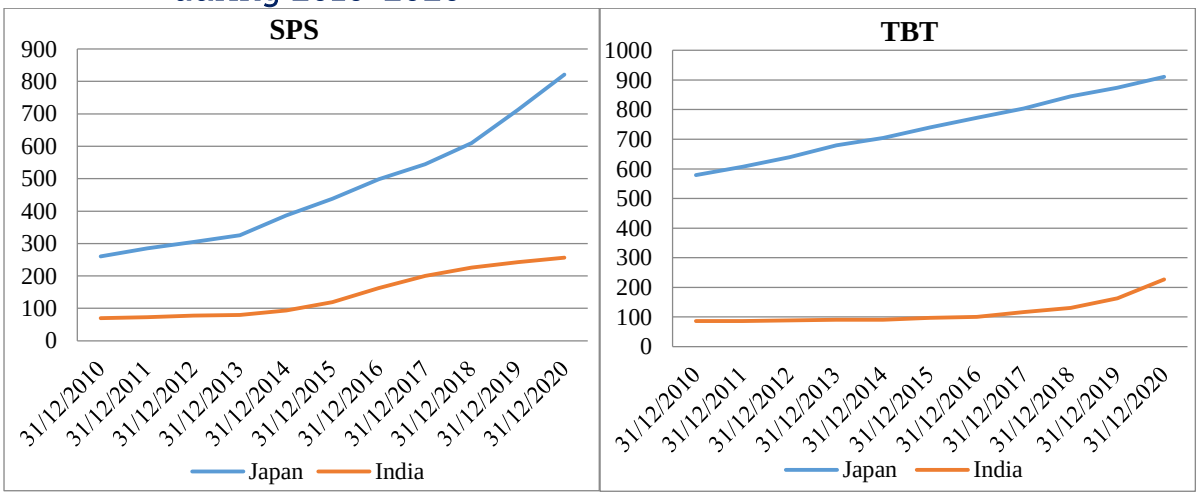
[33] The frequency ratio accounts for the presence or absence of an NTM, and indicates the percentage of traded products to which one or more NTMs are applied.

[34] The coverage ratio is calculated by determining the value of imports of each commodity subject to NTMs, aggregating by applicable HS commodity group, and expressing the value of imports covered as a percentage of total imports in the HS commodity group.

[35] https://wits.worldbank.org/tariff/non-tariff-measures/en/country/IND

To assess trends with regard to the use of NTMs in Japan, we have examined the prevalence of the two most important NTMs – SPS and TBT – in Japan over last 10 years. As Figure 13 shows, although there has been a steady rise in the number of SPS and TBT measures, initiated or in force, in both India and Japan over the past ten years, their prevalence has been far greater in Japan than in India and the gap between the two countries has been widening over the years.

Figure 13: SPS and TBT measures (initiated or in force) in Japan and India during 2010-2020



Source: WTO, accessed on 03/05/2021 at http://i-tip.wto.org/goods/Forms/MemberView.aspx?mode=modify&action=search

Interactions with a few Indian stakeholders and a review of the USTR latest report (2020) on trade barriers in Japan also confirm the high incidence of NTMs in Japan. Some specific NTMs that came out during interactions and were mentioned in the USTR report are discussed below:

- Standards: In Japan, many domestically produced and imported products are required to have product testing and are not allowed to be sold in the country without a certification of compliance with prescribed standards. In many cases, the Japanese companies prefer Japanese agencies for quality accreditation. Indian exporters find this challenging because many of the Japanese test methods are different from that of ISO, Europe (E.N.) or USA (AATCC/ASTM). According to WTO (2020),[36] as of March 2019, there were 10,773 Japanese Industrial Standards (JISs). The number of JISs with corresponding international standards was 6,062; other JISs (4,711) have no corresponding international standards as the target products' features were exclusively for the domestic market. Apart from being a member of several international and regional standards and accreditation bodies, Japan also has mutual recognition arrangements (MRAs) with

[36] Trade Policy Review, Japan, 2020

regards to the results of conformity assessment procedures with a number of key economies like the European Community, Singapore, the Philippines, Thailand and the USA. It is important to note that despite the India-Japan CEPA containing exclusive provision for MRA, the two countries have not been able to put any MRA in place till date.

- Inspection: It is reported by some industries, such as man-made fibres (MMF), that while other countries have a system of random inspection, Japan follows 100 per cent inspection in some cases. However, as per WTO (2020), there is lack of data on the proportion of imported goods that are subject to various types of inspection by customs. Information is also not available on the basis of which goods are physically inspected in Japan.

- Labelling: For some Indian exporters, labelling requirements in Japan are not only very comprehensive but stringent as well, leading to increased compliance costs. For instance, in the case of MMF and articles, the label should include the type of fabric and textile yarn content, with percentage figures for lining, thread, material, etc., care and washing instructions, and the name of the manufacturer/supplier. Besides, the labelling generally has to be in the Japanese language. The USTR report 2020 on trade barriers in Japan has also raised concerns about labelling requirements in Japan. According to this report, the amendments to Japan's Food Labelling Standards in 2017 have expanded the scope of country of origin labelling (COOL) requirements, which are likely to negatively affect the import of food ingredients to Japan.

- SPS Measures: According to the WTO,[37] as on March 31, 2021, with 827 SPS requirements, Japan was the second country after China (1335) with the highest number of SPS measures in place in the Asian region. The USTR report 2020 points out that Japan's regulation of food additives is restrictive for several foods products. For instance, some food additives like carmine, which is used in various food products, is not permitted in Japan. Japan also has burdensome application requirements for pesticide maximum residue level (MRL) approvals. The process for registration for new pesticides and establishment of MRLs is lengthy. It is also reported that the enforcement procedure for MRLs result is uncertain for even those exporters who have never violated Japanese standards. Even a single violation of pesticide MRL could lead to the imposition of enhanced surveillance of all imports of the product that was detected with MRL violation from the exporting country. In addition, according to the Trade

[37] World Trade Organization - Integrated Trade Intelligence Portal - Home page (wto.org)

Policy Review of Japan (2020), several standards on food additives and MRLs in Japan are different from Codex standards.

- Stringent regulatory framework: Despite India being one of the leading suppliers of pharmaceutical products in the world, Indian pharmaceutical companies face issues in accessing the Japanese market. This is mainly on account of the stringent and cumbersome regulatory framework and due to the requirement to form joint ventures (JVs) with Japanese counterparts.[38]

A typical example of NTB while exporting to Japan was explained by a representative from the textile industry in India. He stated that accessories or garments to be exported to Japan are required to go through a 'needle test', which is all right, but Japanese importers insist that the 'needle test' should be performed only on Japanese machines.

According to some stakeholders, there is a general preference for local produce in Japan. They also highlighted the fact that there is lack of capacity to supply the required quantity and quality among Indian exporters, especially micro small and medium enterprises (MSMEs). Another problem that deters Japanese importers from doing business with their Indian counterparts is uncertainty regarding the delivery of goods, which is largely an outcome of inefficient logistics in the country.

3.2. Constraints on Indian services exports to Japan

As discussed previously in Section 2.2, India's services exports to Japan have increased substantially compared to its exports to the rest of the world in the post-2010 period. However, the share of Japan in India's total exports of commercial services is still less than one per cent, far below potential. Even in sectors like 'other business services' and 'telecom, computer and info services', where India is among the leading exporters in the world, India's shares in total imports to Japan were just 1.3 per cent and 3.7 per cent respectively in 2019, significantly lower than India's share in world imports of these services. There exists significant scope to enhance India's services exports to Japan, particularly in sectors like 'other business services' and 'telecom, computer and info services'. In this sub-section, an attempt is made to highlight the key issues that constrain services exports from India to Japan.

[38] TPR Japan- India's Statement.pdf (pmindiaun.gov.in)

An examination of OECD's Services Trade Restrictiveness Index (STRI) shows that except for a few services like legal services, Japan does not appear to be a restrictive market for services trade when compared to India's major export destinations like the USA, the UK etc., as can be seen from Table 17.

Table 17: STRI for Japan and India's other Major Export Destinations in Key Services Sectors

Services sector/Export destination	Australia	Japan	Korea	Netherlands	UK	USA
Logistics cargo-handling	0.231	0.210	0.169	0.157	0.160	0.235
Logistics storage & warehouse	0.181	0.173	0.105	0.148	0.162	0.207
Logistics freight forwarding	0.196	0.201	0.163	0.121	0.136	0.208
Logistics customs brokerage	0.194	0.160	0.175	0.134	0.148	0.223
Accounting	0.205	0.196	1.000	0.166	0.270	0.158
Architecture	0.172	0.148	0.201	0.142	0.186	0.204
Engineering	0.155	0.118	0.155	0.154	0.152	0.210
Legal	0.151	0.538	0.427	0.240	0.182	0.196
Motion pictures	0.170	0.103	0.154	0.147	0.179	0.141
Broadcasting	0.207	0.258	0.358	0.159	0.171	0.248
Sound recording	0.159	0.106	0.126	0.145	0.155	0.170
Telecom	0.201	0.252	0.331	0.127	0.106	0.155
Air transport	0.319	0.395	0.481	0.392	0.393	0.527
Maritime transport	0.211	0.191	0.291	0.147	0.189	0.352
Road freight transport	0.155	0.124	0.179	0.145	0.167	0.167
Rail freight transport	0.180	0.198	1.000	0.129	0.168	0.151
Courier	0.391	0.262	0.381	0.108	0.171	0.367
Distribution	0.156	0.122	0.155	0.144	0.131	0.138
Commercial banking	0.184	0.201	0.177	0.163	0.172	0.206
Insurance	0.186	0.166	0.105	0.123	0.148	0.288
Computer	0.188	0.151	0.122	0.166	0.166	0.173
Construction	0.207	0.123	0.162	0.157	0.145	0.224

Source: OECD.Stat, accessed on 15/04/2021 at Services Trade Restrictiveness Index (oecd.org)

Nevertheless, Japan remains a tough market for India's services exports, even in IT-ITeS sector, where India has a strong comparative advantage. Some of the key factors that limit India's export of commercial services in general and IT-ITeS in particular to Japan are discussed below.

(i) Linguistic and Cultural gap

India has a comparative advantage in services exports to the world but it is largely in the context of western economic settings, which are very familiar to Indian services providers in general and professionals in particular. Indian

services exports are largely destined for the US and the UK, which are not only English speaking but also host to a big chunk of people of Indian origin in the technology sector and Indian students studying outside India. Despite being the world's second largest economy, on the other hand, India's interactions with Japan have been very limited, mainly on account of the linguistic and cultural gap between the two countries. A study by Chanda and Tokas (2020) has highlighted that for Indian firms and MNCs, language was the most important barrier, both while working with Japanese clients and when entering the Japanese market. Language, along with cultural differences, was also cited as a major problem for Indian professionals working in Japan. India's Foreign Trade Policy 2015-20 has also highlighted language as a major hurdle in exporting services to Japan. It is further argued that the Japanese work culture is very different from the working culture of the west and of India. Japanese businesses are based on building relationships, which is a time consuming process and developing trust is the key.[39]

(ii) Recognition of education and experience

Recognition of educational qualifications and work experience are very important to trade in services between the two countries as it allows professionals of one country to supply their services to the other. The India-Japan CEPA has a clear provision in this regard, according to which "a Party may recognise the education or experience obtained, requirements met, or licences or certifications granted in the other Party". However, thus far, progress in this regard has been very limited, which is another factor constraining the expansion of Indian services exports to Japan.

(iii) Issues related to visa or work permits

Visa restrictions are considered to be one of the biggest hurdles in international trade in services. The India-Japan Joint Study Group-JSG (2006)[40] had also mentioned visa restriction as a big issue in expanding India-Japan services trade. There has been some easing off in getting Japanese visas for Indian professionals in recent years as the number of documents required by Indian professionals from a few sectors to acquire the visa has been reduced. However, it is still cited as a barrier to trade with Japan and some studies (such as Seshadri 2016 and Chanda & Tokas 2020) stress the need for further relaxation in Japanese visa norms for Indian nationals and to introduce more business friendly visa rules to enhance people-to-people contact between the two

[39] Japanese and Indian work cultures are starkly different: Geetanjali Kirloskar - The Economic Times (indiatimes.com)

[40] report0606.pdf (mofa.go.jp) , accessed on March 28, 2021

countries. Interaction with an Indian IT company[41] also revealed the lengthiness of visa/work permit processes as one of the biggest hindrance to exports to Japan. The representative of the company was of the view that services suppliers should not be seen as general visa seekers and should get better treatment with regards to visa procedures.

(iv) Unique industrial organisational system

Japan has a unique industrial organisation system known a 'Keiretsu', which is a dominant partnership network of different companies, including banks, manufacturers, distributors, and supply chain partners that drives modern Japanese businesses. This makes it difficult for any new foreign company to enter the Japanese market without getting help from a local company, which could be part of some Keiretsu. The problem posed by the Keiretsu system to India's services export has also been highlighted in the statement by India during '14th Trade Policy Review of Japan, July 6 and 8, 2020'.[42] The statement says, "In the IT services market, the Keiretsu model of Japan makes it extremely difficult for Indian IT firms to approach customers directly, despite their competitive strength in the sector". Consultations with an IT services company also revealed that entry into the Japanese market is tough and time taking process as they follow a closed system.

(v) Growing competition from China and other South East Asian economies

Despite India being one of the leading exporters of commercial services, especially IT-ITeS services, many countries from East and South East Asia have the advantage of cultural proximity to Japan that gives them an upper hand in providing services to Japanese customers. As the economies of China, the Philippines and Vietnam are growing in economic sophistication and have increased interaction with Japanese customers, challenges for Indian companies to enter and survive in the Japanese market are also growing. This can be only overcome through more people-to-people interactions.

(vi) Lack of awareness

Lack of awareness of opportunities in Japan among Indian exporters and about India's services exports capabilities among Japanese customers is another big hurdle in enhancing India's services exports to Japan. According to India's Foreign Trade Policy 2015-20, lack of awareness on the part of industry and

[41] Consultation was held on April 26, 2021

[42] TPR Japan- India's Statement.pdf (pmindiaun.gov.in)

business about the provisions of FTAs also hampers India's export prospects to Japan.

3.3. Barriers to Japanese investment in India

Despite Japan being one of the leading sources of FDI for India, India's share in Japan's total FDI outflow is still significantly lower than that of many Asian counterparts like China, Thailand and Indonesia. There exists great scope for further enhancing the flow of Japanese investment into the country. As the Japanese Minister of Economy, Trade and Industry (METI), Mr. Hiroshi Kajiyama, stated in August 2020, "Japanese companies have more than 200 exciting investment plans in India. These include factory construction and significant production line expansion".[43] However, he added that "in order for Japanese companies to select India as an investment destination, it is very important to provide an attractive business environment".[44] A number of factors limit FDI flows to India in general and FDI from Japan in particular. Moreover, at present, the biggest challenge is to first fix Covid-19 induced disruptions and restore the confidence of foreign investors, including Japanese investors, as soon as possible. Alongside, it is equally important to continue the focus on some key issues, discussed below, that have deterred investment flows into the country for long:

Business environment: The business environment plays a very crucial role in attracting foreign investment in an economy. Japanese firms cite the cumbersome business environment as one of the most important factors adversely affecting their profitability in India (Roy and Chanda 2019). The government has undertaken a number of reform measures in all areas covered by the World Bank's 'ease of doing business' in the recent past, although the focus has been mainly on some parameters like paying taxes, trading across borders, and resolving insolvency. These efforts have not only led to India making significant progress in ease of doing business over the past few years but also demonstrated the government's commitment to the reform process. The country has improved its overall ranking from 130th in 2016 to 63rd in 2020. However, India still has some significant catching up to do to be on par with Asian counterparts like China (31st), Thailand (21st), etc., which also happen to be India's competitors in attracting the Japanese FDI. Besides, with regards to some other specific parameters of 'ease of doing business', such as enforcing contracts, registering property, starting a business and paying taxes, India's position still remains among the worst performing countries. In enforcing

[43] Japanese firms have more than 200 investment plans in India: Japanese Minister - Asian Community News , accessed on April 24, 2021.

[44] Ibid

contracts, registering property, starting a business and paying taxes, India was ranked at 163rd, 154th, 136th and 115th respectively compared to China's positions of 5th, 28th, 27th and 105th and Thailand's positions of 37th, 67th, 47th and 68th on the same parameters.

Trade Facilitation: In last few years, India has introduced a number of trade facilitation initiatives such as the introduction of Indian customs electronics gateway (ICEGATE), single window interface for facilitation of trade (SWIFT), direct port delivery (DPD), direct port entry (DPE), enhanced use of risk management systems (RMS), reduction in the number of required documents, automation of customs clearance system for EXIM trade, etc. (WTO, 2020b). These measures have led to significant improvements in the time and cost related to the clearance of exports and imports (WTO, 2020b). India's advancements on trade facilitation have also been reflected in the country's ranking on ease of doing business. India's raking on 'trading across borders' parameter of the World Bank's 'ease of doing business' jumped from 133rd in 2016 to 68th in 2020. However, there are still some gaps that need to be filled for optimal utilisation of digital platforms. Some of the key gaps include lack of standardisation and co-ordination of processes across ports, lack of awareness and acceptability among new users, shortcomings in the functionality of the system along with technical glitches, parallel use of hard copy, and lack of connectivity or information exchanges among the systems of different stakeholders (Husain and Singla, 2020). A recent JETRO report (2020) has also highlighted that 86.8 per cent of the total number of surveyed Japanese companies felt the need for improved trade facilitation in India, which was just below the proportion that felt that Indonesia needed trade facilitation (96.0 per cent) in the ASEAN, Oceania, and South Asian region.

Logistics: Logistics cost and efficiency play a very important role in determining the economic competitiveness of an economy and, hence, is an important factor in attracting FDI, particularly efficiency seeking FDI. As the government has taken a number of measures to augment the efficiency of the logistics sector in the country, there has been some improvement in the recent past. According to the World Bank's 'Connecting to Compete 2018' report, with a logistics performance index (LPI) score of 3.18, India was ranked at 44th among 160 economies and was one of the top performers among the lower middle-income countries. However, India's ranking was significantly lower than many of its competitor economies in Asia such as China (26th), Thailand (32nd) and Vietnam (39th). Besides, logistics cost in India is still very high at 14 per cent of GDP compared to 8-10 per cent of GDP in the US and Europe, and 9 per cent in China (CII and Arthur D. Little 2020). The high logistics cost is one of major factors hindering FDI flow into the country, particularly efficiency

seeking FDI. Lack of efficient logistics was also highlighted as a big issue for Japanese companies in India during consultation with a Japanese agency.[45]

Underdeveloped infrastructure: Access to quality infrastructure in terms of roads, railways, ports, airports, etc. has a critical role in determining the industrial efficiency of an economy and in influencing the decision of MNCs to choose a potential location for production. Development of infrastructure in terms of expansion of highways, expressways, airports and railways has been a focus area for the government in the last few years, leading to marked improvement in the recent past. However, India has to go a long way in making its infrastructure world class, especially one which is comparable to Asian competitors like China. A 'Survey Report on Overseas Business Operations by Japanese Manufacturing Companies' for FY 2020 by the Japan Bank of International Co-operation (JBIC, 2021) has shown that "underdeveloped infrastructure" has been one of the biggest issues for Japanese manufacturers in India. However, the share of companies highlighting 'underdeveloped infrastructure' as a big issue has continuously declined over the last five years. The problem of underdeveloped infrastructure in terms of poor quality roads connecting factories to ports was also underlined by a Japanese agency during a consultation.

Customs issues: Given the fact that Japanese companies are very much part of regional supply chains, their competitiveness is determined by the openness of the trade regime. Tariff hikes in India during the last few years have not been well received by many Japanese companies in India as it affects their cost competitiveness. It was highlighted during a consultation that while taking investment decisions, Japanese investors do look at the openness of the trade regime of various potential locations like Thailand, Vietnam, etc. Further, in her 2020 budget speech, the Union Finance Minister Ms. Nirmala Sitharaman, said, "It has been observed that imports under Free Trade Agreements (FTAs) are on the rise. Undue claims of FTA benefits have posed threat to domestic industry. Such imports require stringent checks. In this context, suitable provisions are being incorporated in the Customs Act."[46] Following this, Chapter VAA and section 28DA were inserted in the Customs Act, 1962 and the Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020 (CAROTAR, 2020) implemented from September 21, 2020. The new rules require importers claiming duty benefit under FTA to obtain a select set of documents from their vendors and produce them to the customs authorities at the time of import. These changes have become a big cause of concern for

[45] Consultation was held on April 29, 2021.

[46] Budget_Speech.pdf (indiabudget.gov.in)

many Japanese companies in India. It has been reported that the new changes have caused delays in supply of materials and disruption in the supply chain. While the main intent of these changes is to prevent the misuse of ROO provisions under FTAs, they could be counter-productive to India's effort to integrate itself with regional supply chains and attract foreign investors, if not implemented properly. Effort should be made to make these provisions operationally less onerous for authorised/verified importers having a clear track record.

Labour issues: In recent years, both the central and several state governments have taken a number of initiatives to reform India's labour laws. These measures seem to have contributed to enhancing India's attractiveness for foreign investors. As a CII-EY (2020) survey has shown, according to about 40 per cent of investors, simplification of labour laws has been one of the major factors attracting foreign investment into the country. Although the recent codification of labour laws is likely to significantly reduce the compliance burden for investors, including foreign investors, challenges still remain with state laws and issues related to labour management in the country. The importance of labour management for Japanese investors in India was underlined by a recent statement by the Japanese Ambassador to India, Mr. Satoshi Suzuki, who said, "for Japanese companies operating in India, a stable business environment as well as smooth labour management relationship is very important".[47] During consultations with a Japanese agency, it was highlighted that companies with more than thousand employees face problems with labour unions. It was also pointed out that, in many cases, Japanese companies have to pay an annual wage hike of 10 per cent that leads to an increase in their cost of production.

Lack of single clearance/approval system: There is lack of a centralised system that can provide all the information and facilitate clearances/approvals required by potential investors in the country. There exist multiple IT platforms in central and state governments and investors are required to visit several platforms to get the required information and obtain clearances from different stakeholders. This makes the process very cumbersome and time consuming, especially for new foreign investors. It is highly desirable to establish a centralised single clearance/approval platform that can provide end-to-end facilitation support to investors, including pre-investment advisories, information related to land banks; and facilitation of clearances/approvals from different ministries/departments at both the central and state level.

[47] Japan's envoy to India nudges Karnataka govt. to offer better business environment for Japanese companies | Deccan Herald

Uninterrupted and quality electricity: Access to supply of uninterrupted and quality electricity at a competitive cost has also emerged as an important factor in influencing the MNCs' decisions to choose an investment location. India has seen significant improvement in terms of access to electricity in the last few years, as reflected by a significant jump in India's position in the World Bank's 'ease of doing business' rankings. In terms of the 'getting electricity' parameter, India's ranking has improved from 70 in 2016 to 22 in 2020. However, India's ranking is still significantly lower than that of its competitor economies like China and Thailand. Further, the electricity sector is plagued by high commercial and industrial (C&I) power tariff and the quality of supply also remains a major area of concern for industry. However, it is interesting to note that electricity does not appear to be a big issue now for Japanese companies in India. They feel that the situation with regards to electricity has seen significant improvement, at least in some industrially important states, over the last few years.

Access to land: India's rigid land acquisition laws have generally been highlighted as a deterrent for foreign companies looking to invest in India. The long and arduous process of land acquisition and associated approvals is seen as major problem by many firms entering the Indian market (Ray and Chanda 2019). Currently, land acquisition in India is governed by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (LARR) Act, 2013. The Act has not only enhanced significantly the compensation to landowners both in urban and rural areas but also provided for rehabilitation and resettlement services, a social impact assessment (SIA) for public infrastructure projects, and a consent clause for projects under the private and public-private partnership route. These provisions have led not only to a significant rise in land prices but made land acquisition a very cumbersome and time consuming process. Other land related issues include speculative increase in land prices and local agitations. However, it was found during discussions with a Japanese agency that land does not figure as a big issue for Japanese companies now as many state governments have become very supportive to industry with regard to acquisition of land.

Some other issues that deter potential Japanese investors include frequent changes in rules governing industry without a reasonable notice period, political tensions with bordering countries, especially with China, etc. India's withdrawal from the RCEP has also not gone down very well with many Japanese investors as they see it as an important arrangement for integration of regional supply chains with reduced trade barriers.

4. Summary of findings and the way forward

The study has analysed recent trends and patterns in India-Japan economic relations and examined the barriers, particularly NTMs, which could hinder the growth of Indian exports to Japan. It has also highlighted the factors that constrain the flows of Japanese investments to India. The study has shown that the two-way merchandise trade between India and Japan has lacked dynamism during 2010-2019, which also largely happens to be the period the CEPA has been in force. While Indian imports from Japan have seen some growth, India's exports to Japan have exhibited fluctuations and remained almost same in 2019 at the level of 2010. The stagnancy in Indian exports to Japan has been mainly on account of negative growth in 16 major sectors, including mineral fuels, iron and steel, cotton, preparations of meat and fish, animal originated products, textile fabrics, etc. In addition, even in sectors like carpets and other textile floor coverings; other made up textile articles; lac, gums and resins; coffee and tea and articles of apparel where India has exhibited positive growth in exports to Japan during 2010-19, India's share in Japan's imports remain significantly lower compared to that of India's share in world imports. There is potential to enhance Indian exports to Japan.

However, given that Japan is geographically very close to some of world's most competitive manufacturing economies like China and Vietnam that too with a significant involvement of Japanese investment, enhancing India's goods exports to Japan is a challenging task. Although tariff faced by Indian exports is low because of the India-Japan CEPA, there are many sectors of export interest such as fish and crustaceans from which a significant number of tariff lines are excluded from Japan's tariff commitments. Indian exports are also put at a disadvantage on account of Japan's FTAs with many of India's competitor economies like Vietnam, where Japanese tariff commitments are more liberal. It is important, therefore, that while reviewing the CEPA, India should ask for revision of the exclusion list and negotiate liberal commitments in tariff lines that are of export interest. To minimise the adverse impact of Japan's FTAs, there is a need to study specific sectors where Japan has given a relatively more favourable treatment to India's key economic competitors and renegotiate the tariff concessions under CEPA to put our exports on an equal footing. However, the most challenging task for India is to deal with the high prevalence of NTMs in Japan, which significantly enhances the cost of compliance for Indian exports. Since it is extremely difficult to negotiate the measures that are taken with the stated objective of human safety and health, the focus should be on enhancing co-operation with concerned Japanese agencies within the framework of the CEPA and, more importantly, empowering our export industry to follow prescribed quality standards. To cater to the Japanese

market, Indian exporters will have to offer better product profiles with more value added products. Above all, there is no escape from improving India's overall export competitiveness; increased Japanese investment in manufacturing and enhanced ODA in infrastructure could be helpful in this regard.

As for as services are concerned, Japan's imports from India have grown faster than that of its exports to India during 2010-19 leading to a substantial decline in India's trade deficit in services with Japan and an enhanced share for India in Japan's total services imports. Growth in Japan's services imports from India has been largely driven by two sectors – 'telecom, information and computer services' and 'other business services', which largely fall under IT-ITeS sector. Although India's share in Japan's global imports of commercial services has increased over the years, it has remained significantly lower than India's share in world imports of services. Even in the case of 'telecom, information and computer services' and 'other business services', India's share in Japan's total imports remained considerably lower than the share of India's exports in world imports in 2019. There exists significant scope for further enhancing India's exports of commercial services in general, and 'telecom, information and computer services', and 'other business services' in particular, to Japan.

Given that a big chunk of services could be exported through the internet (Mode-1 in WTO terminology), India has a relatively better chance to increase its services exports as compared to goods exports. For this to happen, both government and industry will have to work together. One of the biggest hurdles in getting into the Japanese market is the language barrier. This can be resolved by providing Japanese language training to Indian service providers that can be done through an institutional mechanism involving government, industry and Japanese agencies like JICA or JETRO. The unique industrial organisation system in Japan is another big constraint for Indian companies willing to enter the Japanese market and this can be worked out only by enhanced industry-to-industry co-operation with active support from both governments. The TCS-Mitsubishi model in Japan seems to be working well and could be followed by other Indian IT-ITeS companies wanting to expand their presence in the Japanese market. At the CEPA review negotiations, it could be useful for India to explore possibility of securing market access only in IT and IT enabled services in government procurement on a reciprocal basis. Getting a Japanese visa is seen as another big issue that hinders the flow of bilateral trade in services. There is need to relax the procedural requirements for visas and create a more business friendly visa regime. It is also imperative that both governments actively encourage their respective professional bodies to negotiate on mutual recognition of qualifications or experience in their specific service segment. Most importantly, promotion of people-to-people

contact could play a very crucial role in realising the full potential of bilateral services trade between the two countries.

The analysis of FDI flows from Japan to India has shown that India has gained significance as an investment destination for Japanese companies during 2010-19. However, India's share in Japan's total outward FDI stock still remains lower than in many of its peer economies in Asia like China, Thailand and Indonesia. In terms of growth too, Japanese FDI stock in Vietnam, Indonesia and Thailand has increased much faster than in India during 2010-19 and, hence, there exists significant scope for further enhancing Japanese FDI to the country.

To stimulate Japanese FDI in India, the government has to continue its efforts to further improve all the parameters of the ease of doing business index but with focus on enforcing contracts, registering property, starting a business and paying taxes in the country. States have a very important role to play in improving the business environment of the country. Japan has co-operated with a few state governments like Gujarat and Tamil Nadu to improve the business environment in their respective states. It would be useful if other states are also encouraged to work with JICA. Moreover, given the potential for Japanese FDI in India, it is equally important to work closely with agencies like JETRO on issues that are of particular concern to Japanese investors. For instance, due to their high dependence on regional supply chains, the issue of trade facilitation is of paramount importance to Japanese companies in India. For the same reason, a stable and low tariff regime is very important to them. Poor logistics, including trade facilitation, is one of the biggest reasons for the lack of efficiency seeking FDI from Japan to India. Improved logistics, including hard infrastructure and processes, in the country will further advance India's attractiveness for Japanese investors. The negative impact of India's withdrawal from the RCEP on Japanese investment sentiment could be compensated by a more open, stable and consistent trade policy regime in the country. India also needs to quickly establish a centralised single window clearance system where a potential investor could get necessary information and clearances/approvals from various departments of both the central and state governments.

Overall, although there is great potential in the India-Japan partnership, the bilateral economic relation is still not in a self-driving mode and needs to be driven and facilitated by the governments of the two countries to realise the full potential of bilateral economic engagement between Asia's 3rd and 2nd largest economies.

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Appendix 1: Description of HS code

HS Code	Description
01	**Name**: Live animals
	Description: Live animals
02	**Name**: Meat and edible meat offal
	Description: Meat and edible meat offal
03	**Name**: Fish, crustaceans, molluscs, aquatic invertebrates nes
	Description: Fish & crustacean, mollusc & other aquatic invertebrate
04	**Name**: Dairy products, eggs, honey, edible animal product nes
	Description: Dairy prod; birds' eggs; natural honey; edible prod nes
05	**Name**: Products of animal origin, nes
	Description: Products of animal origin, nes or included.
06	**Name**: Live trees, plants, bulbs, roots, cut flowers, etc.
	Description: Live tree & other plant; bulb, root; cut flowers, etc.
07	**Name**: Edible vegetables and certain roots and tubers
	Description: Edible vegetables and certain roots and tubers.
08	**Name**: Edible fruit, nuts, peel of citrus fruit, melons
	Description: Edible fruit and nuts; peel of citrus fruit or melons.
09	**Name**: Coffee, tea, mate and spices
	Description: Coffee, tea, matï and spices.
10	**Name**: Cereals
	Description: Cereals
11	**Name**: Milling products, malt, starches, inulin, wheat gluten
	Description: Prod. mill. indust; malt; starches; inulin; wheat gluten
12	**Name**: Oil seed, oleagic fruits, grain, seed, fruit, etc., nes
	Description: Oil seed, oleagic fruits; miscell grain, seed, fruit, etc.
13	**Name**: Lac, gums, resins, vegetable saps and extracts nes
	Description: Lac; gums, resins & other vegetable saps & extracts.
14	**Name**: Vegetable plaiting materials, vegetable products nes
	Description: Vegetable plaiting materials; vegetable products nes
15	**Name**: Animal, vegetable fats and oils, cleavage products, etc.
	Description: Animal/veg fats & oils & their cleavage products; etc.
16	**Name**: Meat, fish and seafood food preparations nes
	Description: Prep of meat, fish or crustaceans, molluscs, etc.
17	**Name**: Sugars and sugar confectionery
	Description: Sugars and sugar confectionery.
18	**Name**: Cocoa and cocoa preparations
	Description: Cocoa and cocoa preparations.
19	**Name**: Cereal, flour, starch, milk preparations and products
	Description: Prep. of cereal, flour, starch/milk; pastry cooks' prod
20	**Name**: Vegetable, fruit, nut, etc. food preparations
	Description: Prep of vegetable, fruit, nuts or other parts of plants
21	**Name**: Miscellaneous edible preparations
	Description: Miscellaneous edible preparations.
22	**Name**: Beverages, spirits and vinegar
	Description: Beverages, spirits and vinegar.
23	**Name**: Residues, wastes of food industry, animal fodder

HS Code	Description
	Description: Residues & waste from the food indust; prep. ani fodder
24	**Name**: Tobacco and manufactured tobacco substitutes
	Description: Tobacco and manufactured tobacco substitutes
25	**Name**: Salt, sulphur, earth, stone, plaster, lime and cement
	Description: Salt; sulphur; earth & stone; plastering mat; lime & cem
26	**Name**: Ores, slag and ash
	Description: Ores, slag and ash.
27	**Name**: Mineral fuels, oils, distillation products, etc.
	Description: Mineral fuels, oils & product of their distillation, etc.
28	**Name**: Inorganic chemicals, precious metal compound, isotopes
	Description: Inorgn chem; compds of prec mtl, radioact elements, etc.
29	**Name**: Organic chemicals
	Description: Organic chemicals.
30	**Name**: Pharmaceutical products
	Description: Pharmaceutical products.
31	**Name**: Fertilisers
	Description: Fertilisers.
32	**Name**: Tanning, dyeing extracts, tannins, derivs, pigments, etc.
	Description: Tanning/dyeing extract; tannins & derivs, pigm, etc.
33	**Name**: Essential oils, perfumes, cosmetics, toiletries
	Description: Essential oils & resinoids; perf, cosmetic/toilet prep
34	**Name**: Soaps, lubricants, waxes, candles, modelling pastes
	Description: Soap, organic surface-active agents, washing prep, etc.
35	**Name**: Albuminoids, modified starches, glues, enzymes
	Description: Albuminoidal subs; modified starches; glues; enzymes.
36	**Name**: Explosives, pyrotechnics, matches, pyrophorics, etc.
	Description: Explosives; pyrotechnic prod; matches; pyrop alloy, etc.
37	**Name**: Photographic or cinematographic goods
	Description: Photographic or cinematographic goods.
38	**Name**: Miscellaneous chemical products
	Description: Miscellaneous chemical products.
39	**Name**: Plastics and articles thereof
	Description: Plastics and articles thereof.
40	**Name**: Rubber and articles thereof
	Description: Rubber and articles thereof.
41	**Name**: Raw hides and skins (other than fur skins) and leather
	Description: Raw hides and skins (other than fur skins) and leather.
42	**Name**: Articles of leather, animal gut, harness, travel goods
	Description: Articles of leather; saddlery/harness; travel goods, etc.
43	**Name**: Fur skins and artificial fur, manufactures thereof
	Description: Fur skins and artificial fur; manufactures thereof.
44	**Name**: Wood and articles of wood, wood charcoal
	Description: Wood and articles of wood; wood charcoal.
45	**Name**: Cork and articles of cork
	Description: Cork and articles of cork.
46	**Name**: Manufactures of plaiting material, basketwork, etc.
	Description: Manufactures of straw, esparto/other plaiting mat, etc.

HS Code	Description
47	**Name**: Pulp of wood, fibrous cellulosic material, waste, etc.
	Description: Pulp of wood/of other fibrous cellulosic mat, waste, etc.
48	**Name**: Paper & paperboard, articles of pulp, paper and board
	Description: Paper & paperboard; art of paper pulp, paper/paperboard
49	**Name**: Printed books, newspapers, pictures, etc.
	Description: Printed books, newspapers, pictures & other products, etc.
50	**Name**: Silk
	Description: Silk.
51	**Name**: Wool, animal hair, horsehair yarn and fabric thereof
	Description: Wool, fine/coarse animal hair, horsehair yarn & fabric
52	**Name**: Cotton
	Description: Cotton.
53	**Name**: Vegetable textile fibres nes, paper yarn, woven fabric
	Description: Other vegetable textile fibres; paper yarn & woven fab
54	**Name**: Manmade filaments
	Description: Man-made filaments.
55	**Name**: Manmade staple fibres
	Description: Man-made staple fibres.
56	**Name**: Wadding, felt, nonwovens, yarns, twine, cordage, etc.
	Description: Wadding, felt & nonwoven; yarns; twine, cordage, etc.
57	**Name**: Carpets and other textile floor coverings
	Description: Carpets and other textile floor coverings.
58	**Name**: Special woven or tufted fabric, lace, tapestry, etc.
	Description: Special woven fab; tufted tex fab; lace; tapestries, etc.
59	**Name**: Impregnated, coated or laminated textile fabric
	Description: Impregnated, coated, cover/laminated textile fabric, etc.
60	**Name**: Knitted or crocheted fabric
	Description: Knitted or crocheted fabrics
61	**Name**: Articles of apparel, accessories, knit or crochet
	Description: Art of apparel & clothing access, knitted or crocheted.
62	**Name**: Articles of apparel, accessories, not knit or crochet
	Description: Art of apparel & clothing access, not knitted/crocheted
63	**Name**: Other made textile articles, sets, worn clothing, etc.
	Description: Other made up textile articles; sets; worn clothing, etc.
64	**Name**: Footwear, gaiters and the like, parts thereof
	Description: Footwear, gaiters and the like; parts of such articles.
65	**Name**: Headgear and parts thereof
	Description: Headgear and parts thereof.
66	**Name**: Umbrellas, walking-sticks, seat-sticks, whips, etc.
	Description: Umbrellas, walking-sticks, seat-sticks, whips, etc.
67	**Name**: Bird skin, feathers, artificial flowers, human hair
	Description: Prep. feathers & down; arti flower; articles human hair
68	**Name**: Stone, plaster, cement, asbestos, mica, etc., articles
	Description: Art of stone, plaster, cement, asbestos, mica/sim mat
69	**Name**: Ceramic products
	Description: Ceramic products.
70	**Name**: Glass and glassware

HS Code	Description
	Description: Glass and glassware.
71	**Name**: Pearls, precious stones, metals, coins, etc.
	Description: Natural/cultured pearls, prec stones & metals, coins, etc.
72	**Name**: Iron and steel
	Description: Iron and steel.
73	**Name**: Articles of iron or steel
	Description: Articles of iron or steel.
74	**Name**: Copper and articles thereof
	Description: Copper and articles thereof.
75	**Name**: Nickel and articles thereof
	Description: Nickel and articles thereof.
76	**Name**: Aluminium and articles thereof
	Description: Aluminium and articles thereof.
78	**Name**: Lead and articles thereof
	Description: Lead and articles thereof.
79	**Name**: Zinc and articles thereof
	Description: Zinc and articles thereof.
80	**Name**: Tin and articles thereof
	Description: Tin and articles thereof.
81	**Name**: Other base metals, cermets, articles thereof
	Description: Other base metals; cermets; articles thereof.
82	**Name**: Tools, implements, cutlery, etc., of base metal
	Description: Tool, implement, cutlery, spoon & fork, of base mtl, etc.
83	**Name**: Miscellaneous articles of base metal
	Description: Miscellaneous articles of base metal.
84	**Name**: Nuclear reactors, boilers, machinery, etc.
	Description: Nuclear reactors, boilers, mchy & mech appliance; parts
85	**Name**: Electrical, electronic equipment
	Description: Electrical mchy equip parts thereof; sound recorder, etc.
86	**Name**: Railway, tramway locomotives, rolling stock, equipment
	Description: Railw/tramw locom, rolling-stock & parts thereof; etc.
87	**Name**: Vehicles other than railway, tramway
	Description: Vehicles o/t railw/tramw roll-stock, pts & accessories
88	**Name**: Aircraft, spacecraft, and parts thereof
	Description: Aircraft, spacecraft, and parts thereof.
89	**Name**: Ships, boats and other floating structures
	Description: Ships, boats and floating structures.
90	**Name**: Optical, photo, technical, medical, etc. apparatus
	Description: Optical, photo, cine, meas, checking, precision, etc.
91	**Name**: Clocks and watches and parts thereof
	Description: Clocks and watches and parts thereof.
92	**Name**: Musical instruments, parts and accessories
	Description: Musical instruments; parts and access of such articles
93	**Name**: Arms and ammunition, parts and accessories thereof
	Description: Arms and ammunition; parts and accessories thereof.
94	**Name**: Furniture, lighting, signs, prefabricated buildings
	Description: Furniture; bedding, mattress, matt support, cushion, etc.

HS Code	Description
95	**Name**: Toys, games, sports requisites
	Description: Toys, games & sports requisites; parts & access thereof
96	**Name**: Miscellaneous manufactured articles
	Description: Miscellaneous manufactured articles.
97	**Name**: Works of art, collectors pieces and antiques
	Description: Works of art, collectors' pieces and antiques.
99	**Name**: Commodities not elsewhere specified
	Description: Commodities not elsewhere specified

Source: UNCOMTRADE

Appendix 2: HS wise composition of sectors

HS	Sector
01-05	Animal
06-15	Vegetable
16-24	Food Products
25-26	Minerals
27-27	Fuels
28-38	Chemicals
39-40	Plastic or Rubber
41-43	Hides and Skins
44-49	Wood
50-63	Textiles and Clothing
64-67	Footwear
68-71	Stone and Glass
72-83	Metals
84-85	Mach and Elect
86-89	Transportation
90-99	Miscellaneous

Source: UNCTAD and World Bank, extracted from WITS database

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