

India's Position in RCEP Global Value Chain

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ABSTRACT

On 15th November 2020, RCEP, with 15 members, has become the world's biggest regional bloc. India was the founder member of RCEP; however, on 4th November 2019, India declared to quit RCEP. The main reasons to leave RCEP were India's booming trade deficit with most RCEP members and its unfulfilled tabled demands, especially in service trade. India was hesitant to open its markets for foreign competition, particularly for China. Border tension between India and China has also lead India to take its steps back. This paper analyse India's participation in RCEP Global Value Chain and tried to analyse India's position in RCEP-GVC vis-à-vis RCEP members. The analysis using OECD-TiVA database 2018, represents that India's forward and backward participation in the RCEP region has increased; however, it is very low compared with RCEP members. India's forward participation is higher than its backward participation in the RCEP region. Relatively, India has high backward participation with China, South Korea and Japan.

KEYWORDS: Global Value Chain, Regional Comprehensive Economic Partnership, Trade in Value Added, Forward Participation, Backward Participation

JLCode: F15

Date of Submission: 20-11-2020

Date of Acceptance: 06-12-2020

I. INTRODUCTION

According to the new trade theory, trade involves not only the exchange of final goods but also the intermediate goods which are used to make these final goods (Kemeny & Rigby, 2010). Globalisation has given rise to global value chains (GVCs). GVCs are the key player in the trade integration between nations from all over the world. GVC can be understood as breaking down the production process into various stages, and these stages are carried out in different countries of the world. Sometimes, these GVCs are so complex that it becomes difficult to understand how they have transformed the nature of trade.

Regional production networks are formed by fragmentation of production into production blocs, which are linked with services provided by the public and private sectors. Fragmentation of the production process is necessary is answered by S. Arndt. He says that relocating the labour-intensive components to low-cost countries is similar to technological progress, which leads to high productivity and further adds to a higher economy with wide wages. This will eventually benefit society as a whole (Arndt, 2002). There is a significant contribution of GVCs in the economic development of developing countries. On average, 30% is the share of the value-added trade in the GDP of the developing countries; however, in developed nations, it is 18%. The correlation between the growth rate of GDP per capita and GVC participation is found to be positive (UNCTAD, 2013). This interconnection of different countries to produce final products helps them build a robust and productive base and generate employment. It is believed that strategically choosing the GVCs path can significantly improve the development of a country.

On 15th November 2020, RCEP Agreement was signed by its 15 members. RCEP has become the world's biggest regional trading bloc. India, who was the founding member of RCEP, on 4th November 2019, officially declared to move out of RCEP Agreement. The hinted reasons for India's decision to quit RCEP were mainly the unfulfillment of its tabled demands, especially for trade in services and its border tensions with China. India's growing trade deficit in this region, primarily with China, has also forced India to take its steps back from the China-backed RCEP. It is believed that integration through GVCs has become essential for the development of any economy. As one of the biggest emerging economies, India has transpired as a new driver of GVCs and India's participation in RCEP-GVC is crucial. After moving out of the RCEP deal, debate questioning about India's stand for RCEP has emerged. Whether India's decision is correct or not, it will be analysed in the future; however, we can analyse India's participation and position in RCEP and then comment

on India's stand to quit RCEP. Out of the broad agenda, this paper tried to analyse India's participation in Asia's biggest value chain of the RCEP market. Forward and backward participation of India and RCEP members in the RCEP market are compared and analysed. This paper tries to figure out India's actual position in the GVC of the RCEP region vis-à-vis RCEP members.

II. LITERATURE ON GLOBAL VALUE CHAIN

Economic integration in East Asia has given rise to production networks and supply chains in this region. This has further boosted the demand for complicated logistics across the border. For moving up in the production networks and global value chains, we need high quality of services and investment (World Trade Organisation (WTO), 2011). ASEAN served as a production base for many East Asian economies. To make ASEAN a strong production base, it is not only crucial that tariff rates should be low, but a smooth flow of goods, services, and people is also essential. There should be well-managed NTBs with transparency. Those services and logistics, which act as a supporting system, need to be efficient. Trade facilitation should be given due importance (Pangestu & Ing, 2015) (Cadot, Munadi, & Ing, 2013).

Discussing the ASEAN integration with East Asia's supply chain M. Kawai and K. Naknoi has pointed out that from the export point of view, Malaysia, Singapore, and the Philippines has a large share in the export of parts and components, Thailand, the Philippines, and Vietnam has a large share in capital goods. At the same time, Cambodia, Vietnam, and Thailand constitute a large share in final consumption goods. From the import point of view, Malaysia, Singapore, and the Philippines have a large share in components, whereas Brunei Darussalam has a large share in imports of final goods (Kawai & Naknoi, 2015). M. Ando and F. Kimura, by analysing the trade-in machinery parts and components for the year 2007 to 2011 had indicated that the Philippines' earlier trade-in machinery was very minimal, but now it has become a significant portion of its trade in 2010. Singapore, Malaysia, and Thailand also reported an increase in the trade-in machinery and machinery parts and straightening intra-regional trade in machinery parts in East Asia. According to Ando and Kimura, China has changed its position from a net importer to net export in machinery trade (Ando & Kimura, 2013). Studying two key industries, auto (including auto part industry) and hard disk drive S.Chayodom,C. Kornakarun and B.Nath, try to understand the production network in East Asian economies who are ASEAN members. Their study period was 1994 to 2010, and the countries that were covered are Indonesia, Malaysia, Philippines, Singapore, and Thailand, the PRC, India, Japan, and Korea. By analysing the Grubel–Lloyd (GL) index and Vertical Intra industry trade (VIIT) index, they have indicated that intra-industry trade within ASEAN is increasing, which shows a strong production network within ASEAN in the auto industry, and the trading pattern is vertical type. The HDD industry's production network includes many ASEAN countries, PRC and Thailand have vertical intra-industry trade. They have concluded by saying that the policies to promote investment have benefited more than FTAs in the production networks of countries like PRC, Malaysia, and Thailand (Chayodom, Kornakarun, & Nath, 2013).

In Asia, fragmentation of production stages and its spread over geospace in low-cost locations has given rise to "Factory Asia". R. Baldwin and M. Kawai, in their paper, had discussed the hurdles in the performance of Factory Asia. They pointed out that Factory Asia is more affected by the global financial crisis than other economies. These Economies are also affected by natural disasters, which hampers the supply and, consequently, the production network. They have suggested that NTB's which are high in this region should deal properly and SME's should be promoted. They analysed the ASEAN-centered RTAs (including RCEP) and cross FTAs (including TPP and Asia-EU FTA); they concluded that technologically advanced Asian countries supply intermediate goods to the less technologically advanced nations in this region. After the final product is made out of these intermediate goods, they are delivered to the developed markets like US, EU, and Japan. PRC is an excellent manufacturing assembler, and it does not export much of intermediate goods. They have pointed out that East Asian economies, rather than becoming inward-looking economies they prefer to develop their trade relations with other economies in the world (Baldwin & Kawai, 2013).

Production stages occur in different economies; intermediate goods travel across the borders several times, makes it difficult to trace the value-added of export and import by a country using the gross trade statistics. R.Koopman, W.PowersWang, and A.Wei, tried to see the value-added trade by taking the international trade data along with the world input-output table. They decomposed gross export into domestic value-added and foreign value-added. The authors tried to find out the participation rate in the global value chain. GVC participation rate of a country is defined as the sum of the percentage share of a country in intermediate goods exports used by other countries in their exports and the percentage share of other countries' export in their production. Results show that Indonesia's domestic value-added share to the total value of gross exports was highest among ASEAN member states. India has weak production networks; its GVC participation rate is also low. Opposite of this, Singapore has high foreign value-added, and its GVC participation is highest among ASEAN countries (Koopman, Powers, & Wei, 2011).

Amitendu Palit using secondary data from the TIVA (Trade-in Value Added) database of OECD and WTO, has tried to see the forward and backward participation of RECP members in the global value chains. He has also analysed the connection of India with other RCEP members through GVC's in different industries. The results of his study show that the average forward participation of RCEP members has increased from 16.1 % to 24.5% from 1995 to 2008, and backward participation is more than the forward participation. Amitendu Patil has further segregated the RCEP member based on forward participation (FP) and backward participation (BP). Korea, Malaysia, and the Philippines have high FP and high BP. Australia, Brunei, Indonesia and Japan has high FP but low BP. China, Singapore, Thailand, Vietnam, and now Cambodia has low FP with high BP. New Zealand and India are countries with low FP as well as low BP. Analysing the RCA's (revealed comparative advantages) of the RECP members, he has indicated that India is not such a bad performer; there are sectors like textile products, leather & footwear, and manufacturing nec, recycling where the RCA of India is greater than 1. Analysing other RCEP members, Japan in electrical equipment, transport equipment, machinery, and basic metals has $RCA > 1$, Malaysia has a comparative advantage in chemicals, wood & paper products, non-metallic minerals, electrical and optical, machinery and equipment industries, Thailand is better than others in electrical and optical equipment, textile products, food products etc. He has pointed out that the growth of production networks and supply chain has increased, and the evidence of this is the increased intra industrial trade in this region (Patil, 2015).

III. METHODOLOGY

To analyse India's GVC participation in RCEP markets, its forward and backward participation have been analysed for the years 2005,2010 and 2015. Forward participation of a country means how the host country's goods and services are used as an input in the other country's exports. Backward participation of a country means how the other country's goods and services are used as an input in the host country's exports.

The concept and method of calculating forward and backward participation is adapted from a paper written by M.Javorsek and I.Camacho on TiVA: concept, estimation, and analysis¹.

Backward participation of a country i in GVC is estimated using the following formula:

$$BP_i = \frac{TVA_i^{xj}}{GX_i} \times 100$$

Where

i=Home country, j=Foreign country

BP_i = Backward Participation of country i in the GVC

TVA_i^{xj} =Total value added (Foreign Value added) from country j in the total export of country i

GX_i = Total gross export of country i

Forward participation of a country i in GVC is estimated using the following formula:

$$FP_i = \frac{TVA_j^{xi}}{GX_i} \times 100$$

Where

i=Home country, j=Foreign country

FP_i = Forward participation of country i the GVC

TVA_j^{xi} =Total value added from country i in the total export of country j (Domestic Value added exported of country i sent to country j)

GX_i = Total gross export of country i

IV. INDIA'S RCEP-GVC PARTICIPATION AND POSITION

Table 1 shows that India's average forward participation is higher than its backward participation in the GVC of RCEP-2 group for the years 2005, 2010, and 2015². As per the OECD-TiVA database for the period 2005-2015, India's average forward and backward participation in the RCEP region has increased. It can be deduced from table 1 that India has high forward Participation with Brunei, Indonesia, and Australia. Out of these 12 members of RCEP only in Australia, Malaysia, and New Zealand, India's forward participation has declined when we compare the figures for 2005 with 2015. China is the only country in the RCEP-2 group with whom India has very high backward participation. India extensively uses Chinese goods, which are used as an

¹ (Javorsek & Camacho, 2015)

² RCEP minus Myanmar and Laos

input in the production of those goods which are exported by India to the other countries in the world. India also has high backward participation with Australia, Japan, Malaysia, Singapore, Thailand, and South Korea.

Table 1: India's backward and forward participation in RCEP-2

S. No	Country	Years	FP of India	BP of India
1	Australia	2005	1.47	1.25
		2010	2.55	1.81
		2015	1.2	0.7
2	Brunei	2005	0.14	0.01
		2010	1.04	0.03
		2015	2.37	0.04
3	China	2005	0.24	1.07
		2010	0.47	1.91
		2015	0.46	2.5
4	Indonesia	2005	0.59	0.37
		2010	1.4	0.7
		2015	1.51	0.66
5	Japan	2005	0.14	0.58
		2010	0.27	0.61
		2015	0.28	0.51
6	Cambodia	2005	0.04	0
		2010	0.08	0
		2015	0.07	0
7	South Korea	2005	0.22	0.45
		2010	0.31	0.46
		2015	0.34	0.51
8	Malaysia	2005	0.7	0.67
		2010	0.48	0.29
		2015	0.54	0.27
9	New Zealand	2005	0.22	0.04
		2010	0.28	0.03
		2015	0.21	0.02
10	Philippines	2005	0.11	0.02
		2010	0.21	0.04
		2015	0.2	0.04
11	Singapore	2005	0.34	0.31
		2010	0.41	0.28
		2015	0.47	0.35
12	Thailand	2005	0.22	0.17
		2010	0.33	0.2
		2015	0.29	0.18
13	Vietnam	2005	0.12	0.03
		2010	0.24	0.05
		2015	0.18	0.07
Average		2005	0.35	0.38
		2010	0.62	0.49
		2015	0.62	0.45

Note: FP: Forward Participation, BP: Backward Participation

Data Source: OECD database| TiVA (Trade in Value Added) 2018

India's value addition in the gross import of 12 RCEP members and ASEAN & RCEP-2 is shown in table 2. India's gross value is analysed majorly for the broad category of the Industries, i.e., Agriculture, Forestry & Fishing, Mining & Quarrying, and Manufacturing. In Agriculture, Forestry, and Fishing, out of the 12 RCEP members, India has the highest value addition in China's imports, but this has declined from \$1116.38 million in 2010 to \$520.52 million in 2015. When we compare 2010 and 2015 figures, we found that India's value addition in Agriculture, Forestry, and Fishing has also declined in the imports of Australia, Indonesia, Japan, Malaysia, and Vietnam. India's value addition in Agriculture, Forestry and Fishing in ASEAN as well as the RCEP-2 region has also gone down from \$723 million in 2010 to \$480.97 million in 2015 and \$2002.1 million in 2010 to \$1158 million in 2015, respectively.

When we are analysing India's value-added for Mining and Quarrying Industry in all the 12 RCEP members import, it is evident from table 2 that it is highest in the Chinese market, but it is also true that it had drastically declined from \$4245.2 million in 2010 to \$663.3 million in 2015. The second highest value addition in Mining and Quarrying of India is in Japan's Imports; this value addition has also reduced from \$231.8 million in 2010 to \$82.7 million in 2015. The other members in which India's value addition has gone down in Mining and Quarrying are Indonesia, Singapore, and South Korea. In the case of the ASEAN Region, India's value addition in Mining and Quarrying has increased from \$47.5 million in 2005 to \$173.9 million in 2015, whereas in the RCEP-2 region, it has declined from \$4641.9 million in 2010 to \$979.9 million in 2015.

Table 2: India's value-added in gross imports of RCEP members and ASEAN & RCEP-2 (US Dollar, Million)

Country	Agriculture, Forestry, and Fishing			Mining and Quarrying			Manufacturing		
	2005	2010	2015	2005	2010	2015	2005	2010	2015
Australia	19.4	53.9	43.4	7.4	2.8	10.5	628.0	1,715.6	2,584.5
Brunei	0.23	0.62	1.79	0.0	0.1	0.2	11.5	36.4	20.7
Cambodia	0.9	0.1	0.2	0.0	0.0	0.1	13.37	34.8	46.93
China	124.71	1116.38	520.52	2,240.9	4,245.2	663.3	2857.73	6024.97	12195.55
Indonesia	25.9	173.8	93.6	8.4	27.8	27.5	1093.12	2454.68	2130.32
Japan	43.2	45.7	43.9	158.6	231.8	82.7	2307	4037.59	3711.5
Malaysia	84.81	299.17	120.41	9.1	22.8	36.8	628.2	1,539.5	2,279.8
New Zealand	3.6	6.3	7.3	0.5	1.1	1.5	102.6	209.5	288.1
Philippines	10.94	13.37	36.08	0.3	2.1	5.2	146.4	413.2	1,101.3
Singapore	24.74	46.01	57.16	6.6	9.6	2.0	1,051.7	2,306.0	1,570.7
South Korea	12.5	56.6	61.9	56.5	49.7	48.1	1,433.4	4,458.8	3,229.2
Thailand	12.3	33.7	43.7	7.8	10.6	24.1	759.1	1,693.7	2,418.6
Vietnam	5.0	156.5	128.1	15.4	38.3	78.0	390.4	1,250.8	1,629.6
ASEAN	164.85	723.40	480.97	47.5	111.2	173.9	4,093.8	9,729.0	11,197.9
RCEP-2	368.3	2,002.1	1,158.0	2,511.5	4,641.9	979.9	11,422.6	26,175.5	33,206.8

Data Source: OECD database| TiVA (Trade-in Value Added) 2018

Table 3 :Value added by RCEP members and ASEAN & RCEP-2 regions in the gross export of India (US dollar, Million)

Other Country	Agriculture, Forestry, and Fishing			Mining and Quarrying			Manufacturing		
	2005	2010	2015	2005	2010	2015	2005	2010	2015
Australia	1.6	5.6	3.9	25.7	59.1	14.5	1,743.0	6,017.0	2,486.7
Brunei	2.0	5.3	4.7	13.4	18.2	6.5	629.8	1,701.8	1,571.5
Cambodia	1.3	3.9	4.4	8.6	13.2	5.8	463.8	1,304.1	1,615.9
China	0.2	0.8	0.4	1.0	0.7	0.2	54.8	93.1	74.7
Indonesia	0.0	0.2	0.4	0.2	1.1	0.8	6.6	78.0	115.7
Japan	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.7	4.0
Malaysia	3.0	15.6	23.2	21.2	48.8	27.4	1,315.7	5,618.6	8,159.5
New Zealand	1.9	12.1	7.7	13.2	37.3	17.8	460.3	2,140.5	2,289.4
Philippines	3.3	4.7	4.2	21.1	9.6	3.5	776.0	825.1	870.7
Singapore	0.1	0.3	0.3	0.5	1.2	0.6	19.0	88.5	105.4
South Korea	1.1	3.1	4.2	6.6	9.4	4.4	267.0	679.0	838.0
Thailand	0.6	2.4	2.2	4.1	6.5	2.4	205.5	589.2	599.8
Vietnam	0.1	0.5	0.9	0.9	1.8	0.8	32.1	146.5	235.6
ASEAN	7.2	23.3	19.9	46.5	66.9	30.3	1,767.3	4,549.4	5,058.5
RCEP-2	15.4	54.5	56.5	116.4	207.0	84.8	5,974.3	19,284.0	18,966.7

Data Source: OECD database| TiVA (Trade in Value Added) 2018

Table 2 shows that India has a high value addition in Manufacturing compared to the other two industries (Agriculture, Forestry & Fishing, and Mining & Quarrying), in all the markets of the 12 member

countries of RCEP and ASEAN & RCEP-2 regions. China is the only country out of the 12 members of RCEP where India's value addition is in 5 digits; it was \$6024.97 million in 2005, which has increased to \$12195.5 million in 2015. When we compare India's value-added in the import of Manufacturing goods for the years 2010 and 2015, we can deduce from the table 2 that it has declined in Brunei, Indonesia, Japan, Singapore South Korea. If we analyse the growth of India's value addition in the imports of 12 members of RCEP and ASEAN & RCEP-2 regions for the period 2005 to 2010 and 2010 to 2015, we can predict that the growth rate was much higher in the period 2005 to 2010 than in 2010 to 2015 for all the markets.

Table 3 shows the value-added of 13 RCEP members and ASEAN & RCEP-3 regions in India's gross export for the broad category of Industries.. Malaysia has the highest value-added in India's gross export in the Agriculture, Forestry, & Fishing industry; its value addition had increased from \$3 million in 2005 to \$23.2 million in 2015. The value addition from Australia, Brunei, China, New Zealand, Philippines, and Thailand have declined when we compare the figures of 2010 with 2015 in the Agriculture, Forestry, & Fishing industry. Value addition by ASEAN in India's gross export in Agriculture, Forestry, & Fishing industry has also gone down from \$23.3 million in 2010 to \$19.9 million in 2015, whereas value-added by RCEP-2 region, it has increased from \$54.5 million to \$56.5 million. The value-added from all the 12 RCEP members and ASEAN & RCEP regions in India's gross export in Mining & Quarrying Industry has declined in the period 2010 to 2015. Among all the 12 members of RCEP, the highest value addition was done by Malaysia in the gross export of India in the Mining & Quarrying Industry.

The top country with the highest value addition in India's gross export of Manufacturing products was Malaysia; its value addition has increased from \$1315.7 million in 2005 to \$8159.5 million in 2015. Countries whose value addition in India's gross export in manufacturing products has declined are Australia, Brunei, and China. Value added by ASEAN nations in India's gross export in the Manufacturing industry has increased from \$4549.4 million in 2010 to \$5058.5 million in 2015, whereas in the case of RCEP-2, it has declined from \$19284 million to \$18966.7 million.

The average forward and backward Participation of India and 13 members RCEP have been shown in table 4. The calculation is done by taking the average participation of each RCEP member in the other 12 RCEP markets, and for India, the calculation is done by taking India's average participation in all the 13 RCEP markets. Australia's forward participation has gradually declined after 2011, and its backward participation remained low until 2013; after that, it has sharply increased. The forward participation of Japan in RCEP is much higher than its backward participation. Japan's forward participation has remained stagnant, while its backward participation has improved from 2005 to 2015. In the case of South Korea, its forward participation is more than its backward participation, but both have declined after 2011. New Zealand's backward participation is higher than the forward participation; its GVC participation has declined after 2012 as its forward and backward participation has declined after 2012. The backward participation of China has drastically come down since 2005, while its forward participation has increased. China's forward participation is very high compared to its backward participation, and the gap between the two has widened after 2009. India's forward participation is more than the backward participation, it can be seen from table 4 that India's forward participation has slightly increased during the period 2005 to 2015, but its backward participation has remained more or less constant. Indonesia's forward participation in the RCEP market has drastically gone down in the period 2005 to 2015, whereas its backward participation has remained constant. After 2011, Indonesia's backward participation remained high than its forward participation. Brunei's backward participation was higher than its forward participation, but its backward participation has rapidly fallen after 2013, whereas its forward participation remained steady from 2005 to 2015.

Backward participation of Cambodia in the RCEP region is higher than its forward participation, and it has steadily increased after 2009, whereas its forward participation unvarying during the period 2005 to 2015. In Malaysia's case, its backward participation has always been higher than its forward participation, but from 2005 to 2015, its GVC participation has declined both in terms of forward and backward. The Philippines' backward and forward participation has increased after 2013, but it is much faster in case of its backward participation. When we analyse the Philippines' GVC participation in RCEP through table 4, we can see that its backward participation is more than its forward participation. Singapore has almost equal forward and backward participation in RCEP during the period 2005 to 2013; its forward participation has increased faster than backward participation. Thailand backward participation was stable from 2005 to 2015, but its forward participation, which was lower than backward participation, has steadily increased and was slighter higher than backward participation in 2015. Vietnam's backward and forward participation increased from 2005 to 2015, and its backward participation always remained higher than its forward participation.

China has the highest forward participation in the RCEP region compared to other RCEP members, and Vietnam has the highest backward participation. India's actual position in the GVC of RCEP can be judged through figure 1, which shows a scatter plot of the average forward and backward participation of all the 14 countries. India lies in the circle, which indicates those countries with low forward and backward participation

both, and India is one of them. Though India's average forward and backward participation in RCEP has increased during the period 2005 to 2015, it still lies at the lower end both in forward and backward participation when we compare it with others. So India's GVC participation in the RCEP region is relatively low; on the one hand, it indicates India needs to struggle a lot for its existence in the RCEP multi-regional trade, and on the other hand, India has an opportunity to enhance its position as a member of RCEP, however which is not India's interest.

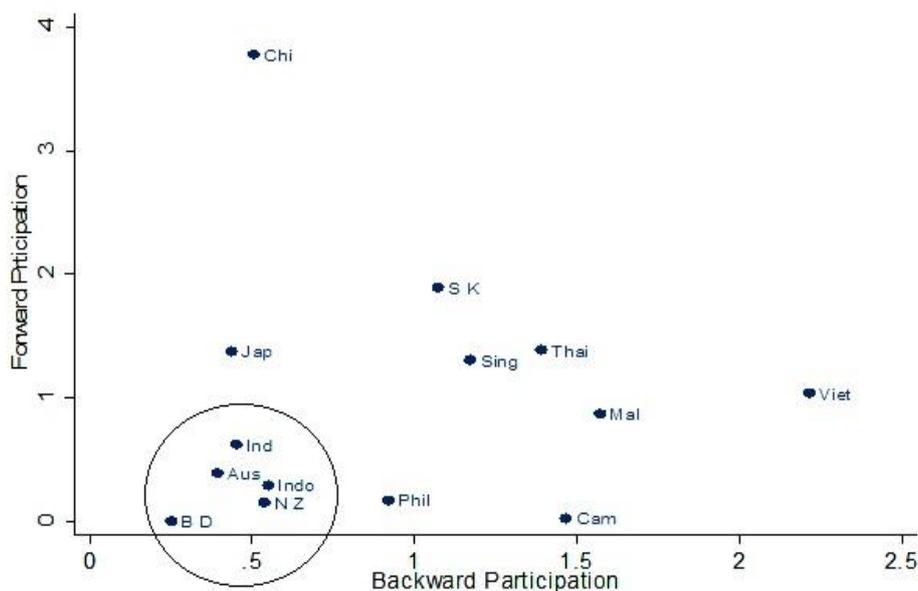
Table 4: Average forward and backward participation of India and 13 RCEP members in RCEP-3 market

Country	Participation	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
		Australia	FP	0.58	0.63	0.56	0.59	0.48	0.62	0.62	0.54	0.48
	BP	0.33	0.37	0.34	0.35	0.33	0.33	0.33	0.34	0.34	0.37	0.39
Japan	FP	1.34	1.48	1.53	1.82	1.29	1.55	1.55	1.43	1.43	1.51	1.38
	BP	0.27	0.33	0.35	0.41	0.32	0.37	0.44	0.42	0.45	0.48	0.44
South Korea	FP	1.64	1.79	1.71	2.15	2.22	2.41	2.60	2.43	2.46	2.05	1.89
	BP	1.06	1.09	1.10	1.30	1.25	1.27	1.37	1.27	1.18	1.10	1.07
New Zealand	FP	0.12	0.14	0.12	0.14	0.14	0.15	0.13	0.21	0.15	0.13	0.15
	BP	0.53	0.59	0.55	0.61	0.55	0.57	0.57	0.62	0.55	0.55	0.54
China	FP	3.08	3.50	3.68	3.31	3.05	3.45	3.58	3.53	3.85	3.90	3.78
	BP	0.88	0.84	0.78	0.67	0.60	0.65	0.63	0.58	0.57	0.54	0.50
India	FP	0.35	0.41	0.45	0.50	0.63	0.62	0.64	0.62	0.67	0.66	0.62
	BP	0.38	0.38	0.40	0.42	0.46	0.49	0.43	0.41	0.42	0.42	0.45
Indonesia	FP	0.96	0.96	0.98	0.80	0.48	0.47	0.53	0.35	0.45	0.40	0.29
	BP	0.66	0.55	0.54	0.56	0.47	0.49	0.48	0.50	0.52	0.54	0.55
Brunei	FP	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.00
	BP	0.15	0.26	0.21	0.16	0.16	0.16	0.20	0.39	0.45	0.28	0.25
Cambodia	FP	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02
	BP	1.20	1.18	1.20	1.28	1.20	1.29	1.33	1.43	1.42	1.47	1.47
Malaysia	FP	1.37	1.26	1.39	1.19	1.14	1.22	1.12	1.04	1.03	0.97	0.87
	BP	1.70	1.65	1.72	1.52	1.62	1.66	1.58	1.54	1.52	1.50	1.57
Philippines	FP	0.11	0.18	0.13	0.14	0.15	0.17	0.15	0.16	0.13	0.16	0.17
	BP	0.88	1.06	0.81	0.84	0.84	0.94	0.89	0.88	0.76	0.81	0.92
Singapore	FP	1.02	1.21	1.02	1.08	1.21	1.03	1.14	1.09	1.12	1.25	1.31
	BP	1.01	1.15	1.07	1.18	1.11	1.05	1.16	1.10	1.08	1.15	1.17
Thailand	FP	0.95	0.85	0.90	0.98	0.96	0.98	0.97	1.13	1.16	1.22	1.39
	BP	1.40	1.31	1.33	1.35	1.29	1.41	1.42	1.44	1.33	1.40	1.39
Vietnam	FP	0.62	0.64	0.66	0.67	0.59	0.64	0.85	0.82	0.86	0.86	1.04
	BP	1.49	1.62	1.76	1.76	1.64	1.83	1.88	1.85	1.96	2.02	2.22

Note: FP: Forward Participation, BP: Backward Participation

Data Source: Calculated from OECD database| TiVA (Trade-in Value Added) 2018

Figure 1: Scatter diagram showing average forward and backward participation of India and 13 RCEP members In the RCEP region in 2015.



Data Source: Average backward and forward participation is taken from table 4

V. CONCLUSION

RCEP has become the world's biggest regional bloc, and economies that are part of this mega-deal probably benefit by expanding their production networks. After India announced to quit RCEP in November 2019, a debate questioning India's stand on the RCEP deal has emerged. Addressing this broader objective, the paper aimed to analyse India's participation and position in the RCEP-Global Value Chain. Analysing the OECD-TiVA database, 2018, it was analysed that India's backward and forward participation has increased in GVC of RCEP; however, compared with RCEP members, India's backward and forward participation is still low. India has high backward participation than its forward participation with China, Japan, and South Korea. Relatively, India has a high-value addition in the service imports of Agriculture, Forestry & Fishing, Mining & Quarrying, and Manufacturing industries of China. Relatively, Malaysia has the highest value-added in India's gross export.

REFERENCES

- [1]. Ando, M., & Kimura, F. (2013). Evolution of Machinery Production Network: Linkage of North America with East Asia. ERIA Discussion Paper . ERIA.
- [2]. Arndt, S. (2002). Production Sharing and Regional Integration. California: Claremont Colleges Working Papers.
- [3]. Baldwin, R., & Kawai, M. (2013). Multilateralizing Asian Regionalism. ADBI Working Paper 431 . Tokyo: Asian Development Bank Institute.
- [4]. Cadot, O., Munadi, E., & Ing, L. Y. (2013). Streamlining NTMs in ASEAN:The Way Forward. ERIA Discussion Paper 2013-24 . Jakarta: ERIA.
- [5]. Chayodom, S., Kornakarun, C., & Nath, B. (2013). Impact of the ASEAN Economic Community on ASEAN Production Networks. ADBI Working Paper No. 409 . ADBI.
- [6]. Javorsek, M., & Camacho, I. (2015). Trade in Value Added: Concept, Estimation and Analysis. Asia-Pacific Research Training Network on Trade, Working Paper No.150 .
- [7]. Kawai, M., & Naknoi, K. (2015). ASEAN Economic Integration through Trade and Foreign Direct Investment: Long -Term Challenges. ADBI Working Paper No. 545 . Tokyo: Asian Development Bank Institute.
- [8]. Kemeny, T., & Rigby, D. (2010). Trading Away What Kind of Jobs? Globalisation Trade and Task in the US Economy. Center for Population Research, PWP-CCPR 2010-007 . California, Los Angeles: University of California.
- [9]. Koopman, R., Powers, W. W., & Wei, S. (2011). Give Credit where Credit is Due: Tracing Value Added in Global Production Chains. NBER Working Paper 16426 . NBER.
- [10]. Pangestu, M., & Ing, L. Y. (2015). ASEAN: Reginal Integration and Reforms. ERIA Discussion Paper . ERIA.
- [11]. Patil, A. (2015). India-Southeast Asia Relations: Enhancing Mutual Benefits. Brookings India Impact Series Foreign Policy .

- [12]. UNCTAD. (2013). World Investment Report 2013: Global Value Chains, Investment and Trade for Development. UN Publication.
- [13]. World Trade Organisation (WTO). (2011). The WTO and Preferential Trade Agreements: From Co-existence to Coherence. The World Trade Report . Geneva, Switzerland: WTO Secretariat.

Sunil Kumar. "India's Position in RCEP Global Value Chain." *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 25(12), 2020, pp. 24-32.