

“Accessing the Trade Potential between China and India”

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Abstract

India and China are emerging as the new trend setters in global world as they represent Asia's largest and most dynamic societies. Both the countries together constitute one-third of total world population and one-fourth of world's skilled labor force. The flourishing bilateral trade between the two titans is the strongest pillar of their rapprochement. Since the two countries are geographically integrated border trade between the nations brings an economic transformation in their remote and underdeveloped border regions. Against this backdrop the present paper tries to analyze the import intensity, competitiveness of export and the bilateral trade potential between India and China. The competitiveness of exports for the two titans is analyzed by computing Revealed Comparative Advantage (RCA) Index and for accessing import intensity, Revealed Import Intensity (RID) Index is being used in the study. Both the indices are then matched to ascertain the products in which the trade potential exists in the two countries. The finding of the study revealed that there exists a moderate amount of trade potential between the two titans. If the exports are extended in the commodities in which trade potential exists this can lead to a substantial increase in bilateral trade.

Keywords: Trade potential, Bilateral trade, Competitiveness, Import intensity, Comparative advantage.

1. Introduction

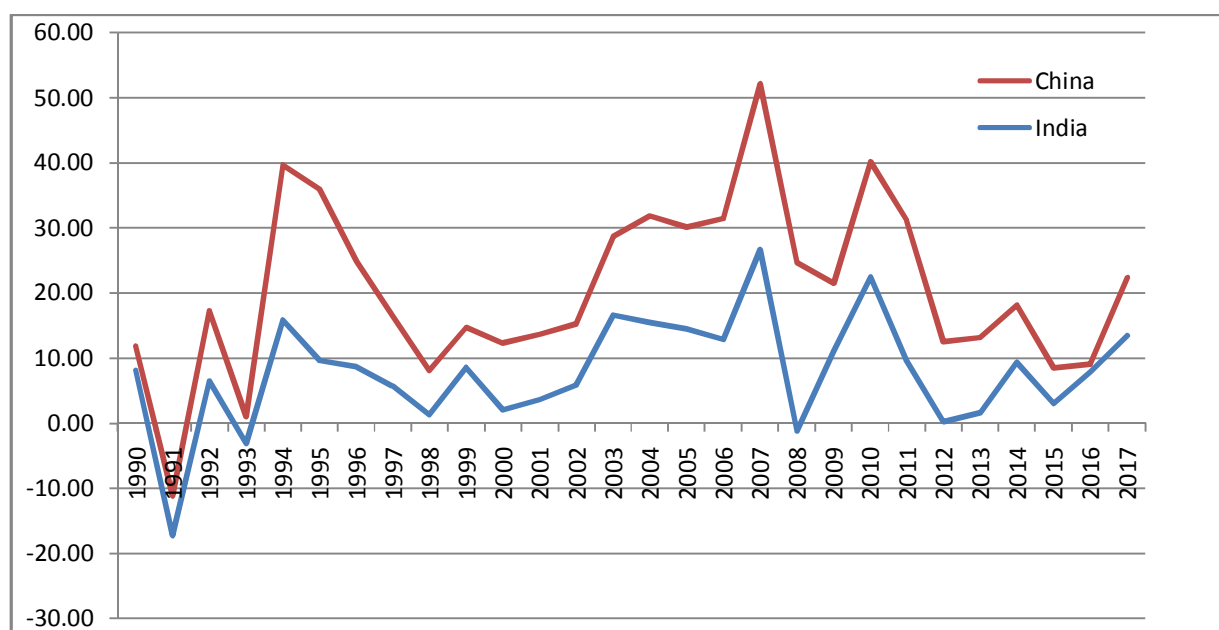
Both India and China are among the fastest growing economies in the world as witnessed by their recent rapid economic growth momentum, this has caused concerns about their trade prospects, growth and future implication for other countries. The growth rate in India and China was 16.56% and 12.14% for 2003 respectively (Figure 1). Therefore, since the early 2000s both the countries came to be recognized as economic power houses of the world. The market liberalization process and ongoing economic reforms have opened the new vistas for economic opportunities between the two countries. India and China are the two key players in the global economy representing a unique combination of rapidly increasing GDP and still significant poverty and low standard of living. China and India are noticeable globally not only because they

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are fast growing poor countries but also due to the fact that they have enormous population. Sustained growth in these two titans offers a platform of lifting one third poor of the world above the poverty line in the forthcoming future. Institutional changes and trade liberalization are the main reasons behind the growth experiences of the two countries. Figure 1 shows the growth rate of India and China from 1995 to 2017. Though growth rate of GDP is rapid in both the countries, Chinese growth rate is much higher than India.

Figure 1- GDP Growth Rate of China and India



Source: World Development Indicators, World Bank
(Growth has been calculated by the log transformation of the level data)

India and China have strong cultural and political links and they share common history. Bilateral trade between them is the strongest reason behind their rapprochement. The economic relations between the two titans and relative activities are one of the most flourishing issues of internal relations. Due to varying degrees of openness and differences in the role of manufacturing and service sector both the countries have followed different growth paths. China has witnessed rapid growth in manufacturing sector. India, in contrast had witnessed high growth in service sector and service sector accounts for large amount of its GDP. The economic reforms in China in the late 1970s after that in India in 1990s have resulted in sustained economic growth in these economies. India and China were at same stage of development when China's economic reforms began in the late 1970s. Due to its head start and sustained economic growth the Chinese economy is much more ahead of Indian economy at present.

Evelyn S. Devadason (2016) accesses the massive untapped potential for broader economic cooperation between China and India Trade. Study revealed that both the countries

have diversified their trade structure that indicates a higher trade potential. The study also finds that there is a scope of expanding IIT between India and China. Result of the study also showed that there exist contrasting differences in quality of products traded by both the countries which indicate that competition in manufacturing sector is still limited and have future prospects for trade expansion.

Srivastava, Anupam(2007) discusses Indo-China security relations and highlight the key factors to strengthen economic ties. These factors also support sustainable economic growth. Author discusses that China needs to expand its relation with India and to other economies of South Asia and at the same time India should seek to reap advantage from the expanded market that China offer. Article also discuss about economic linkages and overlaps between the economic and security dimensions but not in detail.

Mahvash Saud Qureshi and Guanghua Wan (2008) find moderate complementarity in export-import structure of India and China. By computing RCA the analysis reveals that export structure of China is changing from labour intensive products to skill intensive and from medium to high technology products. Analysis also suggests that India specialize in low-technology products and is strong competitor for its neighboring countries.

Veermani(2006) found that China's exports and comparative advantage had undergone a greater degree of structural change over the period of study than India. Study found that in several products India have RCA value greater than China but her share in these products are much lower than that of China.

Meghnand Desai (2005) discusses about the shape of political economies and developmental path and historical legacies of India and China. Article highlights the political relations and made a comparative study of economies of both the countries. Study discusses that both the countries share the same development paths, in the first phase both considered state as the engine of growth while in second phase both countries started liberalizing their economies.

Given the economic structure of the two titans, the opportunities for mutual cooperation exist in manufacturing and service sector. In addition to it, geographical proximity and large market size would also facilitate exploitation of their synergies. Trade potential between the two countries is yet to be explored and exploited fully. The complimentary position of the two titans can be exploited for strengthening economic ties and mutual benefit. Therefore, there is a need to discuss the opportunities India and China possess that occur from the differences and complementarities in their internal and external sector with particular reference to bilateral trade. It is in this context of their fast changing equations, the paper tries to ascertain the competitive position of exports of both the countries by calculating index of Revealed Comparative Advantage (RCA) Index. Study also tried to access the import intensity of their imports by calculating Revealed Import Dependency (RID) Index. In addition to competitiveness and import intensity, present paper also tries to analyze the bilateral trade potential between India and China by matching both comparative advantage index and import dependency index. The present

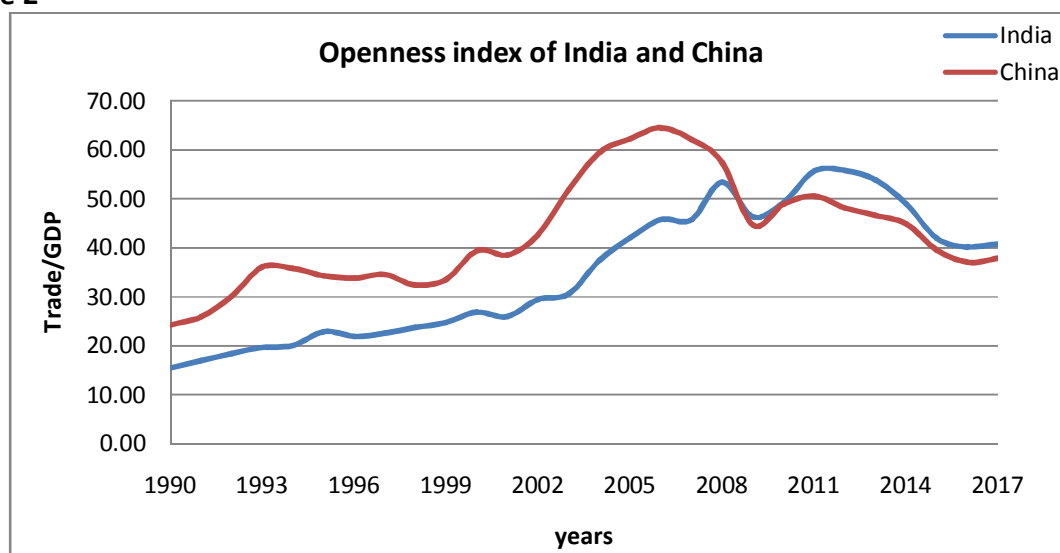
empirical work provides a picture of prospects of trade to be taken place in forthcoming future between the two titans.

For the purpose of study export and import data of India, China and World is collected from UN Commodity Trade Statistics. All 97 products category at HS 2 digit level of commodity classification are being taken for analyzing purpose. The study finds that the export competitiveness and import intensity of India and China has changed over the period of study. In addition to it study also finds that moderate trade potential exists between India and China given the export-import structure of both the countries. The study highlights that out of 97 commodities in 42 commodities India's exports are highly competitive, while in 49 commodities China's exports have high competitiveness. The result of RID index shows that in 21 products import intensity is high for India's imports and for China 30 products have high import intensity. The study analysed on the basis of calculated indices that China can extend its exports in substantial amount in 10 commodities to India. While India's export potential to China lies in 12 commodities on the basis of calculated indices.

The scheme of the paper is as follows: Section 2 discuss about the trade reforms taken place in India and China. Section 3 looks at the competitiveness of exports of both the countries by accessing their comparative advantage. Sections 4 deals with analyzing import dependency of the countries. Section 5 investigates potential for future bilateral trade by accessing their complementarities. Lastly, section 6 summarizes the main findings and concludes.

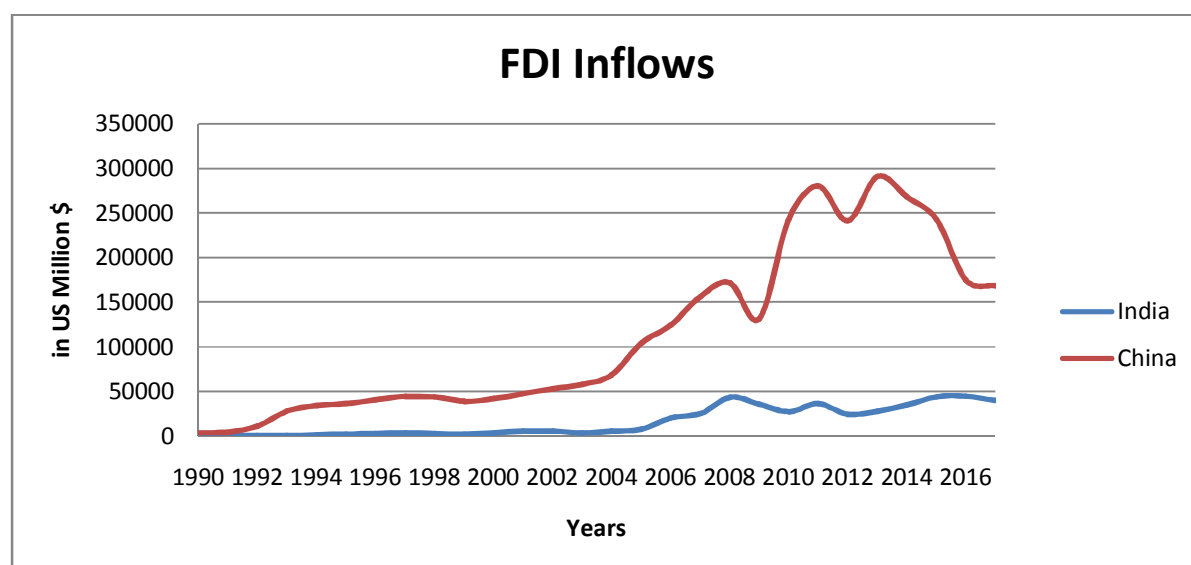
2. Trade Reforms in India and China

Before implementing trade reforms both India and China were closed economies following import substitution policies. External trade possibilities were significantly reduced by various control mechanisms like quantitative restrictions, prohibitive tariff and import licensing. Open door policy of China in 1978 promoted liberalization of foreign imports and encouraged building up of export oriented sector. Under the policy tariffs, quotas and export and import license were minimized. China significantly improved its external trade by establishing Open Economic Zones (OZs) in 1982. India started liberalizing its economy in the mid-1980s. India had increased the number of goods to be imported under the "open general license". Earlier the list was only confined to the capital goods and raw material that have no domestic substitute. Rules were such that the firm that qualified for import license were exposed to bureaucratic discretion and resulted in corruption. Reforms taken by Indian authorities include reduction in canalization, expansion of replenishment import licenses and reduction of import duties on capital goods. Figure 2 clearly spells that trade liberalization was more prominent in China than in India. As shown in Figure 2 China's measure of trade openness increased from 12.42% in 1980 to 64.8 % in 2006, after that it showed a declining trend and reached to 37.80% in 2017. For India openness increased from 15.55 % in 1980 to 41.07 % in 2017 with some fluctuations in trends in between.

Figure 2

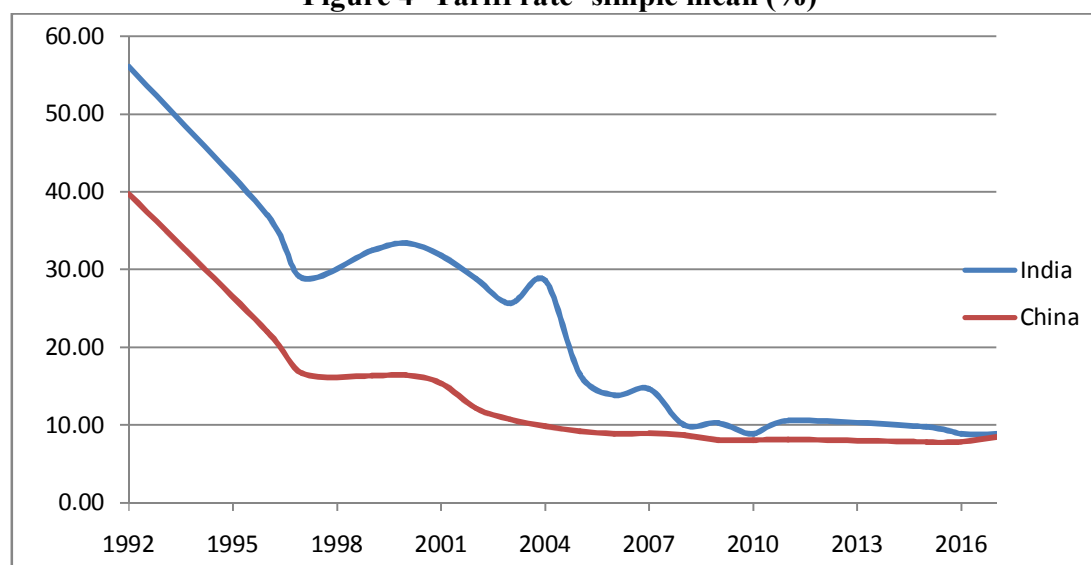
Source: World development indicators

OEZs were established in China in order to attract FDI and to promote exports. These zones enabled investors to establish factories where they can enjoy preferential tax and administrative treatment (like duty free imports to produce exports), collaboration with foreign companies, payments at market based wage rates and avoidance of prohibitive taxes of states. cc China had attracted 10 per cent of total world FDI while India receives less than 1 percent in 2003(Dersoches et al 2009). The large difference clearly spells that foreign investors perceives China more preferable than India. Figure 3 shows increasing trend in FDI for both India and China from 1980 to 2017. The given figures also show that China had attracted lot more FDI than India in these consecutive years.

Figure 3

Source: World Development Indicator

Tariff rate in an economy helps us to know how liberal the imports of the country are. When a country liberalizes its trade it reduces its tariff rate to get cheap and easy access to raw material and other capital goods. China and India too have reduced their tariff rate under trade liberalization policy. But China started reducing its tariff rate much earlier than India. Figure 4 shows mean tariff rate for India and China from 1990 to 2017. The figures clearly stated that both countries had reduced their tariff substantially. Mean tariff rate for India stood at 80.85 % in 1990 that declined to just 8.88% in 2017. While China's tariff rate was much lower in 1990s as compared to India but after that the difference in tariff rate between the countries shows a diminishing trend. China's mean tariff was 39.71 % in 1990 and it further reduced to 8.46% in 2015.

Figure 4- Tariff rate- simple mean (%)

Source: World Development Indicator

Trade reforms taken place in the areas of openness, tariff and FDI resulted in sustained increase in bilateral trade between India and China. Both the economies pass through complex economic transformation following the structural reforms undertaken. As discussed above these reforms taken are more rapid and better in quality in China as compared to India and it had also resulted in widening of trade deficit over the years between the countries. Planning and government owned industries always play a vital role in trade development. Though India succeeded in establishing a balanced and diversified industrial sector but due to large number of small-sized firms in the private sector, India could not reap advantage from scale economies and “Fordist model of growth” (Valli and Saccone 2009). On the other hand China succeeded in rapid expansion of its industrial exports to world markets as a result of economic reforms undertaken following the Mao Zedong’s policies failure. Therefore, India lags behind China in manufacturing sector and this is one of the major reasons behind widening of trade deficit to certain extent. Table 1 clearly shows that India’s exports to China as well its imports from China had increased during the period of 1995 to 2017. The alarming situation for India is that its trade deficit with China increased to a wide extent during this period, as India’s exports are less and imports are more. In 1995 India’s trade deficit with China was US\$ 528.55 million then it increased continuously with little fluctuations and the gap widened to the extent of 59,435.59 till 2017. Though the Indian exports to China increased from US \$ 282.92 million to 12,520.12 million, but they failed to match with more rapidly increasing imports to reduce trade deficit.

Table 1-India's Trade Balance with China
(in US million \$)

Year	India's Exports to China (1)	India's Imports from China (2)	Trade Balance (1-2)
1995	282.92	811.47	-528.55
1996	542.48	702.08	-159.60
1997	692.20	1,028.70	-336.50
1998	499.90	1,102.35	-602.45
1999	511.05	1,240.03	-728.98
2000	758.22	1,448.60	-690.38
2001	915.57	1,809.15	-893.58
2002	1,719.60	2,603.13	-883.53
2003	2,710.18	3,737.92	-1,027.74
2004	4,178.48	6,073.29	-1,894.81
2005	6,473.30	9,925.53	-3,452.24
2006	7,910.25	15,812.51	-7,902.26
2007	10,195.07	24,691.96	-14,496.88
2008	10,536.51	33,606.08	-23,069.57
2009	10,154.95	28,839.64	-18,684.69
2010	17,518.98	41,332.61	-23,813.63
2011	19,113.15	55,299.34	-36,186.19
2012	14,904.00	52,407.20	-37,503.20
2013	14,516.98	51,456.48	-36,939.50
2014	13,251.99	58,279.59	-45,027.60
2015	9,689.94	61,592.82	-51,902.88
2016	8,946.78	60,539.51	-51,592.73
2017	12,520.12	71,955.71	-59,435.59

Source: DOTS, IMF (IMF.ORG)

3. India's and China's Competitive Advantage:

To explore the dynamics of specialization in India and China, we have calculated the Balassa index (1965) of revealed comparative advantage (RCA). 97 products category at HS 2 digit level of commodity classification are being taken for analyzing purpose. The period taken for study is from 1995-2017. The Index is defined as:

$$RCA_{ij} = \frac{X_{ij}/X_i}{X_{wj}/X_w}$$

Where X_{ij} and X_{wj} represents the product j export from country i and product j total export of for the whole world and X_i and X_w denotes country i to total exports and total global exports.

Value of index lies between zero to infinity. Index greater than one indicates that the export product is highly competitive and index less than one indicate that the product is uncompetitive in international market. The higher the value of index the more is the competitiveness of the product. Export data of India, China and World is collected from UN Commodity Trade Statistics.

RCA index greater than one for every five years from 1995 till 2017 is shown in the table 2. Analysis shows that out of 97 products taken for analysis there are 46 products in which China's RCA is greater than one, this indicates that China's exports are competitive in these products. Some commodities had shown a decline in value of index over the given years while some shows improvement in the index value. Products like umbrella, walking sticks riding crops and parts thereof (66); prepared feathers, artificial flowers, articles of human hairs (67); silk (50), manufactures of straw, basket ware, plaiting material (46); articles of leather, travel goods, handbag and similar containers (42); products of animal origin (5) have shown high RCA in the early period of analysis but the value declined over the year. The products like articles of base metals (83); tools, implements, cutlery, spoon and forks (82); nickel and articles there of (75); articles of stones, plaster, cement, mica and similar material (68); knitted or crocheted fabric (60); articles of iron and steel (73); Special woven fabrics, tufted textile fabrics, lace, tapestries, trimmings, embroidery (58) shows more or less similar RCA value over the period of study. On the other hand some products like Furniture; bedding, mattresses, cushions and similar stuffed furnishings; lamps and lighting fittings; prefabricated buildings (94); Electrical machinery and equipment and parts thereof; sound recorders and reproducers, parts and accessories of such articles (85), Glass and glassware (70), Sewing thread of man-made filaments, whether or not put up for retail sale (54) have shown a rise in the value of RCA index. The above analysis showed that the value of RCA index witness change for most of the products that means competitiveness of exports of China have changed during the period of study. In changing export structure of China it is observed that export share of skill-intensive and medium to high technology product is increasing and those of labour intensive product is decreasing. The traditional export sectors like silk, products of animal skin, leather good and travel goods, footwear and apparel have shown a decline in the value of index though their value remains greater than one. This can enable less developed countries to expand their export in world market as the threat of China is reduced in these products.

Table 2- China's RCA

HS code	Product descriptions	1995	2000	2005	2010	2015	2016	2017
5	Products of animal origin, not elsewhere specified or included	6.75	5.6	2.65	1.84	1.44	1.57	1.65

7	Edible vegetables and certain roots and tubers	2.62	1.99	1.24	1.28	0.98	1.14	1.14
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	4.45	2.55	1.36	0.7	1.01	1.06	0.99
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	2.51	3.18	2.29	1.51	1.3	1.35	1.56
26	Ores, slag and ash	0.02	1.15	0.59	0.55	1.33	1.43	1.00
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals	2.09	1.66	1.43	1.1	0.96	1.01	1.07
29	Organic chemicals	0.85	0.72	0.61	0.85	0.87	0.94	1.02
36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	4.55	4.75	2.56	1.73	1.62	1.59	1.38
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut	7.41	6.84	4.3	3.85	2.96	2.86	2.8
43	Furskins and artificial fur; manufactures thereof	2.84	2.63	4.46	2.26	2.14	3.11	2.99
46	Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	18.4 4	12.4 3	8.16	6.66	4.88	4.99	5.16
50	Silk	11.1 9	9.46	5.56	4.81	3.82	4.04	4.01
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	1.63	2.53	1.87	1.8	1.24	1.28	1.07
52	Cotton	3.73	2.88	2.19	2.23	2.08	2.21	2.06
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	4.9	4.28	2.27	2.18	2.41	2.29	2.17
54	Sewing thread of man-made filaments, whether or not put up for retail sale	0.69	1.03	2.15	2.35	2.54	2.79	3.07
55	Man-made staple fibres	3.14	2.88	2.17	2.36	2.52	2.6	2.55
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	0.72	0.82	0.8	1.28	1.45	1.57	1.51
57	Carpets and other textile floor coverings	2.1	1.42	1.09	1.34	1.29	1.26	1.23
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	2.84	2.26	3.13	3.13	2.71	2.8	2.93
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	0.97	0.77	1.44	2.45	2.15	2.2	2.22
60	Knitted or crocheted fabrics	3	2.07	2.45	3.15	3.12	3.33	3.71
61	Articles of apparel and clothing accessories, knitted or crocheted	3.96	4.21	3.35	3.58	2.72	2.83	2.76
62	Articles of apparel and clothing accessories, not knitted or crocheted	5.41	4.59	3.23	3.09	2.56	2.73	2.7
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	6.04	5.03	4.09	3.91	3.14	3.24	3.12
64	Footwear, gaiters and the like; parts of such articles	4.77	5.36	3.83	3.53	2.85	2.74	2.84
65	Headgear and parts thereof	5.63	5.23	4.45	4.4	3.85	3.8	3.63
66	Umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof	10.3 4	10.7 4	7.83	7.26	5.72	5.81	5.53
67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles of human hair	8.78	9.12	6.13	6.24	5.51	5.39	5.27
68	Articles of stone, plaster, cement, asbestos, mica or	1.47	1.44	1.32	1.49	1.86	1.66	1.56

	similar materials							
69	Ceramic products	1.94	2.37	2.23	2.72	3.28	2.77	2.68
70	Glass and glassware	0.85	0.96	1.29	1.59	1.67	1.66	1.64
73	Articles of iron or steel	1.12	1.58	1.48	1.55	1.55	1.52	1.5
75	Nickel and articles thereof	1.74	0.63	0.34	0.69	0.76	1.15	1.04
81	Other base metals; cermets; articles thereof	3.47	2.57	2.56	2.03	1.45	1.41	1.36
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	1.9	2.05	1.82	1.67	1.72	1.71	1.76
83	Miscellaneous articles of base metal	1.61	1.61	1.73	1.82	2.06	1.89	1.91
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	0.39	0.73	1.47	1.68	1.36	1.38	1.4
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, parts and accessories of such articles	0.95	1.18	1.7	1.88	1.84	1.82	1.87
86	Railway or tramway locomotives, and parts thereof; traffic signalling equipment of all kinds	4.05	5.48	3.61	2.54	2.3	1.58	2.09
89	Ships, boats and floating structures	0.79	1.04	0.91	2.25	1.56	1.41	1.27
92	Musical instruments; parts and accessories of such articles	1.66	2.58	2.53	2.44	1.95	1.94	1.82
94	Furniture; bedding, mattresses, , cushions and similar stuffed furnishings; lamps and lighting fittings; prefabricated buildings	1.67	2.28	2.41	2.92	2.95	2.84	2.72
95	Toys, games and sports requisites; parts and accessories thereof	4.73	5.08	4.13	3.34	3.26	3.49	3.56
96	Miscellaneous manufactured articles	2.87	2.73	2.68	3.1	2.86	2.97	2.91

Source: Calculated from UN Commodity Trade Statistics.

Table 3 shows that out of total 97 products there are 40 products that have shown RCA value greater than one that means exports of these products are highly competitive in international market. The result of the RCA index of India also shows that the competitiveness of exports had changed during the period of 1995 to 2017. Out of these 40 some products shows the decline in the value of RCA index while some shows an upward trend in the index value over the study period. The commodities like Oil seeds and oleaginous fruits, miscellaneous grains, seeds and fruit, industrial or medicinal plants, straw and fodder (13); Lac gums, resins and other vegetable saps and extracts(14); Vegetable plaiting materials; vegetable products not elsewhere specified or included (15); Residues and waste from the food industries, prepared animal fodder (23); silk (50); cotton (52); Articles of apparel and clothing accessories, not knitted or crocheted (62); Other made up textile articles, sets, worn clothing and worn textile articles, rags (63); Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof, imitation jewelry, coin (71); Miscellaneous manufactured articles (96) have shown a decline in RCA index value. These products mainly consists of resource based and low technologyproducts. This indicate that competitiveness of Indian exports in these products have declined over the time in these products. Some commodities like Footwear, gaiters and the like; parts of such articles(64); Articles of stone, plaster, cement, asbestos, mica or similar materials (68); Pharmaceutical products (30); Tanning or dyeing

extracts, tannins and their derivatives, dyes, pigments and other colouring matter, paints and varnishes, putty and other mastics, inks (32); Explosives, pyrotechnic products, matches, pyrophoric alloys, certain combustible preparations (36), Salt; sulphur; earths and stone; plastering materials, lime and cement (25); Sugars and sugar confectionery (17) do not show a significant change in RCA index value. The products that do not show much change in RCA value mainly consists of medium to high technology products. This shows that many products from high to medium technology do not show any significant change in export competitiveness. Some products show a rise in the value of RCA index. The products that shows improvement in competitiveness of export include Meat and edible meat offal (2); organic chemicals (29); Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter, paints and varnishes, putty and other mastics, inks (32); Explosives; pyrotechnic products, matches, pyrophoric alloys, certain combustible preparations (36); Miscellaneous chemical products (38); Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn (53); Sewing thread of man-made filaments, whether or not put up for retail sale (54); Man-made staple fibres (55); Copper and articles thereof (74); Aluminium and articles thereof (76); Lead and articles thereof (78); Zinc and articles thereof (79); Ships, boats and floating structures (89). The products that shows improvement in the export competitiveness are mainly consist of medium to high technology category. In the end we can say that India have loose its export competitiveness in the resource based and traditional products and improve its export competitiveness in medium to high technology products.

The analysis of section 3 identified that the competitiveness of exports of both India and China had undergone a change during the period of study. In accordance with relative factor endowments of India and China, comparative advantage of both lies primarily in unskilled labor-intensive goods. Comparative advantage of India and China is least in technology-intensive goods, as expected. In spite of this a gradual increase of comparative advantage in technology-intensive goods and human capital can be seen for both the countries. China holds a comparative advantage in a larger number of technology-intensive and unskilled labor products and as compared to India.

Table 3- India RCA

HS Code	Product Description	1995	2000	2005	2010	2015	2016	2017
2	Meat and edible meat offal	0.68	1.03	0.92	1.26	2.34	2.12	1.89
3	Fish and crustaceans, molluscs and other aquatic invertebrates	4.3	5.01	2.63	1.85	2.87	2.96	3.57
7	Edible vegetables and certain roots and tubers	1.18	1.92	1.66	1.18	1.09	1.01	0.9
8	Edible vegetables and certain roots and tubers	2.66	3.26	1.8	0.99	0.91	0.89	0.93
9	Edible fruit and nuts; peel of citrus fruit or melons	8.68	8.16	4.85	3.77	3.87	3.9	4.09
10	Coffee, tea, mate and spices	5.71	2.92	4.37	2.38	4.03	3.48	4.17
11	Cereals	2.51	0.54	0.41	0.38	1.04	0.8	0.78
12	Products of the milling industry; malt; starches;	2.02	2.32	1.37	1.09	1.21	1.15	0.99

	inulin; wheat gluten							
13	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants ; straw and fodder	12.48	18.68	11.9	8.79	10.61	8.11	7.8
14	Lac; gums, resins and other vegetable saps and extracts	5.55	5.73	5.31	5.24	4.22	5.18	3.53
15	Vegetable plaiting materials; vegetable products not elsewhere specified or included	1.45	1.79	1.05	0.7	0.75	0.64	0.73
17	Sugars and sugar confectionery	1.39	0.85	0.34	1.66	2.22	2.35	1.49
23	Residues and waste from the food industries; prepared animal fodder	5.38	3.71	2.83	2.54	0.92	0.69	1.16
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	2.84	3.79	3.61	2.1	2.69	2.96	2.86
26	Ores, slag and ash	4.13	2.65	7.07	2.54	0.27	0.52	0.55
29	Organic chemicals	1.03	1.63	1.69	1.65	1.97	2.02	2.15
30	Pharmaceutical products	1.56	1.43	0.95	0.98	1.6	1.6	1.33
32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter; paints and varnishes; putty and other mastics; inks	1.79	2.12	1.62	1.61	2.11	2.08	1.98
36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	1.25	1.04	1.3	1.43	1.25	1.46	1.41
38	Miscellaneous chemical products	0.68	1.15	1.08	0.9	1.07	1.1	1.08
50	Silk	5.63	15.53	12.75	7.03	2.87	2.55	2.12
52	Cotton	9.05	10.41	5.84	8.43	8.44	7.44	7.26
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	6	4.08	4.88	6.26	4.74	7.26	6.76
54	Sewing thread of man-made filaments, whether or not put up for retail sale	2.09	2.24	2.65	3.64	2.91	2.6	2.78
55	Man-made staple fibres	1.72	2.81	3.09	3.44	3.57	3.53	3.49
60	Knitted or crocheted fabrics	1.07	0.29	0.23	0.37	0.44	0.49	0.55
61	Articles of apparel and clothing accessories, knitted or crocheted	2.6	3.18	2.57	1.75	2.17	2.42	2.47
62	Articles of apparel and clothing accessories, not knitted or crocheted	4.77	5.35	3.55	2.46	2.62	2.76	2.54
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	7.16	9.33	7.16	4.11	4.63	4.66	4.51
64	Footwear, gaiters and the like; parts of such articles	1.99	2	1.59	1.17	1.27	1.29	1.26
68	Articles of stone, plaster, cement, asbestos, mica or similar materials	1.91	2.79	2.18	1.82	1.64	1.67	1.5
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	9.23	10.09	8.34	5.22	3.82	3.99	3.89
72	Iron and steel	1.01	1.41	1.56	1.26	1.19	1.3	1.79
73	Articles of iron or steel	0.86	1.55	1.63	1.8	1.43	1.37	1.35

74	Copper and articles thereof	0.26	0.57	1.74	2.38	1.35	1.29	1.4
76	Aluminium and articles thereof	0.44	0.67	0.64	0.64	1.03	1.07	1.26
78	Lead and articles thereof	0.33	0.07	0.53	1.31	1.67	1.44	2.4
79	Zinc and articles thereof	0.03	0.15	0.42	3.4	3.06	1.92	2.68
89	Ships, boats and floating structures	0	0.17	0.96	1.69	1.89	1.62	1.97
96	Miscellaneous manufactured articles	1.03	1.13	0.9	0.82	0.99	0.96	0.84

Source: Calculated from UN Commodity Trade Statistics.

4. India's and China's Import intensity:

This section deals with assessing the import intensity of the products imported by India and China. For the purpose of assessing intensity of imports, the Revealed Import Intensity (RID) is being calculated in the study. The index enables us to identify the commodities for the consumption of which a country highly depends on another country. As RCA index shows how competitive the exports of the country are in the same way RID index shows how intensively the country is dependent on imports. We can also say this index tells us about the revealed comparative disadvantage of the commodity traded by the country. The index is defined as:

$$RID = \frac{M_{ij}/M_i}{M_{wj}/M_w}$$

Where M_{ij} and M_{wj} product j import of country i and product j total world imports and M_i and M_w denotes country i total import and total global exports. The value of index lies between infinity to zero. The value less than one indicates that the imports are not intensive and the value greater than one indicates that imports are highly intensive. High value of index shows more intensive the imports are.

The RID index of greater than for China is shown in table 4. The index is calculated from the period of 1995 to 2017 for every five years. As mentioned above the data has been collected from UN commodity trade statistics.

Table 4- China's RID

HS Code	Product Description	1995	2000	2005	2010	2015	2016	2017
10	Cereals	3.66	2.13	0.88	0.72	0.48	0.47	0.44
12	Oil seeds and oleaginous fruits; miscellaneous	0.36	0.7	1.59	2.37	2.74	4.11	3.81

	grains, seeds and fruit; industrial or medicinal plants ; straw and fodder							
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	5.14	2.56	2.34	3.4	3.26	4.53	3.14
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	3.85	2.55	2.51	2.09	1.97	1.63	1.14
23	Residues and waste from the food industries; prepared animal fodder	0.78	2.01	2.82	2.47	1.09	1.25	0.72
26	Ores, slag and ash	2.49	2.79	3.06	3.1	2.79	2.9	3.46
29	Organic chemicals	0.93	0.9	0.84	0.96	1.27	1.45	1.36
31	Fertilisers	7.14	6.75	6.3	5.49	4.61	2.89	2.33
35	Albuminoidal substances; modified starches; glues; enzymes	0.97	1.07	1.32	1.67	1.27	1.26	1.07
39	Plastics and articles thereof	1.84	2.05	2.29	2.35	2.24	2.14	2.05
41	Raw hides and skins (other than furskins) and leather	4.04	4.24	4.52	4.63	4.62	4.16	3.66
43	Furskins and artificial fur; manufactures thereof	1.72	1.34	1.62	1.81	1.9	1.64	1.44
44	Wood and articles of wood; wood charcoal	0.81	0.83	1.02	1.13	1.37	1.45	1.28
47	Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper or paperboard	1.07	1.79	1.79	2.25	2.87	2.83	3.24
50	Silk	2.05	1.97	2.37	2.38	2.13	1.77	1.47
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	4.27	4.18	4.22	3.81	4.04	4.49	4.29
52	Cotton	3.43	3.54	3.76	2.79	2.51	2.33	2.2
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	2.5	2.45	3.7	3.63	2.58	2.73	2.68
54	Sewing thread of man-made filaments, whether or not put up for retail sale	4.12	4.78	4.8	4.26	3.71	3.44	3.03
55	Man-made staple fibres	4.23	4.59	4.86	4.32	3.78	3.47	3.07
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	1.91	1.92	1.89	1.63	1.46	1.31	1.17
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	3.71	3.79	3.69	3.55	3.47	3.14	2.81
60	Knitted or crocheted fabrics	3.99	4.24	4.31	3.99	3.48	2.99	2.79
66	Umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof	1.5	1.39	1.2	0.92	0.49	0.33	0.26
72	Iron and steel	1.6	2.02	1.78	1.74	2.14	2.08	2.32
73	Articles of iron or steel	1.05	0.76	0.89	0.79	0.63	0.55	0.59
74	Copper and articles thereof	1.74	2.11	2.07	2.44	3.13	3.23	3.41
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	1.45	1.46	1.17	1.13	1.1	1.06	1.16
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	1.14	1.07	1.16	1.38	1.48	1.44	1.58
89	Ships, boats and floating structures	2.85	0.98	0.64	0.43	0.49	0.53	0.98
90	Optical, photographic, cinematographic,	0.9	0.91	0.88	0.97	1.01	1.08	1.3

	measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof							
91	Clocks and watches and parts thereof	1.99	1.85	1.8	1.72	1.41	1.2	1.07

Source: Calculated from UN Commodity Trade Statistics.

As can be seen from table 4, value of RID index for China had also undergone a change during the period of study. Out of 97 commodities analysed it is found that 33 products have high import intensity as they show the value of index greater than one. Out of these 33 commodities some show a decline in the value of index, some show increase in index value while for some of the commodities index value more or less remain the same. Commodities that show an increase in import intensity include Oil seeds and oleaginous fruits, miscellaneous grains, seeds and fruit, industrial or medicinal plants, straw and fodder (12); Ores, slag and ash (26); Organic chemicals (29); Albuminoidal substances, modified starches, glues, enzymes (35); Plastics and articles thereof (39); Wood and articles of wood, wood charcoal (44); Pulp of wood or of other fibrous cellulosic material, waste and scrap of paper or paperboard (47); Copper and articles thereof (74). These articles are mainly resource based in which China has witnessed an increase in RID. The commodities like Cereals (10), Vegetable plaiting materials, vegetable products not elsewhere specified or included (14); Animal or vegetable fats and oils and their cleavage products, prepared edible fats, animal or vegetable waxes (15); Fertilisers (31); Raw hides and skins (other than furskins) and leather (41); Silk (50); Cotton (52); Sewing thread of man-made filaments, whether or not put up for retail sale (54); Man-made staple fibres (55); Wadding, felt and nonwovens, special yarns, twine, cordage, ropes and cables and articles thereof (56); Impregnated, coated, covered or laminated textile fabrics, textile articles of a kind suitable for industrial use (59); Knitted or crocheted fabrics (60); Umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof (66); Articles of iron or steel (73) shown a decline in the value of RID index indicating that there is a decrease in the import intensity of these products. These items mainly constitute of resource based and medium to high technology products. Some commodities do not show any major change in the intensity of imports. Some of them are Furskins and artificial fur, manufactures thereof (43); Wool, fine or coarse animal hair, horsehair yarn and woven fabric (51); Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn (53); Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof (56); Nuclear reactors, boilers, machinery and mechanical appliances, parts thereof (84); Electrical machinery and equipment and parts thereof; sound recorders and reproducers, and parts and accessories of such articles (85); Clocks and watches and parts thereof (91). The items that do not show major change in RID value are mainly from high technology products. The above analysis shows that there are fewer commodities in which no significant changes occur but more commodities are there that witness

significant changes. Therefore we can interpret that import intensity of China had also undergone a change.

Table 5- India's RID

HS Code	Product Description	1995	2000	2005	2010	2015	2016	2017
7	Edible vegetables and certain roots and tubers	1.26	0.51	1.55	2.12	1.08	0.5	0.51
8	Edible fruit and nuts; peel of citrus fruit or melons	1.37	1.66	1.24	1.39	1.46	1.36	1.66
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	4.05	8.59	5.01	4.54	9.1	9.27	8.59
17	Sugars and sugar confectionery	0.59	0.48	0.05	1.02	2.09	1.93	0.48
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	2.94	2.63	2.19	2.28	2.41	2.56	2.63
26	Ores, slag and ash	0.86	1.27	0.75	0.6	0.93	1.21	1.27
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	3.23	3.57	3.41	2.85	2.95	4.01	3.57
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	3	3.1	2.89	3.7	3.83	3.7	3.1
29	Organic chemicals	2.03	1.19	2.03	1.88	1.48	1.34	1.19
37	Photographic or cinematographic goods	1.133	1.27	1.07	1.18	1.22	1.05	1.27
47	Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper or paperboard	1.26	1.26	1.52	1.89	1.61	1.47	1.26
50	silk	4.634	6.83	3.73	3.52	4.46	6.32	6.83
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	0.98	1.68	1.51	1.18	1.84	1.96	1.68
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	1.13	1.5	1.41	1.5	1.45	1.24	1.5
72	Iron and steel	1.6	0.92	1.59	1.43	1.04	1.1	0.92
75	Nickel and articles thereof	1.82	1.4	1.48	1.68	1.33	1.3	1.43
78	Lead and articles thereof	2.08	3.03	2.17	2.55	3.46	2.82	3.03
79	Zinc and articles thereof	1.8	1.77	2.87	2.49	2.09	1.96	1.77
80	Tin and articles thereof	1.56	1.37	2.75	2.11	1.45	1.34	1.37
81	Other base metals; cermets; articles thereof	1.24	0.8	1.23	1.05	0.87	0.74	0.8
87	Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof	0.143	0.085	0.17	0.11	0.07	0.09	0.09
88	Aircraft, spacecraft, and parts thereof	1.163	0.182	1.07	0.65	0.27	0.12	0.18
97	Works of art, collectors' pieces, and antiques	3.15	0.393	2.32	1.77	2.87	0.83	0.39

Source: Calculated from UN Commodity Trade Statistics

Table 5 shows the product for which RID index has value greater than one. Out of 97 products analysed in the study it is found that there are 23 products that have high import intensity. Some products show decline in the value of index, some shows an increase in the index value while for some products the value of index does not show high fluctuation. Products like Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes (15); Silk (50); Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn (53); Lead and articles thereof (78) have shown an increase in the value of index. The products for which the value of index does not show significant change are Edible fruit and nuts; peel of citrus fruit or melons (8); Sugars and sugar confectionery (17); Salt, sulphur, earths and stone, plastering materials, lime and cement (25); Mineral fuels, mineral oils and products of their distillation, bituminous substances, mineral waxes (27); Inorganic chemicals, organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes (28); Photographic or cinematographic goods (37); Pulp of wood or of other fibrous cellulosic material, waste and scrap of paper or paperboard (47); Impregnated, coated, covered or laminated textile fabrics, textile articles of a kind suitable for industrial use (59); Nickel and articles thereof (75); Zinc and articles thereof (79); Tin and articles thereof (80). The commodities for which the value of RID had declined are Edible vegetables and certain roots and tubers (7); Organic chemicals (29); Aircraft, spacecraft, and parts thereof (88); Works of art, collectors' pieces, and antiques (97). From the above discussion we can analyse them the maximum number of commodities do not show any significant change in index value. This means that the import structure of the commodity do not undergo a large change.

The above analysis show that China has high import intensity in 33 products while India has high import intensity in 23 products during the period of study. The value of import intensity indices revealed that the China's import structure had undergone greater change as compared to India's import structure. It is due to the fact that there are large number of commodities in India's import basket that does not show significant changes in the value of import dependency index. In case of China it is not so as there are small number of commodities that do not show change in import dependency index.

5. Analysing the trade Potential between India and China

In this section the bilateral trade potential is analysed for India and China. For this purpose average Revealed Comparative Advantage (RCA) index of a country is matched with average Revealed Import Dependency (RID) index of other country. It is based on the fact that how much one country is able to export efficiently the products to other country in which other country has high import dependency. India's export potential to China exists for the products in which India has RCA greater than one and China also has RID greater than one. Similarly China's export potential to India lies in the commodities in which China has RCA greater than one and India too had RID greater than one. The analysis is done for the same 97 product category at 2

digit level from UN commodity trade statistics. RCA and RID values of both the countries are calculated from 1995 to 2017 and then their average value is taken for analysis purpose. When the calculated average RCA indices of India are matched with average RID indices of China and when China's average RCA indices are matched with India's average RID indices it is found that in total there are 22 commodities that possess potential for future trade between India and China

5.1 China's export potential to India:

For the purpose of identifying the commodities in which China's export possess the prospects of trade to India, we look at the products in which China has average RCA greater than one and India has average RID greater than one. This indicates that how efficiently China can meet the import demand of India by its export. The table 8 shows the products that have future prospects of trade between India and China. Out of 97 products taken for analysis there are 10 products identified in which China can easily and efficiently expand its export to Indian market.

Table 6 - China's RCA & India's RID

HS Code	Product Description	China's RCA	India's RID
7	Edible vegetables and certain roots and tubers	1.48	1.66
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	1.27	2.08
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	1.38	2.33
50	Silk	6.4	6.85
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	3.01	2.32
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	1.57	1.47
78	Lead and articles thereof	1.64	3.36
79	Zinc and articles thereof	1.13	1.7
80	Tin and articles thereof	1.92	1.3
89	Ships, boats and floating structures	1.35	3.08

Source: Calculated from UN Commodity Trade Statistics

The products that show high trade potential are from different categories, ranging from traditional and resource based products to high and medium technology products. Traditional item of both the country, Silk (50) have shown highest trade potential followed by other vegetable textile fibres; paper yarn and woven fabrics of paper yarn (53). Ships, boats and floating structures (89) from high technology product also hold high trade potential. If China

wants to increase its exports to India it can do so by increasing its exports in these products as these products show high trade potential between two countries.

5.2 India's export potential to China:

India's export potential to China is analysed by identifying the commodities in which India have RCA greater than one and China too have RID greater than one in the same product. Analysis shows that there are 12 products out of 97 products that show high export potential for India to China. These 12 products are shown in table 7. The average RCA of India meets with average RID of India in these products. The products that show highest trade potential are silk (50) and cotton (52), Vegetable plaiting materials; vegetable products not elsewhere specified or included (14) and Ores, slag and ash (26) also shows high trade potential. The low trade potential is shown by organic chemicals (29) and least by iron and steel (72) out of 12 products showing export potential.

Table 7 - India's RCA & China's RCA

HS Code	Product Description	India RCA	China RID
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants ; straw and fodder	1.53	3.37
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	4.97	2.43
26	Ores, slag and ash	3.02	4.3
29	Organic chemicals	1.67	1.29
41	Raw hides and skins (other than furskins) and leather	2.3	3.14
50	Silk	8.98	1.02
52	Cotton	8.4	2.54
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	5.5	2.36
54	Sewing thread of man-made filaments, whether or not put up for retail sale	2.7	2.18
55	Man-made staple fibres	3.1	2.11
72	Iron and steel	1.3	1.27
74	Copper and articles thereof	1.14	2.77

Source: Calculated from UN Commodity Trade Statistics.

The products that show high trade potential for India are mainly from traditional and resource based category with some exceptions. This may be due the reason that India had underdeveloped manufacturing sector. The growth trajectory of India is an unconventional one, it has shifted its growth momentum from agriculture sector to service sector directly unlike other developed nations where the transformation is from agriculture to industrial and then to service sector. India seemed to have skipped its industrial phase and its manufacturing sector is lurking with minimum investment, bad infrastructure, lack of FDI, shoddy policy formation and implementation. Therefore manufacturing sector in India remain less robust a result of which India don't have trade potential in manufacturing product. Policy reforms are called for

development of industrial sector to meet this end labor market reforms, facilitation of investment in infrastructure and reduction of trade barriers are crucial. These policy changes will induce the multinationals to conduct FDI and hence to augment the process of integrating the Indian industry with of global production activities. The policy environment must discriminate for the domestic and foreign enterprises.

6. Conclusion:

The analysis reveals that the export and import structure of China and India is changing as the value of RCA and RID indices of most of the products have changed over the time, for some of the products it increased and for some of the products it decreased. In case of China we find that the export structure is changing with the export shares of skill-intensive and medium- to high-technology products increasing and those of labour-intensive products decreasing. These corroborate with the well-known notion of China's decreasing comparative advantages in its traditional export sectors such as silk, products of animal skin, leather good and travel goods, footwear and apparel. This can reduce the threat posed by China in labour-intensive products in the long run, thereby benefiting less developed countries that find it hard to compete with China. On the other hand, India specializes in resource base and low technology products like cotton, oil seeds, fibers, paper yarn, pearls, precious stone and metals.

China highly relies on imports for resource based products as the products like raw hides and skin, fertilisers, wool and woven fabrics has shown highest value of RID index. India also relied on imports for resource based products like animal and vegetable fat, mineral fuels, mineral oil, organic chemicals and inorganic chemicals. Though both countries rely on imports for resource based products, the products that show high RID in both the countries differ. Absence of highly disaggregated trade data prevents us from further exploring this issue.

As far as trade potential between the two countries is concerned, the analysis revealed that out of 97 commodities there are 22 commodities that hold future potential for bilateral trade. Out of these 22 commodities, 12 commodities categories for India and 10 commodities from China has potential for future trade. As the RCA of India lies in the same commodities as RID of China and vice versa. China can increase its exports to India in almost all categories as the trade potential is identified in resource-based, traditional as well medium to high technology products. Products like edible vegetables, salt, sulphur and stone; plastering materials, lime and cement, inorganic chemicals, organic or inorganic compounds of precious metals, of rare-earth metals, silk, other vegetable textile fibres, paper yarn, Lead and articles thereof, Zinc and articles thereof, Tin and articles thereof, ships, boats and floating structures shows high trade potential in case of China. While India can increase its exports to China only in resource based and traditional products. Resource based products like oil seeds and miscellaneous grains, Vegetable plaiting materials, ores, slag and ash, organic chemicals, raw hides and skins, silk, cotton, other vegetable textile fibres, paper yarn, sewing thread of man-made filaments, man-made staple fibres, iron and steel Copper and articles thereof shows high value of RID in case of India. This can be attributed due to underdeveloped industrial sector in the country.

Given the differences in the area of specialization of both the countries, we find moderate complementarity in their export–import structures. This indicates a potential for trade expansion between the two countries. Both countries are expected to benefit from each other's growth if the complementarity in the trade structures can be enhanced to larger extent and if they are able to further diversify their export bases. Above conclusions do not represent any causation and are suggestive only. Our findings do not take into account the many important effects like the growing trade of China and India may have on the global economy therefore they should be interpreted with caution .

References

- (1) Beretta, S., & Lenti, R. T. (2012). India and China: Trading with the world and each other. *Economic and Political Weekly*, 35-43.
- (2) Bhat, T. P., Paul, M., & Guha, A. (2008). *India and China: trade complementarities and competitiveness*. Institute for Studies in Industrial Development.
- (3) Bhattacharyay, B. N., & De, P. (2005). Promotion of trade and investments between China and India: The case of Southwest China and East and Northeast India.
- (4) Boillot, J. J., & Labbouz, M. (2006). India-China Trade: Lessons Learned and Projections for 2015. *Economic and Political weekly*, 2893-2901.
- (5) Das, D. K. (2006). China and India: An era of escalating economic interaction. *China & World Economy*, 14(4), 105-119.
- (6) Dersoches, B., Francis, M. & Painchaud, F. (2009) Institutional reforms, trade and growth: The experiences of India and China in a global economy In Reddy, B. S. (Ed), *Economic reforms in India and China: Emerging issues and challenges* (pp. 61-87) New Delhi: Sage Publication.
- (7) Desai, M. (2005). India and China: an essay in comparative political economy. In *India's and China's Recent Experience with Reform and Growth* (pp. 1-22). Palgrave Macmillan, London"
- (8) Devadason, E. S. (2012). Enhancing China—India Trade Cooperation: Complementary Interactions?. *China Review*, 59-83.
- (9) Dimaranan, B., Ianchovichina, E., & Martin, W. J. (2007). *China, India, and the future of the world economy: Fierce competition or shared growth?*. The World Bank.
- (10) Mund, J. A., Brandt, N., & Hansakul, S. (2005). China & India: A visual essay. *Frankfurt: Deutsch Bank Research*.

- (11) Qureshi, M. S., & Wan, G. (2008). Trade expansion of China and India: Threat or opportunity?. *World Economy*, 31(10), 1327-1350
- (12) Rahman, R. D., & Andreu, J. M. (2006). *China and India: Towards Global Economic Supremacy?*. Academic Foundation.
- (13) Singh, S. (2005). China-India Bilateral Trade:. Strong Fundamentals, Bright Future. *China Perspectives*, 2005(62).
- (14) Srivastava & Anupam(2007) Strategic context of India's Economic Engagement with ChinaIn Penelope, P.(Ed),*Economic development in India and China: New prospective on progress and change*. New Delhi: Serial Publication.
- (15) Veeramani, C. (2006). India and China: Changing Patterns of Comparative Advantage?. Georgia Institute of Technology.
- (16) Xie, A., & Ahya, C. (2004). India and China: a special economic analysis.