MPRA

Munich Personal RePEc Archive

India's merchandise trade with China: growth, prospects and future potential?

haq wani, Nassir ul and dhami, Jasdeep kaur

Lovely Professional University, Punjab, India., CT Institute of
Management and Technology.

20 March 2016

INDIA'S MERCHANDISE TRADE WITH CHINA: GROWTH, PROSPECTS AND FUTURE POTENTIAL

Mr. Nassir Ul Haq Wani
Ex. Assistant Professor, Doctoral Fellow
Lovely Professional University, Punjab (India)
nassirtoiba786@gmail.com
09501080836, 09086828459

Dr. Jasdeep Kaur Dhami
Director
CT Group of Institutes
Punjab (India)
bawa_mangat@yahoo.co.in
09988507007

INDIA'S MERCHANDISE TRADE WITH CHINA: GROWTH, PROSPECTS AND FUTURE POTENTIAL

Abstract

India and China are the two important emerging economies of the world with strong history of intimacy. After liberalization both have made rapid progress. Owing to large size and amalgamated composition of economies, the economies are looks as the upcoming global leaders on the international arena. The bilateral trade between the nations has definitely impact on the economic scenario of global trade. The trade relation in terms of trade between India and China is developing its own impetus and dynamism.

India's share in China's exports and Imports increased from 0.51 per cent and 0.30 per cent in 1995 to 2.66 per cent and 1.34 per cent in 2011 respectively. During the period of 1995-1999, the actual growth rates of Indian exports to and imports from China, i.e. 3.07 per cent and 6.05 per cent respectively. The political relations between India and China turned to be good one, which positively affected their trade relations. The trade between these two giant economies has been identified as the most sensible and reliable instrument, in recognizing the impact on the dynamism of the global economy and its vibrant growth speed. It is in this context of their changing behavior, the current paper makes an endeavor to appraise that how the bilateral trade between the two economies becomes as a tool in intensifying their partnership for their joint advantages in the future time.

Introduction

A decade has passed since the problems of economic growth in the poorer nations became a major foreign policy concern of the wealthy and powerful nations of the world. In the underdeveloped lands, the last ten years reveal extensive planning activity as well as unprecedented inflows of technical and capital assistance on government account. Also during this period the imagination and efforts of many economists other social scientists all over the world have turned to the task of uncovering the secret to the critical transition-the process by which stagnation may become growth, or progress at a slow rate may be accelerated.

Yet very few countries have succeeded in making this transition during the decade. In Asia, where live a large part of the world's population and an even larger part of its poor people, India and mainland China alone offer some prospect of such achievement in the near future. The relative progress in the development of these two countries is of great significance. There were strong parallels in their preplan structure and strong contrasts between China's totalitarian and India's democratic programs. Their performance relative tone another may influence the programs adopted by other, now less advanced, countries. It will certainly bear upon Soviet and United States foreign policies. Furthermore, the record of the course of development in these two lands provides a unique opportunity for examining the process of development as such. What are the essential economic ingredients? Can they be used with equal effectiveness in democratic and communist societies?

The rapid economic growth of India and China has been associated with much more rapid growth in their trade."Economic growth in China and India has been rapid in recent years, and these two countries have increased their global market share, trade, and investment in many industries. Productivity and per capita income growth of these two countries, particularly China, appear to have been much more rapid in recent years than that of the United States and other advanced economies"(National Science Board, 2008).

In 1984, the two countries signed the ¨Most Favoured Nation Agreement¨ (ITPO, 2003). But India's liberalization became systematic only with the launch of the major reform package of 1991. In 1991, the trade value of India with China was $265 million. In 1997, bilateral trade had reached $1.85 billion, and, 2009-10, it reached $43.28 billion. In this regard the paper attempts to explore the concentration of trade relations between the economies and examines the opportunities which can be tapped for the mutual benefit of both the nations.

Need for the Study

Although World witnessed economic wonders like that of Singapore, Hong Kong, Japan, Taiwan, North Korea and South Korea but none of these posed so much threat to the global economy, as is expected from India and China. From the last two decades, these giant economies of India and China have achieved economic laurels by following their own growth strategies. China called as "Factory of the World" and India known as "Worlds Back office" continue to grow at the rate of 10 per cent and 7 per cent. In this regard, the study makes an attempt to explore the extent of trade relations between these two nations and hence explore the potential for future trade.

Objectives

1. To analyse the growth of India's merchandise trade with China.

2. To estimate the export and import intensity indices for India's trade with China.

3. To analyse the composition of India's merchandise trade with the China.

Methodology

In order to meet the desired objectives following methodology is used and the analysis will be done for meeting the policy suggestions.

- Real Growth Rate
- Export Intensity Index
- Import Intensity Index

(a) Real Growth Rate

Growth rates have been calculated by using the exponential function of the following form

$$y = abt$$

The Growth rate (r) has been computed as under

$$r = \{Antilog\ (\log b) - 1)\} * 100$$

$$or\ r = (b - 1) * 100$$

Where,
b = Slope of semi-logarithmic trend

a = Constant

r = Growth rate

(b) Export Intensity Index

The ratio of export share of a country/region to the share of world exports going to a partner. Export Intensity Index can be defined as,

$$EII_{ij}= (x_{ij}/X_{iw})/ (x_{wj}/X_{ww})$$

Where

x_{ij}= value of exports of country/region i to country/region j,

X_{iw}= value of the exports of country/region i to the world,

x_{wj}=value of world exports to country/region j, and

X_{ww}= value of world exports.

(c) Import Intensity Index

The ratio of import share of a country/region to the share of world imports going to a partner. Import Intensity Index can be defined as,

$$III_{ij}= (M_{ij}/M_{iw})/ (M_{wj}/M_{ww})$$

Where

M_{ij} = value of imports of country/region i to country/region j,

M_{iw} = value of the imports of country/region i to the world,

M_{wj} = value of world imports to country /region j, and

M_{ww} =value of world imports.

Growth of India-China Merchandise Trade

Growth experience is always necessary whenever there is discussion related to trade and investment policies. The fast economic growth of India and China is attributed to rapid growth in their trade. Another important feature of the growth of India and China has been the growth in their demand for natural resources, and particularly energy (Martin, 2009). Since 1962, India's trade relations with China remained absent for fourteen years. However, the economic and diplomatic relation resumed in the late seventies. India and China have experienced unprecedented growth in terms of economic development, which have attracted the attention of the world economy. India and China today represent two unique new players in the international market, presenting a combination of high GDP. According to Statistics of China Customs, the

total amount of India - China trade in 2002 touched $4.95 billion. In 2004, it crossed $13.6 billion. Trade relations between these two nations have further strengthened after opening up of the border trade in the year 2006. In 2008, China emerged as the largest trading partner of India. During 2009-10, volume of trade between the two countries reached to $42.44 billion (Ansari, 2011). India's trade with China experienced various changes during the last decades.

India-China trade relations experienced various changes during 1995-2011. Table 1 depicts the value of India's merchandise trade with China during 1995-2011. In 1995, India's exports to China were merely 331.69 million US$, which increased to 16717.79 million US$ in 2011. Similarly, India's imports from China also rose quite tremendously from 806.98 million US$ in 1995 to 54348.44 million US$ in 2011. With the substantial growth of exports and imports, India's total trade with China also increased remarkably, from 1138.67 million US$ in 1995 to 71066.23 million US$ in 2011.

Despite growing economic and strategic ties, several issues continued to hinder India-China relations. Though bilateral trade has continuously grown, India faces massive trade imbalance in favor of China. During the year 1998-99, India's political relations with China became worse, which adversely affected their trade relations. Sino-Indian relations hit a low point in 1998 following India's nuclear tests in May. The then Indian Defense Minister George Fernandes declared that "China is India's number one threat", hinting that India developed nuclear weapons in defense against China's nuclear arsenal. In 1998, China was one of the strongest international critics of India's nuclear tests and entry into the nuclear club. During the Kargil War in 1999, China voiced support for Pakistan, but also counseled Pakistan to withdraw its forces.

Table 1: Value of India - China Trade (Million US$)

Year	Exports	Imports	Total Trade	Balance of Trade	Annual % Change
1995	331.69	806.98	1138.67	-475.29 (10.91)	
1996	614.77	756.52	1371.29	-141.746 (2.80)	20.42
1997	718.12	1109.83	1827.96	-391.716 (10.13)	33.30

1998	427.00	1097.24	1524.25	-670.239 (14.29)	-16.61
1999	542.00	1294.88	1836.89	-752.874 (8.44)	20.51
2000	734.88	1477.58	2212.46	-742.692 (11.24)	20.44
2001	922.54	1827.54	2750.09	-905.007 (45.22)	24.29
2002	1531.60	2619.84	4151.45	-1088.25 (29.53)	50.95
2003	2567.16	3611.89	6179.06	-1044.74 (13.67)	48.84
2004	4098.51	6048.02	10146.53	-1949.51 (13.69)	64.20
2005	7183.79	10164.19	17347.98	-2980.4 (10.20)	70.974
2006	7829.16	15639.03	23468.2	-7809.86 (17.79)	35.279
2007	9491.97	24549.14	34041.12	-15057.2 (27.16)	45.052
2008	10093.93	31579.76	41673.69	-21485.8 (18.87)	22.421
2009	10370.05	30608.09	40978.15	-20238 (30.64)	-1.669
2010	17439.99	41184.95	58624.95	-23745 (25.90)	43.06
2011	16717.79	54348.44	71066.23	-37630.7 (34.93)	21.22

Source: Calculations on the basis of data from UNcomtrade

Under the Bangkok Agreement both China and India offered some trade preferences to each other. India provided concession on 188 products exported from China. On the other hand, China provided preferences on tariff for 217 products exported from India. After that the annual growth rate of total trade between the two Asian giants remained healthy up to 2007, but beyond that the financial crisis in the world economy showed its negative impact on the pace of their mutual trade. In fact, due to this crisis, India's imports to China declined in 2009. Further, the trade deficit with China accounted for only -47.529 per cent of India's overall trade deficit in 1995, which rose to its maximum i.e. -3763.065 per cent in 2011. As a result of this decline in

exports and imports, the annual percentage change of total trade remained negative in 2009 (-1.669 per cent). This can be shown by the following figure:

Though, the values of India's exports to and imports from China remained quite phenomenal however one major problem from India's point of view was its rising trade deficit with China. By and large, the balance of trade remained in China's favour; India suffered unfavourable balance of trade with China.

Table 2 depicts the value of India's merchandise trade with World during 1995-2011. In 1995, India's exports to World were merely 31698.57 million US$, which increased to 301000 million US$ in 2011. Similarly, India's imports from World also rose quite tremendously from 36052.53 million US$ in 1995 to 408717.28 million US$ in 2011. With the substantial growth of exports and imports, India's total trade with World also increased remarkably, from 67751.10 million US$ in 1995 to709717.20 millionUS$ in 2011.

Table 2: Value of India - World Trade (Million US$)

Year	Export	Import	Total Trade	Balance of Trade	Annual % Change
1995	31698.57	36052.53	67751.10	-4353.96	
1996	33468.59	38424.28	71892.87	-4955.68	6.11
1997	34793.74	38658.35	73452.08	-3864.60	2.16
1998	33207.32	37895.78	71103.10	-4688.45	-3.19
1999	36919.98	45831.25	82751.22	-8911.26	16.38
2000	42358.1	48965.63	91323.72	-6607.53	10.35
2001	43878.31	45879.43	89757.73	-2001.11	-1.71
2002	50097.88	53782.18	103880.06	-3684.30	15.73
2003	59360.5	67002.91	126363.41	-7642.40	21.64
2004	75904.08	90135.14	166039.21	-14231.06	31.39
2005	100000	129194.7	229194.74	-29194.74	38.03
2006	121000	164897.4	285897.35	-43897.35	24.73
2007	146000	201435.2	347435.23	-55435.23	21.52
2008	182000	295836.1	477836.05	-113836.05	37.53
2009	177000	243036.1	420036.12	-66036.12	-12.09
2010	220000	311677	531676.96	-91676.96	26.57

| 2011 | 301000 | 408717.2 | 709717.20 | -107717.20 | 33.48 |

The trade deficit with World accounted for only -4353.96 per cent of India's overall trade deficit in 1995, which raised to its maximum i.e. -107717.20 per cent in 2011. As a result of this decline in exports and imports, the annual percentage change of total trade remained negative in 2009 (-12.09 per cent).

Table 3: China's Percentage Share in India's Exports and Imports

Years	Exports	Imports	Total Trade
1995	1.04	2.23	1.68
1996	1.83	1.96	1.90
1997	2.06	2.87	2.48
1998	1.28	2.89	2.14
1999	1.46	2.82	2.21
2000	1.73	3.01	2.42
2001	2.10	3.98	3.06
2002	3.05	4.87	3.99
2003	4.32	5.39	4.88
2004	5.39	6.70	6.11
2005	7.15	7.86	7.55
2006	6.45	9.48	8.20
2007	6.50	12.18	9.80
2008	5.55	10.67	8.72
2009	5.87	12.59	9.76
2010	7.91	13.21	11.02
2011	5.55	13.29	10.01

The relative importance of India as China's trade partner and that of China as India's trade partner is depicted in Table 3 and Table 4 respectively. It is clear from the Table 3 that India was not a big partner of China during 1995-2000. During this period, China's share in India's total trade though increased slowly but remained below three per cent. But in 2003, China gained one per cent share in India's global trade. The year 2003 ushered in a marked improvement in India-China relations following Indian Prime Minister Atal Bihari Vajpayee's

landmark visit to China. China officially recognized Indian sovereignty over Sikkim as the two nations moved toward resolving their border disputes. 2004 also witnessed a gradual improvement in the international area when the two countries proposed opening up the Nathula and Jelepla Passes in Sikkim which would be mutually beneficial to both countries. However, in 2008, it again declined. The similarly trend was also seen in case exports and imports with one exception that the share of India in China's global exports increased even during the financial crisis and reached at its ever maximum point, i.e. 7.91 per cent in 2010.

Table 4 depicts China's position in India's overall trade. China's share in India's total trade increased from 0.41 per cent in 1995 to 2.0768 per cent in 2010. However, then it dropped slightly to 2.02 per cent in 2011.

Table 4: India's Percentage Share in China's Exports and Imports

Years	Exports	Imports	Total Trade
1995	0.51	0.30	0.41
1996	0.45	0.51	0.48
1997	0.51	0.63	0.56
1998	0.55	0.64	0.59
1999	0.59	0.49	0.55
2000	0.62	0.60	0.61
2001	0.71	0.69	0.70
2002	0.82	0.77	0.79
2003	0.76	1.02	0.89
2004	1.00	1.36	1.17
2005	1.17	1.47	1.31
2006	1.50	1.29	1.41
2007	1.97	1.52	1.77
2008	2.20	1.78	2.02
2009	2.46	1.36	1.96
2010	2.59	1.49	2.07
2011	2.66	1.34	2.02

Source: Calculations on the basis of data from UNcomtrade.

India's share in China's exports and Imports also increased from 0.51 per cent and 0.30 per cent in 1995 to 2.66 per cent and 1.34 per cent in 2011 respectively. Further, it may also be noted here that after the Chinese accession to WTO in 2001, China's share in India's exports and imports increased with a rapid pace, because China put its door wide open for the international

markets. Like other countries, India also utilized this opportunity to deepen its economic ties with China, but the recent crisis has curtailed the pace of their merchandise trade.

During the period, the values of India-China trade grew at a phenomenal rate which can also be shown in Table 5, which presents the growth rate, the real economic growth rate builds onto the economic growth rate by taking into account the effect that inflation has on the economy.

Table5: Growth of India's Exports and Imports: China and Overall

Year	China		Overall	
	Exports	**Imports**	**Exports**	**Imports**
1995-1999	3.07	6.05	-0.17	-2.60
2000-2004	34.55	19.88	-0.23	-0.87
2005-2009	-4.76	12.12	0.74	0.85
2010 -2011	-28.15	1.15	2.55	0.52
1995-2011	12.93	13.47	-0.10	-0.57

Source: Calculations on the basis of data from UNcomtrade

Table 5 shows that the growth rates of India's exports to and imports from China (i.e. 12.93 per cent and 13.47 per cent respectively) remained well above than India's overall exports and imports (i.e. -0.108 per cent and -0.575 per cent respectively).

During the period of 1995-1999, the actual growth rates of Indian exports to and imports from China, i.e. 3.07 per cent and 6.05 per cent respectively. The political relations between India and China turned to be good one, which positively affected their trade relations. During, 2000-04, the trade relations between the two countries improved rapidly. However, one thing should be noted here that, in this period, the actual growth rate of India's exports to China (i.e. 34.55 per cent) was much higher than that of imports from China (i.e. 19.88 per cent). The major reason behind this was that during this sub-period, China joined WTO and put its door wide open

for the world market. India also utilized this opportunity. But, during the period, i.e. 2005-09, the actual growth rates of exports and imports again went down sharply (i.e.-4.763 percent and 12.127 percent respectively) due to the financial crisis. This process again repeated during 2010-2011, the actual growth rates of exports and imports again went down (i.e.-28.150 percent and 1.159 percent) rapidly

Composition of India-China Merchandise Trade

The usefulness of foreign trade depends upon the structure and pattern of trade which is determined by the nature of commodities exported and imported by a country (Singla and Brar, 2008). During the liberalization era, Indian dependency on Chinese items increased rapidly. Due to the cheap prices of Chinese products, Indian imports from China increased at a tremendous pace. Table 6 shows the percentage share of selected commodities in India's total imports from China. The total share of selected commodities, in India's overall imports from China, increased from 83.49 per cent in 1995 to 87.7 per cent in 2004. The share of two commodities namely Machinery, other than electrical, and electrical machinery in India's total imports from China improved quite surprisingly from 6.37 per cent and 5.89 per cent to 18.52 per cent and 22.99 per cent in 2011. Thus, these two commodities constitute more than half of India's total imports from China. This rise may be the result of increasing demand in Indian consumer market for cheap Chinese electrical equipment's.

Table 6: Percentage Share of Selected Commodities in India's Imports from China

S. No.	SITC Codes	Commodities	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1	05	Fruit, vegetables	1.37	0.40	0.33	0.47	0.65	0.21	1.00	1.71	1.13	0.38	0.29	0.26	0.23	0.20	0.53	0.34	0.41
2	26	Textile fibers	8.49	6.19	4.33	4.64	7.74	7.92	6.13	5.14	3.42	2.27	1.94	1.19	0.90	0.75	0.70	0.54	0.59
3	28	Metalliferous ores, metal scrap	1.81	0.78	0.77	0.66	0.69	0.90	0.94	0.88	0.37	1.94	0.86	0.57	0.37	0.24	0.07	0.12	0.41
4	32	Coal, coke, briquettes	15.24	12.44	16.70	9.87	11.41	17.41	15.22	6.96	6.27	10.86	8.11	6.68	4.63	4.09	0.16	0.62	1.04
5	51	Chemical elements, compounds	20.78	23.61	22.44	20.80	18.19	15.94	14.79	14.68	14.55	11.93	10.78	9.49	7.87	8.74	8.48	8.26	7.43
6	53	Dyeing, tanning, coloring materials	0.84	1.42	1.17	1.44	1.45	1.23	1.35	1.10	0.93	0.73	0.75	0.57	0.45	0.42	0.47	0.53	0.62
7	54	Medicinal, pharmaceutical products	9.17	7.74	5.89	6.50	5.66	4.44	4.57	5.43	4.83	3.18	3.16	2.80	2.68	2.17	2.31	2.28	1.72
8	58	Plastic materials, cellulose, etc	1.29	0.84	0.71	0.69	0.59	0.59	0.49	0.60	1.02	0.92	1.26	1.54	1.83	1.31	1.03	1.30	1.49
9	64	Paper, paperboard	2.41	0.37	0.10	0.15	0.15	0.12	0.15	0.23	0.17	0.21	0.38	0.75	0.81	0.82	0.62	0.51	0.64
10	65	Textile yarn, tabrics, n.e.s.	4.16	5.34	4.85	4.88	4.20	4.98	5.14	7.11	8.74	8.10	8.53	5.97	4.42	3.67	3.80	3.61	3.33
11	67	Iron and steel	2.35	2.69	5.97	2.44	2.77	0.98	0.88	0.48	0.69	1.68	3.61	7.42	8.62	6.92	3.52	6.69	4.88
12	71	Machinery, other than electrical	6.37	8.01	8.25	11.16	10.52	12.22	11.53	10.22	11.11	14.17	17.82	19.57	16.53	18.48	20.06	17.83	18.52
13	72	Electrical machinery	5.89	6.02	6.97	8.67	8.32	10.15	10.19	19.79	25.42	25.51	22.70	22.97	27.33	19.85	30.65	25.44	22.99
14	86	Professional goods, instruments, watches	1.13	1.18	1.41	1.96	2.07	1.97	2.47	3.54	2.94	1.60	1.74	1.50	1.24	1.05	2.06	1.51	1.54
15	89	Miscellaneous manufactures articles, n.e.s.	2.19	3.08	2.95	3.62	3.89	3.80	4.25	5.12	4.44	4.22	3.93	3.28	3.27	1.91	4.71	3.57	3.20
Total			83.49	80.11	82.84	77.95	78.3	82.86	79.1	82.99	86.03	87.7	85.86	84.56	81.18	70.62	79.17	73.15	68.81

Source: Calculations on the basis of data from UNcomtrade.

Table 7 presents percentage share of selected commodities in India's exports to China. The share of selected fifteen commodities in India's total exports to China increased. However, during the study period, it fluctuated sharply. In 1995, it reached to greater heights, i.e. 93.61 per cent, due to the sharp rise in the share of metalliferous ores, metal scrap which raised from 33.7 per cent in 1995 to 57.54 per cent in 2008. However, after that its share declined with lots of fluctuation and adjusted at 25.09 per cent in 2011. Thus, during the last two decades, metalliferous ores, metal scrap remained dominating commodity in India's export basket to China. The share of chemical elements, compounds also increases but iron and steel lost its relevance. Thus, this shows that share of different commodities exported to China, was very unstable.

Table 8 presents value of selected commodities in India's imports from China. In 1995 India's total import of selected 15 commodities is 1494.7 million US$, which increased by 38832.6 million US$ in 2011. India's major imports are like chemical elements, compounds; machinery, other than electrical; electrical machinery; iron and steel; textile yam, fabrics.

Table 9 presents value of selected commodities in India's exports to China. The value of Indian exports to China also increased but not as much as Indian imports are increased. India imports value of selected 15 commodities was 312.6 million US$ in 1995, which becomes 11910.9 million US$ in 2011. Two major commodities exported by India to China were textile fibers and metalliferous ores; metal and scrap which consisted of 2510.4 million US$ & 4194.8 million US$ respectively.

Table 7: Percentage Share of Selected Commodities in India's Exports to China

S. No	SITC Codes	Commodities	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1	03	Fish, fish preparations	4.12	12.03	16.00	12.05	16.26	15.21	9.89	7.04	3.82	1.77	1.92	2.13	1.60	1.08	1.03	1.47	1.28
2	08	Feeding stuff for animals	8.61	2.51	2.62	7.67	1.79	1.12	0.67	0.17	0.46	0.75	0.87	1.73	0.88	1.65	0.95	1.02	1.33
3	26	Textile fibers	0.64	4.05	1.89	0.61	0.25	0.73	0.14	0.24	1.03	1.41	2.70	7.79	9.33	6.98	5.37	11.03	15.01
4	27	Crude fertilizers, crude materials	4.08	3.09	1.46	3.81	7.02	6.32	5.81	4.44	3.26	3.11	2.06	1.98	2.62	3.26	2.62	2.27	3.62
5	28	Metalliferous ores, metal scrap	33.7	19.15	18.29	26.08	20.23	18.61	27.07	25.47	22.54	44.18	55.11	46.26	52.16	57.54	45.37	35.94	25.09
6	42	Fixed vegetable oils	5.87	2.31	03.57	3.74	5.54	3.09	0.50	0.26	0.46	0.68	0.59	0.63	0.65	0.68	1.54	1.26	1.77
7	51	Chemical elements, compounds	9.28	5.78	8.44	10.70	12.27	12.45	9.95	14.79	10.24	11.84	9.87	11.15	8.25	6.40	5.00	5.27	5.17
8	54	Medicinal, pharmaceutical products	2.92	2.89	3.26	6.12	4.72	3.21	4.18	3.21	1.63	0.86	0.86	0.59	0.66	0.71	0.58	0.44	0.68
9	58	Plastic materials, cellulose, etc	3.54	0.16	0.32	0.20	2.77	7.19	11.92	9.33	7.67	9.13	4.60	5.10	2.89	1.61	2.18	2.32	4.40
10	59	Chemicals materials n.e.s.	0.55	0.54	1.11	2.65	1.85	1.30	1.53	0.70	0.53	0.36	0.34	0.35	0.32	0.45	0.70	0.40	0.56
11	61	Leather, dressed furskins	1.15	0.65	0.45	0.79	0.80	1.06	1.20	1.07	0.64	0.77	0.54	0.49	0.53	0.52	0.39	0.39	0.57
12	65	Textile yarn, tabrics, n.e.s.	6.88	7.85	8.23	10.63	11.08	9.10	9.32	4.85	2.82	2.27	1.26	1.70	1.08	1.26	1.48	2.30	3.05
13	67	Iron and steel	11.49	11.62	2.14	2.15	0.76	2.02	2.77	14.06	28.99	10.96	10.23	5.26	5.26	1.99	4.14	4.34	4.19
14	71	Machinery, other than electrical	0.78	0.75	1.08	1.97	1.64	2.24	0.95	1.74	1.97	2.41	1.44	2.23	2.12	2.06	3.28	1.61	2.22
15	72	Electrical machinery	0.67	0.53	0.63	1.19	2.00	2.72	2.26	1.69	1.66	1.19	0.87	1.10	1.13	1.11	2.61	1.37	2.25
Total			93.61	73.91	69.49	90.36	88.98	86.37	88.16	89.06	87.72	91.69	93.26	88.49	89.49	87.38	77.24	71.43	71.19

Source: Calculations basis on the data from UNcomtrade.

Table 8: Value of Selected Commodities in India's Imports from China (million US$)

S. No	SITC Codes	Commodities	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1	05	Fruit, vegetables	11.0	3.0	3.9	5.2	8.4	3.1	18.3	44.9	40.8	23.0	30.1	40.9	58.3	64.5	164.5	150.1	223.7
2	26	Textile fibers	68.5	46.8	48.1	50.9	100.2	117.0	112.1	134.9	123.6	137.8	197.3	186.1	223.2	239.7	216.6	223.4	321.4
3	28	Metalliferous ores, metal scrap	14.6	5.9	8.5	7.2	8.9	13.3	17.1	23.0	13.4	117.4	88.0	89.3	92.0	78.5	23.5	53.1	223.1
4	32	Coal, coke, briquettes	122.9	94.1	185.3	108.3	147.7	257.2	278.3	182.5	226.7	657.1	825.0	1044.7	1136.7	1293.	51.4	255.4	566.4
5	51	Chemical elements, compounds	167.7	178.6	249.1	228.2	235.6	235.6	270.4	384.7	525.5	721.8	1095.9	1485.6	1921.4	2762.7	2597.2	3405.6	4038.5
6	53	Dyeing, tanning, coloring materials	6.8	10.7	13.0	15.8	18.7	18.2	24.8	28.9	33.8	44.2	76.6	90.5	111.6	133.6	143.8	221.7	340.7
7	54	Medicinal, pharmaceutical products	74.0	58.5	65.4	71.3	73.3	65.6	83.5	142.3	174.7	192.5	321.4	439.0	658.9	688.1	708.1	939.0	934.9
8	58	Plastic materials, cellulose,	10.4	6.3	7.9	7.5	7.6	8.7	8.9	15.7	36.9	55.8	128.2	242.0	449.8	416.7	316.7	536.3	812.9
9	64	Paper, paperboard	19.4	2.8	1.2	1.7	2.0	1.8	2.8	6.0	6.3	13.2	39.3	118.2	199.5	260.1	191.1	210.2	350.9
10	65	Textile yarn, tabrics, n.e.s.	33.6	40.4	53.8	53.5	54.4	73.7	94.1	186.3	315.7	490.4	867.7	935.0	1085.	1161.	1165.0	1488.4	1810.5
11	67	Iron and steel	18.9	20.3	66.29	26.8	35.9	14.5	16.1	12.7	25.1	102.0	367.0	1160.	2118.	2185.	1080.2	2759.0	2654.3
12	71	Machinery, other than electrical	872.7	1062.0	1182.5	983.9	1004.6	1236.9	1611.9	1740.5	2277.7	2990.9	4236.8	5181.7	6465.7	8545	7367.4	8744.2	11475.1
13	72	Electrical machinery	47.5	45.6	77.4	95.1	107.8	150.0	186.3	518.6	918.3	1543.1	2307.3	3593.7	6711.6	6271.1	9383.2	10478.3	12496.9
14	86	Professional goods, instruments, watches	9.1	8.9	15.7	21.5	26.8	29.1	45.2	92.9	106.4	96.8	177.6	235.4	305.4	333.2	632.163	624.7	841.3
15	89	Miscellaneous manufactures articles, n.e.s.	17.6	23.3	32.8	39.7	50.4	56.2	77.7	134.2	160.7	255.7	400.0	513.8	804.8	603.5	1444.6	1472.7	1742.0
Total			1494.7	1607.2	2010.894	1716.6	1882.3	2280.9	2847.5	3648.1	4985.6	7441.7	11158.2	15356.4	22342.3	25036.6	25485.4	31562.1	38832.6

Source: Calcuations based on the data from UNcomtrade

Table9: Value of Selected Commodities in India's Exports to China (million US$)

S. No.	SITC Codes	Commodities	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1	03	Fish, fish preparations	13.6	73.9	114.9	51.4	88.1	111.8	91.2	107.8	98.2	72.6	138.5	167.1	152.5	109.1	107.1	256.6	215.0
2	08	Feeding stuff for animals	28.5	154.7	188.4	32.7	9.7	8.2	6.1	2.7	11.8	30.8	63.0	135.5	84.0	167.4	98.7	178.4	223.7
3	26	Textile fibers	2.1	24.9	13.5	2.6	1.3	5.4	1.3	3.6	26.6	57.9	194.3	610.5	886.1	704.6	556.9	1925.3	2510.4
4	27	Crude fertilizers, crude materials	13.5	19.0	10.5	16.2	38.0	46.4	53.6	68.0	83.9	127.5	148.3	155.5	249.4	329.1	272.2	396.3	605.3
5	28	Metalliferous ores, metal scrap	112.0	117.7	131.3	111.4	109.7	136.8	249.7	390.1	578.6	1810.8	3959.3	3622.2	4951.0	5808.1	4705.4	6268.1	4194.8
6	42	Fixed vegetable oils	19.5	14.2	25.6	15.9	30.0	22.7	4.6	4.0	11.9	28.2	42.8	49.6	62.1	69.4	160.6	220.0	296.0
7	51	Chemical elements, compounds	30.7	35.4	60.6	45.6	66.5	91.5	91.8	226.5	262.9	485.4	709.7	873.1	783.9	646.4	519.3	919.6	865.7
8	54	Medicinal, pharmaceutical pro..ducts	9.7	17.7	23.4	26.1	25.6	23.5	38.5	47.3	42.0	35.4	60.6	46.6	63.5	72.2	60.5	78.0	113.7
9	58	Plastic materials, cellulose, etc	11.7	0.9	2.3	0.8	15.0	52.8	110.0	142.9	196.9	374.5	330.7	399.8	274.7	162.8	226.1	405.5	736.2
10	59	Chemicals materials n.e.s.	1.8	3.3	8.0	11.3	10.0	9.5	14.1	10.8	13.7	14.8	24.7	28.0	30.7	45.9	73.2	70.2	94.5
11	61	Leather, dressed furskins	3.8	4.0	3.2	3.3	4.3	7.8	11.0	16.5	16.4	31.9	39.4	38.4	51.1	52.8	41.3	62.3	95.3
12	65	Textile yarn, fabrics, n.e.s.	22.8	48.2	59.5	45.4	60.0	66.9	86.0	74.3	72.4	93.2	91.1	133.5	103.0	127.3	154.0	401.5	509.9
13	67	Iron and steel	38.1	71.4	15.3	9.2	4.1	14.9	25.6	215.3	744.3	449.5	735.5	412.0	332.9	201.6	429.3	758.0	701.9
14	71	Machinery, other than electrical	2.6	4.6	7.8	8.4	8.9	16.4	8.8	26.8	50.6	99.1	104.0	175.0	201.6	208.3	340.2	281.8	372.0
15	72	Electrical machinery	2.2	3.2	4.5	5.1	10.8	20.0	20.8	25.9	42.8	49.0	62.8	86.2	107.7	112.4	271.2	239.8	376.5
Total			312.6	593.1	668.8	385.4	482	634.6	813.1	1362.5	2253	3760.6	6704.7	6933	8334.2	8817.4	8016	12461.4	11910.9

Source: Calculations based on the data from UNcomtrade

Trade Intensity between India and China

An implicit statistical indicator of the growing complementarities in trade between India and china is provided by the export and import intensities. This index is first used by K. Kojima (Kojima, 1964). It measure the share of one country's trade with other country as a proportion of the latter's share in world trade. The average amount of this index is equal to one, if an index is greater than one, which means there is a higher degree of trade intensity between two given countries. On the other hand, if the index is closer to zero, that shows lower degree of trade intensity. The following Table 10 shows Export Intensity Index and Import Intensity index of India with respect to China.

Table 10: Export Intensity Index & Import Intensity Index of India

Year	Export Intensity Index	Import Intensity Index
1995	0.426	0.852
1996	0.729	0.722
1997	0.814	0.782
1998	0.509	0.788
1999	0.534	0.814
2000	0.509	0.947
2001	0.581	1.128
2002	0.874	1.391
2003	0.925	1.260
2004	1.156	1.383
2005	1.098	1.416
2006	1.046	1.350
2007	0.926	1.384
2008	0.738	0.822
2009	0.774	1.209
2010	0.966	0.926
2011	1.024	1.21
2012	0.889	0.10

Source: Calculations based on the data from UNcomtrade

During 1998-2001, India's export intensity to China's lying within 0.5 to 0.581. It implies that India's export to china is much lower than expected given the Chinese market's importance in world export. As a result of global financial crisis, Indian exports to China goes down, this can be seen in the declining export intensity index for the year 2008-2009. India's export intensity index to china, during 2004-2006, and in 2011, the value is greater than one. It implies that India's exports to china are higher than expected, given the Chinese market's importance in world export. The reason behind it may be the very steep increase in India's export of iron and steel and iron ore to China. There may be other reason too, like increasing complementarities between Indian export and Chinese import, etc.

If the Import intensity Index is numerically greater than unity, this would imply over representation of China in the India's imports, on the other hand, if a value is less than unity of this index would imply under-representation. Except 2012, India's import intensity index values are greater than 0.7 during 1995-2011. During 2001-2007, and in 2009 and 2011, the value of India's import intensity index is greater than one; it implies over-representation of China in the India's imports. The highest import intensity index was registered in the year 2005, which was 1.38. The value of import intensity index in 2012 is 0.105, implies under- representation of China in the India's imports.

Conclusion

Over the past three decades, the Asian economies have consistently outperformed other developing regions and become the new growth pole of the world economy. This is the case with both India and China, which are emerging as economic powerhouses not only in Asia but also in the world.

Amongst the economic relations, the trade relations between India and China are developing by good momentum and dynamism. During 1950-90, their trade relations were seriously affected by their political relations and remained at a very low level. However, since the 1991, the mutual trade between the two countries rose tremendously. The value of India's exports to China were merely just 331.69 million US$ in 1995 which shoot up to 16717.79 million US$ in 2011. Similarly, India's imports from China also rose quite tremendously from 806.98 million US$ in 1995 to 54348.44 million US$ in 2011. With the substantial growth of

exports and imports, India's total trade with China also increased remarkably, from 1138.67 million US$ in 1995 to 71066.23 million US$ in 2011.

Though the growth of india-China trade was quite phenominal yet one major problem remained from Indian perspective was its growing trade déficit. During the study period India experiences negative balance of trade with China, which rose substantialy from 475.29 US$ to its máximum i.e. 37630.7 US$ in 2011. The trade déficit with China escalated between 141.74 US$ to 37670.7 US$. The trade déficit with China accounted for 10.91 per cent of India's overall trade déficit in 1995 and rose to 34.93 per cent in 2011. However, it fluctuated rapidly during the study period, In 2001, it increased to its máximum point i.e. 45.22 per cent, that was very high.

India's share in China's exports and Imports also increased from 0.51 per cent and 0.30 per cent in 1995 to 2.66 per cent and 1.34 per cent in 2011 respectively. Further, it may also be noted here that after the Chinese accession to WTO in 2001, China's share in India's exports and imports increased with a rapid pace, because China put its door wide open for the international markets. Like other countries, India also utilized this opportunity to deepen its economic ties with China, but the recent crisis has curtailed the pace of their merchandise trade.

During 1998-2001, India's export intensity to China's lying within 0.5 to 0.581. It implies that India's export to china is much lower than expected given the Chinese market's importance in world export. As a result of global financial crisis, Indian exports to China goes down, this can be seen in the declining export intensity index for the year 2008-2009. India's export intensity index to China, during 2004-2006, and in 2011, the value is greater than one. It implies that India's exports to china are higher than expected, given the Chinese market's importance in world export. The reason behind it may be the very steep increase in India's export of iron and steel and iron ore to China. There may be other reason too, like increasing complementarities between Indian export and Chinese import, etc.

India's import intensity index are greater than 0.7 during 1995-2011. During 2001-2007, and in 2009 and 2011, the value of India's import intensity index is greater than one; it implies over-representation of China in the India's imports. The highest import intensity index was registered in the year 2005, which was 1.38. The value of import intensity index in 2012 is 0.105, implies under- representation of China in the India's imports.

The principal items of Indian exports to China are ores, slag and ash, iron and steel, plastic, organic chemicals and cotton. The main items that comprise Chinese export to India are

electrical machinery and equipment, cement, organic chemicals, nuclear reactors, boilers, machinery, silk, mineral fuels, and oils. Many new items have been entered in India's export list, but even then Chinese exports to India are more diversified vis-a-vis Indian exports to China. India's major exports to China belong to natural resource based and primary products while Chinese exports to India belong to manufactured products.India is continuously facing the adverse balance of trade with China which is a serious concern from India's point of view.

In present era, whole world is catching their eye with keen interest on the economies of China and India, as the future dictators of the global economy. The bilateral trade between the nations has definitely impact on the economic scenario of global trade. The trade relation in terms of trade between India and China is developing its own impetus and dynamism. The trade structure varies regarding the economies. Indian exports are mainly dominated by exports of ores, slag & ash, thus actual export driver for enhancement of India's export trade with China. While, on the other side, Chinese exports to India are comparatively much diversified and balanced. Furthermore, India's major exports to China belong to natural resource based and primary products while Chinese exports to India belong to manufacturing products. If the situations continue, then there is no denying the fact that India and China will set a golden stage for a magnificent jump regarding dominance in the global trade, which finally will increase synergies in the economic cooperation. Thus, bilateral trade will impact on the economic scenario of global trade. The inherent potential in the economies of the two countries could be harnessed to accelerate trade and economic cooperation between India and China to achieve laurels.

Refrences

1) Ayyub, S. (2012). Indo China trade relations: Present Trends and future potential. *ISSN 2277 – 4211 : IIM Journal Vol. 1, No. 1, July-December—2012* , 18.

2) Basu, S. R. (2009). Comparing China and India:Is The Dividend of Economic Reforms Polarized? *The European Journal of Comparative Economics Vol. 6, n.1, pp. 57-99* , 43.

3) Batra, A. (August, 2005). Reavealed Comparative Advantage:An Analysis For India And China.*Core-6A, 4th Floor, India Habitat Centre, Lodi Road, New Delhi-: Indian Council For Research on International Economic Relation.*

4) Belle Marie (2011). CPA Future of the BRICs *Journal of Management 41.*

5) Betina (2007). China, India, and the Future of the World Economy: Fierce Competition or Shared Growth*? The World Bank Development Research Group Trade Team, Policy Research Working Paper 4304.*

6) Bhat, P. T. (April, 2006). India And China In WTO.*New-Delhi: Institute for Studies in Industrial Development.*(Dhami, 2012).

7) Bhattacharya, S. K. (April, 2007). Gains and Losses of India-China Trade Cooperation - A Gravity Model Impact Analysis. Tokyo: *Cesifo (Silvio Beretta, 2012) Working Paper No. 1970.*

8) Burange, L. G. (August, 2008).India's Revealed Comparative Advantage In.*Vidyanagari, Mumbai: Department Of Economics.*

9) Chaudhary, D. A. (2012). Indo- China: The Prospective Economic Region. *Far East Journal of Psychology and Business Vol. 6 No. 3 March 2012 , 35.*

10) Chishti, S.(2002). Globalisation, income inequalities, terms of trade and developing countries, *Foreign Trade Review, 37(1 & 2): 21-34.*

11) Dhami, N. &. (2012). Indo-China Trade: Intensity and Potential for Future Trade.*International Journal of Enhanced research in educational development (ijered)* , 4.

12) Holly A. Bell (2011). Status of the 'BRICs': An Analysis of Growth Factors. *International Research Journal of Finance and Economics - Issue 69.*

13) ITPO (2003), A strategy for enhanced economic cooperation between India and China; *A Report, Trade Information Department, New Delhi: Indian Trade Promotion Organization.*

14) Jean Paul Simon (2011). The ICT Landscape in BRICS Countries: Brazil, India, China, *European Commission Joint Research Centre.*

15) Julian Cooper (2006).Russia as a BRIC: Only a Dream? Centre for Russian and East European Studies. *European Research Institute*.

16) Richard T. Mpoyi (2012). Economies on Global Competitive Advantage: Will There Be a Shift from West to East? *Middle Tennessee State University Journal of Applied Business and Economics vol. 13(3) 2012*

17) Sasikumar, C. J. (2007). India And China: From Trade To Peace? *Asian Perspective, Vol. 31, No. 4, 2007, pp. 99-123 , 25.*

18) Sharma, A. (2007). The Structure and Composition of India's Exports and Industrial Transformation (1980–2000*). International Economic Journal Volume 21, Issue 2, 2007 , 18.*

19) Silvio Beretta, R. T. (2012). India and China Trading With the World and Each Other . *Economic & Political Weekly , 35-43.*

20) Singh, S. (2012). India's Gains From Trade with China: An Analysis. *IJRFM Volume 2, Issue 2 (February, 2012) ISSN: 2231-5985 , 17.*

21) Srinivasan, T. N. (2004). China and India: Economic Performance, Competition and Cooperation. *World Trade Organization in Beijing, China, (p. 38). Bejjing*.