

INDIA'S TRADE RELATIONS WITH SAARC COUNTRIES IN PRE AND POST SAFTA PERIOD: A TRADE INTENSITY APPROACH

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Abstract

Background: South Asian Association for Regional Cooperation (SAARC) is an economic and political organisation of eight countries in South Asia. SAARC would play an important role in accelerating the pace of economic and social development, promote national and collective self-reliance and further the cause of peace, progress, and stability in South Asia.

Research Methodology: The objectives of the study are to analyse the India's trade relations with SAARC countries in pre and post SAFTA period and to identify the further scopes of India's trade with SAARC countries. The trade intensity model was used to measure variation and relative resistance in bilateral trade flows. The trade intensity indices have been calculated.

Scope of the Study: The present study focused on India's trade relations with SAARC countries. It is further divided into Pre-SAFTA and Post-SAFTA period.

Findings of the Study: It has been found that India has huge scope for trade with SAARC country and SAARC have big market to diversify the trade.

Keywords: SAARC, SAFTA, Trade Intensity Index, South Asia

INTRODUCTION

South Asia was no exception to such worldwide trends. The idea of regional cooperation in South Asia was initiated by the late President Zia-Ur-Rahman of Bangladesh, who visited Nepal, India, Pakistan and Sri-Lanka during the period 1977-78 to explore the possibility of regional cooperation among the SAARC countries. He proposed for the collective self-reliance in a quest for peace and economic development of these countries (Kumar M. D. 1997). Therefore, in 1979, the late president Zia-Ur-Rahman of Bangladesh mooted the idea of South Asia cooperation. Meeting at official levels was held to give it a concrete shape. Once the proposal for regional cooperation had been accepted by the South Asia countries, Bangladesh prepared a working paper which was circulated in November 1980 to other countries of the region. The working paper identified the areas on which prospects of cooperation could be worked out for mutual benefits of the countries of the region. This paper provides a forum for discussion. Preliminary meeting was held in Colombo in 1981, in Islamabad in 1982 and in Dhaka in 1983. The South Asian Regional cooperation was formally launched in August 14, 1983. The meetings at Foreign Secretaries and Foreign Ministers level had prepared the ground for regional cooperation, define its objectives, identified possible areas of cooperation and recommended an Integrated Programme of Action on agreed areas (Krishan G.,1996).

After the intense deliberation of eight years the heads of seven South Asian countries- Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri-Lanka are signed a charter to establish the South Asian Association for Regional Cooperation (SAARC) on 8th December 1985, whereas Although Afghanistan joined as 8th member at the fourteenth SAARC

Summit, Delhi, April 2007. It is headquartered in Kathmandu, Nepal. In its First summit, it was resolved by the Heads of Governments of seven countries that the SAARC would play an important role in accelerating the pace of economic and social development, promote national and collective self-reliance and further the cause of peace, progress, and stability in South Asia and the world as well (SAARC Secretariat, Notes)

In its eighteenth SAARC summit held in Kathmandu on 26-27 November 2014, the heads of government expressed their strong determination to deepen regional integration for peace, stability and prosperity in South Asia by intensifying cooperation, inter alia, in trade, investment, finance, energy, security, infrastructure, connectivity and culture; and implementing projects, programmes and activities in a prioritized, result-oriented and time bound manner.

REVIEW OF LITERATURE

The review of the various studies regarding Indo-SAARC trade relations by using trades intensity approach has been presented as under:

Kumar M.D (1999): In his research paper “SAARC Trade Intensity and India” has investigated trades intensity relations among SAARC countries with India. It has been found that during the post-SAARC (1986-98), intra-regional trade intensities relative to the rest of world were high in case of Nepal followed by Maldives, Bhutan, Sri-Lanka, Bangladesh, Pakistan and India. India was the only country, whose intra-regional exports intensities have increased from the pre- SAARC period (1975-85) to the post SAARC period. India’s exports intensities with individuals SAARC countries were far more than its imports intensities. Overall, India’s trade intensities were high with Nepal, Bhutan, Bangladesh, Sri-Lanka, Pakistan and Maldives during the pre and post SAARC period. **Chandran B & P Sarath (2011):** In his research paper “Trade Complementarity and Similarity between India and ASEAN countries in the context of the RTA (Regional Trade Agreement)” has examined Indo-ASEAN trade relations. The study examines the trade complementarity and similarity between India and ASEAN countries. It has been found that the India’s trade intensities with ASEAN countries are above one from 1990 to 2007 during study period. It revealed India’s trade intense with ASEAN countries compared with its trading pattern with rest of world. It has been also found that the ASEAN’s exports intensity index is higher than imports intensity index as it exports more to India compared to its imports.

Khan J. A (2012): In his research paper “India Pakistan Trade Relation” has made an attempted to measure strength, importance, and nature of bilateral relationship between India and Pakistan. The trade intensity model was used to measure variation and relative resistance in bilateral trade flows. The trade intensity indices have been calculated for the period 1994-2008. The study revealed that Pakistan’s importance in India’s total trade, India’s importance in Pakistan’s total trade and trade intensity of India with Pakistan. It shows that India’s

exports intensities were above the unity which further indicates that exports to Pakistan are strengthens. It is also observed that the India's imports intensities showing deceasing trend with Pakistan. However, Pakistan's trade intensity with India is increasing but is below the unity during the study period. In this regard it is suggested that India has space and scope to develop the new market in Pakistan. It is also observed that the Kashmir issue is the main hurdle in the growth of trade between two countries. **Tyagi S. (2014):** In his research paper "Composition, Intensity and Revealed Comparative Advantage in Sino-Indian Bilateral Trade: A Preliminary Study" has investigated the major trends of bilateral trade and explores issues associate with trade intensity, intra-industry trade and comparative advantage in the two countries Indo-China. Its shows increasing trend of trade intensity indices from 1992 to 2003 of both countries. From 2003 to 2007, there is a spike in all indices except import intensity for China from India. After 2007, all indices show a downward trend.

Raj P. S. & Ambrose B. (2014): In their research paper "A Brief Analysis of Indo-Japan Bilateral Trade: A Trade Intensity Approach" have been discussed Indo- Japan bilateral trade relations. The main objectives of the study to examined strength and nature of bilateral trading relationship between India and Japan. The study has been found that trade intensity between two countries is low. However, from the analysis it is observed that both countries have much trade potential to reap between them. **Sadhna (2014)** in her research paper "Feasibility of India's Trade with South Asia Association for Regional Cooperation (SAARC)" has examined the possibility of Indo-SAARC trade. The objective of the study to explore the feasibility of India's trade with SAARC bloc. In this regards it has been found that India's trade intensity is greater than unity that shows its full feasibility of trade with SAARC. Among SAARC, India is the most powerful and active trading partner. It is suggested that India have potential to develop the region. India must play a lead role in making the regional integration reality in South Asia. It has been concluded that the success of SAARC entirely depends upon India.

Anand A. & Grag K. (2016): In their research paper "A Study of India's Trade Intensity with United Arab Emirates: An Overview" have attempted bilateral trade between India and United Arab Emirates. The objective of the study to examine the overview of their trade links and analysed India's trade Intensity with UAE for the period from 1991 to 2014. Time series data has been used to measure Trade Intensity Index at HS code classification. This index used to determine whether India's trade with UAE is more or less than the world does on average. The analysis is divided into two parts. First part deals with Exports Intensity Index and second part deals with Imports Intensity Index. The study shows that India's exports intensity as well as imports intensity with UAE is more than unity for all the periods. This indicates India's exports and imports are more intense with UAE as compared to UAE with rest of the world. It has been suggested that to enhance and sustain the growth of mutual trade, both the countries should find out the existing potential to strengthen their trade. **Singh K. (2016):** In her research paper "Intra-Brics Trade Intensities: An Analytical Study" must

examined the trend in share of BRICS as a group and of individual countries of BRICS in world trade during 2001-2015 and to analyse trend in the Intra-Brics trade intensity of BRICS as a group during the time 2001-2015. The third objective was to analyse trend in the Intra-Brics trade intensity of each of the BRICS countries during the time 2001-2015. The study reveals that the Intra-BRICS trade of major BRICS countries (China, India and Russia) became less intense as intra-BRICS trade intensities decreased in 2015 compared to that in 2001. Intra-BRICS trade intensity of BRICS as a group decreased from 0.82 in 2001 to 0.70 in 2015. For India and Russia, it is 0.84 and 0.85 respectively and for China, it is just 0.59 in 2015, implying that China's trade with other BRICS countries is far less than expected, given its importance in world trade. However, for Brazil and South Africa, trade flows between these two countries and other BRICS countries are more than expected given their importance in world trade, as the figures for intra-BRICS trade intensity are greater than one.

Kumar R. (2018): In his research paper "India's foreign Trade with USA- A Study based on Trade Intensity & Reciprocity Index" has investigated bilateral trade relation between India & USA. The methodology used annual growth rate, compound annual growth rate, trade intensity index, trade reciprocity index for achievement of objectives. Study for the period from 2006 to 2016. The study was showing trade intensity index of India has strengthened its trade relation with USA and there is presence of greater potential in future for both countries. India's balance of trade with USA has always shown favourable balance except in the year 2008; however, trade reciprocity index indicates that India's moving towards unbalance trade with USA as the indices continuously decreasing during the period.

STATEMENT OF THE PROBLEM

The above-mentioned review of literature covers the significant areas of India's trade relations with SAARC countries but there remains some unexplored area which needs to be examined with further study. In this research paper an endeavour has been made to study the trade complementarily and similarity between India and SAARC countries. Therefore, the present study is undertaken with the title "India's Trade Relations with SAARC Countries in Pre and Post SAFTA Period: A Trade Intensity Approach".

OBJECTIVE OF THE STUDY

Objective spell out the basic philosophy of the whole study. In the present study following objectives have been undertaken:

To analyse the India's trade relations with SAARC countries in pre and post SAFTA period.

To identify the further scopes of India's trade with SAARC countries.

HYPOTHESES OF THE STUDY

In accordance with objective of the study the following hypotheses have been formulated:

H₀₍₁₎: There is no significant difference in India's trade with SAARC countries in pre-SAFTA period.

H₀₍₂₎: There is no significant difference in India's trade with SAARC countries in post-SAFTA period.

RESEARCH METHODOLOGY

This study namely India's Trade Relations with SAARC Countries in Pre and Post SAFTA Period: A Trade Intensity Approach conducted by using the secondary data. Data has been collected from various journals, annual reports of Reserve Bank of India, CIA world factbook, UN COMTRADE statistics and international trade centre (ITC). To formulate the study meaningful and empirical table, graphics and models were used. The data used for the present study are basically annual time series panel data covering the period from 1990-91 to 2016-17.

INDIA'S TRADE INTENSITY INDEX WITH SAARC COUNTRIES

There are several statistical indices that can provide useful insights relating to the study of international trade trends. One such statistical index that is used to measure the bilateral trade relation between SAARC countries is referred to as trade intensity index. Trade intensity index is pioneered by Brown in 1949 and which was later developed and popularized by Kojima in 1964. Trade intensity statistics is the ratio of two export shares which measure the share of one country's trade with other country as a proportion of the latter's share of world. The numerator is the share of the destination of interest in the exports of region under study, whereas the denominator is the share of destination of interest in the exports of world. Trade intensity index is used to determine whether the value of trade between the two countries is greater or smaller than would be expected based on their importance in world trade. The value of trade intensity index lies between zero (0) and one (1). The value greater than one indicates that country *i* trade with country *j* more intensely than does the world, on the other hand the value less than one is indicative of small trade flow between *i* and *j* relating to *j*'s trade with rest of the world. The value less than one also reveals that there is vast scope of trade potential between two trading partners.

The trade intensity index is further divided into two categories such as export intensity index and import intensity index for observing the pattern of exports and imports between two nations. Kojima's (1964) and Drysdale's (1969) index of trade intensity is stated as under:

Export Intensity Index: India (i) export intensity index with individual (j) SAARC country is computed as follow:

$$\text{Exports Intensity Index (xij)} = \frac{\frac{X_{ij}}{X_i}}{\frac{M_j}{(M_w - M_i)}}$$

Where:

X_{ij} = Exports Intensity Index of country i with country j.

X_{ij} = Exports of country i to trading partner country j.

X_i = Total exports of country i.

M_j = Total imports of country j.

M_w = Total global imports.

M_i = Total imports of country i.

Import Intensity Index: India (i) import intensity index with individual (j) SAARC country is computed as follow:

The trade intensity indices on both imports and exports demonstrate the bilateral trade orientation of a country with its trading partner.

$$\text{Imports Intensity Index (mij)} = \frac{\frac{M_{ij}}{M_i}}{\frac{X_j}{(X_w - X_i)}}$$

Where:

m_{ij} = Imports Intensity Index country i with country j.

M_{ij} = Imports of a country i from trading partner country j.

M_i = Total imports of country i.

X_j = Total exports of country j.

X_w = Total Global exports.

X_i = Total exports of country i.

SCOPE OF THE STUDY

The present study focused on India's trade relations with SAARC countries. It is further divided into Pre-SAFTA i.e., 1991 to 2005 and post-SAFTA period i.e., 2006 to 2016.

RESULTS AND DISCUSSION

In this section, data has been analysed and interpreted with help of the trade intensity approach. The analysis has been presented under:

A) INDIA'S TRADE INTENSITY INDICES WITH SAARC COUNTRY DURING THE PRE AND POST SAFTA PERIOD HAS DISCUSSED UNDER: -

1.1 India's exports intensity indices with SAARC country during the pre and post SAFTA period: table 1, gives the India's export intensity indices with SAARC country during the pre-SAFTA period (1991 to 2005) and post-SAFTA period (2006 to 2016). The export intensity indices are further classified into developing and least developing countries.

Among the developing countries the export intensity index was high with Sri-Lanka during pre-SAFTA period, which was 11.550 in 1991 and increased to 23.269 in 2005, whereas it is interesting to note that among all developing and least developing countries the export intensity index was lowest with Pakistan, which was 0.961 in 1991 and increased to 2.479 in 2005. The export intensity indices were showing the decreasing trend during the post-SAFTA period in case of both developing countries. The export intensity index was 10.451 in 2006 and declined to 7.671 in 2016 in case of Sri-Lanka, and in case of Pakistan it was 4.160 in 2006 and declined to 2.049 in 2016. Though the export intensity indices were depicting the decreasing trend in the post-SAFTA period, yet the average export intensity indices were depicting the increasing trend. The average export intensity indices in case of Sri-Lanka and Pakistan were 15.614 and 1.910 respectively during pre-SAFTA period which jumped to 16.329 and 3.142 respectively during post SAFTA period. It is observed that the low export intensity in case of Pakistan is due to hostile relationship between two countries but on the other hand side this also indicates that there are still vast scopes of export potential.

Among the least developing SAARC countries the export intensity indices were higher than the desired level in case of Bangladesh, Nepal and Bhutan. The export intensity indices in relation to Nepal and Bhutan were depicting the increasing tendency; the indices were 21.175 and 4.627 respectively in 1991, which increased to 38.860 and 26.114 in 2005 during pre-SAFTA period. The export intensity indices were showing the decreasing trend in case of Bangladesh, Maldives and Afghanistan during pre-SAFTA period, which were 19.225, 5.399 and 8.214 respectively in 1991 and declined to 13.124, 4.453 and 6.344 respectively in 2005. The export intensity indices were revealing the decreasing trend in relation to all least developing countries except Bhutan in the post-SAFTA period. This decreasing trend could be due to the impact of global economic meltdown of 2007-08 and its aftermath. The analysis of average export intensity indices during the pre-SAFTA and post-SAFTA is reflecting the decreasing trend among all the least developing SAARC countries except Nepal. The average export intensity indices in relation to Bangladesh, Bhutan, Maldives and Afghanistan were 18.353, 16.782, 4.729 and 6.779 respectively during pre-SAFTA period which declined to 8.704, 14.792, 4.079 and 5.658 respectively during post-SAFTA period. The average export intensity index was 23.569 during pre-SAFTA period which increased to 30.663 during pre-SAFTA period.

The natural trading partner theory reveals countries tend to trade more with neighbours and close proximate partners. Both the index will come down once it is adjusted for geographical distance. This theory proved consistence in case of all SAARC countries except Pakistan. The export intensity indices in case of neighbouring SAARC countries such as Bangladesh, Sri-Lank, Nepal and Bhutan is exceptionally higher than the desired level and Low in case of Maldives and Afghanistan which are geographically at a distance. It is observed from the analysis that the overall position of export intensity indices is depicting a declining trend in case of all SAARC countries during the post-SAFTA period. The possible reasons for this

decline could be global financial crisis of 2007-08, India is unable to diversify its exports basket over the years to SAARC market and it is basically exporting the same items whose demand have been declined over the years and SAARC countries are importing goods from other countries like China.

Table-1: Analysis of India’s Export Intensity Index with SAARC Countries

Pre-SAFTA								
Years	Bangladesh	Sri-Lanka	Nepal	Bhutan	Pakistan	Maldives	Afghanistan	SAARC(Av.)
1991	19.225	11.550	21.175	4.627	0.961	5.399	8.214	10.16
1992	19.951	15.084	19.557	3.602	1.134	4.169	19.325	11.83
1993	18.508	12.398	18.944	18.905	1.158	5.219	7.947	11.87
1994	23.148	12.682	17.170	19.759	1.063	3.648	6.593	12.01
1995	25.618	12.666	19.620	25.035	1.095	5.262	8.220	13.93
1996	20.149	14.371	19.316	27.900	2.113	4.266	5.600	13.39
1997	17.570	13.595	16.290	15.749	2.002	7.159	5.694	11.15
1998	22.353	12.397	16.524	11.935	2.894	7.419	4.664	11.17
1999	12.083	13.455	16.815	6.569	1.441	4.070	5.192	8.52
2000	13.610	14.742	13.851	0.891	2.350	3.486	3.088	7.43
2001	17.089	15.083	18.740	4.478	2.340	3.099	1.778	8.94
2002	15.738	17.968	24.662	15.462	2.203	2.456	2.694	11.60
2003	20.568	23.254	44.783	44.269	1.827	5.872	7.113	21.10
2004	16.561	21.703	47.625	26.429	3.594	4.966	9.519	18.63
2005	13.124	23.269	38.860	26.114	2.479	4.453	6.344	16.38
Average	18.353	15.614	23.596	16.782	1.910	4.729	6.799	12.54
Post- SAFTA								
2006	10.451	20.617	37.317	15.262	4.160	4.162	6.246	14.03
2007	10.657	22.045	38.053	12.926	4.668	3.733	6.940	14.15
2008	12.073	18.065	41.968	17.354	3.719	4.326	10.728	15.46
2009	7.009	12.062	21.278	14.415	3.231	4.729	9.933	10.38
2010	7.414	16.725	25.375	12.746	4.043	4.995	5.207	10.93
2011	5.599	13.080	26.401	12.504	2.271	4.427	4.611	9.84
2012	9.048	12.445	26.711	10.788	2.319	4.369	3.285	9.85
2013	8.866	14.485	26.515	9.752	2.674	3.165	3.293	9.82
2014	8.881	19.347	32.378	12.547	2.671	3.465	3.359	11.81
2015	8.079	17.874	29.552	21.757	2.758	3.952	4.256	12.60
2016	7.671	12.879	31.749	22.657	2.049	3.546	4.382	12.13
Average	8.704	16.329	30.663	14.792	3.142	4.079	5.658	11.91

Note: Authors’ calculations, computed from the data extracted from *UN COMTRADE* statistics and international trade centre (*ITC*).

1.2, India’s Imports intensity indices with SAARC country during the pre and post SAFTA period: table 2, demonstrates India’s trend of import intensity indices with SAARC countries during the pre-and post SAFTA period in the light of developing and least developing SAARC countries. Among the developing SAARC countries India’s import intensity index with Sri-Lanka is showing the increasing trend whereas with Pakistan it depicting a downward trend. The import intensity index with Sri-Lanka was 1.038 in 1991 and increased to 6.613 in 2005 in pre-SAFTA period, which was more than one, the desired

level. For Pakistan the import intensity index was 3.261 in 1998, which was maximum, but the after the Kargil war of 1991, import intensity index reflect consistent decline. The state of import intensity index manifested the declining in case of both the developing SAARC countries during the post –SAFTA period. The import intensity indices in case of Sri-Lanka and Pakistan were 1.66 and 1.76 respectively in 2006 which declined to 1.10 and 0.90 respectively in 2016. Similarly, the average import intensity indices in case Sri—Lanka and Pakistan were 1.941 and 1.139 respectively during the pre-SAFTA period which reduced to 1.57 and 1.04 during post SAFTA period. This analysis indicates that India’s bilateral import relation with developing countries were not intense during this period. Hence, there is vast scope for India to strengthen the trade tie with developing SAARC countries. India’s import intensity indices with least developing SAARC countries are better than developing SAARC countries. Even among the least SAARC developing countries the position import intensity index is better with Nepal, Bhutan and Afghanistan. The import intensity indices with Nepal, Bhutan and Afghanistan were 13.329, 1.423 and 10.248 respectively in 1991 which increased to 31.258, 23.700 and 10.442 in 2006 respectively, during the pre-SAFTA period. Though in case of Maldives the import intensity index increased yet it remains less than one during the whole period. Similarly, the position was not better with Bangladesh during the same period. Except Afghanistan the import intensity indices declined in case of all least developing countries during the post-SAFTA period. The import intensity indices for Bangladesh, Nepal, Bhutan and Maldives were 1.97, 39.43, 29.18 and 1.29 respectively in 2006, which declined to 0.77, 22.12, 9.69 and 0.98 respectively during post-SAFTA period. This analysis indicates that India’s import relation with least developing SAARC countries has become in weak post-SAFTA period as compared to pre-SAFTA period. The average import intensity is depicting the down trend in case of all least developing countries except Nepal and Afghanistan. This discussion reveals that India’s import relations are more intense with least developing SAARC countries as compared to developing SAARC countries.

Table-2: Analysis of India’s Import Intensity Index with SAARC Countries

Pre-SAFTA								
Years	Bangladesh	Sri-Lanka	Nepal	Bhutan	Pakistan	Maldives	Afghanistan	SAARC Av.
1991	0.605	1.038	13.329	1.423	1.582	0.047	10.248	4.04
1992	0.631	0.960	9.016	3.267	3.048	0.237	2.978	2.88
1993	1.268	1.129	12.142	7.198	1.049	0.974	0.844	3.51
1994	2.146	1.308	15.111	41.327	1.072	0.460	9.277	10.10
1995	3.437	1.336	19.968	47.228	0.792	0.298	7.030	11.44
1996	2.009	1.437	22.855	46.332	0.532	0.292	3.222	10.95
1997	1.409	0.872	31.429	15.253	0.683	0.332	9.887	8.55
1998	1.573	1.009	39.461	7.291	3.261	0.067	22.813	10.78
1999	1.624	1.099	35.808	17.740	0.924	0.494	14.451	10.31
2000	1.681	0.887	38.914	21.512	0.933	0.233	22.890	12.44
2001	1.280	1.386	58.737	26.684	0.917	0.375	35.526	17.84
2002	1.030	2.203	52.651	24.637	0.383	0.298	19.421	14.37
2003	1.064	2.497	45.766	41.275	0.593	0.287	19.422	15.84

2004	0.769	5.347	40.703	25.706	0.546	0.245	16.121	12.78
2005	0.823	6.613	32.978	28.623	0.763	0.748	10.442	11.57
Average	1.423	1.941	31.258	23.700	1.139	0.359	13.638	10.49
Post-SAFTA								
2006	1.278	4.942	25.550	18.910	1.140	0.835	7.547	8.600
2007	1.189	3.618	34.339	19.000	1.020	0.994	10.623	10.112
2008	1.085	3.283	34.040	15.502	0.926	0.707	12.456	9.714
2009	0.722	2.080	23.505	13.191	0.722	0.657	13.894	7.824
2010	0.803	2.595	25.450	12.476	0.645	6.946	15.947	9.266
2011	0.924	2.736	21.571	11.882	0.541	2.026	12.460	7.449
2012	0.841	2.642	12.573	11.777	0.758	0.894	6.918	5.200
2013	0.728	2.016	17.120	10.061	0.603	0.491	16.530	6.793
2014	0.692	2.131	25.653	10.067	0.872	0.604	17.359	8.197
2015	0.820	3.341	28.188	14.747	0.858	0.881	23.101	10.277
2016	0.853	2.703	24.406	10.690	0.995	1.076	34.980	10.815
Average	0.903	2.917	24.763	13.482	0.825	1.465	15.620	8.568

Note: Authors' calculations, computed from the data extracted from UN COMTRADE statistics and international trade centre (ITC).

2 SAARC COUNTRIES' TRADE INTENSITY INDEX WITH INDIA DURING THE PRE AND POST SAFTA PERIOD HAS PRESENTED UNDER: -

2.1, SAARC Countries' exports intensity index with India during the pre and post SAFTA period: Table-3, present the results of SAARC countries' export intensity indices with India during the pre-SAFTA and post SAFTA period from two perspectives i.e., developing and least developing SAARC countries. Sri-Lanka's exports intensity index with India is hovering around the minimum value ranging 0.89 in 1997 to maximum value 6.85 in 2005. The export intensity of Sri-Lanka is depicting the increasing trend in the pre-SAFTA period, where the value of exports intensity was 1.08 in 1991 which increased to 6.85 in 2005. The export intensity index of Pakistan with India is showing a downward trend, the value of export intensity was 1.64 in 1991 which decreased to 0.78 in 2005 in the pre-SAFTA period. The results of Pakistan's export intensity with India indicate that Pakistan is extremely exporting less to India than it ought to export given its importance in world trade. Pakistan's export intensity below the unity indicates that there is more scope for Pakistan to export to India and increase the welfare of the people. The export intensity indices are showing the decreasing trend in case of both the countries during the post-SAFTA period. The export intensity indices for Sri-Lanka and Pakistan were 5.09 and 1.16 in 2006 respectively which decreased to 2.78 and 1.00 respectively in 2016. The average value of export intensity of Sri-Lanka to India increased from 2.00 in pre-SAFTA period to 2.99 in post-SAFTA period, while the average value of export intensity of Pakistan to India decreased from 1.17 in pre-SAFTA period to 0.83 in post-SAFTA period.

Among the least developing SAARC countries the export intensity indices of Nepal, Bhutan and Afghanistan were high with India whereas the export intensity indices of Bangladesh were marginally more than unity but the value of export intensity indices of Maldives were less than unity except 1993. The export intensity indices of Nepal, Bhutan and Afghanistan

were 113.86, 1.47 and 10.65 respectively in 1991 which increased to 34.16, 29.18 and 10.82 respectively in 2016 during pre-SAFTA period. The low value of export intensity indices of Bangladesh and Maldives with India indicates that there is ample scope for these countries to export to India and increase the welfare of people. Except Maldives and Afghanistan, the export intensity indices were showing the decreasing trend in case other least developing SAARC countries like Bangladesh, Nepal and Bhutan during the post-SAFTA period. The average value of export intensity of Maldives and Afghanistan to India increased from 0.37 and 14.09 respectively in pre-SAFTA period to 1.50 and 15.99 respectively in post-SAFTA period, while the average value of export intensity of Bangladesh, Nepal and Bhutan to India decreased from 1.46, 32.26 and 24.18 respectively in pre-SAFTA period to 0.87, 25.05 and 10.74 respectively in post-SAFTA period.

Table 3: Analysis of SAARC Countries Export Intensity Index with India

Pre-SAFTA									
Years	Banglade sh	Sri Lank a	Nepa l	Bhuta n	Pakista n	Maldiv e s	Afghanista n	SAAR C	SAAR C Av.
1991	0.63	1.08	13.86	1.47	1.64	0.05	10.65	29.38	4.20
1992	0.66	1.00	9.36	3.37	3.14	0.25	3.09	20.87	2.98
1993	1.30	1.15	12.41	7.32	1.07	1.00	0.86	25.11	3.59
1994	2.19	1.33	15.41	41.87	1.09	0.47	9.46	71.82	10.26
1995	3.50	1.36	20.31	47.72	0.80	0.30	7.15	81.14	11.59
1996	2.05	1.47	23.36	47.02	0.54	0.30	3.29	78.03	11.15
1997	1.44	0.89	32.10	15.47	0.69	0.34	10.10	61.03	8.72
1998	1.62	1.04	40.58	7.44	3.33	0.07	23.46	77.54	11.08
1999	1.67	1.13	36.88	18.12	0.94	0.51	14.89	74.14	10.59
2000	1.74	0.92	40.39	22.16	0.96	0.24	23.76	90.17	12.88
2001	1.33	1.45	61.21	27.60	0.95	0.39	37.02	129.95	18.56
2002	1.06	2.28	54.38	25.23	0.39	0.31	20.06	103.71	14.82
2003	1.10	2.58	47.27	42.24	0.61	0.30	20.06	114.16	16.31
2004	0.80	5.54	42.17	26.36	0.56	0.25	16.70	92.38	13.20
2005	0.85	6.85	34.16	29.27	0.78	0.77	10.82	83.5	11.93
Average	1.46	2.00	32.26	24.18	1.17	0.37	14.09	75.53	10.79
Post-SAFTA									
2006	1.31	5.09	26.29	19.18	1.16	0.86	7.76	61.65	8.81
2007	1.22	3.71	35.21	19.19	1.03	1.02	10.89	72.27	10.32
2008	1.12	3.39	35.10	15.68	0.94	0.73	12.84	69.8	9.97
2009	0.74	2.13	24.09	13.24	0.72	0.67	14.24	55.83	7.98
2010	0.82	2.65	26.01	12.47	0.64	7.10	16.30	65.99	9.43
2011	0.94	2.79	22.02	11.83	0.54	2.07	12.72	52.91	7.56
2012	0.86	2.70	12.86	11.73	0.76	0.91	7.07	36.89	5.27
2013	0.74	2.05	17.40	9.98	0.60	0.50	16.80	48.07	6.87
2014	0.70	2.17	26.07	9.99	0.87	0.61	17.64	58.05	8.29
2015	0.84	3.43	28.93	14.79	0.86	0.90	23.71	73.46	10.49
2016	0.87	2.78	25.05	10.74	1.00	1.11	35.91	77.46	11.07
Average	0.92	2.99	25.37	13.53	0.83	1.50	15.99	61.13	8.73

Note: Authors' calculations, computed from the data extracted from *UN COMTRADE* statistics and international trade centre (*ITC*).

2.2, SAARC Countries Imports Intensity Index with India during the pre and post SAFTA period table-4, present the results of SAARC countries import intensity indices with India during the pre-SAFTA and post- SAFTA period in backdrop of developing and least developing SAARC countries. The import intensity indices were showing the increasing trend in case of both developing SAARC countries. The import intensity of Sri-Lanka and Pakistan with India were 11.22 and 0.93 respectively in 1991 which increased to 22.96 and 2.44 respectively in 2006 during pre-SAFTA period. While the value of import intensity indices of Sri-Lanka and Pakistan with India was showing the decreasing trend, which were 20.52 and 4.14 respectively in 2006 and decreased to 13.03 and 2.07 in 2016 respectively in 2016 during the post-SAFTA period. The average value of import intensity of Sri-Lanka and Pakistan were 15.36 and 1.88 respectively during pre-SAFTA period which increased to 16.51 and 3.17 respectively during post-SAFTA period.

As far as the least developing SAARC countries are concerned the import intensity indices of Bangladesh, Nepal and Bhutan was high with India, whereas for Maldives and Afghanistan the value was comparatively low though it is more than desired level. The import intensity indices in relation to Nepal, Bhutan with India was 20.58 and 4.50 respectively in 1991 which increased to 38.37 and 25.78 respectively in 2005, while in relation to Bangladesh, Maldives and Afghanistan the value import intensities were 18.68, 5.25 and 7.98 respectively which declined to 12.95, 4.40 and 6.69 respectively during the pre-SAFTA period. The position of import intensity indices in the context of all least developing countries except Bhutan was reflecting the decreasing trend. The of value of import intensity indices in case of Bangladesh, Nepal, Maldives and Afghanistan with India was 10.40, 37.16, 4.14 and 6.22 respectively which decreased to 7.75, 32.13, 3.59 and 4.43 respectively during post-SAFTA period, whereas Bhutan’s the import intensity index with India increased from 15.20 to 22.93. The analysis of average import intensity indices of Bangladesh, Bhutan, Maldives and Afghanistan with India indicates that there import relations with India were not improved during pre-SAFTA period as compared to post-SAFTA period, whereas the imports of Nepal are strengthening. This reveals that there is scope for all SAARC countries to imports from India.

Table 4: SAARC Countries Import Intensity Index with India

Pre-SAFTA									
Years	Banglade sh	Sri- Lank a	Nepa l	Bhuta n	Pakista n	Maldiv e s	Afghanista n	SAAR C	SAAR C Av.
1991	18.68	11.22	20.58	4.50	0.93	5.25	7.98	69.13	9.88
1992	19.43	14.69	19.06	3.51	1.10	4.06	18.83	80.70	11.53
1993	18.30	12.26	18.74	18.71	1.14	5.16	7.86	82.18	11.74
1994	22.97	12.58	17.05	19.62	1.05	3.62	6.55	83.45	11.92
1995	25.49	12.60	19.54	24.93	1.09	5.24	8.19	97.08	13.87
1996	19.96	14.24	19.15	27.66	2.09	4.23	5.55	92.88	13.27
1997	17.41	13.47	16.16	15.62	1.98	7.10	5.65	77.40	11.06

1998	22.01	12.21	16.28	11.76	2.85	7.31	4.60	77.02	11.00
1999	11.89	13.25	16.57	6.47	1.42	4.01	5.12	58.73	8.39
2000	13.29	14.40	13.54	0.87	2.29	3.41	3.02	50.81	7.26
2001	16.63	14.68	18.25	4.36	2.28	3.02	1.73	60.94	8.71
2002	15.47	17.67	24.26	15.21	2.16	2.42	2.65	79.85	11.41
2003	20.24	22.89	44.10	43.60	1.80	5.78	7.00	145.40	20.77
2004	16.27	21.33	46.83	25.99	3.53	4.88	9.36	128.19	18.31
2005	12.95	22.96	38.37	25.78	2.44	4.40	6.26	113.16	16.17
Average	18.07	15.36	23.23	16.57	1.88	4.66	6.69	86.46	12.35
Post-SAFTA									
2006	10.40	20.52	37.16	15.20	4.14	4.14	6.22	97.79	13.97
2007	10.66	22.05	38.08	12.93	4.67	3.74	6.94	99.06	14.15
2008	12.06	18.05	41.96	17.35	3.71	4.32	10.73	108.18	15.45
2009	7.08	12.18	21.50	14.57	3.26	4.78	10.04	73.41	10.49
2010	7.52	16.97	25.76	12.94	4.10	5.07	5.29	77.65	11.09
2011	5.71	13.35	26.97	12.77	2.32	4.52	4.71	70.35	10.05
2012	9.22	12.69	27.24	11.00	2.36	4.46	3.35	70.32	10.05
2013	9.09	14.86	27.22	10.01	2.74	3.25	3.38	70.55	10.08
2014	9.09	19.82	33.19	12.86	2.73	3.55	3.44	84.68	12.10
2015	8.17	18.11	29.95	22.05	2.79	4.01	4.31	89.40	12.77
2016	7.75	13.03	32.13	22.93	2.07	3.59	4.43	85.94	12.28
Average	8.79	16.51	31.02	14.97	3.17	4.13	5.71	84.30	12.04

Note: Authors' calculations, computed from the data extracted from *UN COMTRADE* statistics. International trade centre (*ITC*).

SUMMARY AND CONCLUSION OF THE STUDY

Summary and conclusion of the study discussed under: -

India's exports intensity indices with SAARC country during the pre and post SAFTA period the possible reasons for this decline could be global financial crisis of 2007-08, India is unable to diversify its exports basket over the years to SAARC market and it is basically exporting the same items whose demand have been declined over the years and SAARC countries are importing goods from other countries like China.

India's Imports intensity indices with SAARC country during the pre and post SAFTA period: It has been found that India's import relation with least developing SAARC countries has become weak in post-SAFTA period as compared to pre-SAFTA period. The average import intensity is depicting the down trend in case of all least developing countries except Nepal and Afghanistan. This discussion reveals that India's import relations are more intense with least developing SAARC countries as compared to developing SAARC countries.

SAARC Countries' exports intensity index with India during the pre and post SAFTA period the study has been found that the low value of export intensity indices of Bangladesh and Maldives with India indicates that there is ample scope for these countries to export to India and increase the welfare of people. Except Maldives and

Afghanistan, the export intensity indices were showing the decreasing trend in case other least developing SAARC countries like Bangladesh, Nepal and Bhutan during the post-SAFTA period.

SAARC Countries Imports Intensity Index with India during the pre and post SAFTA period It has been found that the average import intensity indices of Bangladesh, Bhutan, Maldives and Afghanistan with India indicates that there import relations with India were not improved during pre-SAFTA period as compared to post-SAFTA period, whereas the imports of Nepal are strengthening. This reveals that there is scope for all SAARC countries to imports from India.

SCOPE FOR FURTHER RESEARCH AND LIMITATIONS OF THE STUDY

The present study has some limitations such as analysis of India's trade relations with SAARC countries only, confined to the time from 1991-2016. The analysis of India-SAARC trade intensities done in the study focuses on trade in commodities only and hence trade in services has not been included. Since service sector accounted for more than 50 percent of GDP in all SAARC countries except Bhutan (41.50) in 2016 [CIA World Factbook], in future researches, focus may be widened by also including trade in services. Besides, to assess prospects of India-SAARC trade for each member country, trade complementarities indices, revealed comparative advantages indices can be calculated. Hence, there are many other dimensions which requires more in-depth study.

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