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**Dr. Ritesh Kumar Mishra** Lecturer Economics Kashishwar Inter College, Mohanlalganj, Lucknow, Uttar

Pradesh, India

# Measuring India's trade potential with south Asian countries using trade intensity index

## Dr. Ritesh Kumar Mishra

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#### Abstract

In this article we attempt to analyse India's Trade potential with South Asian Countries. In this Researcher calculated two intensity indices first with reference to world and second with reference to South Asian Countries as a whole. To analyse India's trade potential with south Asian countries this study is organized and it was found that India has high trade potential with south Asian countries.

Keywords: Agricultural goods, non-tariff barriers, enterprises, effects, cost benefit analysis

#### Introduction

The interaction between the South Asian Countries is to be seen at various levels like the political, military, academic, sports, cultural, language, and economic. The potential of India with South Asian nation border trade has been another benchmark in bilateral relationships.

To determine trading potential, the researcher measured trading intensity. The trade intensity index can be used to determine whether the value of trade between two nations is higher or lower than expected given the importance of those nations in world trade. This indicator only shows if a country exports or imports more goods to or from a specific location than the global average. The ratio of a country's share of trade with another country to that country's share of global trade is known as the trade intensity index. Given the importance of the partner country in global exports, an index value below one was interpreted as indicative of a lower-than-expected flow of bilateral exports. The ratio of the country i's share in the export and import intensity indices shows an index of greater(less) than unity has been interpreted as an indication of larger(smaller)than expected trade flow between two partner countries. Trade intensity index measures trade potentiality between two countries.

Several statistical indices can be used to measure trade between the two nations. One such index is the trade intensity index (Brown, 1949; Kojima, 1964) <sup>[19, 20]</sup>. Later Bhattacharya & Bhattacharya (2006) used two forms of trade intensity indices i.e., the Export Intensity Index (XII<sub>ij</sub>) and the Import Intensity Index (MII<sub>ij</sub>). They can be defined as follows:

**Import Intensity Index** (*MII*<sub>ij</sub>)

$$MII_{ij} = \frac{\frac{m_{ij}}{M_{iw}}}{\frac{X_{jw}}{X_{w-X_{iw}}}}$$

Here,

 $MII_{ij} = \text{Import intensity index of trade of country I with country j}$   $m_{ij} = \text{Import of country I from trading partner j,}$   $M_{iw} = \text{Total import of country I from the world}$   $X_{jw} = \text{Total export of country j to the world}$   $X_{w} = \text{Total world exports}$ the world I, j = respective countries (South Asian Countries)

Corresponding Author: Dr. Ritesh Kumar Mishra Lecturer Economics Kashishwar Inter College, Mohanlalganj, Lucknow, Uttar Pradesh, India

#### Export Intensity Index (*MII*<sub>ij</sub>)

$$XII_{ij} = \frac{\frac{x_{ij}}{x_{iw}}}{\frac{M_{jw}}{M_{w} - M_{iw}}}$$

#### Here,

 $XII_{ij}$  = Export intensity index of trade of country I with country j

 $x_{ij}$  = Export of country I from trading partner j,

 $X_{iw}$  = Total export of country I from the world

 $M_{jw}$  = Total import of country j to the world

 $M_w$  = Total world imports

 $M_{iw}$ = Total imports of country I from the world I, j = respective countries (South Asian Countries)

For the calculation of MII and XII, we calculate the Index bilaterally between India and different South Asian Countries concerning its share in World trade. And we also attempt to know the Country's status in the South Asian Country group. For this, we calculate MII and XII for India and different SACs concerning the South Asian Economy as a unit. In this analysis, we use the same formula that is used for the Calculation of MII and XII and we made a minor modification by replacing the world with the Sum of South Asian Economies.

These intensities have been calculated on the database available on IMF. This analysis has two references firstly, w.r.t world and secondly, w.r.t South Asian Economies (as a unit)

The calculated indices concerning the world has comparatively small value when MII and XIII compared with the MII and XII calculated w.r.t SACs this value can be interpreted as all SACs involved deeply in trade with India. In the case of some countries, the indices result lower than 1, which indicates that trade between them is extremely less than what it ought/should to export/ import. And the result obtained is tabulated below under the following subheadings:

- 1.1 India-Afghanistan Trade Intensity Index
- 1.2 India-Bangladesh Trade Intensity Index
- 1.3 India-Bhutan Trade Intensity Index
- 1.4 India-Maldives Trade Intensity Index
- 1.5 India-Nepal Trade Intensity Index
- 1.6 India-Pakistan Trade Intensity Index
- 1.7 India-Sri Lanka Trade Intensity Index
- 1.8 India-Afghanistan trade intensity index

Table 1: India-Afghanistan Export and Import Intensity Indices concerning World and SACs

	India-Afghanistan				
Veen	W.R.T	World	W.R.T SACs		
Year	India's Import Intensity	India's Export Intensity	India's Import Intensity		
	Index (MII <sub>ij</sub> )	Index (XII <sub>ij</sub> )	Index (MII <sub>ij</sub> )	(XII <sub>ij</sub> )	
1996-97	4.86	5.11	42.64	28.83	
1997-98	8.17	5.73	66.83	4.39	
1998-99	19.98	5.25	68.99	3.85	
1999-2000	21.87	9.21	61.11	3.64	
2000-01	23.35	7.17	15.24	8.67	
2001-02	24.56	5.69	19.35	9.45	
2002-03	20.67	5.75	24.15	8.65	
2003-04	16.06	10.23	9.13	8.17	
2004-05	27.12	8.24	22.13	8.53	
2005-06	20.36	4.93	15.87	12.74	
2006-07	14.92	4.62	16.66	12.38	
2007-08	23.05	5.68	34.65	9.54	
2008-09	12.08	9.93	67.31	12.23	
2009-10	14.2	10.57	93.70	16.40	
2010-11	15.9	5.16	138.81	12.84	
2011-12	12.25	4.55	101.07	13.14	
2012-13	17.87	4.69	116.03	11.48	
2013-14	21.97	3.24	154.67	8.64	
2014-15	23.42	3.35	143.73	7.82	
2015-16	22.69	4.2	120.62	8.32	
2016-17	20.7	4.37	92.59	8.10	
2017-18	17.09	4.78	110.64	8.42	
2018-19	17.89	5.8	91.48	7.61	
2019-20	21.92	7.5	109.51	8.62	
2020-21	30.82	8.18	126.39	9.66	

Source: Researchers Own Calculation by Using The Database of Imf

The above data for Import Intensity Index has been plotted for India-Afghanistan concerning World and South Asian Countries.

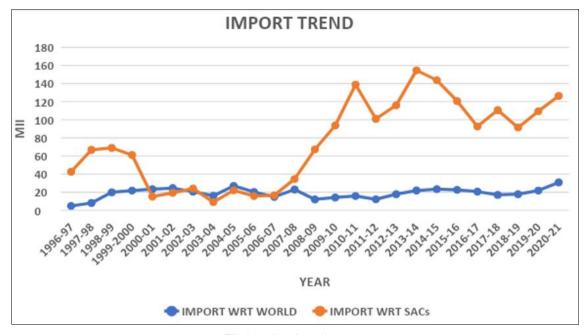


Fig 1: India Afghanistan MII

The above plot indicates India's Import Intensity to Afghanistan concerning World and South Asian Economy as a whole.

In World's scenario, the MII of India-Afghanistan lies between 4 to 31 and displays a constantly increasing trend which signifies that the bilateral relationship is very strong between both Nations.

The formula of MII for India and Afghanistan is defined as the ratio of the share of India's imports from Afghanistan relative to the share of world export destined for Afghanistan. And the MII is greater than one which further defines the strongness of trade relations between both Nations. In the SACs scenario, the MII of India-Afghanistan lies between 9 to 127 and displays fluctuations in trend which signifies that the bilateral relationship is strong but not consistent throughout the study. It can be easily observed by looking at the plot, plotted above. The formula of MII for India and Afghanistan in this context is defined as the ratio of the share of India's imports from Afghanistan relative to the share of SACs export destined for Afghanistan. And the MII is greater than one which further defines the strongness of trade relations between both Nations.

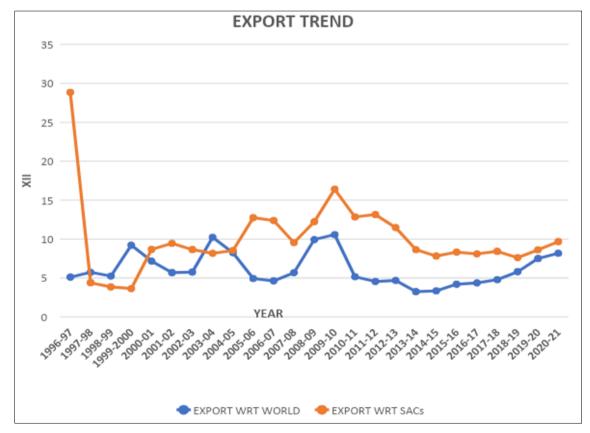


Fig 2: India Afghanistan XII trend

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The above plot indicates India's Export Intensity to Afghanistan concerning World and South Asian Economy as a whole. In World's scenario, the XII of India-Afghanistan lies between 3 to 11 and displays a fluctuation in trend which signifies that the bilateral relationship is strong between both Nations but the Index is inconsistent.

The formula of XII for India and Afghanistan is defined as the ratio of the share of India's export to Afghanistan relative to the share of world imports destined for Afghanistan. And the XII is greater than one which further defines the strongness of trade relations between both Nations.

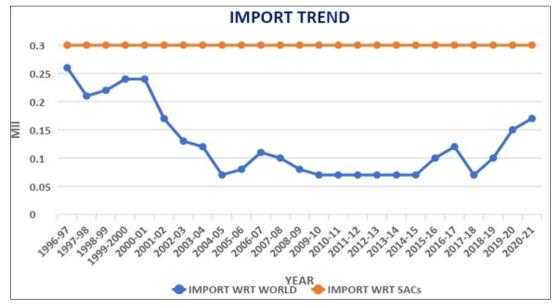
In the SACs scenario, the XII of India-Afghanistan lies between 3 to 30 and displays sudden fluctuations in trend in the year 1997-98 and it falls from almost 30 to 4.5 which signifies that the bilateral relationship is strong but inconsistent throughout the study. India's export to Afghanistan acquired a significant position in India's total export to SACs. It can be easily observed by looking at the plot, plotted above.

#### India-Bangladesh trade intensity index

	INDIA- BANGLADESH				
\$7	W.R.T V	VORLD	W.R.T SACs		
Year	India's Import Intensity Index (MII <sub>ij</sub> )	India's Export Intensity Index (XII <sub>ij</sub> )	India's Import itensity Index (MII <sub>ij</sub> )	India's Export Intensity Index (XII <sub>ij</sub> )	
1996-97	0.26	19.83	265.7	25.35	
1997-98	0.21	18.51	150.7	32.41	
1998-99	0.22	20.83	72.39	25.85	
1999-2000	0.24	13.97	129.61	26.04	
2000-01	0.24	14.99	154.15	31.12	
2001-02	0.17	16.33	82.45	26.86	
2002-03	0.13	18.9	124.3	27.18	
2003-04	0.12	20.52	107.95	23.34	
2004-05	0.07	17.47	77.34	23.68	
2005-06	0.08	12.9	83.72	20.54	
2006-07	0.11	10.26	152.15	19.15	
2007-08	0.1	12.84	136.46	20.91	
2008-09	0.08	10.34	160.26	19.63	
2009-10	0.07	7.55	130.89	19.7	
2010-11	0.07	7.39	177.03	17.18	
2011-12	0.07	6.07	190.46	16.77	
2012-13	0.07	8.93	199.31	21.77	
2013-14	0.07	8.89	215.99	20.52	
2014-15	0.07	9.2	216.1	16.81	
2015-16	0.1	8.84	155.78	16.95	
2016-17	0.12	8.35	157.81	17.4	
2017-18	0.07	8.9	172.09	16.33	
2018-19	0.1	9.4	141.12	14.96	
2019-20	0.15	8.44	175.76	18.93	
2020-21	0.17	10.66	158.27	20.69	

Table 2: India-Bangladesh Export and Import Intensity Indices concerning World and SAC

Source: Researchers own calculation by using the database of IMF



#### Fig 3: India-Bangladesh MII trend

The above plot indicates India's Import Intensity indices from Bangladesh concerning World and South Asian Economy as a whole.

In World's scenario, the MII of India-Bangladesh shows that it is not only far below unit (1), but also it is hovering around the minimum value ranging from 0.26 in 1996-97 to 0.17 in 2020-21. It indicates that India is importing extremely less from Bangladesh in all the years than what it should import. In the SACs scenario, the MII of IndiaBangladesh lies between 70 to 270 and displays fluctuations in trend which signifies that the bilateral relations between the two are strong but not consistent throughout the study. It can be easily observed by looking at the plot, plotted above. From the above, it could be easily concluded that India is not importing much from Bangladesh when we look at its MII considering World. But when we look at its MII considering SACs we found that it has been a great importer from Bangladesh among all SACs

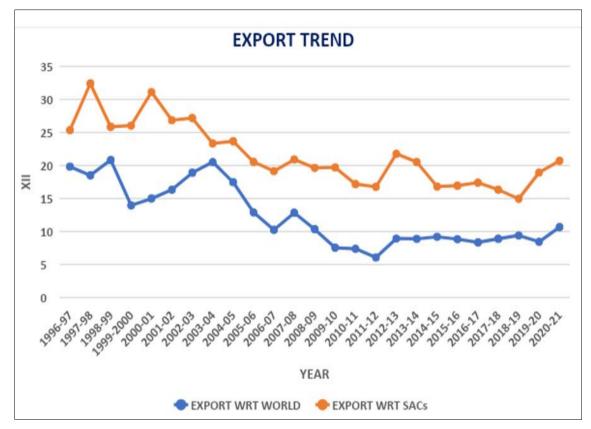


Fig 4: India-Bangladesh XII trend

The above plot indicates India's Export Intensity to Bangladesh concerning World and South Asian Economy as a whole.

In World's scenario, the XII of India-Bangladesh lies between 5 to 21 and displays a fluctuation in trend which signifies that the bilateral relationship is strong between both Nations but the Index is inconsistent. The formula of XII for India and Bangladesh is defined as the ratio of the share of India's export to Bangladesh relative to the share of world imports destined for Bangladesh. And the XII is greater than one which further defines the strongness of trade relations between both Nations.

In the SACs scenario, the XII of India-Bangladesh lies between 14 to 30 and displays fluctuations in trend during the period of study which signifies that Bangladesh is an important destination for India's export concerning SACs. India's export to Bangladesh acquired a significant position in India's total export to SACs as well as in World. It can be easily observed by looking at the plot, plotted above.

#### India-Bhutan trade intensity index

Table 3: India-Bhutan Export and Import Intensity Indices concerning World and SAC

Year	INDIA- BHUTAN				
	W.R.T World		W.R.T SACs		
1 ear	India's Import Intensity Index (MII <sub>ij</sub> )	India's Export Intensity Index (XII <sub>ij</sub> )	India's Import Intensity Index (MII <sub>ij</sub> )	India's Export Intensity Index (XII <sub>ij</sub> )	
1996-97	216.66	22.18			
1997-98	234.4	22			
1998-99	83.33	8.91			
1999-2000	137.18	12.11			
2000-01	62.16	2.88	156.19	2.41	
2001-02	11.09	8.8	187.83	4.01	
2002-03	8.02	9.4	240.82	14.77	
2003-04	7.18	11.92	543.61	17.38	
2004-05	8.92	11.61	620.47	2.69	

2005-06	12.66	17.14	49.99	8.49
2006-07	21.03	15.13	62.14	6.14
2007-08	23.59	15.73	50.77	5.00
2008-09	15.13	13.47	63.94	6.93
2009-10	16.07	8.61	60.91	7.16
2010-11	19.63	10.06	107.12	6.02
2011-12	13.13	6.87	117.59	7.22
2012-13	13.47	6.46	74.16	6.61
2013-14	13.52	5.14	74.16	5.94
2014-15	11.25	3.54	68.18	4.84
2015-16	18.75	5.56	56.21	5.04
2016-17	24.19	5.35	74.91	5.19
2017-18	16.18	6.82	93.22	4.88
2018-19	17.35	5.78	79.08	4.39
2019-20	18.45	5.35	77.43	4.94
2020-21	19.22	4.65	63.96	5.04
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Source: Researchers own calculation by using the database of IMF

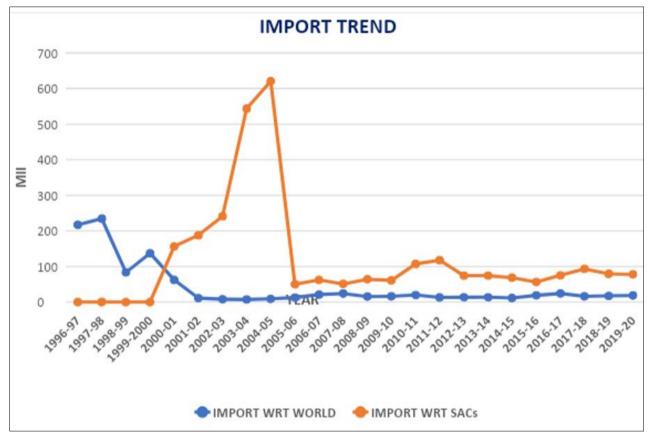


Fig 5: India -Bhutan MII trend

The above plot indicates India's Import Intensity to Bhutan concerning World and South Asian Economy as a whole. In World's scenario, the MII of India-Bhutan lies between 7 to 216 and displays a constantly declining trend which signifies that the bilateral relationship is very strong initially but declines gradually, The high MII shows that India involved majorly in trade with Bhutan since 1996.

In the SACs scenario, the MII of India-Bhutan lies between 50 to 650 and displays fluctuations in trend which signifies

that the bilateral relationship is strong but not consistent throughout the study. It can be easily observed by looking at the plot, plotted above. The formula of MII for India and Bhutan in this context is defined as the ratio of the share of India's imports from Bhutan relative to the share of SACs export destined for Bhutan. And the MII is greater than one which further defines the strongness of trade relations between both Nations.

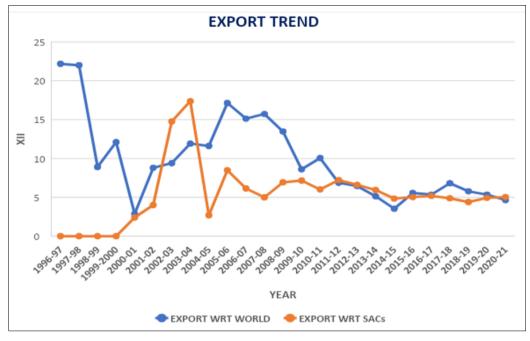


Fig 6: India Bhutan XII Trend

The above plot indicates India's Export Intensity to Bhutan concerning World and South Asian Economy as a whole. In World's scenario, the XII of India-Bhutan lies between 3

to 23 and displays fluctuation in trend which signifies that the bilateral relationship is strong between both Nations but the Index is inconsistent. The formula of XII for India and Bhutan is defined as the ratio of the share of India's export to Bhutan relative to the share of world imports destined for Bhutan. And the XII is greater than one which further defines the strongness of trade relations between both Nations.

In the SACs scenario, the XII of India-Bhutan lies between 2 to 18 and displays a lot of fluctuations in trend the high value of XII signifies that the bilateral relationship is strong but the fluctuations tell us its inconsistency throughout the study. India's export to Bhutan acquired a significant position in India's total export to SACs. It can be easily observed by looking at the plot, plotted above.

#### India-Maldives trade intensity index

Table 4: India-Maldives Export and Import Intensity Indices concerning World and SAC

	India- Maldives					
Year	W.R.T World		W.R.T SACs			
i ear	India's Import Intensity Index (MII <sub>ij</sub> )	India's Export Intensity Index (XII <sub>ij</sub> )	India's Import Intensity Index (MII <sub>ij</sub> )	India's Export Intensity Index (XII <sub>ij</sub> )		
1996-97	0.44	27.92	4.84	28.83		
1997-98	0.39	4.2	4.55	4.39		
1998-99	0.22	3.9	1.32	3.85		
1999-2000	0.6	3.03	3.96	3.64		
2000-01	0.43	8.08	3.27	8.67		
2001-02	0.38	9.46	1.86	9.45		
2002-03	0.43	10.2	3.94	8.65		
2003-04	0.34	10.63	3.82	8.17		
2004-05	0.4	8.22	5.47	8.53		
2005-06	1.25	9.11	13.59	12.74		
2006-07	1.46	7.43	23.94	12.38		
2007-08	2.09	7.02	33.69	9.54		
2008-09	1.83	6.55	68.77	12.23		
2009-10	2.02	8.39	45.27	16.4		
2010-11	1.86	6.21	385.39	12.84		
2011-12	6	4.9	248.73	13.14		
2012-13	1.67	4.79	106.67	11.48		
2013-14	0.97	3.69	76.57	8.64		
2014-15	1.24	4.08	79.34	7.82		
2015-16	1.45	5.41	39.45	8.32		
2016-17	1.97	5.14	65.67	8.1		
2017-18	1.4	5.27	139.86	8.42		
2018-19	4.12	4.4	288.71	7.61		
2019-20	1.43	4.48	82.86	8.62		
2020-21	5.05	6.65	257.97	9.66		

Source: Researchers own calculation by using the database of IMF

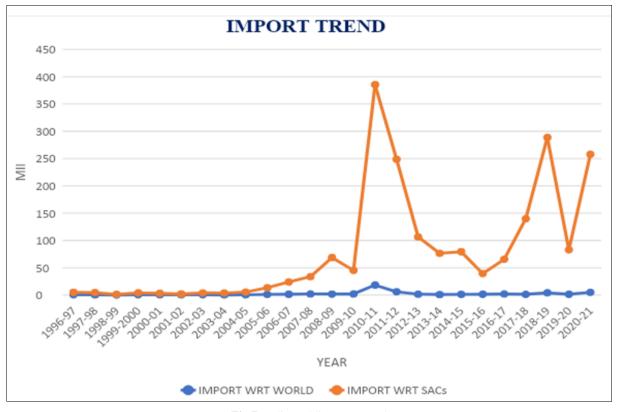


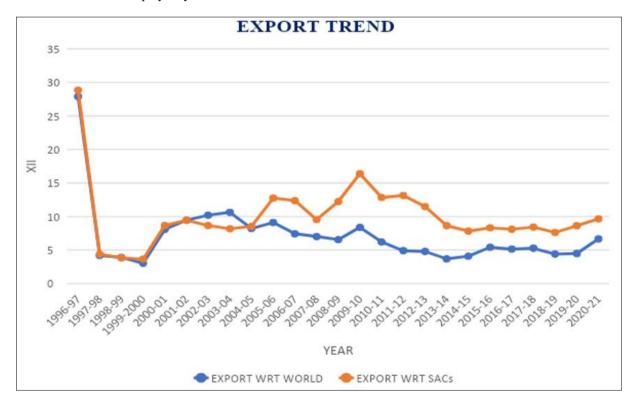
Fig 7: India-Maldives MII trend

The above plot indicates India's Import Intensity to the Maldives concerning World and South Asian Economy as a whole.

In World's scenario, the MII of India-Maldives lies between 0.2 to 5.5. Mostly the indices hover around 0.6, which signifies that there is an import flow between both nations but not to the expected extent.

In the SACs scenario, the MII of India-Maldives lies between 1.0 to 300 and displays dynamic nature which

signifies that the bilateral relationship is strong but not consistent throughout the study. It can be easily observed by looking at the plot, plotted above. The formula of MII for India and Maldives in this context is defined as the ratio of the share of India's imports from Maldives relative to the share of SACs export destined for Maldives. And the MII is greater than one which further defines the strongness of trade relations between both Nations.



#### Fig 8: India-Maldives XII trend

The above plot indicates India's Export Intensity to the Maldives concerning World and South Asian Economy as a whole.

In World's scenario, the XII of India-Maldives lies between 3 to 27 and displays fluctuation in trend which signifies that the bilateral relationship is strong between both Nations but the Index is inconsistent. The formula of XII for India and Maldives is defined as the ratio of the share of India's export to Maldives relative to the share of world imports destined for Maldives. And the XII is greater than one which further defines the strongness of trade relations between both Nations.

In the SACs scenario, the XII of India-Maldives lies between 3 to 29 and displays not many fluctuations in trend the high value of XII signifies that the bilateral relationship is strong but the fluctuations tell us its inconsistency throughout the study. India's export to Maldives acquired almost the same status in both cases i.e., world and SACs.

#### India-Nepal trade intensity index

Table 5: India-Nepal Export and Import Intensity Indices concerning World and SAC

	India- Nepal				
Vaar	W.R.T World		W.R.T SACs		
Year	India's Import	India's Export	India's Import	India's Export	
	Intensity Index (MII <sub>ij</sub> )	Intensity Index (XII <sub>ij</sub> )	Intensity Index (MII <sub>ij</sub> )	Intensity Index (XII <sub>ij</sub> )	
1996-97	20	0.01	198.50	11.88	
1997-98	29.59	0.01	219.27	13.45	
1998-99	37.99	0.01	118.46	10.36	
1999-2000	36.27	0.01	152.06	7.68	
2000-01	42.34	0.01	119.18	9.36	
2001-02	58.19	0.01	125.64	10.62	
2002-03	54.14	0.01	119.80	15.82	
2003-04	45.53	0.01	119.17	15.08	
2004-05	40.96	0.01	108.35	18.11	
2005-06	33.95	0.01	75.64	17.69	
2006-07	26.47	0.01	66.15	16.26	
2007-08	36.75	0.01	93.59	16.44	
2008-09	31.56	0.01	118.31	20.31	
2009-10	22.46	0.01	96.06	18.56	
2010-11	24.06	0.01	107.45	14.49	
2011-12	22.02	0.01	116.61	17.90	
2012-13	23.07	0.02	112.49	17.74	
2013-14	22.18	0.02	119.35	17.48	
2014-15	25.76	0.02	131.66	15.33	
2015-16	30	0.02	126.94	14.91	
2016-17	23.67	0.02	119.55	14.67	
2017-18	18.96	0.02	125.84	14.90	
2018-19	18.59	0.03	89.76	13.83	
2019-20	25.12	0.03	108.01	16.08	
2020-21	32.05	0.03	112.31	16.42	

Source: Researchers own calculation by using the database of IMF

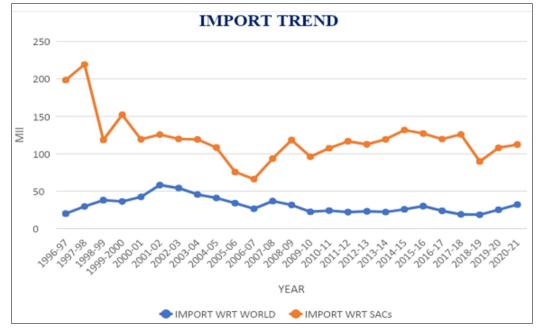
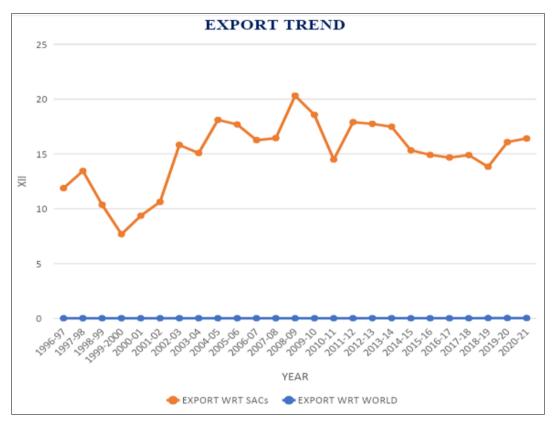
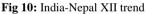


Fig 9: India-Nepal MII trend

The above plot indicates India's Import Intensity to Nepal concerning World and South Asian Economy as a whole. In World's scenario, the MII of India-Nepal lies between 18 to 35 and displays a constant trend which signifies that the bilateral relationship is very strong between both Nations. The formula of MII for India and Nepal is defined as the ratio of the share of India's imports from Nepal relative to the share of world export destined for Nepal. And the MII is greater than one which further defines the strongness of trade relations between both Nations. In the SACs scenario, the MII of India-Nepal lies between 60 to 210 and displays fluctuations in trend which signifies that the bilateral relationship is strong but not consistent throughout the study. It can be easily observed by looking at the plot, plotted above. The formula of MII for India and Nepal in this context is defined as the ratio of the share of India's imports from Nepal relative to the share of SACs export destined for Nepal. And the MII is greater than one which further defines the strongness of trade relations between both Nations.





The above plot indicates India's Export Intensity to Nepal concerning World and South Asian Economy as a whole. In World's scenario, the XII of India-Nepal is extremely low and the value lies between 0.01 to 0.03 which that the export flow occurs but doesn't as expected.

In the SACs scenario, the XII of India-Nepal lies between 7 to 22 and displays sudden fluctuations which signify that the bilateral relationship is strong but inconsistent throughout

the study.

India's export to Nepal acquired a significant position in India's total export to SACs. But it doesn't gain any good state in India's export to the world. It can be easily observed by looking at the plot, plotted above.

#### India-Pakistan trade intensity index

	INDIA- PAKISTAN				
Year	W.R.T WORLD		W.R.T SACs		
rear	India's Import Intensity Index MII <sub>ij</sub>	India's Export Intensity Index XII <sub>ij</sub>	India's Import Intensity Index MII <sub>ij</sub>	India's Export Intensity Index XII <sub>ij</sub>	
1996-97	0.47	1.92	46.97	15.12	
1997-98	0.49	2.03	46.42	20.16	
1998-99	2.35	2.02	58.66	15.89	
1999-2000	1.2	1.51	50.4	16.25	
2000-01	0.78	2.36	35.23	21.49	
2001-02	0.85	2.38	33.1	17.84	
2002-03	0.49	2.22	31.6	21.61	
2003-04	0.43	2.58	22.78	18.12	
2004-05	0.45	3.16	24.44	20.62	
2005-06	0.47	2.75	24.01	22.26	
2006-07	0.66	4.01	42.79	23.95	

Table 6: India-Pakistan Export and Import Intensity Indices concerning World and SAC

2007-08	0.54	5.04	41.17	28.25
2008-09	0.45	3.49	49.83	23.85
2009-10	0.42	3.46	47.55	30.57
2010-11	0.37	4.07	36.93	30.64
2011-12	0.32	2.24	32.21	21.61
2012-13	0.49	2.43	54.93	20.57
2013-14	0.34	3	37.24	20.48
2014-15	0.45	2.67	52.97	14.39
2015-16	0.43	2.78	39.03	16.62
2016-17	0.44	2.12	44.48	14.32
2017-18	0.3	1.83	49.84	13.88
2018-19	0.34	2.32	38.28	14.05
2019-20	0.06	1.37	6.38	12.45
2020-21	0.01	0.39	0.35	5.78

Source: Researchers own calculation by using the database of IMF

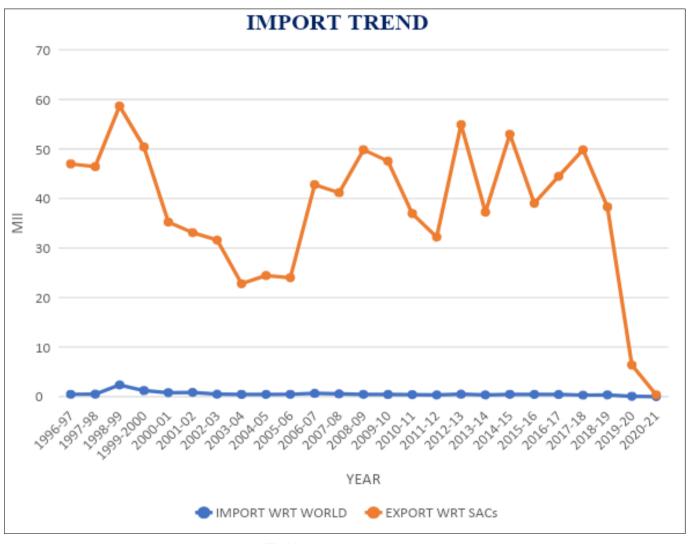


Fig 11: India-Pakistan MII trend

The above plot indicates India's Import Intensity to Pakistan concerning World and South Asian Economy as a whole. In World's scenario, the MII of India-Pakistan lies between always lies below 1 except in the years 1999-2000. This lower value indicates that India doesn't import much from Pakistan concerning its import from World. In the SACs scenario, the MII of India-Pakistan lies between 0.5 to 60 and displays fluctuations in trend which signifies that the bilateral relationship is strong but not consistent throughout the study. It can be easily observed by looking at the plot, plotted above.

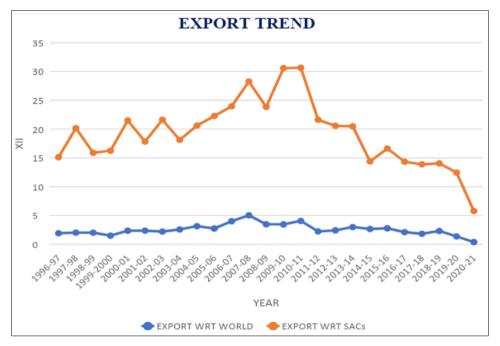


Fig 12: India-Pakistan XII trend

The above plot indicates India's Export Intensity to Pakistan concerning World and South Asian Economy as a whole. In World's scenario, the XII of India-Pakistan always lies above one except in 2020-21 displays a fluctuation in trend which signifies that the bilateral relationship is strong between both Nations but the Index is inconsistent. The formula of XII for India and Pakistan is defined as the ratio of the share of India's export to Pakistan relative to the share of world imports destined for Pakistan. And the XII is greater than one which further defines the strongness of

trade relations in terms of export between both Nations. In the SACs scenario, the XII of India-Pakistan lies between 5 to 31 and displays sudden fluctuations which signify that the bilateral relationship is strong but inconsistent throughout the study. India's export to Pakistan acquired a significant position in India's total export to SACs. It can be easily observed by looking at the plot, plotted above.

#### India-Sri Lanka trade intensity index

Year	INDIA- SRI LANKA				
	W.R.T WORLD		W.R.T SACs		
	India's Import Intensity Index (MII <sub>ij</sub> )	India's Export Intensity Index (XII <sub>ij</sub> )	India's Import Intensity Index (MII <sub>ij</sub> )	India's Export Intensity Index (XII <sub>ij</sub> )	
1996-97	1.25	15.98	95.84	24.4	
1997-98	0.99	14.77	71.53	27.96	
1998-99	0.95	11.7	42.6	24.32	
1999-2000	1.09	12.42	45.4	31.18	
2000-01	1.09	14.31	42.63	32.75	
2001-02	1.48	16.1	47.28	29.86	
2002-03	2.13	18.97	52.6	26.64	
2003-04	3.49	23.73	79.26	24.39	
2004-05	5.41	21.49	102.38	23.42	
2005-06	6.48	23.39	114.7	24.87	
2006-07	5.18	22.13	132.86	24.78	
2007-08	4.22	25.19	144.45	20.89	
2008-09	2.41	20.19	156.88	24.38	
2009-10	1.97	16.26	153.27	25.23	
2010-11	2.33	21.41	175.35	28.87	
2011-12	2.5	16.33	216.72	25.6	
2012-13	2.37	16.08	179.24	24.61	
2013-14	2.4	13.77	192.06	25.02	
2014-15	2.18	19.48	138.9	25.92	
2015-16	3.6	22.21	152.32	21.68	
2016-17	2.76	12.26	129.21	17.2	
2017-18	2.12	12.45	131.95	15.43	
2018-19	4.4	12.18	196.29	15.47	
2019-20	3.18	12.08	134.61	17.72	
2020-21	2.98	12.55	105.18	17.44	

Table 7: India-Sri Lanka Export and Import Intensity Indices concerning World and SAC \_\_\_\_\_

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Source: Researchers own calculation by using the database of IMF

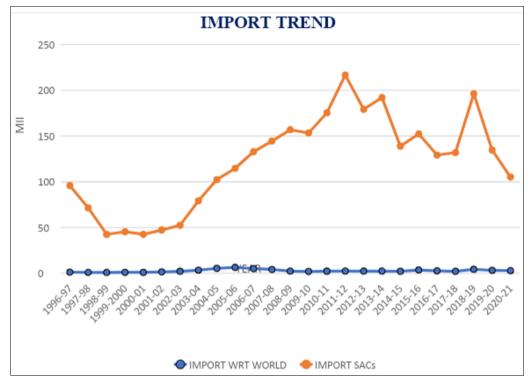


Fig 13: India-Sri Lanka MII trend

The above plot indicates India's Import Intensity to Sri Lanka concerning World and South Asian Economy as a whole.

In World's scenario, the MII of India-Sri Lanka lies between 1 to 7 except in 1997 and 1998 when it lies below 1. The formula of MII for India and Sri Lanka is defined as the ratio of the share of India's imports from Sri Lanka relative to the share of world export destined for Sri Lanka. And the MII is greater than one which further defines the strongness of trade relations between both Nations. In the SACs scenario, the MII of India-Sri Lanka lies between 40 to 250 and displays fluctuations in trend which signifies that the bilateral relationship is strong but not consistent throughout the study. It can be easily observed by looking at the plot, plotted above. The formula of MII for India and Sri Lanka in this context is defined as the ratio of the share of India's imports from Sri Lanka relative to the share of SACs exported destined for Sri Lanka. And the MII is greater than one which further defines the strongness of trade relations between both Nations.

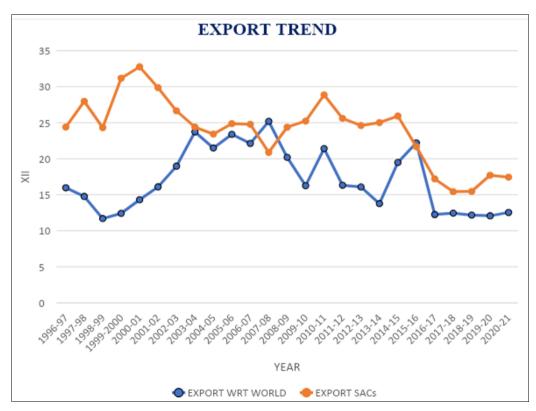


Fig 14: India-Sri Lanka XII trend

In World's scenario, the XII of India-Sri Lanka lies between 10 to 24 and displays a fluctuation in trend which signifies that the bilateral relationship is strong between both Nations but the Index is inconsistent. The formula of XII for India and Sri Lanka is defined as the ratio of the share of India's export to Sri Lanka relative to the share of world imports destined for Sri Lanka. And the XII is greater than one which further defines the strongness of trade relations between both Nations. In the SACs scenario, the XII of India-Sri Lanka lies between 14 to 30 and displays sudden fluctuations in trend which signifies that the bilateral relationship is strong but inconsistent throughout the study. India's export to Sri Lanka acquired a significant position in India's total export to SACs. It can be easily observed by looking at the plot, plotted above.

#### Conclusion

Table 1 to 7 and figures 1 to 14 indicate that India's export intensities to SACs and India's import intensities to SACs concerning the world as well as South Asian Economies (as a unit), during the entire period of study.

The calculated indices concerning the world has comparatively small value when MII and XIII compared with the XII and MII calculated w.r.t SACs this value can be interpreted as all SACs involved deeply in trade with India. In the case of some countries, the indices result lower than

1, which indicates that trade between them is extremely less than what it ought/should to export/import.

Hence the overall trade potential between India and SACs is very high and indicates high prosperity in bilateral between south Asian nations.

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