



## TRADE RELATION BETWEEN INDIA AND PAKISTAN: AN ANALYSIS OF TRENDS AND PROSPECTS SINCE 1990 TO 2018

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### **Abstract**

*It is generally held that India and Pakistan the two populous countries in South Asia trade each other below the expectations despite having similarities in their language, economic and political history and borders. A favorable trading atmosphere is essential for reducing regional tensions and fostering economic development in both the nations by exploiting the relative advantages they possess. Since, trade liberalization over recent decades in both nations have paved way for greater possibilities of trade, it is practically important to study the trade prospects between the two neighbours. In this paper, we have made an attempt to analyse the recent changes in trends and patterns of trade relations between India and Pakistan by estimating group wise export potential by using Revealed Comparative Advantage (RCA) and Trade Complementarity Index (TCI), Grubel -Lloyd and Export -Import Intensity indices. The results show that trade share between the India and Pakistan is considerably insignificant given the importance of both the nations. Analysis of all the three indices shows that there is an immense untapped trade potential among groups of Primary commodities, Labour intensive and resource-based manufactures, manufactures with high skill and technology intensity have higher degree of complementarity showing a greater prospect for a successful trade arrangement between the India and Pakistan.*

**Keywords:** *Bilateral trade, India and Pakistan, RCA, Trade complementarity, Grubel –Lloyd, reforms in India, Export and Import intensity.*

### **Introduction**

India and Pakistan are not only neighbours, but they share common historical past and socioeconomic affinities. Development of trade and other economic relations between them is natural and necessary to maintain historical continuity, peace, and stability. Expansion of the trade relations is essential for reducing regional tensions and mutual mistrust. Beginning as a single economic entity, Pakistan and India have drifted apart since their independence in 1947. India's share in Pakistan's global exports and imports was 23.6 per cent and 50.6 per cent, respectively, in 1948-49. However, these shares have been considerably reduced over the years causing slow movement towards restoring direct trade links. It is estimated that, the share of Pakistan's exports with respect to India's world exports and imports accounted for 0.7 and 0.1 percent respectively. Similarly, the share of total export and import of India with Pakistan stood at 0.73 percent and 0.16 percent in the year 2018. On the other hand, the share of India's exports in the total exports of Pakistan accounted for 0.09 percent and 5.59 percent respectively which is an indication of most hostile trade conditions between two due to a number of historical and political events. Further, the worldwide lockdown imposed by many countries of the world to contain COVID-19 pandemic, will undoubtedly have far reaching and long-term implications on trade projections of both the countries. Since the countries across the globe have put a barrier across their borders in the wake of the pandemic India's merchandise exports rolled down from record amount of 34.6%, imports decreased to a low 28.7% and trade deficit tapered down to \$9.8 billion.



The interest in examining the trade relations and its dynamics between the two countries is not a recent phenomenon. Since independence, bilateral trade between Pakistan and India has been a victim to an unreliable political atmosphere. Even though India granted MFN status to Pakistan in 1996 and both countries signed the SAFTA agreement in 2004, trade relations between Pakistan and India have been marred by political upheavals. A study of both the economies reveals that there are great prospects for economic cooperation between these neighbours, although the actual level of cooperation at present is limited. On the surface it appears that though trade between them has been completely jeopardized, statistical evidence shows that despite political tensions trade have been taking place that could be tapped.

India, recently withdrew its Most Favoured Nation (MFN) status accorded to Pakistan, following the Pulwama terrorist attack (Feb 14, 2019). This literally halts bilateral trade between these neighbours. The decision to curtail the trade though may not have adverse effect on the Pakistan's economy as a whole, some of its strategic sectors will be surely get affected. Hence, Pakistan should make serious efforts at improving its trade relations with India. The reasons for greater prospects of trade between these countries comes from the fact that the Indian economy has in recent years been far ahead of Pakistan and second India has considerably more successful than Pakistan in its attempts at regional bilateral trading arrangements. (Nisha Taneja, 2004). Apart from these, both the countries also have a comparative cost advantage in trade with each other over countries within and outside the region. These advantages include lower transport costs easier time schedules, better understandings of each other's markets and easier settlement of payments. In a significant policy shift, Pakistan has opened its doors to global investments and imports. As a result, India could become Pakistan's largest trading partner after china.

This paper makes an attempt to review the changes in trends and patterns of trade relations between India and Pakistan and to identify the potential commodities to trade for both India and Pakistan by estimating commodity wise export potential between India and Pakistan along with compound annual growth rates (CAGR). The cost advantages of the commodities have been estimated by using the trade indicators methods of Revealed Comparative Advantage (RCA) and Trade Complementarity Index (TCI), Grubel -Lyod and export -import intensities.

### **Data base and methodology:**

The study uses both the descriptive and empirical methods to analyse trade flows between India and Pakistan for the study period. The trade data for both the nations has been extracted from the World Integrated Trade Solution (WITS) data source of United Nation Commercial Trade (UNCOMTRADE). For analytical simplicity, Standard International Trade Classification (SITC) Revision 3 data up to 3 digits has been uniformly used from the years 1990-2018. The WITS divides the merchandise data across six groups. These are, Primary commodities (Group A), Labour intensive and resource-based manufactures (Group B), manufactures with low skill and technology intensity (Group C) Manufactures with medium skill and technology intensity (Group D), Manufactures with high skill and technology intensity (Group E) unclassified products (Group F) (UNCOMTRADE) and the study has been based on this classification throughout. We use, five trade indicators to examine the trade flows between India and Pakistan after reforms in India across the groups. Revealed Comparative Advantage (RCA), Grubel-Lloyd Indices, Trade complementarity index, Export intensity and Import Intensity indices are used to compare and identify the potential commodity groups trading in which both India and Pakistan can successfully gain each other and increase their trade share.



**An overview of the trade relation between India and Pakistan after reforms:**

The India-Pakistan bilateral trade relations have, over the last more than five decades, witnessed a chequered history, reflecting the changing dimensions of geopolitical tensions and diplomatic relations between the two countries. However, the potential of bilateral trade between India and Pakistan has not materialized till yet because of political and economic reasons. In a new low in bilateral trade relations, Pakistan has suspended trade relations with India in a five-point plan, in response to India’s move to end special status for Jammu & Kashmir and split it into two union territories. A glance of the latest facts reveals that in the first quarter of financial year 2020, India’s exports to Pakistan were \$452.5 million and imports were \$7.13 million.

**Table1: India’s share of trade with Pakistan.**

Year	Export share	Import share	Total trade share of Pakistan
2014-2015	0.6	0.11	0.31
2015-2016	0.83	0.12	0.41
2016-2017	0.66	0.12	0.34
2017-2018	0.63	0.1	0.31
2018-2019	0.63	0.1	0.3

Source: Ministry of Commerce, Govt of India

The total share of Pakistan trade with India has been hovering around the minimum values and it stands at a negligible percentage of 0.3 percent in 2018-19. It is also noticeable that there has been a continues dip in the share of export and import. Though there is marginal increase in the export share from 0.6 percent to 0.63 percent the imports from Pakistan have been considerably low, falling from 0.11 percent to 0.1 percent which is a clear indication of fading trade relation between the two nations. In the financial year 2019, total exports to Pakistan were \$2.06 billion, while imports were \$ 495 million. India had revoked Pakistan’s most-favoured nation (MFN) status following the Pulwama terrorist attack that killed about 40 Central Reserve Police Force (CRPF) personnel in February this year and imposed up to 200% duty on import of Pakistani goods. Pakistan currently exports; fruits (\$112.8 million per year), cement (\$78.3 million), chemicals (\$60.4 million), fertilizer’s (\$34.9 million), and leather and allied products to India while India exports tomatoes, tea, sugar, petroleum products, cotton yarn, tyres, rubber, dye and petroleum oils etc to Pakistan. The above table 1 reveals the decreasing trade share of Pakistan from last five years.

**Table 2: Bilateral Trade profile of India and Pakistan**

India's trade with Pakistan (million US \$)						Pakistan's trade with India (Million US \$)				
Year	X	M	X-M	X+M	TBR	X	M	X-M	X+M	TBR
1990	40.6	46.6	-6.0	87.1	<b>-6.9</b>	48.8	45.6	3.2	94.4	<b>3.4</b>
1991	40.2	57.6	-17.4	97.8	<b>-17.8</b>	48.8	43.8	5.0	92.5	<b>5.4</b>
1992	56.7	144.9	-88.2	201.6	<b>-43.7</b>	135.3	52.1	83.2	187.5	<b>44.4</b>
1993	64.1	43.6	20.5	107.6	<b>19.0</b>	49.0	68.3	-19.3	117.3	<b>-16.5</b>
1994	57.2	52.7	4.5	110.0	<b>4.1</b>	0.0	0.0	0.0	0.0	<b>0.0*</b>
1995	76.6	45.0	31.6	121.6	<b>26.0</b>	39.8	82.4	-42.6	122.2	<b>-34.9</b>
1996	157.2	36.1	121.1	193.3	<b>62.6</b>	42.2	187.8	-145.6	230.0	<b>-63.3</b>
1997	143.2	44.4	98.8	187.6	<b>52.7</b>	33.3	142.2	-108.9	175.5	<b>-62.1</b>



1998	106.1	214.6	-108.6	320.7	<b>-33.9</b>	204.3	153.6	50.7	357.9	<b>14.2</b>
1999	93.5	68.6	24.9	162.1	<b>15.4</b>	81.5	130.7	-49.1	212.2	<b>-23.1</b>
2000	163.8	69.6	94.2	233.5	<b>40.4</b>	65.0	183.2	-118.2	248.2	<b>-47.6</b>
2001	164.6	69.9	94.7	234.5	<b>40.4</b>	54.5	240.8	-186.2	295.3	<b>-63.1</b>
2002	187.7	33.9	153.8	221.6	<b>69.4</b>	48.7	162.5	-113.7	211.2	<b>-53.8</b>
2003	183.6	68.1	115.5	251.6	<b>45.9</b>	83.5	226.2	-142.7	309.8	<b>-46.1</b>
2004	522.1	79.1	442.9	601.2	<b>73.7</b>	95.0	377.6	-282.5	472.6	<b>-59.8</b>
2005	593.1	165.9	427.1	759.0	<b>56.3</b>	337.2	576.7	-239.5	913.9	<b>-26.2</b>
2006	1235.0	286.5	948.6	1521.5	<b>62.3</b>	326.7	1115.0	-788.3	1441.7	<b>-54.7</b>
2007	1584.3	286.7	1297.6	1871.0	<b>69.4</b>	291.7	1266.2	-974.5	1557.9	<b>-62.6</b>
2008	1772.8	372.0	1400.8	2144.8	<b>65.3</b>	354.6	1691.5	-1336.8	2046.1	<b>-65.3</b>
2009	1455.8	272.1	1183.7	1727.9	<b>68.5</b>	235.3	1080.4	-845.1	1315.7	<b>-64.2</b>
2010	2235.8	320.7	1915.1	2556.5	<b>74.9</b>	275.0	1559.9	-1284.9	1834.9	<b>-70.0</b>
2011	1678.1	352.1	1326.0	2030.2	<b>65.3</b>	272.9	1607.3	-1334.5	1880.2	<b>-71.0</b>
2012	1633.3	500.3	1133.0	2133.7	<b>53.1</b>	348.0	1572.6	-1224.6	1920.6	<b>-63.8</b>
2013	2176.4	379.2	1797.3	2555.6	<b>70.3</b>	402.7	1874.1	-1471.3	2276.8	<b>-64.6</b>
2014	2169.9	529.9	1640.1	2699.8	<b>60.7</b>	392.2	2104.8	-1712.6	2497.0	<b>-68.6</b>
2015	1963.5	456.3	1507.1	2419.8	<b>62.3</b>	312.3	1669.3	-1357.0	1981.6	<b>-68.5</b>
2016	1592.6	461.1	1131.5	2053.7	<b>55.1</b>	348.1	1644.4	-1296.3	1992.5	<b>-65.1</b>
2017	1789.3	469.3	1320.0	2258.7	<b>58.4</b>	334.8	1696.1	-1361.4	2030.9	<b>-67.0</b>
2018	2344.9	639.7	1705.2	2984.6	<b>57.1</b>	383.0	1928.5	-1545.4	2311.5	<b>-66.9</b>
Average	906.3	226.4	679.8	1132.7	<b>42.3</b>	194.6	809.8	-615.1	1004.4	<b>-44.2</b>

Source: Authors' calculations from UN COMTRADE data at SITC 3-digit level

Note: X-Exports

M – Imports

TBR- Trade Balance Ratio

\*The export and import data for Pakistan is not available for the year 1994

### Bilateral Trade profile of India and Pakistan

Table 2 shows a comparison of the bilateral trade developments of both the countries. It is clear that Indian exports have shown consistently rose over its imports from Pakistan from over the years. It is only in four years (1990, 1991, 1992, and 1998) India's has faced deficit trade balances with Pakistan which is reflected in the trade balance ratio. It is observed that TBR has constantly favoured India throughout and touched its peak in the year 2004 (73.7 percent) after which it slipped continuously and stood at 57.1 percent in the year 2018. The average TBR value for India worked out to be 42.3 percent from the years 1990-2018.

On the other hand, Pakistan continuously faced with trade deficits after the launch of reforms in India. Its only in four years 1990 (3.4 percent), 1991(5.4 percent), 1992 (44.4 percent) during the onset of reforms in India and in 1998 (14.2 percent) Pakistan's TBR has turned out be positive. Otherwise throughout the study period its trends with India is not only volatile but highly dismal and disappointing. It is also noticeable that overall trade balance ratio stood at minus 44.2 percent which is a clear indication of the deficit trade over the years for Pakistan.



In the following sections we use trade indicators as mentioned in the research methodology section to examine the trade performances trade of both nations. In all these indicators the data has been analysed based on the classification made by the WITS data base supported by UNCOMTRADE.

**Table 3: Compound Annual Growth Rates of Indian exports to Pakistan from 1990-2018**

SL.NO	Product Description	CAGR
A	Primary commodities	14.6 %
B	Labour intensive and resource-based manufactures	0.4 %
C	manufactures with low skill and technology intensity	22.9 %
D	Manufactures with medium skill and technology intensity	20.3 %
E	Manufactures with high skill and technology intensity	19.7 %
F	Unclassified products	17.7 %

Source: Author’s estimation from the WITS database

Compound Annual Growth Rate (CAGR) is a useful measure of growth over multiple time periods. In the above table an estimate of growth is made across the commodity groups, which shows that growth rate over the years of Indian exports to Pakistan from 1990 -2018 in all the groups are significant except for labour intensive and resource-based manufacturers which stood at 0.4 percent. The commodities with the low skill and technology intensity grew at rate of 22.9 followed by medium skill and technology intensity 20.3 percent and high skill commodities which grew at 19.7 percent per year. The unclassified commodities also showed a rising trend at 17.7 percent and primary commodities grew at rate of 14.6 percent per year.

### Revealed Comparative Advantage (RCA)

Revealed comparative advantage (RCA) has been used to assess a country’s export potential. The RCA indicates whether a country is in the process of extending the products in which it has a trade potential. Balassa’s (1965) measure of relative export performance by country and industry/commodity, defined as a country’s share of world exports of a commodity divided by its share of total world exports. It can also provide useful information about potential trade prospects with new partners.

The RCA index of country *i* for product *j* is often measured by the products share in the country exports in relation to its share in world trade and at the total market level it is defined as

$$RCA_{ij} = (x_{ij}/X_{it}) / (x_{wj}/X_{wt})$$

Where  $x_{ij}$  and  $x_{wj}$  are the values of country *i* exports of product *j* and world exports of product *j* and where  $X_{it}$  and  $X_{wt}$  refer to the country’s total exports and world total exports.

At the bilateral level.

$$=BRCA_{ij}^k [(X_{ij}^k | X_{ij}) / (X_{wj}^k | X_{wj})]$$



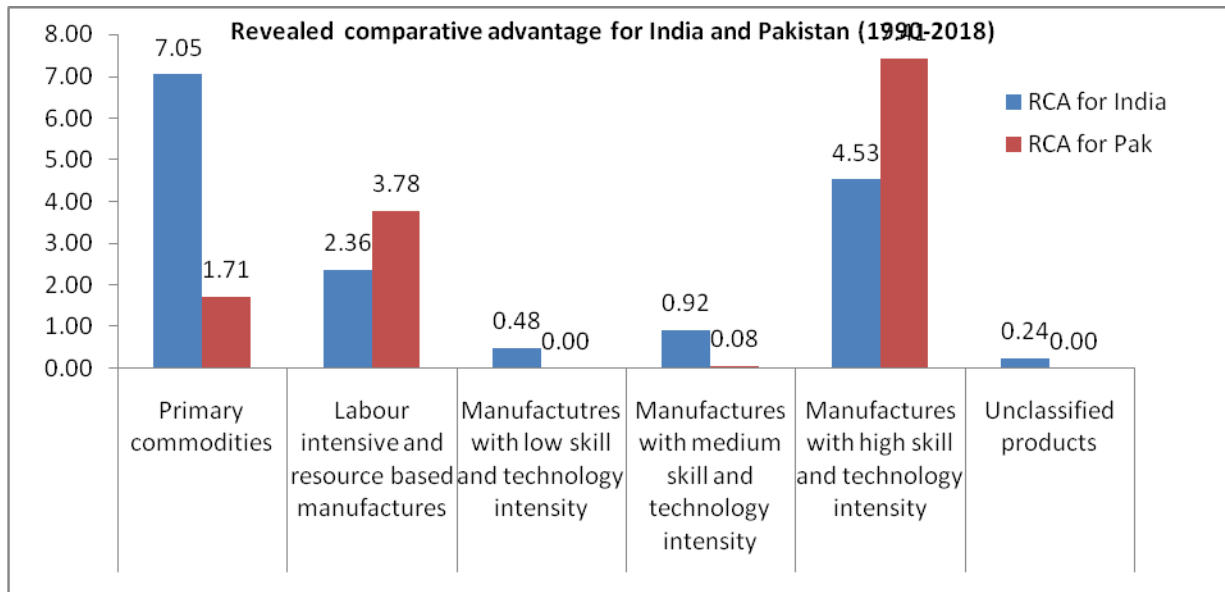
Where  $BRCA_{ij}^k$  is the Bilateral Revealed Comparative Advantage,  $X_{ij}^k$  is the export of commodity k from i (India) to its partner country j (Pakistan),  $X_{ij}$  is the total exports from country i to j,  $X_{wj}^k$  is the total world exports of commodity k to country j and  $X_{wj}$  is the total world exports to country j

A value of less than unity implies that the country has a revealed comparative disadvantage in the product. Similarly, if the index exceeds unity, the country is said to have a revealed comparative advantage in the product.

**Table 4: Bilateral Revealed Comparative Advantage (RCA) for India and Pakistan:**

Group	Product description	RCA for India	RCA for Pakistan
A	Primary commodities	7.05	1.71
B	Labour intensive and resource-based manufactures	2.36	3.78
C	Manufactures with low skill and technology intensity	0.48	0.00
D	Manufactures with medium skill and technology intensity	0.92	0.08
E	Manufactures with high skill and technology intensity	4.53	7.41
F	Unclassified products	0.24	0.00

Source: Author’s estimation from the WITS database



In the table 4 the RCA indices of both India as well as Pakistan for the product categories are presented. RCA for India’s exports is greater than one for the primary commodities for both India (7.05) and Pakistan (1.71) which means that these products belong to the comparative advantage category for both



the countries. Similarly, labour intensive and resource-based manufactures commodities stood at 2.23 and 3.78 for India and Pakistan respectively, indicating an advantageous trade flow between the countries. Manufactures with high skill and technology intensity commodities also shows a significant advantage of trade 4.53 and 7.41 indicating a positive competitiveness between the two countries. However, the number of products of comparative disadvantage for the two economies is significantly larger in the commodity groups of Manufactures with medium skill and technology intensity (0.48 & 0.00) Manufactures with medium skill and technology intensity (0.92 & 0.08) and Unclassified products (0.24 & 0.00). These commodity groups provide scope for building up areas of specialization and competitiveness in both India and Pakistan.

### Grubel-Lloyd Indices

The Grubel- Lloyd index (Grubel and Peter Lloyd, 1971) is used to measure the two-way trade in similar products. It is defined as

$$G_h = \left[ \frac{(X_h + M_h) - |X_h - M_h|}{(X_h + M_h)} \right] * 100$$

Where,

$G_h$  = Grubel-Lloyd index of intra industry trade in  $h$

$X_h$  = Exports of industry  $h$

$M_h$  = Import of industry  $h$

The intra-industry trade index ranges between 0 and 1 with larger values indicating a greater degree of intra group trade.

**Table 5: Grubel- Lloyd. index for India and Pakistan**

GROUPS	Product description	Grubel-Lloyd Indices
A	Primary commodities	43.0
B	Labour intensive and resource-based manufactures	56.1
C	Manufactures with low skill and technology intensity	1.23
D	Manufactures with medium skill and technology intensity	1.23
E	Manufactures with high skill and technology intensity	14.69
F	Unclassified products	4.32

Source: Author's estimation from the WITS database

Taking a look at the estimates of Grubel- Lloyd index reveals that the combination of Primary commodities (43.0), Labour intensive and resource-based manufactures (56.1) and Manufactures with high skill and technology intensity (14.69) have shown a relatively larger share among the two-way trade between India and Pakistan. It should be noted that the commodity groups where both the countries had comparative advantages have been positioned mostly between the countries with respect to Grubel - Lloyd index is well. There are also other groups of commodities who have shown an insignificant proportion of two-way trade with 0.01 (Manufactures with low skill and technology intensity), 0.10 (Manufactures with medium skill and technology intensity) and 0.04 (Unclassified products)



### Trade complementarity index

Trade complementarity index (Peter Drysdale, 1967) measures the compatibility of imports of country I with country j and it is defined as below.

$$TC_{ij} = 1 - \frac{(\sum |m_{hi} - x_{hj}|)}{2}$$

Where

$TC_{ij}$  = Trade complementarity index for trade between the countries i and j

$m_{hi}$  = share of good h in the total imports of country i

$x_{hj}$  = Share of good h in total exports of country j

**Table 6: Trade complementarity index for India and Pakistan:**

Group	Product description	TCI
A	Primary commodities	1.05
B	Labour intensive and resource-based manufactures	1.06
C	Manufactures with low skill and technology intensity	1.00
D	Manufactures with medium skill and technology intensity	1.00
E	Manufactures with high skill and technology intensity	1.02
F	Unclassified products	1.00

Source: Author’s estimation from the WITS database

The trade complementarity index indicates to what extent the export profile of the reporter matches or complements the import profile of the partner. It measures the degree to which the export pattern of one country matches the import pattern of another. A high degree of complementarity is assumed to indicate more favorable prospects for a successful trade arrangement. It also shows how two countries would stand to gain from increased trade, and may be particularly useful in evaluating prospective bilateral or regional trade agreements.

It is obvious from the table 6 that the trade complementarity is quite high for all the commodity groups. This indicates that the exports of India are highly complementary with Pakistan which is also an indication of untapped trade prospects between India and Pakistan in the said groups. Both the countries can gain out of trade in these commodities.

### Export and import intensity index of trade of India with Pakistan

Several statistical indices are used to measure trade relations between two countries. One such index is the trade intensity index (Kojima 1964). It appears in two forms, i.e., the export intensity index (XII) and import intensity index (MII). The trade intensity model is used to measure variations and relative resistance in bilateral trade flows. One can also measure the trade intensities between two countries to see the trajectory of trade over the years and the orientation of a country with its trading partner. Bilateral trade relationships between India and Pakistan described in terms of intensity indices helps to identify how intensively the countries are trading with each other. A simple index of trade intensity has been estimated for trade between India and Pakistan between the time periods 1990-2018. This is to examine whether or not the bilateral trading relationship of India is strengthening (or weakening), with





Pakistan. In a rather crude fashion, this shows whether India’s trade with Pakistan is greater or less than what might be expected given the importance of the trading partner’s share in total world trade (Khan J A 2012).

An index of more than one indicates that trade flow between countries/regions is larger than expected given their importance in world trade.

Trade intensity indices have been estimated from the trading partner’s (Pakistan) perspective as well. It is to understand (i) Pakistan’s importance in India’s total trade (ii) India’s importance in Pakistan’s total trade

**Export intensity Index computed by**

$$XII_{ip} = [X_{ij} / X_i] / [M_j / (M_w - M_i)]$$

Where,

XI<sub>ip</sub>- Export intensity indices of India with Pakistan

X<sub>ij</sub> - Exports of i (India) to j (Pakistan) country

X<sub>i</sub> - Total exports of I country

M<sub>j</sub>- Total import j country

M<sub>w</sub>- Total world imports

M<sub>i</sub> -Total imports of i

Similarly,

**Import intensity Index is given by**

$$MII_{ip} = [M_{ij} / M_i] / [X_j / (X_w - X_i)]$$

Where,

MII<sub>ip</sub>- Import intensity indices of India with Pakistan

M<sub>ij</sub>- Imports of i to j

M<sub>i</sub>- Total imports of India

X<sub>j</sub>- Total exports of j country

X<sub>w</sub>- Total world exports

X<sub>i</sub>- Exports of i country

**Table 8: Export and import intensity index of trade of India with Pakistan:**

Group	Commodities	Export Intensity Index	Import intensity Index
A	Primary commodities	9.040	0.189
B	Labour intensive and resource-based manufactures	0.007	0.217
C	Manufactures with low skill and technology intensity	0.612	0.002
D	Manufactures with medium skill and technology intensity	1.179	0.004
E	Manufactures with high skill and technology intensity	5.810	0.033
F	Unclassified products	0.313	0.000

Source: Author’s estimation from the WITS database



Above table reveals that the export intensity of India with Pakistan are above the unity for three groups of commodities i.e. Primary commodities (9.040), Manufactures with medium skill and technology intensity (1.179), Manufactures with high skill and technology intensity (5.810) which indicates that India's export intensities to Pakistan are increasing for the years 1990 to 2018. However, as far as the import intensity is concerned it was hovering around the minimum values. The result of import intensities of India with Pakistan indicates that India is extremely importing less from Pakistan than it ought to import given its importance in the world trade. India has much scope to import from the Pakistan. However, in spite the most favoured nation status to Pakistan India is still importing less from the Pakistan.

**Export and import intensity index of trade of Pakistan with India:**

Export intensity Index is calculated by

$$XII_{pi} = [X_{pi}/X_p] / [M_i / (M_w - M_p)]$$

Where,

XII<sub>pi</sub>- Export intensity of Pakistan with india

X<sub>pi</sub>- Exports of Pakistan to India

X<sub>p</sub>- Total exports of Pakistan

M<sub>i</sub>- Imports of India

M<sub>w</sub>- Total world imports

M<sub>p</sub>-Imports of Pakistan

Similarly,

Import intensity Index is calculated by

$$MII_{pi} = [M_{pi}/M_p] / [X_i / (X_w - X_p)]$$

Where,

MII<sub>pi</sub>- Import intensity of Pakistan with India

M<sub>pi</sub>- Imports of Pakistan from India

M<sub>p</sub>- Total imports of Pakistan

X<sub>i</sub>- Total exports of India

X<sub>w</sub>- Total world exports

X<sub>p</sub>-Total exports of Pakistan

**Table 9: Export and import intensity index of trade of Pakistan with India:**

Group	Commodity	Export intensity	Import Intensity
A	Primary commodities	2.5340	4.003
B	Labour intensive and resource-based manufactures	1.4538	2.041
C	Manufactures with low skill and technology intensity	0.0244	1.098
D	Manufactures with medium skill and technology intensity	0.0518	1.765
E	Manufactures with high skill and technology intensity	0.4443	5.91
F	Unclassified products	0.0101	2.202

Source: Author's estimation from the WITS database



The export and import intensity index of trade of Pakistan with India are computed in the above table. The results show that export intensity of Pakistan with India though showing an increasing trend it is below unity in many commodities except for Primary commodities (2.5340) and Labour intensive and resource-based manufactures (1.4538). Values of intensity indices below the unity indicates that there is more scope for the Pakistan to export to India and increase the welfare of the people. As far as the Pakistan's import intensities to India are concerned it is showing the increasing trend. Pakistan's import intensity index is above one and is hovering round the minimum value ranging 1.23 to 5.91 from 1990-2018. It is also evident that the import intensity for Primary commodities (4.003) and Manufactures with high skill and technology intensity (5.91)

Overall, the import intensities in the entire sample indicate that Pakistan is importing more from India than it ought to import given its importance in the world trade. The above table shows that export indices for the goods with Labour intensive and resource-based manufactures, manufactures with low skill and technology intensity, manufactures with medium skill and technology intensity are smaller than unity. This means that India's export for Pakistan is less than expected.

### **Conclusion**

Given the volatile environment between two countries and less trade, the results of the study reveal new directions where the trade relations of both the countries can be enhanced after the reforms in India. Firstly, it is very obvious that the trade share between the India and Pakistan is considerably insignificant given the importance of both the nations in the international level as depicted by the trade balance conditions of both nations. The study also found that the importance of Pakistan and India's total trade since 1991 shows marginal increase but it could be more if trade takes place up to the potential level.

Secondly, the analysis of the Revealed Comparative Advantage shows that the index is more than unity for the products Primary commodities (7.05), Labour intensive and resource-based manufactures (2.36) Manufactures with high skill and technology intensity (4.56) for India. Interestingly, Pakistan has also got the advantage in the similar category of the products i.e. 1.71, 3.78, and 7.48 respectively which means that there is an immense untapped trade potential among these commodities if the trade resumes between the two nations.

Thirdly, with reference to Grubel - Lyod index it should be noted that the commodity groups where both the countries had comparative advantages have been positioned mostly between the countries with respect to Grubel - Lyod index is well with primary commodities having 0.43, Labour intensive and resource-based manufactures with 0.56. which again emphasizes the proposition of increasing trade ventures across these groups of commodities. Similarly, it is quite interesting to find from the analysis of the Trade complementarity index that the same group of commodities have higher degree of complementarity indicating a more favourable prospects for a successful trade arrangement between the two nations. [Primary commodities (43.0), Labour intensive and resource-based manufactures (56.1) Manufactures with high skill and technology intensity (14.69). Lastly, the export and import intensity indices for both countries reveal the same results that both India and Pakistan have relatively higher degree of export intensity over the said group of commodities. With reference to Pakistan's import intensity these commodities have shown a tremendous growth prospect with 4.003 for primary commodities, 2.041 for Labour intensive and resource-based manufactures and 5.91 for Manufactures



with high skill and technology intensity which is an indication of higher import intensity among these groups from Pakistan.

To sum up, the study concludes that the volume of trade between the two countries in the above-mentioned groups of commodities is larger than expected. Hence, a large potential trade can flourish between the countries by regularizing and encouraging more official trade by improving trade infrastructure. A congenial atmosphere of peace should be created by both nations to boost up trade and investment. Trade possibilities can be reaped in a big way if both countries are able to create an enabling political environment of peace, trust and confidence.

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### Appendix tables

Sl.No	Primary commodities: A
1	Live animals, chiefly for food
2	Meat and edible meat offals, fresh, chilled or frozen
3	Meat and edible meat offals (except poultry liver), salted, in brine, dried or smoked
4	Meat and edible meat offals, prepared or preserved, nes; fish extracts
5	Milk and cream
6	Butter
7	Cheese and curd
8	Eggs and yolks, fresh, dried or otherwise preserved, sweetened or not
9	Fish, fresh (live or dead), chilled or frozen
10	Fish, dried, salted or in brine; smoked fish
11	Crustaceans and molluscs, fresh, chilled, frozen, salted, in brine or dried
12	Fish, crustaceans and molluscs, prepared or preserved, nes
13	Wheat (including spelt) and meslin, unmilled
14	Rice
15	Barley, unmilled
16	Maize (corn), unmilled
17	Cereals, unmilled (other than wheat, rice, barley and maize)
18	Meal and flour of wheat and flour of meslin
19	Other cereal meals and flours
20	Cereal preparations and preparations of flour or starch of fruits or vegetables
21	Vegetables, fresh, chilled, frozen or simply preserved; roots, tubers
22	Vegetables, roots and tubers, prepared or preserved, nes
23	Fruit and nuts (excluding oil nuts), fresh or dried
24	Fruit preserves and fruit preparations
25	Sugar and honey
26	Sugar confectionery and other sugar preparations
27	Coffee and coffee substitutes
28	Cocoa
29	Chocolate and other food preparations containing cocoa
30	Tea and maté
31	Spices
32	Feeding stuff for animals (not including unmilled cereals)
33	Margarine and shortening
34	Edible products and preparations, nes
35	Non-alcoholic beverages, nes
36	Alcoholic beverages
37	Tobacco, unmanufactured; tobacco refuse
38	Tobacco, manufactured
39	Hides and skins (except fur skins), raw
40	Fur skins, raw (including astrakhan, caracul and similar skins)



41	Oil-seeds and oleaginous fruit, whole or broken (excluding flours and meals)
42	Oil-seeds and oleaginous fruit, whole or broken (non-defatted flours and meals)
43	Natural rubber latex; natural rubber and similar natural gums
44	Synthetic rubber latex; synthetic rubber and reclaimed rubber; waste and scrap
45	Cork, natural, raw and waste (including in blocks or sheets)
46	Fuel wood (excluding wood waste) and wood charcoal
47	Pulpwood (including chips and wood waste)
48	Other wood in the rough or roughly squared
49	Wood, simply worked, and railway sleepers of wood
50	Pulp and waste paper
51	Silk
52	Cot
53	Jute and other textile bast fibres, nes, raw or processed
54	Vegetable textile fibres and waste of such fibres
55	Synthetic fibres suitable for spinning
56	Other man-made fibres suitable for spinning and waste
57	Wool and other animal hair (excluding wool tops)
58	Old clothing and other old textile articles; rags
59	Fertilizers, crude
60	Stone, sand and gravel
61	Sulphur and unroasted iron pyrites
62	Natural abrasives, nes (including industrial diamonds)
63	Other crude minerals
64	Iron ore and concentrates
65	Waste and scrap metal of iron or steel
66	Ores and concentrates of base metals, nes
67	Non-ferrous base metal waste and scrap, nes
68	Ores and concentrates of precious metals; waste and scrap
69	Crude animal materials, nes
70	Crude vegetable materials, nes
71	Animal oils and fats
72	Fixed vegetable oils, soft, crude, refined or purified
73	Other fixed vegetable oils, fluid or solid, crude, refined or purified
74	Animal and vegetable oils and fats, processed
75	Silver, platinum and other metals of the platinum group
76	Copper
77	Nickel
78	Aluminium
79	Lead
80	Zinc
81	Tin
82	Miscellaneous non-ferrous base metals employed in metallurgy

Source: UNCOMTRADE



S.No.	Labour-intensive and resource-based manufactures: B
1	Leather
2	Manufactures of leather or of composition leather, nes
3	Fur skins, tanned or dressed, pieces or cuttings of fur skin
4	Cork manufactures
5	Veneers, plywood, improved or reconstituted wood
6	Wood manufactures, nes
7	Paper and paperboard
8	Paper and paperboard, cut to size or shape
9	Textile yarn
10	Cotton fabrics, woven
11	Fabrics, woven, of man-made fibres
12	Textile fabrics, woven, other than cotton man-made fibres
13	Knitted or crocheted fabrics
14	Tulle, lace, embroidery, and small wares
15	Special textile fabrics and related products
16	Made-up articles, wholly or chiefly of textile materials
17	Floor coverings
18	Lime, cement, and fabricated construction materials
19	Clay construction materials and refractory construction material
20	Mineral manufactures, nes
21	Glass
22	Glassware
23	Pottery
24	Pearls, precious and semi-precious stones, unworked or worked
25	Furniture and parts thereof
26	Travel goods, handbags, briefcases, purses and sheaths
27	Outergarments, men's, of textile fabrics
28	Outergarments, women's, of textile fabrics
29	Undergarments of textile fabrics
30	Outergarments and other articles, knitted
31	Undergarments, knitted or crocheted
32	Clothing accessories of textile fabrics
33	Articles of apparel and clothing accessories, non-textile
34	Footwear
35	Baby carriages and toys

Source: UNCOMTRADE



S.No.	Manufactures with low skill and technology intensity: C
1	Pig iron, spiegeleisen, sponge iron, iron or steel
2	Ingots and other primary forms, of iron or steel
3	Iron and steel bars, rods, angles, shapes and sections
4	Universals, plates and sheets, of iron or steel
5	Rails and railway track construction material
6	Iron or steel wire, whether or not coated
7	Tubes, pipes and fittings, of iron or steel
8	Iron and steel castings, forgings and stampings
9	Structures and parts of structures; iron, steel and aluminium
10	Metal containers for storage and transport
11	Wire products and fencing grills
12	Nails, screws, nuts and bolts of iron, steel or copper
13	Tools for use in hand or in machines
14	Cut
15	Household equipment of base metal, nes
16	Manufactures of base metal, nes
17	Motorcycles, motor scooters and invalid carriages
18	Trailers and other vehicles, not motorized
19	Railway vehicles and associated equipment
20	Ships, boats and floating structures
21	Sanitary, plumbing, heating and lighting fixtures

Source: UNCOMTRADE

S.No.	Manufactures with medium skill and technology intensity: D
1	Materials of rubber (pastes, plates, sheets)
2	Rubber tyres, tyre cases, for wheels of all kinds
3	Articles of rubber, nes
4	Steam and other vapour generating boilers, and parts
5	Steam and other vapour power units, steam engines
6	Internal combustion piston engines, and parts
7	Engines and motors, non-electric
8	Rotating electric plant and parts
9	Other power generating machinery and parts
10	Agricultural machinery and parts
11	Tractors fitted or not with power take-offs
12	Civil engineering and contractors plant and parts
13	Textile and leather machinery and parts
14	Machinery for paper and pulp mills and paper manufactures





15	Printing and bookbinding machinery, and parts
16	Food processing machines, and parts
17	Machinery and equipment specialized for particular industries
18	Machine tools for working metal or metal carbides, and parts
19	Metalworking machinery, and parts
20	Heating and cooling equipment, and parts
21	Pumps for liquids, liquid elevators, and parts
22	Pumps, compressors, fans and blowers
23	Mechanical handling equipment, and parts
24	Other non-electrical machinery, tools, apparatus, and parts
25	Non-electric accessories of machinery
26	Electric power machinery, and parts thereof
27	Electrical apparatus such as switches, relays, fuses and plugs
28	Equipment for distributing electricity
29	Electric and radiological apparatus, for medical purposes
30	Household type, electrical and non-electrical equipment
31	Electrical machinery and apparatus, nes
32	Passenger motor cars, for transport of passengers and goods
33	Motor vehicles for transport of goods materials
34	Road motor vehicles, nes
35	Parts and accessories of 722, 781, 782, 783
36	Articles of materials described in division 58

Source: UNCOMTRADE

S.No.	Manufactures with high skill and technology intensity: E
1	Automatic data processing machines and units thereof
2	Thermionic, cold and photo-cathode valves, tubes, and parts
3	Hydrocarbons, nes, and their halogenated or derivatives
4	Alcohols, phenols, phenol-alcohols, and their derivatives
5	Carboxylic acids, and their anhydrides, halides, and derivatives
6	Nitrogen-function compounds
7	Organo-inorganic and heterocyclic compounds
8	Other organic chemicals
9	Inorganic chemical elements, oxides and halogen salts
10	Other inorganic chemicals
11	Radioactive and associated materials
12	Synthetic organic dyestuffs, etc, natural indigo and colour lakes
13	Dyeing and tanning extracts; synthetic tanning materials
14	Pigments, paints, varnishes and related materials
15	Medicinal and pharmaceutical products
16	Essential oils, perfume and flavour materials



17	Perfumery, cosmetics and toilet preparations
18	Soap, cleansing and polishing preparations
19	Fertilizers, manufactured
20	Explosives and pyrotechnic products
21	Condensation, polycondensation and polyaddition products
22	Polymerization and copolymerization products
23	Regenerated cellulose; cellulose nitrate and other cellulose esters
24	Other artificial resins and plastic materials
25	Disinfectants, insecticides, fungicides, weedkillers
26	Starches, inulin and wheat gluten, albuminoidal substances
27	Miscellaneous chemical products, nes
28	Office machines
29	Parts of and accessories suitable for 751, 752
30	Television receivers
31	Radio-broadcast receivers
32	Gramophones, dictating and sound recorders
33	Telecommunications equipment, and parts
34	Aircraft and associated equipment, and parts
35	Optical instruments and apparatus
36	Medical instruments and appliances
37	Meters and counters, nes
38	Measuring, checking, analysing instruments
39	Photographic apparatus and equipment, nes
40	Photographic and cinematographic supplies
41	Cinematograph film, exposed and developed, negative or positive
42	Optical goods, nes
43	Watches and clocks

Source: UNCOMTRADE

S.No.	Unclassified products: F
1	Printed matter
2	Office and stationery supplies, nes
3	Works of art, collectors' pieces and antiques
4	Jewellery, goldsmiths and other articles of precious materials
5	Musical instruments, parts and accessories
6	Other miscellaneous manufactured articles
7	Animals, live, nes, including zoo-animals
8	Armoured fighting vehicles, arms of war and ammunition

Source: UNCOMTRADE