Trends In Indo - Brics Trade

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Abstract

In recent years, trade and investment between BRICS economies are growing. The growing trade suggests a promising future for trade cooperation. This paper studies the share of other BRICS countries in total Exports and Imports of India with a focus on trends in India's trade with other BRICS countries for the period 1991 to 2013. The analysis in this paper is based on secondary data. The results of the study affirm increased share of other BRICS countries in India's total trade. The BRICS's share in India's trade has increased significantly over the last two decades, with the primary contribution coming from China. South Africa is also emerging as a significant trade partner of India in BRICS group. As an import partner, Brazil and Russia are less important to India. The first decade of study period is characterized by relatively low growth of India's trade from other BRICS countries; it is only during the second decade that India's trade with other BRICS countries gained a momentum.

Keywords: India, Foreign Trade, BRICS, Trends

INTRODUCTION

BRICS¹ is a grouping acronym that refers to the countries of Brazil, Russia, India, China and South Africa. The BRICS alliance has existed as a concept since 2001 Jim O'Neill, a Goldman Sachs economist, identified the alliance of Brazil, Russia, India and China as rising economic powers. The first move in the direction of formalization of this group was made in September 2006 when the first meeting of the BRIC foreign ministers took place, as a side event to the 61st UN General Assembly in New York. This was followed by several other meetings and the group was concretized when the BRIC leaders held their first summit on 16 June 2009 in Yekaterinburg, Russia.² Trade is one of the most important indicators of how co-operation between the BRICS countries is evolving. BRICS trade bloc is an emerging feature of world trade. The potential that exists between India and the other BRICS nations can be assessed from the trends in trade witnessed in past years. This study analyses trends in India's trade with the other BRICS countries. To explore the importance of

Indo-BRICS trade, the share of India in BRICS trade as well as share of BRICS in India's trade has been analyzed for the period 1991-2013.

REVIEW OF LITERATURE

Mizuho Research Institute (2006) made a comparative analysis of trade by BRIC countries. It examined BRICs growing presence in global trade and foreign direct investment. However, among the BRICs countries, there was a large gap between China and the remaining three countries. **Castro De Teraza (2010)** paper assesses inter-BRIC merchandise trade intensity and its tendencies as one of the factors determining a deepening cooperation among countries. **Vadra Ratna (2011)** in his study highlighted the increased importance of the BRICS countries (i.e., Brazil, Russia, India, and China) in the world economy. The paper studied India's trade with BRICS countries during the period 1999-00 to 2009-10. The study revealed that the India's highest import was from china and lowest from Brazil. **Yuan & Zhao (2011)** made a Comparative Analysis on

¹ Neill O' Jim (2001), "Building Better Global Economic BRICS", Goldman Sachs , Global Economics Paper No: 66 <https://www.gs.com>

² http://cuts-international.org/BRICS-TERN/pdf/BRICS_and_the_World_Order-A_Beginners_Guide.pdf

Foreign Trade of the BRICS. The study revealed that BRICS countries, in descending order of export dependence is China, South Africa, Russia, India and Brazil, imports of the order of high to low trade dependence is South Africa, China, India, Russia and Brazil.

OBJECTIVES

The main objectives of the study are:

- To analyze the trends in India's trade with the other BRICS countries.
- To study the share of India in BRICS trade and the share of BRICS in India's trade.
- To study the trade intensity of India's trade with BRICS.

RESEARCH METHODOLOGY

This paper is based on secondary data related to India's merchandise trade with other BRICS countries for the period 1991- 2013. The data has been taken from UN COMTRADE and accessed through World Integrated Trade Solutions (WITS). For calculating the share, percentage method is used. To further analyze the data, the following mathematical and statistical tools are used:

1. Linear Regression

$$Y = a + bx$$

Where, Y = dependent variable for which growth is to be estimated (value),

a = refers to constant term,

b = Regression coefficient

x = independent variable (time).

2. Trade Intensity Index

Export Intensity Index (XII_{ij})

$$XII_{ij} = \frac{\frac{X_{ij}}{X_i}}{\left(\frac{M_j}{M_W - M_i}\right)}$$

Import Intensity Index (MII_{ij})

$$MII_{ij} = \frac{\frac{M_{ij}}{M_i}}{\left(\frac{X_j}{X_W - X_i}\right)}$$

Where i refer to India and j refers to partner country, X-exports and M-imports and W refers to World. The range of trade intensity values lies between 0 and 1, higher value indicating greater importance of selected partner country and 1 interpreted as normal. If the value of index is more (less) than one it shows that bilateral export flow is larger (smaller) than expected, given the partner country's importance in world exports.

RESULTS AND DISCUSSION:

1 India's Trade with other BRICS Countries

In 1991, New Economic Reforms were introduced by the government to make the economy more liberalize in terms of trade and development. Since, 1991, India's foreign trade has shown a significant increase. India's global trade is increasingly diversified towards developing countries. The trend in total trade has shown the significant rise in both India's exports to and also India's imports from other BRICS countries, with the imports having risen faster than the exports, resulting in a negative trade balance of India with all other BRICS countries taken together. In the first decade of reforms, India's trade with other BRICS countries was not very high, it is only during the second decade of reforms that India's trade with other BRICS countries gained a momentum.

Fig. 1

India's exports to other BRICS countries have risen almost 429 times, from US\$ 71.517 million in 1991 to touch US\$ 30690.09 million in 2013. India's total imports from other BRICS countries have also risen from US\$ 219.89 million in 1991 to US\$ 66633.16 million in 2013, showing a 303 times rise. India's trade balance with other BRICS countries has become negative.

2 The Share of India in BRICS Exports and Imports

Table-1

Share of India's Exports in Brics Imports				Share of India's Imports in Brics Exports		
Year	Brics Imports From World (us\$ Million)	India's Exports to Brics (us\$million)	Share of India in Brics Imports (%)	Brics Exports to World (us\$ Million)	India's Imports From Brics (us\$ Million)	Share of India in Brics Exports (%)
1991	22976.33	71.52	0.31	31621.12	219.89	0.7
1992	121304.28	865	0.71	142029.94	619.5	0.44
1993	149284.9	1024.55	0.69	154710.49	715.67	0.46
1994	172231.63	1304.92	0.76	190185.59	1954.66	1.03
1995	212562.33	1797.21	0.85	223510.67	2138.04	0.96
1996	283047.5	1879.17	0.66	310964.98	1764.63	0.57
1997	304650.48	2214.58	0.73	344152.02	2450.25	0.71
1998	271365.26	1673.61	0.62	326790.46	3191.02	0.98
1999	281967.84	1911.56	0.68	340793.7	4255.38	1.25
2000	341595.1	2090.63	0.61	433712.17	3596	0.83
2001	366615.22	2319.32	0.63	450250.75	3980.62	0.88
2002	414810.39	3101.46	0.75	515791.04	5490.12	1.06
2003	552974.5	4119.14	0.74	676722.51	6658.48	0.98
2004	747236.65	6162.4	0.82	911866.73	9720.59	1.07
2005	887293.03	10263.39	1.16	1168924.8	15770.65	1.35
2006	1089083.84	12267.44	1.13	1460894.22	21001.34	1.44
2007	1356334.86	14445.46	1.07	1797001.55	31319.67	1.74
2008	1660403.11	16915.67	1.02	2170595.01	42748.39	1.97
2009	1367795.2	15075.99	1.1	1710301.45	41983.69	2.45
2010	1885511.29	26152.83	1.39	2243672.02	54973.84	2.45
2011	2375455.78	28322.58	1.19	2764395.37	72598.38	2.63
2012	2459151.88	28010.09	1.14	2902840.4	72171.93	2.49
2013	2608019.59	30690.09	1.18	3073676.04	66633.16	2.17

In 1991, the share of India in BRICS imports was 0.31 cent and share of India in BRICS exports was 0.7 percent. Amongst various ups and down, the share of India in BRICS import was 1.18 percent and share of India in BRICS export was 2.17 percent in 2013. Despite rapid growth, India is of very little importance to BRICS as an export partner.

3 The Share of BRICS in India's Exports and Imports

Merchandise trade flows between India and other BRICS countries have increased significantly over the period under study. The share of BRICS countries in India's total exports has ranged from 0.4 percent to 9.1 percent over the study

period. In 2005-06, almost 10 percent of Indian Export was directed towards the BRICS countries. In 2008-09, the global recession also hit the India's total export to some extent and same is reflected in share of BRICS in India's total export that is reduced to 8.5 percent in 2009. Overall, the share trend is rising except for few years. The table further reveals that the merchandise Imports of India from BRICS is showing significantly a rising trend ranging from 1.12 percent to 14.30 percent for the study period, except for the year 1995-97 and 2008.

The share of other BRICS countries has shown an increasing trend in both India's exports to as also India's imports from BRICS. The increasing share indicates the

Fig. 2

potential for great growth and development in the area of trade and investment.

Table-2: Results of Regression Equations Indicating BRICS Share in India's Trade

VARIABLE	TIME PERIOD	A	β	R ²	FValue
			(t statistics)		
SHARE OF BRICS IN INDIA'S EXPORTS	1991- 2000	2.89	0.33	0.37	4.81
			2.19		
	2001-2013	6.62	0.31	0.46	9.42*
			3.07*		
	1991-2013	2.85	0.35	0.77	70.99*
			8.42*		
SHARE OF BRICS IN INDIA'S IMPORTS	1991- 2000	1.56	0.67	0.73	21.73*
			4.66*		
	2001-2013	7.99	0.66	0.82	52.85*
			7.27*		
	1991-2013	1.69	0.64	0.93	289.70*
			17.02*		

* - significant at 5% level of significance

The value of β for both exports and imports shows a positive trend in whole time period 1991-2013, which is statistically significant and the R² value is very high and overall equation result is statistically significant at 5% level.

SHARE OF BRICS IN INDIA'S EXPORTS: The sub time-period 1991-2000 has shown a positive trend for exports but it is not statistically significant. The time periods: 2001-2013 and 1991-2013 has shown the positive trend for exports and the value of t and f is statistically significant at 5% level of significance.

SHARE OF BRICS IN INDIA'S IMPORTS: The value of β shows a positive trend for imports for the whole study period and the sub-periods. The probability value of t and f

statistics is found to be statistically significant at 5 percent level of significance. R² is also high for imports, which show the better goodness of fit.

Hence, with 95 percent confidence level, it can be concluded that there exists significant positive trend in the share of India's exports to and also India's imports from other BRICS nations. The increasing share indicates the potential for great growth and development in the area of trade and investment.

4 India's Trade with the member Countries of BRICS

An analysis of India's trade with BRICS member nations is

important as this kind of analysis will enable us to understand the relative significance of member countries of BRICS in India's trade and explore the possibilities of future growth. Therefore, in the present section, India's imports and exports with BRICS member countries has been analyzed individually.

Fig.3

The fig. 3 reveals that India's imports from other BRICS countries have shown an increasing trend over the period of time. The first decade of study period is characterized by relatively low growth of India's imports from other BRICS countries; it is only during the second decade of reforms that India's import with other BRICS countries gained a momentum. However, the primary contribution to this in terms of value has come from China followed by South Africa. As an import partner, Brazil and Russia are less important to India.

Fig. 4

In terms of India's exports to other BRICS countries, the same is true as in the case of India's imports from BRICS. The main export partner of India among BRICS countries is China. India's exports to South Africa and Brazil have also shown an exponential growth over the second decade of Indian reforms.

Since, 1991, India's foreign trade has shown a significant increase. The impact of trade reforms and liberalization of 1991 is evident from the changing structure of India's Foreign Trade in the form of higher degree of trade openness. Table 3 presents the compound growth rate of exports and imports of India with other BRICS economies for the different time periods.

Table: 3

CAGR for Total Exports and Total Imports of India with other BRICS countries (%)								
Countries	Export Growth				Import Growth			
	1991-96	1997-02	2003-08	2009-13	1991-96	1997-02	2003-08	2009-13
Brazil	50.22	20.29	52.96	36.09	-4.74	11.27	29.97	7.24
Russia	3.67	-4.98	9.39	25.85	13.15	-2.07	41.49	2.63
China	66.32	16.36	31.50	12.17	104.87	18.73	54.27	13.96
South Africa	122.13	3.33	39.63	30.84	136.45	31.40	23.33	9.92

Growth of Indian economy was quite impressive since 2003 till late 2007. Both internal and external factors like high GDP, good monsoon, foreign policy initiatives, expansion of global trade contributed to the good performance of Indian exports. This was also reflected in India's imports and exports to BRICS countries.

5 Trade Intensity Index

The relative importance of two countries in their respective exports and imports is also demonstrated by the trade intensity index. Trade is deemed 'intense' if they trade with each other relatively more than they do with the rest of the world. India's EII was less than one for Brazil in the initial

years of study. Since 2003, India's EII is more than one except for the year 2009. In other words, Indian exports to Brazil are larger than expected on the basis of India's importance in world trade. However, India's III with Brazil is less than one throughout the study period. It indicates that India imports a smaller share of its imports from Brazil than its average from the rest of the world. Therefore, as an import partner, Brazil is of very little importance to India. India's EII was high with Russia till 2004. Since then it has shown a decreasing trend. India's III with Russia has shown a decreasing trend throughout the study period. Despite the long historical relationship between Russia and India, trade and economic ties are still the weakest link in bilateral relations. It could be due to increasing Russian trade with European market rather than its Asian counterparts and India's increasing trade orientation towards other Asian countries.

Fig. 5

Indo-Russia Trade Intensity Index

Indo-China Trade Intensity Index

Indo-South Africa Trade Intensity Index

India's EII with China is less than one for all the years under study except for the year 2005. On the other hand, India's III with China is more than one since 2006 except for last few years. As an import partner, China is more important for India rather than export partner. India's EII and III is markedly high with South Africa while III is comparatively more than EII. It implies that South Africa trade with India relatively more than it do with the rest of the world.

CONCLUSION

The paper assesses dynamics of India-BRICS trade in terms of share of BRICS countries in India's trade and share of India in BRICS trade. India's global trade is increasingly diversified towards developing countries. The trend in total trade has shown the significant rise in both India's exports to and also India's imports from other BRICS countries, with the imports having risen faster than the exports, resulting in a negative trade balance of India with all other BRICS

countries taken together. The results of the study affirm increased share of other BRICS countries in India's total imports, with the primary contribution coming from China. South Africa is also emerging as a significant trade partner of India in BRICS group. The first decade of study period is characterized by relatively low growth of India's trade from other BRICS countries, it is only during the second decade of reforms that India's trade with other BRICS countries gained a momentum. However, the primary contribution to this in terms of value has come from China followed by South Africa. South Africa is also emerging as a significant trade partner of India in BRICS group. As an import partner, Brazil and Russia are less important to India. It is necessary to evolve methods of technological partnership between India and other BRICS countries. Trade treaties among them under formal legally binding arrangements are required. There are very few agreements between India and other BRICS countries (Mercosur-India, South African Custom Union (SACU) and Asia Pacific Trade Agreement (APTA)) and even these agreements do not involve BRICS countries alone. Although India has liberalized its trade policies, still some comprehensive trade agreements should be made between India and other BRICS countries so as to enhance trade relations and trade development. There must be some institutional arrangements by Indian government to reap the gains from trade with other BRICS countries.

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