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Revealed Comparative Advantage and Competitiveness: A Study on BRICS

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Abstract

The BRICS have emerged as a major global force in the global economic arena, with the balance of economic power shifting dramatically towards Asia over the next decades. With 43 percent of the world's population, 46% of the global labour force, 30% of the earth's landmass and 25% of the world share of GDP, the BRICS countries, apart from complementing their respective economies in terms of resource exchange are also the major suppliers to the industrial world. With a cumulative global trade of 20 per cent and generating more than 40 per cent of global economic growth, the BRICS countries, and India specifically as a prominent global leader in trade, are poised to strengthen their relationship through intra-BRICS trade. Between 2001 and 2014 intra-BRICS trade increased nearly 15 times. It is increasing at an average rate of 28 percent annually and currently for USD 300 bn and also the bilateral investment flows among BRICS countries are also on rise - the total FDI inflows into BRICS reached a peak of US$ 322 billion in 2013. In this context the present paper makes an attempt to assess the intensity of trade relations between the BRICS countries and further hypothesize the potentiality of commodity trade among them with respect to 14 distinct sectors. The Study observes that the BRICS countries are complimentary rather than competitive to each other in the various sectors analyzed and presents a greater potential of multilateral trading regime among them which could accelerate the South-South trade.

Keywords: Global economics; Trade relations; Commodities; BRIC countries

Introduction

In 2001, Jim O'Neill Chief Economist of the American bank, Goldman Sachs, in a report "Building Better Global Economic BRIC" first coined the phrase 'BRIC' which stands for Brazil, Russia, India, and China-the four of the fastest growing emerging economies of the world [1]. Looking at the features like size of population, demographic dividend and rate of globalization, Goldman Sachs (GS) forecasted that these four countries had the growth potential to replace the European economy in terms of market size. GS also predicted that China, India, Brazil and Russia would become the first, third, fifth and sixth largest economies respectively, by 2050. However, 'BRIC' as an international forum was formalized with the first meeting of the foreign ministers of Brazil, Russia, India, and China in New York on the margins of the UN General Assembly in September 2006. Later during April 2011, in the third BRIC summit, South Africa joined this forum and "BRICS' was formed. Since then it has become well-known worldwide, and researchers, investors, economists, politicians and many others have focused their attention on these five leading emerging economies of the world. Today the BRICS countries are widely seen as the pistons powering the 21st century global economy as the five BRICS countries together account for 43 percent of the world's population, 46 percent of the global labour force, 20 percent of the earth's landmass, and 25 percent of the world's share of global gross domestic product. BRICS countries have been credited with nearly 50 percent of the world's economic growth. Their share is expected to increase further, as member's growth rates surpass the average annual growth rate of the world economy. As we look back on the last decade, it is clear that the BRICS countries have already begun to play a significant role in the global economy and on the world stage. Virtually unscathed from the recent global economic crisis, these countries are poised for a strong long-term, growth. Between 2001 and 2012 intra-BRICS trade increased 15 times. It is increasing at an average rate of 28 percent annually and currently stands at USD 230 bn and bilateral investment flows among BRICS countries are also on rise. By 2015, a substantial surge is expected in the BRICS' share of world GDP and exports. In this background the paper attempts to explore the intensity of intra-trade relations among BRICS, commodity trade potential (SITC Rev.3. as per Untad classification) between BRICS countries and the prospects for future trade [2].

Objectives of the Study

To analyze the trends and pattern of growth among BRICS countries.

To estimate the extent of Intensity of trade relations among BRICS.

To identify the commodities with trade potential, which could further enhance the trade relations between the BRICS countries?

Need for the Study

The world has experienced a massive transformation in terms of geo-politics, economic and in organization and distribution of production. For several reasons, emerging economies of Brazil, Russia, India and China and South Africa have acquired important role in the world economy as producers of goods and services. The BRICS countries apart from complementing their respective economies in terms of resource exchange are also the major resource suppliers to the industrialized world. The formation of the BRICS was rooted in the long-term common economic interests of the member nations, which include reforming global financial and economic architecture, strengthening the principles and standards of international law and supporting the complementarities of many sectors of their economies. And as Prime Minister Sri. Narendra Modi quoted in his speech in the

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recent BRICS summit at Brazil [3], the BRICS is a unique international institution because for the first time it brings together a group of nations on the parameter of 'future potential', rather than existing prosperity or shared identities. In this background it would be extremely useful to assess the intensity of trade relations between the economies and explore the potential for future trade as BRICS can become the most potential regional block in the world economy in line with EU, ASEAN, G6 and G8 in the near future.

Review of the Earlier Studies

The emergence of BRICS represents an important change in the global political economy and there is anticipation that the BRICS-building on their own lessons and initiatives will play a progressive role on the economic and social issues at regional and global levels. Then there is a critical view on the doubts about the nature and coherence of the group, despite these concerns, the debate on poverty and inequality is integral to any engagement with the BRICS, given its focus on growth and infrastructure. BRICS-led aid and investment activities are expected to have a significant bearing on issues such as the exploitation of natural resource, land garbs, agriculture and food security across regions [4]. BRICS countries, apart from complementing their respective economies in terms of resource exchange, are also the major resource suppliers to the industrialized world. However, these countries have very little cultural or political similarity; and their levels of development differ widely. Given that there were no significant prior economic ties among these countries, the creation of BRICS was a major step towards an alternative global economic landscape. As many studies present that the formation of BRICS was rooted in the long-term common economic interests of the member nations, which include reforming global financial and economic architecture, strengthening the principles and standards of international law and supporting the complementarities of many sectors if their economies [1]. The five key emerging market economies of Brazil, Russia, China, India and South

Africa has been lauded for their spectacular economic growth and resilience they have shown through 2008-2009 financial turmoil. However one significant observation made during the study is the enormous rise of income inequalities in many of these emerging markets–specifically with respect to China, India and South Africa though Brazil has enjoyed a reduction in the same [5]. Though there is an increased participation of BRICS countries in the global sphere and have emerged as a potential regional group but has a limited influence on global monetary policies and world economic and political forum [6]. Also an overview of the philosophies and modalities of BRICS financing presents that the philosophies of most BRICS countries for development financing differ from traditional donors in three main ways: BRICS, with the exception of Russia, provide financial assistance based on the principle of 'mutual benefits' in the spirit of South-South co-operation, while Russia and traditional donars emphasize the role of aid in poverty reduction. Second BRICS particularly China view policy conditionality as interfering with recipients' sovereignty and tend to provide noncash financing as a means to circumvent corruption, whilst traditional donors view policy conditionality as a means to ensure efficient use of aid. Third, different emphasis is placed on how to ensure debt sustainability, with some BRICs giving a greater weight to micro sustainability and growth while traditional donors paying more attention to long-run macro sustainability and emphasis is placed on how to ensure debt sustainability, with some BRICS giving a great weight to micro sustainability and growth while traditional donors paying more attention to long run macro sustainability [7].

Methodology

The study is carried on the basis of secondary data. The data was collected through a wide variety of sources viz., journals on international trade, yearbooks publishing statistical data with respect to trade viz., World Bank, UN, Unescap, IMF, WTO, and Uncomtrade and through different online data sources, web sites, text books, magazines etc.

The analysis was done by adopting the following trade indices.

- Trade Intensity Index
- Revealed Comparative Advantage Index
- Trade Dependency Index

Trade intensity index

Trade Intensity Index (TII) is popularly used to determine the total value of trade that exists between any two countries. It can be defined as the share of one country's exports going to the partner country which is divided by the share of world exports going to the same partner. This can be expressed as:

TII: xij/xit / xwj/xwt

Xij is the country's 'i's total exports to 'jth country. Xit is the total value of 'i'country's exports. Xwj is the total value of the world's exports to 'jth' country i.e. partner and xwj is the total value of the world exports. The TII value ranges between o and 1. A value of '0' indicate a lower degree of Trade Intensity Index (TII) between the countries and '1' a higher Trade Intensity Index TII value.

Revealed comparative advantage index

The paper used the Revealed Comparative Advantage Index (RCA) as proposed by Balassa's Index [8] to identify the commodity trade potential between the countries. The RCA indices have been calculated at SITC-2 digit level classification. The RCA index is used to identify the commodity trade potential between countries and also indentifies potential of trade between new partners. The RCA measures at a higher level of product disaggregation can provide useful information about trading with nontraditional products between the countries. The RCA can be expressed as:

RCAij= xij/xit / xwj/xwt

Where,

xij: Exports of ith country in 'j'th product

Xit: Total Exports value of the ith country.

Xwj: Total World Exports of 'j'th product

Xwt: Total World Exports

The RCA index ranges between o and 1, an RCA index equals to 0 indicates a disadvantage of a country in exports a commodity category and a RCA value 1 indicates a higher degree of advantage for the country in the exports of the products.

Revealed import dependence index

The Revealed Import Dependence Index (RID) expresses the import dependency of a country on a particular product category [9]. As RCA presents the comparative advantage, the RID presents comparative disadvantage of a country in the particular product category which can be expressed as follows:

$$\mathbf{RID_i = (M_{ia}/M_a)/\,(M_{iw}/M_w),}$$

Where M_{ia} is equal to imports of commodity 'i' from a country 'a',

M_a is equal to total imports of a country 'a',

M_{iw} is equal to total value of the world imports of commodity i and

M_w is equal to total world imports.

As in the case of RCA index, an RID index exceeding one suggests a strong dependence of the country on the import of a specific item in a reference period and vice-versa.

While an RCA analysis explains about the comparative advantage that a country enjoys in the export of a certain commodities in general, it does not necessarily tell us about the specific import requirements of the countries being focused for exports. So, although one country may have a comparative advantage in a specific commodity category the other country may not have an important requirement therefore RCA among the BRICS countries is compared with the RID for the same commodities among them as this will give a more reliable picture of the export potential of the commodity trade among them.

The RCA and RID values for 14 distinct product category were shown in Annexure 1 (SITC Rev.3. as per untad classification). BRICS countries are calculated and matched to assess the trade potential between the nations.

Trade Share

The paper calculates trade share of individual BRICS countries as the percentage of trade with the partner country to the total trade of a country/region. It is calculated as the value of the total trade of a country 'i' with the partner country 'j', expressed as a percentage share of the dollar value of the total share of the country 'i' with the world [10-12]. A higher value of trade indicates a higher degree of integration among the countries and vice versa. The following Table 1 presents the Intra-BRICS trade as a percentage of individual BRICS countries total trade.

BRICS as drivers of global economic growth

The five BRICS countries are distinguished from a host of other promising emerging markets by their demographic and economic potential to rank among the world's largest and most influential economies in the 21st century. In the last two decades there has been phenomenal growth in the intra-BRICS trade. Intra-BRICS trade is about USD 300 billion and has the potential of more than doubling to USD500 billion by the end of 2015 [13-15]. Table 1 presents the Intra-BRICS trade share.

Year	Brazil	Russia	India	China	South Africa
1995	2.178	4.184	7.185	4.210	3.420
1996	3.374	3.982	5.868	4.978	3.524
1997	3.325	4.609	7.061	4.246	3.640
1998	3.201	5.138	6.911	3.566	3.983
1999	3.058	5.870	9.020	3.406	4.856
2000	3.680	4.692	8.556	3.697	4.131
2001	3.988	5.996	9.654	4.387	4.639
2002	4.513	6.682	12.348	4.294	4.962
2003	5.133	7.716	12.516	4.501	5.887
2004	6.234	7.857	13.158	4.585	7.112
2005	7.295	8.806	13.940	4.796	7.954
2006	8.905	8.706	14.218	4.511	8.765
2007	11.099	10.875	15.969	4.555	8.153
2008	13.778	10.111	16.554	5.318	7.254
2009	13.011	9.485	20.240	5.692	8.910
2010	16.010	11.847	19.456	5.990	9.589
2011	16.795	11.650	17.592	7.210	9.373
2012	17.963	12.256	17.385	7.342	10.282

Table 1: Intra-BRICS Trade as Percentage of Individual BRICS Countries Total Trade.

The observed growth of intra BRICS trade is largely based on exports of low technology natural resources and largely driven by Chinese demand for inputs goods. Off late India, Brazil and South Africa have switched to China as their main trade partner. With respect to Intra-BRICS trade, the share of India has always been significantly high. India has remained an important market for Brazil and South Africa while becoming more important for Russia. In the year 1995 the share of Intra-BRICS trade of India was 7.18%, this has been gradually on rise to 17.38% by the year 2012. For India, China has emerged as the largest trading partner with largest importation source and third largest export destination since last two years. For Brazil too, the Intra trade has been on rise after the year 2001, which is known for its agricultural exports and imports of manufacturing items. China ranked the largest export and importer country for Brazil in 2013. The share of Russia is 4.18% in the year 1995 and this rose to 4.69% in the year 2000 and 12.25% by the year 2012. The main trading partners of Russia have been the non-BRICS countries.

The Intra-trade share of China is 4.2% in the year 1995 and this rose to 7.3% by the year 2012. A close analysis of Intra BRICS trade indicates that China has become the main source of imports to all the countries at the expense of other traditional trading partners. With respect to South Africa the Intra-trade with BRICS has been significantly on rise as aid for the other BRICS countries and promotes their trade and investment, but the BRICS continue to support Africa's development through project aid-aimed at improving infrastructure concessional and soft loans as well as credit grants. The Intra-trade of South Africa increased from 34% in the year 1995 to 10.2% by the year 2012. India and China are the largest stake holders in the total intra- trade among BRICS and account for 80 percent of exports and imports to all other BRICS countries.

Trade Intensity Index

The BRICS economies have been increasing their economic weight over the past decade, consolidating external linkages and capitalizing on their unique competitive positions in export-import markets [16]. Intra-BRICS trade flow has increased exponentially from a total volume of USD 27 billion in 2000 to the current level of USD 230 billion. The countries have also committed to increase their trade volume to USD 500 billion by 2015 [17]. In this context it is useful to assess the Intensity of trade relations among the BRICS countries. The present study investigates the Trade Intensity Index (TII index) between the individual BRICS countries and aggregate of rest of the BRICS together for the period 1995 to 2012 and analyzed to assess the intensity of trade [18]. Since the average of intensity index is 1.0, the computed index being greater than one would indicate a higher degree of trade intensity between the two given countries. In cases where the results of the computation moves closer to zero it would imply a lesser degree of trade intensity between the countries. The study illustrates greater degree of trade intensity among the BRICS countries.

Over the past few years Brazil has emerged as an important player in the World market alongside of the BRICS regional grouping (Figure 1). Brazil during the last decade has exhibited a greater integration of trade with the rest of the BRICS countries in terms of exports and also

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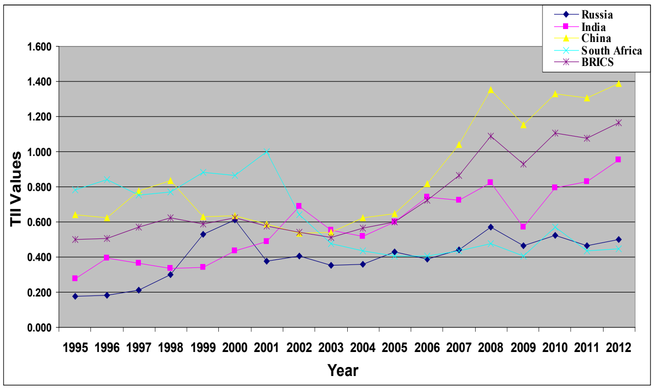
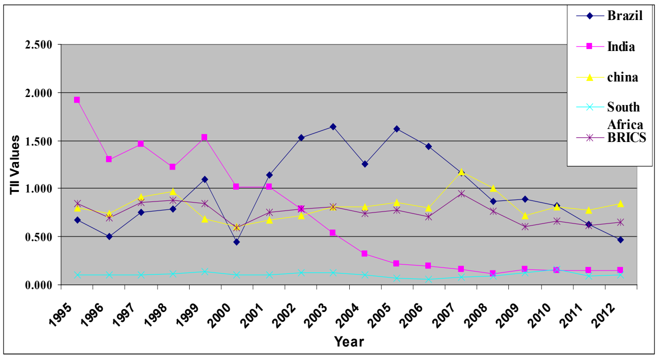


Source: Author's Calculations based on data from unctad.org

Figure 1: Trade Intensity Indices between Brazil and rest of the BRICS.



Source: Author's Calculations based on data from unctad.org

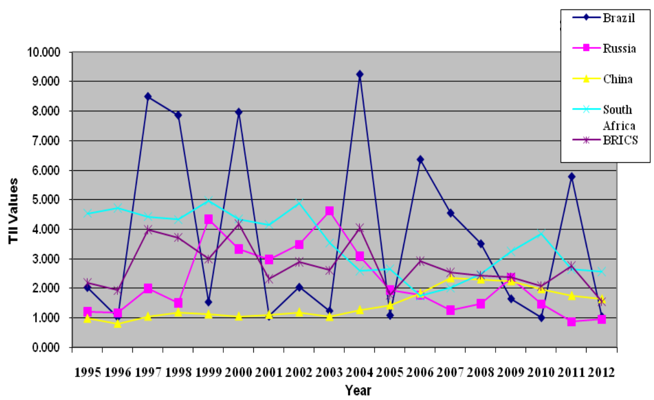
Figure 2: Trade Intensity Indices between Russia and rest of the BRICS.

imports. During the year 1995 the TII of Brazil with Russia stands at 0.17, India at 0.275 and for China and South Africa it is 0.675 and 0.783 respectively [19]. The study observes that its TII of Brazil is high with China for most of the period under study as for 2007 (1.03) till the year 2012 (1.38), and China has emerged as the largest trading partner with Brazil. The Asian country had already surpassed the United States in terms of importing, and in 2012, also excelled the North Americans in exporting. The Intensity Index with other BRICS countries were lower than one for the whole period of study, for the year 2012 the TII Index value stands as with Russia (0.499), India (0.951), South Africa (1.162). Whereas with the whole BRICS as a group the TII index presents a value of 1.162 for the same period [20].

Russia, in addition of holding the largest gas reserves and production globally, also plays a dominant role as oil producer as its oil companies locate and exploit new reserves. The TII of Russia with individual BRICS countries and aggregate value presents that with India and Brazil it exhibits a greater Intensity Index (Figure 2). For India, Russia has been a traditional trading partner as important source of imports and slowly it has been replaced by China and East Asian economies. With Brazil too Russia exhibited a greater Intensity Index from the year 2001 till the year 2007; the index value is greater than one. Thereafter there was a decline and the TII index of Russia with Brazil registered at 0.46 for the year 2012 but still Russia was ranking among the top 10 importing nations for Brazil, especially with petroleum exports followed by China with average TII value for the study period registered at 0.86. China's imports from Russia are especially Oil and fossil fuels, as China is largest oil consumer among BRICS along with India whereas Russia and South Africa are oil producers [19,21]. The TII values of Russia with South Africa presents a smaller index, for the initial period of study it is 0.09 and by the year 2000 it is 0.10 and also the index is 0.099 for the year 2012. Russia is the small trader among BRICS. Africa's exports are mainly food products to it represent only 1 percent of the BRICS total and in the other direction the exports equivalent figure is only 7 percent although growing. Russia has been mainly investing in South Africa in the fuel and energy and bilateral and focuses mainly on food security and education [22].

India presents greater intensity of trade with rest of the BRICS countries as the Intensity Index value exhibits greater than one with Brazil, Russia (except two years), China (except for initial two years) and South Africa for the whole period of study (Figure 3). South Africa has been emerging as one of the most important export destination and 6th largest investment source for India especially with respect to importation of consumer goods [23,24]. Similarly with Brazil, the traditional trade partner to India also presents a greater intensity of trade**.** India's exports to BRICS countries was highest to Russia followed by China during 1999-00, this scenario completely changed during 2005-06 as China occupied the first place followed by South Africa. It was lowest to Russia (733.04 USD mil) in 2005-06. During the year 2011-12 India's exports to China increased to USD 16416.82 mil followed by Brazil and South Africa. India's overall exports to BRICS countries is 36759.52 USD mil, which doubled in 63886.49 USD mil in 2005-06 and then to 19456 USD mil in 2011-12.

The Figure 4 presents Chinese trade with rest of the BRICS. China the most happening economy among the BRICS countries holding the largest amount of forex reserves and growing on an average of 10 percent since the last ten years. The investigation of the intensity index with the rest of the BRICS presents that the TII of China is on rise for Brazil from the year 2002 the TII is greater than one for all the years under study as China has intensified its trade relations with Brazil the overall trade increased from USD6.5 billion to USD 77 billion between 2003 and 2012. The Intensity index of China with India is lower than one presenting a lower trend throughout the period of study. The average index for the whole period has been 0.62 which is lower than one though in the recent years China emerged as a largest source of importer for India and top the three export destination to the Indian exports, this has been less when compared with other BRICS partners of China. There has been a gradual rise of China's exports to South



Source: Author's Calculations based on data from unctad.org

Figure 3: Trade Intensity Indices between India and rest of the BRICS.

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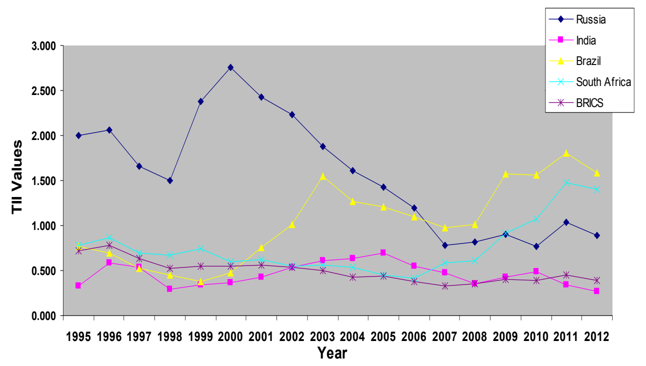

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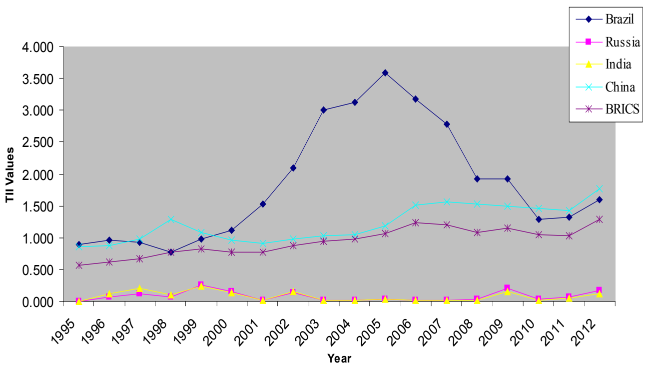
Figure 4: Trade Intensity Indices between China and rest of the BRICS.



Source: Author's Calculations based on data from unctad.org

Figure 5: Trade Intensity Indices between South africa and rest of the BRICS.

Africa, its exports of goods to China have grown faster than imports and Chinese companies continue to allocate resources to grow their presence in South Africa. The TII value of China with South Africa for the initial period of study is 0.781 and this has gradually increased to 1.397 for the year 2012 as China-African trade volumes have grown accordingly there, the total volume of trade was at USD 198.5 billion in 2012. The research from Standard Chartered estimates that trade between China and Africa will cross USD385 billion by 2015. China has been importing oil and raw materials from Russia over an eight-year period ending in 2012, direct foreign investment by Chinese companies in Russia increased 40 times to reach USD 4.9 billion. While trade reached a record high of USD 88 bn (£54 bn) in 2012, the two countries plan to raise the volume to USD100 bn by 2015 and $200 bn by 2020, this could be seen in the TII values between China and Russia as the TII value on an average recorded an index above 1.

Co-operation between South Africa and the BRICS has gained new momentum and generated much interest in the recent years (Figure 5). This is because these countries–Brazil, Russia, India, China and South Africa are playing an increasingly prominent role in global trade, investment and finance within this trend Africa has deepened its engagement, with these countries not only in trade, investment and finance but also in diplomatic and cultural relations [25,26]. The initial TII index for the year 1995 is 0.54 and this gradually is on rise and further the index has been exhibiting a value greater than 1 since the year 2005 (1.06) till the year 2012 (1.25). Among the BRICS countries South Africa revealed a greater intensity of trade with Brazil and China followed by Russia and India. The Intensity Index exhibits South Africa's Index with Brazil has been greater than one since the year 2000 as Brazil emerged as one of the largest source of imports especially with respect to food products and also ranked among the important export destinations. Two key features of Chinese trade stand out with South Africa. First, China's export shares of South African oil exporters are substantial and second the African countries import heavy shares of their manufactured goods from South Africa from the year 2010 the TII index of South Africa is greater than one. The TII index of China is the highest with Russia, it has registered on an average of 1.5 for the whole period of the study, As Russia holds the largest oil reserves over 74 barrels billion and emerged as an important export destination for the other BRICS economies.

Revealed Comparative Advantage an Analysis

The individual composition of exports reflects the diverse resource endowments present within BRICS. This presents a significant opportunity for leveraging existing trade ties and cooperation while serving the economic growth and development agenda, a necessary precursor to faster socio-economic convergence with advanced economies. Trade in goods and services provide multiple sectoral opportunities for cooperation among the BRICS countries, which can be mutually beneficial. For the purpose, the Revealed Comparative Advantage Index (RCA) and Revealed Import Dependency Index (RID) were calculated for each of the BRICS countries [13,27]. The RCA of each country is matched with the RID of the corresponding other BRICS countries to explore the potential for commodity exports. As RCA presents competitive advantage of the country in the export of an item RID presents the import potential of the partner country for the same. So for each BRICS countries the products where the RCA>1 are matched with products where the RID>1 this would present the products with significant trade potential among BRICS (Table 2).

Brazil is currently a major producer of bio-fuels and may eventually be a major energy producer to the Chinese and Indian economies, which have significant energy demands. Brazil also dominated the export of the agrochemical products, which feature prominently in the import basket of Russia, India and China. Also it exhibits a significant export potential for Food, Fuels and Mining and Iron and Steel, when this is matched with partner countries Revealed Import Dependency Index (RID) of Russia, India, China and South Africa it is observed that Brazil and Russia have two commodities (Food and Fuels) which are feasible for trade among them [28]. Similarly Brazil and India has two commodities (Fuels and Mining, Iron and Steel) and between Brazil and South Africa the products category Fuels and Mining is feasible for trade. One significant observation is no commodity is identified for trading with China among the product category analyzed as China has emerged as largest importing source to BRICS at the cost of their traditional partners and Intra-BRICS trade is asymmetrical as it is driven largely by Chinese demand for inputs (Supplementary Data).

Russia exhibited greater potential in the area of Fuels and Mining, Fuels, Iron and Steel and this is matched with the import dependency of the other BRICS countries it is observed that two commodities has been identified for trade, Fuels and Mining and Fuels for Brazil and South Africa. Also in the same line South Africa and India has been observed to have trade potential with Russia for the product category Fuels and Mining, Fuels and Iron and Steel. And China could not be identified for trade feasibility under any product category taken for study. India exhibited competitive advantage for (RCA>1) for eight distinct product category group Food, Fuels and Mining, Fuels, Manufactures, Iron and Steel, Chemicals, Pharmaceuticals, Textiles and Clothing and

Brazil and Russia	**Brazil andIndia**	**Brazil and China**	**Brazil and South Africa**
Food	Fuels and Mining	Nil	Fuels and Mining
Fuels	Iron and Steel		
Russia and Brazil	**Russia and India**	**Russia and China**	**Russia and South Africa**
Fuels and Mining	Fuels and Mining	Nil	Fuels and Mining
Fuels	Fuels		Fuels
	Iron and Steel		
India and Brazil	**India and Russia**	**India and China**	**India and South Africa**
Fuels and Mining	Food	Nil	Fuels and Mining
Food	Pharmaceuticals		
China and Brazil	**China and Russia**	**China and India**	**China and South Africa**
Machinery and Transport	Machinery and Transportation	Iron and Steel	Telecommunications
Telecommunications	Telecommunications		
Textiles	Automotive Products		
Clothing			
South Africa and Brazil	**South Africa and Russia**	**South Africa and India**	**South Africa and China**
Fuels and Mining	Agricultural Products	Fuels and Mining	Nil
Chemicals	Food	Iron and Steel	
Pharmaceuticals	Pharmaceuticals		
Automotives	Automotives		

Source: Feasibility data based on Annexure 1.

Table 2: Commodities feasible for trade among BRICS countries.

for 3 products it exhibited RID>1 i.e. dependency index. When this RID>1 is matched with the RCA>1 for other BRICS countries it was observed that for Fuels and Mining, Food they matched with Brazil, with Russia for Food and Pharmaceuticals and for South Africa, Fuels and Mining. Like others between India and China has no commodity has been identified for trading [29].

Commodities feasible for trade among BRICS countries is shown in Table 2. China has been observed with RCA>1 for 8 product category as it is currently dominating the world with its low cost manufactured commodity exports. Iron and Steel, Machinery and Transport Equipment, Office and Telecommunications Equipment, Electronic data processing and Office Equipment, Tele Communications Equipment, Integrated Circuits and Electronic components, Textiles and Clothing. No commodity has been observed under the RID> 1 category. When commodities RCA>1 are matched with commodities RID>1 of individual BRICS countries it is observed that for Brazil 4 commodities Machinery and Transport Equipment, Tele Communications, Textiles and Clothing are feasible for trade, with Russia machinery and transportation, telecommunication, automotive products are feasible for trade. It has been identified that only one product category among 14 product categories Iron and Steel is feasible for trade between India and China and one product Telecommunications between China and South Africa and off late China has been the largest investor in the infrastructure sector of South Africa. With respect to South Africa five product categories has identified with greater comparative advantage (RCA>1) Food, Fuels and Mining, Iron and Steel, Chemicals and Automotive Products and for six commodities displayed an RID greater than one (Fuels and Mining, Fuels, Telecommunications, Automotive Products, Machinery and Transport Equipment). This is matched with the partner countries RID of the partner countries it is found that the product category of Fuels and Mining, Chemicals, Pharmaceuticals and Automotive products are feasible for trade with Brazil and for Russia it shows feasibility with Agricultural Products, Food, Pharmaceuticals and Auto motives. Two commodities have been identified with India under the Fuels and Mining and Iron and Steel category and no commodity is found feasible for trade with China.

Conclusion

The analysis presents that the BRICS countries are complementary rather than competitive to each other with respect to commodity trade in the 14 categories analyzed for the study, among the 14 categories, Brazil could trade with rest of BRICS in 5 categories, Russia in 7 categories, India in 5 categories, China in 9 and South Africa could trade in 10 commodity categories with the other BRICS partners presenting a greater potential to intra BRICS trade. The BRICS grouping could evolve as a powerful platform to intensify south- south co-operation in trade and investment activities instead of dependence on the West, and off late this has already proven to be the right platform to voice the needs of the developing world and with the evolution of BRICS Development Bank on July 1st, 2014 at the Brazil Summit, the world economy is closing watching this group which could soon pose a challenge to the developed world and evolve into powerful regional group in the near future. Further the new development bank would not only cater to the infrastructure and financial needs of the member countries but also act as an important catalyst to accelerate trade and sustainable development of the region.

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