EU-BRIC Trade Assessment: Introversion, Complementarity and RCA¹

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Abstract:

BRIC countries are now at their growing momentum and the EU plays a substantial role in their trade relations. This paper examines EU-BRIC bilateral trade relations. The trade introversion index between EU-Russia and EU-China has had a slightly persistent growing pattern since 2001 while on the contrary the index between EU-Brazil and EU-India has been falling. Similar behavior is observed also for India-China, Brazil-China and Brazil-Russia, Russia-China partners respectively. Together with these findings the paper assesses the tendency of the trade complementarity, and similarity index between the EU and BRIC countries from 2001 to 2009. The trade potential is revealed by RCA and analyzed at a 2-digit HS level.

Key words:

trade introversion index, complementarity index, RCA, EU, BRIC

Introduction

In 2001 Goldman Sachs introduced newly coined emerging markets - BRIC (Brazil, Russia, India and China) economies. Since then their potential has been growing and they have become more involved in the world's trade and are increasing their shares as trade partners. The EU and the USA still constitute a substantial share in the world's trade but in recent years show a declining tendency of their share in the world's market while on the contrary mainly China's share is constantly increasing. Nonetheless, the EU still remains one of the biggest trade partners for all BRIC economies. There are on-going discussions on the establishment of preferential free trade areas between the EU and MERCOSUR, EU-India and EU-Russia. However, BRIC economies are not falling much behind therefore, we are witnessing their aims for creation of closer trade cooperation among themselves as well e.g. China-India and Brazil-South Africa-India.

The aim of this article is to identify whether there are any possibilities of potential bilateral trade creations, for BRIC/EU countries, and for which commodity groups. In order to provide a more complex trade overview the paper assesses various trade indicators such as the trade introversion index, revealed comparative advantage, complementarity index and the similarity index for cross-commodity, cross-country and over-time comparisons.

The first chapter provides a brief literature review of research from other scholars on the similar topic. This chapter is followed by a description of used methodology and data collections used in the rest of the paper. Subsequently, chapter three overviews the EU and BRIC world trade share in 2001 and 2009. The fourth chapter assesses tendencies of trade development based on the trade introversion index, which determines whether the countries trade intensity with each other is more or less in comparison to other partners. This analysis is further extended in the fifth chapter by the complementarity and similarity index in order to observe the overlap degree of the countries' exports and imports. A deeper commodity trade

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analysis is conducted by a calculation of revealed comparative advantage (RCA) in the sixth chapter. The RCA calculation identifies the countries' specialization and space for potential trade development.

Literature Review

A general overview of the trade indicators for evaluation of potential economic effects of free trade agreement are presented by Cheong (2010) in the Asian Development Bank working paper. This work provides an overview of all important trade indicators from the trade intensity to a computable general equilibrium model.

In order to be able to identify the country's specialization at the commodity level Balassa (1965) brought in a formula of revealed comparative advantage. Even though some authors like lapadre (2001) pointed out the imperfections of RCA, the Balassa index remains the most spread among other formulas due to its calculation simplicity. A later analysis of geographical orientation of exports in accordance with the comparative advantage was presented by Yeats (1997) as he carried out research on the MERCOSUR countries sample.

Kojima and subsequently Drysdale in 1967 first introduced the trade complementarity index measuring the level of export and import patterns matching two countries at all commodity levels.

The analysis presented by lapadre (2006) further elaborated the trade intensity index (lapadre 2004) and first proposed the trade introversion index as a result of interpretation difficulties and ambiguity of already existing trade intensity indices. Research was conducted on several regional groups where he newly calculated the introversion index which eliminated previous ambiguities.

In the past few years there were several researches carried out covering comprehensive studies on regional trade. A regional trade analysis of Indian-ASEAN relations was performed by Chandran (2010), bilateral Indo-Chinese research on trade was conducted by Bhat et al. (2006) and South-Asian trade potential was assessed by Wadwha (2009). One of the most complex research studies was done by Havlik et al. (2009) who elaborated EU-BRIC trade in goods and services as well as with the comparison to the US and Japan. Bilateral trade intensity and trade complementarity between EU and BRIC and BRIC to BRIC countries was elaborated by De Castro (2011). Similarly Singh et al. (2011) investigated bilateral trade flows of BRICS countries by various trade indices for the years 2001 to 2009.

The Methodology and Data

The analysis of mutual trade intensity is conducted by the calculation of **trade introversion index**. It reveals trade intensity within the region in comparison to trade intensity with other countries out of the region. This index is defined as a subtraction of extraregional trade intensity from intra-regional trade intensity divided by the sum of extra and intra regional trade. In our case:

$$TII_{ij} = rac{[HI_{ij} - HE_{ij}]}{[HI_{ij} + HE_{ij}]}$$
 where $HI_{ij} = rac{rac{T_{ij}}{T_{iw}}}{rac{T_{oj}}{T_{ow}}}$ and $HE_{ij} = rac{[1 - rac{T_{ij}}{T_{iw}}]}{[1 - rac{T_{oj}}{T_{ow}}]}$

 T_{ij} is trade (exports plus imports) between reporting country i and partner country j,

 T_{iw} is trade between reporting country *i* and the world;

 T_{oi} is trade between the rest of the world (excluding country i) and country j;

 T_{ow} is trade between the rest of the world and the world.

TII index reaches values from -1 to 1. Negative results imply extra regional bias, positive numbers intra regional bias. Zero value indicates geographic neutrality.

The cross-country trade comparison of this paper stems from the analysis of the **Trade Complementarity Index (TCI)**. TCI reveals an overlap of export patterns from one country to the import profiles of a partner country.

$$TCI = \left(1 - \sum_{i} \left[\left| \frac{\sum_{w} m_{iwd}}{\sum_{w} M_{wd}} - \frac{\sum_{w} x_{isw}}{\sum_{jr} X_{sw}} \right| \div 2 \right] \right) \times 100$$

where

d is importing country of interest;s is exporting country of interest;

w is set of all countries in the world;

i is set of industries;

x is commodity export flow;

X is total export flow;

m is commodity import flow;

M is the total import flow.

The TCI value can range from 0 to 100. Zero implies no complementarity and the threshold value of 100 counts for the complete export-import overlap. Higher TCI thus identifies better trade prospects for examined trade partners.

Furthermore, the paper conducts calculations from the **Export Similarity Index (ESI)** with the purpose of competitor identification. This enables a comparison of export structure from one country to export structures of another country. ESI is defined by the following formula:

$$ESI = \sum_{j} \min \left(\left[\frac{x_{ij}}{x_i} \right], \left[\frac{x_{jk}}{x_k} \right] \right)$$

where

 x_{ii} is export of commodity j by country i;

 x_i is total export by country i;

 x_{kj} is export of commodity j by country k;

 x_k is total export by country k.

The values reach levels from 0 to 1. Zero value represents no similarity at all while one means complete export similarity. Both indices (TCI and ESI) can be used for a revelation trade potential of considered partners.

In order to define the specialization in product groups or commodities that bring the country a comparative advantage in the world the Balassa index of **Revealed Comparative Advantage (RCA)** was chosen for identification. The RCA index is defined as a ratio with an export of a particular commodity j of the examined country i to the total country's export as a numerator, and share of the world exports of commodity j to the total world exports as a denominator.

$$RCA = \frac{\frac{x_{ij}}{x_i}}{\frac{x_{wj}}{x_w}}$$

where

 x_{ij} is export of commodity j by country i;

 x_i is total export of country i;

 x_{wj} is export of commodity j by the world;

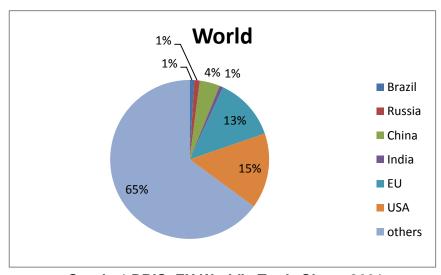
 $x_{\rm w}$ is total export by the world.

The RCA index holds a value of 0 to infinity. When RCA equals unity it means neutrality; there is no comparative advantage or disadvantage in the production of a commodity. Values from 0 to 1 indicate the comparative disadvantage, and values above 1 indicate the comparative advantage.

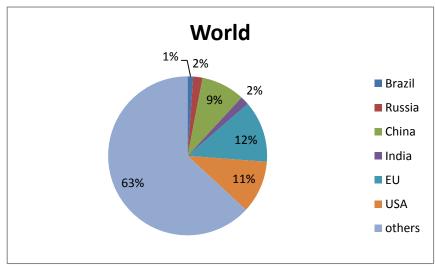
The post-trade calculations of exports and imports were conducted for commodities at the HS2 level (97 chapters of Harmonised System classification). Data was collected from the International Trade Centre online database for the years 2001 to 2009.

BRIC and EU in the World Trade

BRIC economies have become more integrated into world trade since 2001 which reflects their growing importance to the world economy. In 2001 (graph 1) BRIC countries together with the EU and USA contributed to 35% of the world's trade. Whereas, the EU's and the US' trade share in 2001 was 13% and 15% respectively, BRIC economies contributed 7% of the world's trade. Nearly a decade later (graph 2) the BRIC's share grew to a total of 14%, mainly due to China's rising involvement in the world's trade which increased from 4% in 2001 to 9% in 2009. On the contrary, the world's total shares from the EU and the USA decreased by 1% and 4%.



*Graph. 1 BRIC, EU World's Trade Share, 2001*Source: International Trade Centre database (2010)



Graph. 2 BRIC, EU World's Trade Share, 2009

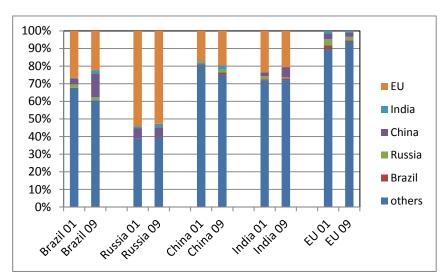
Source: International Trade Centre database (2010)

The following graphs 3 and 4 represent country export composition of BRIC countries and the EU according to destination. In the case of Brazil we can observe an increase in exports to China and India mainly at the expense of exports to the EU and other countries.

A composition of Russian exports remains nearly unchanged whereas; all studied countries participated in 2009 with higher weights on Chinese exports than in 2001. The biggest relative increase is comprised by India, followed by Brazil and Russia while the EU is lagging behind. Chinese export shares to BRIC and the EU economies increased while shares of the rest of the world declined.

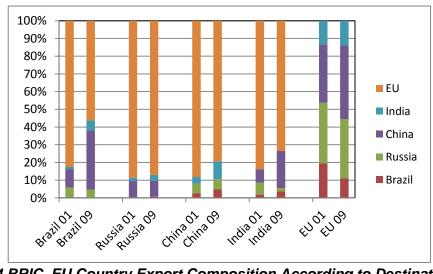
As far as India, only changes in export rearrangement were recorded within the studied economies. Indian exports to other countries remained stable. Graphs 3 and 4 denote a rising share of China in Indian exports at the expense of exports to the EU and Russia.

From the EU perspective the importance of exports to BRIC countries in comparison to the rest of the world is declining. The relative share of EU exports to BRIC economies is nearly without any changes for India and Russia whereas, relative change of China increased at the expense of Brazil.



Graph. 3 BRIC, EU Country Export Composition According to Destination, 2001 and 2009

Source: International Trade Centre database (2010)



Graph. 4 BRIC, EU Country Export Composition According to Destination, 2001 and 2009

Source: International Trade Centre database (2010)

BRIC-EU Trade Introversion, Complementarity and Similarity

The analysis of mutual trade was conducted through the Trade Introversion Index (TII), which reveals the gradual changes in trade intensity for the EU-partner and BRIC-partner economies (graphs 5-14). TII for all EU-BRIC countries is larger than zero which means that their mutual trade is at a higher level than their average trade level with the rest of the world. The highest TII was calculated for EU-Russia, followed by EU-Brazil, and EU-India which have a slightly decreasing tendency. The smallest TII is a characteristic for EU-China however, with a growing trend. In 2009 TII reached the same level as EU-India.

The biggest changes were recorded for the pairs Russia-India, Brazil-China and Brazil-India. The most stable TII growth is for Brazil-China whose TII changed from negative value to positive. Nowadays, it can be seen that it had reached the same value as EU-China TII.

A persistent declining trend of TII for Russia-India and Brazil-India turned to growth in 2007. Brazil-Russia and Russia-China have a slightly declining tendency from positive to negative value i.e. currently their mutual trade does not reach the average level with other countries. The tendency of India-China TII growth in the last years had been with minor fluctuations and since 2003 has remained positive. The highest TII value was recorded for EU-Russia reaching the highest threshold value from all examined pairs of nearly 0.8.

A detailed observation of CI and ESI could reveal a potential possibility for further mutual trade. According to theoretical assumption the higher the index of complementarity the better chances for mutual trade. On the contrary higher SI may result in a decrease of mutual trade.

The evolution of Brazil-Russia (graph 5) and India-China (graph 10) CI corresponds to the development of TII which confirms the theory that higher CI may lead to higher intensity of mutual trade. The average similarity index is more or less constant and decreases respectively.

For Brazil-China (graph 7) the CI reveals a mild growing tendency and the TII recorded a greater increase. The development of the introversion index corresponds to a decrease of the similarity index. The CI for Russia-China (graph 9) improved, the similarity decreased, and thus according to the theoretical assumption the intensity of mutual trade should increase. But empirical results show a decline in TII, i.e. for some reasons the countries are oriented elsewhere. The TII of Brazil-India (graph 6) and Russia-India (graph 8) has a rather complicated behaviour. From the year 2005 to 2009 the behaviour of similarity and introversion indices are in theoretical harmony but not with TII. The local minimum of TII in

2007 for both pairs could be explained by the intensity growth of trade between India and China.

CI and ESI for EU-Russia (graph 12) remain nearly unchanged over the past five years. Average TII is also without significant changes. EU-Russia demonstrate the largest gap between CI Russia-export/EU-import (around 80%) and conversely (around 30%). CI and ESI for EU-India (graph 13) have an increasing trend, but TII decreases. This decrease is in conformity with the theoretical assumption for ESI but not for CI. The situation of China-EU (graph 14) is even more complicated. In this case there is no significance between CI, ESI and TII. It means that mutual trades of both pairs (EU-India, EU-China) are probably influenced by other various factors.

EU-Brazil (graph 11) TII corresponds more or less with average complementarity and similarity indices.

BRIC-EU Revealed Comparative Advantage

The basic theory of international trade stems from different factor endowments of the economy which reflect in a comparative advantage of a particular country. Therefore the following section conducts a deeper analysis of trade at a HS2 commodity level by the calculation of a Revealed Comparative Advantage (RCA).

Overall, China enjoys the largest number of RCAs, in 44 out of 97 commodity groups. The EU falls in second place with RCAs with 42 out of 97 commodity groups. India and Brazil reveal a comparative advantage with 37 and 31 commodity groups respectively, while Russia has the smallest share of RCAs, with only 14 out of 97. In general, the trend number of commodity groups with RCA for all countries was increasing slightly from 2001 to 2007 (Brazil from 35 to 36, China remained 47, India from 42 to 43, and EU from 43 to 46) with the exception of Russia (from 15 to 12). The following years showed a drop in the number of RCAs in 4 commodity groups per country on average. Only Russian RCAs were somewhat increasing.

Potential intra-regional trade may occur according to the trade theory if countries export those products where they have RCA to other countries that are lacking the RCA at a particular commodity level. This statement is valid particularly when an imported commodity is significant in the overall country imports. Therefore, the next analysis focuses only on the top 10 imported commodity groups (in value) of a particular country. The top 10 products contribute to the total imports by 80% in India, 79% in China, 74% in Brazil, 63% in Russia and 62% in the EU.

Tables 1-5 (in the appendix) illustrate the top 10 imported products of the examined countries and suggest potential importers under two conditions:

- potential importers reveal a comparative advantage (RCA>1) in exports of particular products;
- RCA of an imported commodity group of a destination country is less than unity.

Tables include not only RCA but also information about the share of importers at a particular commodity level.

Table 1 represents the top 10 imports by Brazil. For nine out of the ten presented commodity groups, there is at least one country (BRIC or EU) that has RCA above unity in production of that commodity. When looking at trade potential based on the number of RCAs above unity then the highest potential for trade development would have the EU followed by China. For three commodity groups, namely: 84 – Machinery, nuclear reactors, boilers, etc.; 29 – Organic chemicals; and 90 – Optical, photo, technical, medical, etc. apparatus there are two potential importers China, EU; India, EU; and China, EU respectively.

Table 2 displays the largest ten imports to Russia. Potential trade in eight commodities could be increased again by at least one of the BRIC countries and/or the EU. From the number of comparative advantage perspectives the EU and China have the highest chance of developing a potential bilateral trade with Russia. Potential importers China and the EU

overlap in the following commodity groups: 84 – Machinery, nuclear reactors, boilers, etc.; 90 – Optical, photo, technical, medical, etc. apparatus; and 73 – Articles of iron and steel. The comparative advantage is also revealed by India in the last commodity, thus it can also be considered a potential importer.

The top Indian imports are presented in table 3. The examined Indian trade partners reveal a comparative advantage only by five commodity groups. Contrary to previous countries the EU only has RCA above unity at two commodity groups as well as China and Russia. As for India there are only two product groups where there is more than one potential importer. These are: 84 – Machinery, nuclear reactors, boilers, etc. for the EU and China; and 88 – Aircraft, spacecraft and parts thereof for the EU and Brazil. For commodity groups 27 – Mineral fuels, 85 – Electrical, electronic equipment and 31 – Fertilizers there is only one importer - Russia, China, with no competitor from examined countries.

In case of imports to China, India and Russia have the highest number of RCAs above one, four and three respectively. In comparison, the EU falls behind with only two RCAs above unity together with Brazil. Even though India reveals to have a comparative advantage in the largest number of commodity groups it faces competition in all product groups (table 4): 26 – Ores, slag, ash (Brazil, India); 29 – Organic chemicals (India, EU); 74 – Cooper and articles thereof (Russia, India); 72 – Iron and steel (Russia, Brazil, India).

As far as the top ten imports to the EU, China is placed at the first position in number of RCAs (3 total) according to table 5, followed by India (2 total) and Russia (1 total). Potential importers of the commodity group are China and India 62 - Articles of apparel, accessories and 61 - Articles of apparel, accessories, knit or crochet are China and India, whereas Russia's potential is in 27 - Mineral fuels, Oils, Distillations products, etc. The third potential import from China could be 85 - Electrical, electronic equipment.

Conclusions

Mutual trade relations were assessed by an analysis of trade introversion, trade complementarity, similarity and revealed comparative advantage. The development of trade introversion index corresponds to the development of the trade complementarity index for Brazil-Russia, Brazil-China and India-China. In the case of Russia-India and Russia-China the TII shows a declining trend, currently being below zero. This means that trade relations from examined pairs are less intense in comparison to their trade relations with the rest of the world. Due to stagnation and/or slight growth of the complementarity index one can assume that there are commodities suitable for potential trade development. From the RCA examination it was found that in the case of Russia-India, suitable products for trade development are as follows: 08 - Edible fruit, nuts, citrus fruit, melons; 27 - Mineral fuels, oils, distillation products, etc; 31 - Fertilizers and 73 - Articles of iron and steel. Commodity 73 is most likely to face competition with China and the EU. In the case of Russia-China many more commodity groups will arise for trade potential (72, 73, 74, 84, 90) nevertheless, with direct competitors from BRIC/EU countries. The most trade potential favourable commodity group is 27 - Mineral fuels, oils, distillation products, etc and 85 - Electric equipment with no competitors from the examined countries.

TII for all BRIC-EU pairs shows a higher level of trade intensities contrary to the partners in the rest of the world. The highest trade introversion 0.77 was measured between Russia and the EU. Trade complementarity of EU exports to Russia shows a significant overlap value of 82%, thus further raise of Russian exports to the EU (CI currently 33%) could be under assumption of the RCA commodity group number enlargement (nowadays 14/97). The discrepancies in TII and CI development for EU-China may be explained either by a shift in trade partner orientation or by intensification of their mutual trade. TII in regards to EU-Brazil and EU-India shows a declining tendency while the complementarity indices are more or less stable or increase. Higher CI provides an assumption of potential mutual trade. The RCA analysis revealed that EU-Brazil trade potential could be enhanced especially with EU exports of 84, 87, 29, 90, 30 and 38 commodity groups. All product groups with the exception

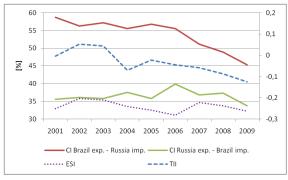
of 87 – Vehicles other than railway, tramway and 30 – Pharmaceutical products have competitors from examined economies. The trade potential for EU-India are in the 61, 62, 84 and 88 commodity groups, however all of which with a direct competitor from BRIC countries.

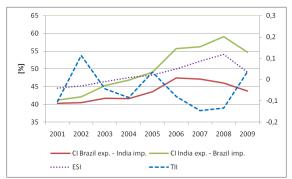
Finally, it is important to note that the results may be affected by various distortions such as trade barriers, subsidies in the case of RCA, or geographic distance, etc.

Literature:

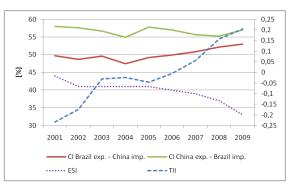
- [1.] Balassa, B., 1965. Trade liberalization and "revealed" comparative advantage. *The Manchester School of Economic and Social Studies*, 33(2), pp. 99-123..
- [2.] Bhat, T.P. Guha, A. and Paul, M., 2006. *India and China in WTO: Building Complementarities and Competitiveness in the External Trade Sector.* [online] New Delhi: Institute of Studies in Industrial Development. Available at: http://planningcommission.nic.in/reports/sereport/ser/stdy_indch.pdf [Accessed 28 March 2011.
- [3.] Chandran, S., 2010. Trade Complementarity and Similarity Between India and Asean Countries in the context of the RTA. *The Indian Economic Journal,* Special Issue, pp. 111-117.
- [4.] Cheong, D., 2010. Methods for Ex Ante Economic Evaluation of Free Trade Agreements. *Asian Development Bank*, ABD Working Paper Series on Regional Economic Integration, no. 52, June 2010.
- [5.] De Castro, T., 2011. Trade Cooperation Indicators: Development of BRIC Bilateral Trade Flows. [online]. Available at: < http://www.wbiconpro.com/206-Tereza.pdf> [Accessed 26 June 2011].
- [6.] Havlik, P., Pindyuk, O. and Stöllinger, R., 2009. Trade in Goods and Services between the EU and the BRICs. Wiener Institut für Internationale Wirtschaftsvergleiche (WIIW), Research Report 357, November 2009.
- [7.] Iapadre, L., 2001. Measuring International Specialization. *International Advances in Economical Research*, [online]. Available at: http://www.iaes.org/journal2/iaer/may_01/iapadre_pdf.pdf [Accessed 28 March 2011].
- [8.] Iapadre, L., 2004. Regional Integration and the Geography of World Trade: Measurement Problems and Empirical Evidence. [online] Brugge: UNU-CRIS. Available at: http://www.cris.unu.edu/fileadmin/workingpapers/lapadreWorkingPaper2004.pdf [Accessed 4 April 2011].
- [9.] Iapadre L., 2006. Regional Integration Agreements and the Geography of World Trade: Statistical Indicators and Empirical Evidence, in P. De Lombaerde (ed.), Assessment and Measurement of Regional Integration, *Routledge*, London, pp. 65-85.
- [10.] International Trade Centre, 2010. *Trade Map Trade Competitiveness Map: Trade Statistics for International Business Development.* [online] Available at: < http://www.trademap.org/countrymap/Product_SelCountry_TS.aspx> [Accessed 29 April 2011].
- [11.] Singh, A., et al., 2011. Analyzing The Trade Flows For Brazil, Russia, India, China and South Africa (BRICS). [online] Available at: http://www.scribd.com/doc/63710945/Analyzing-the-Trade-Flows-for-BRICS [Accessed 5 October 2011].
- [12.] Yeats, A., 1997. Does Mercosur's Trade Performance Raise Concerns about the Effects of Regional Trade Arrangements. *Policy Research Working Paper Series*. The World Bank, no 1729, February 1997.
- [13.] Wadwha, D., 2009. Assessing the potential for groeth of intraregional trade in South Asia. [online] Available at: < http://www.unescap.org/tid/publication/tipub2563_chap3.pdf> [Accessed 19 October 2011]

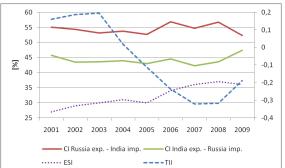
Appendix



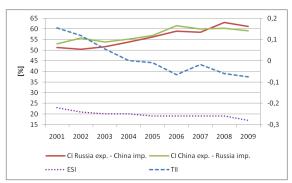


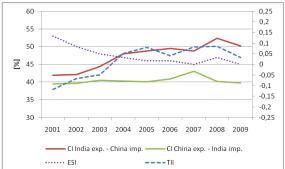
Graph. 5 Brazil-Russia Trade Indicators Graph. 6 Brazil-India Trade Indicators



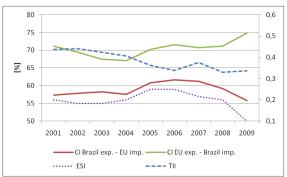


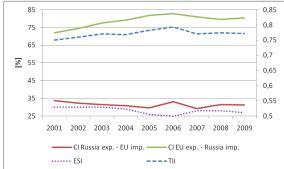
Graph. 7 Brazil-China Trade Indicators Graph. 8 Russia-India Trade Indicators



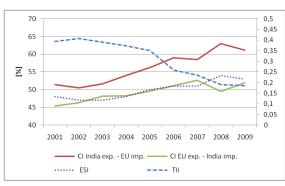


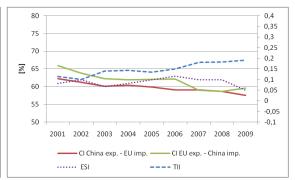
Graph. 9 Russia-China Trade Indicators Graph. 10 India-China Trade Indicators





Graph. 11 Brazil-EU Trade Indicators Graph. 12 Russia-EU Trade Indicators





Graph. 13 India-EU Trade Indicators Graph. 14 China-EU Trade Indicators

Source: calculated by author based on data from the International Trade Centre database (2010)

Tab. 1 Top 10 Brazil Imports - BRIC/EU RCAs

Brazi	il - Importing country	Rus	ssia	Ind	dia	Ch	ina	Е	U		
HS2	Commodity group	RCA	[%] *								
	Machinery, nuclear reactors,										
'84	boilers, etc	-	-	-	-	1,6	15,3	1,5	34,2		
	Mineral fuels, oils, distillation										
'27	products, etc	4,4	0,6	-	-	-	-	-	-		
'85	Electrical, electronic equipment	-	-	-	-	1,9	33,9	-	-		
	Vehicles other than railway,										
'87	tramway	-	-	-	-	-	-	1,2	21,2		
'29	Organic chemicals	-	-	1,6	5,8	-	-	1,5	33,2		
	Optical, photo, technical, medical,										
'90	etc apparatus	-	-	-	-	1	14,9	1,4	29,2		
'39	Plastics and articles thereof	-	-	-	-	-	-	-	-		
'30	Pharmaceutical products	-	-	-	-	-	-	2,2	51		
'31	Fertilizers	5,5	23,9	-	-	-	-	-	-		
'38	Miscellaneous chemical products	_	-	-	-	-	-	1,4	39,1		

^{*} Share of importer on given commodity

Tab. 2 Top 10 Russia Imports - BRIC/EU RCAs

-					
Russia - Importing country	Brazil	India	China	EU	
HS2 Commodity group	RCA [%] *	RCA [%] *	RCA [%] *	RCA [%] *	

	Machinery, nuclear reactors,		ĺ						
'84	boilers, etc	-	-	-	-	1,6	19,1	1,5	54,4
'85	Electrical, electronic equipment	-	-	•	-	1,9	26,2	•	-
	Vehicles other than railway,								
'87	tramway	-	-	-	-	-	-	1,2	44,7
	Commodities not elsewhere								
'99	specified	-	-	-	-	-	-	-	-
'30	Pharmaceutical products	-	-	-	-	ı	-	2,2	76,2
'02	Meat and edible meat offal	9,1	34,6	•	-	ı	-	•	-
'39	Plastics and articles thereof	-	-	•	-	•	-	•	-
	Optical, photo, technical, medical,								
'90	etc apparatus	-	-	-	-	1	9	1,4	47,1
	Edible fruit, nuts, peel of citrus								
'08	fruit, melons	-	-	1,1	0,1	-	-	-	-
'73	Articles of iron or steel	-	-	1,3	0,4	1,5	19,3	1,3	46,4
'72	Iron and steel	-	-	-	-	-	-	-	-

^{*} Share of importer on given commodity

Tab. 3 Top 10 India Imports - BRIC/EU RCAs

India	- importing country	Bra	azil	Rus	ssia	China		Е	U
HS2	Commodity group	RCA	[%] *	RCA	[%] *	RCA	[%] *	RCA	[%] *
	Mineral fuels, oils, distillation								
'27	products, etc	-	-	4,4	1	-	-	-	-
	Pearls, precious stones, metals,								
'71	coins, etc	-	-	-	-	-	-	-	-
'85	Electrical, electronic equipment	-	-	-	•	1,9	42,8	1	-
	Machinery, nuclear reactors,								
'84	boilers, etc	-	-	-	-	1,6	24,7	1,5	32,7
'29	Organic chemicals	-	-	-	-	•	-	-	-
'72	Iron and steel	-	-	-	-	•	-	-	-
'31	Fertilizers	-	-	5,5	14,9	-	-	-	-
	Commodities not elsewhere								
'99	specified	-	-	-	-	-	-	-	-
	Aircraft, spacecraft, and parts								
'88	thereof	1,6	0	-	-	-	-	1,9	62,1
'39	Plastics and articles thereof	-	-	-	-	-	-	-	-

^{*} Share of importer on given commodity

Tab. 4 Top 10 China Imports - BRIC/EU RCAs

	•		•						
China	a - Importing country	Bra	azil	Russia		India		EU	
HS2	Commodity group	RCA	[%] *	RCA	[%] *	RCA	[%] *	RCA	[%] *
'85	Electrical, electronic equipment	-	-	-	ı	ı	ı	-	-
	Mineral fuels, oils, distillation								
'27	products, etc	-	-	4,4	7,6	-	-	-	-
	Machinery, nuclear reactors,								
'84	boilers, etc	-	-	-	-	-	-	-	-
'26	Ores, slag and ash	9,9	18,9	-	•	3,5	11,4	-	-
	Optical, photo, technical,								
'90	medical, etc apparatus	-	-	-	-	-	-	-	-
'39	Plastics and articles thereof	_	_	_	-	-	-	-	-

'29	Organic chemicals	-	_	-	-	1,6	1,6	1,4	10,3
'74	Copper and articles thereof	-	-	1,4	0,9	1	1,4	-	-
	Vehicles other than railway,								
'87	tramway	-	-	-	-	-	-	1,2	41,3
'72	Iron and steel	2	4,3	2,2	5,8	1,1	1,6	-	-

^{*} Share of importer on given commodity

Tab. 5 Top 10 EU Imports - BRIC/EU RCAs

EU -	Importing country	Bra	azil	Rus	ssia	India		China	
HS2	Commodity group	RCA	[%] *	RCA	[%] *	RCA	[%] *	RCA	[%] *
	Mineral fuels, oils, distillation								
'27	products, etc	-	-	4,4	20,6	-	-	-	-
'85	Electrical, electronic equipment	-	-	-	-	-	-	1,9	11,4
	Machinery, nuclear reactors,								
'84	boilers, etc	-	-	-	-	-	-	-	-
'30	Pharmaceutical products	-	-	-	-	-	-	-	-
	Vehicles other than railway,								
'87	tramway	-	-	-	-	-	-	-	-
	Optical, photo, technical,								
'90	medical, etc apparatus	-	-	-	-	-	-	-	-
	Commodities not elsewhere								
'99	specified	-	-	-	-	-	-	-	-
	Articles of apparel, accessories,								
'62	not knit or crochet	-	-	-	-	2,7	4,8	3	31
'29	Organic chemicals	-	-	-	-	-	-	-	-
	Articles of apparel, accessories,								
'61	knit or crochet	-	-	-	-	2,3	0,7	1,4	20,4

^{*} Share of importer on given commodity