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Economic and Geopolitical influence of India through BRICS summit: A brief analysis

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Abstract
Recently, developing economies have emerged as regional and global growth players due to higher economic integration, regional collaboration, and international trade growth than developed economies. BRICS comprises the five emerging global powers: Brazil, Russia, India, China, and South Africa from Asia, Africa, and Latin America. This bloc incrementally enhances their global engagements in international trade and regional integration through economic collaboration and mutual discussions among different summit levels. BRICS produces around 23 percent of the worldwide merchandise output, and 18 percent of global goods and service trade among 42 percent of the worldwide population. This research work observed that over the last ten years, the weight of the BRICS countries, especially the GDP of China, was growing faster, resulting in a global economic impact on fiscal and monetary policy. In the future, these economies will be more significant in economic integration through trade and FDI movement than the G-7 region, consisting of Canada, Japan, the United Kingdom, France, the United States, Germany, and Italy.
BRICS economy remains heterogeneous due to its character, with significant changes in socio, political, and legal frameworks. The nominal GDP of BRICS economies is now reflected US$ 23 trillion, and its world share is expected to increase to 26 percent. Future growth in BRICS economies is expected to stabilize by 2025, with India and China being the primary drivers of the multiregional growth. BRICS countries have made significant progress in integrating with the global economy. Analysis of trading patterns within BRICS countries reveals that levels of intra-BRICS trade are pretty diverse, mainly reflecting the comparative sizes of the economies. Over the last couple of years, intra-BRICS employment and regional trade have increased nearly three times, supported by increased intra-regional business among member countries. An analysis of the intra-BRICS trade reveals that China has played a significant role by accounting for nearly half of the intra-BRICS trade, followed by India, Brazil, Russia, and South Africa. India is cautious about BRICS expansion. India's role in the neighboring SAARC agreement is central to its foreign policy. At the same time, India dominates sub-regional cooperation to promote economic growth, social progress, cultural development, and security in South Asia regions. India can use the strength and power of BRICS expansion to develop a strategy for regional cooperation within SAARC, BIMSTEC, and ASEAN member countries.

Keywords: BRICS, SAARC, BIMSTEC, ASEAN, G-7

Introduction
All major economies of BRICS countries are represented by BRICS, accounting for roughly seventeen percent of global trade, twenty-five of the worldwide GDP, and approximately forty-two percent of the world's population. The term "BRIC" was first used by Goldman Sachs in their 2001 paper on global economics, "The World Needs Better Economic BRICs," which was based on econometric projections that the four economies would collectively and individually occupy a lot more economic space and rank among the largest economies in the world within the next 50 years. During the first BRIC Foreign Ministers meeting, all countries formally established the partnership for economic cooperation and collaboration. The BRICS cooperation has two crucial segments, namely practical association through the appointment of senior officials in a variety of fields, such as trade, finance, health, education, science and technology, agriculture, environment, energy, labour, disaster management, anti-corruption, anti-drugs, etc., and consultation on issues of mutual interest for the flow of investments. The BRICS Business Council and BRICS Women Business Alliance facilitate business-to-business interactions between the BRICS nations.

Other BRICS events can be broadly divided into Track II meetings, Parliamentary Exchanges, Seminars/Conferences, Business, and People-to-People exchanges.

Developing countries have been at the forefront of global expansion and a significant source of economic activity since the turn of the twenty-first century. Brazil, India, and China's growth rates are good indicators of this phenomenon. They are the world's largest and fastest-growing significant economies, according to G.D.P. Given their location, it wasn't easy to envision a bloc composed of these nations. But Jim O'Neill combined Brazil, Russia, India, and China under the moniker BRIC. He predicted that over the following ten years, the BRIC economies will expand in size to the point where they might control the world economy. They have recently progressed towards being developed nations while still being developing economies. The BRICS nations are renowned for significantly impacting local and global affairs and have updated their political philosophies to gain from global commercialism. In a Goldman Sachs follow-up analysis in 2003, Dominic Wilson and Roopa Purushothaman predicted that the BRIC economies might surpass the G6 in less than 40 years and make up more than half of the G6 by 2025. The "Big Four," or the BRIC economies, first met as a group in 2006, and South Africa officially joined on December 24, 2010, giving rise to the term BRICS. Since BRICS is one of the cornerstones of the newly emerging polycentric world order, its economies are crucial for global commerce and economic growth, particularly in third-world countries. In addition, the BRICS economies are emerging as significant financial donors and altering the dynamics of intercontinental economic connections. According to Tantri and Shaurav (2018), the BRICS economies, which together accounted for roughly 3.1 billion people or about forty-two of the world's population in 2015, saw significant social and economic development over the previous ten years.

India faces additional difficulties inside the BRICS due to China's economic hegemony, which stops any possible opportunities. It is possible to measure China's dominance by noting that as of 2021, it was India's second-biggest trading partner and the country's largest trading partner overall, with South Africa, Brazil, and Russia. However, there is still much space for development in India's commerce with the BRICS nations. India would benefit from focusing on its export potential to the BRICS nations to minimize its expanding trade deficit. This policy would also improve India's trading connections with the BRICS.

Review of Literatures

An emerging body of literature has used the gravity framework and the comparative advantage (RCA) index to analyze the trade flow dimensions in the BRICS nations, the SAARC region, UN-defined regional groups, and Caribbean Community and Common Market (CARICOM) nations. The literature review, however, has been split into two subsections for conciseness. Using the RCA index, Balassa (1977) [9] verified the existence of export diversification. He emphasized that export diversification becomes more solid with technological advancements. Using the RCA indices, demonstrated that China's export patterns had altered to reflect its dynamic comparative advantages.

Similarly, Ahmad *et al*. (2018) [2] observed that China and India have performed consistently and strongly in exports of goods. China, however, has greater negotiating leverage than India in the bilateral market. Based on the RCA analysis, concluded there is no competition between South Africa, Brazil, and Russia in exporting textiles for apparel and services. China and India, on the other hand, are engaged in fierce competition in the clothing and service textiles industries. However, when exporting steel-related goods, all of the BRICS nations have a comparative edge.

Last but not least, the investigation discovered a complementary link in the export of some goods. In a similar vein, discovered that rather than being competitive, commerce in products among the BRICS countries. According to Seyoum's 2007 research, some emerging nations, including the BRICS, have significant competitive advantages in transportation and tourism. Financial and commercial services, on the other hand, have lots of room for development. The potential and problems the BRICS countries pose to the EU in terms of competition were examined by Havlik and Stöllinger (2009) [25].

Members of one bloc and its non-members exhibit very different trade integration and assimilation patterns. Rasoulinezhad *et al*. (2018) concluded that the basis for Russia's trade in manufactured goods and raw materials with regional groups defined by the United Nations in 2014 is Hecksher-Ohlin's theory of factor endowments. However, the rest of the sample countries are appropriate for the Linder international trade hypothesis. These results imply that Russia differs from other BRIC nations with regional categories designated by the UN in 2014 regarding trade assimilation and integration tendencies. As a result, the trade flows between the trading partners of the BRICS are governed by the revealed comparative advantage postulation and Linder's premise concluded that commerce between India and the BRICS is significantly and favorably affected nationally.

GDP per person and the extent of market permeability. Similarly, Maryam and Mittal (2019) discovered that the size and population of the participating nations have a favorable and significant impact on the trade in commodities between India and the BRICS. However, the distance between India and its BRICS trading partners harms bilateral trade between the two nations. The gravity model's conventional justifications are applicable in India, claims Lohani (2020) [34]. Additionally, having a shared official language and strong border relations help trade. Similarly, Chakravarty and Chakrabarty (2014) [15] examined the commerce between India and ASEAN and found that distance affects it more than the nation's size. Dinc and Gonul (2014) used an enhanced gravity model to evaluate the pattern of trade, particularly in imports among BRICS nations.

Objectives

The objective of the study.

1. To identify significant Products being traded among other countries/ regional blocks.
2. To assess the extent to which different products have advantages among regional blocks under study.
3. To estimate the pattern of trade among BRICS member countries using Panel regression.

Methodology

Secondary data from WITS COMTRADE, CEPII, etc., were used for the current investigation of our research and period 2010 to 2018 to evaluate India's trade in goods among

BRICS regions. The International Trade Centre and the UN Common Format for Transient Data Exchange have provided data for international trade flow. World Trade Integrated Solutions provided the data for evaluation in the RCA computation. The World Bank Development Indicators obtained population, GDP, and GDP per capita information. The Centre for Prospective Studies and International Information (CEPII, France) provided information on distance.

Trade Integration Pattern Index

Total trade volume and content vary throughout time depending on the country for evaluating integrating patterns. Several variables cause this change, and the idea of comparative advantage helps to explain many aspects of the patterns of international commerce. Consequently, we created an index of integration patterns using data on the relative advantages of various items. The author aimed to evaluate India's integration pattern with other BRICS nations by building an index of trade integration patterns. Increasingly specifically, it is founded on the idea that trading partners' trading patterns are increasingly similar the more commodities they share where they have a competitive advantage. This index is predicted to range from 0 to 1.

Export Aspiration Index

The interdependence of economies has increased in a globalized world. Productivity gains and a rise in competition result from promoting exports through active involvement in international commerce. A country that exports also benefits significantly from an increase in high-tech exports. Along with boosting the proportion of high-tech exports, nations must also create and export goods that fall under the aspirational category. This indicates that exports of such things should be able to distinguish between the various groups of people and should be able to meet the needs of the people following their hierarchies. For instance, China produces goods of different grade levels to appeal to multiple types of customers. Typically, inferior items are created to satisfy market demands.

According to the gravity model of trade, which is analogous to the Newtonian law of gravitation, trade between two countries is inversely proportional to their distance from one another and directly proportional to the sum of their GDPs (Rahman, 2006) [10]. While some studies praised the gravity model for its accuracy in forecasting the factors that will affect commerce between nations, others criticized it for having a weak theoretical underpinning (Antonia & Troy, 2014) [6]. However, Anderson's groundbreaking work provided the gravity models with a theoretical framework. The author can combine all observations in the pooled OLS regression model and estimate a grand trade function while ignoring the duality of cross-sectional and time-series data. This pooling of words assumes that the cross-sectional and temporal coefficients are constant. Due to its continuous cross-section and across-time coefficients, the pooled OLS regression is also known as a constant-coefficient model.

Proposed gravity model for our research

The researcher used the extended gravity model in a logarithm form to evaluate the potentiality of trade. The equation look like $LT_{ijt} = \alpha+\beta_1 LGDP_{ijt} + \beta_2 LDPCY_{ijt}+ \beta_3 LTRF_{ijt} + \beta_4 LPOP_{it}+ \beta_5 LDIS_{ij}+ \beta_6 LREM_{it}+ \beta_7 LREM_{jt}+€_{ijt}$ eq no (i). Where i indicates India, j shows other BRICS countries other than India, t indicates periods, namely 2010… 2018, T_{ijt} India's Total Trade, GDP_{ijt} means GDP of Home country, $DPCY_{ijt}$ indicates the absolute difference in GDP per capita, TRF_{ijt} shows trade freedoms between countries i and j, POP_{ijt} revealed populations of country i and j, DIS_{ij} indicates distance between two countries, $LREM_{it}$ indicates India's outward multilateral trade resistance and $LREM_{jt}$ shows outward multilateral resistance among BRICS countries and ε_{ijt} revealed Error term.

Analysis Section

Actual trade with BRICS countries

10.61% of the BRICS's worldwide trade is mainly reflected among the intra-BRICS regions during 2017. Table 1 contains information on intra-BRICS business trade in the year 2017. Table 2 provides information on India's trade among the BRICS region during the last five years, including 2014-2019. Table 3 shows the contribution of India's trade within the BRICS to evaluate business among overall trading patterns. Over these years, the BRICS partners' cooperation in trade and investment has grown due to consistent engagement. To raise money for infrastructure and sustainable development projects in the BRICS and other developing nations, the New Development Bank was founded. The Memorandum of Understanding among BRICS Trade and Investment Promotion Agencies/Trade Promotion Organizations was signed at this year's Trade Ministers Meeting. This research provides a framework for trade and investment promotion organizations to work together to facilitate increased trade among their respective countries. The BRICS countries agreed to a non-binding and voluntary Working Mechanism on Technical Regulations, Standards, Metrology, and Conformity Assessment Procedures to reduce business and boost bilateral trade flows in 2018. This mechanism will identify, prevent, and remove technical trade barriers.

Table 1: Total trade among all regional economies of BRICS (US$ Billion)

Country	World	Brazil	China	India	Russia	South Africa	Intra BRICS	% Share of its Global Trade
Brazil	369	-	75	6	8	2	90	25%
China	4108	88		85	85	40	296	8%
India	588	8	85		11	11	114	20%
Russian	739	6	86	9		1	101	14%
South Africa	172	2	24	1	9		35	21%
BRICS	5975 (Approx.)						639	17% (Approx.)

***Source*:** COMTRADE Data of WITS

Table 2: Trade between India vis vi BRICS countries over the last six years (in Billion US$)

Major economics of BRICS, along with years	2014-5	2015-16	2016-17	2017-2018	2018-2019	2019-20
Brazil	12	6	7	9	9	4
China	73	71	72	90	88	45
Russia	7	7	8	11	9	5
South Africa	12	10	10	11	11	6
India's Total Intra-BRICS (approx.)	104	95	96	123	118	62

***Source*:** COMTRADE Data of WITS

Table 3: Percentage of intra-BRICS trade with world trade

Country	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Brazil	2	2	1	2	1	1
China	10	11	11	12	11	12
Russia	1	1	2	2	1	2
South Africa	2	2	2	2	2	2
India's Intra-BRICS (approx.)	16	16	17	18	17	18

Source: COMTRADE of WITS

The average RCA values of India and the other BRICS nations among different product categories in 2018 are highlighted in Table 4. For Brazil, Russia, and India, the average RCA for animals is more significant than one, while it is less than one for China and South Africa. This paper suggests that higher RCA in Brazil, Russia, and India can increase animal commerce with low RCA values among BRICS regions like China and South Africa. The findings also show that Brazil and India compete fiercely in the animal trade, whereas Russia and India face little competition. Compared to China, India has a lower RCA value for hides and skin. Brazil is now a rival in the export of hides and skins. China continues to be India's key rival in consumer goods, textiles, and apparel markets. Brazil and South Africa are two of India's main competitors in food exports. Furthermore, compared to its rivals South Africa, China, and Russia, India's export of chemicals has a more excellent RCA value.

Table 4: Avg. RCA values of significant economies of BRICS countries in 2018

Major tradeable products along with major economics among BRICS	Brazil	Russia	India	China	South Africa
Animal Products	3,48	2.76	4.03	0.76	0.65
Agri Products	1.76	17.98	4.06	0.43	1.89
Transportation	0,78	4.67	2.03	0.56	0.67
Metal Products	0.65	0.87	4.67	1.54	3.09
Manufacturing Products	0.45	0.78	0.45	2.12	0.65
Types of Equipment and Machinery	0.7	0.6	0.45	0.34	0.23

Source: Author Calculation from COMTRADE data

Trade Integration Pattern Index

The value of the trade integration pattern index lies between o and 1. If the value is close to zero, regional exports are insignificant among member countries. If the value is relative to one then regional export are at a significant level. In this research, the trade integration index values among the BRICS sub-region are at a substantial level, and below one indicates enhancing regional export among this bloc (Ref table 5). The findings also suggest that the slow movement of inter-industry trade flows among the BRICS countries is performed due to low regional orientation among member countries. As a result, the BRICS economies typically purchase commodities that use high amounts of scarce factors while exporting goods that utilize comparatively large quantities of abundant elements to the BRICS market. As a result, trade among the BRICS countries is based on variations in factor endowments. Moreover, the resulting figure indicates that some powerful economies among BRICS, like China, Russia, and South Africa trade, are more integrated than other economies of this sub-region.

Table 5: Trade Integration Pattern Index

Major Economics of BRICS	Brazil (1)	Russia (2)	India (3)	China (4)	South Africa (5)
Brazil (1)	-	0.37	0.65	0.45	0.54
Russia (2)	0.37	-	0.39	0.28	0.45
India (3)	0.65	0.39	-	0.48	0.29
China (4)	0.45	0.28	0.43	-	0.35
South Africa (5)	0.45	0.45	0.29	0.35	-

***Source*:** Author Calculation from COMTRADE data

Here, researchers used an augmented gravity model to analyze trade potentiality among the India-BRICS region (Ref Table 6A) through the pooled OLS method. P value statistics revealed that some of the variables in the augmented gravity model are at a significance level in the ten percent level. The result signifies that the coefficient GDP, the population of India, and partners of BRICS countries are at a significant level, enhancing a 56 percent increase in trade among these regions. But as the distance coefficient value is negative, it indirectly reduces trade as distance increases among regions, establishing the gravity model's truthiness.

Table 6A: Gravity model results through pooled OLS method

Variables	Coefficients	Standard Errors	T value	P values for the significance level
$LGDP_{ij}$	0.978	0.324	2.828	0.003
$LDPCY_{ij}$	1.018	0.317	2.826	0.004
$LTRF_{ij}$	0.134	0.123	1.121	0.271
$LPOP_{ij}$	1.217	0.616	1.29	0.018
$LDIS_{ij}$	-4.419	1.014	-4.229	0.000
$LREM_{i}$	2.727	0.422	6.522	0.000
$LREM_{j}$	1.621	0.829	1.821	0.074
Constant	-15.21	24	-6.227	0.008

***Source*:** Author Calculation from COMTRADE data

Table 6B: The gravity model results through the Fixed Effect method

Variables	Coefficients	Standard Errors	T values	P values for the significance level
$LGDP_{ij}$	0.987	0.452	1.896	0.001
$LDPCY_{ij}$	0.821	0.32	3.94	0.000
$LTRF_{ij}$	0.222	0.231	1.03	0.326
$LPOP_{ij}$	0.723	0.21	6.82	0.010
$LDIS_{ij}$	1.217	0.616	1.9	0.048
$LREM_{i}$	-1.029	0.225	-4.35	0.001
$LREM_{j}$	0.862	0.324	2.39	0.016

***Source*:** Author Calculation from COMTRADE data

India and BRICS countries' multilateral trade is positively and significantly influenced by multilateral trade resistance at both inward and outward levels among the member countries, which generally creates trade creation or diversion among other countries (Ref table 6B) through the fixed-effect method. Higher multilateral resistance for the inward part generates more business for India among BRICS as relative prices are slowly reducing among member countries. Similarly, higher multilateral resistance for the outward part generates more business for India by exporting more goods among BRICS regions to develop a win-win situation in the regional context.

Limitation

This study was restricted to a few macroeconomic factors that are used for analyzing trade between India and the BRICS countries through an econometric model. The commerce between India and the BRICS countries is significantly influenced by several factors, including political, legal, technological, etc. However, the COVID-19 outbreak and the political unrest between Russia and Ukraine have harmed the economic flows between India and the BRICS nations. Adding such exogenous shocks could offer more insightful data about the pattern of trade between India and member countries of BRICS. Future studies are very much required for analyzing the current status of exports and possible barriers to trade among member countries of the BRICS sub-region.

Conclusion

This research examined the integration pattern of trade among BRICS regions for future economic collaboration. This research also revealed that the BRICS economy performed inter-industry business among these sub-regions. The economic size of individual member countries, population, and multilateral trade barriers among respective member countries significantly influence trade flow among India and BRICS countries. India's export strength among BRICS countries is slowly improving, indicating that India is trying to emerge as a critical player among BRICS regions. India is trying to concentrate more on those products that provide a more competitive advantage over other members after diversifying commodity composition to reconstruct its export baskets, which enhance the relative strength of its exports and market share among member countries.

References

1. Adam C, Cobham D. Modeling multilateral trade resistance in a gravity model with exchange rate regimes. J Macroecon Anal. 2007;21(3):1–36.
2. Ahmad I, Kunroo M, Sofi I. An RCA analysis of India – China trade integration: Present potential and prospects. Foreign Trade Rev. 2018;53(1):1–10. doi:10.1177/0015732516681885.
3. Ahn J, McQuoid AF. Capacity constrained exporters: Micro evidence and macro implications. Department of Economics Florida International University. Working Papers. 2013;1301:7–15.
4. Anderson JE. A theoretical foundation for the gravity equation. Am Econ Rev. 1979;69(1):106–116.
5. Anderson JE, Van Wincoop E. Gravity with gravitas: A solution to the border puzzle. Am Econ Rev. 2003;93(1):170–192. doi:10.1257/000282803321455214.
6. Antonio A, Troy L. A gravity model approach to analyzing the trade performance of CARICOM member states. Appl Econ Int Dev. 2014;14(2):145–160.
7. Ali G. Does trade openness have noteworthy effect on bilateral trade flows of ECO countries: An empirical investigation. Timisoara J Econ Bus. 2016;9(2):6–11. doi:10.1515/tjeb-2016-0007.
8. Balassa B. Trade liberalization and 'revealed' comparative advantage. Manchester Sch. Econ Soc. Stud. 1965;33(2):99–123.
9. Balassa B. Revealed comparative advantage revisited: An analysis of relative export shares of the industrial countries. Manchester Sch. Econ Soc. Stud. 1977;45(4):327–344.
10. Batra A. India's global trade potential: The gravity model approach. Indian Council Res Int. Econ Relat. Working Paper. 2004;151:7–23.

11. Bergstrand JH. The generalised gravity equation, monopolistic competition, and empirical evidence. Rev Econ Stat. 1989;7(1):143–153.
12. Beyene GH. Trade integration and revealed comparative advantages of Sub-Saharan Africa and South Asian merchandise export. Foreign Trade Rev. 2014;49(2):163–176. doi:10.1177/0015732514525170.
13. Beyene GH. BRICS and Sub-Saharan Africa trade interdependence and peace: Evidence based on revealed comparative advantages. J Law Soc. Dev. 2015;2(1):4–28.
14. Bhattacharya R, Banerjee T. Does the gravity model explain India's direction of trade? A panel data approach. Indian Inst Manage Ahmedabad. Working Paper. 2006;09-01:8–24.
15. Chakravarty SL, Chakrabarty R. A gravity model approach to Indo-ASEAN trade fluctuations. J Soc Behav Sci. 2014;13(3):383–391.
16. Chaney T. Distorted gravity: The intensive and extensive margins of international trade. Am Econ Rev. 2008;98(4):1707–1721.
17. Chen L. The BRICS in the global value chains: An empirical analysis. Cuad. Econ. 2012;31(57):221–239.
18. Chychkalo-Kondratska I, Bezrukova N, Svichkar V. New stars of global economy regarding BRICS. J Int Stud. 2017;10(3):24–34. doi:https://dx.doi:org/10.14254/2017-8330.217/10-3/2
19. Deardorff AV. Determinants of bilateral trade: Does gravity work in a neoclassical work. In: The Regionalisation of the World Economy. Chicago, IL: University of Chicago Press; c1998. p. 7–32.
20. Dinçer Gonul. Turkey's rising imports from BRICS: A gravity model approach. University Library of Munich, Germany. MPRA Paper. 2014;61979:18–32.
21. Eaton J, Khortum S. Technology, Geography and Trade. Journal of Econometrica. 2002;70(5):1741–1779.
22. Egger P. An Econometric View on the Estimation of Gravity Models and the Calculation of Trade Potentials. The World Economy. 2002;25(2):297–312.
23. Ekanayake E, Mukherjee A, Veeramacheneni B. Trade Blocs and Gravity Model: A Study of Economic Integration among Asian Developing Countries. Journal of Economic Integration. 2010;25(4):627–643.
24. Farah PD. Five Years of China's WTO Membership: EU and US Perspectives on China's Compliance with Transparency Commitments and Transitional Review Mechanism. Legal Issues of Economic Integration. 2006;33(3):263–304.
25. Havlik P, Stöllinger R. EU and BRICs: Challenges and opportunities for European competitiveness and cooperation. Industrial Policy and Economic Reform, Papers No. 13; c2009. p. 7-23.
26. Helpman E, Metliz M, Rubinstein Y. Estimating Trade Flows: Trading Partners and Trading Volumes. Quarterly Journal of Economics. 2008;103(2):441–467.
27. Hillman AL. Observations on the relations between revealed comparative advantage and comparative advantage as indicated by pre-trade relative prices. Weltwirtschaftliches Archiv. 1980;(116):315–321. DOI: 10.1007/BF02696859.
28. Hooijmaaijers B. China, the BRICS, and the limitations of reshaping global economic governance. The Pacific Review. 2021;34(1):29-55.
29. Cheng IH, Wall HJ. Controlling for Heterogeneity in Gravity Models of Trade and Integration. Federal Reserve Bank of St. Louis Review paper. 2005;87(1):49-63.
30. Kansra P, Kumar P, Mahapatra SK, Oberoi S. India's economic concert, cooperation, and trade specialization compared with the rest of the BRICS nations. International Journal of Trade and Global Markets. 2021;14(6):580-602.
31. Khan S, Khan AT. India's Trade Relation with BRICS Countries and Issues of Sustainability. Management and Economics Research Journal. 2020;6(S5):9-28. https://doi.org/10.18639/MERJ.2020.9900028.
32. Khayat HS. A gravity model analysis for trade between the GCC and developed countries. Cogent Economics & Finance. 2019;7(1):1-13. https://doi.org/10.1080/23322039.2019.1703440.
33. Kocourek A. Structural Changes in Comparative Advantage of the BRICS. Procedia-Social and Behavioral Sciences. 2015;17(2):10-17.
34. Lohani KK. Trade Flow of India with BRICS Countries: A Gravity Model Approach. Global Business Review. 2020;5(2):8-21. https://doi.org/10.1177/0972150920927684.
35. Máñez JA, Rochina ME, Llopis JAS. Sunk Cost Hysteresis in Spanish Manufacturing Exports. Review of World Economics. 2008;14(4):272-294.