Examining the BRICS Countries' Economic Performance in terms of GDP, Exports, and Imports

Dr. R. Ravikumar¹, Mr. G. Ezhilarasan² and Mr. Nikkil Dcruz³

Abstract: The BRICS nations-Brazil, Russia, India, China, and South Africa—have significantly shaped the global economic landscape, collectively accounting for over 25 per cent of the world's GDP and 42 per cent of the global population. The study analyzed the GDP, export, and import performance of the BRICS nations from 2001 to 2023, focusing on key trends and their implications for global trade. The analysis revealed that China has consistently led in economic performance, with the highest GDP, exports, and imports, followed by India, which has demonstrated robust economic growth in recent years. Brazil and Russia have shown moderate growth, influenced by commodity price fluctuations and geopolitical factors, while South Africa, the smallest economy of the group, has experienced slower yet stable growth. Using secondary data from the UNCTAD database, the study employs descriptive statistics to highlighted trends and performance. The findings underscored that China's dominance, with India emerging as a fast-growing economy, while Brazil, Russia, and South Africa face varying degrees of challenges.

Keywords: BRICS, Economic Performance, GDP, Exports, Imports, Global Economy, Descriptive Statistics.

INTRODUCTION

The BRICS nations—Brazil, Russia, India, China, and South Africa—represent a significant bloc of emerging economies contributing to the global economic landscape. Together, they account for over 25 percent of the world's GDP and 42 per cent of the global population, making them a formidable force in the international economy (UNCTAD, 2023). Since the early 2000s, the BRICS nations have shown impressive growth trajectories, though with varying patterns. China has emerged as the dominant economy, consistently recording the highest GDP, exports, and imports, while India has exhibited strong economic momentum, particularly in the last decade (World Bank, 2023)⁴. Brazil and Russia have experienced moderate growth, influenced by commodity price fluctuations, global crises, and domestic economic conditions, whereas South Africa, the smallest economy of the group, has shown stable but slower progress (UNCTAD, 2023)⁵. The economic performance of BRICS nations is critical to understanding their role in the global economy, particularly their trade performance and growth variability. The study examined the GDP, export, and import performance of BRICS nations between 2001 and 2023, highlighting key trends and contributing factors that shaped their economic trajectories.

REVIEW OF LITERATURE

The economic performance of the BRICS nations has attracted significant scholarly attention due to their increasing influence on the global economy. China, as the leading economy in the group, has achieved remarkable growth through policies focused on infrastructure development, export-driven strategies, and foreign investments, solidifying its role as a dominant force in global trade (Zhang et al., 2018). India's rapid expansion has been driven by economic reforms and liberalization, positioning it as an important player in the global market, with structural changes contributing to its growing GDP and trade performance (Sharma & Reddy, 2020). In contrast, Brazil and Russia have experienced more moderate growth, with their economies heavily reliant on global commodity prices and facing challenges such as the 2008 financial crisis and ongoing geopolitical tensions (World Bank, 2022). South Africa, the smallest BRICS economy, has struggled with high unemployment, income inequality, and infrastructure issues, but continues to maintain steady trade

¹ Associate Professor & Head, Department of Economics, PSG College of Arts & Science, Coimbatore-14.

² Assistant Professor, Department of Economics, PSG College of Arts & Science, Coimbatore-14.

³ XII Student, DPS Indian Modern School, Qatar.

⁴ UNCTAD. (2023). UNCTAD Database: International Trade and Economic Statistics. United Nations Conference on Trade and Development.

⁵ World Bank. (2023). World Development Indicators. The World Bank Group.

performance despite these challenges (Moyo, 2021). Collectively, the BRICS nations contribute significantly to global GDP and trade, with their diverse economic paths underscoring their crucial role in shaping global economic trends (UNCTAD, 2023).

Objectives of the Study

1. To analyze the trends in GDP, export and import performance of BRICS nations

Table: 1 Annual GDP Rate of BRICS Nations

METHODOLOGY

The study examined the GDP, export, and import performance of BRICS nations—Brazil, Russia, India, China, and South Africa—over the period 2001 to 2023 using secondary data from the UNCTAD database. Descriptive statistics, including mean, standard deviation, CAGR are used to analyze trends and trade performance.

RESULTS AND DISCUSSION

					USD in Millio
Year	Brazil	Russia	India	China	South Africa
2001	1202907	822744.1	856373.2	3001021	227530.8
2002	1239638	861773.3	888949.5	3275123	235950.3
2003	1253781	924647	958824.3	3603882	242908.6
2004	1325999	990999.2	1034791	3968366	253972
2005	1368459	1054187	1116782	4420545	267374.3
2006	1422677	1140140	1206803	4982881	282357.4
2007	1509032	1237451	1299254	5691987	297493.1
2008	1585905	1302392	1339358	6241302	306986.2
2009	1583910	1200534	1444657	6827905	302264.5
2010	1703150	1254602	1567418	7554111	311452.6
2011	1770840	1304444	1649571	8275591	321321.1
2012	1804861	1356936	1739578	8926362	329020.7
2013	1859094	1380756	1850670	9619596	337198.4
2014	1868463	1390922	1987808	10333925	341965.8
2015	1802212	1363482	2146759	11061570	346486.1
2016	1743173	1366123	2324002	11819151	348788.7
2017	1766233	1391078	2481926	12640251	352827.5
2018	1797737	1430116	2642106	13493439	358320.3
2019	1819683	1461552	2744394	14296365	359251.7
2020	1760056	1422767	2584367	14616411	337828.2
2021	1847863	1502646	2818259	15850964	353716.5
2022	1901461	1471546	3022292	16325036	360473.9
2023	1960342	1524510	3224749	17174196	362629.4
Mean	1647716	1267667	1866508	9304347	314700.8
Std. Dev.	236361.1	207555.1	740846.3	4567056	43646.46
CAGR	0.021	0.027	0.059	0.079	0.020

Source: UNCTAD

As presented in the Table 1, China consistently reported the highest GDP throughout the study period, beginning with USD 30, and 01,021 million in 2001 and growing remarkably to USD 1, 71, 74,196 million in 2023. India showed the second-highest growth trajectory, with its GDP increasing from USD 8, 56,373 million in 2001 to USD 3,224,749 million in 2023. Brazil and Russia

demonstrated relatively steady GDP growth over the years, with Brazil's GDP ranging from USD 12, 02,907 million in 2001 to USD 19,60,342 million in 2023, and Russia's GDP increasing from USD 8,22,744 million in 2001 to USD 15,24,510 million in 2023, despite some fluctuations, particularly during the 2009 global financial crisis and the COVID-19 pandemic in 2020. South Africa, though

the smallest contributor among BRICS nations, showed gradual GDP growth, from USD 2,27,530 million in 2001 to USD 3,62,629 million in 2023. The mean value of GDP for the 23-year period reflects China's dominance at USD 93, 04,347 million, with India (USD 18, 66,508 million), Brazil (USD 1,647,716 million), and Russia (USD 1,267,667 million) following. South Africa reported the lowest mean GDP at USD 314,700 million. Standard deviation values reveal high variability in GDP growth for China (USD 45, 67,056 million) and India (USD 740,846 million), reflecting their dynamic economic growth during the period. In contrast, South Africa displayed the least variability (USD 43,646 million). China's minimum and maximum GDP values also indicate its rapid growth, with a minimum of USD 30, 01,021 million in 2001 and a maximum of USD 1, 71, 74,196 million in 2023. Among the BRICS nations, South Africa had the lowest GDP throughout the period, with a minimum of USD 2, 27,530 million in 2001. The compounded annual growth rate was calculated as 0.021, 0.027, 0.059, 0.079 and 0.020 for the countries Brazil, Russia, India, China, and South Africa respectively. It is inferred that China and India are leading the growth performance in terms of GDP.

USD in Million

					SD III MIIIIOII
Year	Brazil	Russia	India	China	South Africa
2001	58286.6	101884	43361	266098	29258
2002	60438.7	107301	49250	325596	29723
2003	73203.2	135929	58962.9	438228	36481.6
2004	96677.8	183207	76648.6	593326	46145.7
2005	118529	243798	99616	761953	51625.7
2006	137581.2	303551	121807.7	968978	58175.1
2007	159816.4	354403	150158.6	1220456	69784.1
2008	195764.6	471606	194828.3	1430693	80782.16
2009	151791.7	303388	164908.7	1201612	61676.81
2010	200434.1	400630	226351.4	1577754	91347.3
2011	253666.3	522011	302905.4	1898381	108814.7
2012	239952.5	529256	296828.2	2048714	99605.98
2013	232544.3	521836	314847.7	2209005	96153.49
2014	220923.2	496807	322693.7	2342293	93043.28
2015	186782.4	341419	267951.4	2273468	81002.04
2016	179526.1	281710	264542.2	2097632	76214.43
2017	214988.1	352943	299241.4	2263346	88946.81
2018	231889.5	443914	324778.4	2486695	93970.07
2019	221126.8	419721	324339.6	2499457	90015.63
2020	209180.2	333530	276410.3	2589952	85833.77
2021	280814.6	494161	395425.6	3316022	123571.6
2022	334136	592075	453414.8	3544435	122900.6
2023	339695.8	424222	431574	3379255	110855.3
Mean	191206.5	363447.9	237428.1	1814493	79388.14
Std. Dev.	77284.2	141312.2	122571.4	976096.6	27589.87
CAGR	0.080	0.064	0.105	0.117	0.060

Table: 2 Export of BRICS Nations

Source: UNCTAD

Table 2 highlighted the export performance of BRICS nations (in USD million). China consistently outperformed other BRICS countries, with exports increasing from USD 2, 66,098 million in 2001 to a peak of USD 35, 44,435 million in 2022. India's export performance also demonstrated strong growth, rising from USD 43,361 million in 2001 to USD

453,414.8 million in 2022, reflecting its expanding global trade footprint. Brazil and Russia showed steady but less dramatic growth in exports over the study period, with Brazil increasing from USD 58,286.6 million in 2001 to USD 339,695.8 million in 2023 and Russia from USD 101,884 million in 2001 to a maximum of USD 592,075 million in 2022.

South Africa recorded the lowest export values among BRICS nations, with exports increasing gradually from USD 29,258 million in 2001 to USD 123,571.6 million in 2021 before moderating to USD 110,855.3 million in 2023.

The mean export values during the period revealed that the China's dominance at USD 1,814,493 million, followed by Russia (USD 363,447.9 million), India (USD 237,428.1 million), and Brazil (USD 191,206.5 million). South Africa reported the lowest mean exports at USD 79,388.14 million. Standard deviation values indicate high variability in China's exports (USD 976,096.6 million), which aligns with its substantial growth over the years. India and Russia also showed significant export variability with standard deviations of USD 122,571.4 million and USD 141,312.2 million, respectively. In contrast, South Africa exhibited the least variability in exports (USD 27,589.87 million), indicating more stable performance.

Table 3 provided insights into the import trends of BRICS nations (in USD million) from 2001 to 2023. China consistently recorded the highest imports

among the BRICS nations, starting at USD 243,553 million in 2001 and reaching a peak of USD 2,706,507 million in 2022, underscoring its position as a major global importer. India followed a notable upward trajectory, with imports increasing from USD 50,392 million in 2001 to a peak of USD 720,441.3 million in 2022, reflecting its growing economic integration and demand for foreign goods and services. Brazil and Russia showed moderate import growth, with Brazil's imports rising from USD 58,381.8 million in 2001 to USD 292,244.5 million in 2022, while Russia's imports increased from USD 53,764 million in 2001 to USD 341,269 million in 2013 before stabilizing in subsequent years. South Africa displayed the lowest import volumes among BRICS nations, beginning at USD 28,248 million in 2001 and increasing to a maximum of USD 136,206.9 million in 2022.

The compounded annual growth rate was calculated as 0.080, 0.064, 0.105, 0.117 and 0.060 for the countries Brazil, Russia, India, China, and South Africa respectively. It is inferred that China, Brazil and India are leading the growth performance in terms of exports.

I				USD in Million	
Year	Brazil	Russia	India	China	South Africa
2001	58381.8	53764	50392	243553	28248
2002	49722.5	60966	56517	295170	29267
2003	50881.1	76070	72557.7	412760	39748
2004	66433.4	97382	99775.4	561229	53465.8
2005	77627.8	125434	142870	659953	62304.3
2006	97048.73	164281	178410	791461	78714.6
2007	128110.6	223486	229369.9	956116	88449.6
2008	183920.7	291861	321031.5	1132567	101640
2009	135377.6	191803	257202.2	1005923	74053.5
2010	193184.3	248634	350232.8	1396247	96835.45
2011	238706.1	323831	464462	1743484	124430
2012	235404.5	335446	489693.9	1818405	127154.1
2013	252281.7	341269	465397.07	1949990	126330
2014	240763.4	307877	462909.62	1959233	121949.8
2015	180460.3	193019	394131.364	1679566	104651.4
2016	145247.9	191493	361648.587	1587925	91691.91
2017	165855.2	238384	449924.951	1843792	101575.6
2018	192840.2	248856	514464.057	2135748	113970.5
2019	193162	253876	486058.553	2078386	107539.4
2020	166336.2	240088	373202.029	2065964	84061.96
2021	234690.4	301046	573092.35	2679412	113988.9

Table: 3 Import of BRICS Nations

2022	292244.5	276511	720441.32	2706507	136206.9
2023	252710.5	303297	672231.28	2556565	130747
Mean	166582.2	221246.7	355913.7	1489563	92914.08
Std. Dev.	73133.65	89183.13	192909	760944.2	32365.95
CAGR	0.066	0.078	0.119	0.108	0.069

Source: UNCTAD

The mean import values further highlighted China's dominance at USD 1,489,563 million, significantly higher than India's mean imports of USD 355,913.7 million. Brazil and Russia reported mean imports of USD 166,582.2 million and USD 221,246.7 million, respectively, while South Africa exhibited the lowest mean imports at USD 92,914.08 million. The standard deviation values reveal high variability in China's imports (USD 760,944.2 million), consistent with its rapid economic growth and substantial import needs. India also exhibited significant variability (USD 192,909 million), indicative of its increasing global economic engagement. Brazil and South Africa showed relatively stable import trends, with standard deviations of USD 73,133.65 million and USD 32,365.95 million, respectively.

The compounded annual growth rate was calculated as 0.066, 0.078, 0.119, 0.108 and 0.069 for the countries Brazil, Russia, India, China, and South Africa respectively. It is inferred that China and India are leading the growth performance in terms of imports.

CONCLUSION

The analysis underscored China's economic dominance among BRICS nations, with exceptional growth in GDP, exports, and imports, aligning with findings by Wang et al. (2020) that highlighted China's role as a global economic driver. India's rapid economic expansion also mirrors trends observed in studies by Kumar and Gupta (2019), reflecting its increasing trade engagement and economic reforms. Brazil and Russia demonstrated moderate growth trajectories, consistent with IMF reports (2023) on their resource-dependent economies. Meanwhile, South Africa exhibited the slowest yet stable growth, as noted by Naidoo (2021), indicating structural challenges but steady performance. Overall, it was concluded that reaffirm BRICS' significant contribution to the global economy, though with varying growth dynamics across member nations. It was found from CAGR analysis that India and China are leading the growth performance in terms of GDP and Imports and in terms of exports China, Brazil and India are leading among the BRICS nations.

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