

BRICS INBOUND AND OUTBOUND TOURISM VERSUS SOCIO-ECONOMIC INDICATORS

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Citation: Ventura, R.V., Fernandes, E., Tshikovhi, N., & Sucheran, R. (2023). BRICS INBOUND AND OUTBOUND TOURISM VERSUS SOCIO-ECONOMIC INDICATORS. *GeoJournal of Tourism and Geosites*, 48(2spl), 733–740. <https://doi.org/10.30892/gtg.482spl07-1073>

Abstract: BRICS assemblies focus on politics and security, economics, and finance, and cultural and people-to-people exchange. Since these areas depend on global air transit and tourism, seamless movement is essential. Tourism fosters cultural proximity and human encounters, benefiting nations and businesses. This study aims to analyse tourism and socio-economic dynamics considering globalisation and socio-economic structural factors. The study examines economic growth, travel, and financial success in BRICS nations. The panel data regression method is applied to highlight the relations between tourism and socio-economic indicators among BRICS and G7 countries. Temporal and territorial aspects and all regression studies were performed using the statistical modelling programme EVIEWS 11. The study found inbound and outward connections between globalisation, dynamic socio-economic indicators, and each country's structural indicators. These tripartite aspects explained BRICS inbound and outward travel, but both are in constant change over time. Results show that the actual globalisation paradigm favours developed nations in the tourism sector, emerging BRICS nations show hopeful socio-economic structures, however they need to find new unique strategies to achieve a fair share of the new emerging world middle class tourism market. The old one is already taken by developed countries and they will fight to expand it.

Key words: BRICS, tourism, air transport, inbound, outbound, socio-economic, economies

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INTRODUCTION

In 2009, emerging nations formed the BRIC multilateral cooperative arrangement with the aim of promoting their development and sustainability. The participating countries included Brazil, Russia, India, and China. Later, in 2011, South Africa joined the group, which then became known as BRICS. BRICS is a significant multilateral cooperative framework that unites the foremost emerging economies worldwide, encompassing 42% of the global population, 24% of the global GDP, and more than 16% of involvement in global trade (Ambardar, 2017). BRICS nations have served as the primary drivers of worldwide economic expansion in recent years, and since their inception, these countries have convened to discuss significant matters under three fundamental pillars, namely political and security, economic and financial, and cultural and people-to-people exchanges. The present research is centred on the final two pillars, with a particular emphasis on interpersonal interactions that occur between individuals, not solely for the purpose of fulfilling business or educational obligations, but also for fostering a cultural approach that promotes closer ties between nations in a sustainable manner over the long term. Tourism is a crucial element that facilitates cultural proximity and fosters interpersonal interactions, which yield benefits for both nations and corporations. Congruently, air transportation plays a vital role in facilitating international travel within the tourism sector (Mishra et al., 2021).

The most important air routes in the world connect North America, Europe, and Asia in the northern hemisphere. Middle Eastern nations have also been investing heavily in the region over the past several years to revive its former status as a commercial crossing point between the West and the East, with most of the funding going towards tourism. Several attempts have been made to develop new routes to what was formerly known as the "Silk Road" (Syed et al., 2021). Geopolitical concerns, however, impede or even block these alternatives from transferring people and products. The BRICS coalition possesses a relative advantage in the realm of tourism, as there is a consistent growth in the quantity of tourists arriving in the

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individual BRICS nations. According to a report by the World Bank (2019), the rise in BRICS tourists can be attributed to the hosting of the 2010 soccer World Cup in South Africa, the 2014 soccer World Cup in Brazil, and the 2018 Russia World Cup.

Moreover, India has played host to numerous cricket tournaments, while China has organised several Olympic games. In addition to the comparatively relaxed travel regulations in these countries, the bloc is a popular destination for tourists who are drawn to the stunning landscapes of its constituent countries. This is evidenced by the fact that all member states rank within the top 20 countries for tourist attractions (United Nations World Tourism Organisation, 2019). The rise in tourist arrivals has contributed to the enhancement of international trade among the BRICS nations. Therefore, effective utilisation of international trade in these nations has the capacity to enhance economic progress in individual countries.

The presence of a robust tourism is known to have a positive impact on economic expansion and progress. The prospective economic advantages of tourism hold considerable appeal for developing nations. Several emerging nations are opting for or receiving recommendations to prioritise the development of tourism as opposed to conventional industries like agriculture and manufacturing (Mishra et al., 2021). Empirical research has predominantly concentrated on the body of literature that posits tourism as a catalyst for fostering economic development. Despite the economic importance of BRICS countries in the tourism industry, there is a noticeable lack of research investigating the relationship between tourism and poverty reduction in the collective context of the BRICS nations. This gap highlights the need for further research on the topic within the context of the group of nations. The contemporary literature presents contradictions that sustain the absence of agreement regarding the impact of tourism on poverty reduction. This highlights the possibility of diversity in the effects of tourism on poverty across BRICS countries. This research, therefore, investigates the correlation between tourism and a nation's socio-economic dynamics, the global trend of globalization, and the socio-economic structural indicators of countries, contingent upon air travel. This study explores the potential connections between economic growth and tourism in BRICS countries, while also examining the significance of financial development within this framework. The goal was to provide additional evidence supporting the existence of a nexus between these factors. Tourism is an integral element in the BRICS framework for international collaboration, and comparisons between the BRICS and G7 countries in this study, in terms of tourism, sheds light on potential growth prospects for these nations.

LITERATURE REVIEW

The emerging middle class (Clément et al., 2022), mainly from developing countries like the BRICS, has become a significant driving force in the tourism market (WEF, 2013, 2015). Their growing purchasing power, changing travel patterns, and diverse interests have reshaped the industry, creating new opportunities and challenges for destinations, businesses, and policymakers alike (OECD, 2018). Comerio and Strozzi (2019) show a review on the tourism economic impact in all aspects. They show several lines of research underway for the future. None of them approach the developed countries battle to retain preference of tourism destination, which is a challenge for emerging countries to overcome.

Given the palpable economic value of the global tourism industry, tourism has thus far been propagated as a catalyst for both the economic development and rapid global value-chain integration of most emerging and developing countries (Garidzirai and Matiza, 2020; Garidzirai, 2022). The advancement of tourism within an economy has the potential to make a significant contribution to long-term human development (Biagi et al., 2017; Croes et al., 2020, 2021). Tourism is a highly integrative economic activity - contributing to the socio-economic development of host economies through employment creation, tax base expansion, infrastructure improvement, public resource development, and export earnings. Moreso, the role of tourism as a vector of poverty alleviation/reduction has emerged as a critical debate within the tourism economics discourse (Rasool et al., 2021). Tourism is a crucial factor in addressing macroeconomic challenges such as reduced income and output, elevated unemployment rates, inadequate capital, insufficient foreign exchange, fiscal deficits, and imbalances in the balance of payments (Belke et al., 2021), and it can contribute to the eradication of poverty in developing nations (Henama, 2013). To guarantee that tourism is pro-poor, however, concerted efforts must be made to ensure that the advantages of tourism flow effortlessly to poor and vulnerable groups of people at a destination. Since widespread poverty may result in economic prosperity, pro-poor tourism is essential. Traveling to a destination area for the purpose of consuming a product related to tourism is known as tourism. This means that to get to the tourism destination region, travellers must take a journey, or at least a portion of a trip, from the region that produces tourists and pass through a transit area. Aviation is crucial for tourism and an important engine of economic growth, particularly in developing countries. Therefore, by enabling the free movement of goods and people, the liberalisation of air services may be advantageous to a country's economy.

Majority of BRICS countries share two traits: first, they are long-haul destinations, and second, they provide a small market with significant development potential. The integration of nations through socioeconomic, political, and cultural means, commonly referred to as globalization, has a favourable impact on the advancement of tourism. This, in turn, contributes to the growth of the economy. Within this framework, the amalgamation of the BRICS countries (Brazil, Russia, India, China, and South Africa) can be perceived as a significant illustration of global economic integration that has the potential to stimulate international tourism and propel their economic advancement and progress. During the BRICS Xiamen Summit of 2017, which took place in China, the significance of tourism as a catalyst for economic growth within these nations was acknowledged (Rasool et al., 2021). In 2019, the tourism industries of BRICS nations exhibited remarkable standings in global competitiveness (Pop, 2020). The advancement of the tourism industry plays a significant role in fostering sustainable economic growth in the long-term for the BRICS nations (Danish and Wang, 2018), and the impact of inbound tourism on the economic growth of BRICS nations is noteworthy and affirmative (Rasool et al., 2021). Tourism within the BRICS economies has the potential to serve as a catalyst for achieving global competitiveness (Usmani et al., 2020; Ambardar, 2017). Moreover, rising incomes, a growing middle class, and better living circumstances are all associated with

the BRICS countries' rapid economic growth (Pop et al., 2016; Hieu and Hai, 2022). The tourism literature thoroughly analyses the possible contributions for emerging countries economic growth, it explores the weaknesses of emerging countries, but it fails to consider the possible advances of developed countries to continue expanding their tourist market, not allowing the emerging ones to advance. The confrontation of data from BRICS and G7 highlights some of the challenges.

Data and analytical methodology

Due to the time dependence of the explanatory variables and considering that information is available for a range of units in a cross-sectional data format, the panel data technique was applied. Also referred to as longitudinal data, this approach deals with a time series of cross-sectional observations on a specific group of units. The panel thus reports cross-section data for the same units over time. In this approach, the variables are all collected at different points in time, usually over the entire analysed period, for the same element. In longitudinal studies, an individual's observations are correlated over time, requiring statistical techniques that consider this dependence (Twisk, 2013). The advantages of panel data analysis include the potential to study dynamic relationships over time and modelling individuals' differences (Frees, 2004).

For panel data, the standard linear model can be denoted by: $Y = XB + E$ (1)

Where: $Y_{NT \times 1} = \begin{bmatrix} Y_1 \\ \vdots \\ Y_N \end{bmatrix}, X_{NT \times k} = \begin{bmatrix} X_1 \\ \vdots \\ X_N \end{bmatrix}, E_{NT \times 1} = \begin{bmatrix} E_1 \\ \vdots \\ E_N \end{bmatrix}, B_{k \times 1} = \begin{bmatrix} \beta_1 \\ \vdots \\ \beta_N \end{bmatrix}$. (2)

And: $Y_i = \begin{bmatrix} Y_{j1} \\ \vdots \\ Y_{jT} \end{bmatrix}, X_i = \begin{bmatrix} X_{j11} & \dots & X_{jk1} \\ \vdots & \ddots & \vdots \\ X_{j1T} & \dots & X_{jKT} \end{bmatrix}, E_i = \begin{bmatrix} E_{j1} \\ \vdots \\ E_{jN} \end{bmatrix}, i = 1, \dots, N, j = 1, \dots, n$. (3)

The model's assumptions follow those established by the classical multiple linear regression model, except that the latter does not use panel data structure. Thus, the errors should be independent and identically distributed (*iid*), as well as homoscedastic - that is, for a particular individual, the observations are uncorrelated and, between individuals and time, the error variance is constant. Nevertheless, the benefit of employing the panel data frame is to analyse the individuals' patterns over time, revealing any differences they may have (Frees, 2004). Such differences between individuals arise from the similarities observed in the data compiled for a particular unit. The non-inclusion of this factor in the model could result in biased estimators. So, an upgraded model is introduced in which there is a structure to the error term, assuming that differences between the units can be absorbed through differences in the constant term:

$$Y_{it} = X_{it}B + \epsilon_{it}, \tag{4}$$

$$\epsilon_{it} = \alpha_i + N_{it}, N_{it} \sim iid(0, \sigma^2).$$

Equation 4 is summarised as: $Y_{it} = \alpha_i + X_{it}B + N_{it}$. (5)

Where, in Equations 1 to 5, Y_{it} is the dependent variable for each individual i at period t , B is the angular coefficient of the j -th explanatory variable X_{it} for $j=1, \dots, n$ and ϵ_{it} is the idiosyncratic error since it varies with the cross-section (that is, the individual) and also over time. Within this mathematical expression, α_i denotes the individual effect (with variation across individuals and constancy over time), and N_{it} varies independently of individual or time. With this new model, the heterogeneity among the panel individuals can be better reflected (Johnston and DiNardo, 1963).

Based on the assumed individual effects, the model can still be divided into various parts. The first is the random-effects model, in which each individual effect is independent of the explanatory factors, suggesting that it is random and unaffected by the covariates of the model. The second is the fixed-effects model, which considers the possibility of a relationship between the individual effect and the explanatory factors in the model. The effect is fixed based on the variables and does not happen arbitrarily. Because they consider the variations in airline connections, the models that consider the individual impact provide a great deal of versatility. We solely take the fixed-effects model into consideration in this working paper. Figure 1 summarises the methodological approach employed in the study.

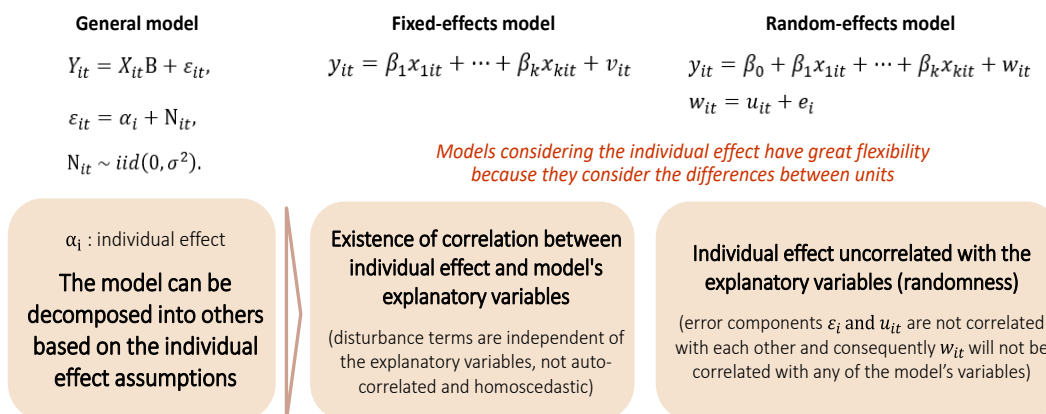


Figure 1. Panel data models

Given the panel data approach, it is necessary to assume the possibility of such effects for both the cross-section and the period. Thus, the general model applied for estimating the regression parameters is presented below in Equations 6 and 7.

Firstly, the analytical model for inbound tourism:

$$\log(\text{inbound}) = \log(\text{income level}) + \log(\text{currency power}) + \log(\text{transport cost}) + \log(\text{trade openness}) + c \quad (6)$$

Furthermore, the model for outbound tourism is described as:

$$\log(\text{outbound}) = \log(\text{income level}) + \log(\text{flight departures}) + \log(\text{currency power}) + c \quad (7)$$

Variables definition:

Data sources: World development indicators (World Bank -<https://data.worldbank.org/>) and United Nations World Tourism Organization data (UNWTO <https://www.unwto.org/tourism-statistics-database>)

Log (inbound) – inbound tourism, indicating the number of tourists arriving from other countries.

Log (outbound) – outbound tourism, indicating the number of tourists travelling to other countries.

Log (openness) – share of tourism receipts and expenditure in the country's GDP indicating the country's level of tourism openness.

Log (income level) – GDP per capita constant US\$ 2015, indicating the country's economic development level.

Log (flight departures) – number of regular flight departures, indicating the country's level of air travel mobility.

Log (currency power) – exchange rate for the constant value of GDP in PPP 2017 less exchange rate for the constant value of GDP in US\$ 2015 indicating the purchasing power of the local currency (a negative value indicates a strong country currency; a zero value indicates equivalence to the dollar, and a positive value indicates a weak currency relative to the dollar).

Log (transport cost) – participation of transport costs relative to revenues (inbound) in the country.

Log (trade openness) – participation of imports and exports in the country's GDP, indicating the country's openness to international trade. Regressions were conducted for the BRICS countries and the G7 countries to construct comparative analyses in the temporal and territorial dimensions. The econometric software for statistical modelling, EViews 11, was the tool applied to run all the regressions (Eviews 11, 2019).

CASE STUDY

During a gathering of tourism ministers from BRICS nations on July 13th, 2021, a consensus was reached to engage in collaborative efforts with the tourism industry to fully realise the potential of BRICS countries. Nonetheless, a clear definition of effective measures to accomplish this objective was not provided. Table 1 displays a representative selection of the world's most heavily populated countries, along with information regarding the number of international tourists who have visited each country. According to the ITurArr index, which measures the number of tourist arrivals (TurArr) per capita, India and Brazil exhibit the weakest correlation among the countries included in the sample. This indicator illustrates the relatively low standing of these nations in terms of global tourism. Except for Mexico, emerging and developing countries exhibit a low level of IT utilisation and adoption, suggesting a lack of development in this crucial economic domain. A distinct scenario is revealed when comparing the metrics of the BRICS countries to those of the five G7 nations, which constitute the block of the world's wealthiest countries.

Table 1. Population (Pop), international tourism arrivals (TurArr) and Intensity of TurArr (ITurArr) by country in 2019 (Source: World Bank, 2019)

Country Name	Country Code	Pop	TurArr	ITurArr*
China	CHN	1,397,715,000	162,538,000	0.12
India	IND	1,366,417,756	17,914,000	0.01
United States	USA	328,329,953	166,009,000	0.51
Indonesia	IDN	270,625,567	16,107,000	0.06
Brazil	BRA	211,049,519	6,353,000	0.03
Russian Federation	RUS	144,406,261	24,419,000	0.17
Mexico	MEX	127,575,529	97,406,000	0.76
Japan	JPN	126,264,931	31,882,000	0.25
Philippines	PHL	108,116,622	8,261,000	0.08
Egypt, Arab Rep.	EGY	100,388,076	13,026,000	0.13
Vietnam	VNM	96,462,108	18,009,000	0.19
Turkey	TUR	83,429,607	51,747,000	0.62
Germany	DEU	83,092,962	39,563,000	0.48
Iran, Islamic Rep.	IRN	82,913,893	9,107,000	0.11
Thailand	THA	69,625,581	39,916,000	0.57
United Kingdom	GBR	66,836,327	40,857,000	0.61
Italy	ITA	59,729,081	95,399,000	1.60
South Africa	ZAF	58,558,267	14,797,000	0.25
Tanzania	TZA	58,005,461	1,527,000	0.03
Myanmar	MMR	54,045,422	4,364,000	0.08
Kenya	KEN	52,573,967	2,049,000	0.04
Korea, Rep.	KOR	51,709,098	17,503,000	0.34
Colombia	COL	50,339,443	4,529,000	0.09
Spain	ESP	47,133,521	126,170,000	2.68
Argentina	ARG	44,938,712	7,399,000	0.16

*ITurArr=TurArr/Pop. In red are G7 countries, and in bold are BRICS countries

Table 2 presents the influx of visitors in BRICS countries during the year 2009, which marks the inception of the organization, and represents the latest data accessible for the current investigation. Except for India, the tourist movements of the BRICS nations exhibited varying rates of increase. China and South Africa experienced a positive shift in their international tourist balance, with China and Russia receiving the highest volume of inbound tourists. The remaining flows exhibit a relatively moderate magnitude. Brazil's tourism industry lags behind that of its BRICS counterparts, largely due to its geographical distance from major international markets in the Northern Hemisphere, particularly the Asian market. The quantity of inbound tourists to India experienced a significant increase.

Table 2. Arrivals of non-resident tourists at national borders, balance between inbound and outbound 2018, and growth by country (Source: UNWTO - United Nations World Tourism Organization, 2019)

Country	2009	2018	Balance 2018	Change 2018-2009
Brazil	4,802,217	6,621,376	- 4,565,579	1.38
Russia	21,338,650	24,550,910	- 19,090,543	1.15
India	5,167,699	17,423,420	- 1,971,775	3.37
China	126,475,923	158,606,390	80,929,046	1.25
South Africa	9,531,615	15,004,384	8,471,754	1.57

The tourism flows of the BRICS nations exhibit notable disparities, prompting several critical questions. What strategies can be employed to promote tourism growth within the BRICS countries despite existing barriers? What measures can these countries take to improve their international tourism status? What is the impact of socioeconomic indicators and globalisation on tourism in both developing and affluent countries? While it is true that neighbouring countries tend to engage in more trade and commerce with each other due to their proximity, significant trade flows can still be observed between geographically distant nations, particularly in the context of tourism.

Consequently, it is imperative to re-examine the tourism industry and assess the dynamics of inbound and outbound tourism in every nation. The present research opted to utilise a collection of variables that were made available through the World Development Indicators and the United Nations World Tourism Organization with the aim of evaluating the aforementioned concerns. Alternative variables could conceivably be employed in this investigation; however, the authors have elected to emphasise three methodological facets: the socio-economic dynamics of the nation, globalization, and socio-economic structure. The present investigation examines the panel data regressions of BRICS and G7 nations with the aim of elucidating possible future trends in these facets.

RESULTS AND DISCUSSION

The first model showcases the regression estimation of panel data for inbound tourism in both the BRICS and G7 nations. The four explanatory variables pertaining to inbound tourism signify the underlying dynamics of countries in relation to their income, currency purchasing power, air transportation costs, and trade openness. The present model solely considers income level as the elastic variable, exhibiting a coefficient greater than 1 for the BRICS nations.

Model 1. Inbound tourism BRICS and G7

Dependent variable: log(inbound)

Method: Panel Least Squares

Sample: 1995 2018 Periods included: 24

Variable	BRICS		G7	
	Coefficient	Prob.	Coefficient	Prob.
log (income level)	1.612167	0.00	-0.116929	0.69
Log (currency power)	0.150289	0.09	1.378725	0.10
log (transport cost)	-0.276255	0.00	-0.144363	0.15
log (trade openness)	0.489155	0.01	1.320593	0.00
C	-0.169159		13.21927	
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
Adjusted R-squared	0.97		0.96	

The variable in question pertains to the mean income of the nation's residents, rather than the income of the tourist. This may be construed as a measure of their socio-economic status. The positive income evolution of the BRICS countries is perceived as a factor that enhances their appeal to international tourists. The variable in question did not accurately reflect the G7 nations, as it was assumed that visitors were already cognizant of encountering a society that is more advanced. Despite exhibiting an inelastic coefficient of less than 1, trade openness remains the second most significant determinant that positively contributes to the development of inbound tourism in the BRICS nations. The escalation in trade volume with foreign nations indicates a strengthening of the country's trade relations, potentially leading to an upsurge in commercial partnerships and a corresponding increase in the inclination of visitors to travel to the country. The elasticity of

trade is a crucial variable for G7 nations, highlighting the necessity of maintaining open trade policies even in the context of tourism expansion in developed economies. The third variable under consideration pertains to the impact of transportation costs on the total expenses incurred by tourists visiting BRICS countries. This factor poses a significant constraint on the tourist's itinerary, as it curtails the financial resources at their disposal for availing other services during their trip.

The typical tourist is constrained by a limited budget while on vacation, and as a result, any rise in transportation expenses diminishes the financial resources that can be allocated towards other leisurely pursuits. The aforementioned variable exhibits analogous behaviour in both G7 and BRICS nations. However, the statistical examination indicates a lack of significance. The fourth variable indicates that a decrease in the value of a country's currency has a positive effect on the number of tourists visiting that country. A devaluing currency may enhance the purchasing power of tourists, enabling them to acquire a greater number of goods and services during their stay in the host country, thereby contributing to a more gratifying travel experience. The variable in question appears to hold significant importance and flexibility for the G7 nations.

However, in Model 2, it was observed that some of the variables utilised in Model 1 were insufficient in explicating the intricacies of the expansion of BRICS outbound tourism. A variable that was deemed insignificant in Model 1 was found to be significant in the context of outbound tourism among the BRICS countries. The chosen indicators pertaining to the BRICS nations did not exhibit a noteworthy influence on the G7 nations. Several studies suggest that international travel ranks as the second most sought-after aspiration among the expanding middle-income demographic. The present study's experiments investigated the potential correlation between a country's air mobility and the frequency of aircraft departures. The aforementioned variable exhibits statistical significance in the G7 nations regression estimate, despite its unexpectedly adverse effect. Despite the inelasticity of income, it exhibited the highest coefficient in the regression analysis, indicating the importance of income growth in relation to outbound tourism. The increase in income levels among the middle class in developing countries may lead to an expectation of increased foreign tourism. The coefficient in G7 nations exhibits no statistical significance, suggesting that the income level is adequate and unlikely to have a discernible impact. The analysis conducted on BRICS tourists identified the evolution of air transportation as the second most noteworthy factor. Paradoxically, it has been observed that the purchasing power of a country's currency has a positive correlation with the tendency for foreign tourism in BRICS nations. Specifically, as the currency weakens, the inclination for foreign tourism in these nations tends to increase. The concept of a devalued currency within a nation implies that foreign visitors would be able to procure goods and services at a lower cost in other countries, thereby fostering a positive inclination towards such a prospect. In terms of income level, the strength of currency holds minimal significance for visitors from the G7 nations. The aforementioned components serve to exemplify the diverse aspects of outbound tourism with regards to socioeconomic factors.

Model 2. Outbound tourism

Dependent variable: log(outbound)

Method: Panel Least Squares

Sample: 1995 2018 Periods included: 24

Variable	BRICS		G7	
	Coefficient	Prob.	Coefficient	Prob.
log (income level)	0.764022	0.00	0.151397	0.38
log (flight departures)	0.435334	0.00	-0.184540	0.07
Log (currency power)	0.135103	0.00	0.307126	0.40
C	3.735494		18.72957	
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
Adjusted R-squared	0.97		0.96	

The regression equation provides an estimation for the second component of the variation in tourist indicator variables that is dependent on the period. The period fixed effect in Figure 2 illustrates the observed variance. The observed difference can be ascribed to the impact of globalisation on the inbound and outbound tourism trends of the BRICS and G7 nations. Although there is a positive trend in the impact of outbound tourism, it is evolving at a faster rate than the impact of incoming tourism in both cases. Both phenomena, namely stagnation and the commencement of a new phase, have been observed. The latter is expected to occur in 2020, because of the COVID-19 pandemic. These trends suggest that the BRICS nations are primarily recognised as sources of tourists rather than as destinations for tourism. The task of redirecting the inclination of tourists from developed nations towards emerging countries is a challenging one, as it is shaped by factors such as education, media representation that is subject to scrutiny or may be inaccurate, and the promotional endeavours of the tourism industry in these nations. In contrast, developing countries are actively establishing and advancing fundamental components necessary for educating their populace, while simultaneously imparting knowledge regarding optimal practises and standards. The process of globalisation is a significant aspect of the project. The fixed impact of the period on inbound tourism for G7 countries was 0.42, whereas for BRICS nations it was 0.32. The G7 countries exhibited a variance of 0.55 in outbound tourism, while the BRICS countries demonstrated a variance of 0.86.

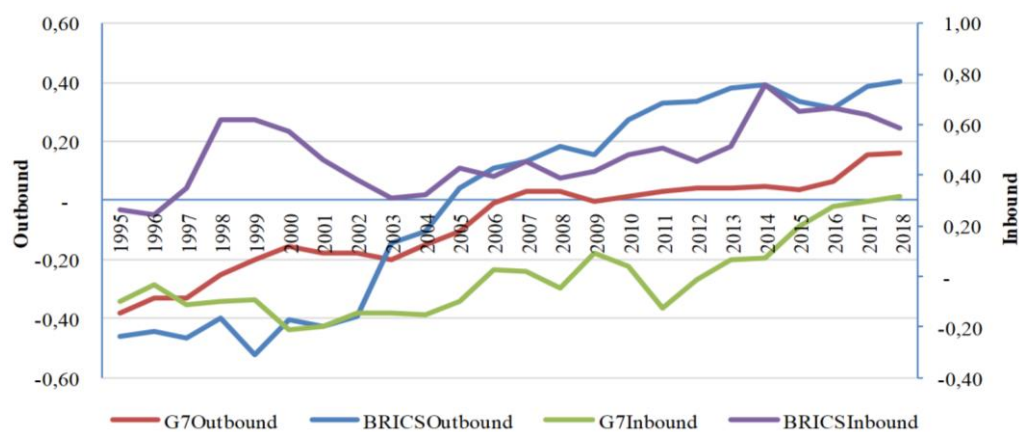


Figure 2. Inbound and outbound period fixed effect

The cross-section fixed effect, which this study defines as the demographic and economic structure of the nations with reference to the arrival and departure of tourists, is the third part of the panel data regression analysis. Tables 3 and Table 4 provide the coefficients of these impacts for each BRICS and G7 nations. The most reliable indicator for receiving and departing BRICS visitors is China, whereas the most reliable indicator for G7 visits is the United States. India, although having a slightly lower level of reception, has the second-best structure among the BRICS countries.

In terms of the structural level of tourist arrivals, South Africa and Russia are comparable, although Russia is better positioned in outbound tourism. Brazil has the lowest tourist arrival and departure indices, and an even lower inbound tourism indicator. France is a prominent member of the G7 countries in Europe. In addition to other factors that need to be considered, the nations each have unique structural characteristics, such as population, territory, and levels of import and export. Indicators at the structural level show that there is an imbalance between these indicators, even within the BRICS countries. This imbalance may be addressed in relation to the rest of the world and among these countries, especially by bolstering intra-BRICS ties and emerging country interactions in general. The socioeconomic structural gap between the BRICS and G7 countries widens when the cross-section fixed effect is combined with the constants from Models 1 and 2. This distinction gives G7 countries a considerable tourism competitive advantage over BRICS economies.

Table 3. Inbound and outbound cross-section fixed effects on BRICS

Acronym	Country	Inbound	Outbound
CHN	China	2.66	0.92
IND	India	0.66	0.89
RUS	Russian Federation	-0.75	0.37
ZAF	South Africa	-0.75	-1.05
BRA	Brazil	-1.82	-1.13

Table 4. Inbound and outbound cross-section fixed effects G7

Acronym	Country	Inbound	Outbound
USA	United States	2.04	1.12
FRA	France	1.15	- 0.64
ITA	Italy	-0.13	- 0.29
GBR	Great Britain	-0.24	0.25
CAN	Canada	-0.54	- 0.02
JPN	Japan	-0.85	- 1.14
DEU	Germany	-1.41	0.73

CONCLUSION

This report is part of continuing research on tourism in emerging nations. The findings demonstrate substantial variations between developing and developed economies. In terms of socioeconomic structure, developed economies in North America and Europe have a considerable advantage over emerging economies in attracting visitors. Actual elements of globalisation support prosperous economies. However, rising economies have more dynamic socioeconomic traits, resulting in modest tourist advantages for them. This is an undesirable condition for developing economies to compete in the arena of advantaged economies. A paradigm shift is necessary to achieve more stability in the global tourist landscape. Instead of attempting to attain North American or European norms to catch up with established economies, developing nations should concentrate on their rising middle-class market, which will drive the expansion of the global economy in the future years. Cost-effective improvements must be made to the transit routes between emerging nations.

Based on their ideals, they must promote inter-people exchange and cultural integration. There is a great amount of research to be conducted on this topic; nevertheless, we must grasp what is most essential for this significant portion of the globe, considering its values and expectations. To conserve national cultures and establish a balance of cultural integration, education and the media in rising and underdeveloped countries must be enhanced. Worth mentioning that the two-stage least squares (2SLS) method could be appropriate to correct the possible endogeneity of some variables (for example: price). Nevertheless, a limitation of the study is finding a same instrumental variable suitable for geographic regions that are notably heterogeneous. Considering a constant year-to-year effect is another study limitation, since it is known that the globalisation process presented distinct dynamics throughout the considered period: more intense at the beginning and moderate after the effects of the global financial crisis that erupted in 2008. Nevertheless, we consider the estimate presented here already acceptable as the model presents a high determination coefficient (adjusted R-squared).

Author Contributions: Conceptualization, R.V and N.T.; methodology, R.S and R.V.; software, R.V. and E.F.; validation, R.V. and E.F.; formal analysis, R.V. and E.F.; investigation, R.V. and E.F.; data curation, R.V. and R.S.; writing

- original draft preparation, R.V. and E.F.; writing - review and editing, N.T. and R.S.; visualization, R.V. and E.F.; supervision, E.F.; project administration, N.T. All authors have read and agreed to the published version of the manuscript.

Funding: This work is based on the research supported by the National Institute for the Humanities and Social Sciences.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study may be obtained on request from the corresponding author.

Acknowledgments: The research undertaken was made possible by the equal scientific involvement of all the authors concerned.

Conflicts of Interest: The authors declare no conflict of interest.

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