

PATTERN OF RELATIONSHIP BETWEEN TOURISM AND ECONOMIC GROWTH

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Abstract

Tourism sector is tremendously growing sector of BRICS economies during past two decades. Tourism industry directly or indirectly contributes to the GDP, employment and balance of payment to the financial system of every economy. This sector is also contributing to increase the revenue and thus converting financial deficit into surplus. Therefore, an effort is made to observe the causal association linking tourism industry and BRICS economies. GDP and receipts from this sector have been taken as proxy respectively for BRICS economies and tourism sector to check the causal relation. Data was gathered from various sources and suitable techniques were employed to analyses the data. The results of the study presented that in the case of Brazil as well as China, growth in GDP cause growth in Tourism Receipts whereas reciprocal relationship exists for other countries.

Keywords: *Tourism, Growth, BRICS, Causality, Development*

Introduction

Initially Brazil, Russia, India and China collectively formed BRIC group. Afterwards, South Africa joined this group in 2011. It is proposed by Goldman Sachs. These are all developing or newly industrialised countries. These all five BRICS countries are G-20 members also. Almost 3 billion people live in BRICS countries with US\$ 4.8 trillion in combined forex reserves. This group continued to be the leading sources investment from different countries in form of FDI (Sharma, 2018).

To understand and analyse BRICS as a group, it is necessary to understand how these five emerging countries spread across four continent situated in the global context. Table 1 reports the comparative data of major variables of BRICS countries. As far as population is concerned, the BRICS together as a group accounted for over 43% of global population in 2018. In terms of population, China is closely followed by India; these are the two most populous nations in the world. After India, Brazil and Russia are holding third and fourth position respectively. As far as area of these five BRICS countries is concerned, Russia is holding the largest vicinity in the group followed by South Africa, China, Brazil and India. The literacy rate of maximum BRICS nations falls in the range of 86% to 100%. As far as India is concerned, however, the literacy rate is just 74.04%. Moreover, with regard to life expectancy rate, South Africa has the highest life expectancy rate and India is following the footprints of South Africa and having good life expectancy rate compared to Russia, Brazil and China. Russia does the maximum export of goods as compared to other countries whereas about more than 6% of goods is imported in India as compared to China.

As far as Annual GDP of the BRICS countries is concerned, China holds the top position followed by India, Brazil and Russia. Contrary to it, South Africa is lacking in comparison to its member nations regarding GDP while India is on the lowest position as far as GDP per person is concerned.

Tourism and BRICS

Nowadays, many sectors are contributing towards the economies of their countries and tourism sector is no exception to it. Its contribution towards monetary development is enormous in form of increased GDP, employment and foreign exchange earnings. Hence, enlargement in tourism and travel sector is considered complementary for the expansion and growth of economy as a leading benefactor (Dritsakis, 2012).

All the BRICS countries are the most excellent target for the tourists all over the world. Brazil hosted 2014 FIFA event. Brazil was declared as most visited country during the event of FIFA and Olympic Games in 2016. In addition to it, other BRICS nations Russia also organised various political and sports related events continuously for umpteen events. In 2014, Winter Olympics and T20 conference of tourism ministers across the globe were also organised systematically in Russia. In addition to it, World Cup of football was also hosted by Russia in 2018 after Brazil which further raised the foreign exchange earnings for Russia.

Table 1: Major Variables of BRICS Countries for the Year 2018

Countries	Area (sq. km.)	Population	Literacy Rate (%)	Life Expectancy Rate (Age in Years)	Export (\$ bn)	Import (\$ bn)	Annual GDP (US Million)	GDP per Capita (US Dollar)
Brazil	8514880	209,469,333	93.5	64.2	309.1	500.3	1,867,818	8,917
Russia	17098240	146,800,000	99.6	69.6	542.5	358.1	1,657,290	11,289
India	3287260	1,352,617,328	74.04	72.5	221.0	1,780.0	2,718,732	2,010
China	9600000.9	1,395,380,000	92.2	51.5	101.2	106.8	13,368,073	9,580
South Africa	1219090	57,939,000	86.4	74.6	256.0	238.8	368,135	6,354

Source: World Development Indicator, World Bank, 2018

Table 2: FTAs and FEEs from Tourism for BRICS Countries (2001-2018)

Year	No. of Arrivals (In Millions)					Tourism Receipts (In US\$ Billions)				
	South Africa	Russia	India	Brazil	China	South Africa	Russia	India	Brazil	China
2001	5,787,000	21,595,000	2,537,000	4,773,000	33,167,000	3.256	4.726	3.198	1.844	19.006
2002	6,430,000	23,309,000	2,384,000	3,785,000	36,803,000	3.695	5.278	3.103	2.142	21.742
2003	6,505,000	22,521,000	2,726,000	4,133,000	32,970,000	6.674	5.879	4.463	2.673	18.707
2004	6,678,000	22,064,000	3,457,000	4,794,000	41,761,000	7.571	7.262	6.17	3.389	27.755

Year	No. of Arrivals (In Millions)					Tourism Receipts (In US\$ Billions)				
	South Africa	Russia	India	Brazil	China	South Africa	Russia	India	Brazil	China
2005	7,369,000	22,201,000	3,919,000	5,358,000	46,809,000	8.629	7.806	7.493	4.168	31.842
2006	8,396,000	22,486,000	4,447,000	5,017,000	49,913,000	9.211	9.72	8.634	4.577	37.132
2007	9,091,000	22,909,000	5,082,000	5,026,000	54,720,000	10.226	12.427	10.719	5.284	41.126
2008	9,592,000	23,676,000	5,283,000	5,050,000	53,049,000	9.178	15.821	11.747	6.109	44.134
2009	7,012,000	21,339,000	5,168,000	4,802,000	50,875,000	8.684	12.369	11.394	5.635	42.632
2010	8,074,000	22,281,000	5,776,000	5,161,000	55,664,000	10.308	13.239	14.193	6.18	50.154
2011	8,339,000	24,932,000	6,309,000	5,433,000	57,581,000	10.707	17.031	16.124	6.83	53.313
2012	8,399,000	24,932,000	6,309,000	5,413,000	57,562,000	10.847	17.0315	16.544	6.95	53.452
2013	8,738,000	24,932,000	6,309,000	5,532,000	57,698,000	10.867	17.5654	16.764	6.855	53.365
2014	8,799,000	25,900,000	6,349,000	5,553,000	57,896,000	10.968	17.8955	16.654	6.569	53.563
2015	8,968,000	25,934,000	6,109,000	5,633,000	57,899,000	10.489	17.9615	16.864	6.895	53.945
2016	8,898,000	26,455,000	6,254,000	5,458,000	57,785,000	10.453	17.2547	16.247	6.478	53.478
2017	8,768,000	26,984,000	6,369,000	5,698,000	57,368,000	10.785	17.3658	16.365	6.369	53.358
2018	8,856,000	27,248,000	6,486,000	5,879,000	57,989,000	10.895	17.4785	16.687	6.245	53.789

Source: MOT, India, 2018, Economics Trading; World Development Indicator, World Bank

Note: *indicates estimated data

As far as India is concerned, yearly report of 2018-19 presented by MoT, Government of India concludes that about 7.71 million people paid a visit to India in the year 2019 and income of US\$ 18.60 billion was collected for a similar year. As per report presented by UNWTO (United Nations World Tourism Organisation) in 2018, in China, more than 40 billion US dollars were earned from tourism activities. Same report anticipated that China would turn into the most visited nation in term of earning from tourists by the end of the year 2020. In light of this document, Government of South Africa reported that they will soon inaugurate the offices in member countries to promote their travel industry.

One of the fundamental targets of BRICS cluster is to make a travel industry universally accepted and to make these destinations popular among other countries as a centre point of magnetism for worldwide visitors. BRICS regional group assumes that by initiating different campaigns to promote tourism, consideration from rest of world can be captured easily to make BRICS nations as tourism heaven on the earth (Employment News, India, 28th March 2014). Table 2 presents the insights on tourists (FTAs) and revenue (FEEs) from the travel industry part for BRICS from 2001 to 2018.

Table 2 depicts the statistics of visitors and receipts from them, which shows a phenomenal escalation in the data of visitors i.e. from 5,787,000 arrivals in 2001 to 8,856,000 in 2018, with 6.62 percent growth rate in case of South Africa. In 2018; tourist arrivals in Russia posted 86.6% as compared to China (57.6%) and 6,486,000 (40.2% in India. During the same period, tourism receipts were \$10.895 billion for South Africa (29.9%), \$17.4785 billion for Russia (27.74%), \$ 16.687 billion (19.07%) for India, \$ 6.245 billion (26.9%) for Brazil and \$ 53.789 billion (35.61%) for China.

Review of Literature

The travel and tourism and its impacts on the economic advancement has been part of discussion by many researchers, some of them are as follows:

Table 3: Review of Literature

Name of Author	Objectives	Research Methodology	Conclusion
Eugenio Martin et al., 2004	To find the association between tourism and travel sector and economic growth.	Panel data regression	Tourism Growth
Kim et al., 2005	To find out causality between economic advancement and travel growth.	Cointegration and causality test	Tourism Growth
Jimenez and Pulina, 2010	To check the relationship of exports and economic growth on causality basis.	Cointegration and Granger causality	Exports Growth
Lee and Chang, 2008	To re-investigate the growth of economy with tourism sector.	Cointegration Technique	Tourism Growth
Brida et al., 2008	To study the causal relation between economy and tourism sector in Mexico.	Johanson and Cointegration test	Growth Tourism
Tang and Jang, 2009	To study liaison between economic activities and tourism activities in US.	Granger causality and cointegration	Growth Tourism
Brida et al., 2008	To investigate the tourism promotes economy concept and vice versa for South Tyrolean economy.	Granger causality	Tourism Growth
Dritsakis, 2012	To ensure the long term relation between economy and one of the sector of economy i.e. tourism.	Cointegration and OLS	Tourism Growth
Chen and Wei, 2009	To study bond between tourism extension and economic enlargement.	Garch Model	Tourism Growth
Chen, 2009	To study the effect of hotel industry on augmentation of Taiwanese economy.	Panel regression	Hotels Growth

Name of Author	Objectives	Research Methodology	Conclusion
Chang et al., 2010	To examine the correlation between tourism specialication for generating economic activities.	Panel Threshold regression	Tourism Growth
Jackman, 2012	To verify the tourism-led growth hypothesis in Barbados.	Dickey Fuller test and Granger causality test	Tourism Growth
Ertugrul and Mangir, 2015	To find out empirical link between fiscal growth and tourism activities.	Cointegration and Granger causality test	Tourism Growth
Manzoor et al., 2019	To find out association between tourism and economic growth in case of Pakistan.	Johansen's Cointegration	Tourism Growth

Source: Compiled from old studies.

Need and Objectives of the Study

Balaguer and Cantavella-Jorda, 2002 studied contribution of travel sector in improvement of economy in Spain by examining tourism led growth assumption. This hypothesis has been tested and it was concluded that this industry is acting as a big benefactor towards Spanish economy. Eugenio-Martin et al., 2004 examined causal association between economy and travel sector for some American companies. The findings specified that expansion in this sector automatically promote the growth of economies of under-developed countries and emergent economies as well while for industrial nations economic development contributed for the growth of tourism sector.

Kim et al., 2005 explored the connection between tourism activities and monetary enlargement for Taiwan. Bi-directional relationship was experienced for Taiwan for economic growth and tourism development.

Fayissa and Tadasee, 2007 and Khalil et al., 2007 viewed the causal relation between travel industry and financial development and found a strong association between tourism promotion and economic development for Pakistan. Lee and Chang, 2008; Fassiya and Tadasse, 2007 and Dritsakis, 2012 considered the relationship between the travel industry development

and monetary augmentation. It was concluded that economic development has been caused by tourism sector positively.

Zortuk, 2009; Chang et al., 2010; Ghartley, 2010 and Kreishan, 2011 examined the commitment made by the travel industry towards the monetary development. A positive connection among the travel industry and monetary development was found in the wake of running board relapse. Bouzahzah and Menyari, 2012 and Suresh and Senthilnathan, 2014 analysed that travel industry drove financial development speculation and monetary development drove the travel industry.

Connection between the travel sector and economic development for all sampled nations was affirmed.

As far as tourism to the BRICS is concerned, then China is considered as one of the most attracted destination followed by Brazil. Russia and India are also taping a major chunk of the tourists throughout the world and at number third and fourth place respectively. South Africa is at bottom of the BRICS nations in the queue of tourists' arrivals.

After, Recapitulation of various concepts of tourism, theories of tourism and its development has revealed that the existence of tourism is very ancient. It has now become more obvious that tourism is impacting significantly on economic dimensions. Many developed and developing countries made efforts to boost tourism as a key sector for economic development. This development is confirm by many countries that tourism helped in local, state and the national level for the whole economy. It is because tourism is seen as a versatile industry that holds potential to improve the developing country's standard more and gradually at the world level. Evidence from some countries indicated that tourism has been promoting the chances of economic growth. In such background, it would be appropriate to take up the analysis of tourism development for economic growth of India.

Review of literature depicts strong connection between economic growth and tourism development for the host country. As far as BRICS countries are concerned, no study has been conducted so far in this regard. Therefore, economic growth and tourism sector has been examined because it is contemporary issue in the present scenario. Hence, current research paper is an effort to study the causality from relationship point of view from the angle of tourism-led growth hypothesis (TLGH) and economic growth led tourism growth hypothesis (ELGH) for BRICS nations. Data was taken for the period of 28 years i.e. 1991-2018. Especially the developing countries have strong

cultural base ((Dana & Sharma, 2020; Dana, 2000) and with passage of the time the scope of research methodology is also changing (Dana & Dumez, 2015; Dana & Dana, 2005). So such studies can be useful to put new insight on the topic.

Data Base and Research Methodology

The purpose of the current research paper is to check the causality association between enlargement of economy and growth of travel and economic for BRICS countries. Secondary data was taken from Ministry of Tourism, India, while statistics for GDP for India was derived from RBI. Statistics for GDP and receipts from tourism sector for BRICS countries have been taken from World Bank, Economics Trading and Index Mundi. Sample period was taken from 1991 through 2018. Data for GDP was taken as a proxy to economic growth and tourism receipts were used as an indicator of tourism growth. Log was taken of both the variables to standardise the figures of GDP and Tourism economic growth.

Analysis and Interpretation

Results of Unit Root Test

Before testing the relationship between two categories, it is necessary to observe certain assumptions. Firstly, unit root test was employed on the data to examine the stationarity of both variables because it is significant to examine the stationarity of the data. Long run link exists between variables if these variables found non stationarity.

ADF test was carried out at to examine the stationarity of data series, but null hypothesis 'GDP series is not stationary' for unit root for both variables was accepted at levels for the all five countries.

Results of ADF test for GDP for all five BRICS countries have been presented in Table 4. The calculated test statistic for ADF test in case of GDP series for Brazil, Russia, India, China and South Africa is smaller than the significant values at 5% level of significance, therefore H_0 cannot be accepted in case of all BRICS countries. It signifies that there is no unit root problem. Further, this result is also suitable as Durbin-Watson statistics holds good as well because value of Durbin-Watson lies near to 2 and hence there exists no problem of autocorrelation.

Table 4: Result of Augmented Dickey-Fuller Test Statistic for GDP Series

		Brazil	Russia	India	China	South Africa
	t-Statistic	-3.209304	-4.112826	-4.080397	-7.314986	-3.619632
Test critical values	5% level	-3.040391	-3.012363	-3.020686	-3.029970	-3.020686
	Prob.*	0.0362	0.0049	0.0056	0.0000	0.0149
	Durbin-Watson stat	1.995755	1.997578	2.193683	1.657728	1.789554
	R-squared	0.708753	0.470978	0.480514	0.798553	0.438043
	Adjusted R-squared	0.619139	0.443135	0.451654	0.773372	0.371930
	F-statistic	7.908927	16.91534	16.64964	31.71268	6.625710

Source: Authors 'calculations based on statistics.

Likewise, unit test has been conducted in case of Receipts from tourism sector to check either these series are stationary or not. Table 5 depicts the findings of ADF test for the variable of receipts from tourism sector.

Table 5: Result of Augmented Dickey-Fuller Test statistic for Receipts Series

		Brazil	Russia	India	China	South Africa
	t-Statistic	-3.679910	-4.212775	-3.222258	-5.400989	-3.652969
Test critical values	1% level	-3.788030	-3.788030	-3.705676	-3.788030	-3.788030
	5% level	-3.012363	-3.012363	-3.000696	-3.012363	-3.012363
	10% level	-2.646119	-2.646119	-2.664673	-2.646119	-2.646119
	Prob.*	0.0126	0.0040	0.0336	0.0003	0.0134
	Durbin-Watson stat	1.934644	1.974710	1.725633	1.914747	1.958278
	R-squared	0.416134	0.482958	0.365816	0.605569	0.412568
	Adjusted R-squared	0.385405	0.455745	0.330584	0.584810	0.381651
	F-statistic	13.54174	17.74748	10.38295	29.17068	13.3441

Source: Authors 'calculations based on statistics.

The computed values of ADF test statistic in case of Brazil, Russia, India, China and South Africa is slightly important than critical values at 5% level of significance, therefore H_0 can be rejected in case of all BRICS countries. It denotes that the receipts series is a stationary series at 5% level of significance. Moreover, current finding also appropriate because value of Durbin-Watson falls near to 2 and hence there exists no problem of autocorrelation.

Cointegration Results

Usually a long run relationship can be established if non stationarity is found for time series data. Then, these series are considered as co integrated. Cointegration technique is relevant to examine the pattern of time series data and to observe the relation in long run. Cointegration has been verified with the help of Johansen (1988, 1991) test for cointegration. A trace test (Tr) and a Max-Eigen value test (MAX) statistics has been computed to find out the relationship between receipts from tourism and GDP.

Results of Max Eigen value and Trace statistic test has been shown in Table 6. Also, p value is more than 0.05 meaning hereby that null hypothesis of ‘Series are not co integrated’ is accepted. It also shows the absence of cointegrating relationships between these two series. Since both variables are not cointegrated, it means there is absence of relationship between both series. Therefore, the Granger Causality Test can be used to establish short run causal association between these two variables.

Empirical Results of Causality

Granger causality test is used to examine the causal relation between two variables. Relation between two variables can be unidirectional or bidirectional. Causal relation can be find out with the help of following equations:

$${}^n\text{GDP}_t = \beta_0 + \sum_{i=1}^n \beta_{1i} \text{GDP}_{t-i} + \sum_{i=1}^n \beta_{2i} \text{RECEIPTS}_{t-i} + U_t \quad \dots\dots(1)$$

and

$${}^n\text{RECEIPTS}_t = a_0 + \sum_{i=1}^n a_{1i} \text{RECEIPTS}_{t-i} + \sum_{i=1}^n a_{2i} \text{GDP}_{t-i} + V_t \quad \dots\dots (2)$$

Table 6: Results of Cointegration

Hypothesized No. of CE(s)	Brazil			Russia			India			China			South Africa		
	Statistic	Critical Value	Prob.	Statistic	Critical Value	Prob.	Statistic	Critical Value	Prob.	Statistic	Critical Value	Prob.	Statistic	Critical Value	Prob.
$r=0$	15.42862	15.49471	0.0512	10.84464	15.49471	0.2212	15.49471	0.3768	8.877	4.27449	15.4947	0.880	3.696555	15.49471	0.9265
$r \leq 1$	0.794663	3.841466	0.3727	1.664543	3.841466	0.1970	3.841466	0.5146		0.74047	3.84146	0.389	0.295627	3.841466	0.5866
Max-Eigen Test															
Hypothesized No. of CE(s)	Brazil			Russia			India			China			South Africa		
	Statistic	Critical Value	Prob.	Statistic	Critical Value	Prob.	Statistic	Critical Value	Prob.	Statistic	Critical Value	Prob.	Statistic	Critical Value	Prob.
$r=0$	14.63395	14.26460	0.0437	9.180092	14.26460	0.2715	14.26460	0.3345	8.453	3.53402	14.2646	0.905	3.400928	14.26460	0.9165
$r \leq 1$	0.794663	3.841466	0.3727	1.664543	3.841466	0.1970	3.841466	0.5146	0.424	0.74047	3.84146	0.389	0.295627	3.841466	0.5866

Source: Authors 'calculations based on statistics.

Table 7: Granger Results

Null Hypothesis	Brazil			Russia			India			China			South Africa		
	F-Statistic	Prob.	Conclusion	F-Statistic	Prob.	Conclusion	F-Statistic	Prob.	Conclusion	F-Statistic	Prob.	Conclusion	F-Statistic	Prob.	Conclusion
Tourism Receipts do not Cause GDP	0.9442	0.409	Accepted	26.815	0.000	Rejected	4.1463	*0.038	Rejected	0.7708	0.479	Accepted	13.888	0.0003	Rejected
GDP does not Cause Tourism Receipts	4.3027	0.032	Rejected	1.4506	0.2637	Accepted	1.2775	*0.309	Accepted	4.0094	0.049	Rejected	0.5969	0.5623	Accepted

Source: Authors 'calculations based on statistics.

Causal relation has been calculated with the help of Granger Causality test. The result of Granger causality test for all five BRICS countries has been presented in the Table 7. Table 7 shows that the null hypothesis i.e. “GDP does not cause Tourism Receipts”, is rejected for Brazil and China as the p values are less than 0.05 in case of these two countries. This means that in case of Brazil and China Tourism receipts are concerned by expansion in economic activities. Thus, growth in the economy should be initiated so that growth in tourism sector could be made. This result was supported by findings of Brida et al., 2008; Tang, 2011 and Bouzahzah and Menyari, 2012. According to them appropriate resource allocation should be made in those industries which further leads growth in tourism sector.

However, the null hypothesis i.e. “Tourism Receipts do not cause GDP” is not accepted at 5% significance level in case of Russia, India and South Africa. Therefore, strong policies should be framed in tourism sector that will automatically lead to economic growth. Hence, it clears that causality is running from one side not vice-versa. This result is supported by Balageur and Cantavella-Jorda, 2002; Lanza et al., 2003; Khalil et al., 2007; Lee and Chang, 2008; Brida et al., 2008; Kreishan, 2011 and Dritsakis, 2004. They found that there is strong positive relation between tourism receipts and economic growth. According to them external competitiveness in tourism sector is a basic variable for the expansion of economic growth. They also suggested that government should frame the strategies to enhance the tourism activities to generate more revenue for the economy.

Conclusions

Tourism is one of the key sectors leading to the foreign trade and is one of the major parts of revenue for Indian economy. For empirical testing of data, Granger causality and Johansen cointegration tests have been applied for further analysis. To examine the cointegration, probability of data is verified through Max Eigen value and Trace statistic test. As probability value for BRICS countries was greater than 0.05, so the consequences of the cointegration analysis report the nonexistence of cointegration relationship between the two variables.

The findings denote that in the case of Brazil and China, growth in GDP cause growth in Tourism Receipts. Thus, financial extension is pre-requisite for tourism enlargement in BRICS. On the other hand, proceed from travel industry is a foundation for augmentation in GDP in case of Russia, India and South Africa. This implies that tourism expansion acts as an engine for determining overall long run economic growth.

BRICS showed a promising image in the years to come and will be the significant mainstay of the worldwide tourism. BRICS have changed their political framework and invited worldwide private enterprise to strengthen the tourism and travel sector. Resultantly, BRICS can possibly shape an incredible financial alliance. All these five nations started monetary and political changes to rival the world economies by ameliorating the tourism policies. Further, these 5 nations should come together to develop their industries specifically tourism which can be big producer for employment, infrastructure, revenue etc.

All the nations of BRICS bloc should come together and join their hands than giving stiff competition to each other and needs to promote FDI in their respective countries. This group can become the supreme destination for the tourists with joint conclave. Further, economies of this bloc will be flourished because of this sunup industry. Furthermore, international harmony and peace can be restored with close cooperation with one another.

Implications and Recommendations

Current study might be helpful to frame policies for the escalation of tourism sector that will lead to the growth of economic development because results depicted that tourism sector contributed positively towards the economic growth of Indian, South African and Russian economies. The government of these countries should set funds for the development of tourism sectors that will routinely lead to the economies of these countries. Contrary to it, Brazilian and Chinese economies, economic growth led tourism sector is implemented so the economic development should be strategically motivated with stringent policies. Moreover, Central Government and state governments should understand the importance of tourism sector. Visa relaxation schemes should be introduced. Event tourism such as World Cup, Olympic Games etc. should be organized to attract more and more tourists. Security of tourists should be the foremost criteria especially in India.

Practical Implication

The researchers should also use the concept of causality for some other countries in some other field except tourism. The researchers need to explore some other variables which may be lead to economic growth of a company. Tourism organizations should understand the importance of tourism for economic development and should do something in this regard. Tourism organizations should frame some good policies for the development of tourism sector of the country.

Tourism and travel sector is one of the leading sectors. It is one of the biggest sources of generation of revenue for many countries. It further supports in providing more chances of employment opportunities. It provides a boost to generate the large amount of foreign exchange by giving a fillip to other allied activities. Because of tourism, residents of one country get to interact with other countrymen thus lead to social development. So, an effort should be made to develop tourism sector to accommodate a rational number of tourists in a sustainable way.

Moreover, it should not only the duty of government but also private sector and voluntary organizations to come forward to join hands with government to become active partners in the campaign to attain sustainable growth in tourism.

Limitations and Scope for Future Research

Only short-term relationship was examined in case of BRICS countries as no cointegration was found between both variables. Further, long run relationship can be investigated by adding Vector Error Correction Model (VECM). As Granger causality depicts the causal relationship of one variable over another at a particular time but does not show relationship between multivariate variables. The current study was limited to BRICS countries only and the study can also be conducted by taking another group like G20, SAARC, G-8 etc. Hypothesis like trade led economic growth and economy led trade development can be tested for further research.

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