Impact of tourism on the economic growth of the developing countries

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ABSTRACT

Aim: The study aims to evaluate tourism's impact on economic growth while drawing evidence from the developing countries

Methodology: Secondary quantitative methodology was adopted, where the data was collected from Afghanistan, Algeria, Bangladesh, Brazil, Cambodia, Malaysia, Georgia, Indonesia, India, Maldives, Philippines, Russia, Vietnam, Srilanka, and Thailand while considering the time of 10 years from 2010 till 2020. The test applied is the GLS regression model along with descriptive statistics and correlation analysis.

Results: The results of the study reflect that Tourism expenditures significantly influence the GDP growth rate while the number of arrivals insignificantly influences economic development. Other than that, tourism receipts and exports are both variables that significantly influence economic development and growth.

Limitations: This research article was based only on developing countries, limiting the scope of the research paper. Therefore, it is recommended to future researchers that in the dynamic connection between economic growth and tourism in the BRICS nations, researchers must consider the nonlinear element.

Keywords: *Tourism, Economic growth, Developing countries, BRICS, GDP*

INTRODUCTION

Tourism is an important economic activity for a country's development because it contributes to three important prerequisite goals for growth prospects. This includes; the generation of income for the country, the enhancement in the employment level for the country's workforce, and the foreign exchange earnings, which stimulate the macroeconomic indicator of exchange rates prevailing within the country. Although Tourism is a low-skilled and highly labor-intensive industry, it provides various benefits to the local regions by alleviating poverty and acting as a critical factor in economic growth (Meyer and Meyer, 2015). The study aims to assess tourism's impact on developing countries economic growth. In doing so, the research will assess the factors affecting tourism in the country and highlight suggestive strategies to promote tourism, especially in developing countries. Despite various benefits provided by tourism, several aspects of the tourism industry create adversities to other sectors of the country. In a study by Bojanic and Lo (2016), the researcher highlighted the moderating effects of tourism on economic development for countries with Islands and Natural beauty like Malaysia and Bangladesh.

The researcher chose the topic of the study because tourism has become the World's largest service industry right after the energy sector. According to research by Rasool, Maqbool, and Tarique (2021), international tourism, on average, aggregates 7% of the World's total exports. Hence it is essential to evaluate the relationship and the embedded variables of countries' tourism and economic development. Furthermore, world Tourism Day was celebrated in 2015; it was highlighted that tourism has become of the existential sectors for economic growth because the contribution to global GDP was 9.8%. Therefore, the study aims to assess tourism in developing countries and evaluate its impact on their economic growth.

The underlying problem to which the study attends to the high reliance of the developing countries on tourism. Developing countries like Bangladesh, Malaysia, Maldives, etc., highly rely on tourism because they consider it the most viable option for economic development and reduction in poverty. Regardless of countries' size and geographical location, tourism is always valuable to a country's recognition and GDP. Despite numerous benefits of tourism, it can be ascertained that

the industry is volatile and prone to macroeconomic factors like inflation, interest rate, and prevailing government policies. In addition, an outbreak like the pandemic also severely hits the growth prospects for the country's economic growth (Mo,2018). The pandemic resulted in a decline of at least 73% in 2020, according to the World Tourism Organization (Brookings,2020). The travelers were approximately 1 billion less than the previous year, which affected 100 to 120 million direct tourism jobs. It was also reported that there was a collapse in the exports and transport services.

The impact on some countries was more significant than the others. This includes explicitly countries that highly rely on international travelers as a source of economic stability. Although various countries are in the scope of reliance, the study aims to assess the fifteen countries. Although various studies implicate the assessment of post covid impacts on developing countries, like Skare, Soriano, and Rochon (2021), they are provocatively subjected to the Covid impact on tourism. They do not assess other factors that might indicate tourism's reliance on developing countries' economic growth.

LITERATURE REVIEW

Various studies like Khan et al. (2020) indicate that tourism is a competent driver of the developing economies and acts as one of the constitutional pillars of development and growth prospects for developing countries. The government in these countries is more assertive in supporting tourism due to its higher multiplier effects on more than one component of the country (Cardenas et al.,.2015). Some of the direct prevailing implications of increased tourism include the stimulation of foreign direct investments, which is the underlying reason for increasing foreign exchange earnings in the country, improving the balance of trade and balance of payments, and stimulating the supply sectors of the tourism. In addition to this, the scholar also suggests that tourism provides support to the country's agriculture through a backward integration strategy.

Various other authors indicated that the importance of tourism on economic growth is a more subjective debate and is affected by the countries' policymakers. In addition, various other factors were identified during the study conducted by Telfer and Sharpley (2015), including the standard

of living of individuals living in the country, the socio-economic dynamics of the country, and the legal framework of the country. However, after the study was summarized, the findings indicated that merely the role of tourism is insufficient in augmenting economic growth, although it was considered a significant and integral part of economic development. The study was conducted with the data of a cross-section of 109 countries. Despite various benefits proposed and discussed by authors in the study, there are findings in the study that highlight those characteristics of tourism as a socio-economic activity also transform the global political economy and reduce the potential decline contribution.

Another study by Ding, Lew, and Pin (2016), highlighted that tourism increases lobbies for investments and provides a practical base for economic growth mechanisms. The authors highlighted that the countries led by tourism use their tourism activity as an s competitive edge by displaying natural and cultural resources and using them to earn money for the local community of the country. It was also highlighted that the impact of eth tourism, despite its negative externalities, would implicate lesser environmental harm than the extractive industries. From the macro-economic perspective, tourism would contribute to the ii Investment in export-led growth and income.

A similar result was provided by Lekshmi and Mallick (2020) with the study conducted on the Indian economy for the place Kerala. The study attempted to comprehend international tourism on the economic growth at the sub-national level. The data were analyzed through a cointegration test and Vector Error Correction Model with the annual data from 1980 to 2017. The study's findings suggested that tourism has significant potential for unraveling the economic growth of Kerala. The study also linked the study's results with an increase in Foreign Tourist Arrivals (FTAs), leading to a percentage increase in Gross State Domestic Product (by 0.97%).

Various theories have also been discussed in academics to highlight the contribution made by the tourism industry in developing countries. This includes the theory of the tourism-growth model that assumes that the tourism activity will generate foreign exchange, which can be later used to generate imports of the capital goods. This will increase the domestic production of goods and

services and enhance the developing country's GDP. The theory was first discussed in 2007 and later explained more elaborately by Sintes (2020). In its initial findings of 2007, the model was assessed through export-led growth and economic broad efficiency hypothesis, which indicated the significant role of foreign equity entirely being financed through inbound tourism. The theory indicates that tourism's role is essential in developing countries' economic growth, and the tourism-led countries can demure various productivity gains to assess their economic progress (Nowak, Sahli, and Jimenez, 2007).

Recent studies also highlighted tourism's impact in developing countries during the pandemic. A study by the UNWTO (2021) highlighted that the adversities on tourism-led countries were massive during the pandemic. Since tourism is included in the world's third-largest export category, the reduction from tourism revenue has reduced by \$910 billion globally. The share of the developing countries with a more significant economic contribution through tourism had the highest share in the contribution lost. It was also indicated that 100 million jobs directly linked to tourism were at risk. Various other studies indicated that the pandemic primarily affected traveling and tourism. This includes the study Jaipuria, Parida, and Ray (2021) conducted in India. The study also highlights the impact on foreign exchange earnings (FEE).

Conceptual Framework

The conceptual framework highlights the relationship between the independent and dependent variables. In addition, the conceptual framework highlights the coherence between the study's structure by identifying the study's variables, assertion, and hypothesis. The conceptual framework of the study is as follows:

- International tourism expenditures
- International tourism number of arrivals
- International tourism receipts
- Exports of goods and services
  Foreign direct investment

GDP per Capita

As highlighted by the conceptual framework, the study's dependent variable is GDP per Capita, and the independent variables are the International Tourism expenditure, number of arrivals, and receipts. The Control variables include the Exports of goods and services (annual % growth), Foreign direct investment, and net outflows (the balance of payment in US dollars). The data for the study was collected from 15 countries for ten years. The conceptual framework was developed to assess tourism's impact on developing countries' economic development through expenditure, the number of arrivals, and receipts in the international tour of the developing countries.

METHODOLOGY

Nature of the study and data description

The following research mainly investigates tourism's impact on developing countries' economic development, and it is critical to define the appropriate method and techniques used for the research methodology. The research design adopted was quantitative. The source of data collection was secondary, and the data was collected through panel data of 15 developing countries (Afghanistan, Algeria, Bangladesh, Brazil, Cambodia, Malaysia, Georgia, India, Indonesia, Maldives, Philippines, Russia, Vietnam, Sri Lanka, and Thailand). The study's findings indicated that tourism's role was essential in developing countries' economic development. Data collected was from 2010 to 2020.

Variables of the study

The research investigates tourism's impact on developing countries economic development. For the study, the researcher has included 15 countries. The following table represents the variables that are included in the study:

Variables	Description	Source

Gross domestic product per capita (dependent variable)	GDP per capita is the GDP divided by the midyear population.	World Bank
International tourism expenditures (Dependent variable)	International tourism expenditures are the expenditure of outbound visitors in foreign countries including payments to foreign carriers. It is calculated as a percentage of the total imports.	World Bank
International tourism number of arrivals (Dependent variable)	The data on inbound tourists refers to the number of arrivals in a given period of time in each country. this is taken as a percentage of total exports.	World Bank
International tourism receipts (Dependent variable)	International tourism receipts are expenditures made by international inbound visitors.	World Bank
Exports of goods and services (Control Variable)	These are the goods and services from a local country to an international country. The amount is taken as a percentage of annual growth)	World Bank
Foreign direct investment, net outflows (Control Variable)	This is the amount of outward foreign investment made by the locals to external	World Bank

	economies. This also includes the reinvested earnings and intra-company loans and is expressed in US dollars.	

RESULTS

Descriptive statistics

The features of a data set or sample, such as a variable's standard deviation, mean, and frequency, are described or summed up using descriptive statistics (Kaur, Stoltzfus, and Yellapu, 2018). The table presented below demonstrates the descriptive statistics, where the technique's goal is to condense the raw data and information into a form that is intelligible and interpretable so that pertinent input can be provided (George and Mallery, 2018). As shown in the table, a total of 165 observations were made in the set of data as it is identified as the panel set of data. In the same period, the data is gathered from the 15 developing nations from 2010 to 2020. Furthermore, concerning the descriptive statistics, the mean value of GDP growth is computed as 4.036which imitates that the average level of GDP growth throughout selected developing countries is 4.036%. At the same time, the standard deviation is calculated as 4.654, which redirects to the decrease or increase of GDP growth. The second component is the tourism expenditures, and the mean value of the tourism expenditures is computed as 5.423 %. The standard deviation is computed as 3.558, which imitates a decline and increase in tourism expenditure. Moreover, the number of arrivals mean value is computed as 9262728, which indicates that on the average level, the 9262728 individual and the standard deviation are computed as 9999908, which reflects the increase or decrease in the mean value. The mean value of the tourism receipts is calculated as 13.788%, and that can be decreased or increased by the 19.975% value as the standard deviation is computed as 19.975.

Table 1 Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
GDP	165	4.036	4.654	-33.500	14.362
tourism expenditures	165	5.423	3.558	-1.057	14.883
Number of Arrivals	165	9262728	9999908	104000	4.27E+07
tourism receipts	165	13.788	19.975	-0.217	85.562
Exports	165	1.344	12.066	-51.355	29.339
FDI	165	7.14E+09	1.24E+10	-1.16E+10	8.65E+10

Correlation analysis

Correlation analysis in research studies is the statistical technique utilized to evaluate and access the linear relationship strength among two variables and compute their interconnection (Cleophas and Zwinderman, 2018). The correlation analysis also computes the variation in one study variable because of the variation in the other variable (Cohen, West, and Aiken, 2014). Table 2, which is represented below, concerning the correlation analysis, and it can be seen in the table that tourism expenditures and GDP growth is found to have insignificant interconnection. At the same time, the beta value is computed as 0.0438. This also validates that the association of GDP growth rate with Tourism expenditures is harmful and weak. Other than that, the number of arrivals does not also impact the GDP growth as the value is computed as -0.0579, which indicates that the interconnection between the number of arrivals and GDP growth is insignificant, weak, and negative. While on the other hand, it can be observed that the number of arrivals has a significant and positive relationship with the tourism expenditures with the beat value of 0.1816*.

Tourism receipts and GDP growth have insignificant interconnection while the beta value is computed as -0.0008. This also validates that the association of GDP growth rate with tourism receipts is negative and weak. However, it has a significant relationship with tourism expenditures, and the Number of Arrivals with the tourism expenditures and tourism receipts has a moderate and positive interconnection. However, with the Number of Arrivals, tourism receipts have a negative and weak association. Further, table 2 presents that export has a significant, positive, and moderate interconnection with the GDP growth as the beta value is computed as 0.4470*. Additionally, exports have a significant relationship with tourism receipts; however, the strength and level

among these variables are negative and weak as the beta value is computed as -0.2075*. Moreover, foreign direct investment is found to have a significant relationship and positive and moderate strength with the tourism expenditures and the number of arrivals with the beta value of 0.4442* and 0.5747*.

Table 2 Correlation Analysis

	GDP	tourism expenditures	Number of Arrivals	tourism receipts	exports	FDI
GDP	1					
tourism expenditures	0.0438	1				
Number of Arrivals	-0.0579	0.1816*	1			
tourism receipts	-0.0008	0.3811*	-0.1797*	1		
exports	0.4470*	0.054	0.0241	-0.2075*	1	
FDI	-0.1145	0.4442*	0.5747*	-0.0404	0.0067	1

HAC T-stats

The abbreviation HAC stands for heteroskedasticity, autocorrelation, and the initial regression analysis tests. The early testing of the modest regression model determines the optimal regression technique. According to the heteroskedasticity test, the variance of residuals is not equal over the whole range of measured values. The modified Wald test is used to assess the heteroskedasticity in the data set (Arvanitis, 2018). These are the two hypotheses: the null hypothesis is the first, and the alternative hypothesis is the second.

Additionally, the alternative hypothesis is H1 which states that there is a heteroskedasticity problem, as opposed to Ho, which states that there is no problem with heteroskedasticity. The modified test value must be greater than 0.05 to reject the null hypothesis (Kumar, Sharma, and Joshi, 2016). While on the other hand, the autocorrelation test, which analyses the relationship of observations among disparate opinions through time and afterward looks for a pattern or trend several times, is the next step (Ye and Sun, 2018). The Wooldridge test is used to assess the autocorrelation in the sample or data set, with Ho denoting no problem with autocorrelation and H1 denoting that there is a problem with autocorrelation as the alternative hypothesis. The Wooldridge test value must be more than 10% to accept the null hypothesis (Sar, 2017). Table 3,

presented below, indicates that the null hypothesis will be rejected concerning heteroskedasticity. The alternative hypothesis will be accepted as the Modified Wald test value is calculated as 0.0000, which is lower than 0.05. Other than that, regarding the autocorrelation null hypothesis will be accepted as this is considered that there is no issue with the autocorrelation in the data set as the value of the Wooldridge test is computed as 0.3414 which is above the predestined threshold. Moreover, to clear the issues of heteroskedasticity in the data set, the GLS model will be applied.

Table 3 HAC T-stats

Heteroskedasticity	Modified Wald test	0.0000
Autocorrelation	Wooldridge test	0.3414

Regression analysis

Generalized least squares (GLS) is the regression model utilized to examine the parameters that are non-known in the linear model of regression where there is a substantial point degree of the association among the residuals in the model of regression. Moreover, the relationship among the variables is considered significant if the (Prob>chi2) is below 0.05 (Menke, 2015). Table 4, which is presented below, states that Tourism expenditures significantly influence GDP growth as the p-value is computed as 0.044. Moreover, the value of the coefficient is calculated as 0.270, which shows that tourism expenditures positively influence the GDP growth of the selected developing countries. Other than that Number of Arrivals has an insignificant influence on the GDP growth rate as the p-value is computed as 0.33, above the threshold of 0.05. Other than that, tourism receipts have a significant influence on GDP growth as the p-value is computed as 0.049. The value of the coefficient is calculated as 0.059, indicating that tourism receipts positively influence the GDP progression of developing countries. Furthermore, exports have a significant influence on the GDP as the p-value is 0.00 while the coefficient value is 0.191, which shows the positive influence of exports on the GDP. Lastly, foreign direct investment has an insignificant and negative influence on the GDP as the p-value is computed as 0.176, and the coefficient value is in the negative form.

Table 4 Regression Analysis

GDP	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Tourism expenditures	0.270	0.115	2.35	0.019	0.044	0.494996
Number of Arrivals	3.83e-08	3.92E-08	0.97	0.33	-3.87E-08	1.15E-07
tourism receipts	0.059	0.030	1.97	0.049	0.0003	0.117844
Exports	0.191	0.025	7.68	0	0.1421	0.239537
FDI	-3.80e-11	2.81E-11	-1.35	0.176	-9.31E-11	1.71E-11
_cons	1.441558	0.560429	2.57	0.01	0.343137	2.539979

DISCUSSION

The study aims to evaluate tourism's impact on economic growth while drawing evidence from developing countries; the study reveals that Tourism expenditures significantly influence the GDP growth rate while the number of arrivals insignificantly influences economic development. Other than that, tourism receipts and exports are both variables that significantly influence economic development and growth. Moreover, Selimi, Sadiku, and Sadiku (2017) conducted a research study that investigates the tourism impact has on the growth of the economy while taking the evidence from the Western Balkan Countries; the researcher collected the data from the six countries considering the period of the 16 years and Hausman Taylor IV estimator is utilized as the most suitable model results analysis. The results of the study state that tourism has a significant as well as a positive influence on economic development. Even after collecting the data from the different countries, considering the period, and applying the different tests for the analysis, the study shows similar results. Other than that, the research study of Cannonier and Burke (2019) investigates the impact tourism has on the economic development in the Small Island Emerging States while explicitly considering the Caribbean. The researcher utilized the panel data set and took 30 years (three decades). Concerning the results of the study, it indicates that tourism has a statistically significant as well as positive influence on the growth of GDP. Moreover, the research also states that a 10% rise in tourism expenditure is found to rise economic development from 0.3% to 1%.

CONCLUSION AND RECOMMENDATIONS

It has been concluded that travel-related nations experience quicker growth than all other subcategories (OECD, exporting of oil, LDC, Small). As a result, many developing nations now view tourism as a crucial and integral component of their economic development and growth policies since it generates jobs, foreign exchange, and limited resources of financial and technical help. Today, tourism is a significant segment of the global services line of work. Other than that, International travel expenditures increased dramatically in 2015, demonstrating the industry's importance in fostering economic development, improving exports, and generating jobs for rising economies worldwide. Moreover, concerning the recommendations, there is a requirement for policy intervention, whereby the government must establish the tourism strategy in such a manner as to attract enlightened tourist arrival to developing countries, which would have a sustainable influence on economic development.

Along with that, developing nations can boost their performance of economic growth by strategically utilizing the contributions of the tourism sector and by strengthening their governance, in addition to investing in the traditional bases of evolution like foreign direct investment, trade, and investments in physical and human capital. Additionally, to further ensure beneficial effects on economic growth, these nations' regional collaboration and the creation of long-term viable tourism policies should be given full attention. Moreover, according to the economic-driven tourist growth theory, governments should invest money and resources to advance their top industries to strengthen the national economy. In contrast, because tourism activity drives economic growth, resources allocated and efforts made to promote tourism or employ powerful economic expansion techniques are thought to exacerbate the actual situation.

This research article was based only on developing countries, limiting the scope of the research paper. Therefore, it is recommended to future researchers that in the dynamic connection between economic growth and tourism in the BRICS nations, researchers must consider the nonlinear element. For example, one might conduct a comparative study to learn about TLGH in the BRICS nations. Further study might also be based on a sector-driven method to differentiate between the

indirect and direct effects of tourism on the economy. Last but not least, future studies should examine additional dependent variables, particularly foreign exchange earnings and revenue.

REFERENCES

Arvanitis, S., 2018. A note on stable limit theory for the OLSE with non usual rates and the heteroskedasticity robust Wald test. *Communications in Statistics-Theory and Methods*, *47*(1), pp.28-41.

Bojanic, D.C. and Lo, M., 2016. A comparison of the moderating effect of tourism reliance on the economic development for islands and other countries. Tourism Management, 53, pp.207-214.

Brookings,.2020. The COVID-19 travel shock hit tourism-dependent economies hard

Cannonier, C. and Burke, M.G., 2019. The economic growth impact of tourism in Small Island Developing States—evidence from the Caribbean. *Tourism Economics*, *25*(1), pp.85-108.

Cárdenas-García, P.J., Sánchez-Rivero, M. and Pulido-Fernández, J.I., 2015. Does tourism growth influence economic development?. Journal of travel Research, 54(2), pp.206-221.

Cleophas, T.J. and Zwinderman, A.H., 2018. Bayesian Pearson correlation analysis. In *Modern Bayesian Statistics in Clinical Research* (pp. 111-118). Springer, Cham.

Cohen, P., West, S.G. and Aiken, L.S., 2014. *Applied multiple regression/correlation analysis for the behavioral sciences*. Psychology press.

Ding Du, Alan Lew and Pin T.Ng., 2016. Tourism and Economic Growth

George, D. and Mallery, P., 2018. Descriptive statistics. In *IBM SPSS Statistics 25 Step by Step* (pp. 126-134). Routledge.

Inchausti-Sintes, F., 2020. A tourism growth model. Tourism Economics, 26(5), pp.746-763.

Jaipuria, S., Parida, R. and Ray, P., 2021. The impact of COVID-19 on tourism sector in India. Tourism Recreation Research, 46(2), pp.245-260.

Jiachen Mo .,2018.Tourism Dependency of Island and Developing Countries

Kaur, P., Stoltzfus, J. and Yellapu, V., 2018. Descriptive statistics. *International Journal of Academic Medicine*, *4*(1), p.60.

Kavya Lekshmi, R.S. and Mallick, H., 2020. Contribution of international tourism to economic growth of Kerala: a subnational-level analysis in India. Journal of Policy Research in Tourism, Leisure and Events, pp.1-18.

Khan, A., Bibi, S., Lorenzo, A., Lyu, J. and Babar, Z.U., 2020. Tourism and development in developing economies: A policy implication perspective. Sustainability, 12(4), p.1618.

Kumar, A., Sharma, P. and Joshi, S., 2016. Assessing the impacts of climate change on land productivity in Indian crop agriculture: An evidence from panel data analysis. *Journal of Agricultural Science and Technology*, *18*(1), pp.1-13.

Menke, W., 2015. Review of the generalized least squares method. *Surveys in Geophysics*, *36*(1), pp.1-25.

Meyer, D.F. and Meyer, N., 2015. The role and impact of tourism on local economic development: a comparative study and leisure. African Journal for Physical Health Education, Recreation and Dance, 21(1.1), pp.197-214.

Nowak, J.J., Sahli, M. and Cortés-Jiménez, I., 2007. Tourism, capital good imports and economic growth: theory and evidence for Spain. Tourism Economics, 13(4), pp.515-536.

Rasool, H., Maqbool, S. and Tarique, M., 2021. The relationship between tourism and economic growth among BRICS countries: a panel cointegration analysis. Future Business Journal, 7(1), pp.1-11.

Sar, A.K., 2017. Competitive advantage and performance: An analysis of Indian downstream oil and gas industry. *Academy of Accounting and Financial Studies Journal*, *21*(2), pp.1-7.

Selimi, N., Sadiku, M. and Sadiku, L., 2017. The impact of tourism on economic growth in the Western Balkan countries: An empirical analysis. *International Journal of Business and Economic Sciences Applied Research*, *10*(2).

Škare, M., Soriano, D.R. and Porada-Rochoń, M., 2021. Impact of COVID-19 on the travel and tourism industry. Technological Forecasting and Social Change, 163, p.120469.

Telfer, D.J. and Sharpley, R., 2015. Tourism and development in the developing world. Routledge.

UNWTO, 2021.TOURISM AND COVID-19 – UNPRECEDENTED ECONOMIC IMPACTS

Ye, X. and Sun, Y., 2018. Heteroskedasticity-and autocorrelation-robust F and t tests in Stata. *The Stata Journal*, *18*(4), pp.951-980.