



Budgetary Allocation in the Tourism Industry and GDP Growth in Bangladesh: An Empirical Analysis

Dr. Mohammad Badruzzaman Bhuiyan

Professor

Department of Tourism and Hospitality Management
University of Dhaka

Email: bhuiyan.aisdu@yahoo.com

Md. Ziaul Haque

Assistant Professor

Department of Management Information Systems
Noakhali Science and Technology University

Email: zia10093@yahoo.com

Abstract

This study attempts to investigate the impact of the spending from national allocation to the tourism industry on gross domestic product (GDP) growth rate of Bangladesh for the period from FY 1998-99 to 2018-19 as well as the causal relationship between these two elements. Existence of unit root in each of the time-series data is tested by Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests. This study applies the Johansen-Juselius cointegration technique to observe the long-run association between budgetary allocation in the tourism industry and GDP growth. Empirical analysis asserts the existence of a long-run relationship between budgetary allocation in the tourism industry and GDP growth. Moreover, the Granger causality test shows that there is a causal relationship between the budgetary allocation in the tourism industry and GDP growth. Finally, the Vector Autoregression Estimates explores that allocation of the national budget in the tourism industry has a positive effect on GDP growth rate.

Keywords: Budgetary Allocation, Tourism Industry, GDP Growth, Long-run Relationship, Granger Causality Test.

1. Introduction

Tourism is a growing industry in Bangladesh which embraced 4.4% of the total GDP in 2018 (UNWTO, 2019). The government has allocated Tk 34 billion in FY2019-20 in Civil Aviation (Biman) and Tourism Ministry which is more than double allocation of the last fiscal year which specifies that the government of Bangladesh is giving importance to the Tourism sector. The tourism industry in Bangladesh is exceedingly powered by MSMEs (Micro, Small and Medium Enterprises), in particular in restaurants, regional hotels, tour operators and recreational activities. The tourism sector currently does not enjoy any government financial support such as cash benefits, tax holidays and VAT exemptions on imports (Uddin, 2019).

The assessment of public finances is usually defined in terms of their allocation function by 3E criteria; such as efficiency, effectiveness and economy. Inbound tourism can contribute to economic growth in several ways: tourism brings new technologies for the production process that significantly provides foreign exchange services (McKinnon, 1964). Tourism stimulates the competition, accelerates the investment in production and human capital (Lemetyinen and Go, 2009). Besides, tourism stimulates industrial development through spillover effect (Cernat and Gourdon, 2012). Travel industry creates new job opportunities and promotes earnings in the economy (Lee and Chang, 2008). Finally, Tourism accelerates favourable economic externalities which supports the economic growth of the country (Croes, 2006). Tourism is considered as an emerging indicator of economic growth in majorities of the countries of the world comparing other factors of economic growth (Shahbaz et al., 2016). Moreover, Ridderstaat and Croes (2015) discovered an association between national budget allocation and tourism demand cycle.

From our previous discussion, it is evident that there is a positive association between budgetary allocation in the tourism industry and economic growth, based on this background, the objective of this current study is to investigate the plausible linkage between economic growth and the allocation of the national budget in the tourism industry. It also seeks to look empirically at the causal link between national budget allocation in the tourism industry and economic growth in Bangladesh. The remaining of this paper organized as follows.

Section two presents the related literature, which is followed by the methodology section. Afterwards, the analysis of empirical results is presented. Finally, the paper ends with implications, recommendation and conclusion.

2. Literature Review

Since tourism spending is related to the demographic profile of society and the lifecycles of tourists, studies have explored the factors that drive decision-making about tourism spending. Majority of the scholars propose that budgetary allocation influences travel industry uses significantly. Most observational research also indicates the important effect of income on holiday decisions. Fredman (2008), Nicolau and Más (2005), and Wang, et al. (2006) allude to pay as an intermediary variable for budgetary requirements in investigations of the impacts of budgetary limitations on movement cooperation. The outcomes demonstrate that budget has a critical, positive impact on the travel industry consumptions. Rudez (2008) finds that GDP has a critical, positive impact on the universal travel industry uses of Slovenians during 1994-2006. The researcher' outcomes likewise show that increments in budget or the GDP of the host nation support the number of outbound vacationers and the travel industry uses. Lim et al. (2009) utilize an autoregressive moving normal model with illustrative exogenous factors to inspect the global travel industry demand of Japanese visiting Taiwan and New Zealand from the earliest quarter of 1980 through the second quarter of 2004. The outcomes show that the number of voyagers in the past can catch the travel industry demand.

There is a fantastic correlation between demand for worldwide tourism and the real income of origin countries. Wang (2009) examines the outcomes of crises and macroeconomic activities on demand for inbound tourism in Taiwan and finds that both budget and exchange rate are large explanatory variables. Divisekera (2010) investigates the expenditure of vacationers from New Zealand, UK, USA, and Japan, the four major consumer markets of Australian tourism. The outcomes exhibit that price and earnings stages are the key determinants of customer behaviour. Expenditures are notably sensitive to earnings but much less touchy to fee levels. Dolnicar et al. (2008) accept as true with that the decision of

whether or not or no longer to travel, the selection of unique holidays and non-vacation expenditures are interdependent and concurrent, concern to time and finances constraints. Alegre et al. (2010) examine the financial, social, and demographic variables and take into account different constraints and household characteristics, such as health, education, age, and unemployment, that is, factors that can affect tourism budgets.

Their empirical analysis finds out that budgetary constraints have full-size binding effects on tourism participation for households in Spain. Household tourism participation is an additional concern to the influence of monetary variables (e.g., income, family financial savings capacities, family member unemployment, unemployment benefits), as nicely as the outcomes of nonfinancial variables (e.g., education, age, health, the range of minors, get admission to accommodation). Yap and Allen (2011) use a three-stage least squares method to have a look at Australia's home tourism demand. Their consequences propose that the patron self-assurance index has a tremendous impact on the visits to friends and families, but not on vacation travels. Surprisingly, an extend in family debt boosts demand for tourism. In different words, Australians are inclined to pay for home journeys with credit.

Hung et al., (2011) analyze Taiwan's 2006 overview of family pay and consumption and utilize the level of family unit salary spent on the travel industry as an informative variable in the communication between the travel industry uses and different uses. They convey out a quantile regression analysis to decide the connection between the travel industry applications and the travel industry time-series data. Chen and Chang (2012) explore the relationship between players in the travel industry, and the travel industry uses of vacationers to comprehend the last's effective procedure. They centre around the first-run through and rehash buy/use examples of Taiwanese visitors to investigate the distinctions in the budgetary levels and vacationer gatherings. They utilize ordinary least squares to evaluate the minor impacts of the travel industry benefits on the travel industry consumptions. They additionally direct a regression analysis to look at the heterogeneity effects of the travel industry on various degrees of the travel industry uses. In any case, Chang et al. (2013) recommend that paying little mind to past movement experience; visitors cut back

the vast majority of their travel industry uses when costs increment.

Kareem et al (2017) used vector error correction model and found a positive association between economic growth and budgetary allocation in agriculture sector in Nigeria. Chugunov and Makohon (2019) explored budgetary allocation particularly in tourism industry plays significant role in socio economic development. Hodzhiyevich et al. (2018) proposed the mechanism for effective regulation of budgetary allocation and found a fantastic association among different allocation items and economic growth. Zeti, and Drago (2020) found that effective budget programming particularly allocation in tourism industry which realistically anticipates the concrete conditions of economic and social life, is a stimulating factor for progress and economic development. Iddrisu et al. (2020) explored that allocation of budget in agriculture sector promotes economic growth of Ghana.

Pablo-Romero and Molina (2013), Brida et al., (2016) and Kumar et al., (2015) have complied different survey literature for tourism and financial development and found a positive association between financial development and tourism allocation. However, Matarrita-Cascante (2010), Lee (2012), Ivanov and Webster (2012) and Bouzahzah and Menyari (2013) explored that economic growth promotes tourism, not vice-versa. While some other studies (e.g., Seetanah, 2011; Yazdi et al., 2017) found a feedback type of linkage between tourism and economic growth. On the other hand, some studies (e.g., Tang & Jang, 2009; Katircioglu, 2009) found no relationship between economic growth and tourism. Lanza and Pigliaru (2000) and Singh (2008) found that small countries are highly influenced by tourism, while Sequeira and Nunes (2008) concluded that country size had not to effect on the tourism industry. Figini and Vici (2010) and Ekanayake and Long (2012) find that tourism does not speed up the growth in developing countries while the association between economic growth and tourism is more visible in developed countries (Cárdenas-García et al., 2015). Seetanah (2011) and Salmani et al. (2014) sharply confirmed that tourism positively affects the economic growth in both developing countries and developed countries where this growth is comparatively higher in developing countries.

From the literature, it is clearly found that there is no study is found regarding the budgetary allocation in the tourism industry and economic growth in Bangladesh to the best of our knowledge. Hence it is imperative to identify the relationship between the allocation of the national budget in the tourism industry and economic growth in Bangladesh.

3. Data and Methodology

3.1 Data

This study attempts to investigate the causal relationship and the effect of national budget allocation in the tourism industry on GDP growth rate in Bangladesh. We used secondary data published in different organizations. Data for GDP growth rate collected from World Bank's World Development Indicators (WDI) and data for allocation of the national budget in tourism industry obtained from the Bangladesh Bureau of Statistics and Ministry of Finance, Bangladesh. We used annual time series data, and the sample period consists of fiscal year 1998-99 to 2018-19. We used econometric software Eviews 11.0 and Excel for data analysis after compilation of the data.

3.2 Methodology

We tested the causality between the budgetary allocation and GDP growth in different steps. First, we used the Augmented Dickey-Fuller (ADF) test suggested by Dickey and Fuller (1979, 1981) and Philip Perron (PP) proposed by Phillips (1987) and Phillips and Perron (1988) to test for unit roots of time series data. Afterwards, we conducted a cointegration test among the variables to determine whether there exists the cointegrating vector(s). Though cointegration affirms a stable long-run relationship between the variables, this equilibrium may not exist in the short run.

Moreover, we also performed a linear regression analysis between budgetary allocation and GDP growth. Finally, we tested the causal relationship between budgetary allocation in the tourism industry and GDP growth. Granger causality is a technique for determining whether a one-time series is useful in forecasting another. A variable (X) is said to Granger-cause another (Y) if the present value of Y can be predicted with greater accuracy by using past values of

X. If X Granger-causes Y, then the causality from X to Y and If Y Granger-causes X, then the causality from Y to X. In both cases the causality is uni-directional. But when both variables Granger cause each other, then it is called a bi-directional causality.

3.2.1. Model Specification

A Keynesian-macroeconomic position on the link between government expenditure and economic growth was adopted in this study; therefore, gross domestic product growth (GPDG) is modelled to be a function of budgetary allocation in tourism industry (BATI). The model for the long-term relationship between the variables was given explicitly as:

$$nGDPG_t = \alpha_0 + \alpha_1 \ln BATI_t$$

In order to estimate the long-term relationship between the variables, the corresponding error-correction equation was estimated as follows:

GDPG= Gross Domestic Product Growth proxied by Real GDP growth (percent)

BATI= Budgetary Allocation in Tourism Industry (N 10million)

4 Findings and Analysis

4.1 Integration Test

We performed a unit root test for time series data to know the status of variables. Unit root test examines whether the variables are stationary or not. Besides unit root test determines the order of integration of variables. We utilized both the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests to discover the presence of unit root in every one of the time-series data.

Said and dickey (1984) upgrade the basic autoregressive unit root test to oblige general ARMA (p, q) models with unidentified orders. Their analysis is known as the Augmented Dickey-Fuller (ADF) test, which depends on evaluating the accompanying regression.

$$y_t = \beta'D_t + \phi y_{t-1} + \sum_{j=1}^p \psi_j \Delta y_{t-j} + \varepsilon_t$$

Where D_t is a vector of deterministic terms (constant, trend etc.) The ϕ (lagged difference terms) and Δy_{t-j} are used to estimate the ARMA arrangement of the errors, and ϕ value is set so that the error ε_t is successively uncorrelated. The error term is assumed

to be homoskedastic. Where the ADF tests use a parametric autoregression to estimate the ARMA arrangement of the errors in the test regression, the PP tests disregard any sequential correlation in the test regression. The test regression for the PP tests is given by

$$\Delta y_t = \beta' D_t + \pi y_{t-1} + u_t$$

$$u_t \approx I(0)$$

Where u_t is $I(0)$ and maybe heteroskedastic? The PP tests correctly for any sequential (or serial) correlation and heteroskedasticity in the errors u_t of the test regression by directly modifying the test statistics $t_{p=0}$ and $T\hat{\rho}$. These modified statistics denoted Z_t and Z_p are given by

$$Z_t = \left(\frac{\hat{\sigma}^2}{\hat{\lambda}^2} \right)^{1/2} \cdot t_{\pi=0} - \frac{1}{2} \left(\frac{\hat{\lambda}^2 - \hat{\sigma}^2}{\hat{\lambda}^2} \right) \cdot \left(\frac{T \cdot SE(\hat{\pi})}{\hat{\sigma}^2} \right)$$

$$Z_\pi = T\hat{\pi} - \frac{1}{2} \frac{T^2 \cdot SE(\hat{\pi})}{\hat{\sigma}^2} (\hat{\lambda}^2 - \hat{\sigma}^2)$$

The terms $\hat{\sigma}^2$ and $\hat{\lambda}^2$ are consistent estimates of the variance parameters. However, the results of both the ADF and PP tests indicated that all the series are stationary and integrated of order one $I(1)$ as reported in Table 1 and Table 2.

Table-1: Test for Integration (Augmented Dickey-Fuller)

Variables	Augmented Dickey-Fuller (Intercept)		Augmented Dickey-Fuller (Trend and Intercept)	
	Level	1st Diff.	Level	1st Diff.
GDPG	-0.173194	-1.462261***	-0.961009**	-1.491141***
BATI	0.722701	-1.414024	-2.557081	-2.844523***

Notes: *** at the 1%, ** at the 5% and * at the 10% level of significance, indicating the rejection of the null (variables are unit root/non-stationary); GDPG; GDP growth rate; BATI: Budgetary Allocation in Tourism Industry

The test upshots of the unit root above show, by and large, the nearness of unit establishes in the first arrangement; for example, $I(0)$ at their levels. The outcomes test, ADF, demonstrate that at first differences of the factors GDP growth rate is measurably significant at 1% significance level and affirms that GDP growth rate is stationary in the first differenced series, i.e., $I(1)$ in all cases. Then again, ADF result demonstrates that budgetary allocation in the travel industry is statistically significant at 1% level and stationary at the 1st difference (Trend and Intercept) test. These give the premise to the trial of the long-run relationship among the factors because the variables are stationary.

Table-2: Test for Integration (Phillips Perron)

Variables	Phillips Perron (Intercept)		Phillips-Perron (Trend and Intercept)	
	Level	Ist Diff.	Level	Ist Diff.
GDPG	-0.173194	-0.918229***	-0.520491**	-0.926033***
BATI	-1.043947	-0.028407	-1.167136	-0.397527**

Notes: *** at the 1%, ** at the 5% and * at the 10% level of significance, indicating the rejection of the null (variables are unit root/non-stationary); GDPG; GDP growth rate; BATI: Budgetary Allocation in Tourism Industry

From Table 2, it is shown much of the time, the nearness of unit establishes in the first series; for example, I(0) at their levels. The outcomes test, PP, show that at the first difference of the factors GDP growth rate is measurably significant at 1% significance level and furthermore affirms that GDP growth rate is stationary in the first differenced series, i.e., I (1) in all cases. Then again, PP results show the budgetary allocation in the tourism industry is statistically significant at 1% level and stationary at the 1st difference (Trend and Intercept) test. These give the premise to the trial of the long-run relationship among the factors because the variables are stationary.

4.2 Cointegration Test

Theoretically, it is suggested that a cointegration relationship in the model share a common trend and long-run equilibrium between GDP growth rate and budgetary allocation in the tourism industry. We apply Johansen-Juselius cointegration technique. Johansen recommends two different likelihood ratio tests of the significance of the canonical correlations and thereby the reduced rank of the matrix: the trace test and maximum eigenvalue test i.e.

$$\lambda_{trace(r)} = -T \sum_{i=r+1}^k \ln(1 - \hat{\lambda}_i)$$

$$\lambda_{\max(r,r+1)} = -T \ln(1 - \hat{\lambda}_{r+1})$$

Here T is the sample size and $\hat{\lambda}_i$ the i th largest canonical association. The trace tests the null hypothesis of r cointegrating vectors against the alternative hypothesis of n cointegrating vectors. The maximum eigenvalue test, in contrast, tests the null hypothesis of r cointegrating vectors against the alternative hypothesis of $r+1$ cointegrating vectors. The null hypothesis of cointegration test states that variables are not cointegrated. If calculated Trace statistic or Max Eigen Value exceeds the critical value, then we can reject the null hypothesis of no cointegration. The Johansen test statistics show rejection for the null hypothesis of no cointegrating vectors under both the trace and maximal Eigenvalue forms of the test.

If there should arise an occurrence of the trace test, the null hypothesis is there is no co-integration between GDP growth rate and budgetary allocation in the tourism industry, and this null hypothesis is dismissed because the test measurements (21.62045) is more prominent than the 5% critical value (15.49471). Proceeding onward to test the null hypothesis considered 1 co-coordinating vectors, the trace measurement is 6.522951, while the 5% critical value is 3.841465, with the goal that the null hypothesis is dismissed at 5% significant level. So the observational outcome demonstrates that there is, in any event, one cointegration among the factors in the series over the long run because there is at least one cointegration among the variables

Table-3: Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE (s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.548240	21.62045	15.49471	0.0053
At most 1 *	0.290584	6.522951	3.841465	0.0106

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

If there should be an occurrence of the most extreme Eigenvalue test, the null hypothesis, “no co-integration among the factor” is dismissed since the test measurement of 15.09750 is more prominent than the 5% basic estimation of 14.26460. Proceeding onward to test the invalid of all things considered 1 co-integrating vectors, the greatest Eigenvalue statistics is 4 6.522951, while the 5% critical value is 3.841465 that the null hypothesis is dismissed at 5% significance level. At long last, max results show the presence of at any rate one cointegrating relationship among the factors in the series.

Table-4: Unrestricted Cointegration Rank Test (Maximum Eigen Value)

Hypothesized No. of CE (s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.548240	15.09750	14.26460	0.0368
At most 1 *	0.290584	6.522951	3.841465	0.0106

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

The estimations of the standardized co integrating coefficient show that over the long run, the illustrative variable is decidedly identified with the GDP growth rate. Over the long run, 1% expansion in budgetary allocation in tourism industry prompts practically 0.02% increment in GDP growth rate. This long-run harmonious connection between GDP growth rate and budgetary allocation in the tourism industry is measurably significant.

Table-5: Long-run impact of GDPG and TAB of Bangladesh

Variables	Normalized cointegrating coefficients	Standard Error
GDPG BATI	0.022365	(0.00405)

Note: GDPG; GDP growth rate; BATI: Budgetary Allocation in Tourism Industry

4.3 Granger causality test

In order to find out the causal relationship between GDP growth rate and budgetary allocation in the tourism industry, we used Granger causality approach. Using this analysis, we want to test for causality between these two variables.

The results are presented in Table 6.

Table-6: Granger Causality test

Null Hypothesis:	F-Statistic	p-value	Granger Causality
BATI does not Granger Cause GDPG	8.42796	0.0010*	Yes
GDPG does not Granger Cause BATI	0.52131	0.7730	No

Note: * at the 5% level of significant GDPG; GDP growth rate; BATI: Budgetary Allocation in Tourism Industry

The Granger causality result indicates that budgetary allocation in the tourism industry is Granger cause of GDP growth rate. On the other hand, GDP growth rate is not Granger cause of budgetary allocation in the tourism industry. This result suggests that there is a uni-directional causality between the GDP growth rate and budgetary allocation in the tourism industry.

4.4 Vector Autoregression Estimates

Johansen Cointegration test indicates the existence of a cointegrating relationship between the dependent an independent variable that establish the long-term dynamics between the variables in the cointegrating equation by estimating the error correction model. The results of the vector error correction as shown in table 7 different estimates and diagnostic statistics. The model is capable of explaining 54.48 per cent of the variation in GPD growth rate as noted by the R-squared of 0.544857. The coefficient value of probability statistics suggests overall significance of the explanatory variable of the model.

Table-7: Vector Autoregression Output

Variable	Coefficient	Std. Error	t-Statistic	
C	3.156274	1.59038	1.98460	
GDPG(-1)	0.736217	0.30460	2.41701	
BATI(-1)	0.002436	0.00235	1.99477	
R-squared	0.705496	Mean dependent var		6.092289
Adjusted R-squared	0.544857	SD dependent var		1.019642
SE of regression	0.687894	Akaike info criterion		2.374937
Sum squared resid	5.205179	Schwarz criterion		2.721193
Log-likelihood	-14.37443	F-statistic		4.391819

The estimates show that budgetary allocation in tourism industry is associated with GDP growth in the long run and is therefore conformity with a priori expectation. It indicated that a 1% increase in the budgetary allocation in the tourism industry would increase a 0.24% increase in GDP growth rate, which substantial for the economic growth of a country. The coefficient of budgetary allocation in the tourism industry is positive and statistically significant at the 99% level.

5. Conclusions and Recommendation

The central objective of this paper was to recognize whether the allocation of the national budget in the tourism industry affects GDP growth rate depending on the information over the period FY 1998-99 to 2018-19 of Bangladesh. The paper additionally attempts to investigate the causality connection between budgetary allocation in the tourism industry and GDP growth rate. The observational investigations are done utilizing the time series econometric procedures. The series is tested for unit roots, using the Augmented Dickey-Fuller


(ADF) and Philip Perron (PP) test indicate that the variables budgetary allocation in the tourism industry and GDP growth rate are statistically significant. By utilizing the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests, it has been discovered that all the factors are non-stationary at their levels, but at first differences both the budgetary allocation in the tourism industry and GDP growth rate are stationary. The observational consequence of Johansen Juselius method uncovers that budgetary allocation in the tourism industry and GDP growth rate are cointegrated. It infers that there is for some time run a stable relationship among these two factors. Moreover, findings from the Johansen-Juselius cointegration technique demonstrate the presence of at any rate one cointegrating relationship among the factors. The estimations of the standardized cointegration coefficient show that over the long run, the regressor is positively related to the regress.

The Granger-causality results found that budgetary allocation in the tourism industry is a cause of GDP growth rate in Bangladesh. The Granger causality result indicates that GDP growth rate is not granger cause of budgetary allocation in the tourism industry. There is a uni-directional causality between budgetary allocation in the tourism industry and GDP growth rate. This result will help the strategy maker of Bangladesh about the allocation of the national fiscal budget. The tourism industry is a consistently developing industry and its commitment to financial development is likewise mentionable. This study additionally affirms this thought and exactly declare that budgetary allocation in the tourism industry is a reason for the GDP growth rate. Government and strategy makers should devise a strategy to make the planned allocation of the national budget for sustainable economic growth, social and natural supportability and for decreasing congestion and unemployment.

Many peoples are pulled towards the tourism sector for getting a number of better prospects in Bangladesh during the last few decades. This study finds that budgetary allocation in tourism industry positively affects our GDP growth. Vector auto regression analysis shows that 1% increase in budgetary allocation in the tourism industry will increase GDP growth by 0.24%.

This paper combines budgetary allocation in the

tourism industry to analyze economic growth. It proposes an unexpected supposition in comparison to past writing, which has recommended a fundamentally positive direct impact of budgetary allotment in the tourism industry on economic growth in Bangladesh. This finding is useful to policymaking and the advancement of the tourism industry. It is imperative for the tourism industry to comprehend the impact of the national financial plan on economic growth in Bangladesh.

This paper adds to the knowledge by consolidating worldwide information with national information to approve the straight connection between budgetary allocation in the tourism industry and economic growth by utilizing threshold variables. The impacts of budgetary allocation on economic growth is changed under explicit conditions. 

References

- Alegre, J., Mateo, S., & Pou, L. (2010). An analysis of households' appraisal of their budget constraints for potential participation in tourism. *Tourism Management*, 31(1), 45-56.
- Brida, J. G., Cortes- Jimenez, I., & Pulina, M. (2016). Has the tourism-led growth hypothesis been validated? A literature review. *Current Issues in Tourism*, 19(5), 394-430.
- Bouzahzah, M., & Menyari, Y. (2013). International tourism and economic growth: The case of Morocco and Tunisia. *Journal of North African Studies*, 18(4), 592-607.
- Cárdenas-García, P.J., Sánchez-Rivero, M., & Pulido-Fernández, J.I. (2015). Does tourism growth influence economic development?. *Journal of Tourism Research*, 54(2), 206-221.
- Cernat L., Gourdon, J. (2012). Paths to success: Benchmarking cross country sustainable tourism. *Tourism Management* 33, 1044-1056.
- Chang, K. L., Chen, C. M., & Meyer, T. J. (2013). A comparison study of travel expenditure and consumption choices between first-time and repeat visitors. *Tourism Management*, 35, 275-277.
- Chen, C. M., & Chang, K. L. (2012). The influence of travel agents on travel expenditures. *Annals of Tourism Research*, 39(2), 1258-1263.
- Chugunov, I & Makohon, V. (2019). Fiscal Strategy As An Instrument Of Economic Growth, *Baltic Journal of Economic Studies*, 5(3), 213-217
- Croes, R. (2006). A paradigm shifts to a new strategy for small island economies: Embracing demand side economics for value enhancement and long term economic stability. *Tourism Management*, 27, 453-465.
- Divisekera, S. (2010). Economics of tourist's consumption behavior: some evidence from Australia. *Tourism Management*, 31(5), 629-636.
- Dolnicar, S., Crouch, G. I., Devinney, T., Huybers, T., Louviere, J. J., & Oppewal, H. (2008). Tourism and discretionary income allocation: heterogeneity among households. *Tourism Management*, 29(1), 44-52.

- Ekanayake, E.M., & Long, A.E. (2012). Tourism development and economic growth in developing countries. *The International Journal of Business and Finance Research*, 6(1), 51–63.
- Figini, P., & Vici, L. (2010). Tourism and growth in a cross section of countries. *Tourism Economics*, 16(4), 789–805.
- Fredman, P. (2008). Determinants of visitor expenditures in mountain tourism. *Tourism Economics*, 14(2), 297–311.
- Hung, W. T., Shang, J. K., & Wang, F. C. (2011). Another look at the determinants of tourism expenditure. *Annals of Tourism Research*, 39(1), 495–498.
- Hodzhivovich, Z.K., Stasisovich, J.K. & Kobildzhonovich, Z. Z (2018). Modeling of the system of financial-budgetary relations of the countries of the post-soviet space in the conditions of instability, *Public Administration Special Issue*
- Ivanov, S., & Webster, C. (2012). Tourism's impact on growth: The role of globalization. *Annals of Tourism Research*, 41, 231–236.
- Iddrisu, A.M., Gafa, D.W., Abubakari, M., Emini, C.A., & Beaumais, O. (2020). How the Fertilizer Subsidy Program Can Boost Economic Growth and Employment in Ghana? Available at <https://www.africaportal.org/publications/?topic=fertilizer-use-in-africa>, Accessed on 26/06/2020
- Katircioglu, S.T. (2009). Revisiting the tourism-led-growth hypothesis for Turkey using the bounds test and Johansen approach for cointegration. *Tourism Management*, 30(1), 17–20.
- Kareem, S.D., Olusegun, A.K. & Arogundade, L.S (2017). The Link Between Agricultural Budgetary Allocation and Economic Growth in Nigeria, *Journal International Journal of Business, Economics and Management*, 4(2), 38–43
- Kumar, R.R., Loganathan, N., Patel, A., & Kumar, R.D. (2015). Nexus between tourism earnings and economic growth: A study of Malaysia. *Quality and Quantity*, 49(3), 1101–1120.
- Lemmetyinen, A., & Go, F.M. (2009). The key capabilities required form Managing tourism business networks. *Tourism Management*, 30, 31–40
- Lanza, A., & Pigliaru, F. (2000). Tourism and economic growth: Does country's size matter?. *Rivista Internazionale di Scienze Economiche Commerciali*, 47, 77–85.
- Lee, C.G. (2012). Tourism, trade, and income: Evidence from Singapore. *Anatolia*, 23(3), 348–358.
- Lee, C.C., & Chang, C.P. (2008). Tourism development and economic growth: A closer look at panels. *Tourism Management*, 29, 180–192.
- Lim, C., McAleer, M., & Min, J. C. H. (2009). ARMAX modelling of international tourism demand. *Mathematics and Computers in Simulation*, 79(9), 2879–2888.
- Matarrita-Cascante, D. (2010). Beyond growth: Reaching tourism-led development. *Annals of Tourism Research*, 37(4), 1141–1163.
- McKinnon, D.R.I. (1964). Foreign exchange constraint in economic development and efficient aid allocation. *Economic Journal*, 74, 388–409.
- Nicolau, J. L., & Más, F. (2005). Stochastic modeling: a three-stage tourist choice process. *Annals of Tourism Research*, 32(1), 49–69.
- Pablo Romero, M.P., & Molina, J.A. (2013). Tourism and economic growth: A review of empirical literature. *Tourism Management Perspectives*, 8, 28–41.
- Ridderstaat, J., & Croes, R. (2015). The link between money supply and tourism demand cycles. a case study of two Caribbean destinations. *Journal of Travel Research*, 26(2), 37–40.
- Rudez, H. N. (2008). The GDP impact on international tourism demand: A Slovenia based case. *Tourism and Hospitality Management*, 14(2), 217–228
- Sequeira, T.N., & Nunes, P.M. (2008). Does tourism influence economic growth? A dynamic panel data approach. *Applied Economics*, 40(18), 2431–2441.
- Salmani, B., Panahi, H., & Razzaghi, S. (2014). Assessing the dynamic economic impact of tourism for OIC members. *World Applied Sciences Journal*, 32(6), 1098–1105.
- Seetanah, B. (2011). Assessing the dynamic economic impact of tourism for island economies. *Annals of Tourism Research*, 38(1), 291–308.
- Singh, D.R. (2008). Small island developing states (SIDS): Tourism and economic development. *Tourism Analysis*, 13(5–6), 629–636.
- Shahbaz, M., Kuma, R.R., Ivanov, S., & Loganathan, N. (2016). The nexus between tourism demand and output per capita, with the relative importance of trade openness and financial development: A study of Malaysia. *Tourism Economics*, 1–19, <http://dx.doi.org/10.5367/te.2015.0505>.
- Tang, C.H., & Jang, S.S. (2009). The tourism–economy causality in the United States: A sub industry level examination. *Tourism Management*, 30(4), 553–558.
- Uddin, S. (2019). Tapping tourism potential crucial to BD economy: USAID, *Financial Express*, Accessed on 12 June, 2020.
- United Nation World Tourism Organization (UNWTO). (2019). International tourism, number of arrivals – East Asia & Pacific– World Bank, Accessed on 12 June, 2020.
- Wang, Y. S. (2009). The impact of crisis events and macroeconomic activity on Taiwan's international inbound tourism demand. *Tourism Management*, 30(1), 75–82.
- Wang, Y., Rompf, P., Severt, D., & Peerapatdit, N. (2006). Examining and identifying the determinants of travel expenditure patterns. *International Journal of Tourism Research*, 8(5), 333–347.
- Yap, G., & Allen, D. (2011). Investigating other leading indicators influencing Australian domestic tourism demand. *Mathematics and Computers in Simulation*, 81(7), 1365–1374.
- Yazdi, S.K., Salehi, K.H., & Soheilzad, M. (2017). The relationship between tourism, foreign direct investment and economic growth: Evidence from Iran. *Current Issues in Tourism*, 20(1), 15–26.
- Zeti, C.F. & Dragoie, S.I (2020). Opinions regarding the budgetary performance in the public sector of Romania, *Annals of the Constantin Brâncuși" University of Târgu Jiu, Economy Series, issue 2.*