Financial Development, Tourism and Economic Growth Nexus: An Empirical Evidence from Pakistan

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Abstract

This study explores the connection between tourism and economic growth keeping in view the importance of financial development in Pakistan. The outcomes of the study revealed that tourism and economic growth are co-integrated. Moreover, the results highlighted that tourism upsurges economic growth both in the short and long term in Pakistan. Similarly, the financial liberalization by and large has also the same impact on economic growth like tourism. Nonetheless, the coefficient of financial liberalization is having correct sign, but not that much overwhelming effect in the short run.

Keywords: Tourism, Economic Growth, Financial Development

Introduction

Tourism is a multi-dimensional and labor-intensive economic activity. It spurs aggregate economic activities and makes revenue for government through general taxes, foreign exchange, creates employment and business opportunities. In addition, it also leaves a positive impact on a society by encouraging intercultural cooperation, culture exchange and integration (Hye & Khan, 2013).

Similarly, global tourism plays an important role in promoting world peace by initiating mediation and forming a channel between cultures. It also supports host countries both at micro and macro levels: to increase the level of family income by stimulating aggregate economic activities. On the one hand, global tourism promotes efficiency through greater competition among tourism-related companies, which contributes to the development of economies of scale in the local businesses.

Pakistan is enjoying enormous beauty, which includes large and magnificent mountains (e.g. peaks of the Karakoram range), ancient Silk Road, stunning landscapes, large deserts that run thousands of miles from South to North, fertile Indus River plain, ruins of Mohenjo-Daro, Indus Valley civilization, Harappa, Gandhara. These panoramic tourism destinations have turned Pakistan into a prominent tourist destination for foreigners. Further, Pakistan is also a great potential to become a hub of ecotourism. It shows Pakistan enormous tourism capacity, which entices various individuals and religions from around the world to visit Pakistan.

Tourism mostly supports unindustrialized and emerging economies for its finance and foreign exchanges. They typically use foreign exchange earnings to pay for major import products as utmost for import oriented economies. As a result, tourism has become one of the most important sectors in many developing countries. Therefore, improving tourism has become an indispensable approach especially for developing countries. Moreover, generally tourism sector has been consi-

dered as a creator of a rapid and comprehensive tax activity which contributes to poverty reduction and peacekeeping. Likewise, the sector is also known as the major voluntary transfer of money from rich to poor countries (Mitchell & Ashley, 2009).

The expedite development of the tourism industry throughout the world presently causes an expansion in household and government incomes. This increase in income has manifold effects on the economy due to multiplier effect. As the expansion of the tourism industry has boosted aggregate demand and has spurred the economic growth. Moreover, the development of the tourism industry increases the prices of indigenous and non-traded commodities, which improves profit and income of the local traders.

The composition of tourism in GDP in various countries like Macau, Seychelles, Maldives, Saint Kitts and Nevis, and Grenada are 72.2, 67.1, 66.4, 62.4 and 56.6 respectively (Travel & Tourism Economic Impact, 2018). It shows that tourism has the capacity to give a strong boost and support to economic growth and prosperity, employment opportunities, infrastructure development, a better standard of living, spur tax revenue, regulate steady transport system and diminish economic uncertainty. If governments of Pakistan aptly oversee the tourism sector, then this sector potentially can play a vital role in economic growth and development of the country.

In Pakistan economy, the tourism sector is not that much prominent nevertheless it still supports economy one-way to another. The travel and tourism contributions were $7.6 billion in 2016 (2.7% of GDP). In 2017, an increase of 5.1% (833.8 billion PKR) was reported. It is anticipated that there will be increased yearly of 5.6%. Accordingly, this upsurge would reach to 1,432.1 billion PKR in 2027. The proportion of travel and tourism in GDP was 6. 9% ($ 19.4 billion) and was estimated at 6.0% in 2017 and 7.2% in 2027 to 5.8% per year ($ 36.1 billion) respectively (T&TEI, 2018). Nevertheless, tourism supports 6% of labor force for employment. Consequently, the implicit impact of this industry to total employment is roughly 3,550 million jobs. This should be increased by 3.0% in 2017 to reach 3,657 million jobs and in 2027 by 2.7% per year to reach 4,783 million jobs (6.3% of the total) (T&TEI, 2018).

These figures suggest that Pakistan has brilliant prospects for tourism, with a diversity of cultures, charming landscapes, beautiful beaches and a variety of attractions and sites that meet the needs of local and international tourists. The potential tourism of Pakistan is still underutilized. The tourism sector of Pakistan has prodigious potential and has the capacity to contribute more effectively. Hence, this study is investigated to quantify the impact of tourism on GDP of Pakistan.

The next section offers methodology followed by upcoming two sections on results and discussion and conclusion respectively.

Methodology
Description of the data
The study used time series data from 1995 to 2018 to see the impact of tourism on economic growth, moreover, the detail of the variables are as under: Gross Domestic Product (GDP): GDP is the market value of all final good and services produce in specific time period. International Tourism Receipts (ITR): ITR is that income which a host country is receiving from the international tourism. Financial Development: The financial development is also one of the important factors to facilitate foreigner in different way to visit a country. Similarly, for this purpose, the variable is incorporated in the model. In addition, the inclusion of financial development in the tourism-driven growth hypothesis is based on the study (Hur et al., 2006). Moreover, Hassan, Sanchez and Yu, (2011) highlighted the relationship between financial development and economic growth. Therefore, the present study also considers the financial development as one of the contemporary determinates of

GDP along with tourism. Likewise, Hassan et al., (2011), used ratio of the aggregate money supply (M3) to GDP as a proxy for financial development. The data for the three variables were extracted from IFS.

The descriptive statistics of the data along with the Correlation Matrix are reported in Table 1. This table depicts that the variables are normally distrusted and have no multicollinearity issue.

Table 1. Descriptive Statistics of the Variables

Statistics	Growth (lnG)	Tourism (lnT)	Financial Development (lnF)
Mean	4.123	3.092	3.651
Median	4.321	3.231	4.902
Maximum	4.3211	4.632	6.321
Minimum	3.0562	1.0326	0.8632
Standard deviation	0.6512	1.5623	1.0632
Skewness	0.3410	0.6521	0.4621
Kurtosis	1.928	2.1094	3.0261
Jarquebera	1.902	3.217	3.6591
(Probability)	(0.2351)	(0.2310)	(0.01242)
Correlation Matrix			
lnG	1.0000	0.00	0.00
lnT	0.5721	1.0000	0.00
lnF	0.6210	0.561	1.000

The specification of the variables for the model is based on new theory of economic growth (Balassa, 1978). This theory posits that the expansion of exports can stimulate economic growth by promoting specialization and increasing factor productivity by increasing the rate of competition growth with the positive aspects. The study follows the well elaborated model of $Y = A(TOR, FD)$ according to the characteristics of the country. The relationship can be calculated based on the formula below. Hence the log-linear description is as under:

$lnY = \beta_0 + \beta_1 \ln TOR + \ln FD + \mu_t$ (1)

Whereas, Y refers to GDP; (TOR) is International Tourism Receipts and (FD) is financial development where is the coefficient of the variable i.e. β_1 must be greater than one. $\beta_1 \beta_1 > 0$.

Estimation Strategy

The study applied the ARDL critical bonds test which is applicable notwithstanding whether the regressors are I(0)/ I(1); nevertheless when the regressor turns to stationary I(2) then the outcomes of the model are no longer reliable (Ouattara, 2004).Intrinsically, the study applies the ADF test before executing the ARDL bounds test. Moreover, Haug (2002) claims that ARDL method is desirable as it has worked much nicer in case of small sample properties related to previous techniques. The data guesstimating procedure in the general-to-specific framework was completed with the help of the Unrestricted Error Correction Model (UECM) with suitable lags. Appropriate adjustment in the order of ARDL model instantaneously adjusts with serial correlation of residual to cater endogeneity problems (Pesaran & Shin, 1999). Therefore, the present study applied the subsequent UECM for the said purpose.

$\Delta \ln Y_t =$
$\beta_0 + \beta_t t + \gamma_Y lnY_{t-1} + \gamma_{TUR} lnTUR_{t-1} + \sum_{i=1}^{m} \beta_i \Delta \ln Y_{t-1} + \sum_{j=0}^{n} \beta_i \Delta \ln TUR_{t-1} + \varepsilon$ (2)

In equation (2),β_i signifies the short run parameters while,γ_{TUR} show the long run coefficients. The no-cointegration hypothesis H0 is assessed versus the alternate hypothesis H1. The upper critical bound (UCB) is used to make the decision about the co-integration among the variables in the model. The UCB critical value presume that all regressors in the model are I (1)/of mixed, while the lower critical bounds (LCB) believe that regressors are I (0).

Nevertheless, when the estimated F-statistic is less than the UCB then the result is in support of cointegration among the series. Even so, when the F-statistic is low than LCB, then there will be no cointegration; moreover, the decision about co-integration will be inconclusive if the F-statistic falls between UCB and LCB. Once the long run association has been established among the variables then the Error Correction Representation (ECM) can be estimated through the arrangements:

$$\Delta \ln Y_t = \beta_0 + \beta_t t + \gamma_Y lnY_{t-1} + \gamma_{TUR} lnTUR_{t-1} + \sum_{i=1}^{m} \beta_i \Delta \ln Y_{t-1} + \sum_{j=0}^{n} \beta_i \Delta \ln TUR_{t-1} + \varphi(ECM)_{t-1} + \varepsilon \quad (3)$$

Moreover, to check robustness of the results ARDL model is examined by diagnostic test.

Results and Discussion

Table 2 reveals that all the variables are stationary at I (1). Consequently, the data is ready and qualified for execution of ARDL bounds approach to cointegration. As the ARDL F-statistics is vulnerable to the lag length, therefore, the model has used Akaike Information Criteria (AIC) for the selection of appropriate lag length. Moreover, to establish the co-integration for this purpose, the overall regressions estimated by ARDL model is [(p+1) k] = (3+1)3 = 12 for every expected equation; whereas p respects variables used in the model while k lag length, to compute the F-statistics for this purpose the OLS method has applied to estimate the model

Table 2. Unit Root Test (ADF)

Variable	lnY	LnTUR	lnF	ln∆Y	Ln∆TUR	lnF
T-Statistics	-2.3993	-0.1559	0.1521	-6.7119	-6.7551	-5.0213
Probability	0.3740	0.8918	0.1920	0.0000	0.0000	0.0000
Inference	NS	NS	NS	ST	ST	ST
Note:	*MacKinnon (1996) one-sided p-values. (NS) Nonstationary, (ST) Stationary					

Besides, table 3 postulates that calculated F-statistics is greater than UCB critical values supplied by Narayan (2005). Hence, it is concluded the long run relationship is existing among the variables of the model.

Table 3. Results of Bound Test of Co-integration

Estimated Models	F-statistics		Probability
FY (Y /TOUR, FD)	6.3260		0.000
FC (TOUR/Y, FD)	4.1120		0.000
FD (FD/Y, TOUR)	5.0172		0.000
Significance level	1%	5%	10%
LB	6.053	4.450	3.740
UB	7.458	5.560	4.780

Table 4 offers the short run results of the ARDL model. The estimated parameters of the model reveal that in the long run 1 percent expansion in tourism expenditure increases GDP by 1.9044 percent ceteris paribus. Further, all the diagnostic tests results indicated that the model is estimated correctly. The positive coefficient of financial development suggests that 1 percent upsurge in financial development on average is likely to the GDP 0.0877 percent.

Table 4: Long Run Relationship

Variables	Constant	LnY	lnTOUR	lnF	
Coefficient	-0.08230	0.45040	0.612690	0.312	
T-Statistic	-0.0174	6.0238	8.0403	3.6192	
Probability	-0.3291	0.000	0.000	0.0016	
R-Squared	0.7432	AIC	-3.6455	F-Statistic	54.2314
Adj: R-Sq	0.8122	DW	1.8894	Prob(F-Stat)	0.000

Table 5 offers the long run results of the ARDL model. It exhibits that the coefficients of tourism expenditure spur the GDP growth rate of the country. Nevertheless, the magnitude of the coefficient is slimmer than the coefficient of the long-run. The result indicates that in the long-run, tourism elasticity for GDP growth rate is not as much of like short run elasticity. These findings strengthen this preposition that Pakistan has a great potential to utilize tourism for economic benefit of the country. Moreover, the long-run effect of financial development is ample greater in utter terms than in the short-run. However, the latter is insignificant. Furthermore, the projected value of ECM term is -0.5213 which is statistically significant at the 5% level. This unveils the long run connotation among the successively variables. The value of ECM denounces that in the short-run to long-run equilibrium aberration of GDP growth is corrected by 52.13% per annum.

Table 5. Short Run Relationship

	Constant	lnTOUR	lnF	ECM_{t-1}
Coefficient	0.08230	0.1844	0.002	0.3742
T-Statistic	2.031	2.0307	2.6192	4.021
Probability	-0.3291	0.010	0.011	0.0011
R-Squared	0.6505	F-Statistic		13.2314
Adjusted R-Sq	0.6222	Prob(F-Stat)		0.000
DW	1.9519	AIC		-4.210
Sensitivity Analysis				
Serial Correlation		0.1231		
Normality Test		1.4873(0.4753)		
ARCH Test		0.32149.02145)		
Heteroscedisticity Test		1.2105 (0.1217)		

Conclusion

The paper applies time series data from 1995 to 2018 to explore a long-term and short-term relationship between tourism and economic growth. The results of the ARDL have repeatedly demonstrated that all the variables in model are integrated i.e. economic growth, tourism and financial

development. To derive the long- and short-term elasticity of economic growth with respect to tourism, it shows that tourism revenues have a positive impact on Pakistan's economic growth, both in long and short terms. The results indicated 1% increase in international tourism revenues and Pakistan's GDP grew 0.2% in the long term. In the perspective of policy implication, our findings suggest that the government should invest more on tourism and provide facilities related to tourism in order to improve the long-term economic growth. The policy makers should carefully consider tourism industry as one of the sectors of inoculations of economic growth.

Policy Recommendations

These findings underlined the need for more reliable tourism development plan to exploit the tourism potential for economic growth. To achieve the desired growth in this sector, the country should take measures to promote the management of motivational and human capital. In addition, the country has to take step to introduce campaign for tourism promotion in various aspects like culture and history. Moreover, the government also need to take different measures to recompense the negative perception of tourism in Pakistan especially tourism security.

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