Tourism, foreign direct investment and economic growth in India

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Abstract

This paper studied the association between tourism sector development, FDI flows to the tourism sector and real economic growth in India for the period 2000 to 2018. The findings support the occurrence of the tourism-led growth hypothesis in India. But we did not find any significant impact of FDI flows to the tourism sector on the economic growth in the country. Such a finding may be due to the low quantum of FDI equity flows to hotel and tourism sector in India. It is recommended that the policy circle in the country should focus on tourism sector development and its promotion in the international market.

Keywords: Tourism, foreign direct investment, economic growth, India

Introduction

In the present era of liberalization, globalization and sustainable development, the main focus is on fostering all those socio-economic activities that are inclusive and sustainable (Mishra *et al.,* 2019; Mishra & Verma, 2018, 2019). In this perspective, the role of the smokeless sector, tourism, is noteworthy regarding investment, employment generation, foreign exchange earnings, output growth and excelling human development (Mishra *et al.,* 2011; Mishra & Rout, 2013; Mishra *et al.,* 2016; Rout *et al.,* 2016a, 2016b, 2016c; Mishra & Verma, 2017; Rout *et al.,* 2018; Mishra *et al.,* 2018).

In the literature, tourism is considered as an important service sector having manifold implications for economic and human development (Padmasree & Anchula, 2011; Kumar *et al.,* 2018). It is considered pro-poor because it enlarges the job market and promotes economic diversification in the locality. It is a significant basis for foreign exchange earnings. Several studies are supporting the tourism-led economic growth hypothesis (for details refer to Rout *et al.,* 2018). Recently, Yazdi *et al.,* (2017) and Fauzel *et al.,* (2016) have established observed support for the tourism-led growth hypothesis in Iran and Mauritius respectively. In the context of India, Kaur and Sarin (2016) and Rout *et al.,* (2018) they provide support for the tourism-led growth hypothesis. Given the importance of the tourism sector in promoting economic and human development, it is essential to focus on the development of this sector in the country. As a part of such development strategy, the role of

destination development, development of travel & tourism related infrastructure and tourist arrivals are critical (Mishra *et al.,* 2011). This development strategy is contingent upon the rise in tourism spending and an increase in the equity inflow of FDI to hotel and tourism entities in the country (Boora & Dhankar, 2017; Matiza & Perks, 2017). Tang *et al.,* (2007) confirmed the existence of a unidirectional causal link from FDI to tourism demand. Selvanathan *et al.,* (2012) found a one-way causal relationship from FDI to tourism sector development in India. Samimi *et al.,* (2013) also provide similar evidence for a panel of developing countries. Fauzel *et al.,* (2016) found the evidence for the positive contribution of tourism FDI in Mauritius. Besides, Yazdi *et al.,* (2017) found a positive link between tourism expenditure and economic growth in Iran. But Georgantopoulos (2013) did not find a significant relationship between tourism expenditure and real economic growth in India. However, the power of the relationships between FDI and tourism, and between tourism spending and economic growth are very much affected by the degree of economic freedom and the status of the foreign exchange rate of the host country. This aspect has not been a part of empirical research in most of the cases. Thus, we have controlled our analysis by incorporating these variables in this research work.

In India, tourism is one of the largest and fastest-growing service sector activities in terms of its total contribution to gross domestic product (9.23 per cent), total employment (8.08 per cent), total exports (5.4 per cent), and total investment (5.87 per cent) in the year 2018 (WTTC, 2019). This implies a significant potential of tourism in generating growth-stimulating spirals in the Indian economy. Also, the shares of leisure and business tourism spending in India's total GDP in the year 2018 were 3.41 per cent and 0.18 per cent respectively. In the year 2018-19, the foreign exchange earnings from tourism in India were US$27.7 billion (WTTC, 2019). This resulted from 10.6 million foreign tourist arrivals to the country in the year 2018-19, and also from the inflows of FDI to the hotel and tourism sector (WTTC, 2019).

The total FDI inflows from April 2000 to March 2019 in India was US$ 609,838 million, out of which the total amount of FDI equity inflows is US$ 420,021 million. The FDI equity inflow to hotel and tourism from April 2000 to March 2019 is US$12,351.77 million (2.94 per cent of total equity flows). Therefore, tourism in India is economically important and has incredible prospects to serve as an engine for economic growth, job creation and development. In this perspective, it is quintessential to study the relationship between tourism development, tourism FDI and economic growth in the emerging market economy like India.

Data and Methodology

The main aim of this paper was to investigate the relationship between the development of tourism sector, tourism FDI and economic growth in India over the period 2000 to 2018. The fundamental design of the model to investigate such a relationship, was based on certain earlier studies including Fauzel *et al.,* (2016) and Yazdi *et al.,* (2017). The functional form of the econometric exercise adopted in the research is given below:

$$RGDP = f\left(TE, FDITS, FDINTS, EFI, EXR\right) \qquad (1)$$

This model was used to examine the impact of tourism sector development and tourism FDI on economic growth (*RGDP*) in India which is measured by real GDP. The variable *TE* stands for the tourism expenditure which is the sum of Leisure Tourism Spending (LTS) and Business Tourism Spending (BTS), and it indicates the development of the tourism sector in the country (Georgantopoulos, 2013). So, *TE* is expected to have a positive coefficient. The variable *FDITS* is the Foreign Direct Investment (FDI) equity inflows to hotel and tourism in India (in US$ million). Such tourism FDI can stimulate the economic growth of the host country by injecting new capital, creating/upgrading tourism-related infrastructure, fostering additional investments in the tourism sector, and also by increasing the number of foreign

tour operators and tourists (Yunis, 2008; Dwyer *et al.,* 2003). So, *FDITS* is expected to have a positive coefficient. Besides, we have included the variable *FDINTS* that stands for FDI equity flows (in US$ million) to non-tourism sectors in India (Mustafa, 2014), and this variable is expected to have a positive coefficient. Also, we have used a control variable Economic Freedom Index (*EFI*) based on the argument that socio-economic, political and legal freedoms are important requirements for fostering economic growth (Fauzel *et al.,* 2016). This variable is expected to have a positive coefficient in the abovementioned model. Furthermore, to deal with potential omitted variable problems, we have included the Exchange Rate (*EXR*), a proxy of external competitiveness of the Indian economy (Dritsakis, 2004). It is argued that exchange rate deterioration promotes exports thereby positively contributing to the economic growth of a country (Halim & Malim, 2018).

The annual values of these variables for the specified period have been compiled from the WDI database of World Bank, travel & tourism database of WTTC, time-series database of RBI and economic freedom index of Heritage Foundation.

All these variables are taken in their natural logarithms to eliminate the likely problems of heteroskedasticity (Gujarati, 2007) and to facilitate elasticity interpretations while depicting the long-run relationship between variables. Thus, the econometric specification of the model (1) is as follows:

$$LnRGDP_t = \beta_0 + \beta_1 LnTE_t + \beta_2 LnFDITS_t + \beta_3 LnFDINTS_t + \beta_4 LnEXR_t + \beta_5 LnEFI_t + u_t \qquad (2)$$

In estimating this single-equation time series model, it is essential to check whether variables in (2) are stationary or not. For this purpose, we have used the Augmented Dickey-Fuller (ADF) unit root test (Dickey & Fuller, 1979, 1981). In the case when the variables are found non-stationary, equation (2) cannot be estimated by Ordinary Least Squares (OLS) method as such estimation may give rise to spurious regression. However, if the variables are cointegrated, then the regression can be estimated by the Fully-modified Ordinary Least Squares (FMOLS) method. Philips and Hansen (1990) introduced FMOLS to estimate a single co-integrating relationship when variables are all stationary at their 1st differences. This method is reliable and robust for small sample size cases. So, we have used the bounds test approach based on ARDL framework as introduced by Pesaran, Shin and Smith (2001) to check whether a cointegrating relationship exists in our case or not.

Results and Discussion

This empirical study uses ADF unit root test for examining the stationary properties of the variables of interest. The results of such tests are reported in table-1. It is observed that the null hypothesis of 'presence of unit root' in each variable case could not be rejected at the level, but rejected at the first difference. So, all the variables are integrated of order one. Since all the variables are integrated of order one, and a small period of study from 2000 to 2018 has been considered, we have chosen the ARDL based bounds test approach for examining the long-run or cointegration relationship between the variables. We have estimated the ARDL(1,1,0,0,1,1) model in which the lags of regressors have been selected by the AIC. The results are presented in table-2.

Table-1: Results of Stationarity Tests

Variables in the Model	ADF Unit Roots Test (at Level)	ADF Unit Roots Tests (at 1st Difference)	Decision on the Level of Stationarity (with intercept)
Ln(RGDP)	0.91(0.99)	-3.63(0.016)**	Stationary at 1st Difference – I(1)
Ln(TE)	1.76(0.99)	-4.30(0.004)*	Stationary at 1st Difference – I(1)
Ln(FDITS)	-1.85(0.34)	-4.55(0.003)*	Stationary at 1st Difference – I(1)
Ln(FDINTS)	-1.33(0.58)	-3.37(0.027)**	Stationary at 1st Difference – I(1)

| Ln(EFI) | -0.82(0.94) | -5.374 (0.003)* | Stationary at 1st Difference – I(1) |
| Ln(EXR) | 0.14(0.95) | -3.58(0.018)** | Stationary at 1st Difference – I(1) |

Note: Values within parentheses are p-values of the corresponding test statistic
*, ** are the levels of significance at 1% and 5% respectively
Source: Authors' Estimation

Table-2: Results of ARDL based Bounds Test

| Lag Structure | F-Stat | Critical Value Bounds | | |
		1%	5%	10%
ARDL(1,1,0,0,1,1)	44.317	2.82 to 4.21	2.14 to 3.34	1.81 to 2.93
Residual Diagnostics	JB Normality test			0.163 (0.922)
	BG Serial Correlation test (LM test)			3.054 (0.118)
	BPG Heteroskedasticity test			0.983 (0.515)
Model Stability	Ramsey RESET test			0.113 (0.913)

Source: Authors' Estimation

Since the F-statistic for the LnRGDP model is larger than the critical upper bound value at 1 percent level of significance, the null hypothesis of 'no cointegration' or 'no long-run relationship' between variables is rejected. The results of standard diagnostics – normality test, serial correlation, heteroskedasticity and stability tests – are presented in the lower portion of table-2 which implies that the estimations are unbiased and robust. Thus, the existence of the long-run equilibrium relationship in the model is confirmed. Hence, the next step is to estimate the long-run elasticities using FMOLS method, the results of which are presented in table-3.

The coefficient of LnTE is 0.60 which implies that 1 percent increase in TE leads to 0.60 percent increase in the LnRGDP in the long-run. This means that the development of tourism can positively affect a higher level of economic growth. This finding is statistically significant at 1 percent level. Thus, this finding supports the tourism-led growth hypothesis in the context of India.

Table 3: Results of FMOLS Estimation

Dependent Variable: LnRGDP; Method of Estimation: Dynamic FMOLS Null Hypothesis: Slope Coefficient is Zero				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	19.10892*	1.938138	9.859421	0.0000
LnTE	0.600875*	0.109652	5.479828	0.0001
LnFDITS	0.006486	0.020304	0.319466	0.7549
LnFDINTS	0.129856*	0.026234	4.949950	0.0003
LnEXR	0.301561***	0.153725	1.961695	0.0734
LnEFI	0.904352***	0.500637	1.806401	0.0960
R-squared	0.980549	**Adjusted R-squared**	0.972444	

Source: Authors' Estimation
*, *** are the levels of significance at 1% and 10% respectively

The coefficient of LnFDITS is positive but not statistically significant. The coefficient of LnFDITS is 0.006 which implies that 1 percent increase in tourism FDI contributes to a 0.006 percent increase in LnRDGP in the long-run. So we find a insignificant positive effect of tourism FDI on economic growth in India.

The coefficient of LnFDINTS is 0.13 which implies that 1 percent increase in FDI in non-tourism sectors contributes to 0.13 percent increase in LnRGDP. This means that the FDI inflows to non-tourism sectors can positively affect the higher level of economic growth in India. This finding is statistically significant at 1 percent level of significance.

The coefficient of LnEXR is 0.30 which implies that 1 percent increase in exchange rate contributes 0.30 percent increase in LnGDP. This means that the deterioration in the exchange rate of the country tends to boost its real GDP by encouraging exports to other countries. This finding is statistically significant at 10 percent level of significance.

The coefficient of LnEFI is 0.90 which implies that 1 percent increase in economic freedom contributes 0.90 percent increase in LnGDP. This means that greater economic freedom tends to increase economic growth in the country. This finding is statistically significant at 10 percent level of significance.

Overall, the FMOLS results provide evidence of the positive impact of tourism FDI and the growth of the tourism sector on the real economic growth of India in the long-run. Additionally, R-squared and adjusted R-squared values are close to 1. It means that the aforesaid relationships are very strong over the sample period. However, in the long-run, the variables must depict a stable equilibrium relationship. For this purpose, we have used the *Lc* parameter instability test for the null hypothesis of stability or cointegration as proposed by Hansen (1992). The results of this test are presented in table-4.

Table 5: Results of Hansen's Parameter Instability Test

Time Series: LnRGDP, LnTE, LnFDIT, LnFDINT, LnEXR, LnEF				
Null hypothesis: Series are Cointegrated				
Lc Statistic	Stochastic Trends (m)	Deterministic Trends (k)	Excluded Trends (p2)	Prob.*
0.526771	5	0	0	> 0.2

*Hansen (1992) Lc(m2=4, k=0) p-values, where m2=m-p2 is the number of stochastic trends in the asymptotic distribution

Source: Authors' Estimation

The *Lc* statistic cannot reject the null hypothesis at the 1 percent critical level based on FMOLS. In other words, the results in table-4 show the evidence for parameter stability as the probability values are greater than 0.05. Thus, the estimated long-run relationship by FMOLS is stable.

Conclusion

This paper investigated the link between tourism development, tourism FDI and economic growth in India from 2000 to 2018. The results reveal the existence of a long-run equilibrium relationship between these indicators. Specifically, tourism sector development was found to occupy a central place in fostering the economic growth of India thereby supporting the tourism-led growth hypothesis. This finding justifies the public sector invention to uphold the increasing demand for tourism by making available necessary facilities in the country. Moreover, tourism FDI was not found to be statistically significant in contributing to the real economic growth in India. This necessitates government intervention through more liberalized policies that encourage foreign investors to put their money in the hotel and tourism industry in the country.

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