RESEARCH ARTICLE

TOURISM GROWTH IN INDIA AND ITS LINK WITH GROSS DOMESTIC PRODUCT AND FOREIGN DIRECT INVESTMENT

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ABSTRACT

Purpose: The role of tourism industry for accelerating the growth of a nation is discussed here. One of the objectives of this study is to observe the trend of year wise domestic tourist visits into different states and union territories (UTs) of India during 1991 - 2021. The other important objective is to analyse the simultaneous relationship across FDI, GDP as an indicator of economic growth and foreign exchange earnings from tourism (FET) in respect of Indian economy. Focus is also put on determining pair-wise causal relationship among the aforesaid variables. **Methodology:** Three year moving average method is used to observe trend of year wise domestic tourist visits into different states and Union Territories (UTs) of India during 1991-2021. Augmented Dickey Fuller (ADF) test and Phillips – Peron (PP) test for unit root is used here. Vector Auto Regressive (VAR) model is used here to see the simultaneous relationship among these three variables. Finally pair-wise Granger Causality test is used to examine the direction of causality among them. **Results / Conclusion:** Using three yearly moving averages, we got a smooth upward rising curve till 2019. This study also shows the unidirectional relation of FDI on GDP and GDP on FET. By analysing the result of this study we see that there is no influence of FDI on FET. We can say that if FDI and FET have positive influence on each other then it becomes beneficial for economic growth. There is needed inflow of FDI in tourism sector, in constructing roads for better transport, infrastructure, hotels, renovation and construction of tourism site etc. We also see that FDI has influential effect on GDP but not the other way round. So Govt. may encourage FDI inflow in tourism sector which might enhance FET and contribute to GDP growth. Hence favourable policies should be recommended and implemented that will encourage inflow of FDI in tourism sector which will prove beneficial for engendering GDP. Apart from this, further research is needed for analysing the impact of FDI on FET, effect of FET on GDP and influence of GDP on FDI.

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INTRODUCTION

Over the past decades, tourism industry has established itself as a large and fast growing economic sector in the world through continued expansion and diversification in its nature. According to UNWTO (United Nations World Tourism Organization), tourism growth was triggered by a number of factors including rapid globalisation, surge in the rise in middle classes, spread of urbanisation in developing economies, affordable travel and easy access to visa facilities together with emergence of newer business modes and technological progress. The travel and tourism industry created us$ 9.6 trillion revenue worldwide which constitutes 10.3% of global GDP and it contributed 333 million jobs which is also 10.3% of total employment that accounts for 1 in 4 of all jobs, directly or indirectly related with Travel and Tourism industry according to world Travel and Tourism Council, 2020. In many economies around the world a major portion of Gross Domestic Product comes from both inbound and domestic tourism.

Macao (China) is an economy where the share of tourism on GDP is largest which accounts for 48% of total GDP (UNWTO report 2020). Since 2000 to 2019 share of global GDP from travel and tourism industry lies near about 10%. It is expected that this portion of share will reach 10.8% at the end of 2026. In 2019, total exports from international tourism reached USD 1.7 trillion which accounted 7% of global exports (International tourism Highlights UNWTO 2020 edition). "Tourism and Jobs: a better future for all" was the theme of World Tourism Day 2019. In that year host country was our India. Sometimes we undervalued the role of tourism as job creator sector. By tourism 10% of worldwide Jobs are generated. Tourism has potential to create decent works which is included in the eighth number of Sustainable Development Goal named as "Decent Work and Economic growth". The role of tourism industry in the growth of Indian Economy merits special mention. In India travel and tourism industry contributed 6.8% of total GDP which is US$ 194.30 billions (Rs. 1,368,100 crore) in the year 2019(Tourism & Hospitality Industry in India report 2022).

In that financial year, 12.95% share of total employment in Indian economy was contributed by travel and tourism industry where percentage of direct employment and indirect employment were 5.65% and 7.3% respectively (Statista). Approximately 90 million people were engaged directly and indirectly in the travel and tourism industry for their livelihood in India. In recent time tourism industry is playing an indispensable role to create job opportunities and development of economic structure in underdeveloped countries like India, Sri Lanka, Bangladesh, Ethiopia etc. So it is very important to put more importance on the development and up-gradation of tourism industry for betterment of economic condition of underdeveloped countries. There are so many sectors in the developing economies which have the required ability for enhancing the overall development of a country. Traditionally agriculture sector followed by manufacturing sector have potential role in the development process of an economy but now- a -days, after liberalization there are some sectors which have proved that they have important role and future potential to drive the economic development process of a developing nation. Among these sectors, tourism sector is playing a vital role in socio- economic development of developing countries by creating possible employment opportunities, increasing the government revenue, rising the foreign exchange earnings from tourists, generating the economic diversification etc.

To develop tourism sector, there are needs of huge infrastructure, good communication system to connect urban areas and remote rural areas, up gradation of technology , promote the tourism related education for which a huge/ heavy amount of investment are required which do not always become possible by the government of developing nations due to scarcity of funds. On the other hand a big amount fund are needed for ensuring the basic needs of all the citizens in a developing country to maintain a minimum standard of living. It is the big responsibility for the government of a developing country. It is quite common that developing nations are dependent on foreign funds for upgrading the standard of infrastructure and technology of different kind of economic sectors. In recent time, tourism sector has been able to generate the needed foreign funds for raising the standard of its infrastructure and technology. The part of foreign capital which is useful for flourishing and stimulating growth in tourism industry is characterised as Foreign Direct Investment (FDI). FDI is considered as inflow of assets from a foreign nation to host economy. FDI is like the flow of capital coming from foreign nations which are invested in construction of infrastructure and new facilities at different sectors such as manufacturing sector, tourism sector, construction sector, educational sector which have a significant role to maintain a long lasting relationship between foreign country and the host country where the fund is invested. In developing countries FDI have a vital role in the growth of tourism sector because it provides essential capital for different types of activities under tourism sector such as communication, accommodation, foods and beverages, sports, recreational activities, cultural assistance, networking etc.

Gross Domestic product (GDP) of a nation is generally considered as the indicator of economic growth of an economy. Usually GDP measures the total output of an economy during a period. It represents the value of all goods and services produced in a country during a certain period. GDP is used to observe whether an economy is growing or facing recession. According to the World Bank, growth in the economy is measured by the change in GDP at constant price. Many World Development Indicators (WDI) such as GDP or GDP per capita are used to enable cross country comparisons of socio-economic and other type of data. The relationship between GDP (economic growth) and FDI is important on the ground of economic development of a nation. There are several ways by which a nation can earn foreign exchange; among them tourism is an essential source of earning foreign exchange. In 2019, tourism has held third position as the foreign exchange earner in India. For economic growth of a developing country, Foreign exchange earnings from tourism have a vital role. In this backdrop the objectives in this paper seem as follows First it seems pertinent to observe the trend of year wise domestic tourist visits into different states and Union Territories (UTs) of India during 1991 – 2021.

Second it is considered important to analyse the simultaneous relationship across FDI, GDP as an indicator of economic growth and foreign exchange earnings from tourism in respect of Indian economy which is deemed to be one of the fastest growing economies and is the 5th largest economy of the world (according to IMF). Our study considered the period 1989- 2021 to see the causal relationship among the above mentioned three variables. In order to investigate the relationship across FDI, GDP and foreign exchange earnings from tourism, some methodology are used in this study. Augmented Dickey Fuller (ADF) test and Phillips – Peron (PP) test for unit root is used here. Vector Auto Regressive (VAR) model is used here to see the causal relationship among these three variables. Finally pairwise Granger Causality test is used to examine the direction of causality among them.

Data: this article is based on secondary data. The required secondary data have been collected from the yearly reports of the Ministry of Tourism, Govt. of India , Indian Tourism Statistics at a Glance for various years. We have also collected information from different types of research papers published in various journals. We have used tourism and other related data in India from 1989 to 2021.

METHODOLOGY

Here we have used various types of methods under time series analysis. Moving Average Method : to measure secular trend or trend of time series data, four methods are generally used – free hand curve method, method of semi average, method of moving average and method of mathematical curves or the least squares method. Among them we used here Moving Average Method. We can see the regular, smooth, long-term movement of the time series when we use secular trend of time series which reflects either continuous growth or decline. Moving average is a type of stock indicator which is used to observe the overall idea of trends in a time series data set. Here we have to calculate an average of any subset of numbers. It is useful to forecast the long term trends. We here used it to observe the trend of year wise domestic tourists visits in different states and UTs in India since 1991 to 2021. Three year moving average value has been used here.

Augmented Dickey Fuller (ADF) Test: this test is a well known statistical test and used to test whether a given time series is stationary or not. By ADF test, it is tested that whether the null hypothesis (unit root) is accepted in a time series or the alternative hypothesis (no unit root). In the second case the time series is stationary. Phillips - Perron (PP) Test : like ADF test , PP test is also a Unit root test. By generalizing the ADF test, Phillips and Perron (1988) gave the concept of Pp test where the restrictive assumption related to the distribution of error term become less restrictive compared to ADF test. While the ADF test uses additional lags of the first difference variable for the correction of presence of serial correlation, the PP test uses standard error to account for serial correlation. Vector Auto Regressive (VAR) model: VAR model is used to analyse Multivariate time series data. VAR model was developed by Christopher Sims (1980). This econometric model generalizes Univariate Autoregressive models. All the variables in this model are treated systematically with an equation for each variable explaining the development of the variable depending on the lags of the variable in the model and the lags of all other variables. VAR model is used to determine the one way relationship between variables. It is also used to elicit the linkage between variables in terms of lags (Kearney and Monadjemi 1990). The advantages of VAR method were pointed out by the proponents of this model (Kinal and Ratner 1982). In this model all variables are endogenous. There is no necessity to determine which variables are internal and which are external. OLS method is applicable to each equation separately. The estimates obtained in this model are better compared to estimates obtained from simultaneous equations model. There are wide use of VAR model in economics and natural sciences.

It helps forecasting the variables Granger Causality Test: Granger (1969) proposed this as a statistical hypothesis test to analyse the time series data in order to determine causality relation between economic variables. There is a common question which very often arises in time series data analysis, whether one economic variable is useful in forecasting another economic variable or not. According to Granger, a time series X is a cause of another time series say Y if it is useful in forecasting Y. It can be said that if the current value of a variable Y is Granger caused by another variable X then the history of X containing the past values of X helps to predict Y (Konya 2004). In our study we used pair wise Granger Causality test to analyse the causality relation among three types of time series data – FDI, Foreign Exchange Earnings from Tourists and GDP.

RESULTS

Domestic tourists are the major driving force in India's tourism industry traditionally. A major thrust towards development in different parts of tourism sectors like accommodation, foods and beverages, travelling are contributed by domestic tourists. The small and up-growing tourist spots are often places of attraction for the domestic tourists rather than foreign tourists. Here we have considered the data of domestic tourist visits to different states and UTs of India from 1991 to 2021. In 1991 it was 66.67 million and at 2019 it became 2321.98 million. To see the trend of domestic tourist visits in different states and UTs in different years we used here the three year moving average method. In table - 1, we analyze yearly data for total number of domestic tourist visits to different states and UTs of India for the thirty one year's period from 1991 to 2021. In the second column in the table, the total number of tourist visits (in million) are shown. To measure the trend of number of domestic tourist visits, here we use three year Moving Average method. Three yearly moving totals are calculated in the third column. The final trend value or three yearly moving averages calculation are presented in the right side final column of this table. Figure 1. time series three yearly moving averages value of domestic tourist visits in different states and UTs of India. Putting the three yearly moving average values on the chart we get a smooth upward rising curve till 2019. However the downfall after 2019 is clearly visible due to pandemic effect.
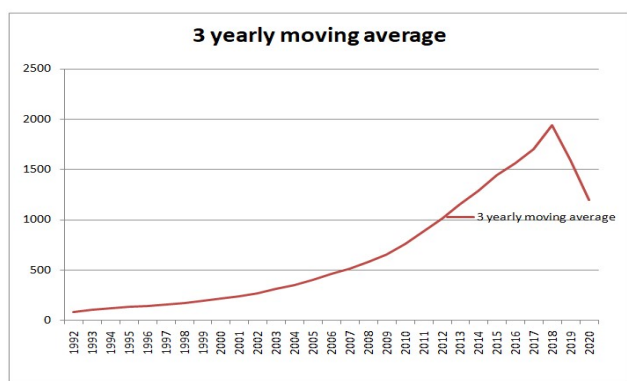

Figure 1. Time series three yearly moving averages value of domestic tourist visits in different states and UTs of India.

Now the aim of our study is to find out the causal relationship among three time series – Foreign Direct Investment, Foreign Exchange Earnings from Tourists and Gross Domestic Product. At initial stage it is important to investigate whether the time series data comprise unit root or not. If they have a unit root that means they are non-stationary. There are some tests which are used to test whether the data series contains unit root or not. In our study we used Augmented Dickey Fuller (ADF) test, Phillips – Peron (PP) test for checking the existence of unit root.

The hypothesis which are to be examined for unit – root test are

H_0: There is a unit root (the time series data are non – stationary)
H_1: there is no unit root (the time series data are stationary)

We investigate the corresponding time series data; log value of Foreign Direct Investment (FDI), Foreign Exchange Earnings from Tourists (FET) and Gross Domestic Product (GDP) are used in our study to check the existence of unit root (non stationary). At first we used ADF test to check non- stationarity of the unit root hypothesis of LFDI series. In Table 2. one type of unit root test for the first difference of LFDI(Δ LFDI) is provided. In above table it is observed that when the dependent variable is LFDI , the value of computed t statistic is – 6.719915(with p value 0.0000) for the first difference of LFDI series (ΔLFDI) lower than all critical values of t statistics. This implies that the LFDI series in first difference form is stationary there is no unit root i.e null hypothesis is rejected.

In Table 3 . it is seen that the LGDP series in first difference form has no unit root and it is stationary because the value of t statistic is lower than the critical values of t statistic. In table 4. when we consider the results of unit root test for the first difference of LEFT series , it is seen that for ADF test the value of t – statistic is – 2.93406(with p value 0.0533) which is significant at the mentioned level. Next we use the Phillips – Perron (PP) test of unit root and the results are shown in the Table 5, Table 6 and Table 7 and it is observed that the results obtained from PP test for first difference form of three time series data– LFDI, LFET, LGDP are same as the results got from ADF test. In table 5. the decision rules are same as the rules followed in ADF test. It is observed that like ADF test , the LFDI series in first difference form is stationary, there is no unit root when we apply Phillips – Perron test for checking Unit root.

In table 6. when we consider the results of unit root test for the first difference of LEFT series , it is seen that for PP test the value of t – statistic is – 2.934061(with p value 0.0533) which is significant at the mentioned level. This result is same as result we got from ADF test. Here (table 7.) the value of computed t statistic (-5.977348) for first difference form of LGDP is lower than (or lies to the left of) all critical t – statistic values. So we can say that the LGDP series in first difference form is stationary. Now we focus on the development of VAR model involving simultaneous relation across GDP (Gross Domestic Product), FDI(Foreign Direct Investment),FET(Foreign Exchange Earnings from Tourists)

The VAR model relating GDP, FDI, FET is written as follows.

$$GDP_t = \alpha_1 + \alpha_2\, GDP_{t-1} + \alpha_3\, FDI_{t-1} + \alpha_4\, FET_{t-1} + \in_{1t}$$

$$FDI_t = \beta_1 + \beta_2\, GDP_{t-1} + \beta_3\, FDI_{t-1} + \beta_4\, FET_{t-1} + \in_{2t}$$

$$FET_t = \gamma_1 + \gamma_2\, GDP_{t-1} + \gamma_3\, FDI_{t-1} + \gamma_4\, FET_{t-1} + \in_{3t}$$

Now in Table 8. we interpret the results of VAR model. The second column corresponds to results relating to Foreign Exchange Earnings from Tourists (FET) equation, the third to Foreign Direct Investment (FDI) equation and the fourth to Gross Domestic Product (GDP) equation. In each of these columns, apart from estimated coefficient for each right – hand side variable , its standard error and computed t value have been reported. On the basis of our results, it can be said that higher growth of foreign exchange earnings from tourists [d (LFET)] during period (t – 1) leads to higher growth of foreign direct investment [d (LFDI)] in period t. This is revealed by statistical significance of computed – t for the estimated coefficient of d [LFET(-1)]. The same relation holds between growth of FDI d[LFDI (-1)] and growth of GDP [d (LGDP)] (Computed t being 1.72229).
It can also be said that past values relating to GDP, [d (LGDP)] during period (t – 1) leads to higher growth of FET [d (LFET)] in period t. It should be noted in this context that EVIEWS output on VAR does not give the significance level of t values. But as a rule of thumb, the critical values of t for large sample (n>30) at 5 % level of significance becomes >1.697(one tail test.) Hence if computed t value is observed to be > 1.697, it may be considered as significant at 5% level. Lastly we used Pairwise Granger – Causality Test to investigate the causal relationship between the three time series data. Here we have three pairs, involving LFDI and LFET, LGDP and LFET and LGDP and LFDI.

Table 1. Three Year Moving Averages Calculation

YEAR	Domestic tourists visits to all states / UTs (in million)	3 yearly moving total of domestic tourists visits to all states and UTs (in million)	Trend value [3 yearly moving average of domestic tourists visits to all states and UTs (in million)]
1991	66.67		
1992	81.45	253.93	84.64
1993	105.81	314.37	104.79
1994	127.11	369.56	123.19
1995	136.64	403.86	134.62
1996	140.11	436.62	145.54
1997	159.87	468.17	156.06
1998	168.19	518.73	172.91
1999	190.67	578.97	192.99
2000	220.11	647.25	215.75
2001	236.47	726.18	242.06
2002	269.6	815.11	271.70
2003	309.04	944.91	314.97
2004	366.27	1067.35	355.78
2005	392.04	1220.75	406.92
2006	462.44	1381.18	460.39
2007	526.7	1552.17	517.39
2008	563.03	1758.53	586.18
2009	668.8	1979.53	659.84
2010	747.7	2281.03	760.34
2011	864.53	2657.28	885.76
2012	1045.05	3052.11	1017.37
2013	1142.53	3470.38	1156.79
2014	1282.8	3857.3	1285.77
2015	1431.97	4328.32	1442.77
2016	1613.55	4698.01	1566.00
2017	1652.49	5120.97	1706.99
2018	1854.93	5829.4	1943.13
2019	2321.98	4787.13	1595.71
2020	610.22	3609.83	1203.28
2021	677.63		

Table 2. Results of ADF Test for LFDI

Null Hypothesis: D(LFDI) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=7)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-6.719915	0.0000
Augmented Dickey-Fuller Test Equation				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LFDI(-1))	-1.089657	0.162153	-6.719915	0.0000
C	0.100861	0.036028	2.799510	0.0092
R-squared	0.617263			
F-statistic	45.15725			
Prob(F-statistic)	0.000000			

Table 3. Results of ADF Test for LGDP

Null Hypothesis: D(LGDP) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=7)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-5.963439	0.0000
Augmented Dickey-Fuller Test Equation				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LGDP(-1))	-0.979231	0.164206	-5.963439	0.0000
C	0.035029	0.007857	4.458649	0.0001
R-squared	0.559489			
F-statistic	35.56261			
Prob(F-statistic)	0.000002			

Table 4 . Results of ADF Test for LFET

Null Hypothesis: D(LFET) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=7)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-2.934061	0.0533
Augmented Dickey-Fuller Test Equation				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LFET(-1))	-0.548294	0.186872	-2.934061	0.0066
C	0.000967	0.024407	0.039602	0.9687
R-squared	0.235155			
F-statistic	8.608716			
Prob(F-statistic)	0.006608			

Table 5. Results of PP Test for First – Difference LFDI

Null Hypothesis: D(LFDI) has a unit root				
Exogenous: Constant				
Bandwidth: 2 (Newey-West automatic) using Bartlett kernel				
			Adj. t-Stat	Prob.*
Phillips-Perron test statistic			-6.440556	0.0000
Phillips-Perron Test Equation				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LFDI(-1))	-1.089657	0.162153	-6.719915	0.0000
C	0.100861	0.036028	2.799510	0.0092
R-squared	0.617263			
F-statistic	45.15725			
Prob(F-statistic)	0.000000			

Table 6. Results of PP Test for First – Difference LFET

Null Hypothesis: D(LFET) has a unit root				
Exogenous: Constant				
Bandwidth: 0 (Newey-West automatic) using Bartlett kernel				
			Adj. t-Stat	Prob.*
Phillips-Perron test statistic			-2.934061	0.0533
Phillips-Perron Test Equation				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LFET(-1))	-0.548294	0.186872	-2.934061	0.0066
C	0.000967	0.024407	0.039602	0.9687
R-squared	0.235155			
F-statistic	8.608716			
Prob(F-statistic)	0.006608			

Table 7. Results of PP Test for First – Difference LGDP

Null Hypothesis: D(LGDP) has a unit root				
Exogenous: Constant				
Bandwidth: 1 (Newey-West automatic) using Bartlett kernel				
			Adj. t-Stat	Prob.*
Phillips-Perron test statistic			-5.977348	0.0000
Phillips-Perron Test Equation				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LGDP(-1))	-0.979231	0.164206	-5.963439	0.0000
C	0.035029	0.007857	4.458649	0.0001
R-squared	0.559489			
F-statistic	35.56261			
Prob(F-statistic)	0.000002			

Here we also consider the ability to predict the future value of a time series using prior values of another time series. Granger causality is a statistical hypothesis test for determining whether one time series is useful in forecasting another since in this analysis we have consider three relevant variables , it is important to focus on pairwise Granger Causality results (in the form of one way, two way interaction or no interaction). After affirming the stationary of the time series it is essential to determine the causality using Granger Causality test. Table 9. shows the results of Pairwise Granger Causality Test

H_0: There is no causality
H_1: there is causality

In table 9. we observe that LFDI and LFET have no causality because p values are greater than 0.05 so null hypothesis is accepted. LFDI and LGDP have uni directional causality. LFDI has significant causal impact on LGDP. Similarly LGDP and LFET have unidirectional causality. LGDP has significant forecasting impact on LRET.

Ecotourism: Tourism has also a negative drawback. With the growth of tourism it leads to environmental degradation. It gradually reduces the earning capacity from destabilising environment and leads to the misuse of natural resources. So economists and environmental scientists advocated for sustainable tourism. After 1970's, the concept of Sustainable Development emerged.

Table 8. Estimated results of VAR Model

Vector Auto regression Estimates			
Date: 09/09/22 Time: 09:26			
Sample (adjusted): 3 32			
Included observations: 30 after adjustments			
Standard errors in ( ) & t-statistics in [ ]			
	D(LFET)	D(LFDI)	D(LGDP)
D(LFET(-1))	0.387961	0.530340	-0.070758
	(0.21844)	(0.28941)	(0.05352)
	[1.77603]	[1.83246]	[-1.32218]
D(LFDI(-1))	-0.087456	-0.065257	0.66932
	(0.12336)	(0.16344)	(0.38862)
	[-.70897]	[-0.39928]	[1.72229]
D(LGDP(-1))	0.496249	-0.788056	0.138097
	(0.29042)	(1.04570)	(0.19336)
	[1.7087]	[-0.75361]	[0.71418]
C	-0.005966	0.113054	0.032711
	(0.03325)	(0.04406)	(0.00815)
	[-0.17942]	[2.56617]	[4.01541]
R-squared	0.194981	0.124605	0.064347
Adj. R-squared	0.102094	0.023598	-0.043613
Sum sq. resids	0.476737	0.836834	0.028614
S.E. equation	0.135411	0.179404	0.033174
F-statistic	2.099127	1.233627	0.596024
Log likelihood	19.56166	11.12175	61.75774
Akaike AIC	-1.037444	-0.474783	-3.850516
Schwarz SC	-0.850617	-0.287957	-3.663690
Mean dependent	0.009475	0.093604	0.035666
S.D. dependent	0.142902	0.181559	0.032474
Determinant resid covariance (dof adj.)		4.60E-07	
Determinant resid covariance		2.99E-07	
Log likelihood		97.62916	
Akaike information criterion		-5.708611	
Schwarz criterion		-5.148132	

Table 9. Results of Pairwise Granger Causality Test

Pairwise Granger Causality Tests					
Date: 09/11/22 Time: 08:55					
Sample: 1 32					
Lags: 1					
Null Hypothesis:	Lag	Obs	F-Statistic	Prob.	Decision
LFDI does not Granger Cause LFET	1	31	0.06642	0.7985	Accepted
LFET does not Granger Cause LFDI	1		2.76685	0.1074	Accepted
LGDP does not Granger Cause LFET	1	31	3.98410	0.0557	Rejected
LFET does not Granger Cause LGDP	1		0.45978	0.5033	Accepted
LGDP does not Granger Cause LFDI	1	31	0.54391	0.4670	Accepted
LFDI does not Granger Cause LGDP	1		6.59304	0.0159	Rejected

It is seen that in India nature based tourism grew by an average of 15% from 2002to 2008 and domestic tourists are comprised the 80% of total visitors (Karanth et al., 2012). The year 2017, was declared by United Nations as the year of Sustainable Tourism for development to forward tourism's potential to assist in the 2030 Agenda for Sustainable Development (World Tourism Organisation 2017). The estimated size of India's Sustainable Tourism market in 2022 is US$26.01 Million and the projected market size of it in 2032 is US$151.88 million (Report of India Sustainable Tourism Market).

CONCLUSION

Trend of year wise domestic tourist visits into different states and union territories (UTs) of India during 1990-2021, has been fit by using three yearly moving averages   and we got a smooth upward rising curve till 2019. It is a good indicator for the nation since as number of tourists increases in successive years, the revenue earnings from tourism also increases and it is supposed to contribute in undertaking development expenses of the economy. After 2019 there is drastic fall of the visitation rate which is clearly visible. Pandemic is the main reason of this fall. This study also shows the unidirectional relation of FDI on GDP and GDP on FET.

Policy Prescription: By analysing the result of this study we see that there is no influence of FDI on FET. We can say that if FDI and FET have positive influence on each other then it becomes beneficial for economic growth. There is needed inflow of FDI in tourism sector, in constructing roads better transport, infrastructure, hotels, renovation and construction of tourism site etc. Secondly we see from the result of this study that GDP has causal relation with FET which is helpful for economy but surprisingly it is also observed that FET has no influence on GDP. This needs to be reversed by suitable steps.

Lastly by analysing the causal relationship between GDP and FDI we see that FDI has influential effect on GDP but not the other way round. So govt may encourage FDI inflow in tourism sector which might enhance FET and contribute to GDP growth. So favourable policies should be recommended and implemented that will encourage inflow of FDI in tourism sector which will prove beneficial for engendering GDP. Apart from this, further research is needed on analysing the impact of FDI on FET, effect of FET on GDP and influence of GDP on FDI.

ADF Test – Augmented Dickey Fuller Test
GDP – Gross Domestic Product
FDI – Foreign Direct Investment
FET – Foreign Exchange Earnings from Tourists

PP Test – Phillips – Perron Test
UNWTO - United Nations World Tourism Organization
UTs – Union Territories
WDI –World Development Indicators

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