

## THE RELATIONSHIP BETWEEN TOURISM INDUSTRY AND ECONOMIC GROWTH IN INDIA: EVIDENCE FROM MULTIVARIATE REGRESSION ANALYSIS

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### Abstract

Tourism industry of any country is not only related with the economic profit of the country but it is also a way to communicate heritage, cultural, social and environmental values between two nations. The United Nations declared 2017 as the “International Year of Sustainable Tourism for Development.” Tourism industry creates jobs, generate prosperity and drives export sector of the country. Tourism industry in India contributed 9.6 per cent in total GDP of country in 2016 with the value US \$ 71.55 billion and it is third largest sector contributed in foreign exchange earnings. The estimated compound annual growth rate for direct contribution of tourism and hospitality industry to GDP for 2016-17 was 14.05 per cent. As per the report of world travel and tourism council’s economic impact 2017 forecasted contribution of tourism industry to GDP by 2027 is 147.96 billion. In 2016, 8.8 million foreign tourists arrived in India which is forecasted 15.3 million by 2025. A government perspective and promotion to tourism industry and favorable tourism policy and facility availability of e-visas increased the tourist visits in India. In recent years India has attracted tourists from UK, US and Bangladesh. The present study is designed to analyze the growth rate of tourism industry in India. The finding of the study suggests that Foreign Exchange Earnings (FEE) from the foreign tourists is significant for Gross Domestic Product (GDP) of India whereas the impact of Foreign Tourist Arrivals (FTA) on Gross Domestic Product (GDP) in India is not significant. It is also clear that 1 % increase in Foreign Exchange Earning (FEE) in India leads to about 7.86 % increase in Gross Domestic Product (GDP) in India. Furthermore, R-squared value is 0.99 which is very close to 1 which indicates the relationship between the variables is very strong over the sample period. The data used for the study is from various secondary sources such as indiastat.com, annual report from various ministries of India.

**Keywords:** Economic Growth, Tourism, Tourist arrivals, Foreign Exchange earnings etc.

**JEL Classification:** L83, O40.

### I. INTRODUCTION

*“Tourism is a major engine of economic growth in most parts of the world. Several countries have transformed their economies using the tourism potential to the fullest. Tourism has great capacity to create large scale employment of diverse kind - from the most specialized to the unskilled and all of us know that generation of massive productive employment is what India needs the most”*

Atal Bihari Vajpayee, Ex-Prime Minister of India

The world ‘Tourism’ defined by Hunziker & Kraft in 1941 as “the sum of the phenomena and relationships arising from the travel and stay of non-residents, insofar as they do not lead to permanent residence and are not connected with any earning activity.” Whereas League of Nations defined the world “foreign tourist” in 1936 as “someone traveling abroad for at least twenty-four hours.” As per the Travel and Tourism 2017 report, this industry has proven to its importance for economic growth and development. This report indicates that it contributes 10 per cent to global GDP and also generates one job out of ten jobs.

Thus, this industry provides more opportunities for developing nations to boost their economy. Tourism industry of any country is not only related with the economic profit of the country but it is also a way to communicate heritage, cultural, social and environmental values between two nations. The United Nations declared 2017 as the “International Year of Sustainable Tourism for Development.” Tourism industry creates jobs, generate prosperity and drives export sector of the country. Tourism industry in India contributed 9.6 per cent in total GDP of country in 2016 which was US \$ 71.55 billion and it is third largest sector contributed in foreign exchange earnings. The estimated compound annual growth rate for direct contribution of tourism and hospitality industry to GDP for 2016-17 was 14.05 per cent. As per the report of world travel and tourism council’s economic impact 2017 forecasted contribution of tourism industry to GDP by 2027 is 147.96 billion. In 2016, 8.8 million foreign tourists arrived India which is forecasted 15.3 million by 2025. A government perspective and promotion to tourism industry and favorable tourism policy and facility availability of e-visas increased the tourist visit in India. In recent years India has attracted tourists from UK, US and Bangladesh. Tourism

industry is an important source for foreign earning in any country.

Tourism industry has considered as unprecedented important element in last few decades at national and international level. Tourism is a phenomenon of a temporary movement of peoples for their happiness from one place to other whereas domestic tourism is a movement of local people within their own country and international tourism is a movement of the foreign tourists across the border.

International tourism can be broadly categories into two categories one is the outside movement of people to any other country and the other is incoming movement of people from foreign country to their own country. Tourism industry has attracted many researchers across the world which is necessary also for the sustainable growth and development of the tourism industry. Tourism sector not only attracts big business houses, hotel industry, traveller agencies but also provides various jobs to poor people at local and national level. There are various motives work behind tourism industry such as desire to visit sea sight places, religions places, adventures activities, etc. Tourism is a way to exchange culture, ideas, social life thus it provides various opportunities for the global developments. During the last few years, the contribution of tourism industry in India's economic system has increased. The rate of contribution of tourism industry in Gross Domestic Product (GDP) , Foreign Exchange earning has also increased. India is very rich country having natural beauty from east to west and north to south part which attracts the foreign tourists across the world. Government of India promoting tourism industry which provides various monetary and non-monetary supports to state government. "The incredible India" programme is one of the major programme started by Government of India which providing boost to tourism industry such programme has attracted many foreign tourist in last few years. India is considered as a land of the rivers, place of different culture and spiritual richness, various different colorful festivals all confined together and celebrated across India. Every state has different taste of cultural values, foods, life styles which makes India as an important tourist place. An increase in foreign tourist visit in any country is considered as a contribution of tourism sector in Gross Domestic Product (GDP) and employment generation. It is observed that if any foreign tourist visits any country they consume food and services of that country which means not only organized sector but local people and poor also get benefited. Therefore, it cannot be denying that the development in tourism sector employs people belongs to lower economic class. There are various studies are found on various issue related to tourism sector. There is a need for more government policies and support to tourism sector in India. The development of the Tourism sector in India will not only give economic benefits to the country but also will be beneficial in the exchange of culture, tradition. It will

help to develop small and medium enterprises related to tourism sector, development of basic amenities such as water availability, good condition of transport infrastructure i.e. road, railways, etc. (Jamieson et. al. 2004).

## II. FOREIGN EXCHANGE EARNINGS (FEE) IN

### INDIA

Foreign Exchange Earnings generated by foreign tourist. The spending by the foreign tourists of their own currency or the exchange of their currency in the currency of particular country where they are travelling is classified as foreign exchange earnings for the host country. Thus, an increase in the foreign tourists ensures increase in high foreign exchange earnings reserves which is a main source of foreign currency. India is a culturally rich and growing economy which attracts foreigners for their holidays. It is clear from the figure no. 1 that foreign exchange earnings are continuously increasing since 1991 to 2016. Foreign Exchange Earnings in 1991 was only 1816 US \$ millions only and achieved 14.24 % yearly growth rate in 1992 but further it achieved negative growth rate of -0.09 per cent in 1992. Further from 1993 till 2002 foreign exchange earnings increased with slow growth rate. In 2002 it increased with slow growth rate up to 3,103 US \$ millions. In 2003 there is highest change in last 10 years were recorded in foreign exchange earnings which was 43.83 percent. In 2003 foreign exchange earnings from the foreign tourists was 4,463 US \$ millions and after that it showing slow growth rate in percentage change. The increase in foreign exchange earnings in percentage change per year is decreasing from 2010 to 2016 but in real term it is increasing continuously growth rate and till 2016 it achieved a collection of 23,146 US \$ millions as foreign exchange earnings (FEE).

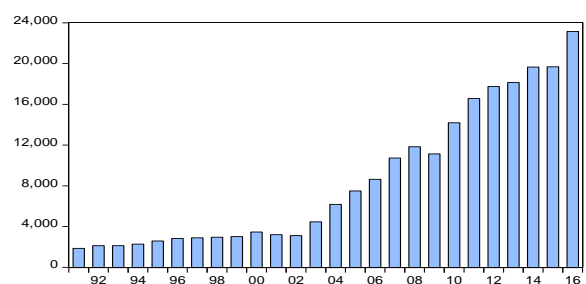


Figure No.: 1 Foreign Exchange Earnings (FEEs) in India (US\$ Millions)

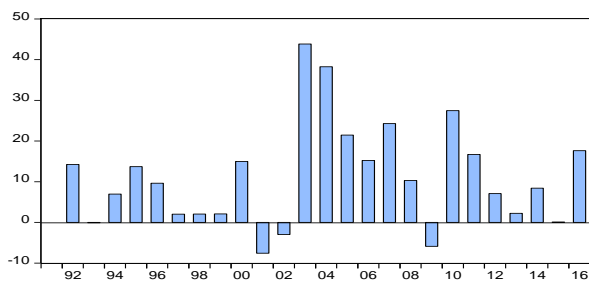


Figure No.: 2 Foreign Exchange Earnings (FEEs) in India (Percentage Change)

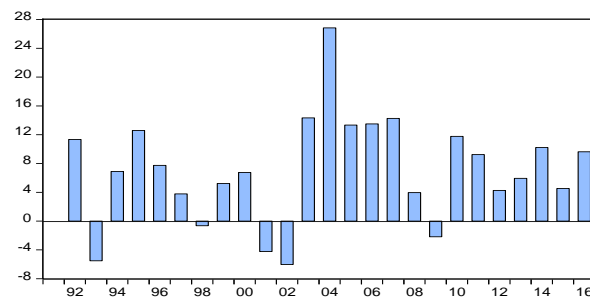


Figure No.: 4 Foreign Tourist Arrivals (FTAs) in India (Percentage change)

III. FOREIGN TOURIST ARRIVALS (FTAS) IN INDIA

An increase in foreign tourist’s arrival indicates the good and healthy environment for foreign tourists as their preferred location for holidays or weekends. The data of foreign tourists arrival in India indicating that India is good in providing healthy environment to its visitors. There is continuously increasing growth rate is achieved in foreign tourists arrival in India. The number of foreign tourist arrivals in 1991 in India was only 1677508 from all over the world and in next year 1992 it achieved 11.33 percent growth rate. The data showing that foreign tourists arrival was increased on an average from 1991 to 2003. The number of foreign tourist arrivals in 2003 was 2726214 which was 14.34 percent growth rate from the previous year. In 2004 the total number of foreign tourist arrivals in India was 3457477 which was 26.82 percent in compare to previous year further it increased every year till 2016 up to 88 US \$ millions in 2016. In 2001, 2002 and 2009 foreign tourist arrivals data showing negative growth rate in India. The highest growth rate in percentage was recorded in 2004.

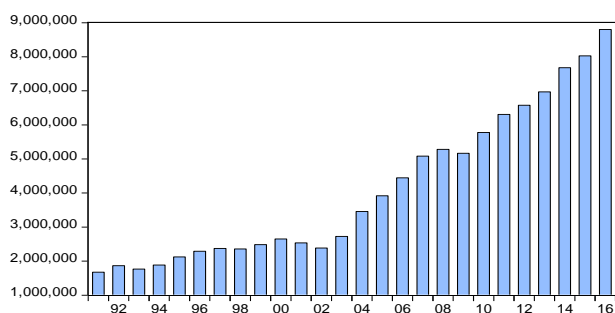


Figure No.: 3 Foreign Exchange Earnings (FEEs) in India (Percentage Change)

IV. REVIEW OF LITERATURE

There a number of studies indicates that an good environment attracts foreign tourists in the country whereas the country having any type of political, social, cultural disturbance have to face downfall in tourism industry O’ Hagan & Harrison (1984), Martin & Witt (1987), Rosenweig (1988). Little (1980) study is based on the causal relationship between political disturbance and tourist arrival. His study indicates that a better political environment helps to increase the number of foreign tourists whereas political disturbance causes a fall in tourism demand. Papadopoulos & Witt (1985) analyze tourism industry of Greece during the time span of 1972-1982. Their finding suggested that due to political disturbance in Greece there is downfall in per capita tourist visit from various countries. Lim & McAleer (2001) study discussed tourist arrival in Australia from Singapore. The result of the following study suggests that income level of the domestic country also plays very important role in increasing tourism industry for other nations. This study indicating that the income level of Singapore citizens, amount of the airfare and bilateral exchange rate of currency affected the tourist arrivals in Australia from Singapore. There are various study have discussed various motives attracting foreign tourist. There are various studies based on univariate and multivariate time series methods forecasting tourism arrival for particular countries. Martin & Witt (1989), Chan (1993), Witt et al. (1994), Kulendran and King (1997), Kim (1999). Libison.K.B. & K.P. Muraleedharan (2008) study discussed the role of pilgrimage places and their impact in attracting tourist in India. His study is based on sabarimala pilgrimage in Kerala. The major finding of this study suggested that religious destinations are the major source not only attracting domestic tourist but foreign tourist also. It also concluded that during the pilgrimage season income level, standard of living and employment generate more than the off season. There are few study suggested that for the better growth of tourism sector we have to focused on the education system also. Various studies are based on the state domestic tourism growth such as the role of tourism with respect to hospitality education in Utrakhhand (Bagri, 2005; Bagri and Babu, 2009). Their study focus that the tourism education not only

spread the knowledge of tourism sector among the students but also increase tourism development. In the same way, Bharadwaj, 2002 study also focused on the importance of tourism education and its role in training of manpower which will help to increase tourism industry. Tourism industry is very important for the long-haul economic growth of any country. There is a direct relationship with growth of tourism industry with the economic growth. This statement is supported by the finding of the research study conducted by Dritsakis (2004). Their study is based on Greece country which showing that economic growth of Greece also depending on the growth of tourism industry. The study conducted by Balaguer and Cantavella-Jorda (2002) for Spain also confirms the causality relationship between growths of tourism industry with the economic growth of the country. Further, the study by Tosun (1999), Oh (2005) for Korea and Gunduz and Hatemi (2005) for Turkey also confirm the same relationship between the growth of tourism industry and economic growth of the country. Proenca and Soukiazis (2008) findings shows that the growth of tourism industry can be a catalyst for enhancing regional growth. Their study based on the per capita income growth generated by tourism industry in Portuguese region. The study conducted by Cunado and Garcia (2006) was based on the conditional convergence towards Africa regions and USA. This study also suggests that convergence has their contribution for the growth of tourism industry. Brau et al (2003) study was the based on the fourteen tourism based countries out of their selected 143 countries. During their study, they compared growth performance relatively of these fourteen countries. The finding of the study confirms that tourism industry grows faster comparing to other industry which is very important for the economic growth of the country. Therefore, many countries started to focus on the development and growth of their tourism industry which is the part of their integral economy and it helps in job creation and increasing reserve of foreign exchange earnings (Sinclair, 1998; Dieke, 2004).

## V. RESEARCH OBJECTIVE

The research objectives which served as a guide for the following study are as follows:

1. To find out the causality relationship between tourism and economic growth in India.
2. To find out the correlation between Gross Domestic Products (GDP) and Foreign Exchange Earnings (FEE) in India.
3. To analyze correlation between Foreign Tourist Arrivals (FTA) and Economic Growth in India.

### Justification or Rationality of the study

In the following research study we have tried to find out the contribution of tourism sector for the economic growth of the country. The development of tourism sector in India is a fundamental need of the country because India is a growing economy and rich

in having cultural heritage therefor it is main destination center of the foreign tourist. India is a developing and growing economy where the role of tourism sector increasing year by year. Thus the analysis of the contribution of tourism in India a very important to study and it justified the study of role of tourism sector in India.

## VI. RESEARCH METHODOLOGY

There are various studies indicating the contribution of tourism sector in the economic development of the country. Most of the existing literatures are related with this present study explaining the relationship between Gross Domestic Product (GDP), Foreign Exchange Earning (FEE) and Foreign Tourist Arrivals (FTA). The study of existing literature suggests that tourism sector play an important role for the economic development of the country. It increases income levels of locals, improve local welfare, standard of living, profit to industry, revenue generation, etc. There are few study available showing the relationship between these three variable on such a long-time period from 1991 to 2016. Thus the present study will help to explore this issue of tourism in Indian context.

In the following study we shall study the relationship between Gross Domestic Product (GDP), Foreign Exchange Earning (FEE) and Foreign Tourist Arrivals (FTA). This will be done through multivariate regression analysis techniques by regressing Foreign Exchange Earning (FEE) and Foreign Tourist Arrivals (FTA) on Gross Domestic Product (GDP) of India. The following study is based at yearly data of Foreign Exchange Earning (FEE) and Foreign Tourist Arrivals (FTA) of India. It is assumed that the increase in foreign exchange and foreign tourist arrival will increase gross domestic product (GDP) of India which is an indicator for the economic growth of the country.

The study is based on the secondary data. The data of foreign exchange earnings through the foreign tourists and the data of foreign tourist arrivals is taken from [indiatat.com](http://indiatat.com) whereas the data form gross domestic product (GDP) is collected from the website of International Monetary Fund (IMF) for the period of 1991 to 2016. The data is used in raw form. The data of foreign exchange earnings through the foreign tourists is in US \$ million and the data of foreign tourist arrivals are in real numbers US \$ billion.

### Empirical Analysis

There are various study indicating tourism development as an engine of economic growth of various countries. The following study is an attempt to find out the relationship and causality relationship between tourism and economic growth in India. To find out the causality relationship, we have selected three variables, viz. Gross Domestic Product (GDP) at the constant price as Dependent Variables and Foreign Exchange Earning (FEE) in one financial year and the numbers of Foreign Tourist Arrivals (FTA) in one

financial year in India. To find out the relationship between following variables, we have estimated multivariate regression model. The result of the

estimated multivariate regression model is summarized in Table no.1.

**Table No.: 1 Results of Multivariate Regression Model**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
$\alpha_0$	64.23531	90.93834	0.706361	0.4871
$\alpha_1$	0.078657	0.020655	3.808099	0.0009
$\alpha_2$	5.81E-05	6.43E-05	0.902826	0.3760
R-squared	0.990316	Mean dependent var		973.8932
Adjusted R-squared	0.989474	S.D. dependent var		674.5552
S.E. of regression	69.20570	Akaike info criterion		11.42021
Sum squared reside	110156.9	Schwarz criterion		11.56538
Log likelihood	-145.4627	Durbin-Watson stat		1.128033

It is clear from the above table that the coefficient of  $\alpha_1$  is significant whereas the coefficient of  $\alpha_0$  and  $\alpha_2$  are not significant in this multiple regression model. It means that the impact of Foreign Exchange Earnings (FEE) from the foreign tourists is significant on the Gross Domestic Product (GDP) in India is significant in long run whereas the impact of Foreign Tourist Arrivals (FTA) on Gross Domestic Product (GDP) in India is not significant. It is also clear that 1 % increase in Foreign Exchange Earning (FEE) in India leads to about 7.86 % increase in Gross Domestic Product (GDP) in India. Furthermore, R-squared value is 0.99 which is very close to 1 which indicates the relationship between the variables is very strong over the sample period. The value of Adjusted R-squared is 0.989. It means about 98.9 % variances in Gross Domestic Product (GDP) at constant prices in India is explained by Foreign Exchange Earnings (FEE). The value of R-squared is 99.03 percent explicates that regression line fitted in following data strongly. It is also indicating the suitability of multivariate regression analysis for the following set of variables. The value of p-value is 0.009 percent which is less than 0.05 percent meaning that FEE is significant independent variable to influence dependent variable whereas the p-value of FTA is 37.60 percent which is not significant independently and it is not influencing the dependent variable. Thus out of these to independent variable only one is independently significant and the other is not significant. The value of F-statistics is 1176.07 and the Prob (F-statistic) value is 0.0000 which is less than 0.05 percent thus meaning that we can reject null hypothesis. This result is desirable for the multiple regression models. The Observed R-squared value is 5.534 and their correspondent Prob. Chi-Square value is 6.25 percent which is more than 5 percent it means that we cannot reject null hypothesis which means that residuals are not auto-correlated or residuals are not serial correlated which is desirable and it is a good sign of the model. The Observed R-squared value is 3.67 and their correspondent Prob. Chi-Square value is 15.91 percent which is more than 5 percent it means that we cannot reject null hypothesis thus we accept null hypothesis

meaning that variance of the residual is homoscedastic meaning that this model is good because of residuals are homoscedastic not heteroscedastic. It is a good sign for this model. The Jarque Bera Statistics is 6.5263 and corresponding probability value is 0.0382 or 3.82 percent which is less than 5 % meaning that we can reject null hypothesis which means that Residuals are not normally distributed which is not desirable. So from this point of view this model is not good. Thus on the basis of econometric analysis, it can be clearly said that tourism sector can be considered as the engine of economic growth in India.

As per the result of multiple regressions of the following variable indicates that foreign exchange earnings from the foreign tourists in India is economically significant whereas in case of foreign tourists arrivals in India is non-significant but it does not means that the role of foreign tourist arrivals in India can be entirely ignored. It means there is need for more facilities, infrastructures, visa policies other monetary and non-monetary facilities is required and Government of India should focus more on the development of tourism sector in India in forthcoming years. As it is clear from the results that increase in foreign exchange earning contribute more in gross domestic product in India. An increase in foreign tourist arrivals has potential to stimulate other economic sectors in India such as hotel industry, FMCG goods, Medical facilities, Transportation, Constructions, etc. Government should promote various manufacture domestic products, various facilities to the foreign tourists so that in increase the revenue of State as well as Centre also.

## VII. CONCLUSION

Tourism is a growing sector in India and its contribution in economy increasing years by years. Tourism industry in India is generating employment at large scale not only for organized sector but also for unorganized sector. The people from all the section of the economy are getting benefits from the growth of tourism industry. There are various people from economically low middle class also getting benefits

from tourism industry. There are various industries such as Hotels, Transportation, Food, Luxury goods, Handicrafts are getting benefit also from tourism industry. In last few years various foreigners choose India for medical treatment and facility, it is increasing medical tourism industry in India. The tourism industry of India has capacity to boost economy by contribution in income, increasing employment, etc. India is a developing economy attracting more foreigners which has potential to make India is a good tourism destination. Therefore the following study research study is based on the objective to find out the contribution of tourism industry in economic growth of India.

Tourism covers a large number of small-scale industries. In the past few years there is drastic change recorded in case of foreign tourist arrivals in India which is a sign of good and favorable tourism environment in India. From 2002 to 2016 foreign tourist arrivals are continuously increased. The highest percentage change recorded in 2004 which was more than 25 percent. Tourism industry is a main source for foreign currency reserve earned from foreign tourist arrivals in India. A tourist spends their money not only

on Hotels, Restaurant, Transport, Shipping, etc. but also helps to handicrafts sector, local markets, reducing poverty, etc. Thus tourism industry is a very helpful not only in monetary benefits but also non-monetary benefits. As per the result output shown in figure no.1 foreign exchange earnings also has drastically increased form 2002 to 2016 which is indicating an increase in foreign exchange reserve of the country. India is having more capacity to grow its tourism industry in upcoming years. There are various states which are promoting tourism sector at national level such as Gujarat, Madhaya Pradeh, Uttar Pradesh, Orissa, etc. whereas India government also promoting tourism at national level with its campaign programmed named “Incredible India”. There are various tourism policies and programmes launched recently by Indian government such as e-visa facility for the foreign tourists for the citizen of 44 selected countries; participating in major international fairs and exhibitions related to tourism promotion; organizing road shows for the promotion of tourism destination; focused on increasing trained manpower and hospitality industry; policy to promote Buddhist heritage and North-East states of India, etc.

## VIII. REFERENCES:

1. Bagri, S. C. (2005). Human resource practices in travel and tourism sector, souvenir of the national conference held in Rishikesh 19th-21st March.
2. Bagri, S. C., & Suresh Babu, A. (2009). Critical Analysis of the Existing Scenario of Hospitality Management Education. *University News*, 47(36).
3. Balaguer, J., and Cantavella-Jorda, M. (2002), ‘Tourism as a long-run growth factor: the Spanish case’, *Applied Economics*, Vol 34, No 7, pp 877–884.
4. Benn, H (2006): Growth and poverty reduction – creating more and better jobs in poor countries First Speech on the White Paper by the Secretary of State for International Development, 19th January 2006, London, UK.
5. Bharadwaj, D. S. (2002). Manpower development for tourism sector in India, tourism in the new millennium, challenges & opportunities. In S.P.Bansal, S. Sushama and C. Mohan (Eds.), *Cutting edge research in tourism*. Chandigarh: Abhishek Publications, 418-428.
6. Brau, R., Lanza, A., and Pigliaru, F. (2003), How Fast are the Tourism Countries Growing? The Cross-country Evidence, *Nota di Lavoro*, No 85, Fondazione Eni Enrico Mattei, Milan, Italy.
7. Brohan, J (1998): New directions in tourism for third-world development *Annals of Tourism Research* Vol.23, No.1, pp.48-70
8. Chan, Y. M. (1993), Forecasting Tourism: A Sine Wave Time Series Regression Approach, *Journal of Travel Research*, Vol.32, pp 58-60.
9. Cunado, J., and Perez de Garcia, F. (2006), ‘Real convergence in Africa in the second-half of the 20th century’, *Journal of Economics and Business*, Vol 58, pp 153–167.
10. Dieke, P.U.C. (2004), ‘Tourism in Africa’s economic development: policy implication’, *Management Decision*, Vol 41, No 3, pp 287–295.
11. Dritsakis, N. (2004), ‘Tourism as a long-run economic growth factor: an empirical investigation for Greece’, *Tourism Economics*, Vol 10, No 3, pp 305–316.
12. Gunduz, L., and Hatemi, A. (2005), ‘Is the tourism-led growth hypothesis valid for Turkey?’ *Applied Economics*, Vol 12, pp 499–504.
13. Jamieson, W et al (2004): Contribution of Tourism to Poverty Alleviation, UN ESCAP, November.
14. Martin, C.A. and S.F. Witt (1987), Tourism Demand Forecasting Models: Choice of Appropriate Variable to Represent Tourists’ Cost of Living, *Tourism Management*, Vol.8, No.3, pp 233-246.
15. O’ Hagan, J.W. and M.J. Harrison (1984), Market Shares of US Tourists in Europe: An Econometric Analysis, *Applied Economics*, Vol.16, pp 219-226.
16. Oh, C. (2005), ‘The contribution of tourism development to economic growth in the Korean economy’, *Tourism Management*, Vol 26, No 1, pp 39–44.
17. Papadopoulos, S.I. and S.F. Witt (1985), A Marketing Analysis of Foreign Tourism in Greece, in: S.Shaw, L.Sparks and E.Kaynak, (eds.), *Marketing in the 1990’s and beyond: Proceedings of Second World Marketing Congress*, University of Stirling, Stirling, pp 682-693.
18. Proenca, S., and Soukiazis, E. (2008), ‘Tourism as an alternative source of regional growth in Portugal: a panel data analysis at NUTS II and III levels’, *Portuguese Economic Journal*, Vol 7, No. 1, pp 43–61.
19. Kim, J.H. (1999), Forecasting Monthly Tourist Departures from Australia, *Tourism Economics*, Vol.5, pp 277-291.
20. Kulendran, N. and M.L. King (1997), Forecasting International Quarterly Tourist Flows using Error-Correction and Time-Series Models, *International Journal of Forecasting*, Vol.13, pp 319-327.
21. Libison.K.B. & K.P. Muraleedharan (2008), “Economic Benefits of Pilgrimage Tourism: A Case Study of Sabarimala Pilgrimage with Special Reference to Pandalam Rural Locality in Kerala (India)”, *South Asian Journal of Tourism and Heritage* (2008), Vol. 1, No. 1.
22. Lim, C. and M. McAleer(2001), Modelling the Determinants of International Tourism Demands to Australia, Discussion Paper No: 532, The Institute of Social and Economic Research, Osaka University, Japan.
23. Little, J.S. (1980), International Travel in the US Balance of Payments, *New England Economic Review* (May-June), pp 42-55.
24. Rosenweig, J.A. (1988), Elasticities of Substitution in Caribbean Tourism, *Journal of Development Economics*, Vol. 29, No.1, pp 89-100.
25. Sinclair, M.T. (1998): Tourism and economic development. *Journal of Development Studies*. 34(5), 1-51.

26. Tosun, C. (1999), 'An analysis of contributions international inbound tourism to the Turkish economy', *Tourism Economics*, Vol 5, pp 217–250.
27. Wally Mamudu (2001): "Ecotourism and Sustainable Wildlife Management", paper presented in the conference "Atelier regional- Faune Sauvage et betail" on January 16-19, 2001 in Niger.
28. Witt, C.A., S.F. Witt and N. Wilson (1994), Forecasting International Tourist Flows, *Annals of Tourism Research*, Vol.21, pp 612-628.