Indian Journal of Economics and Development, January 2019, Vol 7 (1), ISSN (online): 2320-9836
ISSN (Print): 2320-9828

Study of the importance of Indian tourism on economic development over the period 2000—2017

Anay Kumar[1], Dr. Gurdeep Singh[2]

Assistant Professor, Department of Economics, M.P. Govt College Amb, Una, Himachal Pradesh-177203, India
Lecturer, Department of Mathematics, Govt. Sr.sec. School Ghanari, Una, Himachal Pradesh-177212, India
anaykumar72@gmail.com[1], math.gurdeep@gmail.com[2]

Abstract

Objectives: This work assesses the relationship between Gross Domestic Product, Foreign Tourist Arrivals, Gross Domestic Product and Employment in India over the period 2002 to 2017. The other objective is to observe the growth and performance of tourism in Gross Domestic Product of India. To study the different tourism policies and identify the best policies or suggestions for government of India.
Methods/Analysis: This study has used the Karl Pearson method for calculating the Coefficient of Correlation. The coefficients R12,R13,R14 & R24 have been calculated and these are between the 1.Gross Domestic Product, 2. Foreign Tourist Arrivals, 3. Foreign Exchange Earning, 4. Employment. The P.E. Maximum Limit, Minimum Limit, S.E., Significant of |r| and 't' Test are also used to calculate the findings of the study.
Findings: The study finds that the coefficient of correlation between foreign tourist arrivals and gross domestic product i.e.R12 for the 1st period of study i.e. 2000-05 and in the 3rd period of study i.e. 2012-17 is highly positive and significant. Which clearly means that the gross domestic product of India depends upon foreign tourist arrivals? As it is observed in the 2nd period of i.e. 2006-11, the coefficient of correlation R12 is moderate positive &insignificant. According to the economic review of India, this was recession, yet then the coefficient of correlation which is moderate positive shows that the Indian gross domestic product depends upon foreign tourist arrivals whether which was decreased as compare to 1stperiod & 3rd periods of our observation. The resulted provided by R12 are also explained by the coefficient of determination i.e. r2. The value of r2, in the 1st period of study 2000-05,2nd period of study 2006-11 & 3rd period of study 2012-17 is 65.60%, 50% & 88% respectively. It clearly means that the variation in gross domestic product is highly in the 3rd period & lowest in the 2nd period of the study. As 2nd period of study was economic recession, yet then the variation in gross domestic product is not less than 50%. The employment was also increased in the 1st& 3rd period due to increment in the foreign tourist arrivals shown by the value of R24.
Keywords: Tourism, Employment, Gross Domestic Product, Foreign Exchange Earning, Foreign Tourist Arrivals.

1. Introduction

Tourism industry is the backbone of a service sector and it plays an important role in the development of allied sectors as hotels, restaurant, hospitality, travel and transportation. State and central government frame various policies for tourism. For the development of tourism huge amount of money is invested and spent. Tourism also generates employment and contributing to Gross Domestic Product. Ashish Nag mentioned that the ministry of Tourism in any country seeks ways to promote and develop tourism in the country [1]. Tourism is not only growth engine but also an employment generator. The role of Government in tourism development has been redefined from that of a regulator to that of a catalyst [2]. Apart from marketing and promoting, the focus on the tourism development plans is now on integrated development of enabling infrastructure through effective partnership with various stakeholders. M.A. Khan wrote in his book on 'Principles of Tourism Development' which deals with hotel industry and tourism [3]. These are the major sectors of modern economy in the world as well as in India. Tourists help to promote the economy of a country, so these should be honored as guests. Romila Chawla wrote her famous book 'Tourism. In the 21st Century' and she emphasized on important features of the tourism industry and its role in the Gross Domestic Product of India [4-5]. The tourism acts as an industry for the economic development of a country.

ISSN (online): 2320-9836
ISSN (Print): 2320-9828

Tang, Tiwari and Shahbaz related international tourist arrivals with energy consumption and economic growth nexus for India covering the period from 1971-2002 and their result showed a feedback type relationship between the foreign tourists arrivals and economic growth in India [6]. The 'Tourism Development and Economic Growth in India [7]. Manish Ratti. In his "Tourism Planning and Development" Book which deals with the tourism industry also provides a number of job opportunities to the local people, adverse effect on destinations; it contains vital information on tourism [8]. Dr. Kulwant Singh Pathania and Arun Kumar explain all the aspects related to tourism in India and the resources available for tourism in India. The data used in this study has been taken from India Tourism Statistics at a Glance [9], Bureau of Immigration, Government of India [10], Ministry of Tourism, Government of India [11], Reserve Bank of India [12] and World Travel and Tourism Report [13]. Indian Government has been framing the various types of tourism policies from the year 2000 to 2017. The details are given below:

1. Visiting India Year (1999-2000).
2. National Tourism Policy (2002): National tourism policy is based on seven key indicators. These are cleanliness, co-operation, facilitation, information, infrastructural development, safety and welcome. Another concept of tourism is development of Highway tourism, agricultural tourism and rural tourism. A campaign titled as 'Incredible India' was launched in 2002.
3. 'Athithi Devo Bhavo' campaign launched (2009).
4. Hunar se Rozgar Programme launched (2009-10).
5. The Ministry Launched its International TV Campaign Europe (2010-11).
6. 'Clean India' campaign launched (2013)

The study of this paper is based on four periods:
1. 1st period: 2000-05
2. 2nd period: 2006-11
3. 3rd period: 2012-17
4. Overall period: 2000-17

In these four periods the study of this paper has investigated the effect of tourism on the Indian economy by studying the effect on Employment, Gross Domestic Product, Foreign Exchange Earning, and Foreign Tourist Arrivals.

2. Objectives and Methodology

This study has the following main objectives:
1. To study the relationship between Gross Domestic Product and Foreign Tourist Arrivals, Gross Domestic Product and Employment in India.
2. To study the growth and performance of tourism in Gross Domestic Product of India.
3. To study the different tourism policies and identify the best policies or suggestions for government of India.

In order to fulfill the objectives, the detailed data for various years collected from various resources [13].The results are based on the data provided by India tourism statistics at a glance, Bureau of Immigration, Ministry of Tourism, Reserve Bank of India and World Travel and Tourism Report. By using the Karl Pearson method for calculating the Coefficient of Correlation, P .E. Maximum Limit, Minimum Limit, S.E., Significant of |r| and 't' Test. It is observed that tourism places have an important role in the economic growth of India in the long run as well as short run. During the 1st period of our study that is 2000-05, the 65.60% of variation in the Gross Domestic Product has been observed by the strength of Foreign Tourist Arrivals, in the 2ndperiod that is 2006-11, the 50% of variation in Gross Domestic Product has been observed by the Foreign Tourist Arrivals.

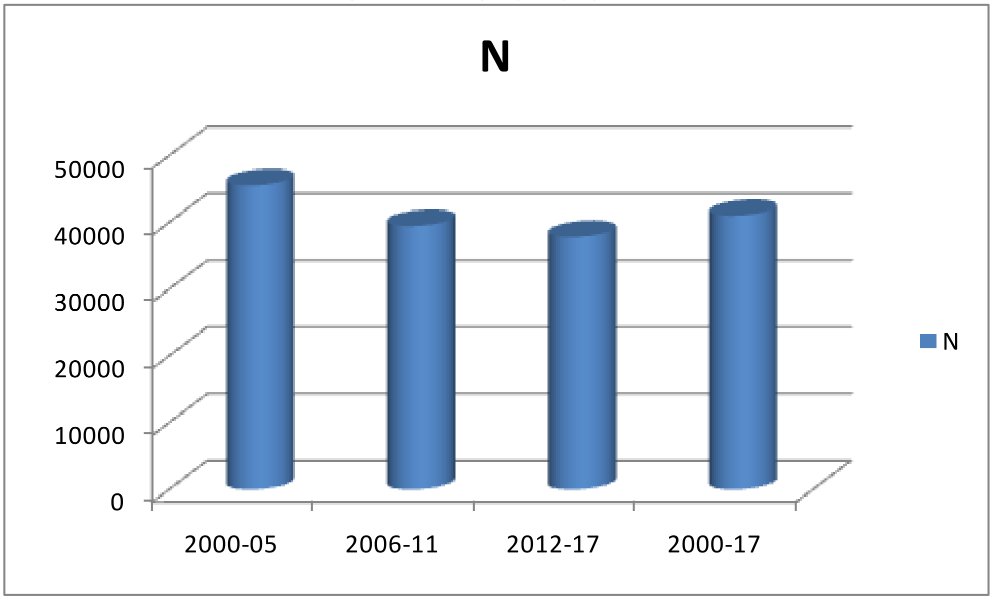
In the 3rd period of our investigation that is 2012-17, 88% of variation in the Gross Domestic Product has been observed by the Foreign Tourist arrivals the significant value of |r| and 't' Test also shows that these results are Significant. It clearly means that the policies for attracting the International tourists were more attractive during the 3rd period as compare to 1st period and 2nd period. So finally it is suggested to the tourism department as well as Government to continue their policies for promoting tourism which they have followed during the 3rdperiod of our study.

 ISSN (online): 2320-9836
ISSN (Print): 2320-9828

3. Results and Data Analysis

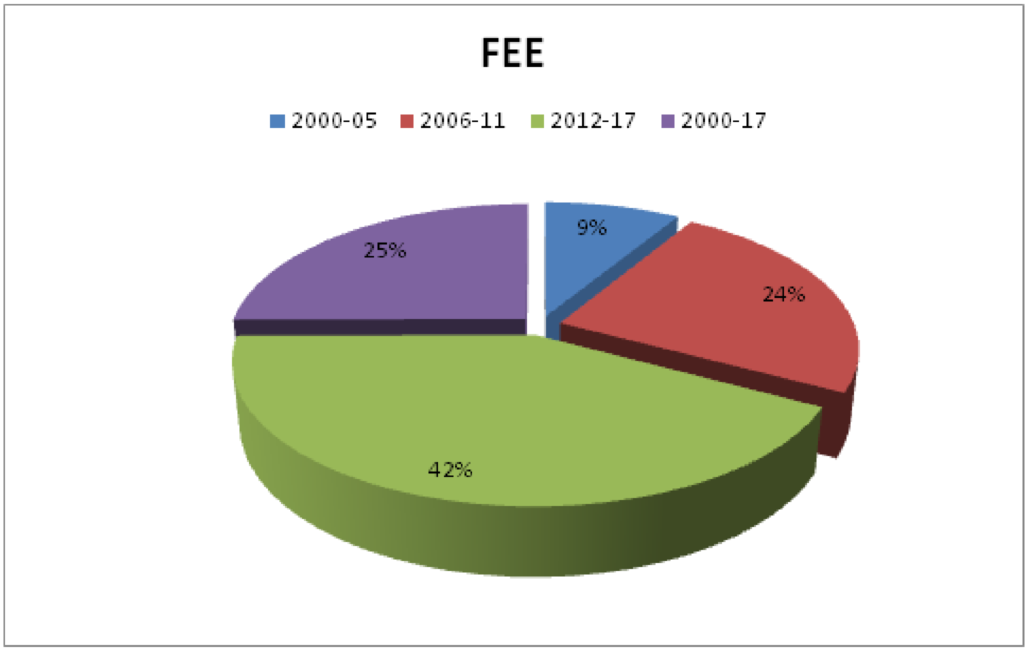
The results of this study are based on the average of Foreign Tourist Arrivals, Foreign Exchange Earning, Gross Domestic Product and employment under four periods' i.e. 2000-05, 2006-11, 2012-17 and 2000-17 in India. In the three periods i.e. 2000-05, 2006-11 and 2012-17 the average of FTA's, FEE and GDP are continuously increasing but in the 1^{st}& 2^{nd} periods the average of FTA's, FEE and GDP are less to the overall period i.e. 2000-17. In the 1^{st} period i.e. 2000-05 the average of Employment is highly to overall period 2000-17 but in the 2^{nd}& 3^{rd} periods i.e. 2006-11 & 2012-17 the average of Employment is less to overall period i. e. 2000-17. Note:- FTA-foreign tourist arrivals, FEE-foreign exchange earnings, GDP-gross domestic product, N-employment.

Figure 1. Average of employment



Note: N-employment

Figure 2.The percentage average of FEE



ISSN (online): 2320-9836
ISSN (Print): 2320-9828

The Figure 1shows the variation of employment in the respective four periods of study 2000-05, 2006-11,2012-17 and 2000-17.In the 1st period i.e.2000-05 the average of Employment is highly to overall period 2000-17 but in the 2nd& 3rd periods i.e. 2006-11 & 2012-17 the average of Employment is less than the overall period. i.e. 2000-17. This clearly explains that the employment of a country do not depend on only one parameter like FTA, but this depends upon many national as well as international parameters. The Figure 2 explains the percentage of the average of FEE less than four periods of the study of the paper. The highest average of FEE was 42% in the 3rd period i.e. 2012-17 but the lowest average of FEE was 9% in the 1st period i.e.2000-05.Thus, the percentage of average of FEE indicates that the maximum foreign exchange earnings was in the 3rd period (2012-17), but the coefficient of variation is maximum in the 4th period (2000-17) which clearly means that there is too much variation in the foreign exchange earnings in India in different financial years.

Figure 3. Percentage average of FTA

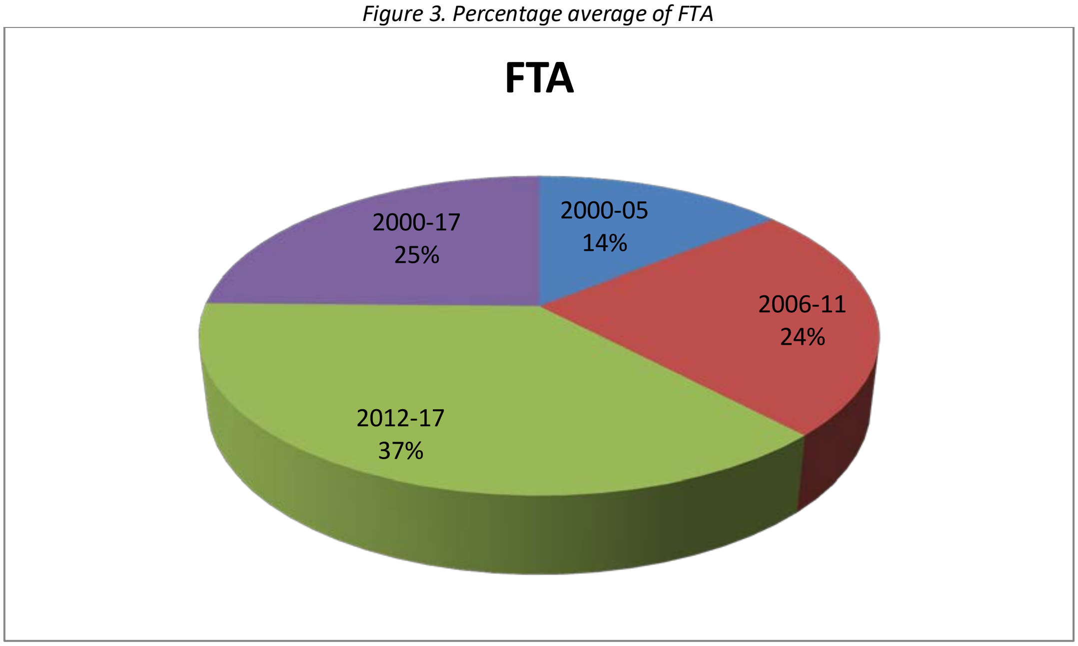
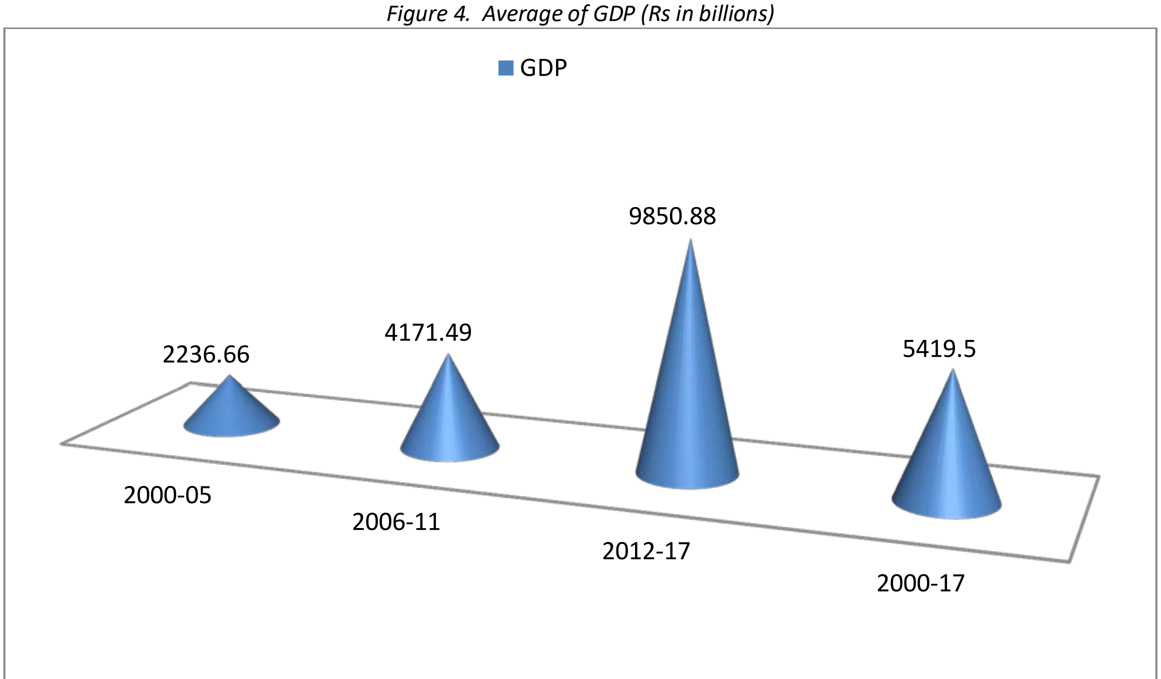


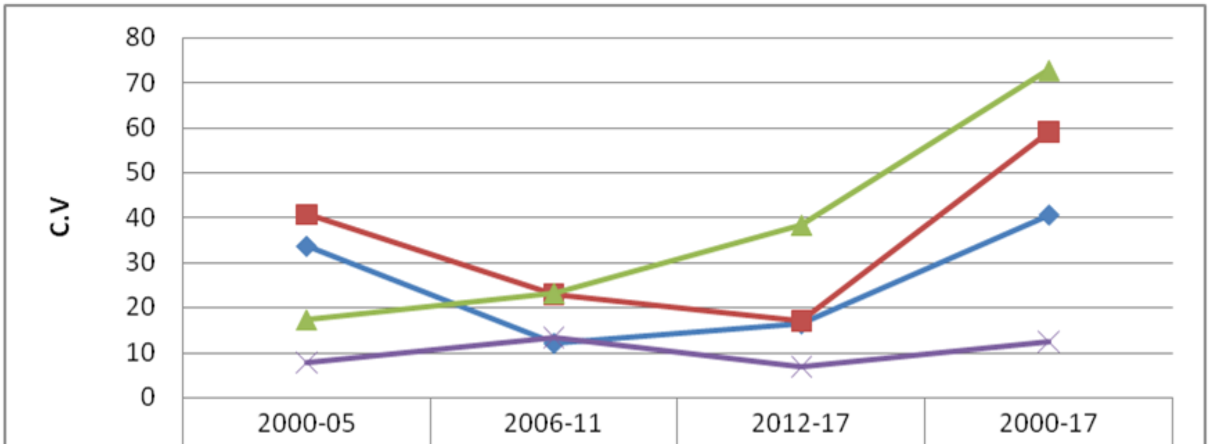
Figure 4. Average of GDP (Rs in billions)



The Figure 3 shows the percentage of foreign tourist's arrivals in the four different four periods of our study. It suggests the information that the maximum foreign tourists had arrived in the 3rd period (2012-17).But the coefficient of variation is maximum in the overall period (2000-17) which clearly indicates that the strength of tourists from foreign countries in India changes frequently in the respective financial years.

The Figure 4 shows the average of GDP in Rs billions for the different periods of the study. It is obviously from the Figure 4 that the GDP is maximum for the 3rd period (2012-17) and it is minimum for the 1st period (2000-05). The GDP of India as indicated by the Figure 4 is increasing continuously but with a variation in different periods. So, the FTA has also a great importance in deciding the GDP of India as shown by the variation of different parameters in the study.

Figure 5. The coefficient of variation (C.V) for employment(N),FTA,FEE and GDP



	2000-05	2006-11	2012-17	2000-17
FTA	33.53	11.96	16.3	40.46
FEE	40.65	22.97	16.95	59.07
GDP	17.23	23.12	38.31	72.79
N	7.78	13.26	6.82	12.25

The Figure 5 shows that the coefficient of variation (C.V.) is maximum for GDP in the 3rd period of the study, which means that there is a great change in the economy of India as compare to the earlier periods of our study. But this was a positive change towards the GDP. If we observe the C.V carefully then it shows the more stability than GDP for other parameters like FTA and FEE.

The Table 1shows that the coefficient of correlation between foreign tourist arrivals and gross domestic product i.e.R12 for the 1st period of study i.e. 2000-05 and in the 3rd period of study i.e. 2012-17 is highly positive and significant, which clearly means that the gross domestic product of India depends upon foreign tourist arrivals. As it is observed in the 2nd period of i.e. 2006-11, the coefficient of correlation R12 is moderate positive & insignificant. According to the economic review of India, this was recession, yet then the coefficient of correlation which is moderate positive show that Indian gross domestic product depends upon foreign tourist arrivals whether which was decreased as compare to 1st period & 3rd periods of our observation. The resulted provided by R12 are also explained by the coefficient of determination i.e. r2.

ISSN (online): 2320-9836
ISSN (Print): 2320-9828

Table 1. Coefficient of correlation & determinations'', P.E., MAXI.LIMIT, MIN.LIMIT, S.E

PERIODS/STASTICS	1^{ST} PERIOD 2000-05	2^{ND} PERIODS 2006-11	3^{RD} PERIOD 2012-17	OVERALL PERIOD 2000-17
R12	0.81	0.71	0.94	0.92
r2	0.656	0.504	0.883	0.846
|r|	9.00	5.07	31.33	46.00
t	2.779	2.00	5.434	9.39
P.E.	0.09	0.14	0.03	0.02
Maxi	0.90	0.85	0.97	0.94
Min.	0.72	0.57	0.91	0.90
S.E.	0.18	0.20	0.05	0.04
R13	0.81	0.99	0.92	0.93
r2	0.656	0.98	0.846	0.865
|r|	9.00	99	23.00	46.5
t	2.779	14.04	4.75	4.973
P.E.	0.09	0.01	0.04	0.02
Maxi	0.9	1.00	0.96	0.95
Min.	0.72	0.98	0.88	0.91
S.E.	0.18	0.01	0.06	0.03
R13	0.81	0.99	0.92	0.93
r2	0.656	0.98	0.846	0.865
|r|	9.00	99	23.00	46.5
t	2.779	14.04	4.75	4.973
P.E.	0.09	0.01	0.04	0.02
Maxi	0.9	1.00	0.96	0.95
Min.	0.72	0.98	0.88	0.91
S.E.	0.18	0.01	0.06	0.03
R24		-0.740	0.97	-0.51
R2	0.29	0.547	0.94	0.260
|r|	0.08	6.16	48.5	4.25
T	1.16	2.201	7.918	1.186
P.E.	0.604	0.12	0.02	0.12
Maxi	0.25	-0.62	0.99	-0.39
Min.	0.54	-0.86	0.95	-0.63
S.E.	0.04	0.18	0.02	0.17
	0.38			

The coefficients of correlation R12, R13, R14 & R24 are between the 1. GDP 2. FTA 3. FEE 4. N

4. Discussion

In this study we have found that in the three periods i.e. 2000-05, 2006-11 and 2012-17 the average of FTA's, FEE and GDP are continuously increasing as shown in the Figure 5,but in the 1^{st}& 2^{nd} periods the average of FTA's, FEE and GDP are less to the overall period i.e. 2000-17 shown in Figures 2-4. The coefficient of variation of FTA's under four periods i.e. 1^{st} period 2000-05 was 33.53%, 2^{nd} period 2006-11 was 11.96%, 3^{rd} period 2012-17 was 16.29% & in the 4^{th}period 2000-17 was 40.46%. The highest coefficient of variation of FTA's was 40.46% in the overall period i.e. 2000-17 but the lowest coefficient of variation of FTA's was 11.96% in the 2^{nd} period i.e. 2006-11. The coefficient of variation of FEE was under four periods i.e. 2000-05, 2006-11, 2012-17 and 2000-2017 were 40.65%,22.97%, 16.95% and 59.07% respectively as shown in Figure 4.

The highest coefficient of variation of FEE was 59.07% in overall period but the lowest coefficient of variation of FEE was 16.95% in the 3^{rd} period i.e. 2012-17. The coefficient of variation of GDP was under four periods i.e. 2000-05, 2006-11, 2012-17 and 2000-20017 were 17.23%, 23.12%,38.31% & 72.79% respectively as shown in Figure 4. The highest coefficient of variation of GDP was 72.79% in the overall period i.e. 2000-17 but the lowest coefficient of variation of GDP was 17.23% in the 1^{st} period i.e. 2000-05. The value of r2, in the 1^{st} period of study 2000-05, 2^{nd} period of study 2006-11 & 3^{rd} period of study 2012. It clearly means that the variation in gross domestic product is highly in the 3^{rd} period & lowest in the 2^{nd} period of the study. As 2^{nd} period of study was economic recession, yet then the variation in gross domestic product is not less than 50%.

ISSN (online): 2320-9836
ISSN (Print): 2320-9828

5. Conclusion

This study investigated the long run effects of tourism on economic growth of India over the period 2000-2017. To furnish thoroughly this, the coefficient of variation and coefficient of correlation were examined for various variable factors on which the economy of India depends. Our investigation shows that the economy of India depends upon the tourism while it also shows its impacts on the employment of India. It also shows that the gross domestic product in India depends on employment in the long period of our study. The employment was increased due to the increment in the foreign tourist arrivals. Even in the period of recession the increment in our gross domestic product can clearly explained by the increment of foreign exchange earnings due to increment in foreign tourist arrivals.

5.1. Suggestions

These findings emphasize the need for more reliable tourism development policies and programs to be executed by the Government as well as the various agencies involved in the development of tourism for promoting the economic growth of India. Finally, it is suggested that the tourism policies such as incredible India, Infrastructural development, development of high way for tourism and clean India have been shown the positive effect on foreign tourist arrivals in India. So Indian government, especially tourist department must follow these policies for increasing the foreign tourist arrivals, foreign exchange earnings and gross domestic product of India.

6. References

1. A. Nag. A study of tourism industry of Himachal Pradesh with special references to eco tourism. *Asia Pacific Journal of Marketing and Management Review*. 2013; 2(4), 1-18.
2. LokSabha Secretariat. http://164.100.47.194/loksabha/Secretariat/OfficersOfSecretariat.aspx. Date accessed: 31/12/2018.
3. M.A. Khan. Principles of tourism development. *Anmol Publication Pvt. Ltd*. New Delhi. 2005; 1-250.
4. K.S. Pathania, A. Kumar. Tourism in India*. Regal Publication*. New Delhi. 2008; 1-294.
5. R. Chawla. Tourism in the 21st century. *Sonali Publications*. New Delhi. 2003; 1-288.
6. C.F. Tang, A.K. Tiwari, M. Shahbaz. Dynamic interrelationship among tourism, economic growth and energy consumption in India. *Geo system Engineering*. 2016; 19(4), 158-169.
7. K.C. Dayananda, D.S. Leelavathi. Tourism development and economic growth in India. *IQSR Journal of Humanities and Social Sciences (IQSR-JHSS)*. 2016; 21(11), 43-49.
8. M. Ratti. Tourisim planning and development. *Rajat Publication*. New Delhi. 2007; 1-282.
9. India tourism statistics at a glance. Incredible India. 2017; 1-28.
10. Bureau of Immigration. https://boi.gov.in/. Date accessed: 11/12/2018.
11. Ministry of Tourism. https://en.wikipedia.org/wiki/Ministry_of_Tourism_(India). Date accessed: 28/11/2018.
12. Reserve Bank of India. https://en.wikipedia.org/wiki/Reserve_Bank_of_India. Date accessed: 26/12/2018.
13. World Travel and Tourism Report. https://en.wikipedia.org/wiki/World_Travel_and_Tourism_Council. Date accessed: 27/07/2018.

The Publication fee is defrayed by Indian Society for Education and Environment (www.iseeadyar.org)
Cite this article as:
Anay Kumar, Dr. Gurdeep Singh. Study of the importance of Indian tourism on economic development over the period 2000—2017. Indian Journal of Economics and Development. January 2019, Vol 7 (1), 1-7.

Received on: 06/11/2018

Accepted on: 01/01/2019