

Seasonal Concentration of Domestic and International Tourists: An overview of Himachal Tourism

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Abstract: The paper describes and analyses the seasonal concentration of Himachal tourism and compares between arrivals of domestic and international tourists using Gini coefficient. This method is applied to monthly time series data from year 2004 to 2012, the data consists of monthly tourist arrival of domestic as well as international tourists. The aim of this analysis is to determine the strength of seasonality criteria in Himachal Tourism. The results will be useful in deciding the overall impact of seasonality on the tourism sector.

Keywords: Tourists; Domestic Tourists; International Tourists; Himachal Tourism

Introduction

Seasonality is one of the distinctive characteristics and a major problem of tourism industry, and it has shown a global presence. Seasonality refers to the temporal fluctuations or imbalance in the phenomenon of tourism i.e. the variable flow of tourists which can be expressed in terms of fluctuations in receipts, visitation numbers, occupancy rates and bed nights (Jafari, 2013). Allcock (1994) defines it is the tendency of tourist flows to become concentrated into relatively short periods of the year. The total contribution of tourism to GDP in India has grown at a CAGR of 4.6 percent during 2006-2010 period, reaching INR 6,000 billion in 2012. According to World Travel & Tourism Council, the tourism sector in India is expected to grow at even faster rate of 8 percent over the next decade, contributing approximately INR 13,000 bn to the GDP by 2022. As tourism sector is still a lynch pin for many economies in the world, it is important to investigate the seasonal behavior of the tourists across the globe. The phenomenon of seasonality has been identified since past few decades and various attempts have been made to explore it as an area for research, but still it lacks a scientific theory (Nadal). Therefore there is still need to strengthen this phenomenon by accumulating evidences from different parts of the world.

This research is an attempt to study the seasonal pattern of tourist arrivals in the state of Himachal Pradesh. And, compare the seasonal behavior of domestic and international tourists using time series data for every month from the year 2004 to 2012. This analysis will also depict the trend of tourist arrivals since last few years.

Tourism seasonality

Seasonality in tourism is caused by a number of factors which can be classified in three major types

as, natural factors (such as snowfall, temperature variations, location, etc.); institutional factors which are man-made (such as actions and policies regarding culture, religion and social life etc.) (Weidner S. 2009). Butler (1994) cites other causes: social pressure or fashion, sporting calendars, and inertia or tradition. Moreover, climate, available holidays, special characteristics of the destination, and marketing including special events determine the different types of seasonal variation in tourism demand. (Kulendran & Wong 2005). Previous research advocates that seasonality is a major problem with multiple facets and implications, and it is something to be overcome and its effect should be adjusted or abridged at least (Butler, 1998). An alternate opinion is also advocated by some scholars which grasps the positive side of seasonality, as it provides critical time needed for refurbishing the environment and the physical as well as social resources (Butler, 1998). As a consequence of this difficult acuity, much attention has been paid and much effort made by both public and private sectors to reduce seasonality through a variety of approaches (Butler 1994).

Measuring Seasonality

There is ample proof that the frequency of tourist arrivals changes throughout the year and thus poses a challenge for the tourism infrastructure set in place and for the overall tourism sector.

(Nadal *et al*, 2004) suggests that seasonality is a particular kind of non-uniform distribution; therefore different measures have been proposed for its quantification. The Gini coefficient is a well-known and frequently used measure for quantifying inequality. It has been used to measure Tourism seasonality in various studies. In addition, this index can be decomposed in a very useful way for assessing the degree of variation within and between seasons, as well as providing a measure of

trans-variation between them (Fernandez-Morales 2003).

OVERVIEW OF HIMACHAL PRADESH TOURISM

Popularly known as *Devbhumi*- “Land of Gods”, Himachal Pradesh lies in western Himalayas and is primarily a mountainous state of India. The state of Himachal Pradesh recognizes Tourism as the engine for economic growth as this region is blessed with all the basic resources necessary for thriving tourism activity like geographical and cultural diversity, clean beautiful and peaceful streams, sacred shrines, historical places, and friendly hospitable people (Department of Economics and Statistics, 2012). As a result of miscellaneous tourism resources the state of Himachal Pradesh over the years has seen a steady rise in the tourist arrivals and tourism infrastructure as well.

Tourists both domestic and international come to visit various parts of the region throughout the year. For our analysis of tourist concentration we will take month wise data DTA (Domestic Tourist Arrivals), and FTA (Foreign Tourist Arrivals) provided by Himachal Tourism (himachaltourism.gov.in).

Table 1 illustrates the trends of Domestic and International tourists for years 2004-2012

Table 1: Trends in Tourist Arrivals from 2004-2012

Tourist Arrivals (in lakhs)			
Year	Domestic	Foreign	Total
2004	63.45	2.04	65.49
2005	69.28	2.08	71.36
2006	76.72	2.82	79.53
2007	84.82	3.39	88.21
2008	93.73	3.77	97.49
2009	110.37	4.01	114.37
2010	128.12	4.54	132.66
2011	146.05	4.85	150.89
2012	156.46	5.00	161.46

Table 1 clearly shows that the number of tourists both domestic as well as foreign have increased every year. Also it is evident from the table that domestic tourists are far ahead from the foreign tourists in terms of numbers. The gradual increase in overall tourist arrivals is promising sign for the state tourism sector. The CAGR for Domestic tourists is 11.94%, for Foreign tourists is 11.84% and for combined tourist arrivals is 11.93%. The *Devbhumi* attracts a lot of domestic tourists because of its rich religious heritage, the region is full of religious places and attracts a lot of tourists from neighboring states of Punjab, Jammu and Kashmir, Haryana, Delhi and Rajasthan.

Seasonal Concentration of Himachal Tourism

Table 2 Percentage distribution of total tourists over months from 2004 to 2012

%age distribution of Tourist			
Month	Domestic	Foreign	Combined
January	5.00	3.87	4.96
February	6.13	3.58	6.04
March	7.90	6.24	7.85
April	11.90	7.95	11.77
May	11.43	9.45	11.36
June	14.04	10.76	13.93
July	7.47	13.04	7.66
August	6.98	12.15	7.16
September	8.79	12.37	8.91
October	9.40	9.72	9.41
November	5.48	6.26	5.50
December	5.48	4.62	5.45

Table 2 illustrates the %age distribution of tourist arrivals for all months for total tourist arrivals from 2004 to 2012. It is clear from the table that April, May, and June are the preferred months of Domestic tourists with a share of 11.90%, 11.43% and 14.04% respectively, where as Foreign tourists arrivals are mainly concentrated in the months of June (10.76%), July(13.04%), August(12.15%) and September (12.37%). For overall tourists arrivals April (11.17%), May (11.36%) and June (13.93%) are the peak months. This trend shows some seasonal variations in terms of tourist arrivals. The peak months for Domestic tourists differ from foreign tourists. During the four winter months from November to February, the tourist inflow to Himachal Pradesh is at lowest as accessibility to different tourist locations within the state is a challenge during this harsh winter period.

Method

Following previous studies the Gini coefficient is appropriate and widely used measure to describe seasonal concentration of tourism. Gini coefficient is well-known statistical measure of inequality which is derived from Lorenz curve. Lorenz curve is graphical representation of inequality, whereas Gini coefficient measures this inequality. Lorenz curve is a measure of deviation of actual distribution from the line of equal distribution (the line of equal distribution is a straight line, inclined at 45⁰ angle) (Jain & Ohari, 2006, p257). Whereas, Gini Coefficient varies from 0 to 1. The higher the Gini coefficient, the greater the inequality (i.e., seasonality in Himachal Tourism) and the smaller the Gini coefficient, the lower the inequality (i.e., seasonality in Himachal Tourism) (see Arnold, 2011, p664). With the same number of visitor every month, the Lorenz curve would be a straight line, the line of equality. The more unequal the

seasonal distribution of visitors, the larger will be the area between the Lorenz curve and the line of equality (i.e., straight line). The Gini coefficient is

calculated as the area between the curve and the 45° equality line divided by the entire area below the 45° line' (Lundtorp, 2001, 30)

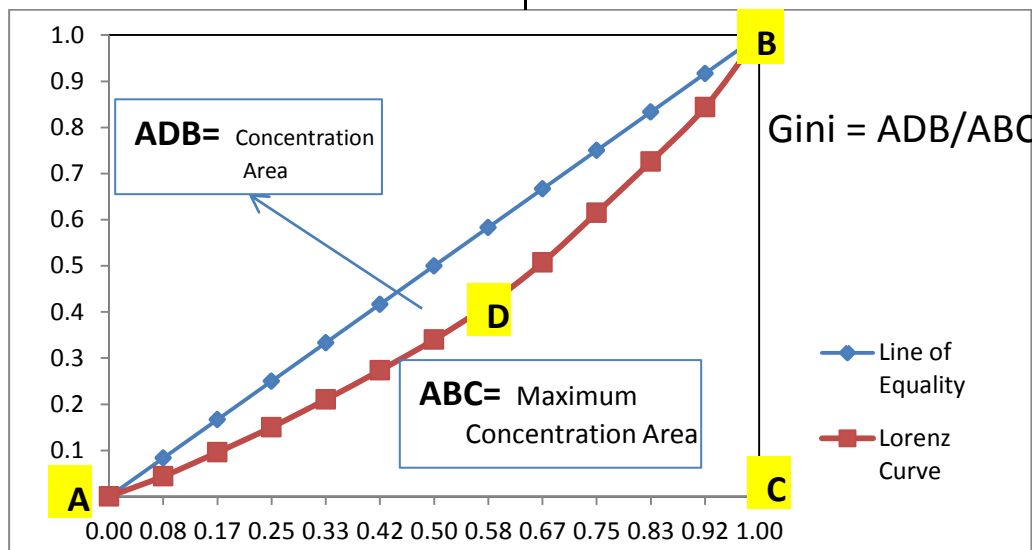


Figure 1 The Lorenz Curve and the Gini Index

This geometrical interpretation based on the Lorenz Curve, however, is only one of the possible methods to calculate the Gini Index. The other way is to express the Gini Index in terms of the covariance between tourist arrivals and the cumulative distribution of tourist arrivals. In particular:

$$G = \frac{Cov(y, F(y))}{\bar{y}}$$

where *Cov* is the covariance between tourist arrivals *y* and the cumulative distribution of the same arrivals *F(y)* and \bar{y} is average arrivals. The Lorenz curve and Covariance methods give same results. The closer value of the Gini coefficient to 0 means the smaller seasonality in Himachal tourism and the closer value of the Gini coefficient to 1 means the stronger or greater seasonality in the destination.

Results

Tourist arrivals

Figure 2 shows Lorenz curves of DTAs for years 2004 to 2012 in Himachal, the distance of Lorenz curves is approximately equidistant this shows that Gini coefficients for each year will be nearly same. Also the Lorenz Curves are not far away from line of equality, which implies that Gini coefficients value will be smaller.

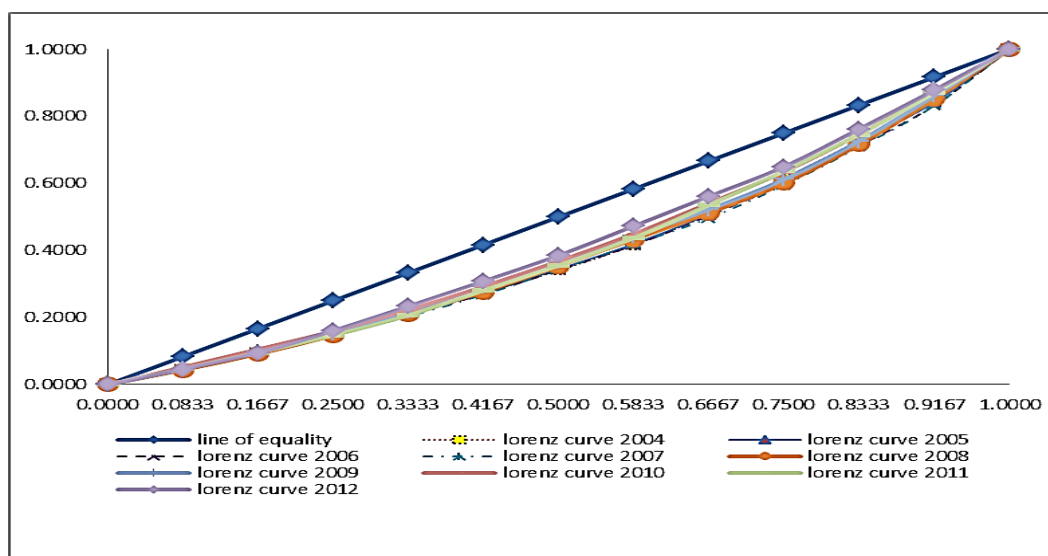


Figure 2 Lorenz Curves for Domestic Tourist Arrivals in Himachal Pradesh from 2004-2012

Similarly, Figure 3 illustrates the Lorenz curves for Foreign Tourist Arrivals in Himachal Pradesh from 2004 to 2011, the distance from line of equality for years 2004 and 2005 is farther than other Lorenz curves therefore the Gini Coefficients for FTA for these years is expected to be larger compared to other years. For other years it is approximately same.

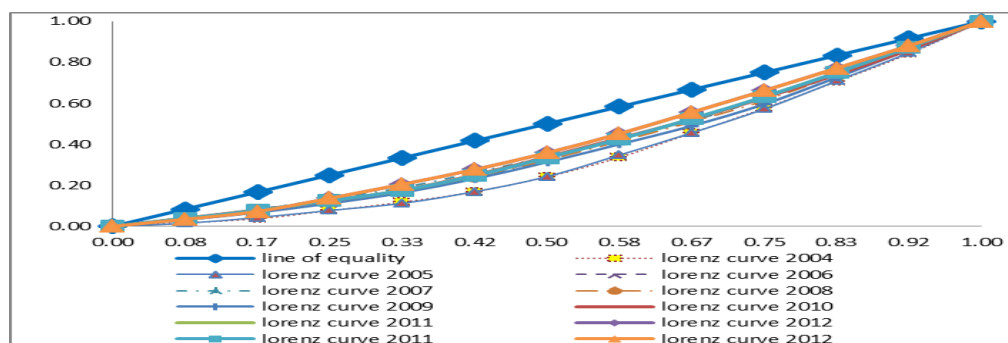


Figure 3 Lorenz curves for Foreign Tourist Arrivals in Himachal Pradesh from 2004-2011

Table 3 illustrates the Gini Index values for DTAs and FTAs. Following Bigović (2011) there is not any theoretical ‘critical limit’ suggesting a clear difference between strong and non-strong seasonality in tourism. However, for the purpose of this paper and according to the Gini coefficient, the suggestion for that limit is proposed to be at 0.5. Concretely, if the value of the Gini coefficient is over 0.5 the seasonal concentration should be

regarded as strong and vice versa. it is clear from the table that the G_{dta} , or Gini Index value for domestic tourist seasonality is non-strong and also shows decreasing trend in recent years. In comparison the Gini index values for foreign tourist seasonality are higher than the domestic tourists values, but on the other hand is also lower than the significant. The G_{fta} also shows a decreasing trend in recent years.

	2004	2005	2006	2007	2008	2009	2010	2011	2012
G_{dta}	0.21	0.21	0.22	0.22	0.21	0.19	0.18	0.19	0.16
G_{fta}	0.32	0.32	0.23	0.21	0.24	0.25	0.22	0.22	0.18
G_{cmb}	0.21	0.21	0.22	0.22	0.21	0.19	0.17	0.19	0.16
G_{dta} , Gini Index for domestic tourism arrivals G_{fta} , Gini Index for domestic tourism arrivals G_{cmb} , Gini Index for combined tourism arrivals									

Table 3 Comparison of Gini Index for FTA and DTA for years 2004 to 2011

Conclusion

The results presented above show weak tourism seasonality in Himachal Pradesh, thus it is evident that Himachal attracts tourists all over the year, this might be due to various reasons such as the fact that besides the natural beauty, Himachal attracts a lot of religious tourism from the neighbouring states. Also the government of Himachal Pradesh has recognised and developed the tourism potential of the state over the years. The increasing number of tourists is a welcome sign for the tourism industry as a whole.

Tourist arrivals shrink for a very short period of time mostly in winter months when some parts of

the region are unapproachable. In fact this short period of low concentration of tourists gives valuable time for the tourism resources to revive for the peak season. Although from income point of view this period is lame for the tourism industry, but from ecological point of view this period is beneficial.

The lack of study of tourism seasonality for this region provides ample space for researchers and investigators to further ponder upon the characteristics of tourism and various factors which may curb down the seasonal impact on tourist arrivals.

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