A STUDY ON WAGE DIFFERENTIAL IN THE TOURISM INDUSTRY

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Preface
The tourism sector is considered to be a composite income generating sector. The importance of this sector is measured in terms of tourism GDP as well as employment. The study is trying to examine the implications of employment in tourism, drawing attention to a field which is somewhat neglected within tourism research; namely the supply or production side of tourism. Set within a human capital framework, the basic purpose of conducting this study is to examine how variables such as gender, education, and age affect tourism employees' monthly wages. Furthermore, the study specifically tries to examine how the gender variable affects these wages. This research paper uses observational data as well as questionnaires conducted with 50 tourism workers, data being collected from employees working in the hotel industry. This study aims to investigate the gender gap in the Indian tourism industry by pursuing two major objectives, both trying to capture the extent to which gender effect exists within the industry. First, the study explores the potential relationship which exists between demographic variables and employees' gender. Secondly, the paper studies the difference in earnings based on gender bias. The status of women through readings state that the real talents of women are kept hidden. These readings provide important insights which should be considered in the research areas pertaining to the female contribution in the tourism industry. The tourism industry tries to examine gender arrangements of tourism workers, comparing men's and women's status in the tourism industry, using indicators of job tenure, education, income, and age. In recent years, there has been significant progress with respect to women closing the gender gap in managerial positions in the hospitality industry. Pinar(2009) has observed “patterns of employment ghettos in the industry,” wherein certain departments are predominantly filled by men and others are predominantly staffed by women. This suggests that gender diversity may be absent in the hospitality industry, which uses the generalized measures of wage differentials. Wage discrimination has been explained in terms of the statistical discrimination model, where the average monthly wages of both women and men are considered. Variable X (wage) has been defined using OLS method for the purpose of performing regression analysis. The analysis of seasonality is another core area which has been taken into consideration. The main findings indicate that the independent variables such as education and wage are affected in a positive way, but gender does not have an impact on the earnings. Even though there exists no gender bias in this sector, tourism economics provides opportunities for further study. This field being a new branch which is gaining importance could be further explored addressing questions such as “Is it possible for tourism to enhance women’s status?”

Keywords: Wage Differential, Gender Bias, Gender Diversity, Seasonality, Tourism Industry.
1. Introduction and Purpose

The Tourism Industry has been emerging to be one of the largest industries in terms of both employment as well as gross domestic product, generating exports as well as stimulating capital investment. The importance of this sector is even more pronounced in terms of employment. In 2013, travel and tourism witnessed direct employment of 102 million people, which accounts for a greater contribution when compared to other regions such as manufacturing, mining, chemicals, global financial services, and the communications industry. All the countries are seeing travel and tourism as a sector which creates powerful employment when compared to that of the average. This industry employs more than 260 million people generating over 9.1% of Global GDP. World Travel and Tourism Council’s latest research predicted that the contribution to GDP is projected to grow over the next decade at 4.2% per annum. The projected employment growth is considered to be 1.8% per annum 10 years from now, significantly contributing to employment, GDP, and world trade. This sector would therefore be considered to be one of the most important sectors which contribute to economic wellbeing.

The importance of tourism is measured in terms of gross domestic product as well as employment. As a composite sector, this sector generates income through activities taking place in both the sub-sector as well as the major sectors. This sector is categorized as a complex, diverse, fragmented, labour-intensive service sector, considered to be the job creators for women. The industry aims to reduce poverty, creating opportunities for women. The challenges faced by women employees are explored. The women workers are subject to occupying comparatively more jobs when compared to that of men, but earning relatively less. The background study of the tourism industry helps examine the proportion of women and the presence of disparities with respect to wages. Therefore, this study tries to examine and compare the status of both women and men in this industry, comparing the salary influenced by gender.

In line with the background, this study becomes important for the purpose of mitigating the disparity in wages with respect to gender, making it significant for the purpose of study.

2. Literature Review

The characteristics which define the Tourism industry are explored along with the emphasis on the wage gap among the employees. Some studies have explored these vital characteristics. The entire review of literature has been divided into different themes. The themes explored are as follows:

2.1 Wage Differential and Gender

Levy and Lerch (1991) has made an attempt to examine the employment implications in the tourism industry using observational data and interviews. These interviews were conducted with 80 women and 53 women workers in Barbados, where the author has found that the women often balance domestic as well as the market work, tending towards less stable, low level jobs as well as lower paid jobs in the tourism industry. The report suggests the dependence on additional sources of the network as well as financial support. This report suggested ways to enhance the autonomy of the women with the industry with the help of government programs which support women entrepreneurs and managers. These programs deal with increase of the formal training, flexible hours, and the support system.

Hwang, Reed and Hubbard (1992) have highlighted the inability with respect to the observational power for the workers’ productivity which leads to bias estimates of compensation for the purpose of differentials in wages. The paper tries to estimate the seriousness of the bias by adopting a stochastic framework modeling wage-job attribute choice equilibrium. The paper has used the standard estimation methodology for the purpose of finding the degree of bias present. The degree of bias observed by the authors is large, concluding that the labour market are underestimating workers’ willingness to pay and shows a presence of implications with respect to compensations.
of the wage differentials through value of life studies. Munshi (2006) argues that the tourism processes in society are gendered, considered to be gender biased, built into discourse of tourism practices, activities, images which is considered to be advantageous to the male viewpoint. This paper has also questioned the hegemonic view of the male with respect to tourism. The processes of tourism have seen rapid expansion in this world of globalization, giving importance to the need to strengthen voices at all levels (local as well as global levels). The paper focuses on including demand with respect to greater participation of the local people in the field of tourism development and planning. The author focuses on protecting the rights as well as the interests of the people in the third world in tourist destinations. Understanding the major benefits of this industry, the author emphasized the generation of employment and the presence of gender differences in the type as well as the seasonality of employment and many other factors. Munshi (2006) stated "Women work as counter and kitchen staff, domestic and cleaners, while men toil as porters and stewards. Over 50 per cent of the men employed in the industry are in a professional, managerial and supervisory occupation." The author has tried exploring various case studies for analyzing differentials and observed women surrounded with low pay, less stable and status jobs. The Case on Goa has explored the above finding. The case study based on Goa has reported income generation from tourism resulting in increase of freedom and confidence for women.

Pinar, et.al (2009) has highlighted the concern with respect to gender diversity along with the status of women in the Tourism/Hospitality Industry among the academicians. This paper has studied the closing of the gender gap due to the remarkable progress with respect to women, still having presence of patterns of employment ghettos and suggesting lack of gender diversity. The paper has focused on pursuing two research objectives. The first study explores the potential relationship between demographic variables such as age, educational level, job position, and department along with the employees’ gender. The second study tried to examine the beliefs with respect to the recruitment of both men as well as women along with their earning potential within the industry, revealing whether salary is influenced by gender. The question arises whether gender influences earning potential. The answer is a result of two different analyses where one is based on the t-test and the other is based on the two-sample t-test. The findings have contradicted the results of the gender gap literature Robert and Gibelman (2002).

Mendes and Vareiro (2010) believed there was a presence of gender wage inequality in the Portuguese tourism industry. The estimation with respect to productivity as well as gender wage differentials relies on production functions and firm level wage equations. These are compared in order to deduce and reason whether the observed gender discrepancies are justifiable on the basis that women are comparatively less productive than men. The disparities are also due to the wage discrimination arising due to gender. The data gathered was targeted in matched employer-employee sets applying to this Industry. The paper finds females to be less productive, explaining the differences in wages and productivity on the bases of gender. Development regards gender equality as the core element improving the quality of democracy, ensuring full legal equality. This paper uses the standard human capital wage equations, trying to regress on the productivity related characteristics. They are offering new empirical evidence with respect to the inequality present in this particular industry.

Guimar and Silva (2014) studied tourism as one of the major economic activities having a greater portion and participation in GDP of many countries. This industry focuses on boosting the level of employment and promoting development. This paper studies the characteristics of income inequality arising out of wage differential among male as well as female workers. The paper researches with the aim of exploring three core concerns and studying the analysis of the wage gaps in tourism-concerned activities in the year 2012, identifying those variables that establish the evolution of wages. The paper studies a case based on Brazil where the micro data is provided by PNAD available for the year 2012 through IBGE. The sample size considered was 11559
employees who were providing positive value with respect to the monthly wages. The analysis showed the presence of a 23.22% gap where the age and the educational level of the women were considered to be comparatively better. The findings concluded that the Brazilian industry for tourism saw gender discrimination with respect to women detriment.

2.2 Employment

Shaw and Williams (1988) has highlighted the importance of tourism in terms of income generation as well as employment, accounting for both direct and indirect jobs. At the time of stagnation with respect to the total employment in tourism, it saw rapid expansion predicting potential for further expansion in the future. Enthusiasm for tourism was found to be the source of employment creation. There were two vital features of the organization with respect to employment generation. Firstly, in terms of both indirect and direct components, the natures of linkages within the tourism industry were located. Secondly, the authors have neglected this particular area of study. The research conducted by the authors was on the supply side of the tourism industry in Cornwall where over 500 employers were interviewed, establishing features, operation as well as linkages. This paper has highlighted some features with respect to heterogeneity, firm formation along with employment.

Chadwick (1994) has highlighted the difficulties in measuring employment, recognizing the tourism sector as one of the economic sectors. The author has mentioned two challenges with respect to the measurement of employment. Firstly, challenges in producing an accurate and a relevant data source along with identification of ratio. Secondly, the classification of standard tourism jobs have limited information, making this task even more difficult and having a cascading effect.

Chow (1995) has highlighted and suggested the creation of new employment opportunities with the development of the tourism industries. The authors have tried to analyze the quality of the employment with the help of the Hawaii case, where direct employment encompasses 126900 jobs approximately accounting for 24% of the total civilian employment. The author has suggested a high degree of dependency on this industry for jobs, investigating four commonly held beliefs. First, tourism generates primarily low level and low skilled jobs. Second, the industry offers low levels of job satisfaction. Third, tourism is considered to generate low paying jobs. Lastly, it offers limited advancement opportunities for the local residents. The study focuses on three sectors, mainly air, hotels and drinking/eating places, accounting for 67% of the total sales expenditure. Numerous databases including a recent survey regarding tourism establishments and investigation of each of the quality aspects of tourism employment helps minimize possible confusion over the databases used in each analysis.

Liu and Wall (2004) considered tourism as a commonly used tool for the purpose of stimulating marginal economies and promoting development through incomes it can foster and jobs. The author explores literature on human resources in tourism and tries to link it to the broader concept of development. A plethora of academic studies relating to tourism employment was studied, concentrating on hospitality linked to employment and planning issues, re examining tourism employment and their issues using the policy-industry-locality framework.

Kadiyali and Kosova (2012) believed that tourism generated externalities to other sectors, boosting the local economies. The authors have endorsed tourism as one of the key job creating economies. The impact of tourism was analyzed through the adoption of an empirical and theoretical approach. This approach was considered a departure from the old and traditional papers. The prior studies were descriptive in their methodology focusing on macro-level studies, whereas the author has relied on micro level data. They have tried to estimate the responsiveness of employment to tourism inflows. The methodology and data allowed the application of the panel data models accounting for various interactions in the data. Their work suggested positive
spillovers from the tourism inflows with respect to the non-hotel industries. The authors tried to explore and analyze the largest beneficiaries of employment spillovers in the form of retail, construction, health care, technical and professional services from tourism.

2.3 Seasonality

Msourdouko (1988) throws light on the theoretical and the empirical investigation of employment opportunities generated in the Greek tourism industry. The study is supporting the conventional thesis. It supports the concept where seasonal employment is not produced due to unemployment. Unemployment is subject to seasonal employment where the seasonal employment is considered to be either voluntary or involuntary in nature. The article suggests that there are some employees who choose seasonal for the reason that they are paid more and others choose due to the preference during the off-peak season where the non-market activities suit the occupation. The purpose of this study has been divided into two questions which have been modeled with the help of deterministic model. The results support the hypothesis set by the author and concludes that the regular fluctuations from season to season do not result in the seasonal unemployment.

Ball (1989) has tried to explore the long-term seasonality of the tourism industry present and has coupled unpretentious scale of various labour markets of the resort. These generate vital and core geographical links between seasonal areas and the areas of labour supply. The authors try to note the presence of seasonality linking it to North West and North Wales. This paper suggests three implications. Firstly, geography of the seasonal labour market is linked together with the observed trend. The analyses represent externalization degree for the local market. Secondly, the impact of links for the host resorts is considered to be significant. Thirdly, the migrating seasonal workers are offered a valuable period of certain work, providing a safety valve and linking it to the experience.

Chen and Fomby (1999) tries to review several variations with respect to the seasonal stable pattern. Marshall and Oliver introduced the stable seasonal model, and this paper studied their procedures of prediction. There were different treatments which were considered with respect to the data type. This paper considered conditional independence. This allowed seasonal patterns as well as the trend which was to be modeled independently and separately. The author has conducted experiments on Hawaiian Tourism where seasonality has been analyzed with the help of the Box-Jenkins moving average and transfer functional models.

Bono and Weber (2008) have highlighted investigation of the compensating wage differentials with respect to seasonality. The paper has used longitudinal information and derived the definition of seasonality. The industry is subject to changes in wages across long term and seasonal jobs for same. The study focuses and concentrates on investigation with respect to wage differential compensation across long-term and seasonal jobs arising because of anticipated time restrictions with respect to the work. Seasonality has been well defined based on the observed regularities in the patterns of employment. Wages are changed with respect to changes across the seasonal jobs for the same individual. Employers were found to be having positive wage differential in this study, having about 11% of seasonal jobs.

Dacal and Compostela tries to study Spain. Spain is considered to have the maximum arrivals having spatially uneven distribution. This region sees a pattern of peak seasons in summer and seasonality having economic effects, both in terms of private as well as social cost, exceeding its benefits. This makes seasonality a core area to deal with. The core subject this paper deals with is the analysis of seasonality effects and the development of tourism on employment and wages for the chosen region. They have focused on highlighting and identifying seasonality and tourism development level. The approach developed is the synthetic indicator approach, which helps in summarizing tourism sector information. The Mincerian Wage approach is the tool used by this
study in order to see the effects on employment as well as wages. For the following purpose a survey on Income as well as Living Conditions was conducted for proportionating personal level information about demographics, having possible spillover effects. The major findings demonstrate big differences in degree of seasonality comparing between independent Spanish regions of the degree of tourism development. The results should be valuable for a large number of the authorities, at the national as well as regional level, in the context where smart specialization becomes important for European policies.

3. Theoretical Framework

The main focus of this paper is to decompose wage differentials into human capital as well as discrimination components. The method often used for decomposing the wage differentials into discrimination components is formulated in such a manner that both the cost or discrimination imposed on the minority wage earner and benefit bestowed on the majority wage earner can be estimated. Recent studies have seen growing agreement with respect to assessments of wage differentials stating the need to go beyond comparisons of the average wage of the average person. This paper focuses on generalized measures of wage differentials, not entirely determined by the “average wage of the person” but depending on differences across the complete wage distribution. The need arises to define the statistical framework this paper is going to follow, along with briefly defining the measures of the wage differentials and their critiques.

3.1 Defining the Statistical Framework

In order to examine the presence of wage discrimination Blau and Kahn (1997) it becomes important to understand both the supply and the demand side. The supply side exhibits differences in the earnings being the result of the presence of productivity differences. The labour supply is affected by factors such as education, tenure of experience and other attributes. The demand side explanation with respect to the earnings differences between men and women is discrimination, where the difference in the treatment is the result of wages. Several studies have successfully examined the presence of wage discrimination, observing variation in wages with relation to the characteristic differences. The existence of discrimination is attempted to be explained with the help of neoclassical theories falling into the categories, Becker’s taste discrimination model and the Statistical discrimination model. This study models the second model developed by Aigner and Cain (1977) and Edmund Phelps (1972). This model attempts to explain the absence of prejudices and usage of signals. The ‘signals’ in this study are the educational qualifications, tenure of their service, along with their gender. The statistical model usually compares the calculation of the average wages of both women and men, where I have considered monthly average wages earned by the sample and the difference between women and men’s average monthly wages. Considering the equations with respect to bivariate and multivariate regression, we formulate the following:

\[ \text{Wage}_i = a + b(\text{FEMALE}_i) + e_i \] ................................. 1

\[ \text{Wage}_i = a + b(\text{FEMALE}_i) + b_2(\text{years of education}_i) + \ldots e_i \] ............ 2

While defining the variable X (wage), many literatures have seen the usage of OLS method. The OLS regression could be considered for the calculation of the dependent variable, until many researchers criticized the usage of the OLS method. The OLS regression is considered to ignore the selection bias, encouraging the application of the Maximum Likelihood Method. Heckman (1979) proposed the two step procedure based on the probability density function to obtain consistency in estimators. Albrecht and Firpo (2009) had suggested substantial progress with respect to the description of the wage differentials at different wage levels, taking into
consideration differences in other observable human capital as well as characteristics.

Smith (2003) has illustrated the estimation of wage distributions, creating a parametric framework combining Singh-Maddala distribution specifications along with their covariates. This approach came to be considered as a classic participation probability model.

3.2 Estimation

The measures estimate conditional wage distributions, such as $F_x^n$ and $F_x^f$ for all the observed $x$ in the sample. The approach adopted is a fully parametric approach, where the assumed conditional wage distribution follows Singh-Maddala distribution such as:

$$F_x(x) = 1 - \left[ 1 + \left( \frac{w}{b(x)} \right)^a \right]^b$$

Where $b(x) = \exp(\alpha x)$ is a scale parameter

$Q_x(x) = \exp(\gamma x)$ is the shape parameter

$F_x$ assumed to be Singh-Maddala distributed and $Z^*$ denoted as $G_x$

Smith (2003) demonstrated how the standard maximum likelihood method is used to estimate fully parametric model, using the maximum likelihood estimates ($\hat{a}_f$, $\hat{b}_f$, $\hat{q}_f$) and ($\hat{a}_m$, $\hat{b}_m$, $\hat{q}_m$) available. The wages have been expressed as monthly average wages and the vector $x$ are the characteristics such as age, educational qualification, tenure of service and gender, leading to measures of the wage differentials capturing the total effect of gender. The conditional probability function becomes vital to estimate $f_x^n$ and $f_x^f$ for educational level, age and tenure of service.

4. Regression Analysis

The null hypothesis ($H_0$): Gender affects tourism employees’ monthly wages

Table 4.1 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.681</td>
<td>.463</td>
<td>64326.8284</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Years of Education, Gender, Age

Table 4.2 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>13.226</td>
<td>.006</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Average monthly wage
b. Predictors: (Constant), Years of Education, Gender, Age
Table 4.2
The F-test is noted to be 13.226, obtained with the help of the first three columns named as Sum of Squares, degree of freedom, and finally the mean squares. The null hypothesis for the F test has no explanatory power where all the coefficient of the independent variables are said to be 0. The P value for the independent variables is equal to .000 which is way less than .005. Therefore, concluding strong evidence to reject the null hypothesis.

Table 4.3

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-401218.372</td>
<td>112415.445</td>
<td>-3.569</td>
</tr>
<tr>
<td>Gender</td>
<td>15829.907</td>
<td>19424.812</td>
<td>.815</td>
</tr>
<tr>
<td>Age</td>
<td>3702.566</td>
<td>952.265</td>
<td>3.888</td>
</tr>
<tr>
<td>Years of Education</td>
<td>15897.891</td>
<td>5691.610</td>
<td>2.793</td>
</tr>
</tbody>
</table>

Table 4.3
The T-statistics states that each of the coefficients of the independent variables has a predictive ability. The higher the value of the coefficients, the higher will be the average wage earned. In general, a one unit increase in the independent variable will increase or decrease the dependent variable, holding the other variables constant. In the case of my survey the cases are as follows:

1. The model predicts that with a year increase in age, the average monthly wage will increase by Rs. 3702 holding the other variables such as gender and years of education constant.
2. The model considers the coefficient of years of schooling, where with an increase in the years of schooling, the average monthly wage increases with Rs. 15897 holding other variables such as gender and age as constant.

The test statistics are valid with certain conditions which are assumed for the model. It becomes evident that with the increase in factors such as age and years of education, there is an increase in the average monthly wage of the employees. But the factor gender does not affect the wages. Independently, gender components are not affecting wages but years of education as well as age has a positive effect on wages.

Summary and Conclusion
This survey tries to study women employees working in the Indian Tourism Industry. Conclusions about the status of women through readings state that they play a subservient role to the men both in terms of social as well as economic areas. The real talents of women are kept hidden and that becomes the crux of the study leading to differential between male and women employees with respect to wage. (Jackson, 1982) states that women are yet to receive any significant degree of economic as well as social authority. The respondents’ participation was from the formal sector comprising of the employees working in the hotels. The question which was raised in the questionnaire was whether wages differed according to seasonality. The answers to this open ended question suggested that wages do not differ according to seasonality as it is the formal set.
up. Whereas, the informal sector is subject to wages differential and is affected by the seasonality issue. The reasoning for such a scenario was provided by the respondents stating that as the hotels are part of the formal set up, they are not subjected to variations in the wages with respect to seasonality when compared it to an informal sector. With the operationalization of this study, the above statements made through the reading are considered to be a myth. The study was trying to explore the influence of the average wage on independent variables such as age, education and the gender. Through the results which showed that the independent variables such as education and age affected the average wage in a positive way. In other words, with an increase in the years of education and age, earnings increase. But gender does not have an impact on earnings. Gender discrimination does not exist in this industry, giving women more employment opportunities.

This study gives an opportunity for further scope of study with respect to the tourism industry. Tourism economics is a new branch which has started to gain importance with respect to research. This branch should be studied and explored more, providing an opportunity for students and researchers to explore this genre.
References


Appendix
The Questionnaire

The data analysis was conducted which was collected from the employees of the hospitality and tourism sector. The picture of the average wages earned by the respondents and participants in the industry has been derived from the questions in the questionnaire. The total number of participants being 50, out of which 26 were females and 24 males. The following questions were answered by the participants:

Q1. Do the wages differ according to the Gender, if yes to what degree?
Q2. Do the decisions regarding the role of the employee differ according to Gender, if yes to what degree?
Q3. What do you think whether women overall, with no attention to variations between occupations and industries, are less productive than men?
Q4. Do you think ‘The Tourism Industry’ is considered an advantageous occupation for women?
Q5. Do the wages differ according to seasonality?