Research Article

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Tourism Sector in the European Union: Job Satisfaction of Employees in Hotels and Restaurants

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Abstract

The main objective of this article is to analyze the degree of satisfaction of European Union workers, especially those working in the hotel and restaurant sector. The study is based on two phases: the first analyzes the number of workers in the EU between 2006 and 2017; a dynamic model for predicting the number of people working in hotels and restaurants has been created. In order to predict the number of workers in the studied sector, a dynamic model has been created based on a classical series estimation methodology. In the second phase, this study aims to measure the degree of satisfaction of these workers and the causes that affect them. A univariate and bivariate analysis has been used to describe satisfaction among hotel and restaurant workers and the relationship between this satisfaction and their working conditions. From the special characteristics observed in this sector, it can be deduced that the level of satisfaction expressed by the working conditions of the worker is significantly lower in the hotel and restaurant sector.

Keywords: Hotels and restaurants; Work satisfaction; European Union; Workers; Time Series forecasting

1. Introduction

Since the European Union creation, much progress has been made in economic and social policy to achieve a certain socio-economic convergence in the conditions of the European Union members. Several of these economic changes have focused on the national labor market of each country with the aim of making it more flexible. However, as a result of the possible realization of most of these processes, a strong and prominent concern is created for the quality / satisfaction of the work, due to its possible link with the increase of jobs production through a smaller assistance, in general terms, return.

Job satisfaction is important in its own right as part of social welfare. In addition, measures of job satisfaction, such as the representation of job quality and predictors of future labor market behavior, appear to be useful. Workers' choices about whether or not to work, the permanence, what type of work they should accept or the duration of the work in relation to the effort are probably determined by job satisfaction. There are many previous research on job satisfaction that have mainly addressed wages over other job satisfaction measures (Robst and VanGilder, 2016; Islam and Saha, 2016). There are signs that there are certain quality-of-work issues that affect job satisfaction but are not income-related (Arekar, Jain, Desphande and Sherin, 2016; AlAzzam, AbuAlRub, and Nazzal, 2017). This contrasts with the credibility of the Freeman (1978) economists who considered wages as the main focus for calculating the value of jobs. In fact, job satisfaction acts as a measure of different aspects of job quality, some of which are difficult to analyze or measure. Satisfaction information can help us to clarify the worker's behavior.

The main objective of the analysis is to study the degree of satisfaction of workers in hotels and restaurants and what causes it, compared to the overall result, regardless of this sector. The rest of the paper is organized as follows: Section 2, review of the literature is reported. Section 3 establishes the working hypotheses and then constructs a dynamic model for estimating the number of workers in hotels and restaurants and analyzes the degree of satisfaction through a Likert scale variable in Section 3. Finally, conclusions are drawn in Section 4. Paragraph: use this for the first paragraph in a section, or to continue after an extract.

2. Literature Review

Allport's (1943) research theorized about participation in work as an active contribution or the degree to which employees are actively involved. Dubin (1956) reported that participation in work is the key to behavior, that is, that the work we do is so important that everything related to or affected by it has a profound influence on our self-perception. The concept of commitment was originally defined by Kahn (1990) as "the utilization of the members of the organization". The association between work participation understood as a positive workplace mood and organizational commitment has been extensively analyzed over the years (Greenhaus, 1971; Gordon, Philpot, Burt, Thompson and Spiller, 1980; Morrow and McElroy, 1983; Blau, 1985; Prasetyo, Paramita and Minarsih, 2016; Supeli and Creed, 2016; Yousef, 2017).

Paullay, Alliger and Stone-Romero (1994) suggest that a vital part of self-definition of employees is the degree to which they are involved in their jobs. Involving workers is physically, cognitively and emotionally at work and they have a strong and effective connection to their tasks. (Harris and Burman, 2016; Bachman, Norman, Hopkins and Brookover, 2016; Su, Swanson, Chinchanchokchai, Hsu, Chen, 2016).

According to Schaufeli, Salanova, González-Roma and Bakker (2002), the work refers to a construct that integrates feelings of trust, professionalism, loyalty and absorption. Employees highly involved in the work are more loyal to their business, making a significant effort to achieve their goals (Seifert, Brockner, Bianchi and Moon, 2016; Asrar-ul-Haq, Kuchinke and Iqbal, 2017; Trivellas, and Santouridis, 2016; Domínguez-Falcón, Martín-Santana, De Saá-Pérez, 2016; Judge, Weiss, Kammeyer-Mueller and Hulin, 2017; Zopiatis, Theocharous, Constanti and Okumus, 2016) analyzed that participation in work offers the opportunity for people to make decisions, the basis for strengthening their labor participation.

Khan, Naseem and Masood (2016) and Anitha and Begum (2016) who suggested that participation in work is related to the promise of continuity. For example, Singh, Saufi, Tasnim and Hussin (2017) and Worsfold, Fisher, McPhail, Francis and Thomas (2016) analyzed the relationship between job satisfaction of employees in hotels and clients one. Giebelhausen, Chan and Sirianni (2016) analyzes in restaurants how job satisfaction influences the brand image projected by restaurants. Oh and Kim (2017) analyzed the evolution of job satisfaction and customer satisfaction in restaurants in the years 2000 and 2015.

Employees hired for fast-service restaurants are likely to be engaged in their jobs, Orlowski, Murphy and Severt (2016) if they are excellent (Kim, Shin and Swanger, 2009). Slatten and Mehmetoglu (2011) and Bufquin, DiPietro, Park and Partlow (2017) have argued that, in the

hostelry industry, commitment to work was predicted by independence work and strategic attention. In addition, Leung, Wu, Chen and Young (2011) studied it, as it was indicated that the work commitment was related to the workplace and personal behaviors.

Many studies in the literature have shown that such unmet expectations are related to job satisfaction Wang, Sang, Li and Zhao (2016), and their rotation intentions, Bufquin, DiPietro, Orlowski and Partlow (2017). Han and Hyun (2017), in a hotel and restaurant survey, found that to improve employee perceptions of customers, managers must increase employee job satisfaction. The main objective of the analysis is to study the degree of satisfaction of workers in hotels and restaurants and what causes it, compared to the overall result, regardless of this sector.

3. Methodology

According to the work of Han and Hyun (2017), the increase in the satisfaction of workers in the hotel and restaurant sector affects the perception of the quality of the service obtained by the client. In this sense, to analyze their degree of satisfaction compared to the rest of workers of other sectors, as well as to measure the differences between the different countries of the EU and, in particular, Spain for the importance that tourism has as one of its main productive sectors, will help to better understand in which situation one and others are. Do hotel and restaurant workers enjoy the same level of satisfaction? In countries where tourism is of great importance, do workers have the same satisfaction? The results of the study set out below - carried out with a sample of workers from Europe - aim to respond to some of these questions, throwing some light on a sector accused too often of having worse working conditions.

The main objective of this paper is to analyze the level of satisfaction of EU workers, especially those working in hotels and restaurants, to analyze the characteristics that differentiate them from the others. As an additional objective, it is desired to construct a time series to estimate the future number of workers in the EU, based on the time evolution experienced to date.

3.1 Construction of the prediction model methodology

The study, therefore, is divided into two phases: the first one analyzes the number of workers in the EU between 2006 and 2017, and from this information an econometric model is constructed with which to estimate the number of future workers in the hotel and restaurant sector.

First, in order to create the model for estimating the number of workers in the hotel and restaurant sector, the classical time-series analysis methodology (Kendall and Ord, 1990) was used to obtain better results. This methodology was selected after evaluating and discarding the use of neural networks (Hill, O'Connor and Remus, 1996) and the Box - Jenkins methodology (Box, Jenkins, Reinsel and Ljung, 2015) due to its reduced predictive ability.

After unsuccessfully attempting to use the Box Jenkins methodology to construct the model, it was decided to use the classical methodology. The structure of the series led us to opt for an additive model, so we defined the series as the sum of a quadratic type trend component, a clearly observed quarterly seasonal component, and a residual component defined by an ARMA type process, in particular, and as will be seen in the next section an autoregressive process of moving averages of orders 1 and 2, respectively.

The rest of the paper is organized as follows: Section 2, review of the literature is reported. Section 3 establishes the working hypotheses and then constructs a dynamic model for estimating the number of workers in hotels and restaurants and analyzes the degree of satisfaction through a Likert scale variable in Section 3. Finally, conclusions are drawn in Section 4. Paragraph: use this for the first paragraph in a section, or to continue after an extract.

3.2 Sample for the construction of the prediction model

The time series analyzed measures the number of workers in thousands, who carry out their work in hotels and restaurants. These data were extracted from the Eurostat database, and can be contracted from its website. The construction of the variable was made from two sets of data.

Between 2006 and 2008, the "hotels and restaurants" section of the NACE v.1.1 classification system was used. However, in 2008, it stopped working with this classification and was replaced by version 2.0, which were used the sections "Food and beverage service activities" and "Accommodation". The time series considered has been constructed from both sets of data.

The model was created from a total of 47 observations that make up the quarterly series between the second quarter of 2006 and the fourth quarter of 2017. The value for the first quarter of 2008 was estimated since the value was not available.

Analysis of the degree of job satisfaction methodology

In the second part of the research we use the Sixth European Working Conditions Survey (EWCS) conducted by the European Foundation for the Improvement of Living and Working Conditions, under the European Commission. (Eurofound, 2012).

These surveys have been carried out periodically since 1990 and have also presented results in the years 1995, 2000, 2005, 2010 and the last one in 2015, which will be used in this work. Surveys were done through personal interviews conducted by Eurofound, an European Union agency, which replicates them to at least 20% of respondents in each country. In this way, conditions of validity and reliability are guaranteed (Eurofound, 2015). The survey was carried out between January and June 2015 in the 28 member states of the European Union and, in addition, Albania, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey, candidate countries, as well as Switzerland and Norway.

Initially, a comprehensive descriptive study of satisfaction and a comparative analysis of satisfaction by sex was performed. Because of the nature of the variables analyzed, Pearson's Chi-square contrast was used for the study of the degree of association between several variables when at least one nominal qualitative age was used, and the contrast on the Spearman correlation coefficient when both variables were, at least, of ordinal type. In the first ones, we analyzed in detail the existence of significant differences through the analysis of corrected standardized residuals.

3.3 Sample for the construction of the prediction model

The question of the EWCS of 2015 analyzed in depth in this work is: "In general, are you very satisfied, satisfied, not very satisfied or not at all satisfied with your working conditions?", Ordinal type variable, known as scale of Likert of four categories. Those workers in the hotel and restaurant sector who did not respond to this question were excluded from the analysis.

Finally, we have worked with a total sample of 35,765 people, of which 1,881 worked in the hotel and restaurant sector. However, only 1,867 of them answered the question about satisfaction.

On the basis of the whole sample obtained in the VI European Survey of Working Conditions, it is estimated that 5.51% of European Union workers work in hotels and restaurants, compared to 94.49% who provide their services in other sectors. Taking the total sample as a reference, it should be noted that 50.4% of the participants are men and 49.6% are women. The average age of respondents is 43.37. The average salary is € 1,346.02. In the hotels and restaurants sector, 47.9% of the participants are men and 52.1% are women. The average age of respondents is 37.46. The average salary is 1,182.74 €.

4. Results

First, let's look at the graphical representation of the series that measures the number of workers in the hotel and restaurant sector from the second quarter of 2006 to the fourth quarter of 2017:

Figure 1. Workers of the European Union. Source: Authors based on Eurostat data

As it can be observed, the number of workers grows over time producing seasonal declines once the holiday period ends. There is also some stagnation between 2009 and 2012, although it seems to be a recovery after this period with greater intensity in the last two years.

As seen with the naked eye, the series presents a trend component, which is confirmed by the increased test for the unit root of Dickey-Fuller.

The model chosen for the estimation of hotel and restaurant workers in the European Union is that of Holt-Winters, which defines the series as the sum of a quadratic type trend, a quarterly seasonal component, clearly observed in Figure 1, and some residuals modelled by an autoregressive process of moving averages of orders 1, 2. The model finally constructed is:

$$\ln(y_t) = 9,4280 - 0,0177t + 0,0003t^2 - 0,035x_1 + 0,0162x_2 + 0,0401x_3 + \varepsilon_t$$

$$\varepsilon_t = 0,907\varepsilon_{t-1} + a_t - 0,4809a_{t-1} - 0,5189a_{t-2}$$

Where the variables; are auxiliary variables that take the values 1 in month i, and 0 in the other quarters, except the fourth, which takes the value -1, to ensure a zero-annual sum. The residuals of the model verify the necessary hypotheses for its validation since they do not present autocorrelation, they are homoscedastic and are distributed normally. The coefficient of determination is high, so that the model explains 98.22% of the variability in the number of workers in the hotel and restaurant sector. Results are shown in Table 1:

Table 1. Result of the model.

Dependent Variable: LY				
Method: Least Squares				
Sample (adjusted): 2006Q3 2017Q4				
Convergence achieved after 25 iterations				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.427964	0.222463	42.37984	0.0000
T	-0.017748	0.008976	-1.977177	0.0555
T^2	0.000306	9.64E-05	3.172689	0.0030
X1	-0.035007	0.002258	-15.50056	0.0000
X2	0.016160	0.002260	7.150158	0.0000
X3	0.040054	0.002208	18.14220	0.0000

AR(1)	0.907012	0.037536	24.16379	0.0000
MA(1)	-0.480913	0.164918	-2.916067	0.0060
MA(2)	-0.518917	0.165198	-3.141173	0.0033
R-squared	0.982161	Mean dependent var	9.147636	
Adjusted R-squared	0.978303	S.D. dependent var	0.059175	
S.E. of regression	0.008716	Akaike info criterion	-6.473659	
Sum squared resid	0.002811	Schwarz criterion	-6.115882	
Log likelihood	157.8942	Hannan-Quinn criter.	-6.339634	
F-statistic	254.6328	Durbin-Watson stat	1.942391	
Prob(F-statistic)	0.000000			
Inverted AR Roots		.91		
Inverted MA Roots	0.98	-.52		

Source: Own elaboration

The model has a high predictive capacity, with a Theil index of 0.000496 for the estimation of 45 observations, of which more than 99.17% is due to chance. As a result, the estimated model accurately reflects the behaviour of the series of hotel and restaurant workers in the European Union.

The series of observed and estimated values are shown in Figure 2.

Figure 2. Observed values and predictions.

Source: own elaboration.

The predictions obtained for the following periods are shown below:

At the end of the first quarter of 2018, it is estimated that the number of workers will decrease, from 10,352,000 to 10,322,060. In the second quarter of this year, this number is expected to increase to 10,998,510. This number will increase to 11,410,580 in the third quarter of 2018. It finally decreases in the fourth quarter, to 10,878,030 workers.

In seasonally adjusted terms (2018-Q1: 10.689.806, 2018-Q2: 10.822.204, 2018-Q3: 10.962.565 and 2018-Q4: 11.111.193), we can say that the number of workers in the sector will increase at a more than 7% per annum, which at rates close to 2% at the global level supposes a very high growth of this sector.

Table 2. Satisfaction with working conditions

HOTELS AND RESTAURANTS			TOTAL		
Q88 - On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?			Q88 - On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?		
N	Valid	1867	N	Valid	35506
Mean		1,97	Mean		1,92
Median		2,00	Median		2,00
Mode		2	Mode		2
Std. Deviation		,726	Std. Deviation		,688

Source: Authors from the EWCS' results.

Let us see below the results obtained for the degree of satisfaction of workers with their working conditions through the European Survey of Working Conditions.

As can be seen, the values obtained for the degree of satisfaction are similar to those of all EU workers in general. (The mean and standard deviation were calculated only to perform a comparison between groups).

From these results shown in Figure 3, it can be concluded that workers in the European Union, and especially those working in hotels and restaurants, are generally satisfied with their working conditions, since value 1 is associated with the "Very satisfied" and value 4 to the answer "not at all satisfied".

Figure 3. Satisfaction with working conditions. Source: Authors, based on EWCS data

85.37 percent of workers surveyed say they feel satisfied or very satisfied with their working conditions. This percentage is slightly lower, 82.05 percent among hotel and restaurant workers. It is also noteworthy that the percentage of workers who feel "unsatisfied" is slightly higher among workers in the hotel and restaurant sector.

After performing the comparison contrast of proportions, we affirm that this difference is significant ($p - \text{valor} < 5 \cdot 10^{-4}$). Therefore, the percentage of individuals who feel satisfied or very satisfied with their working conditions is lower among workers in the hotel and restaurant sector and, on the contrary, the percentage of those who feel not or not very satisfied is higher in this sector.

These contrasts of independence have revealed the absence of an association between the degree of satisfaction and the gender of the worker, both globally and in the hotel and restaurant sector.

Similar analyzes have been performed with different variables under study, whose summary of results is shown below.

In general, the worker nationality is significant in the degree of satisfaction with the working conditions, so that the proportion of those who do not feel at all satisfied with their work is higher in France (4.6%), Italy (4.5%), Spain (4.3%), Croatia (4.2%), Greece (4.2%) and Luxembourg (4.2%).

Of these countries, only in Luxembourg (9.6%), Italy (7.6%) and Spain (6.5%), this proportion of unsatisfied workers remains in the hotel and restaurant sector.

There is a 41.2% of hotel and restaurant workers who work at least 6 days a week, which has a negative impact on the degree of satisfaction.

The percentage of workers who do not feel at all satisfied with their working conditions is higher in jobs where employees suffer from vibrations (7.6%), noise (8.0%), high temperatures (10, 7%) or heavy loads (10%), have a negative effect on the level of satisfaction. However, public service jobs using computers and the internet have a positive influence, increasing the percentage of those who feel very satisfied, especially when the workers spend all their time on these, up to 31.9%. In the hotel and restaurant sector, the factors influencing satisfaction are climatic conditions, not only cold but also hot, smoke and noise, and staying in uncomfortable postures. Among the workers who suffer from these unfavorable conditions, 22.7%, 8.9%, 9.7%, 10.8% and 14.4%, respectively, are not at all satisfied.

Workers in general and those working in hotels and restaurants in particular, and considered to be very well informed of the risks inherent in their jobs, feel a high degree of satisfaction, among them, more than 35% reveal to be very satisfied.

Also, facing difficult challenges and solving their problems influences the degree of satisfaction, with very high satisfaction rates of 26% and 28%, respectively. These factors are not as important to hotel and restaurant workers.

They also feel very satisfied if they are supported, valued and involved in the company (40.8%). In the hotels and restaurants sector this factor is not so relevant to analyze the degree of satisfaction.

In addition, we have analyzed the prevalence of discrimination in the workplace due to different factors collected in the survey. The existence of any type of the studied discriminations has revealed to have a significant and negative influence in the degree of satisfaction in the working conditions.

3.4% of workers surveyed, in general, claim to have suffered discrimination in recent years because of their age. This percentage rises to 4.2% in the hotel and restaurant sector.

1.7 % of workers surveyed were discriminated because of their race, ethnic origin or color of their skin in recent months. This percentage amounts to 2.7% in the studied sector.

1.9% of workers surveyed were discriminated because of their nationality in the last twelve months. The same happens in hotels and restaurants, where the percentage increases to 3.4 %.

2.1% of workers in general felt they had been sexually discriminated in the last twelve months. The same happens in the hotel and restaurant sector, where the percentage increases to 2.8%.

11.1% of EU workers suffered verbal abuse during the past month. This percentage increases to 12.3% among hotel and restaurant workers. In addition, 5.3% of hotel and restaurant workers claim to have received "unwanted sexual attention" during the past month, significantly higher than the overall rate found at 1.8%.

6.1% of EU workers felt that they had received threats and humiliations during the past month. This percentage amounts to 8.5% in the hotel and restaurant sector.

4.5% of workers surveyed were subjected to intimidation and harassment during the past year. This has had a negative effect on the degree of job satisfaction. This percentage is slightly lower in the hotel and restaurant sector, 4.2%.

Finally, we analyzed the degree of linear relationship between some of the ordinal variables collected in the study and the degree of satisfaction. The results are as follows:

The relationships found in the group of workers in general differ from those working in hotels

and restaurants, so the reasons that cause a different degree of satisfaction also differ.

Table 3. Spearman's correlations

	Correlations			
	Spearman's rho			
	Q88 - On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?			
	Hotels and restaurants		General	
	r	Sig.	r	Sig.
NET monthly earnings from the main paid job	0,080	,002	0,140	,000
How many hours do you usually work per week in your main paid job?	-0,099	,000	-0,049	,063
How many minutes per day do you usually spend travelling from home to work and back?	-0,072	,003	-0,038	,077
How many people work under your supervision?	0,093	,000	0,016	,112
How many hours do you take a training or education course?	0,249	,069	0,110	,040

Source: Authors, based on EWCS data

For workers in general, a situation that positively affects the degree of satisfaction of the workers is to spend a lot of time training after having been working.

On the other hand, hotel and restaurant workers are more satisfied as the number of people in their charge increases, when the number of hours spent on main job is lower and when the minutes per day spent travelling from home to work and back decreases. Moreover, as can be expected, the positive linear relationship between pay and the degree of satisfaction observed in EU workers in all sectors is remarkable, included in hotels and restaurants sector. Spearman's linear correlation coefficients are shown in the Table 3:

5. Conclusions

The hotel and restaurant sector has very different characteristics from other sectors of the EU economy. This reveals that the treatment that must be done in this one must be directed to the special needs that this generates.

As we have seen, the number of workers in this sector increases at a significantly higher rate than other sectors and, as we have been able to estimate using a model with high reliability and predictive capacity, it is expected that in the coming months this number will continue to grow at very high rates.

From the special characteristics observed in this sector, it can be deduced that the level of satisfaction expressed by the working conditions of the worker is significantly lower in the hotel and restaurant sector. The high number of days a week worked in the hotel and restaurant sector, the adverse climatic conditions and the difficult situations that the worker sometimes experiences in dealing with the public are factors that negatively influence the degree of satisfaction.

Particular attention should be paid to the high rate of discrimination and abuse occurring in

this sector, which is significantly higher than the rate experienced by all EU workers, and the undesirable sexual attention experienced by workers in this sector with a rate higher than 5%.

In order to increase workers' satisfaction in Europe in the hotel and restaurant sector, a number of changes should be made to regulation and work management. An increase in the stability of labour contracts would mean greater job satisfaction that would be reflected in greater productivity and innovation. What really stands out in this sector is an atmosphere of difficult work, so it will be recommended certain rules such as homogeneity in working hours, functions and tasks to be performed, hygiene and safety measures along with interpersonal relationships.

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