Tourism and The Employment Growth : The Albanian case

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Abstract : Tourism is a service sector which has shown a big development throughout the world. The tourism's contribution in the country's economy cannot be calculated exactly because tourism is a mixture of sectors, it embodies a great number of small service sectors. However, in this survey there are theoretical and empirical studies, which once again show that tourism has a positive effect on employment. This study aims to determine the relationship between tourism and the Employment in Albania during the period 1999-2012. Time series have quarterly data and their study is done using the Engle Granger test, Johansen Co-integration and the correction of error. The empiric results show that tourism has had a positive effect on employment, and the co-integration test has demonstrated that there is a strong relationship between the two variables in long run period.
Key words: *Tourism, Employment, Casuality.*
JEL Classification: L90, J82, O 10.

INTRODUCTION

During the last decades many places have initiated politics in order to stimulate tourism and this is considered as one of the promoters of the economic growth. The economic literature about the tourism and its effects on the economic growth is wide enough. In fact, there are some channels through which the tourism development is translated into economical growth. The revenue is the channel through which the tourism affects the economical growth or the employment. The foreign direct invest is another channel through which the tourism development is transmitted into an economical activity growth. In the same time, the politics which aim the development and the consolidation of tourism sector through the security growth, stability and outboard dissection degree can also stimulate the growth in the other sectors of economy.

In many places is proved that the development in the tourism sector is translated into a real economic growth in the future. Moreover many developing countries, has as an economic growth promoter exactly the tourism sector. This way these places create premises about a simultaneous growth of employment in their country. The empirical studies which are focused in identification of the connection

between the tourism revenue and the economical growth has founded a positive correlation between them, especially for poor countries and developing ones (Sequera and Nunes, 2008).

The tourism includes the activities of persons which travel and stay in different places from their general stay for a period of time not any longer than a year. The aim of this travelling is the free time.

I.THE TOURISM IN ALBANIA, GENERAL SCENARIO

We have created e set of figures in order to represent the trend of tourism in Albania, the revenue from this activity and their affect in the economical growth. Referring to the data of INSTAT, the GDP is formed by 5 main branches which are: commerce, the Hotels and the Restaurants, the Transport, the Post − telecommunication, and the others services. We should emphasize that the branch which approximates with the economical activity is: Hotels and Restaurants. So, firstly we are trying to identify if exists a direct connection between the number of foreign visitors and the added value that shows the hotel-restaurant branch.
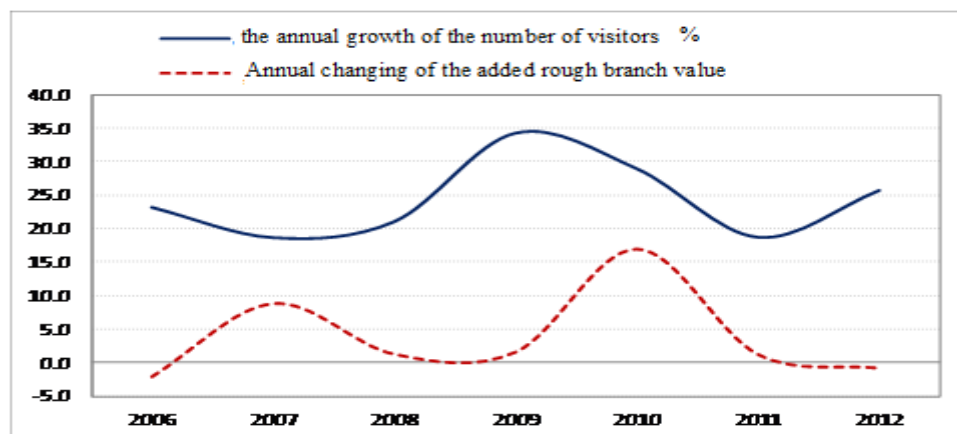

**Figure 1: The number of tourists and added value in the hotel-restaurant branch.
Source: MTKRS and INSTAT.**

As we can see from the figure 1, the annual growth of the number of visitors has followed the same trajectory with the annual changing of the added rough branch value (the hotels-restaurants), and this shows us that there is a positive relation between them both. So, despite the fact that the annual magnitude for these two indicators is different, the movement direction is the same for both, the growth of the number of visitors and the added impact that comes to the economy from this sector. So, we can say that the growth of the foreign visitors' number has had a positive impact in the economic activity in the country.

But how has been the private investment strategy in this sector during the last decade? We should see the figure 2 and its data in order to be able to give an answer for this question.

As we can see from the figure 2 there wasn't any clear investment strategy in the hotels branch, because the annual changes of the number of hotels and the number of beds in Albania have not followed a sustainable trajectory in time. This way the growth of the hotels number is similar to the trajectory of a business cycle, which culminates in 2005 and 2009 and it acts with one time latency against the changes in the economic growth (in 2004 and 2008 have been registered the highest rates of the annual economic growth, respectively with 8% and 13%).
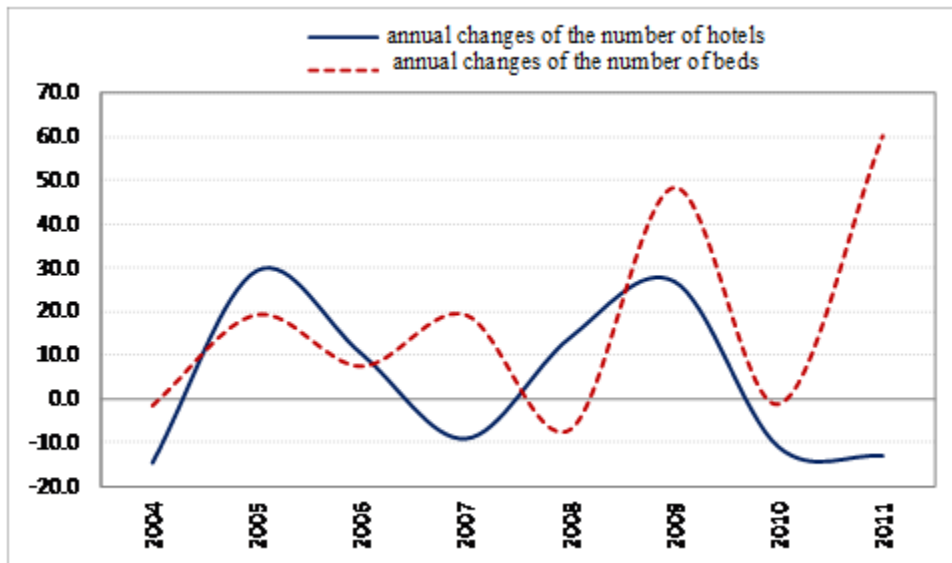

Figure 2: Private investment in the hotels branch
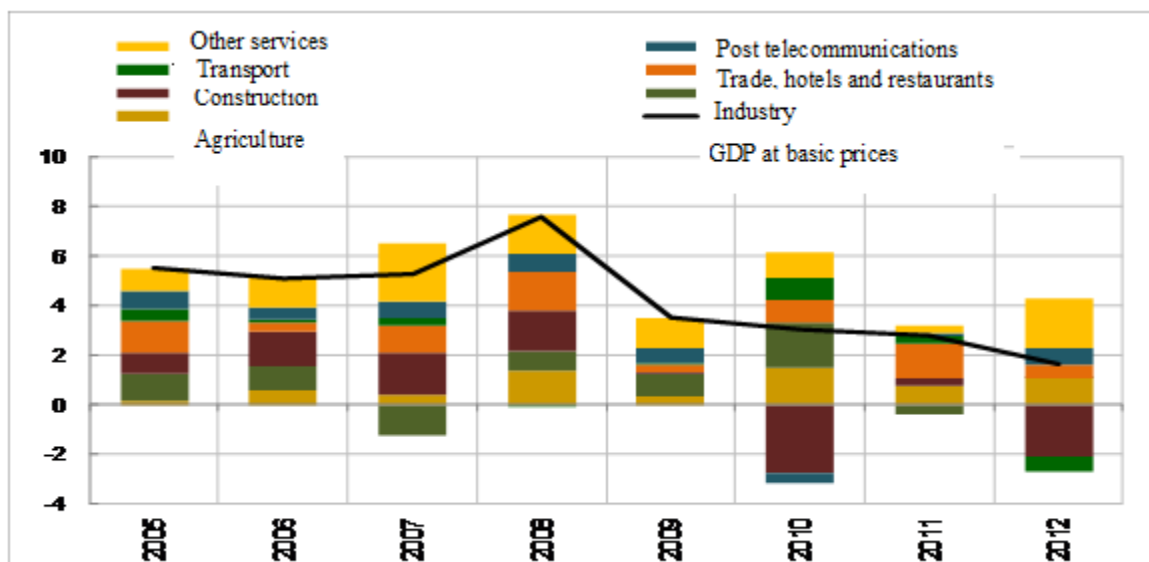**Source: INSTAT.**

Figure 3: Economic real growth and contributes of main branches.
Source: Bank of Albania, INSTAT.

Meanwhile, the efficiency growth in this branch, which is measured from the growth of the beds number, seems to have moved a little in the same direction as the number of hotels, except in 2007 and 2011.We should emphasize that this branch of economy can be affected by the economical crises of the last few years, which is showed in the decrease of the hotels number. However the fact that the hotels branch might have reached a point of maturity can be a reason why there are not the same rates as in the period before 2009.

Referring to the GDP splitting according to main branches, we notice the branch which approximates the performance of the tourism sector, the commerce, the hotels and restaurants branch has had sustainable positive contribute during these years. For instance, in the year 2012 the Albanian economy has been grown with annual real terms up to 1.6%. The contribute of tourism (whether we suppose that hotels – restaurant branch represents the tourism sector) in the economic growth has been about 0.5 percentage point composing about 31% of this growth.

Up to this time we showed that the development of tourism sector has promoted the economic growth. Beginning from the economic fundaments, which define a positive relation between production growth and employment (so economic growth, in ceteris paribus conditionals causes economic growth), we can investigate that exists a positive relation between the tourism revenues and the employment. Referring to annual data for the period of time 1999-2012 as will illustrate by the figure below it has had a positive relation between the tourism revenues and the employment in non agriculture private sector.

It is widely accepted from the economic literature that the development of tourism generates a higher employment. And this because the tourism is an industry based on working factor a lot, operates 24 hours of the day, and 7 days during the week. The opportunities for working are very high, because, it does not require very professional laborers, and you can also work part time.

In the next section the positive relation between the tourism revenues and the employment in non agriculture private sector will be proved by a deep econometric analyze.

II.ECONOMETRIC ANALYZE OF ALBANIA CASE

1) Data

The variables included in this study are the employment in non agriculture private sector and the tourism revenues during the period of time 1999 – 2012. It is selected the indicator of employment in non agriculture private sector, referred to INSTAT, because it represents that sector of employment where is included the activity of tourism, is characterized by higher movement dynamic showing easily the economic trend and it has a higher degree of statistical measurement quality1[1]. The data of the income by tourism are obtained from the payment balance, generated by Statistical Department of the Bank of Albania. Concretely, in the payment balance is obtained the series of total entry revenues from tourism. Since are expressed in euro those are deflated with the average exchange rate euro/lek[2]. The frequency of data is quarterly. For smoothing the fluctuation of the indicators the variables are included in the logarithms format in this model. Shortly, the indicators are: the natural logarithm of

the tourism revenues (ltr) and the natural logarithm of non agriculture private sector (lpun).

2) Unit Root Test

If we talk about a relation between two time series whether exists an important statistical relation between them, is needed to define the level of stationary and to study whether these variables are sustainable during the whole studying period or if it is needed to enter any parenthetic variable.

If we have the stability of these two studying variables then we can say that the model really shows an important relation.

The stationary of an economic time series can define in some manners:

a) One manner which is used a lot during the latest times to define the level of differentiation is the criterion for existence of unitary roots of series. The number of unitary roots defines the level of differentiation.

b) Dickey – Fuller test generalized ADF(p)[3], which is an asymptotic test to show us the existence of unitary roots.

Referring to the model:

$$\Delta X_t = \beta_0(1-\rho) - \rho X_{t-1} - [(1-\rho)\beta_1 t] + \sum_{i=1}^{p} \gamma_i \Delta X_{t-i} + u_t \text{ the}$$

expression which represents the trend has taken into consideration in only one case.

Let's build the hypothesis:

$H_0 : \rho = 0$ (It is equivalent with the existence of unitary roots)

In the following table we will give in the first column the value of ADF(p) criterion, which will be compared with the critic value of the criterion with importance level 5% which is given in the end of each table.

In our analyze we will also use other criterions to perform the analyze of better models like:

• Akaike information criterion (AIC), which determines by AIC=$\ln(\overline{\theta}) - p$ where $\ln(\overline{\theta})$ is the maximal likelihood function, whereas p represents the number of parameters that are measured, according to this criterion the best model is the model which has the maximal value of AIC.

• Schwarz Bayesian criterion (SBQ), which determines by SBQ= $\ln(\overline{\theta})$-0.5p logn, according to this criterion the best model is the model which has the maximal value of SBQ.

• Maximed log-likelihood (LL)

Table 1: The results of Unit Root test for the given values (level).

Null Hypothesis	t-Statistic	Test critical values 1% level	Prob.[4]
LTR has a		-3.562669	

[1] In Albania about 56% of the employments are in agriculture private sector, measured through annual observations which carry a high inaccurate degree. The including of those in this study would influence negatively, decreasing the role of influencing of tourism income in employment. This argument is also for employments in public sector, which are not influenced from income variable by tourism.

[2] Lek is many of Albania

[3] Dickey and Fuller 1979, 1981
[4] MacKinnon (1996) one-sided p-values

unit root	-2.992639		**0.0422**
LPUN has a unit root	-1.514979	-3.555023	**0.5187**

These are my own calculations.

As far as is selected as criteria α=1%, the probability value 4.2 % and 51.9% shows that those series are not stationary in level. Therefore is passed in their testing in the first difference.

Table 2: The results of Unit Root test for the first difference.

Null Hypothesis	t-Statistic	Test critical values 1% level	Prob.[5]
D(LTR) has a unit root	-9.557388	-3.562669	**0.0000**
D(LPUN) has a unit root	-7.777563	-3.557472	**0.0000**

These are my own calculations.

The above results show that time series are stationary of the first level I(1).

3) Co-Integration Test

After we converted the series in stationary, we will test whether their relation exists in short -run or long - run. To do this, we will use the Johansen co-integration test. According to this test we have to find out the number of series that are in co-integration. The results have been shown as follow.

Series: LPUN LTR
Lags interval (in first differences): 1 to 2
Unrestricted Cointegration Tank Test (Trace and Maximum Eigenvalue)

Hypot hesized No. of CE(s)	Eigen value	Trac e Stati stic	Criti cal Valu e	Pro b.**	Max - Eige n. st	Criti cal Valu e	Pro b.**
None *	0.377 094	**31.1 6927**	**25.8 7211**	**0.00 99**	**25.0 8808**	**19.3 8704**	**0.0 066**
At most 1	0.108 402	6.08 1188	12.5 1798	0.45 00	6.08 1188	12.5 1798	0.4 500

* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
These are my own calculations.

According to Johansen we can use for testing Trace Statistic or Max Eigen Statistic, according to these if the observation value is higher than critic value then the basic hypothesis will swoop. Both kinds of used tests for co-integration (trace test and Max-eigenvalue) demonstrate that exists a relation in long run and this is positive.

III. GRANGER CAUSALITY TEST.

The next step of analyze is the determination of the long run relationship between variables which is realized through VECM. We have to use the Granger test (Granger, 1969) for correcting of errors.
Below it is demonstrated the Granger Causality test in order to determine the direction of long run relationship.

VAR Granger Causality/Block Exogeneity Wald Tests

Sample: 1999:1 2012:4			
Included observations: 54			
Dependent variable: D(LPUN)			
Excluded	**Chi-sq**	**df**	**Prob.**
D(LTR)	4.016262	2	0.1342
All	4.016262	2	0.1342
Dependent variable: D(LTR)			
Excluded	**Chi-sq**	**df**	**Prob.**
D(LPUN)	10.51542	2	**0.0052**
All	10.51542	2	0.0052

These results show that the relation between the tourism revenues and the employment in non agriculture private sector is positive in long run period. In other words, the growth of the tourism revenues influences to the growth of the employment in non agriculture private sector in long run period.

IV. CONCLUSIONS

The tourism sector in Albania, based on our analyze seems that it has been one of the main sector in economic growth during the last decade. However, we judge that this sector is potentially a key factor for the economic growth and the employment in the future.
The data for the last decade has showed that the growth of visitors' number is in the same time with the extending of capacity in hotels' branch. This is also converted in economic growth during the analyzed period. The data also demonstrated that during these years the development of tourism sector has promoted economic growth.
The available data showed a perfect linear relation between the tourism revenues and economic growth, including the employment in this country. The relation that exists among those in the case of Albania was empirically proved by VAR model which was used for this purpose. In the beginning, the used series converted in stationary in the first difference, because ADF test showed that the series were not stationary in level. Then both kind of used tests for co-integration (trace test and Max-eigenvalue) demonstrated that between these variables exist a positive and long run relation. So it empirically proved that the income by tourism relates in the perfect way (positive) with the employment in the country and this relation is evaluated to be present in long run too. Whereas the third test performed, the test that defines the influence direction of the variables showed that the relation functioned from the tourism revenues to employment. In other words, the income growth by tourism influences to the employment growth in non agriculture private sector in long run period.

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[5] MacKinnon (1996) one-sided p-values

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