

THE IMPACT OF TOURISM ON REGIONAL ECONOMIC DEVELOPMENT – CASE STUDY OF CROATIAN COUNTIES

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Abstract

In many countries of the world, including Croatia, tourism has an extremely important role in economy. The aim of this paper is to analyse complex relations that exist between tourism industry and processes of economic development at regional level. Croatia has been divided into 20 counties and the capital city of Zagreb. The purpose is to investigate the impact of tourism on the economic development of Croatian counties and to examine the difference between them. In the research, two variables have been used, GDP as one of the main tools for measuring economic development, and total tourist arrivals as a proxy variable for tourism.

The obtained results show positive correlation between economic development and tourist arrivals. The counties that have more tourist arrivals have larger share of tourism in GDP, and are also more developed. But, the research shows the differences between the counties. Based on the conducted analysis, the author suggests that investments and development should be encouraged in other Croatian counties as well. Local and regional authorities have to create conditions for increasing competitiveness in tourism that will ultimately stimulate economic growth and development. The empirical findings in this study may provide guidance for private, local and government tourism policy makers and authorities in Croatia.

Keywords regional economic development, GDP, tourist arrivals, Croatian counties

INTRODUCTION

Tourism expansion is considered to be a potential mode for achieving growth and development. Developing countries have set their policy in such way that they attract foreign visitors and develop tourism sector on the basis of its multiplier effect on other sectors as well (Cortes-Jimenez and Pulina, 2010). Hardly a day passes without a new statement on the wider significance of tourism, which is called the world's largest industry by many people.

Over the last few decades, the importance of tourism industry for the economy of many countries has been increasing (Oh, 2005). Also, the role of regions in national economies has recently changed considerably as a result of globalization and structural adjustment. According to Stimson et al. (2006), regional economic development is the implementation of economic processes and resources available to a region, resulting in sustainable development and desirable economic outcomes for the region, its entrepreneurs and residents. Understanding these processes is crucial for making regional economic analyses and for planning regional development.

In the recent few decades, international tourism has grown considerably, with technological improvements, the rise in standard of living and with wider processes of globalization, which has led to a rapid increase in the number of visitors (Milne and Ateljevic, 2001). According to the United Nations World Tourism Organization Report (2016), international tourist arrivals reached 1.235 billion in 2016, which is 4% more than in 2015. Europe has realized 615 million international tourist arrivals, which make 50.2% of total arrivals. The share of tourism in world GDP in 2016 was 10% (UNWTO, 2016).

In many countries of the world, including Croatia, tourism has an extremely important role in economy. In 2016, almost 15.6 million tourist arrivals were recorded in Croatia, and over 78 million tourist nights in accommodation were realized, which represents an increase of 8.7%, or 9%, compared to 2015. Tourism is a branch that employs 6 to 7 per cent of the total number of the employed, while foreign currency tourism income is 18.1 % in relation to GDP (Croatian Chamber of Commerce, 2016).

One of the main reasons why governments support and promote tourism in the world is that tourism has a positive impact on economic growth and development (Ivanov and Webster, 2007). Tourism should create employment and income, lead to a steady balance of payments, stimulate tourism supply sectors, and lead to generally increased levels of economic activity in countries. Of all member states of the European Union, Croatia is one of the countries with the highest share of tourism in GDP. In 2015, this share was 18.1% (Eurostat, 2016). However, such an indicator suggests high dependency of the economy on tourism and points to the insufficiently developed economic structure of Croatia (Krstinić Nižić, Šverko Grdić and Hustić, 2016).

The aim of the paper is to analyse the complex relations that exist between tourism and economic development at regional level. Croatia is divided into 20 counties and the capital city of Zagreb. According to the Nomenclature of Territorial Units for Statistics (NUTS) of the European Union, Croatia has two large regions, Adriatic and Continental Croatia (Eurostat, 2013). Adriatic Croatia comprises 7 counties, and Continental Croatia 13 counties and the capital. The purpose of the paper is to explore the influence of tourism, i.e. tourist arrivals on regional economic development and to analyse the difference between the counties. The basic research question asked in the paper is which counties are more developed, and whether those counties that have more tourist arrivals have higher GDP. The motive for the research lies in the fact that tourism in Croatia has a long tradition and is especially developed in coastal counties. Furthermore, the research wants to discover whether tourism has an impact on economic development in continental counties as well.

The paper is structured in five parts. After the introduction, the second section examines the review of current literature on the topic. The third section describes the data and methodology used. The fourth section contains results and discussion, and finally, the fifth section brings conclusions and the limitations of the research.

1. LITERATURE REVIEW

The discoveries that tourism is considered to be the largest industry of the 21st century in many countries, and one of the fundamental drivers of local and national development, is unquestionable. In the last few years, these discoveries have taken hold of scientific and empirical research as well (Kumar and Hussain, 2014; Pulido-Fernández, Cárdenas-García and Sánchez-Rivero, 2014; Ekanayake and Long, 2012; Cortés-Jiménez and Pulina, 2010).

The importance of tourism for national economic development is widely acknowledged because of its contribution to the balance of payments, production and employment. Tourism helps in paying the imports and mitigates the pressure on the balance of payments (Blažević, 2007). There are also strong relations between tourism and other economic sectors, including transport, retail, wholesale, manufacturing, agriculture, arts and crafts, and other services. From a regional point of view, tourism can act in such a way that it distributes development far from industrial centres towards less developed regions (Soukiazis and Proenca, 2007). Tourism can be a key factor in economic growth and development, and many regions have achieved economic growth thanks to their ability to manage resources and promote tourism sector (Šimundić and Kuliš, 2016).

There are a large number of studies on tourism and economic growth and development. These studies can be grouped into two broad categories; studies that have analysed only one country over a number of years (time series analysis) and studies that have included more countries and more years (panel data analysis). Massidda and Mattana (2012) investigate causal relationship between GDP, international tourist arrivals and trade on the example of Italy, Lorde et al. (2011) investigate the relationship between GDP, GDP per capita, tourist arrivals and foreign exchange rates in Barbados, while Katircioglu (2009) does it for Turkey and in his research he analyses GDP, tourism receipts and real exchange rates. On the other hand, Ekanayake and Long (2012) analyse developing countries, 140 of them, and the variables they use are GDP, tourism incomes, physical capital and labour. Cortés-Jiménez (2008) studies Spanish and Italian regions, while Soukiazis and Proenca (2007) investigate Portuguese regions.

Empirical results from earlier researches on causal relations between tourist development and economic growth and development are mostly mixed. For example, Massidda and Mattana (2012), Dritsakis (2012), Cortés-Jiménez and Pulina (2010), Lee and Chang (2008), Kim et al. (2006) in their research find evidence that supports the hypothesis of the influence of tourism on economic growth and development. On the other hand, Oh (2005) proves that economic growth contributes to tourism growth. Several authors also prove reciprocal relation between tourism and economic growth (Lorde et al., 2011, Kim et al., 2006, Dritsakis, 2004).

From the above literature review, it is evident that tourism can play an important role in stimulating larger growth and development, reducing regional asymmetries, creating employment and positive impacts that affect (directly or indirectly) other economic activities. This paper will focus on the impact of tourism on regional development.

2. DATA AND METHODOLOGY

Despite the existence of previous studies that have analysed various economic effects of tourism, the studies focused on the existence of a causal relations between tourism and economic growth and development are relatively new and have increased in number since 2002 (Pablo-Romero and Molina, 2013).

Various authors have conducted the analysis of the impact of tourism on economic development, thereby using various variables in their research. Massidda and Mattana (2012) use the analysis of GDP, tourist arrivals, exchanges, Cortés-Jiménez and Pulina (2010) use GDP, tourist income, foreign exchange rate and human capital, Katircioglu (2009) uses GDP, tourist receipts and foreign exchange rate. Authors Tang i Abosedra (2013) and Kim et al. (2006) use two variables, GDP and tourist arrivals. Pablo-Romero and Molina (2013) emphasize that the inclusion of other variables in the analysis, such as employment, capital, trade has been recorded in previous studies.

Compared to the existing empirical research conducted at regional level, this study includes two variables, GDP as one of the main tools for measuring economic development, and tourist arrivals as a proxy variable for tourist development. The proxy variable serves as a substitute, a representing variable of the observed variable, which is in this case tourism. A statistical method will be applied, and the height of the correlation coefficient (Pearson coefficient) between individual counties will be analysed and interpreted. The analysis of the collected data was performed using Stata 13.0. program. The annual data on GDP of each county, as well as the number of tourist arrivals, is taken from the Central Bureau of Statistics just before the research. Time period is 15 years (from 2000 to 2014) for 21 counties. The analysis will cover 2 large regions: Adriatic and Continental Croatia, and within them individual counties.

Following hypotheses were considered in order to confirm the existence of a correlation between tourism and economic development at regional level.

H0: There is no correlation between tourism and economic development of Adriatic and Continental Croatia

H1: There is a positive correlation between tourism and economic development of Adriatic and Continental Croatia

H1a: There is a positive correlation between tourism and economic development of the counties in Adriatic Croatia

H1b: There is a positive correlation between tourism and economic development of the counties in Continental Croatia

3. RESULTS AND DISCUSSION

To determine the correlation between tourist arrivals and GDP at regional level, Pearson correlation coefficient will be applied.

The descriptive statistics is shown in Table 1. The data shown in the table describes tourist arrivals (TA) and Gross Domestic Product (GDP).

Table 1: Croatia, Adriatic Croatia and Continental Croatia (in billion kuna)

Variable	N	Mean	Std. Dev.	Min	Max
GDP	15	2.86	0.575	1.80	3.48
TA	15	0.103	0.01716015	0.07136554	0.131
GDP A CRO	15	0.906	0.190	0.559	1.11
TA A CRO	14	0.09393197	0.01271601	0.07140618	0.115
GDP C CRO	15	1.95	0.385	0.124	2.36
TA C CRO	14	0.01154869	0.00259101	0.00719139	0.01634200

Source: author's research

Average GDP in the period of 2000-2014 was almost 2.86 billion kuna, and tourist arrivals were over 10 million arrivals. It can be noticed that Adriatic Croatia has on average more tourist arrivals, over 9 million, while Continental Croatia has 1.15 million. GDP of Continental Croatia is higher than GDP of Adriatic Croatia.

Table 2 shows the correlation between tourist arrivals and GDP of Adriatic and Continental Croatia.

Table 2: Correlation of Adriatic and Continental Croatia

Region	coefficient	p
Adriatic Croatia	0.9120	<0,001
Continental Croatia	0.8796	<0,001

Source: author's research

From the above table we can notice a very positive correlation between tourist arrivals and GDP of Adriatic Croatia (0.9120) at the significance level of $p < 0.001$. A high positive correlation is also present in Continental Croatia (0.8796).

Thus, we can reject the hypothesis H_0 and confirm the hypothesis H_1 , which says that there is a positive correlation between the influence of tourism on economic development of Adriatic and Continental Croatia.

Following table shows the ratio of GDP and tourist arrivals in the seven counties of Adriatic Croatia.

Table 3: Correlation of Adriatic Croatia counties

County	coefficient	p
Istria	0.8251	0.0003
Primorje-Gorski Kotar	0.9294	<0.001
Lika-Senj	0.3121	0.2774
Zadar	0.9578	<0.001
Šibenik-Knin	0.7614	0.0016
Split-Dalmatia	0.8405	0.0002
Dubrovnik-Neretva	0.8724	<0.001

Source: author's research

The acquired data from Table 3 show a very high or a high positive correlation between tourist arrivals and GDP in 6 counties of Adriatic Croatia at a high significance level. In case of Lika-Senj County there is a positive correlation between tourist arrivals and GDP, but the correlation coefficient is negligible, it is statistically insignificant ($p = 0.2774$). The H1a hypothesis is mostly accepted and it is rejected only in the case of Lika-Senj County.

Table 4. Correlation of Continental Croatia counties

County	coefficient	p
City of Zagreb	0.8635	0.0001
Zagreb County	0.8465	0.0001
Krapina-Zagorje	0.7244	0.0034
Sisak-Moslavina	0.6661	0.0093
Karlovac	0.6466	0.0125
Varaždin	0.0929	0.7522
Koprivnica-Križevci	0.8170	0.0004
Bjelovar-Bilogora	0.8023	0.0006
Virovitica-Podravina	0.8063	0.0005
Požega-Slavonija	0.7195	0.0037
Brod-Posavina	0.8564	0.0001
Osijek-Baranja	0.9608	<0.001
Vukovar-Srijem	0.8540	0.0001
Međimurje	0.9538	<0.001

Source: author's research

Table 4 shows a very high and a high positive correlation between tourist arrivals and GDP in 11 counties. There is a medium positive correlation in Sisak-Moslavina County and Karlovac County, which would mean that a correlation between tourist arrivals and GDP is very small. There is no statistically significant correlation between tourist arrivals and GDP in Varaždin County ($p = 0.7522$).

Hypothesis H1b is mostly accepted and rejected only in the case of Sisak-Moslavina, Karlovac and Varaždin County.

By analysing the results obtained, it can be concluded that in most Croatian counties there is a positive correlation between tourist arrivals and GDP, and that regional economic development is influenced by tourism. The correlation coefficient of tourist arrivals and GDP in the coastal counties is highly positive. The highest number of tourist arrivals is in Istria County and Primorje-Gorski Kotar County. Thus they also have the largest GDP, which states that these two counties are the most developed.

In Lika-Senj County there is statistically insignificant correlation between tourist arrivals and GDP. From this it can be concluded that tourism in this county is still not sufficiently developed. Lika-Senj County has the least tourist arrivals. The main activities in this county are construction and processing industry, especially wood processing. Therefore, tourist sector should be more developed. The advantages are in the fact that on its territory this county has two national parks, one nature park, one river, all natural beauties that can be used for purposes of improving tourist development. One should further

explore total accommodation capacity, possibility of new forms of tourism, and also increase the share of domestic products in tourist offer which would increase the number of tourist arrivals, and thus of the GDP of this county.

The correlation coefficient is highly positive in 3 continental counties, Osijek-Baranja County, Međimurje County and the City of Zagreb. The City of Zagreb has the highest number of tourist arrivals, and thus the highest GDP. Osijek-Baranja County is the third county for tourist arrivals and GDP. Sisak-Moslavina County and Karlovac County have a medium positive correlation indicating that tourism, tourist capacities and offer should be further developed. Varaždin County has an insignificant correlation. This county has a smaller number of tourist arrivals and it is in the 7th place from all the counties for its GDP. From these data it can be concluded that tourism is not the main activity in this county. Varaždin County is famous for its textile industry, food and beverage industry, agriculture and leather processing, so these activities increase its GDP. However, tourism development should not be neglected. The centre of this county, the town of Varaždin, has several recognizable tourist attractions, such as Špancirfest and Baroque evenings. The increase of tourist offer in terms of time and quantity would enable the county to become an even stronger tourist destination, which would thus enable further development of tourist infrastructure and gastronomy offers. This would lead to an increase in the number of tourists and, consequently, GDP as well.

CONCLUSION

The main aim of this research was to examine whether tourism could be an important factor for economic growth and development on a sample of Croatian counties. Empirical research was conducted using a statistical method and correlation testing on a sample of 21 counties over a period of 15 years (2000-2014). The results have confirmed that tourist arrivals, and by that tourism as well, have a positive and statistically significant impact on economic development of counties. The results of this paper can provide implications for tourist policy makers. Local and regional tourist holders have to create conditions for increasing the competitiveness of individual counties, stimulate real investment in less developed tourism counties, and encourage the creation of regional partnerships, which will ultimately stimulate economic growth and development. In addition to economic benefits, the role of tourism in social development and the well-being of local communities should also be emphasized. Therefore, tourism development should be encouraged in all counties.

The conducted research included two variables, which is referred to as the first limitation of this paper. For future research, the analysis should include tourism income, foreign exchange rate, employment, human capital, investments. The second limitation refers to the choice of methodology. The recommendation for a future study is to conduct a panel analysis that provides the ability to use multiple variables, a larger sample of countries, longer time periods, as well as a depth analysis of the relations between the variables.

Nevertheless, the contribution of this paper is evident in the fact that it covers all Croatian counties. Also, only a few studies have analysed the relationship between tourism and economic development at regional level. This research fills the gap in that direction.

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