

The Impact of the International Tourism Receipts on GDP: The Case of Republic of Macedonia

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Abstract

In the past few decades' tourism has played a major role in the EU and global economies. By the estimates of UNWTO tourism is accounted for 9% of the world economy's GDP, and it's considered the third largest socio-economic sector after the period of the financial crisis. More so tourism's impact on the economic and social development of a country can be enormous; opening it up for business, trade and capital investment, creating jobs and entrepreneurialism for the workforce and protecting heritage and cultural values. However, measuring the exact impact of the tourism and tourism related activities on the GDP poses a serious challenge. Even though the impact of the tourism on the GDP is highly recognized the correct measurements of his impact differ from country to country depending of their national practices and their legal framework. Also, the impact of tourism is widely spread and besides the direct impact on the GDP and, tourism also contributes with indirect impact to a variety of other socio economic categories, which makes it more difficult to estimate the total impact.

Key words

International tourism, visitor expenditure, GDP, economic development

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1. Introduction

As an important branch in the late twentieth and early twenty-first century, tourism in all relevant indicators is one of the leading industries in the world economy, including number of employees, participation in social product, national income and total consumption. With the combination of higher disposable income and more free time have contributed to the emergence of a new market segment in tourism industry (Kim *et al.*, 2015). According to the research "Tourism in the EU economy", some of the positive economic effects of tourism can be specified as: the impact on GDP; ability to creates jobs both directly and indirectly and thus; the impact on capital investments; the contribution of tourism in the balance of payments; the impact on the development of other related industries; and also encourage proper regional development (Cristea, 2012). Economists find the economic impacts and the allocation of scarce resources to tourism activities a fascinating topic (Smith 2011). The process of creating jobs and direct impact on the GDP are two of the many benefits that can be generated with tourism. According to Eulalia Claros and Alessandra Di Tella, researches in the European Parliament Research Service, in 2013, tourism activities in the accommodation and food services sector accounted for almost 10 million jobs, or 4% of total EU employment. Tourism is a vitally important industry to many regions of the world and forms an important and growing part of the world's economy. There were 1087 million international tourists during 2013, generating 9% of the world's GDP and creating 1 in every 11 of the jobs around the world (Jarvis *et al.*, 2016). This means that the tourism sector is vast enough to be able to create a large amount of job vacancies which can contribute to increasing the other macroeconomic indicators of the countries, one of them also being GDP.

Tourism effect on the GDP of a country is incontrovertible, but depending of the types of revenues gathered by tourism, national practices and law framework the effects of the tourism can be perceived as

direct, indirect and induces effects. According to the research of Professor Francois Vellas in his paper “*The Indirect impact of tourism an economic analysis*”, direct effects concern expenditure within the tourism sector, based on a list of typical tourism products drawn up by the UNWTO and the OECD (Vellas, 2011). Taxes according to the legal framework of the country can also be considered as direct effects of the tourism in the form of revenues. Indirect effects concern intermediate consumption for the production of goods and services in the tourism sector (Şafakli, and Kutlay 2016). These are goods and services that tourism companies purchase from their suppliers, forming the tourism supply chain (Vellas, 2011). The grater the supply chain of the goods and services connected to the tourism is the grater the indirect effects can be. They can move forward and can implemented a number of innovative initiatives driven by the implementation of a multi-stakeholder partnership (Graci 2013). Induced effects concern expenditure by employees from wages paid by companies in direct contact with tourists but it can also be considered as effect of the consumption of companies that have benefited directly or indirectly from initial expenditure in the tourism sector (Vellas, 2011).

The subject of this paper is assertion of the impact as a direct effect of the international tourism receipts on the GDP of Republic of Macedonia. Also, considering the data gathered from the OECD database and Statistical Office of Republic of Macedonia, a comparative analysis is made between the Balkan countries in the field of international tourism receipts. The hypothesis is that the international tourism receipts have impact on the GDP in Republic of Macedonia. According to the OECD classifications *International tourism receipts* are expenditures by international inbound visitors, including payments to national carriers for international transport. These receipts include any other prepayment made for goods or services received in the destination country. They also may include receipts from same-day visitors, except when these are important enough to justify separate classification. Despite the presentation of the international tourism receipts of the 6 Balkan countries, the effects and the impact of the tourism revenues from international tourist’s expenditures on the GDP will be measured only for Republic of Macedonia because of the different national policies and legal frameworks of the Balkan countries concerning the tourism sector. Also different geographical locations and capacities can give different statistical date for comparison. Never the less in the next chapter of this paper an overview of the international tourism receipts of the Balkan countries is presented in order to spot the differences in the development of the tourism sector.

2. Literature review

The impact that tourism sector can have on one country’s economy is wide and diverse, and in most cases relatively hard to estimate. This is due to the diversity of national policies and legal framework, but also the degree of development of the tourism sector and the capacity for tourism of one country. More so the possibility of generating significant income from the tourism sector depends on the geographical possibilities for development of the tourism in one country. However in the past few decades more countries proved this point wrong, as new types of tourism emerged, the possibilities of generating significant income from tourism and promoting sustainable growth have increased. Therefore building tourist capacities is no more strictly connected to the geographical location and natural goods of the country, more so the primate for building and increasing the tourism capacities was taken by tourism national policies, investment in tourism and strategically development of tourism capacities. Below a table is presented on which shows the different impact that tourism has on the economy on different countries, i.e. the countries form the Balkan. Specifically the table shows the international tourism receipts of Balkan countries for the period of year 2004 till the year 2014. The countries taken into consideration in this research are Republic of Macedonia, Greece, Serbia, Bosnia and Herzegovina, Slovenia, Albania, Bulgaria, Croatia and Montenegro. Although these countries have different geographical location and different natural resources which by themselves increase the possibility of development of the tourism, still the development and investment in tourism capacities play a vital role in the amount of international tourism receipts.

According to the Table number 1, country with the most acquired revenues from international tourism, i.e. international tourism receipts is Greece with average of 14.589.000.000 \$ in the observational period.

Table 1. Review of the international tourism receipts of the Balkan countries in 000 US dollars

Year	Republic of Macedonia	Serbia	Albania	Bulgaria	Greece	Croatia	Bosnia and Herzegovina	Slovenia	Montenegro
2004	86.000	220.000	756.000	2.796.000	12.809.000	6.945.000	507.000	1.725.000	
2005	103.000	308.000	880.000	3.063.000	13.453.000	7.625.000	557.000	1.894.000	
2006	116.000	416.000	1.057.000	3.317.000	14.495.000	8.296.000	658.000	2.074.000	
2007	156.000	1.016.000	1.479.000	4.181.000	15.687.000	9.601.000	804.000	2.465.000	660.000
2008	219.000	1.133.000	1.848.000	4.852.000	17.586.000	11.681.000	913.000	2.954.000	859.000
2009	262.000	989.000	2.014.000	4.273.000	14.796.000	9.308.000	753.000	2.735.000	792.000
2010	232.000	951.000	1.780.000	4.075.000	12.579.000	8.255.000	662.000	2.721.000	765.000
2011	209.000	1.149.000	1.833.000	4.554.000	14.984.000	9.638.000	722.000	2.953.000	926.000
2012	242.000	1.083.000	1.623.000	4.202.000	13.313.000	8.865.000	689.000	2.841.000	860.000
2013	237.000	1.221.000	1.670.000	4.632.000	16.188.000	9.721.000	754.000	2.976.000	929.000
Average	193.818	848.600	1.494.000	3.994.500	14.589.000	8.993.500	701.900	2.533.800	827.286

As second comes Croatia with an average of 8.993.500.000 \$ acquired from international tourism receipts. The country with the least acquired revenues from the expenditures of international tourism is Republic of Macedonia with average realization of 193.818.000 \$ in the observational period. Knowing the fact that Croatia and Greece have developed most of their tourism capacities through the years and due to their geographical location and natural resources, their tourism sector is already developed industry which generates a sufficient amount of revenues and is also represented as a higher percentage in their GDP. This kind of tourism acquired revenues can significantly affect the GDP growth of the county, with the multiple indirect and direct effects. Although Republic of Macedonia doesn't have the predispositions for tourism development as other countries taken into consideration for this research, further increasing the tourism capacities may lead to multiple positive effects generated from the tourism, one of them being the increase growth rate of GDP. In the next table the growth of the international tourism receipts in the observational period is shown, in order to determine the relative growth of the capacities of the tourism industries.

Table 2. Review of the growth/decline of the international tourism receipts of the Balkan countries

Year	Republic of Macedonia	Serbia	Albania	Bulgaria	Greece	Croatia	Bosnia and Herzegovina	Slovenia	Montenegro
2004	86.000	220.000	756.000	2.796.000	12.809.000	6.945.000	507.000	1.725.000	
2005	103.000	308.000	880.000	3.063.000	13.453.000	7.625.000	557.000	1.894.000	
2006	116.000	416.000	1.057.000	3.317.000	14.495.000	8.296.000	658.000	2.074.000	
2007	156.000	1.016.000	1.479.000	4.181.000	15.687.000	9.601.000	804.000	2.465.000	660.000
2008	219.000	1.133.000	1.848.000	4.852.000	17.586.000	11.681.000	913.000	2.954.000	859.000
2009	262.000	989.000	2.014.000	4.273.000	14.796.000	9.308.000	753.000	2.735.000	792.000
2010	232.000	951.000	1.780.000	4.075.000	12.579.000	8.255.000	662.000	2.721.000	765.000
2011	209.000	1.149.000	1.833.000	4.554.000	14.984.000	9.638.000	722.000	2.953.000	926.000
2012	242.000	1.083.000	1.623.000	4.202.000	13.313.000	8.865.000	689.000	2.841.000	860.000
2013	237.000	1.221.000	1.670.000	4.632.000	16.188.000	9.721.000	754.000	2.976.000	929.000
Average	193.818	848.600	1.494.000	3.994.500	14.589.000	8.993.500	701.900	2.533.800	827.286

From the Table number two it can be seen that the highest growth of international tourism receipts is realized by Serbia with 14.20% average growth rate of the revenues from international tourist. After Serbia, the highest growth rate is realized by Republic of Macedonia with 9.83%. This can be seen as a good omen for further development of the tourism capacities in Republic of Macedonia, therefore increasing the impact of the tourism industry on the overall economy. However the capacities of tourism can be foreseen as limited, and once the growth of them reaches certain point it can no longer carry on with the same intensity. This can be seen in the examples of Croatia and Greece, both of which generate lowest growth of the international tourism receipts, with growth rates of and 2.73% and 1.68% respectfully. Never the less Croatia and Greece (according to Table 1) have realized the most assets from the international tourism receipts from the selected countries for the research. This can indicate that the full grown industry of tourism has lower growth rate because of the limited natural resources and therefore limited possibility for capacity building. However it still generates enough income and growth to stimulate the economic growth. In the next chapter the impact on the international tourism receipts on the GDP of Republic of Macedonia

is shown, in order to determine if there is a link between the acquired tourism revenues and growth of the GDP. More so are the income acquired by international tourism large enough to present a serious stimulant to the growth of the GDP of Republic of Macedonia and the economy as a whole.

3. Methodology of research

We live in a research world increasingly awash with rich sources of micro-level data and powerful analytical tools. The field of tourism research can benefit from these trends in many ways (Johnson 2012). The research in this article is conducted using both quantitative and qualitative methods for research. The quantitative methods are consisted of statistical and econometrical analysis using correlation and regression as econometric models to determine the link and impact on international tourism receipts and GDP in Republic of Macedonia. Statistical method is used to collect the data necessary for comparison of the international tourism receipts of the Balkan countries and south-east European countries (Dragulanescu and Drutu, 2012). The data was gathered from the data base of World Bank, OECD data base, research in the field and other written sources. Econometric analysis presented in the last chapter of this research paper is based upon correlation and regression analysis on expenditures by international inbound visitors, including payments to national carriers for international transport in order to determine the strength of the link and impact of the international tourism receipts and GDP in Republic of Macedonia. The analysis is conducted within the period of 10 years from year 2005 to year 2014. The data of the GDP of Republic of Macedonia is collected from the State Statistical office of Republic of Macedonia.

Qualitative method that is used in the research for this article is comparative method. The comparative method is used to compare the international tourism receipts for Republic of Macedonia, countries of the Balkan and South-east European countries. Besides the comparative method, other qualitative methods are used in the process of research and conclusion findings, such as: analytical method, method of deduction and method of induction.

4. The impact of international tourism receipts on the GDP of Republic of Macedonia – regression and correlation analysis

In order to determine the link and relevance of the link between the international tourism receipts and GDP in Republic of Macedonia, an econometric analysis was conducted using the correlation and regression analysis. In the case of the econometric analysis GDP is taken into consideration as a depending variable in this paper, and through the correlation and regression analysis the impact of the international tourism receipts, i.e. the expenditures by international inbound visitors, is shown. The analysis is conducted on 10 observational years starting with year 2004 and ending it with year 2013. Although the period can be perceived as a rather small it still can give an insight into the bond between the international tourism receipts and GDP in Republic of Macedonia. In this research correlation and regression analysis will be followed by determination of the significance and the strength between the revenues from international tourism and the GDP linkage.

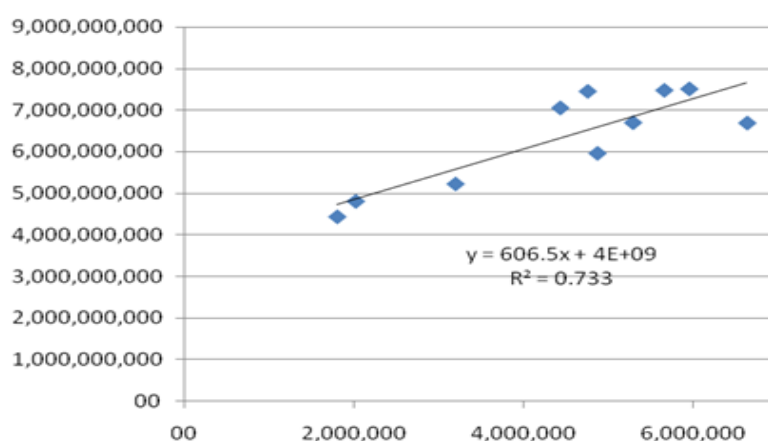


Figure 1. Review of the impact of revenues from tourism on GDP in Republic of Macedonia

The regression analysis showed that the impact of the international tourism receipts on GDP in Republic of Macedonia is existent, i.e. there is a bond between the two variables. This can be seen at the Graph number 1 where R^2 is determined to 0.7333 and also another indicator that is Adjusted R^2 which takes into consideration the observational sample size is determined to 0.70 which indicates to relative strong link between the two variables. The regression is determined to linear function represented with the equation y (GDP of Republic of Macedonia) = $606.56 \cdot (\text{international tourism receipts of Republic of Macedonia}) + 4E+0.9$. The correlation index is determined to 0.8563 which is enough to claim that there is connection between the international tourism receipts and GDP in Republic of Macedonia. More so the correlation analysis shows that there is a strong proportional link between the two variables, i.e. the higher the expenditures by international inbound visitors are the greater impact will be produced on the GDP of Republic of Macedonia. The regression analysis also passed the p-test for $p < 5\%$ ($p = 0.16\%$), thus it can be deducted that there isn't any degree of randomization in the link between the two variables and that the bond between them is consistent. Also the regression model between the two variables passed the F-test, $F = 22.17$, where the critical value of the F-test was determined to 5.317. The significance of the F-test is 0.091% for F-test significance critical value 5% and thus the bond between the two variables can be determined as significant. All the data presented above showed that there is a significant link between the international tourism receipts and GDP in Republic of Macedonia. This can actually be expected as the revenues from tourism directly influence the growth or decline of the GDP. More so the grater the revenues from the expenditures by international inbound visitors, including payments to national carriers for international transport are the grater the impact they will have on the county's GDP. The regression analysis showed that there is a significance link between the international tourism receipts and GDP in Republic of Macedonia, and also this bond is considered to be true considering that the regression has passed the t-test, $t = 4.69$ for t-test critical value 2.3 and t-test success probability -2.3 to +2.3.

5. Conclusions

Tourism revenues can have significant effect on the growth of the economy. According to the latest trends tourism as an industry is on a rise and its effects contribute to the real economic growth by stimulation of the growth of GDP, opening new jobs, stimulating entrepreneurship, stimulating investment etc. The impacts on economy created by tourism can be so vast that at some times it can be a real challenge to measure them. More so, the effects of the tourism on the economic sector can be divided into three groups, i.e. direct, indirect and induced effects. Direct effects of the tourism are considered the effects that have immediate impact on the growth of GDP induced by the revenues acquired from tourism. In this paper international tourism receipts are taken into consideration to show the direct effect that the tourism can have on the GDP. The research in the paper is based on the case of Republic of Macedonia, where on an observational period of 10 years the effects of international tourism receipts on the GDP is measured. International tourism receipts are considered expenditures by international inbound visitors, including payments to national carriers for international transport. Besides the case of Republic of Macedonia a review of the international tourism revenues is presented for the countries in the Balkan in order to give an insight of the development of the tourism capacities of Republic of Macedonia.

The comparative analysis showed that Republic of Macedonia acquires the least amount of assets from the expenditures by international inbound visitors in relation to other countries taken into consideration for the research. On the other hand Republic of Macedonia realized the second best growth in the last 10 years of the international tourism receipts, only second to Serbia. This indicates that the capacities for tourism in Republic of Macedonia are still in the phase of development. This can be concluded from the data obtained from the research where the two countries which acquire the most assets from international tourism have the smallest rate of growth of these assets. In conclusion to that it can be deducted that the capacities from tourism are limited to some point, because of the limitation of the natural resources. That is the reason among many others for decreasing of the growth rate of the international tourism receipts after the certain period.

The comparative analysis showed that Republic of Macedonia can be seen as a country in the process of development of the tourism capacities. Ranking the last between the Balkan countries doesn't necessary have to mean that the tourism in Republic of Macedonia isn't developed as a sector. Other factors such as

geographical location and availability of natural resources still play a vital role in revenues acquired for tourism. Still the importance of the revenues from tourism for the economy is unquestionable. This can be seen from the regression and correlation analysis made in this paper, which shows that the impact of international tourism receipts on the GDP of Republic of Macedonia is strong and the bond between them is true. This confirms the hypothesis of this paper and also the fact that the revenues gathered from tourism can affect the growth of GDP in a proportional line, i.e. the larger the revenues from international tourism expenditures will be the larger the growth of GDP is to be expected. This and many other benefits that can be caused by the tourism revenues on the economy should make the tourism sector one of the primary strategic sectors for further development in Republic of Macedonia.

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