

TOURISM AND EMPLOYMENT – A COMPARATIVE ANALYSIS OF POLAND AND CROATIA

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Abstract

Purpose – The purpose of the article is to compare the role of tourism in generating jobs in Poland and Croatia in the years 2006-2016.

Methodology – First, the review of world reports on the contribution of tourism to employment was conducted and the methodology of measuring this contribution was presented. Next, on the basis of data published by Eurostat and World Travel & Tourism Council, three research hypotheses were verified. In the case of the first and second hypotheses Pearson's correlation coefficient was used, and in order to check the third – the map of dynamics of the impact of tourism on employment was created.

Findings – Conducted analyses allowed positive verification of the second hypothesis: correlation between the number of people employed in tourism and its contribution to total employment in Poland and Croatia is positive and statistically significant. However, the first hypothesis wasn't confirmed – positive significant dependency between the size of tourist traffic and the number of employed in tourism is only true for Poland and only refers to the number of people employed directly in travel & tourism industry. The third hypothesis had to be refuted because in the analyzed years only Poland (not Croatia) was the country which was able to make use the opportunities provided by tourism to generate jobs.

Contribution of the research – The original map of dynamics of the impact of tourism on employment was designed (based on the portfolio methods). It allowed indicating four fields: giving away everything, penetrating market, creaming-off and taking everything.

Keywords employment, travel & tourism industry, direct and total contribution, Poland, Croatia

INTRODUCTION

One of the industries of the world economic activity that employs the most staff is tourism. Nearly 10% of people employed worldwide work in tourism – twice as many as in the average economic sector. Moreover, development of tourism contributes to the increase in employment not only in tourism but also in other industries, induced by tourism demand – crafts, farming, etc. According to UNWTO each job in travel & tourism industry equals three jobs in other areas of economy [*Measuring...* 2014, 17].

The essential synthetic indicator for determination of the significance of a given industry for the economy (besides its share of GDP) is its role in generating jobs. The purpose of this article is to compare the level of this indicator for Poland and Croatia in the years 2006-2016. On the basis of Eurostat and World Travel & Tourism Council data three hypotheses were verified:

- H1A. *There is a significant positive correlation between the size of tourist movement and number of people employed in tourism in Poland and Croatia.*
- H1B. *The correlation between the number of people employed in tourism and its share in the total employment in Poland and Croatia is positive and statistically significant.*
- H1C. *Poland, unlike Croatia does not take full advantage of the opportunity tourism gives in terms of generating jobs.*

In order to verify the first two hypotheses Pearson's correlation coefficient was used, and to check the third one, the map of dynamics of tourism impact on employment was created.

Empirical analyses were preceded by the query of global reports on the impact of tourism on generating jobs.

1. THE IMPACT OF TOURISM ON GENERATING JOBS

Tourism is one of the leading industries in the world in terms of the number of employed people. In 2016 travel & tourism industry employed directly nearly 109 million people, i.e. 3.6% of all working people in the world (*Travel...* 2017, 5). It was five times more than automotive or chemicals manufacturing, four times more than mining or banking industry and twice more than financial services industry (*Benchmarking...* 2017, 2). However, considering the indirect and induced impacts, travel & tourism industry employed over 292 million people, i.e. 9.6% of all working people in the world (*Travel...* 2017, 5). This means that it generated close to every tenth job, more than automotive, chemicals, mining, banking or financial services industry (*Benchmarking...* 2017, 2). This is due to the fact that tourism is mainly services, and producing them is much more labor-intensive (less mechanized). Moreover, creating jobs in tourism is less capital-intensive than in other fields of economy. It is estimated that on the average one million USD invested in tourism generates 50 new jobs, that means twice as many as the same million invested in financial services, communications or car manufacturing sectors (Turner and Sears 2013, 67).

It is worth stressing that tourism development contributes to the increase in employment not only in tourism but also in other branches induced by tourism demand – construction, crafts, farming, etc. Moreover, employment growth leads to the increase in people's income with all economic implications for the economy (Koniczna-Domańska 2007, 141-142) since it is followed by the increase in consumer demand. Therefore it leads to development of the companies producing consumption goods (clothing, food, cars, etc.) and realizing investments (e.g. building houses), and also the enterprises supplying means of production (materials, equipment, etc.) (Seweryn 2012, 128). As a result, the employment in the aforementioned enterprises grows.

2. INDICATORS OF THE IMPACT OF TOURISM ON ECONOMY

The essential synthetic indicators for determination of the significance of a given industry for the economy are its share of GDP, and its role in generating jobs. Measuring this contribution does not cause trouble provided that the industry is specified in the national classification of economic activity. Since European countries motivated by the need to keep comparable national accounts have implemented Nomenclatures des Activites de Commune Europeene – NACE Rev. 2, compliant with International Standard Industrial Classification of all Economic Activities – ISIC Rev. 4, they do not include the name “tourism” in their national classifications specified as a separate section, division, group, class or sub-class. Therefore, the system of basic national accounts does not allow determining the contribution of tourism to GDP or generating jobs. On the other hand, there is a possibility to design the complementary account called satellite by the statisticians. Currently the UN recommended methodology of Tourism Satellite Accounting (TSA: RMF 2008) presumes including in tourism sector internal expenditures incurred by domestic and foreign visitors, and also the expenditures for services provided to tourists by governmental institutions (public expenditure). It is so the gross added value and employment in so-called tourism-characteristic sectors (hotels, airlines, tour operators, museums, etc.), in other words – direct impacts of travel & tourism industry (*Methodology... 2013, 4*).

WTTC (*World Travel & Tourism Council*) represents a wider approach and for over 20 years in cooperation with Oxford Economics has been presenting the account of the contribution of travel & tourism to GDP and employment in the world in particular regions and countries. Their methodology consist in not only the separation of direct impacts, but also indirect and induced. Indirect impacts reflect gross added value and employment at the partners of tourist traffic service entities, i.e. companies and institutions closely connected to tourism. Tourism enterprises spend the money from tourists further – to buy raw materials for catering, cleaning products in hotels or IT services for tour operators, and investments related to tourism (e.g. hotels, attractions). Moreover, the taxes paid by tourism enterprises are spent on governmental expenditures for tourism (promotion, security, etc.) (*Methodology... 2013, 3*). On the other hand, induced impacts of travel & tourism include gross added value and employment by entities partly related to tourism obtained from the expenditures of employees employed directly or indirectly in tourism. This refers to the enterprises manufacturing and offering food, clothing, also to the suppliers of media, equipment, educational services, etc. (Seweryn 2010, 251). If it was not for the initial expenditure of a tourist and at the same time the salaries of the employees attending him or her directly or indirectly, the income of these entities would not have been recorded and they would not have employed staff (Niemczyk and Seweryn 2008, 259).

3. RESEARCH METHODOLOGY

This article focuses on the role of tourism in generating jobs in Poland and Croatia. The first of the countries was chosen because of the origin of the Authors, who being professionally interested in the impact of tourism on economy observe growing significance of the industry in their home country. Croatia, owing to its values

(particularly warm and clean sea, and the climate) is one of the most tourist countries in Europe. Therefore, it seems interesting to compare the impact of tourism on employment in both countries.

What was used in the analyses were WTTC and Eurostat data for the years 2006-2016, basing on which the Authors decided to verify empirically three research hypotheses.

H1A. *There is a significant positive correlation between the size of tourist movement and number of people employed in tourism in Poland and Croatia.*

As was noticed before, development of tourism leads to growth of employment in the industry. With the growth of inbound traffic to a given country, higher number of staff is necessary to take care of the visitors. Attention should be paid to the fact that tourist demand cannot immediately adjust to the growing demand – it takes time to prepare new facilities or attractions (including the staff employed there).

H1B. *The correlation between the number of people employed in tourism and its share in the total employment in Poland and Croatia is positive and statistically significant.*

Already in 1983 J. Jafari included i.a. the growth in employment in the place of reception in economic benefits of development of tourism. However, since then a lot of researchers (i.a. D. Harrison (1992), J.J. Cukier (2002) or E. Becic and K. Crnjar (2009)) consider the role of tourism as a significant tool of improving the situation on national or local job market, most of these opinions is not supported by any empirical data. This work makes an attempt to prove it by means of numerical values.

H1C. *Poland, unlike Croatia does not take full advantage of the opportunity tourism gives in terms of generating jobs.*

Tourism in Poland has never been appreciated enough. Presuming scarce competitiveness of this country as compared to other European countries offering more attractive values for tourism (such as warmer climate and the sea like in i.a. Croatia), Polish authorities do not pay enough attention to the role of travel & tourism in economy. Therefore the entities of tourism industry in the periods of volatile prosperity cannot count on support which translates into restricting employment in this area.

In order to verify the first and the second hypotheses Pearson's correlation coefficients were used, yet in terms of H1A their level was considered with the consideration of one-year, two-year and three-year delay in employment according to the changes in tourist traffic. In order to check the third hypothesis, the map of dynamics of tourism impact on employment was created. It is based on portfolio methods which allow graphic representation in 2D of predictable results of interplay between the controllable and uncontrollable factors (Kotler 2005, 94). In this compilation the horizontal axis shows the average rate of changes (calculated as geometric average of chain indices of dynamics) of the size of employment in tourism, and the vertical axis – the average rate of changes in percentage share of tourism in the total employment in the country. The

strategic matrix created in this way allowed indicating four fields (Seweryn 2017, 226-227):

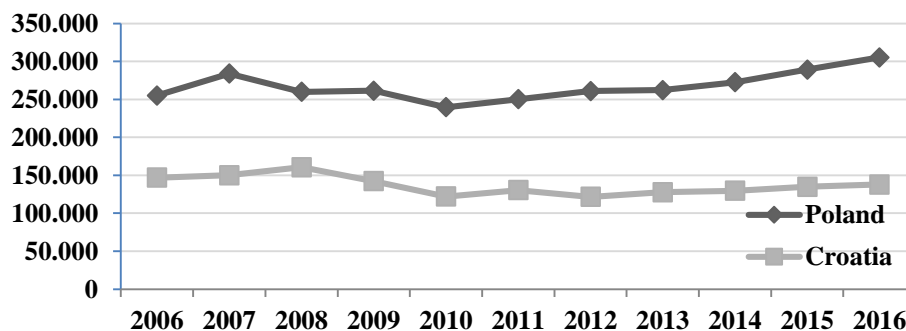
- giving away everything – a country where not only is the employment in tourism decreased, but also tourism is becoming less and less significant in generating jobs;
- penetrating market – despite the increase in employment in tourism, in this country the contribution of tourism to generating jobs is decreasing;
- creaming-off – despite the decrease in employment in tourism, in this country the contribution of tourism to generating jobs is increasing;
- taking everything – a country which makes the best use of tourism and market opportunities it creates – both the size of employment in tourism and its contribution to generating jobs are increasing.

The map was designed on the basis of both direct and total effects of tourism in generating jobs in Poland and Croatia.

4. EMPLOYMENT IN TOURISM IN POLAND AND CROATIA IN THE YEARS 2006-2016

According to WTTC methodology in 2016 travel & tourism industry in Croatia employed less than 138k people whereas in Poland 2.2 times more, i.e. over 305k people. Such ratio 1:2 between these two countries was maintained for the whole analyzed period 2006-2016 (with slight deviations up or down – figure 1). However, if in the years 2006-2009 it was less than two, after 2011 it exceeded this number every year. It was due to the fact that whereas in Poland the increases in the number of employed people were on the average 5%, in Croatia the increases were approx. 2.6%.

Figure 1: **The number of jobs generated directly in the travel & tourism sector in Poland and Croatia in the years 2006-2016**

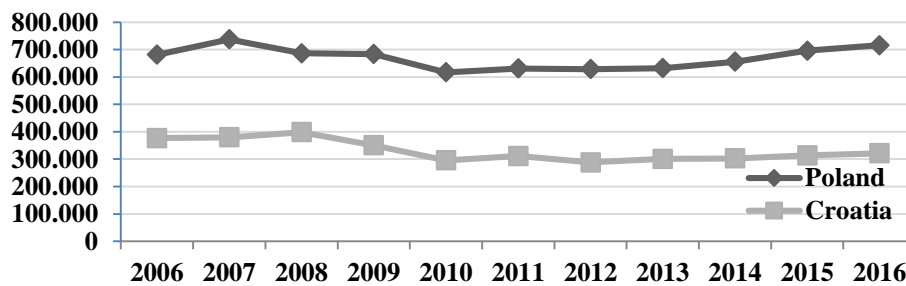


Source: own compilation based on WTTC data (<http>).

It is worth pointing that in Poland slight decreases in the number of employed in travel & tourism direct industry were observed in the times of the crisis (in 2008 by over 6%) and its “second wave” (in 2010 by nearly 6%). On the other hand, in Croatia the impact of crisis was revealed somewhat later and its influence was stronger and longer – in 2009 the drop by over 11%, in 2010 by over 14% and later in 2012 by nearly 7%.

Also including its indirect and induced impacts in 2016 travel & tourism in Poland employed more than twice as many people (almost 716k) than in Croatia (a little over 321k). Observed in the studied years changes in total employment generated by travel & tourism were nearly analogical as in the case of direct effects (figure 2).

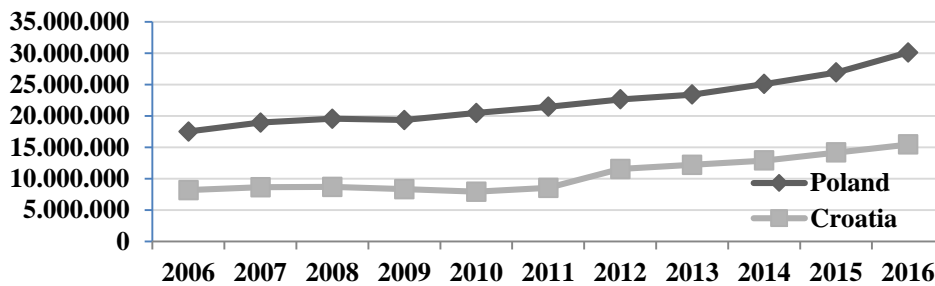
Figure 2: **Total contribution of travel & tourism to employment in Poland and Croatia in the years 2006-2016 (the number of jobs)**



Source: own compilation based on WTTC data (<http>).

Considering the size of tourist traffic it is also more or less twice as big in Poland as in Croatia – according to Eurostat data in 2016 the number of visitors to Croatia was close to 15.5 million, and the number of visitors to Poland – over 30.1 million (figure 3).

Figure 3: **Size of inbound tourist traffic to Poland and Croatia in the years 2006-2016**



Source: own compilation based on Eurostat data (<http>).

Nonetheless, the growth of the size of tourist traffic in Croatia in the studied years was higher than in Poland (89.21% vs 71.93%). What is more important, even though in both countries tourist traffic showed upward trend, the number of people employed in tourism, as observed before, was fluctuating (including significant drops). Basing solely on this, it may be presumed that the first research hypothesis (H1A) which says that *there is a*

significant positive correlation between the size of tourist movement and number of people employed in tourism in Poland and Croatia, will not be confirmed. Its thorough verification can be conducted by means of Pearson's correlation coefficients between the number of people employed in travel & tourism (direct and total) and the size of tourist traffic in both countries (table 1). It is clear that the presumed significant dependency only occurs in the case of Poland. What is more it only refers to direct employment. When total employment is considered the only correlation which is moderate yet statistically insignificant is the correlation calculated with two- and three-year delay in employment. Therefore, the first hypothesis cannot be empirically confirmed.

Table 1: **The value of Pearson's correlation coefficient between the size of tourist traffic and employment in Poland and Croatia in the years 2006-2016***

The size of tourist traffic a	Croatia	Poland
Direct employment in T&T	-0.3075	0.7043
Total employment generated by T&T	-0.4811	0.0965
Direct employment in T&T after a one-year delay	-0.1300	0.6334
Total employment generated by T&T after a year delay	-0.3045	0.0808
Direct employment in T&T after two-year delay	0.0173	0.8390
Total employment generated by T&T after two-year delay	-0.1494	0.4041
Direct employment in T&T after three-year delay	0.4396	0.8437
Total employment generated by T&T after three-year delay	0.1986	0.5761

* Significant dependencies, i.e. for which the value of correlation coefficient (for 11 years of analysis and confidence interval $p=0.05$) was higher than $|0.6|$ were marked in **bold**.

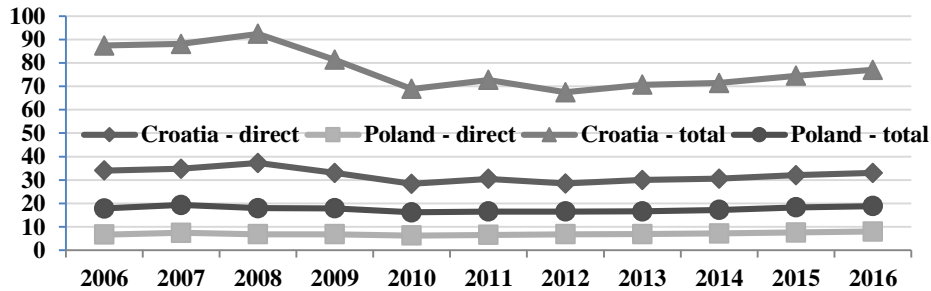
Source: own compilation based on Eurostat (<http>) and WTTC data (<http>).

It should be noted that the correlation coefficient for Croatia takes negative values which means that with the growth of traffic, the number of employed in tourism decreases – both direct and total. Only correlation calculated with two-year delay in employment turned out to be positive for direct, and with three-year – for total effects.

5. IMPACT OF TOURISM ON EMPLOYMENT IN POLAND AND CROATIA IN THE YEARS 2006-2016

The number of jobs in travel & tourism in relation to the size of population in Poland and Croatia, as well as its contribution to the total employment nationwide seems completely different than the comparison of absolute number of jobs in travel & tourism (direct and total) in both countries under study. Considering direct impacts, in Croatia there are about 32 jobs in tourism per 1000 inhabitants, whereas in Poland there are nearly five times less, i.e. about 7 jobs. Considering total impacts, this ratio equals respectively 77 and 18 jobs (figure 4), which means it is more than four times higher in Croatia than in Poland.

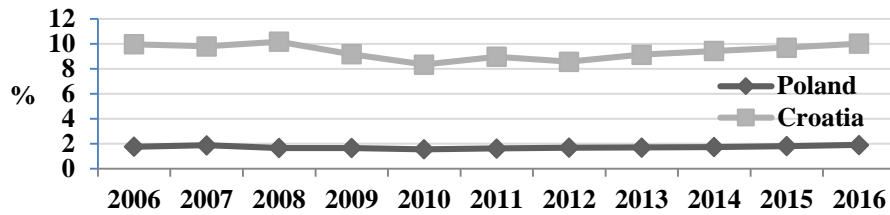
Figure 4: **The number of jobs in travel & tourism per 1000 inhabitants in Poland and Croatia in the years 2006-2016**



Source: own compilation based on WTTC data (<http>).

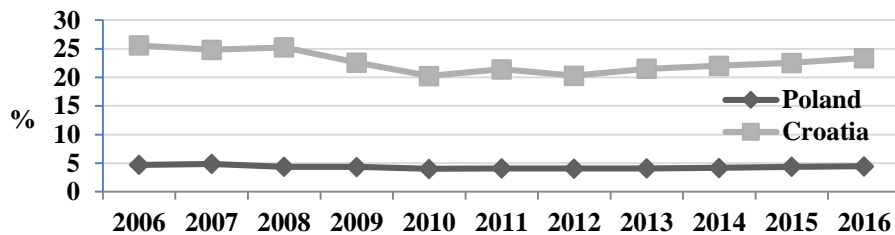
Also the share of travel & tourism jobs in the total national employment is five times lower in the case of Poland than in Croatia, and it refers both to direct (figure 5) and total (figure 6) effects.

Figure 5: **Direct contribution of travel & tourism to employment in Poland and Croatia in the years 2006-2016 (%)**



Source: own compilation based on WTTC data (<http>).

Figure 6: **Total contribution of travel & tourism to employment in Poland and Croatia in the years 2006-2016 (%)**



Source: own compilation based on WTTC data (<http>).

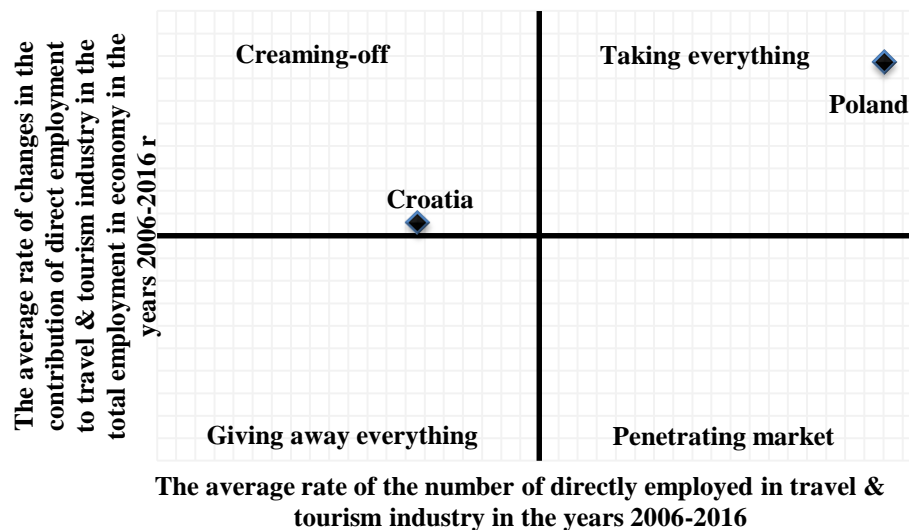
When direct contribution is concerned, in Poland its size was maintained in the analyzed period on similar level of about 2% with slight deviations up (the most in 2017 – by 6.53%) or down (in 2008 – by 11.65% and in 2010 – by 6.04%). These effects were subject to more significant fluctuations in the case of Croatia (contribution of 8.34% – 10.18%) – the most dramatic drops were observed in the period of crisis, i.e. in 2009 – by 9.84% and in 2010 – by 9.02%, and the most dramatic rise – right after it, i.e. in 2011 – by 7.55% and in 2013 – by 6.54%. It is easy to notice that these changes nearly coincided with the changes in the number of directly employed in travel & tourism industry – Pearson's correlation coefficient between these variables was 0.91697 for Poland, and for Croatia was slightly lower, i.e. 0.82808. Therefore, the second presumed research hypothesis (H1B) which says that *the correlation between the number of people employed in tourism and its share in the total employment in Poland and Croatia is positive and statistically significant*, was empirically confirmed.

Total effects relating to Poland also showed moderately stable level (c. 4-5%) – they decreased the most during the 2008 and 2010 crisis (respectively by 10.11% and by 7.5%), and increased in 2007 and 2015 (respectively by 3.62% and by 4.72%). However in the case of Croatia the changes were more visible (the share of 20.24% – 25.58%) – the highest drops were also recorded during the 2009 and 2010 crisis (respectively by 10.57 and by 10.36%), and increases in 2011 and 2013 (respectively by 5.79% by 5.99%). Pearson's correlation coefficient between the total number of employed in travel & tourism and its share of the total employment in the country was this time higher for Croatia (0.92626) than for Poland (0.88871), yet in both countries it was statistically significant which again confirmed the second hypothesis (H1B).

It is interesting to say that so-called tourism multiplier effect in both countries terms of employment was over two, which means that each job in travel & tourism industry created over two jobs in other sectors of economy. This multiplier was marginally higher in Poland but in both countries showed downward trend – in Poland from 2.67 to 2.35, and in Croatia from 2.57 to 2.33.

The map of dynamics of direct impact of travel & tourism industry on employment in Poland and Croatia in the years 2006-2016, created for the purpose of this article, allows the conclusion that these countries are located in its different fields (figure 7).

Figure 7: **The map of dynamics of direct impact of travel & tourism industry on the employment in Poland and Croatia in the years 2006-2016**



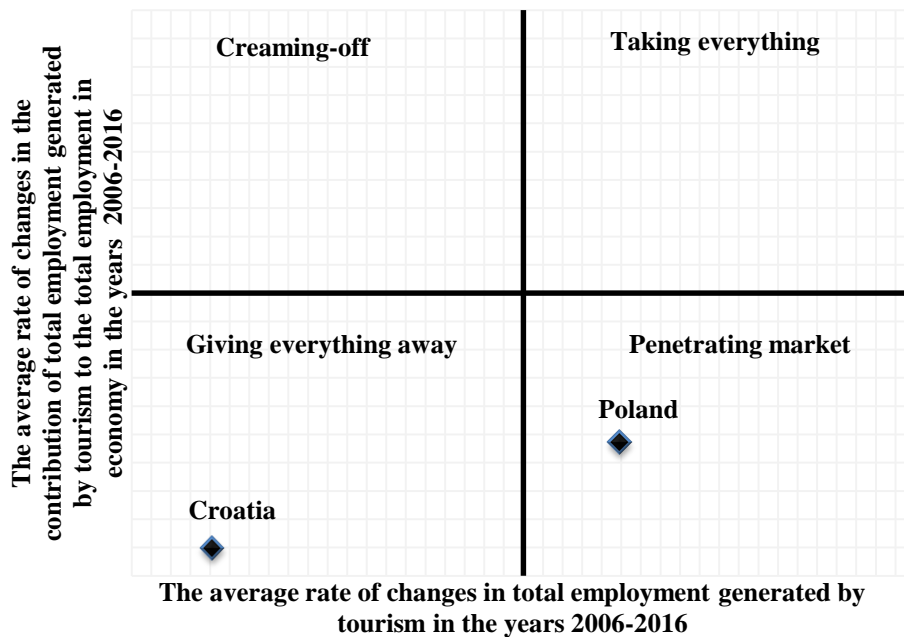
Source: own compilation based on WTTC data ([http](http://www.wttc.org)).

In particular, Croatia is the “creaming-off” country – despite the fall in direct employment in travel & tourism industry, its contribution to the economy is growing, which means that other industries in the past decade have decreased the number of employed even more or/and the unemployment has grown. Therefore this is not a beneficial situation for the country. If tourism is supposed to provide relevant effects in terms of employment, it should be supported. On the other hand, Poland classifies as “taking everything” – the number of employed directly in travel & tourism industry is growing, and additionally its contribution to the total employment is growing, too. Therefore the tourism largely contributes to generating jobs in this country and at the same time to economic growth and increase in the standard of living of its citizens. The state, however, needs to invest a lot in tourism in order to follow the development of market and resist the attacks of growing competition.

The situation seems less favorable in both countries in terms of total effects of tourism in generating jobs (figure 8). In this context Croatia is the “giving away everything” country, which means that the country is “failed” when the total contribution of tourism to economy is considered. On the domestic market there are not enough goods and services which would satisfy the needs of individuals closely or/and partly related to tourism. Thus, so-called “leaks” appear which lead to the disappearance of the phases of turnover. In particular, if tourism enterprises or any other related or local authorities or local people employed directly or indirectly in services for tourism are not able to purchase sought goods in a given country, they would buy it from producers or offerors outside this country. Hence the import and the money brought by tourists instead of circulating in Croatian economy is flowing outside – to other exporting countries (Seweryn 2012, 126-128), generating the jobs there. What should be done in the future

is considering the opportunities and chances for development of tourism related branches of economy.

Figure 8: **The map of dynamics of the total impact of tourism on employment in Poland and Croatia in the years 2006-2016**



Source: own compilation based on WTTC data (<http>).

On the other hand Poland, in terms of total effects from tourism was classified as “penetrating market”. Therefore, if the direct effects in this country are significant, then clearly other industries of Polish economy showed in the studied period a higher growth dynamics than tourism, thus contributing more to generating jobs. Yet, with the relevant policy and investments, tourism in Poland has a chance to transform into a significant factor of economic growth.

Considering the above it should be stated that the third research hypothesis (H1C), which says that *Poland, unlike Croatia does not take full advantage of the opportunity tourism gives in terms of generating jobs* is not positively verified – quite the opposite, it is Poland where the impact of tourism on employment occurred to be higher in the studied period, particularly in terms of direct effects.

CONCLUSION

Conducted analyses of the impact of tourism on employment in Poland and Croatia brought surprising results. It occurred that both the size of tourism traffic and the size of employment in tourism were larger in Poland than in Croatia. However, it is Croatia that sets priority to tourism more than Poland as the contribution to the employment in tourism (both direct and total) in the total employment in this country is higher than in Poland, which means that in other industries of its economy are less developed

Considering the presumed research hypotheses, the first one has not been positively verified – the size of tourist traffic has no impact on the size of employment in tourism in Croatia (and in Poland it only influences the number of directly employed in travel & tourism). There might be at least three reasons of the situation. Firstly, the number of people employed in Croatian tourism is big enough to handle the growing number of visitors. Secondly, Croatia as a country of well-developed tourism function sets priority more to the quality than the number of employed people. And finally, Croatia responds to market changes definitely slower than Poland.

The second hypothesis was confirmed – the correlation between the number of employed in tourism and its contribution to the total employment in Poland and Croatia is positive and statistically significant. However, the third hypothesis was not verified positively – it is not Croatia, but Poland that is able to take advantage of the opportunities that tourism gives in terms of generating jobs. On the map of dynamics, Poland was classified as the “taking everything” country (in terms of direct effects) and as “penetrating market” (in terms of total effects), whereas Croatia – respectively as “creaming-off” and “giving away everything”. Such a result is likely to be the consequence of the economic and political crisis, and underdeveloped branches of Croatian economy other than tourism.

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