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Index of destination attractiveness as a tool for destination attractiveness assessment

Abstract

Tourism attractions are widely recognized as the major determinants of the destination competitiveness. Global tourism market is becoming fiercely competitive environment and tourism destinations are under extreme pressure to rejuvenate and to enhance their attractiveness in order to remain competitive. This paper has two main goals. First goal of the paper is to advance existing body of knowledge from the field of destination attractiveness. Second goal is to construct and empirically test methodology for the destination attractiveness assessment. This is achieved through the calculation of index of destination attractiveness (IDA), which is a managerial tool that could be used for quantitative description of destination attractiveness level. This paper presents an example of IDA values calculation for six Croatian seaside counties and for Dubrovnik-Neretva County, located in the southern part of Croatia.

Key words:

tourism destination; destination attractiveness; destination competitiveness; index of destination attractiveness; Dubrovnik-Neretva County, Croatia

Introduction

Global tourism market is becoming ever more competitive environment for tourism destination, due to large number of emerging destinations putting the mature ones under pressure to rejuvenate and to enhance their quality in order to remain competitive. Therefore, tourism destination should be innovative and continuously seek new sources of comparative advantages. Those comparative advantages, in the form of tourism resources and through the adequate destination management and marketing strategies, could be transformed into tourism attractions and become competitive advantages which can provide long term sustainable tourism growth and development for the tourism destination and therefore, improve its market positions.

Many authors (Gunn, 1979; Lew, 1987; Mihalič, 2000; Vengesai, 2003; Pikkemaat, 2004; Ritchie and Crouch, 2005; Kim & Agrusa, 2005; Yoon & Uysal, 2005; Um,

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Chon & Ro, 2006; Krešić, 2007; Omerzel & Mihalič, 2008; Cracolici & Nijkamp, 2009; Leask, 2010) have recognized importance of tourism attractions as being one of the most important determinants of destination competitiveness. Tourism attractions are defined as those attributes of tourism destination which, with their specific features, attract or motivate tourists to visit particular tourism destination. Tourism attractions determine direction as well as intensity of tourism development on the specific tourism receptive area (Kušen, 2002). Tourists do not have the motive or the desire to travel to particular tourism destination with poor supply and which they do not perceive as attractive. To be successful on the international tourism market, destinations should ensure that their overall level of attractiveness is at least equal, or preferably higher, than the attractiveness level of its competitors.

Destination attractiveness research is closely associated to the analysis of destination image since the notions of destination image and destination attractiveness are closely tied and conceptually interconnected, whereas the level of destination attractiveness is largely influenced by the destination image and vice versa. As Lew (1987) suggests, image is the most important aspect of a tourism attraction from a marketing point of view. It also has a major impact on the cognitive experience of an attraction. This area of research is relatively recent. However, in the last three decades since the first studies emerged, this topic has become one of the most popular in the tourism research literature (Pike, 2002). In his comprehensive review of 142 papers dealing with destination image analysis, Pike found that only 23 papers (16%) attempted to measure destination image (some of the most recent and therefore not included in Pike's review are: Formica, 2002; Pikkemaat, 2004; Formica & Uysal, 2006). This is not surprising since the notions of destination image and destination attractiveness are very fluid and intangible, and it is difficult to construct adequate indicators which would quantitatively describe the level of destination attractiveness or, in other words, quantify the magnitude of the destination appeal on potential tourists.

This paper has two main goals. First goal of the paper is to advance the existing body of knowledge from the area of the destination attractiveness since this research area is still under investigated, especially in Croatia where there is still very limited number of scientific papers dealing with the destination attractiveness issues. Second goal of this paper is to construct and to test the applicability of the Index of Destination Attractiveness (IDA), as an indicator which could be used to quantify the level of destination attractiveness. IDA index should identify the most important tourism attractions in particular destination, determine their attractiveness level and allow quantification and comparison of different tourism attractions within the same destination or the same tourism attraction across different destinations.

This paper begins with definition of tourism attractions and with description of their importance for the tourism destination competitiveness. This is followed by the presentation of the methodology for the IDA index calculation. Next, the IDA index is calculated separately for Dubrovnik-Neretva County and for six other Croatian seaside

counties to demonstrate that the proposed methodology is applicable in practice and some concluding remarks concerning the validity of proposed methodology are given. Finally, obtained results were used to compare attractiveness of both analyzed areas and to determine what causes these differences.

Defining tourism attractions

In order to understand and to define destination attractiveness it is important to distinguish between the notions of tourism attraction and destination attractiveness. As stated before, tourism attractions can be defined as specific destination features (such as climate, landscape features, activities in destinations etc.) which have the ability to attract visitors. On the other hand, destination attractiveness has a more cognitive connotation as it is a mental construct that exists only in the minds of the potential visitors. It can be said that tourism attractions are the physical manifestation of the destination attractiveness and the destination attractiveness is a mental image of the destination that is formed on the basis of the physical attractions available in the destination. Along this line of thought, Mayo and Jarvis (1981) argue that attractiveness can be defined as the perceived ability of the destination to deliver individual benefits. Additionally, Hu and Ritchie (1993) define destination attractiveness as the reflection of the feelings, beliefs and opinions that an individual has about the destination's perceived ability to satisfy the special vacation needs of that person.

There are different definitions of tourism attractions. Gunn (1972, 1998) suggests that without tourism attractions there would be no tourism and Lew (1987) adds that vice versa also applies, that is, without tourism there would be no tourism attractions. Although both of those statements seem self evident they are nevertheless important because they underline the great importance of tourism attractions as a prerequisite for tourism development in a particular destination. Lew (1987) defines tourism attractions as all the elements of tourism destination which are attracting tourists from their place of permanent residence and they refer to the geographic and climate characteristics of a particular location, activities in which tourists can participate as well as experiences they are going to remember.

Gartner (1996) defines tourism attractions as the center of tourist experience and he also emphasizes the importance of destination management by saying that virtually any feature of a destination could become tourism attraction if it is correctly marketed and adequately presented. Kušen (2002) defines tourism attractions as tourism resources which could attract, or are already attracting tourists to visit particular tourism destination. Ritchie and Crouch (2005) in their model of the destination competitiveness put the tourism attractions in the central position. They argue that the tourism attractions are the main element of the destination's appeal and that they are the principal factor which motivates tourists to visit a particular tourism destination. Leask (2010) stresses the importance of tourism attractions by saying that they play a crucial role in the success of a tourism destination, where they act as key motivators for visits and as resources for local communities.

Main problem concerning the definition of tourism attractions is the fact that there are number of factors that can significantly affect visitation of particular area but cannot be defined as tourism attractions. Those factors are economic (foreign exchange rates and costs of living); political (war and terrorism risks), socio-demographic (friendliness of local people, courtesy of public service employees) factors and risks of natural disasters (droughts, tsunamis, earthquakes etc). This view is supported by the studies reviewed by Kim and Morrision (2005) who concluded that factors like actual travel experience with a tourism destination, changes in the political or social environments or socio-demographic factors, which cannot be considered as tourism attractions, can significantly affect visitation of an area. Therefore, sometimes it is difficult to distinguish between attractions and non-attractions. But, regardless of the adopted definition, there is a central element that can be recognized or extracted from every proposed definition. The element common to all definitions, is the ability to attract visitors. The word *attractiveness* itself originates from the Latin verb "atrathere", meaning – to attract. So it can be argued that if some characteristic of tourism destination is to be considered tourism attraction it necessarily must have features that are interesting and attractive to potential tourists. Therefore, most researchers agree that attractions are the basic element on which tourism is developed (Gunn, 1987).

Classification of tourism attractions

Tourism attractions are very heterogeneous category and their essence can be very different. For example, scenic beauties, night life, interesting historic sites or market ties with the receptive destination (VFR – visiting friends and relatives) are all examples of tourism attractions, even though they do not have much in common. Formica (2000) argues that even those services that develop around the attraction often become attractions themselves. For example, a mean of transportation could be an important attraction when it is a cruise ship or a historical train. Lodging facilities are perceived as the important attractions if famous people have stayed there. Therefore, it is important to classify and consolidate numerous tourism attractions into fewer categories, which have higher degree of homogeneity in order to make the complex tourism system more transparent and to study those attractions more easily.

In the tourism literature, numerous classifications of tourism attractions can be found. Basic classification of tourism attractions is the one proposed by the UNWTO (McIntyre, Hetherington & Inskeep, 1993), which classifies all destination attractiveness factors into several following categories:

- i. Natural tourist resources;
- ii. Cultural and historical heritage in tourism;
- iii. Climate conditions;
- iv. Infrastructure;
- v. Tourist services and facilities.

Although widely accepted, this classification is often considered to be insufficiently detailed. Therefore, in the scientific literature numerous additional classifications of

tourism attractions can be found. They differentiate according to the degree of classification details as well as to the basis for the classification.

Lew (1987) suggests three major tourism attraction typologies or typology approaches:

- i. The ideographic approach systematizes tourism attractions according to their observable features rather than on abstract and universal characteristics. The best example of this typology is classification of attraction individually identified by name. This typology is mainly applied in studies oriented toward smaller areas.
- ii. The organizational approach does not systematize attractions according to their observable features but focuses on capacity of attraction, attraction surrounding environment and the time of duration of attraction. This approach is most frequently used in tourism research.
- iii. The cognitive approach systematizes tourism attractions based on the perceptions and experiences of the tourists regarding those attractions. This approach is commonly mixed with the ideographic approach but the difference is clear. As Lew (1987) suggests, a "camping ground" is clearly ideographic attraction but "camping" as experience is more a cognitive attraction.

One of the most recent classifications of tourism attractions which is also widely accepted by the scholars, is the classification developed by Ritchie and Crouch (2005), where all tourism attractions are divided into seven main categories:

- i. Physiography and climate;
- ii. Culture and history;
- iii. Mix of activities;
- iv. Special events;
- v. Entertainment;
- vi. Superstructure;
- vii. Market ties.

According to these authors, physiography and climate includes natural and climatic features of a destination. These destination attributes are very important for the overall aesthetic appeal of a destination. According to the authors, main characteristic of the physiography and climate is that even though they are very important for the overall level of destination attractiveness, destination managers have little or no control over these features. Culture and history refers to the set of destination attributes that have the ability to meet the intellectual needs of visitors. These elements include tradition and life style of destination residents, gastronomy of the destination, architectural characteristics, and language spoken by residents as well as many other destination features that have the ability to provide a unique and non-routine experience. Mix of activities refers to the combination of activities that are available in destination in which visitors can actively participate. This group of destination attractions is becoming very important for the overall level of destination attractiveness as visitors are becoming more active during their stay in destination. This is also a group of tourism attractions that destination managers can fully control. Special events refers to the wide variety of

events that destination can organize in order to attract visitors and to ensure distinctiveness on the tourism market. The magnitude of these events can vary from small events of local significance to the mega events that have international importance. Entertainment as a tourism attraction category includes destination features such as night life, gambling, theaters, concerts etc. Those attractions, to a certain degree, overlap with the special events and activities offered in destination. The tourism superstructure is a set of tourism destination features that refers to the variety of tourism facilities in which different destination activities take place (accommodation, entertainment facilities etc). Finally, market ties, as a tourism attraction category, describes personal and professional relations that can exist between tourism destination and generating markets and that could also be a very strong motivator to visit particular tourism destination.

Tourism attractions, classified in this manner, are only one element within the comprehensive model of destination competitiveness developed by Ritchie and Crouch. Other elements include supporting factors and resources, destination management, destination policy, planning and development and qualifying and amplifying elements. Aforementioned classification of tourism attractions has several advantages. First of all, it classifies all tourism attractions in systematic and comprehensive manner. Secondly, as a part of the wider concept of tourism destination competitiveness, it clearly defines important role that tourism attractions have in the process of achieving destination competitiveness. By connecting tourism attractions with destination competitiveness, the authors have set a theoretical framework for the destination attractiveness research which is also pursued in this paper.

Index of destination attractiveness (IDA)

IDA is a part of composite indicators group, which are able to combine a number of related measures into a single measure (Smith, 1987). Its main purpose is the quantification of the destination attractiveness level, by measuring the attractiveness of every individual tourism attraction and aggregating these values into a single value. This line of thought is also supported by Hu and Wall (2005), who argued that every individual attraction contributes to the overall attractiveness of the whole destination area, and that the competitiveness of a destination rests substantially with each attraction's performance. IDA calculation is based on the assumption that tourists, during their decision making process, are associating different destination features (every destination feature being a potential tourism attraction) with one or more of their beliefs and feelings. This process of using destination features, which are associated with tourist's beliefs and feelings, as a criterion for destination choice, is referred to as "abstraction" (Seddighi & Theocharous, 2002). Once the process of abstraction is completed, tourists are aggregating their perceptions of the destination in the final attitudes towards destination. Those tourism features, which are perceived by the tourists as most important (or most interesting) and which evoke strongest and most positive feelings among tourists, can be defined as most important tourism attractions and therefore should have higher values of IDA index.

There are several benefits from calculating IDA values. First of all, IDA would be helpful for determining attractiveness of individual tourism attraction group (i.e. attractiveness of destination climate and natural features, of its cultural and historic attractions, activities in destination etc...) and therefore for determining main pull factors in the particular destinations. In this manner it is possible to analyze destination attractiveness structure or, in other words, to determine relative importance of different destination attributes for the overall destination attractiveness. Besides the structure analysis of the destination attractiveness, IDA values can also be compared across different destinations in order to determine which destination is more attractive and to compare attractiveness structures of different destinations. As Kim, Guo and Agrusa (2005) argue, destination managers want to know potential or actual tourists' perceptions of attractiveness of their destinations and where their destination is positioned among competitive destination. By calculating and analyzing IDA values, a difference between attractiveness levels of different destinations can be determined and destination managers, through different destination policy measures, can try to reduce this difference and make their destination more attractive.

While comparing IDA values of different destinations, it is important that compared destinations are providing similar type of tourism product (it would be inappropriate to compare maritime and mountain tourism destination since they produce different tourism products) and that they have the same or similar main generating markets (in order for attractiveness factors to be comparable between different destinations, their generating markets should have similar characteristics in terms of travel motivation). It can be concluded that, since destination competitiveness is very much influenced by destination attractiveness, any managerial tool which would enable destination managers to measure destination attractiveness, can be very useful.

Research setting

Dubrovnik-Neretva County is the southernmost county of Croatia. It covers 9,273 km² (12.4% of Croatian territory) of which 1,781 km² belongs to land and 7,491 km² to sea surface. The coastline of Dubrovnik-Neretva County is 1,025 km long. It's economy largely depends upon tourism. In 2007, Dubrovnik-Neretva County recorded slightly more than 11 millions tourist overnights and around 1 million tourist arrivals, and participated with 8% in total tourist overnights and with 9% in total tourist arrivals in Croatia. The average length of stay in Dubrovnik-Neretva County during 2007, is 4.5 days which is slightly shorter compared to the Croatian average of 5 days.

Dubrovnik-Neretva County was selected as the most appropriate unit of analysis because, according to TOMAS 2007 summer research, some important characteristics of tourism in this region are significantly different compared to tourism that is taking place in other Croatian seaside counties. First of all, Dubrovnik-Neretva County is predominantly long haul destination while other six Croatian seaside counties are predominantly short haul destinations. Therefore, the above-average number of tourists is coming to Dubrovnik-Neretva County by air transport. This has two main implica-

tions. Firstly, majority of tourists in Dubrovnik-Neretva County comes through tour operators or travel agencies, as a part of packaged tours. Secondly, national structure of visitors in Dubrovnik-Neretva County is somewhat different compared to national structure of visitors in other Croatian seaside counties. In 2007. top three generating markets for Croatian seaside counties were Germany, Slovenia and Italy, while at the same time three most important generating markets for Dubrovnik-Neretva County were France, Great Britain and Germany. Secondly, socio-demographic profile of tourists visiting Dubrovnik-Neretva County is different compared to socio-demographic profile of tourists staying in other seaside counties. In Dubrovnik-Neretva County there is above average number of highly educated tourists, who have higher level of income and who come from cities with more than 100,000 inhabitants. Consequently, the average daily expenditure of tourists staying in this region is considerably higher than the average daily expenditure of tourists staying in six other seaside counties. Finally, there are also important differences between Dubrovnik-Neretva County and other Croatian seaside counties in terms of travel motivation. Culture, natural beauties and culinary offer as a travel motivators have much greater importance for tourists staying in Dubrovnik-Neretva County while other activities in destination are less important compared to other Croatian seaside counties.

Given the previously described differences, it was concluded that Dubrovnik-Neretva County provides very good research setting for testing the applicability of IDA index since differences in socio-demographic profile of tourists, in travel motivation, differences in average daily expenditure, travel characteristics etc. should also be reflected in the calculated values of IDA index. Therefore, due to different characteristics of tourism product as well as different preferences of tourists, the level of attractiveness (expressed as a IDA index value) of Dubrovnik-Neretva County, should be different from the level of attractiveness of other Croatian seaside counties.

Data collection and research methodology

Variables used in this research were adopted from TOMAS Summer 2007. research, a longitudinal research on attitudes and expenditures of tourists in Croatian coastal destinations, conducted by the Institute for Tourism, Zagreb. Variables were identified based on the expert's evaluation of importance of the particular elements of the tourist supply for the tourism destination product in Croatian coastal tourism destinations. There were 19 variables used in the research (Table 1). The research was conducted in period from June 15th to 30th September 2007. The study was conducted in seven coastal counties in Croatia. A stratified random sample was used in the research. The framework for the sample design was the number of the tourist overnights in 7 coastal counties in the period of June – September 2006. (Source: monthly data of Central Bureau of Statistic of Republic of Croatia). The stratification was conducted according to the counties, to the types of accommodation facilities, and the tourist's countries of origin. The sample covered four types of accommodation facilities (hotels, tourist resorts, camps and private accommodation) which generated more than 93% of tourist overnights in 7 coastal counties in period June – September 2006., and 13 most

important generating markets according to the number of tourist overnights in coastal counties. The instrument for data collection was the questionnaire printed on the A3 paper format, and the method of data collection was the personal interview. The variable choice as well as their grouping was in accordance with the classification of tourism attractions proposed by Ritchie and Crouch (2005). There were total of 4,915 questionnaires collected.

Table 1
LIST OF THE RESEARCH VARIABLES

| No. | Variable label | Variable name |
|-----|----------------|--|
| 1. | V1 | Image of the country |
| 2. | V2 | Feeling of personal safety |
| 3. | V3 | Quality of the country's promotion |
| 4. | V4 | Climate |
| 5. | V5 | Scenic beauty |
| 6. | V6 | Accessibility |
| 7. | V7 | Quality of information in destination |
| 8. | V8 | Urban and architectural harmony of the place |
| 9. | V9 | Environmental preservation |
| 10. | V10 | Tidiness of the place |
| 11. | V11 | Friendliness |
| 12. | V12 | Quality of accommodation |
| 13. | V13 | Quality of restaurants |
| 14. | V14 | Variety of restaurants |
| 15. | V15 | Presentation of cultural heritage |
| 16. | V16 | Entertainment opportunities |
| 17. | V17 | Sport and recreation opportunities |
| 18. | V18 | Shopping opportunities |
| 19. | V19 | 'Value for money' |

Tourists were asked to evaluate influence of the selected variables on their destination choice on the six point Likert scale. By evaluating influence of every variable on their destination choice, respondents were, in fact, evaluating the level of attractiveness of those tourism attractions, described by the variables used in the research. Collected data were analyzed by using confirmatory factor analysis (CFA). There are several reasons for the CFA application:

- i. CFA provides a test of the previously defined relationship between the variables,
- ii. CFA can produce quantitatively defined indicators that do not rely on subjective impressions or judgments of the researchers, with the exception of naming the factors (Smith, 1987) and
- iii. CFA produces indices that are statistically independent of each other, which is quality known as orthogonality.

After CFA application, the next step is to obtain weightings from the matrix of factor loadings after the Varimax rotation. This is possible since the squares of factor loadings represent the proportions of variable variance explained by the factor. Therefore, weightings are representatives of the variable variance explained by the corresponding extracted factor. So, if the extracted factor explains high proportion of the variable variance, this variable fits neatly into extracted factor solution, and therefore should have higher weightings in the IDA values. Weightings are important because they assign different relative importance to every variable and also because they allow aggregation of variables into intermediate composite indicators (factors) and aggregation of intermediate composite indicators into a single IDA value. In order to account for all the variance explained by the particular factor, the variance of the variables that did not have high loadings on that factor, is represented through the residual weight, that is assigned to every factor. This residual weight allows the sum of all weights within one factor to be equal to 1 and therefore the value of particular factor is not influenced by the number of variables that have high loadings on this factor. After the weightings are defined, it is possible to aggregate initial variables into intermediate composite indicators or factors. The intermediate composite indicators (or factors) are finally aggregated into single indicator using weights which represent proportion of the dataset variance explained by that factor. Finally, these weightings are multiplied by the variable mean scores in order to obtain IDA index values. According to Nardo, Saisana, Saltelli, Tarantola, Hoffman and Giovannini (2005), values of intermediate composite indicators (or factors) can be calculated by multiplying variable mean by the corresponding weight of the variable and summing these products. Therefore, an equation can be written that calculates values of intermediate composite indicators as well as value of final aggregated composite indicator or IDA value: $IDA = \sum_{i=1}^n \alpha_i \bar{X}_i$, where α_i represents weight of particular variable, \bar{X}_i is the mean score of that same variable and the sum of all weights must always be equal to 1 ($\sum_{i=1}^n \alpha_i = 1$).

Data analysis

The CFA was applied on two datasets. The first dataset (dataset 1) consisted of data collected from respondents (foreign and domestic tourists) from all of Croatian seaside counties, except Dubrovnik-Neretva County, in period June-September, 2006 (N=4,066 or 83% of the collected data). The second dataset (dataset 2) consisted of data collected from respondents (foreign and domestic tourists) from Dubrovnik-Neretva County, in period June-September 2006 (N=849 or 17% of collected data). By applying CFA, 19 original variables have been reduced to 6 factors which explained more than 73% of the variance from the first dataset (all seaside counties except Dubrovnik-Neretva County) and more than 71% of the variance from the second dataset (Dubrovnik-Neretva County).

Kaiser-Meyer-Olkin measure of sampling adequacy has shown that both datasets were appropriate for the CFA application (KMO=0.934 for dataset 1 and KMO = 0.908 for dataset 2). The application of Kaiser's criteria for factor extraction (keeping the factors with eigenvalue greater than 1) resulted with three factor solutions in both datasets. However, three factors solutions were dropped since several variables had higher

cross-loadings on two or three factors. The application of more liberal Jolliffe (1987) criteria (keeping the factors with eigenvalue greater than 0.7) resulted with six factors solutions for both datasets. After orthogonal Varimax rotation it was concluded that the most acceptable interpretation is achieved by retaining six factors solutions for both datasets. Six factors explained 73.4% of the total variance in dataset 1 and 71.6% of the variance in the dataset 2. Factors extracted from both datasets and their variable loadings are presented in Table 2.

Table 2

EXTRACTED FACTORS AND THEIR VARIABLE LOADINGS FOR DATASET 1 AND DATASET 2

| Variables | Factors - dataset 1 | | | | | | Factors - dataset 2 | | | | | |
|---|---------------------|--------------|--------------|--------------|--------------|--------------|---------------------|--------------|--------------|--------------|--------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| V1 - Image of the country | 0.125 | 0.176 | 0.160 | 0.228 | 0.114 | 0.795 | 0.772 | 0.089 | 0.127 | 0.135 | 0.082 | 0.142 |
| V2 - Feeling of personal safety | 0.240 | 0.088 | 0.352 | 0.059 | 0.252 | 0.672 | 0.734 | 0.160 | 0.067 | 0.269 | 0.028 | 0.197 |
| V3 - Quality of Country's promotion | 0.095 | 0.278 | 0.205 | 0.442 | 0.030 | 0.624 | 0.803 | 0.082 | 0.154 | 0.081 | 0.098 | 0.072 |
| V4 - Climate | 0.262 | 0.075 | 0.689 | -0.047 | 0.209 | 0.319 | 0.229 | 0.231 | 0.099 | 0.166 | -0.065 | 0.788 |
| V5 - Scenic beauty | 0.218 | 0.076 | 0.737 | 0.126 | 0.270 | 0.192 | 0.176 | 0.123 | 0.008 | 0.230 | 0.219 | 0.789 |
| V6 - Accessibility | 0.188 | 0.203 | 0.708 | 0.271 | 0.127 | 0.120 | 0.460 | 0.444 | 0.264 | -0.088 | 0.219 | 0.251 |
| V7 - Quality of information in destination | 0.198 | 0.281 | 0.422 | 0.602 | 0.119 | 0.197 | 0.630 | 0.265 | 0.235 | 0.107 | 0.285 | 0.077 |
| V8 - Urban and architectural harmony of the place | 0.165 | 0.246 | 0.096 | 0.732 | 0.252 | 0.237 | 0.240 | 0.082 | 0.131 | 0.294 | 0.743 | 0.081 |
| V9 - Environmental preservation | 0.153 | 0.132 | 0.194 | 0.338 | 0.773 | 0.188 | 0.185 | 0.072 | 0.135 | 0.725 | 0.392 | 0.151 |
| V10 - Tidiness of the place | 0.270 | 0.157 | 0.302 | 0.134 | 0.778 | 0.117 | 0.191 | 0.332 | 0.113 | 0.684 | 0.203 | 0.286 |
| V11 - Friendliness | 0.528 | 0.146 | 0.366 | 0.080 | 0.470 | 0.068 | 0.188 | 0.419 | 0.105 | 0.621 | 0.153 | 0.242 |
| V12 - Quality of accommodation | 0.718 | 0.116 | 0.314 | 0.055 | 0.294 | 0.163 | 0.216 | 0.777 | 0.078 | 0.283 | -0.009 | 0.195 |
| V13 - Quality of restaurants | 0.811 | 0.182 | 0.220 | 0.241 | 0.141 | 0.152 | 0.150 | 0.832 | 0.153 | 0.208 | 0.167 | 0.170 |
| V14 - Variety of restaurants | 0.747 | 0.270 | 0.142 | 0.336 | 0.088 | 0.140 | 0.101 | 0.683 | 0.310 | 0.105 | 0.367 | 0.065 |
| V15 - Presentation of cultural heritage | 0.309 | 0.397 | 0.034 | 0.613 | 0.158 | 0.175 | 0.118 | 0.227 | 0.258 | 0.151 | 0.719 | 0.060 |
| V16 - Entertainment opportunities | 0.152 | 0.786 | 0.172 | 0.234 | 0.121 | 0.074 | 0.168 | 0.181 | 0.764 | 0.071 | 0.213 | 0.097 |
| V17 - Sport and recreational opportunities | 0.103 | 0.826 | 0.179 | 0.208 | 0.100 | 0.075 | 0.119 | 0.095 | 0.842 | 0.075 | 0.099 | 0.189 |
| V18 - Shopping opportunities | 0.191 | 0.703 | -0.028 | 0.214 | 0.074 | 0.251 | 0.199 | 0.167 | 0.776 | 0.137 | 0.122 | -0.149 |
| V19 - Value for money | 0.386 | 0.462 | 0.190 | -0.175 | 0.378 | 0.258 | 0.242 | 0.443 | 0.381 | 0.416 | -0.289 | -0.041 |
| Variance explained | 2.72 | 2.66 | 2.43 | 2.10 | 2.02 | 2.02 | 2.87 | 2.75 | 2.47 | 2.02 | 1.80 | 1.69 |
| Explained/ total variance | 0.20 | 0.19 | 0.17 | 0.15 | 0.15 | 0.15 | 0.21 | 0.20 | 0.18 | 0.15 | 0.13 | 0.12 |

* Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

There were six factors extracted in each dataset. The factors were named as follows:

| FACTOR NAME | VARIABLES LOADED (dataset 1) | VARIABLES LOADED (dataset 2) |
|--|--|--|
| Accommodation and catering facilities (FAC1- dataset1; FAC2 – dataset 2) | <ul style="list-style-type: none"> • Quality of restaurants • Variety of restaurants • Quality of accommodation • Friendliness | <ul style="list-style-type: none"> • Quality of restaurants • Quality of accommodation • Variety of restaurants • Value for money • Friendliness |
| Activities in destination (FAC2 – dataset 1; FAC3 – dataset 2) | <ul style="list-style-type: none"> • Sport and recreational opportunities • Entertainment opportunities • Shopping opportunities • Value for money | <ul style="list-style-type: none"> • Sport and recreational opportunities • Shopping opportunities • Entertainment opportunities |
| Natural features (FAC3 – dataset 1; FAC6 – dataset2) | <ul style="list-style-type: none"> • Scenic beauty • Accessibility • Climate | <ul style="list-style-type: none"> • Scenic beauty • Climate |
| Destination aesthetics (FAC4 – dataset 1; FAC5 – dataset 2) | <ul style="list-style-type: none"> • Urban and architectural harmony of the place • Presentation of cultural heritage • Quality of information in destination | <ul style="list-style-type: none"> • Urban and architectural harmony of the place • Presentation of cultural heritage |
| Environmental preservation (FAC5 – dataset1; FAC4 – dataset 2) | <ul style="list-style-type: none"> • Tidiness of the place • Environmental preservation | <ul style="list-style-type: none"> • Environmental preservation • Tidiness of the place |
| Destination marketing (FAC6 – dataset 1; FAC 1 – dataset 2) | <ul style="list-style-type: none"> • Image of the country • Feeling of personal safety • Quality of country's promotion | <ul style="list-style-type: none"> • Quality of country's promotion • Image of the country • Feeling of personal safety • Quality of information in destination • Accessibility |

The construct validity was evaluated by testing the existence of convergent and discriminant validity of the model. The convergent validity was tested by calculating the Cronbach's alpha values. The Cronbach's alpha values were higher than 0.7 for all extracted factors which, according to Hair, Black, Babin and Anderson (2010), indicates satisfying degree of consistency of the variables which loaded on the particular factor. On the other hand, in this case the discriminant validity tests were not necessary because the orthogonal Varimax rotation was applied, which a priori implies that extracted factors do not overlap conceptually. Overall, the construct validity was confirmed which implies that six extracted factors, in both datasets, are appropriately reflecting their underlying constructs of destination attractiveness.

After obtaining factors for both datasets through CFA, next step is to calculate weightings for every variable as well as weightings for every intermediate composite indicator (factor). They allow aggregation of variables into intermediate composite indicators and aggregation of intermediate composite indicators in the single IDA index value. The sum of weightings for all variables loaded into one intermediate composite indicator (factor) and also for all intermediate composite indicators (factors) is equal to 1. To

accomplish this, those variables that have low loadings on particular factor are represented jointly, through the residual weightings that are assigned to every factor. In this manner, the IDA values are not influenced by the number of variables that have high loadings on the particular factor. The calculated weightings for variables and intermediate composite indicators are shown in the table 3.

Table 3
WEIGHTINGS FOR VARIABLES AND INTERMEDIATE COMPOSITE INDICATORS (FACTORS)

| Variables | Variable weightings - dataset 1 | | | | | | Variable weightings - dataset 2 | | | | | |
|---|---------------------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| V1 - Image of the country | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.31 | 0.21 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 |
| V2 - Feeling of personal safety | 0.02 | 0.00 | 0.05 | 0.00 | 0.03 | 0.22 | 0.19 | 0.01 | 0.00 | 0.04 | 0.00 | 0.02 |
| V3 - Quality of country's promotion | 0.00 | 0.03 | 0.02 | 0.09 | 0.00 | 0.19 | 0.22 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 |
| V4 - Climate | 0.03 | 0.00 | 0.20 | 0.00 | 0.02 | 0.05 | 0.02 | 0.02 | 0.00 | 0.01 | 0.00 | 0.37 |
| V5 - Scenic beauty | 0.02 | 0.00 | 0.22 | 0.01 | 0.04 | 0.02 | 0.01 | 0.01 | 0.00 | 0.03 | 0.03 | 0.37 |
| V6 - Accessibility | 0.01 | 0.02 | 0.21 | 0.03 | 0.01 | 0.01 | 0.07 | 0.07 | 0.03 | 0.00 | 0.03 | 0.04 |
| V7 - Quality of information in destination | 0.01 | 0.03 | 0.07 | 0.17 | 0.01 | 0.02 | 0.14 | 0.03 | 0.02 | 0.01 | 0.04 | 0.00 |
| V8 - Urban and architectural harmony of the place | 0.01 | 0.02 | 0.00 | 0.25 | 0.03 | 0.03 | 0.02 | 0.00 | 0.01 | 0.04 | 0.31 | 0.00 |
| V9 - Environmental preservation | 0.01 | 0.01 | 0.02 | 0.05 | 0.30 | 0.02 | 0.01 | 0.00 | 0.01 | 0.26 | 0.09 | 0.01 |
| V10 - Tidiness of the place | 0.03 | 0.01 | 0.04 | 0.01 | 0.30 | 0.01 | 0.01 | 0.04 | 0.01 | 0.23 | 0.02 | 0.05 |
| V11 - Friendliness | 0.10 | 0.01 | 0.06 | 0.00 | 0.11 | 0.00 | 0.01 | 0.06 | 0.00 | 0.19 | 0.01 | 0.03 |
| V12 - Quality of accommodation | 0.19 | 0.01 | 0.04 | 0.00 | 0.04 | 0.01 | 0.02 | 0.22 | 0.00 | 0.04 | 0.00 | 0.02 |
| V13 - Quality of restaurants | 0.24 | 0.01 | 0.02 | 0.03 | 0.01 | 0.01 | 0.01 | 0.25 | 0.01 | 0.02 | 0.02 | 0.02 |
| V14 - Variety of restaurants | 0.21 | 0.03 | 0.01 | 0.05 | 0.00 | 0.01 | 0.00 | 0.17 | 0.04 | 0.01 | 0.07 | 0.00 |
| V15 - Presentation of cultural heritage | 0.04 | 0.06 | 0.00 | 0.18 | 0.01 | 0.02 | 0.00 | 0.02 | 0.03 | 0.01 | 0.29 | 0.00 |
| V16 - Entertainment opportunities | 0.01 | 0.23 | 0.01 | 0.03 | 0.01 | 0.00 | 0.01 | 0.01 | 0.24 | 0.00 | 0.03 | 0.01 |
| V17 - Sport and recreational opportunities | 0.00 | 0.26 | 0.01 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.01 | 0.02 |
| V18 - Shopping opportunities | 0.01 | 0.19 | 0.00 | 0.02 | 0.00 | 0.03 | 0.01 | 0.01 | 0.24 | 0.01 | 0.01 | 0.01 |
| V19 - Value for money | 0.05 | 0.08 | 0.01 | 0.01 | 0.07 | 0.03 | 0.02 | 0.07 | 0.06 | 0.09 | 0.05 | 0.00 |
| Total | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Factor weights | 0.20 | 0.19 | 0.17 | 0.15 | 0.15 | 0.15 | 0.21 | 0.20 | 0.18 | 0.15 | 0.13 | 0.12 |

By using calculated weightings, it is possible to define formulas for IDA values of every intermediate composite indicator as well as formulas for overall value of IDA index. For dataset 1, these formulas would be as follows:

$$\begin{aligned} \text{FAC1 (Accommodation and catering facilities)} &= (V_{13} \times 0.24) + (V_{14} \times 0.21) + (V_{12} \times 0.19) + (V_{11} \times 0.10) + (V_{F1} \times 0.26) \\ \text{FAC2 (Activities in destination)} &= (V_{17} \times 0.26) + (V_{16} \times 0.23) + (V_{18} \times 0.19) + (V_{18} \times 0.19) + (V_{19} \times 0.08) + (V_{F2} \times 0.24) \\ \text{FAC3 (Natural features)} &= (V_5 \times 0.22) + (V_6 \times 0.21) + (V_4 \times 0.20) + (V_{F3} \times 0.37) \\ \text{FAC4 (Destination aesthetics)} &= (V_8 \times 0.25) + (V_{15} \times 0.18) + (V_7 \times 0.17) + (V_{F4} \times 0.39) \\ \text{FAC5 (Environmental presentation)} &= (V_9 \times 0.30) + (V_{10} \times 0.30) + (V_{F5} \times 0.41) \\ \text{FAC6 (Destination marketing)} &= (V_1 \times 0.31) + (V_2 \times 0.22) + (V_3 \times 0.19) + (V_{F6} \times 0.27) \\ \text{IDA (dataset 1)} &= (\text{FAC1} \times 0.20) + (\text{FAC2} \times 0.19) + (\text{FAC3} \times 0.17) + (\text{FAC4} \times 0.15) + \\ &+ (\text{FAC5} \times 0.15) + (\text{FAC6} \times 0.14) \end{aligned}$$

For dataset 2, these formulas would be as follows:

$$\begin{aligned} \text{FAC1 (Destination marketing)} &= (V_3 \times 0.22) + (V_1 \times 0.21) + (V_2 \times 0.19) + (V_7 \times 0.14) + (V_6 \times 0.07) + (V_{F1} \times 0.17) \\ \text{FAC2 (Accommodation and catering facilities)} &= (V_{13} \times 0.25) + (V_{12} \times 0.22) + (V_{14} \times 0.17) + (V_{19} \times 0.07) + (V_{11} \times 0.06) + (V_{F2} \times 0.23) \\ \text{FAC3 (Activities in destination)} &= (V_{17} \times 0.29) + (V_{16} \times 0.24) + (V_{18} \times 0.24) + (V_{F3} \times 0.23) \\ \text{FAC4 (Environmental preservation)} &= (V_9 \times 0.26) + (V_{10} \times 0.23) + (V_{F4} \times 0.51) \\ \text{FAC5 (Destination aesthetics)} &= (V_8 \times 0.31) + (V_{15} \times 0.29) + (V_{F5} \times 0.41) \\ \text{FAC6 (Natural features)} &= (V_4 \times 0.37) + (V_5 \times 0.37) + (V_{F6} \times 0.26) \\ \text{IDA (dataset 2)} &= (\text{FAC1} \times 0.21) + (\text{FAC2} \times 0.20) + (\text{FAC3} \times 0.18) + (\text{FAC4} \times 0.15) + \\ &+ (\text{FAC5} \times 0.13) + (\text{FAC6} \times 0.12) \end{aligned}$$

Research results

In the example bellow, the value of IDA index will be summary calculated for six Croatian seaside counties, and also separately calculated for the County of Dubrovnik-Neretva. In this manner, it will be possible to compare IDA values of Dubrovnik-Neretva County and IDA values of other Croatian seaside counties.

Table 4 (column 6) shows values of IDA index for intermediate composite indicators (factors) as well as the single aggregated value of IDA index for six Croatian seaside counties.

Table 4

VALUES OF IDA INDEX FOR SIX CROATIAN SEASIDE COUNTIES

| Factors and variables Variables | | Weightings | | Mean values | IDA values |
|------------------------------------|---------------------------------------|------------|---------|----------------|---------------|
| | | Variables | Factors | | |
| 1. | 2. | 3. | 4. | 5. | 6. |
| FAC1 | Accommodation and catering | | 0.20 | | 4.764 |
| V13 | Quality of restaurants | 0.24 | | 4.747 | 1.147 |
| V14 | Variety of restaurants | 0.21 | | 4.625 | 0.948 |
| V12 | Quality of accommodation | 0.19 | | 4.841 | 0.918 |
| V11 | Friendliness | 0.10 | | 4.904 | 0.502 |
| F1 | Residual | 0.26 | | 4.779 | 1.249 |
| FAC2 | Activities in destination | | 0.19 | | 4.446 |
| V17 | Sport and recreational opportunities | 0.26 | | 4.417 | 1.135 |
| V16 | Entertainment opportunities | 0.23 | | 4.480 | 1.042 |
| V18 | Shopping opportunities | 0.19 | | 4.178 | 0.777 |
| V19 | Value for money | 0.08 | | 4.910 | 0.395 |
| F2 | Residual | 0.24 | | 4.496 | 1.098 |
| FAC3 | Natural features | | 0.17 | | 4.916 |
| V5 | Scenic beauty | 0.22 | | 4.970 | 1.112 |
| V6 | Accessibility | 0.21 | | 4.744 | 0.979 |
| V4 | Climate | 0.20 | | 5.037 | 0.985 |
| F3 | Residual | 0.37 | | 4.917 | 1.839 |
| FAC4 | Destination aesthetics | | 0.15 | | 4.366 |
| V8 | Urban and arch. harmony of the place | 0.25 | | 4.255 | 1.084 |
| V15 | Presentation of cultural heritage | 0.18 | | 4.354 | 0.778 |
| V7 | Quality of information in destination | 0.17 | | 4.521 | 0.779 |
| F4 | Residual | 0.39 | | 4.377 | 1.726 |
| FAC5 | Environmental preservation | | 0.15 | | 4.780 |
| V10 | Tidiness of the place | 0.30 | | 4.863 | 1.453 |
| V9 | Environmental preservation | 0.30 | | 4.696 | 1.387 |
| F5 | Residual | 0.41 | | 4.780 | 1.939 |
| FAC6 | Destination marketing | | 0.14 | | 4.451 |
| V1 | Image of the country | 0.31 | | 4.324 | 1.356 |
| V2 | Feeling of personal safety | 0.22 | | 4.750 | 1.063 |
| V3 | Quality of country's promotion | 0.19 | | 4.301 | 0.832 |
| F6 | Residual | 0.27 | | 4.458 | 1.200 |
| | Total | | | | 4.627 |

These results (Table 4) suggest that most influential pull factors for tourists visiting six Croatian seaside counties (all Croatian seaside counties except Dubrovnik-Neretva County), in period June-September 2006, were natural beauties (IDA=4.916) and preserved nature (IDA=4.780) which are, at the same time, the most important competitive advantages of the Croatian tourism industry. These factors are, in terms of

attractiveness, followed by the quality of accommodation and catering services (IDA=4.764), quality of destination promotion and marketing activities (4.451) and quality and variety of activities offered in destination (IDA=4.446). The least influential pull factors in analyzed destinations is factors identified as destination aesthetics (IDA=4.336), which suggest that very few tourists are attracted to these destinations by variables loaded into this factor, such as urban and architectural harmony of the place or presentation of cultural heritage. Overall, the single aggregated value of IDA index for all six Croatian seaside counties was 4.627.

Table 5 (column 6) shows values of IDA index for intermediate composite indicators as well as the single aggregated value of IDA index for Dubrovnik-Neretva County.

Table 5
VALUES OF IDA INDEX FOR DUBROVNIK-NERETVA COUNTY

| Factors and variables | | Weightings | | Mean values | IDA values |
|-----------------------|---------------------------------------|------------|---------|-------------|------------|
| | | Variables | Factors | | |
| 1. | 2. | 3. | 4. | 5. | 6. |
| FAC1 | Destination marketing | | 0.21 | | 4.480 |
| V3 | Quality of country's promotion | 0.22 | | 4.241 | 0.952 |
| V1 | Image of the country | 0.21 | | 4.597 | 0.956 |
| V2 | Feeling of personal safety | 0.19 | | 4.721 | 0.887 |
| V7 | Quality of information in destination | 0.14 | | 4.332 | 0.599 |
| V6 | Accessibility | 0.07 | | 4.533 | 0.335 |
| F1 | Residual | 0.17 | | 4.485 | 0.751 |
| FAC2 | Accommodation and catering | | 0.20 | | 4.721 |
| V13 | Quality of restaurants | 0.25 | | 4.737 | 1.190 |
| V12 | Quality of accommodation | 0.22 | | 4.859 | 1.065 |
| V14 | Variety of restaurants | 0.17 | | 4.498 | 0.761 |
| V19 | Value for money | 0.07 | | 4.695 | 0.335 |
| V11 | Friendliness | 0.06 | | 4.811 | 0.307 |
| F2 | Residual | 0.23 | | 4.720 | 1.062 |
| FAC3 | Activities in destination | | 0.18 | | 4.032 |
| V17 | Sport and recreational opportunities | 0.29 | | 4.078 | 1.171 |
| V18 | Shopping opportunities | 0.24 | | 3.792 | 0.924 |
| V16 | Entertainment opportunities | 0.24 | | 4.223 | 0.998 |
| F3 | Residual | 0.23 | | 4.031 | 0.939 |
| FAC4 | Environmental preservation | | 0.15 | | 4.662 |
| V9 | Environmental preservation | 0.26 | | 4.582 | 1.191 |
| V10 | Tidiness of the place | 0.23 | | 4.747 | 1.097 |
| F4 | Residual | 0.51 | | 4.664 | 2.374 |
| FAC5 | Destination aesthetics | | 0.13 | | 4.416 |
| F5 | Residual | 0.41 | | 4.417 | 1.797 |

Table 5 **CONTINUED**

| Factors and variables | | Weightings | | Mean values | IDA values |
|-----------------------|------------------|------------|---------|-------------|------------|
| | | Variables | Factors | | |
| 1. | 2. | 3. | 4. | 5. | 6. |
| FAC6 | Natural features | | 0.12 | | 5.105 |
| V5 | Scenic beauty | 0.37 | | 5.094 | 1.878 |
| V4 | Climate | 0.37 | | 5.116 | 1.878 |
| F6 | Residual | 0.26 | | 5.105 | 1.349 |
| | Total | | | | 4.544 |

The results for Dubrovnik-Neretva County suggest that most influential pull factor for tourists visiting this particular county in period June-September 2006 was factor identified as natural beauties (IDA=5.105). The second most influential pull factor in this county was quality of accommodation and catering facilities (IDA=4.721), followed by environmental preservation (IDA=4.662) and destination marketing (IDA=4.480). Two least influential pull factors among respondents in this destination were destination aesthetics (IDA=4.416) and activities in destination (IDA=4.032). Overall, the single aggregated value of IDA index for all six Croatian seaside counties was 4.544. The results obtained also allow comparison of the destination attractiveness attributes between six Croatian seaside counties and Dubrovnik-Neretva County (Table 6).

Table 6
COMPARISON OF CALCULATED IDA VALUES

| Factor name | Six Croatian seaside counties | Dubrovnik-Neretva County | Difference (%) |
|----------------------------|-------------------------------|--------------------------|----------------|
| Accommodation and catering | 4.764 | 4.721 | -0.9 |
| Activities in destination | 4.446 | 4.032 | -9.3 |
| Natural features | 4.916 | 5.105 | 3.8 |
| Destination aesthetics | 4.366 | 4.416 | 1.1 |
| Environmental preservation | 4.780 | 4.662 | -2.5 |
| Destination marketing | 4.451 | 4.480 | 0.7 |
| Total | 4.627 | 4.544 | -1.8 |

The research findings indicate that there are three pull factors that are more influential among tourists visiting Dubrovnik-Neretva County and those factors are natural features, destination aesthetics and destination marketing. At the same time, other three pull factors – accommodation and catering, activities in destination and environmental preservation are found to be more influential in other analyzed counties. The biggest difference is determined in the IDA value of pull factor identified as "destination activities", which is less important for the tourists visiting Dubrovnik-Neretva County and in the IDA value of pull factor identified as "natural features", which is more important for the tourists visiting Dubrovnik-Neretva County. Additionally, it is important to notice that destination aesthetics is a pull factor which is perceived to be very important among tourists visiting Dubrovnik-Neretva County but at the same

time it is perceived as least important among tourists visiting other six Croatian seaside counties. Finally, overall attractiveness of Dubrovnik-Neretva County is perceived to be lower compared to the perceived attractiveness of six other Croatian seaside counties. This may be due to the fact that tourists visiting this particular county have higher level of income and therefore they also might have higher expectations compared to the tourists that are visiting other seaside counties. Additionally, tourists visiting Dubrovnik-Neretva County are not as loyal to the destination (they change holiday destination more frequently) compared to tourists visiting other Croatian seaside destination, which also, coupled with higher level of income, can result in lower attractiveness perception of this particular county.

Conclusion

From the literature review it can be concluded that the notions of destination attractiveness and destination competitiveness are closely tied and that destination attractiveness has large influence on destination competitiveness. Many authors argue that destination attractiveness is central element in achieving destination competitiveness. The link between destination attractiveness and destination competitiveness is conceptualized through the decision making process. Therefore, it is very important to develop deeper understanding of the role that destination attractiveness plays in the process of achieving destination competitiveness as well as to develop tools for quantitative description of destination attractiveness level. The quantitative indicator of destination attractiveness can also be very useful tool for destination managers, as it enables them to identify the most important tourism attractions in their destinations, determine their attractiveness levels and to compare them to attractiveness level of other competitive destinations. By calculating IDA values destinations can become more aware of their strengths and weaknesses, opportunities and threats. By understanding the nature and intensity of their attractiveness destinations can, during their market positioning activities, put emphasis on those destination attributes or attractions that have the highest attractiveness power and also improve the attractiveness of those attributes that are perceived by tourists as unattractive. These destinations that understand and turn the concept of destination attractiveness to work in their favor will definitely be more competitive, and therefore, more successful than the others.

The example presented in this paper has demonstrated that the methodology for destination attractiveness quantification is not only theoretically sound but is also applicable in practice. In both units of analysis natural features are perceived (by tourists visiting those areas) to be the most attractive and therefore most influential pull factors. Those natural features can also be described as basic attractions or as fascination attractions which can cause a "wow" effect. The main characteristic of those attractions is that destination managers have little or no control over development of these attractions since they are the result of natural (geological and climatic) processes that were taking place over hundreds of thousands of years. Other analyzed pull factors have very different influence on destination decision making process among respondents in Croatia and Dubrovnik-Neretva County. Major differences were determined in the attraction intensity of the factor named destination aesthetics. This factor was

perceived as unattractive among respondents from six Croatian seaside counties and, at the same time, as very attractive among respondents in Dubrovnik-Neretva County. On the other hand, the factor identified as activities in destination proved to be a very important pull factor among respondents from six Croatian seaside counties while, at the same time, the same factor is perceived as the least influential pull factor among respondents from Dubrovnik-Neretva County. Also, factor identified as environmental preservation has proven to be less important pull factor among respondents from Dubrovnik-Neretva County compared to the other group of respondents. Finally, other analyzed factors (accommodation and catering and destination marketing) have approximately the same attractiveness in both analyzed areas. Overall attractiveness intensity of Dubrovnik-Neretva County was found to be somewhat lower compared to the attractiveness intensity of six other Croatian seaside counties. Therefore, it could be concluded that tourists visiting Dubrovnik-Neretva County perceive it to be less attractive compared to tourists visiting other Croatian seaside counties.

Main advantage of methodology proposed in this paper is its relatively simple application and potential to compare the level of attractiveness across different destinations. Also, interpretation of IDA value is relatively simple, so it can be used, not only within the narrow academic community, but also among all tourism stakeholders, which can lead to the broader social affirmation of the notion of destination attractiveness and its importance for destination competitiveness.

However, there are some limitations to the proposed methodology. The main limitation is the fact that the respondents should be interviewed prior to the arrival in a destination which is not the case here. This is important because the answers of respondents who have already arrived in the destination can and usually are influenced by their current stay. This should be avoided because IDA index should measure the attraction power of the destination among the travelers during their decision making process and not after they have already made their decision and arrived in the destination. Additional limitation of the model lies in the fact that it is based on the data which are collected through the questionnaire which is very time and financial consuming process. Additionally, because of the great number of possible initial variables, it is impossible to include all of the variables in the index, so it is important to include only those variables that are considered as the most significant by the tourism experts. It should also be emphasized that the proposed index gives relatively 'rough' image of the observed phenomenon - attractiveness. With certain modifications of the model, as for example the increased number of observed variables, incensement of the ranges of the measurement scales used for variables description (from 6 to 7) and the research conducted on the greater sample, the level of reliability of the obtained results can be improved.

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