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TOURISM IN TIME OF CRISIS: SPECIALIZATION, SPATIAL DIVERSIFICATION AND POTENTIAL TO GROWTH ACROSS EUROPEAN REGIONS

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Tourism is a pivotal economic sector with major social impact on local communities and a development pillar for both advanced and emerging countries. Tourism development has a valuable impact on employment and output, contributing to post-crisis economic recovery. Under the hypothesis that tourism development is a complex phenomenon shaped by economic growth and negatively influenced by the most recent financial crisis, this study proposes a comprehensive analysis of the spatial distribution of tourism activities across European countries and regions during recession time (2008-2014). Changes in the location quotient of tourism jobs were computed to evaluate the importance of this sector across European regions, providing an informative base for policies enhancing tourism competitiveness. The 2007 recession resulted a spatially-heterogeneous impact on tourism specialization across European regions, maintaining a strong (and sometimes declining) base in southern Europe, promoting tourism diversification with sparse employment growth in western and central Europe and strengthening cultural and natural attraction poles in northern Europe.

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The issue comprises eight (8) papers on various aspects of tourism. In the first paper, **Viera Kubičková, Anna Micháľková** and **Iveta Fodranová** aim to reveal tourism economic impacts on the Slovak economy by measuring expenditure at national level. For the purpose of the study input-output tables which are transmitted to The European System of National and Regional Accounts (ESA 2010) and current Tourism Satellite Account (TSA) based on 2013-14 financial year data are used. In the second paper, **Rahul Pratap Singh Kaurav, Monika Prakash** and **Ruturaj Baber** review Internal Marketing literature and then transfigure the concept to cater the needs of tourism industry and especially DMOs (Destination Marketing Organizations). They conclude in 13 variables of Internal Marketing (inter-functional coordination and integration, customer orientation, marketing-like approach, job satisfaction, empowerment, stakeholder's motivation, quality of service, stakeholder's development, training and development, vision of the firm, strategic rewards, internal communication and senior leadership) that can help planners and managers of DMOs in setting a strategy that will enhance tourism stakeholders' performance. Then, **Nataša Slavić** explores the applicability of the theoretical concept of the tourism logistics system to the bicycle tourism market. The aim of the paper is to build a model of a bicycle tourism destination logistics system based on the conceptual framework and compare it with the actual modus operandi of bicycle destinations. Field research was conducted in Croatia and observational and interview techniques were implemented.

In the fourth paper, **Alessandra Fermani, Elena Cavagnaro, Simona Staffieri, Angelo Carrieri** and **Flavia Stara** aim to explore the impact of psychological wellbeing on the change (in the relationship with themselves, the others and the natural environment) perceived after a travel experience by young students. To meet research purposes a survey

took place in 2015 and young Dutch travellers were invited to fill in a questionnaire. Concluding, four wellbeing components (positive relations to others, autonomy, purpose in life, self-acceptance) were outlined to influence the dimensions of change. In what follows, **Laura Perpiña, Lluís Prats** and **Raquel Camprubí** deal with perceived risks in international tourism and examine how several key indicators contribute to the individuals' perception of risk in international travel. At the first hand research highlights the primary risk dimensions associated with international travel and then aims to explore whether sociodemographic variables and past travel experience influence perceived risks. Then, **Korede Ajogbeje, Oludele Folarin, Emmanuel Oladipupo** and **Oluwatosin Adeniyi** focus on the relationship that exists among tourism, terrorism and the macroeconomic environment. Data of the Nigerian economy from 1995Q1 to 2012Q4 were used and impulse response and variance decomposition of the Vector Autoregression (VAR) were applied. Study results highlight terrorism's negative effects on tourism.

Subsequently, **Nikolaos Rodousakis, George Soklis** and **Gerasimos Zacharatos** examine the application of the n -firm concentration ratio and the Herfindahl-Hirschman Index to Greek hotel industry. Research results indicate that the concentration of the industry is quite low not only for the total market but also for the separate markets of the different stars categories and that there is a significant difference between the outcomes obtained for the highest categories and those for the lowest categories. Finally, in the eighth paper, **Kostas Rontos, Maria-Eleni Syrmali, Ioannis Vavouras, Efstratia Karagkouni** and **Luca Salvati** analyse the spatial distribution of tourism activities across European countries and regions during recession time. The study perceives tourism as a pivotal economic sector that boosts both advanced and emerging countries economic and societal development and have valuable impact on employment and output, contributing to post-crisis economic

recovery. For the research purposes changes in the location quotient of tourism jobs were computed to evaluate the importance of this sector across European regions and the outcomes pose a spatially-heterogeneous impact on tourism specialization across European regions that occur due to the 2007 recession.

THE ECONOMIC CONTRIBUTION OF TOURISM TO THE SLOVAK ECONOMY

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This study focuses on quantification of economic impacts of tourism by measuring tourism expenditure at the national level via input-output tables which are transmitted to The European System of National and Regional Accounts (ESA 2010) and current Tourism Satellite Account (TSA) based on 2013-14 financial year data. The key findings are as follows: In the year 2013 it accounted for the sum of EUR 4.624.912 thousand. A basic parameter for its calculation is a multiplier of value added with induced effect in the amount of 1.1938. It was the production of selected foods and tobacco, production of accommodation services and catering services that contributed to the total economic value of tourism in the highest volume. Practical utilisations of results consist in creating a database performing more effective decision making process.

Keywords: *Economic benefits, input-output analysis, multipliers effects, value added*

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INTRODUCTION

Tourism's role and importance in economies is becoming increasingly evident. For Slovak economy, tourism represents a promising resource for development and economic growth. Tourism contributes significantly to the Slovak economy as it impacts a wide range of business sectors and augments employment and payroll income. Because of this reason, there is an acute need to *quantify* benefits of tourism so that the state will take part to correct the market failures.

Since tourism is becoming a key driving force of socio-economic development (UNWTO, 2014), it is essential to pay attention to measuring not only its direct but also secondary benefits in individual countries in order to evaluate tools of economic and regional policy. In this respect, academic activities have been going on for several decades, while various approaches and models depicted indirect and induced effects of tourism in a region. One of the most frequently applied models is the input-output (I-O) model and the calculation of input-output multipliers. An intangible nature of a substantial part of tourism product increases the importance of determining the parameters that enable to measure effects of their consumption. This idea is supported also by Mundt (2006), who considers the use of the multiplier in tourism to be more important than in other industries, in particular in view of the fact that a large part of tourists' expenditures is invisible.

There are several approaches to applying the I-O model in tourism. It deals with the structure of the model itself, the way of its application in analyses of tourism economic impacts as well as basic methodology connection. These approaches were elaborated in detail in works by authors Fletcher and Archer (1989, 1990). Stettler (2000) sees the application of the I-O analysis mainly in solving macroeconomic issues; i.e. mainly in measuring quantitative (monetary) macroeconomic effects. The reasons are existing data material and relatively clear results. A marked shift in this area is

the implementation of tourism satellite account (TSA) into SIOT tables. This implementation brings possibilities of quantifying economic effects of tourism production generated by internal consumption (Van de Steeg, 2008). It is a model that is used by most authors of studies on measuring economic effects of tourism on the territory of recent past as well as the present (Khan et al, 1990, Adams, 1992, Chang, 2001, Mules, 2005, Boďa, 2006, Chang, 2010, Bakos, 2011, Stynes, 2002, Van de Steeg, 2008 and many other). The most prevalent approach to estimating the direct and secondary effects of visitor spending is input-output model (I-O model) and this model is still popular today (Reece, 2010).

Input-output analysis was used also in several analytical studies that served as background in the creation of up-to-date development documents, e.g. in identifying key industries of the Slovak economy (Balog, 2013), as well as in the evaluation of the economic importance of creative industry in the Slovak Republic (Neulogy, 2013). In the Czech Republic, there was worked out a certified methodology of calculating economic impacts of cultural organisations (Raabová, 2013). The I–O model was used for the purposes of quantifying economic effects of tourism on local and regional levels by several authors. Frechtling and Horváth (1999) explored the multiplier effects of visitor expenditures in Washington D.C. Likewise, the analysis into economic effects in the Austrian region Kalkalpen (Baaske, 1998) is based on the I–O analysis. The I–O Kalkalpen analysis has been applied as the most suitable of methods of measuring economic effects also in the study on measuring economic effects of the support of the Alpine infrastructure in Austria (Grohall, 2010). In several cases, the use of I–O analysis is known for exploring the economic impacts of events. This is e.g. the case of the analysis of impacts of potential expenditures related to the Olympic Games in the Wallis Canton (Switzerland) and identifying the share that flows from to other regions (Stritt, 1997). Next, it is also possible to mention the

analysis of impacts of organising Olympic Games in Graz in the year 2002 (Stettler, 2000), as well as, for instance, the analyses of the impact of expenditures during the match on the local tourism (Neuhaus, 1997).

Therefore, the application of I–O analysis in the quantification of economic effects of tourism has a relevant theoretical and also practical background, which reflects several levels of usage – national, regional and local levels as well as the level of the event. Under conditions of the Slovak economy, the use of I–O analysis for the quantification of economic effects of tourism industry is known only in the works of the author cited before – Bod’a (2006) – who, however, does not mention partial (product) multipliers of tourism, and so, we are not able to evaluate the multiplying efficiency of its individual products. Input-Output model is also used and applied to tourism in the present paper. Its aim is to quantify economic benefits of tourism on national level by means of total value added created and/or stimulated by the production of tourism enterprises. The paper intends to verify the possibility of application of the Leontief input-output model for the determination of economic value of tourism in the environment of tourism in the Slovak Republic (SR).

LITERATURE REVIEW

Over the last decades, tourism has become a major activity in our society and an increasingly important sector in terms of economic development (Giaoutzi and Nijkamp, 2006; Nonthapot and Ueasin, 2015). As pointed out by Fletcher (1989), tourism economic impact is complex because it occurs across several industrial sectors. There are three fundamentally different approaches for studying the economic impacts of tourism on economies: direct economic impacts, qualitative/perceived economic impacts, and multiplier effects.

Since tourism is a conglomeration of industries, it is not possible to identify a set of industries, add up their output/employment and use the result to gauge the impact of tourism in a country or region. TSA offers a solution to this problem. The term 'satellite' refers to the fact that a TSA is based on the I/O framework of a state/regional economy (Bonn, Harrington, 2008). The TSA is considered to be an optimum method of reporting the direct effect of tourism expressed in overall internal demand for tourism, direct economic contribution of tourism, direct internal expenditures in tourism, direct internal tourism consumption (Frechtling, 2013). However, there are methods that more adequately study the measuring of the contribution of tourism to an economy's growth by means of Gross value added (GVA) per capita, resp. Gross domestic product (GDP) per capita (Ivanov, 2007). These enable to monitor the influence of tourism on the economy in connection with the operation of various exogenous influences. An integrated nature of the quantification of tourism value added lies in the expression of not only direct but also indirect and induced effects. Indirect benefits of tourism capture the intermediate consumption for the production of goods and services in the sector of tourism (Vellas, 2011). Consequently, the original expenditure spent in the sector of tourism thus passes through several stages and sectors of the economy (Bod'a, 2006). Induced benefits express "part of expenditures of participants of tourism, which travels to residents in the form of income (wages, salaries, and profits), while part of them leaves this cycle in the form of savings and part is again consumed" (Bakos, 2011, p. 23). "Induced effects cover consumption of enterprises, which directly or indirectly benefited by initiation expenditures in the sector of tourism" (Vellas, 2011, p. 4). Secondary economic benefits (indirect and induced ones) of tourism are expressed by the multiplier that captures mutual economic links between single industries in the economy of a territory.

In theory and practice, we can identify several methods of determining multipliers of tourism. Three models may be denoted as relevant and applicable for measuring the multiplier effect of tourism, namely the Keynesian model of multiplier, input-output model (I-O model) and Computable General Equilibrium model (CGE model). The Keynesian multiplier model is based on the employment multiplier developed by Kahn (1931), and it relies on the assumption that the growth of income, employment and consumption is a multiple (result of multiplication effect) of investment increment. By applying the Keynesian multiplier in tourism, Archer (1977) developed the tourism multiplier, which captured indirect and also induced effects of the expenditure by a participant of tourism (Frechtling, 2011). Keynesian model was applied in various studies by many authors (e.g. Jackson, 1998, Dwyer, 2005, Bod'á, 2006, Hall, 2009, Piteková, 2009, Mayer, 2010, Bakoš, 2011, Vellas, 2011, Franke, 2012). CGE as a model of computable general equilibrium is technically a follow-up to I-O analysis. There are various opinions of the application of CGE model; according to some authors it represents the best tool for the quantification of economic impacts as a result of continuous changes in tourist expenditures. This model has been used in particular by Dwyer (2005) but also Madden (2002); its advantages and limitations have been analysed also by Frechtling (2011, 2013). However, despite its positive features, as described by these authors, the model has not found a broader application in practice. Its main cause can be seen in its excessively complicated structure and the data-intensive nature of the model. Moreover, the model works with numerous assumptions and simplifications, which finally results in imprecise results. Several studies are available on the assessment of the economic impact of a demand shock that compare the results of CGE and Input-Output analysis. All these studies found that: "Input-Output results are greater than CGE results, but failed to evaluate these results in a more general economic context that considers factor availability and the degree of market efficiency. In

other words, the finding that I-O analysis overestimates the impacts is based on the lower CGE results as benchmarks, but no evidence is presented on how the CGE results represent reality” (Frechtling, Smeral, 2010). According to Briassoulis (1991) Input-output analysis has been used in tourism impact studies because of its (a) comprehensiveness-the input-output model provides a holistic picture of the economic structure of a region (or a system of regions) and enables the analyst to identify interrelationships among economic sectors; and (b) flexibility – depending on the level of detail desired in an application and the available resources, any economic sector can be disaggregated, and its relationships to the other sectors can be traced and studied in detail. Moreover, because (c) tourism is labour intensive, it is characterized by stable production functions.

METHODOLOGY

In the present paper, we apply the input-output value added multiplier of tourism as a value used to measure effects of tourism consumption in the economy that rest in increments of the magnitude under study. Value added as a selected parameter of quantifying the economic effect benefits of the production of the industry enables to identify the value that arose through processing intermediary inputs while using producers’ own production sources. Its use within the procedure of determining multiplier effects thus enables to ascertain a relevant economic benefit of production achieved in single multiplication cycles. The use of GVA to measure tourism impacts on the economy is recommended also by authors Ivanov and Webster (2007). They compare this indicator with GDP while considering GVA to be more suitable for measuring economic welfare of population, because it includes all primary incomes.

We consider defining multipliers to be the starting-point of quantifying overall economic benefits of the development of tourism on national level, as the former will enable the calculation of the latter. For the purposes of designing a relevant procedure under conditions of the Slovak economy, we have chosen the Leontief input-output model, which provides the tool for the calculation of all secondary effects resulting from mutual links between individual processes and services. When applying the Leontief model to tourism, a new exogenous parameter is inserted in the model, which expresses the final consumption of tourism (according to methodology the Tourism Satellite Account – internal tourism consumption). The value of the parameter gained from the Tourism Satellite Account of the Slovak Republic (TSA SR). Modelling processes of applications of the Leontief models in the sixties and seventies were characteristic of the emphasis on balance relations by means of the so-called technical co-efficient of direct consumption, i.e. norms or relations between individual parts of the final whole. However, the application of data from the TSA overcomes clumsiness of the model by bringing in dynamics via changes of relevant exogenous variables. The development of the TSA methodology has become an assumption for applying the exogenous parameter. We start from the basic premise of this model, namely, that the sum of intermediate consumption, and the final demand represents an overall production (Hara, 2008). Its essence is a mathematical record of the inverse Leontief matrix as the sum of infinite geometric series (Workie, 2011).

$$\Delta x = (I - A)^{-1} \times \Delta y \quad (1)$$

Δx - Change in the volume of production of the industry

Δy - Change in the consumption of goods and services of the industry by economic entities

$(I - A)^{-1}$ - Inverse Leontief matrix

By applying this model to tourism environment, it is possible to quantify the changes resulting from the final consumption of participants of tourism in overall volume of production, as well as the influence of the given change on the overall volume of incomes in the economy. The choice of this method for the application to tourism in this paper considers its favourable features and respects basic assumptions for its use as defined in listed sources. In order to achieve a concrete expression of input-output tourism multipliers, there were taken over data on the internal tourism consumption from the database of the TSA SR – Table 5 (year 2013, last available) and used for the symmetric input-output table of the year 2010 (last available year). The time-lag is caused by the methodology used in the construction of calculations based on input-output models, namely The European System of Accounts (Eurostat, 2013), according to which the symmetric input-output tables are construed in five-year intervals. The internal tourism consumption includes expenditures for internal tourism and other consumption components, i.e. imputed rent, natural social transfers of the government and non-profit institutions serving to households. By means of the implementation of the data on the internal tourism consumption into a symmetric input–output table, it has been secured that the process of the calculation of multipliers, and their application may reflect the production of tourism branches, which was consumed for the purposes of satisfying the demand for tourism services. After that, by means of MATLAB software, there were constructed individual partial multipliers. Tourism multipliers are expressed as a weighted arithmetic average of partial multipliers of individual tourism characteristic branches.

In order to determine the economic value of tourism, we used the value added multiplier, the implementation of which enabled the quantification of indirect effects (simple multipliers) and induced effects (induced effect multipliers), i.e. summary components of overall economic benefits of tourism in the Slovak economy across

time monitored. The direct gross value added of tourism is monitored in the TSA SR and it represents part of value added (VA) of all industries of the economy, which directly serves to visitors and was created to cover the internal tourism consumption. Its value is equal to, according to TSA SR methodology as well as according to UNSD (2009), the difference of production and intermediate consumption. Its single components are employees' remunerations, gross operating surplus, and other net taxes on production (Infostat, 2008). It expresses the parameter that arises via production directly in enterprises that represent producers of tourism products. The application of I–O multiplier of tourism to parameter of value added is defined by the following calculations (formula 2 – 5): By means of the product of consumption of a product and a selected simple multiplier we obtain the value, which expresses the sum of direct and indirect effects.

$$C_{IT} \times m_{VAs} = E_d + E_{in} \quad (2)$$

C_{IT} - Internal tourism consumption

m_{VAs} - Simple multiplier VA

E_d - Direct effects

E_{in} - Indirect effects

By the multiplication of consumption of product xy and a selected induced effect multiplier, we will obtain the value which expresses the sum of direct, indirect and induced effects.

$$C_{IT} \times m_{VAi} = E_d + E_{in} + E_{ind} \quad (3)$$

$$E_d + E_{in} + E_{ind} \quad (3a)$$

C_{IT} - Internal tourism consumption

m_{VAi} - Multiplier VA with induced effect

E_d - Direct effects

E_{in} - Indirect effects

E_{ind} - Induced effects

E_t – Total effects

To express net indirect and net induced effects (increments) of value added it is then necessary to use the difference:

$$E_{Nin} = (C_{IT} \times m_{VAs}) - GVA_d \quad (4)$$

E_{Nin} - Net indirect effect (increment)

C_{IT} - Internal tourism consumption

m_{VAs} - Simple multiplier VA

GVA_d - Direct gross value added

$$E_{Nind} = (C_{IT} \times m_{VAi}) - (C_{IT} \times m_{VAs}) \quad (5)$$

E_{Nind} - Net induced effect (increment)

C_{IT} - Internal tourism consumption

m_{VAi} - Multiplier VA with induced effect

m_{VAs} - Simple multiplier VA

RESEARCH RESULTS

The economic value of tourism expressed in overall value added generated by the internal tourism consumption in the Slovak Republic accounted for in the year 2013 the sum of EUR 4.624.912 thousand and may be further considered a key parameter for the assessment of the total economic value of tourism for the year 2013. By means of expressing the share per inhabitant, we can derive the societal value of tourism in a territorial unit. The utilisation and advantage of an indicator of tourism societal value constructed this way rests in particular in a possible comparison of values achieved

in territorial units. The total value added of tourism is derived from the value of internal tourism consumption and its induced multiplier effect on value added. It is calculated by means of the formula mentioned (3), while the value of value added induced effect multiplier is 1.1938.

$$C_{IT} \times m_{VAi} = E_d + E_{in} + E_{ind} \quad (3)$$

$$E_d + E_{in} + E_{ind} = E_t \quad (3a)$$

$$E_t = 3\,873\,980\,000 \times 1.1938 = 4\,624\,912\,000$$

The calculation of value added induced effect multiplier of tourism (for products 1-12):

$$m_{VAi} = \frac{4\,624\,912}{3\,873\,980} = 1.1938$$

In the year 2013 tourism expenditures generated (internal consumption of tourism) in total volume of EUR 3.873.980 thousand the value added (total of directly and indirectly) in the value of EUR 3.085.424 thousand. The calculation of the data assumes to apply formula (2) and use a relevant multiplier of the value of 0.7964.

$$C_{IT} \times m_{VAS} = E_d + E_{in} \quad (2)$$

$$E_d + E_{in} = 3\,873\,980\,000 \times 0.7964 = 3\,085\,424\,000$$

The increment of value added induced by the final wages consumption of employees in tourism (induced effect) accounted for the value of 1.539.488 thousand EUR. The given result is the net induced effect of value added of tourism and its calculation is done according to formula (5), while the value of a simple multiplier of value added of tourism is 0.7964.

$$E_{Nind} = (C_{IT} \times m_{VAi}) - (C_{IT} \times m_{VAS}) \quad (5)$$

$$E_{Nind} = (3\,873\,980 \times 1.1938) - (3\,873\,980 \times 0.7964) \\ = 1\,539\,488\,000$$

The calculation of simple value added multiplier of tourism (for products 1-12) by means of applying the weighted arithmetic mean:

$$m_{VAs} = \frac{3\,085\,424}{3\,873\,980} = 0.7964$$

For the purposes of calculating the production effects of tourism characteristic industries, there were calculated also multipliers linked with them. Pertinent implementation will respect the procedure presented.

The calculation of simple value added multiplier of tourism (for products 1-10)

$$m_{VAs} = \frac{1\,872\,823}{2\,444\,591} = 0.7661$$

The calculation of value added induced effect multiplier of tourism with (for products 1-10).

$$m_{VAi} = \frac{2\,806\,689}{2\,444\,591} = 1.1481$$

Tab. 1: Application of simple multipliers of value added and multipliers of induced effect value added, calculation of direct, indirect and overall effects in tourism, year 2013

| Multipliers of value added | Internal tourism consumption by products, in thousands of EUR in base prices | Simple Multiplier of value added | Direct and indirect effects of tourism, in thousands of EUR | Induced effect multiplier of value added | Total effect (including induced one) of tourism, in thousands of EUR |
|--|--|----------------------------------|---|--|--|
| Characteristic products of tourism (1–10) | | | | | |

| | | | | | |
|---|------------------|-------|------------------|-------|------------------|
| 1 – Accommodation services for visitors | 543 747 | 0.789 | 429 016 | 1.240 | 674 246 |
| 2 – Restaurants and similar services | 539 772 | 0.789 | 425 880 | 1.240 | 669 317 |
| 3-6 – Passenger transport services | 757 887 | 0.750 | 568 415 | 1.101 | 834 434 |
| 7 – Transport equipment rental | 49 294 | 0.829 | 40 865 | 1.046 | 51 562 |
| 8 – Travel agencies and similar | 107 552 | 0.706 | 75 932 | 1.036 | 111 424 |
| 9 – Cultural services | 226 621 | 0.741 | 167 926 | 0.941 | 213 250 |
| 10 – Sports and recreation services | 219 718 | 0.750 | 164 789 | 1.149 | 252 456 |
| Characteristic tourism goods–country-specific | | | | | |
| 11a – Power fuels | 296 246 | 0.846 | 250 624 | 1.273 | 377 121 |
| 11b – Selected foods and tobacco | 857 922 | 0.846 | 725 802 | 1.273 | 1 092 135 |
| 11c – Selected other consumer goods | 149 790 | 0.846 | 126 722 | 1.273 | 190 683 |
| Characteristic tourism services–country-specific | | | | | |
| 12a – Financial and insurance services | 3 641 | 0.839 | 3 055 | 1.252 | 4 559 |
| 12b – Rental of other articles | 742 | 0.829 | 615 | 1.046 | 776 |
| 12c – Services for personal wellbeing | 41 815 | 0.921 | 38 512 | 1.117 | 46 707 |
| 12d – Health services | 59 928 | 0.826 | 49 501 | 1.413 | 84 678 |
| 12e – Other selected services | 19 305 | 0.921 | 17 780 | 1.117 | 21 564 |
| Total | 3 873 980 | | 3 085 424 | | 4 624 912 |

Note: Data were processed by means of EXCEL program, which works with 15 decimal digits. The table contains rounded figures of multipliers in order to secure better clarity and functionality.

Source: own

The table above provides a survey of economic benefits of tourism production in the division into industries that produce characteristic and specific products of tourism. In the period under study, it was the production of selected foods and tobacco (23.61%), production of passenger transport services (18.04%), production of accommodation services (14.58%) and restaurants and similar services (14.47%) that contributed to the total economic value of tourism in the Slovak Republic in the highest volume. The same succession also holds for the value expression of direct and indirect benefits of production to the creation of value added in tourism. The same holds also for the absolute expression of net induced effects in the creation of value added of tourism. It indicates some specificity in the pattern of consumption of tourism in the Slovak Republic. Even despite a relatively high value of multipliers of value added identified in group 12 (country-specific services), their economic benefit for the total economic value of tourism is not distinct, which is, of course, connected with low expenditures of consumers on these products within internal tourism consumption. At the same time, a simple multiplier has its highest value in category "Services for personal wellbeing" and "Other selected services". The results given are logically affected apart from other things, also by a differing construction of production in branches monitored and by a participation of the element of "value added" within the value added. For example, health services are a field, which records a rather significant share of value added on production, which, in effect, also influences the value of induced

effect multiplier of value added in tourism. A thorough analysis thus requires to consider many facts and connections.

As far as the creation of direct gross value added of tourism is concerned, based on the data of TSA SR, Tab.10 TSA SR T6 (2013) from tourism industries, it was in particular passenger transport services with the share of 20.37%, sports and recreation services 12.48%, and restaurants and similar services 12.72%, followed by accommodation services 9.52% that participated in the share of the creation of direct gross added value of tourism; all of these are tourism characteristic industries. Overall tourism characteristic industries (1-10) represented the share of 70.8% on the creation of direct gross value added of tourism; tourism industries specific for the Slovak Republic accounted for 4.1%; the share of tourism industries on the creation of direct gross value added of tourism was 74.9%. Tourism characteristic industries are thus essential not only in respect of their importance in the internal tourism consumption (in its value expression) and in the creation of direct gross value added of tourism, but also in the creation of total economic value of tourism as expressed in total gross value added of tourism.

CONCLUSION

The values of simple multiplier indicate a high cohesion of production in tourism industries to other industries and close inter-industry links. The values of multiplier with induced effect in the creation of gross value added of tourism and as the expression of net induced effect indicate the ability of tourism to contribute to the consumption in the national economy. This is achieved by means of the income creation in industries directly or indirectly related to tourism. By means of the quantification of overall economic value of tourism expressed by value added, it is then possible to contribute to strategic perception of value of tourism also in connection with its influence on supplier and follow-up industries of the national economy. Except modifications of key indicator, it is beneficial for

securing the complexity of evaluation to monitor also supplementary indicators constructed as share indicators. In terms of exploring the position of tourism in the economy, it is the indicator of the share of the total gross value added of tourism on the total gross value added in the economy; for the evaluation of economic effectiveness of tourism it is the indicator of total value added created in characteristic industries of tourism per one employee, or the indicator of the total value added created in tourism characteristic industries on one inhabitant, which can be used also to express the societal value of tourism. Compiling an entire complex of measuring societal benefits of tourism requires the implementation of procedures, which demonstrate links and mutual connections between single environment components (economic, social and environmental). In theory and practice, there is not known such a complex system of assessment and subsequent quantification of benefits, which would ascertain the final economic benefit of tourism. The present paper is a contribution to the quantification of economic benefits of tourism to the economy of the Slovak Republic, which may be applied as a consistent part of the assessment of tourism societal value.

RESEARCH LIMITATION AND FUTURE RESEARCH SUGGESTION

Limits of I-O model applicability in the quantification of economic benefits of tourism are based on the following facts: tourism is a heterogeneous industry; its output consists from several industries, which influences also technical coefficients. The method assumes a constant character of technology coefficients. However, in reality it is the changes in technologies, input prices, as well as the changes in the structure of industries that influence the technical coefficients. If these changes are marked, the value of technical coefficients is not objective. Moreover, the model operates on the

assumption of unlimited sources, the offer of which is endless and perfectly elastic. The linear and additive input-output relationships assumed among economic sectors leave out interaction effects. Because of the inter-relatedness of tourism activities, the interactions effects may be important and, consequently, the technical coefficients may not represent realistically the true relationships among sectors (Briassoulis, 1991). Miller and Blair (2009) mention short-term, existence of static linear production function, impossibility of substitution and the use of impacts of economies of scale and the fixed structure of inputs as typical I–O analysis constraints. It is also necessary to note the constraints of using multipliers as a universal tool for evaluating the impacts of changes in separate factors on output indicators. That is only a partial indicator, which does not predicate further impacts of the change of a given factor.

In the authors' future research, the procedure carried out will become part of the system determining the societal value of tourism constructed in the light of the principles of the triple bottom line system. A challenge for future development of the solution described is its application to the regional or the local level. A forward-looking follow-up of the work is also the monitoring of the directions/trends of expenditure impulses and defining multiplication more efficient and less efficient industries. The methodology represents a concept for the possibility of evaluating mutual links of tourism and selected industries (e.g. knowledge-intensive industries), but also comparing the economic performance of tourism with other economic activities.

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THE APPLICATIONS OF INTERNAL MARKETING VARIABLES TO DESTINATION MARKETING ORGANIZATIONS

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This study was done to understand the gaps between two industries for the same concept named internal marketing. The study fills the gap with the help of defining IM from the literature review and then transfiguring the idea for the tourism industry focussed towards DMOs (Destination Marketing Organizations). The study has got 13 variables of internal marketing and redefined them for the tourism sector, i.e., inter-functional coordination and integration, customer orientation, marketing-like approach, job satisfaction, empowerment, stakeholder's motivation, quality of service, stakeholder's development, training and development, vision of the firm, strategic rewards, internal communication and senior leadership. These definitions can be helpful for planners and managers of DMOs in weaving a strategy to obtain a better performance from all stakeholders. Government departments, agencies, consultancies, and NTOs can also use these definitions for policy planning and implementation.

Keywords: *Internal marketing, DMOs, Service marketing triangle, Tourism industry, and Destination performance*

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INTRODUCTION

More than 35 years ago, internal marketing was first proposed as a solution to the problem of delivering high service quality consistently by Berry, Hensel, & Burke, (1976). The internal marketing concept emerged from services marketing, and its primary concern was to get everyone who was involved in service encounters – the front-line squad of contact workforce to perform superior in the interaction with customers (Kaurav & Prakash, 2011).

Since the 1970s, IM has appeared to be the solution to the problem related to consistently delivering high service quality (Berry, Hensel, & Burke, 1976). The literature dedicated to IM is rapidly evolving and increasing (Sasser & Arbeit, 1976; Berry L., 1981; Gronroos, 1981; Richardson & Robinson, 1986; Barnes, 1989; George, 1990; Piercy & Morgan, 1990, 1991; Collins & Payne, 1991; Piercy, 1995; Foreman & Money, 1995; Varey, 1995; Cahill, 1995, 1996; Sergeant & Asif, 1998; Pitt & Foreman, 1999; Varey & Lewis, 1999; Ballantyne, 2000; Rafiq & Ahmed, 2000; Bansal, Mendelson, & Sharma, 2001; Ahmed & Rafiq, 2003; Ballantyne, 2003; Lings, 2004; Lings & Greenley, 2005; Panigyrakis & Theodoridis, 2009). By following few paragraphs concept of internal marketing is explored with the supportive and argued phenomenon.

Numerous Researchers have tried to define internal marketing number of times, but their definitions have appeared to be extremely narrow, usually unclear in explaining concepts of IM:

Berry L.L. (1981), has studied all the dimensions of employees and defined internal marketing as- “Viewing employees as internal customers, viewing jobs as internal products and then endeavouring to offer products that satisfy the needs and wants of these internal customers while addressing the objectives of the organisation.” In

the same study, he has stated that the same marketing tools used to attract customers can also serve to attract and retain the best employees, who can be considered of as ‘internal customers’.

Chowdhary & Prakash (2005), explained internal marketing as “Internal marketing refers to selling the service concept to the internal audience before it can be sold externally. The organisation must ensure all support and enable the employees to deliver what is promised.”

Clow & Kurtz (2008), also defined internal marketing as “the process of using marketing concepts to enhance the satisfaction of company’s employees is called internal marketing.”

Rafiq & Ahmed (1998), expanded the idea of internal marketing and defined it as, “... a planned effort using a marketing-like approach to overcome organisational resistance to change and to align, motivate and inter-functionally coordinate and integrate employees towards the effective implementation of corporate and functional strategies in order to deliver customer satisfaction through a process of creating motivated and customer-oriented employees”.

De Bussy, Ewing, & Pitt, (2003) argued for the concepts given earlier and stated that the concepts of internal marketing are not limited to the ‘front-line’ customer service staff alone. Even the employees who do not interact directly with their clients may impact upon the perceived service quality, because they directly influence the service providers. If all the employees perform their jobs well, they are counted as a value-added component of the service and product offering.

CHALLENGES WHILE IMPLEMENTING IM IN THE TOURISM INDUSTRY

Here is the pictorial depiction of the major challenges and issues in implementing the concept of internal marketing in the tourism industry.

- Earlier there were direct employees, which can be directly controlled or administered. Now, stakeholders cannot be directly supervised by DMOs. DMOs are not actual controllers of the stakeholders.
- No presence of clear rules and regulation by DMOs for maintaining the conduct of stakeholders. Stakeholders work in their way, have different strategies for different situations. Binding to follow the DMO leadership would not be possible.
- Absence of transparent framework for measuring business performance of stakeholders in the tourism sector.

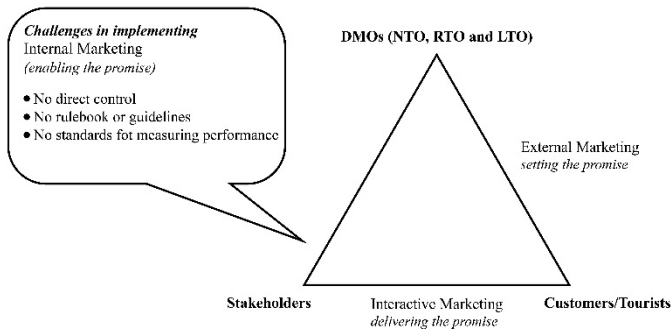


Figure 1: Services marketing triangle presenting challenges in implementing the IMC in the tourism industry (Source: Drawn by authors, based on literature review).

RESEARCH METHODOLOGY

Researchers had gone through the extensive literature review for identifying all the constructs and variables constitute internal marketing. In the process, the team has selected various concepts

and tableside them for proper knowledge dissemination in this area of research.

This piece of research is a conceptual paper identifying all the variables related to the concept of internal marketing and has interpreted them for the tourism industry. The whole study is based on secondary data which has been collected through various national and international journals of repute.

CONSTRUCTS AND VARIABLES OF IM IN SERVICE AND TOURISM INDUSTRY

From extensive and varied literature reviews, 13 constructs have been identified to make up the core structure of internal marketing for research, are derived. The constructs are i) inter-functional coordination and integration, ii) customer orientation, iii) marketing-like approach, iv) job satisfaction, v) empowerment, vi) stakeholder's motivation, vii) quality of service, viii) stakeholder's development, ix) vision of the firm, x) strategic rewards, xi) internal communication, xii) senior leadership, and xiii) training and development. For understanding and differentiating the constructs mentioned above, further discussions are followed here:

Inter-functional coordination and integration: A major impetus of internal marketing, amongst other things, is to be a vehicle for internal strategic implementation (Winter, 1985). This can be done through inter-functional coordination and integration. The concept is defined as the coordinated utilisation of an organisation's resources in creating superior value for target customers (Narver & Slater, 1990). When an organisation can use its resources efficiently to create value, it will ensure long-term profitability thus improving business performance. The role of internal marketing in integrating marketing and personnel functions must be to the extent in which personnel become a resource for the marketing function (Glassman & McAfee, 1992; Sincic & Vokic, 2007; Nahavandi, Caruana, & Farzad, 2008; Kaurav, 2015; Kaurav,

Paul, & Chowdhary, 2015; Kaurav, Prakash, Chowdhary, & Briggs, 2016).

Interpretation: In case of tourism this variable deal with how tourism authorities facilitate coordination among stakeholders like- restaurateurs and hoteliers, tour guides and escorts, travel agencies, tour operators, public and private monument authorities, merchandisers (souvenir shop owners, Emporium owners, owners of books and cassette shops, etc.), employees of local tourism department, civil authorities, event managers, etc. at a destination.

Customer orientation: Gronroos (1981) first allude to the fact that customer orientation is the driving force for internal marketing. This is especially significant for services organisations where the most crucial part of the business occurs during stakeholder-customer contact. Hence, internal marketing aims to get motivated and customer-oriented stakeholders. Later Bansal, Mendelson, & Sharma, (2001), also supported Gronroos that customer orientation is the result of better internal marketing policies. Internal marketing always generates customer focused strategies and customer orientation of employees for better results in many aspects (Hogg & Carter, 1996; Naude, Desai, & Murphy, 2003; Kaurav, 2015).

Interpretation: In the case of a tourism destination this variable deal with whether tourism authorities expand their efforts to educate and motivate various stakeholders to provide superior services to visitors.

Marketing-like approach: Internal marketing holds that stakeholders are “best motivated for service-mindedness and customer-oriented behaviour by an active marketing-like approach, where marketing-like techniques are used internally” (George, 1990). The marketing-like approach is defined as a business management philosophy based on the need for customer orientation, profit orientation, and recognition of the role of marketing to communicate the needs of the market to all major corporate departments. Hogg & Carter (1996) express their views in similar

words - marketing like approach or market orientation is a part of overall internal marketing, involving “The use of marketing techniques within the organisation to create and communicate corporate values.”

Interpretation: Marketing like approach means the customer (stakeholder) and profit (maximum tourist arrival) orientation approach adopted by destination managers.

Job satisfaction: Job satisfaction is defined as how content an individual is with his or her job. The underlying view of internal marketing is based on the concept that for a service organisation to have satisfied customers, it must first have satisfied stakeholders (George, 1990). Job satisfaction is vital as internal marketing will also serve as a tool for organisations to attract, retain and motivate its stakeholders (Bansal, Mendelson, & Sharma, 2001; Nahavandi, Caruana, & Farzad, 2008; Kaurav, Prakash, Chowdhary, & Briggs, 2016).

Interpretation: Implication for a destination is that there should be a supportive business climate at a destination; entrepreneurs will be motivated to operate and offer superior services. In contrast, a destination where service providers spend time and effort struggling with petty bureaucratic and administrative issues, they will have little energy to focus on customer issues. This, in turn, will also serve as an entry barrier for entrepreneurs. A thriving destination would require an unabated supply of entrepreneurs who come with innovative ideas and products to keep the destination fresh. Increased competition would also lead to better services for tourists. Take care of your stakeholders; they are caring for your guests. This variable measure how supportive and encouraging the destination is for business.

Empowerment: In order for stakeholders to fully appreciate their jobs (i.e. the internal product), they must be allowed more latitude in dispensing their duties (Gronroos, 1981). Berry & Parasuraman (1991) believe that empowerment should be an essential aspect of internal marketing. Empowerment is the

procedure of enabling or authorising an individual to feel, behaves, take action, control work and decision making in autonomous ways (Rafiq & Ahmed, 1998; Kaurav, 2015; Kaurav, Prakash, Chowdhary, & Briggs, 2016).

Interpretation: In case of tourism this variable describes how empowered, the stakeholders feel to conduct their businesses. Some destination authorises authoritarian and has strict guidelines for the conduct of businesses. This refers to freedom in designing and delivering products for customers, dealing with them and taking care of them. This refers to the amount of control DMOs exercise, over the stakeholders.

Stakeholder's motivation: In most organisations, the situation is that the customers are highly demanding of stakeholders while the stakeholders, in turn, hold high expectations from their jobs as sources of self-actualisation and self-development (Rafiq & Ahmed, 1998). Here, internal marketing sought to increase stakeholder's motivation by focusing on treating the job as an internal product and try to "sell" it to the stakeholders. This inward-looking philosophy is enhanced by the steps which motivate stakeholders to try out the product first (Preston & Steel 2002; Jaiswal & Saha, 2007; Nahavandi, Caruana, & Farzad, 2008; Kaurav, Prakash, Chowdhary, & Briggs, 2016).

Interpretation: DMO managers need to motivate stakeholder for their continue engagements in same or similar activities, like-cultural activities and good civilian system.

Quality of service: Preston & Steel (2002), explains, quality of service is defined as a form of attitude, related but not equivalent to satisfaction, which results from the comparison of expectation with performance. Berry & Parasuraman (1991) added that service quality is an essential element in internal marketing because high quality will make it easier for stakeholders to identify themselves with the service they are selling to the customers.

Interpretation: At a destination, good customer service should be the norm rather than the exception. Does destination manager set high standards for service quality? For a networked product like tourism, good service quality could be ensured only when all stakeholders are pressed for superior service. When a destination establishes itself for quality services, stakeholders can drive mileage out of it.

Stakeholder's development: Foreman & Money (1995) define stakeholder development as a strategic investment by an organisation in training its members. If stakeholders are required to perform their tasks well, they must be armed with the necessary skill and knowledge that is required of them. Piercy & Morgan (1989), supported foreman and money that for internal marketing to be employed efficiently within an organisation, stakeholders must be trained and adequately developed to fulfil its service role.

Interpretation: On similar lines, a destination must ensure training of stakeholders on a continuing basis. For a superior tourist experience, it is important to ensure that visitor is satisfied during all encounters involving different stakeholders from a common member of the community to trained guides and taxi drivers. This is a 'must' responsibility of DMOs public or private.

Training and development: Preston & Steel (2002); Jaiswal & Saha (2007); Nahavandi, Caruana, & Farzad, (2008) identifies, first that the training and development part is another critical factor to study internal marketing because it makes stakeholder more comfortable in adjusting them with organisational change.

Interpretation: On similar lines, a destination must ensure training of stakeholders on a continuing basis. For a superior tourist experience, it is crucial to ensure that visitor is satisfied during all encounters involving different stakeholders from an ordinary member of the community to trained guides and taxi drivers. This is a 'must' responsibility of DMOs public or private.

Vision of the firm: Foreman & Money (1995) define vision as short-term and long-term goals that stakeholders can believe in.

Internal marketing programmes that are intensively and sensitively created and put into practice, with this in mind, it will improve both the internal efficiency and external effectiveness of the organisation's marketing efforts.

Interpretation: Every destination must have a unique personality that should be projected and used for differentiating it from other destinations. DMOs must have a clear vision for positioning the destination. Ideally, all resources at a destination should be deployed towards sustaining this image. Independently, stakeholders' activities should also reinforce this image. In the absence of such a shared vision, everyone will be doing whatever they feel like and would fail to create a pre-ordained experience. The starting point, therefore, is to have a vision and share it with stakeholders who must buy in.

Strategic reward: Strategic rewards defined as a system designed to motivate behaviours, actions and accomplishments that help advance the organisations towards specific business goals. Ahmed & Rafiq (2003) believe the inclusion of strategic reward in implementing internal marketing is important as it will help in accomplishing other goals of internal marketing such as motivation and stakeholder satisfaction (Jaiswal & Saha, 2007; Kaurav, Paul, & Chowdhary, 2015; Kaurav, Prakash, Chowdhary, & Briggs, 2016).

Interpretation: Similarly, destinations should also have a reward mechanism to reinforce desirable performance by stakeholders. From simple recognition to monetary rewards/concessions are used by DMOs to reinforce required performance by stakeholders.

Internal communication: Ahmed & Rafiq (2003) identify internal communication as the dissemination of information within the organisation to enable the creation of stakeholders with a greater sense of ownership, accountability and responsibility. When stakeholders are well-informed about the expectations of its customers as well as the condition and health of the organisations,

they are more willing to dispense their duties diligently which in turn improves the business performance.

Interpretation: At a destination, it is the DMO's responsibility to keep all stakeholders engaged and together in the so far primacy of tourist interests is concerned. DMOs must continuously keep stakeholders informed about new products, schemes, and strategies. This is important as stakeholders, in this case, are independent entities (not on company rolls).

Senior leadership: Ahmed & Rafiq (2003); Jaiswal & Saha (2007), defines senior leadership as the moral and intellectual ability of the upper-echelon management to move the organisation and its stakeholders towards the right direction. Thus, leadership style is important in determining stakeholders' attitudes and behaviours. Management commitment is the most consistent predictor of stakeholders' behaviour, and its effectiveness will lead to an improvement of the well-being of the organisation.

Interpretation: DMOs as public authorities often take some antagonistic stance vis-à-vis, other stakeholders. They become just one of the competitors whereas they have a broader responsibility of herding all on the path set as strategic direction for the destination. Their role is to sell the idea (vision) of the destination and ensure to buy in terms of commitment and compliance from individual members. The success of DMOs is measured regarding sync among activities of different stakeholders at a destination.

CONCLUSION

This study was done to understand the gaps between the two industries for the same concept named internal marketing. The study fills the gap with the help of defining IM from literature review and then transfiguring the concept for the tourism industry.

The study has defined 13 variables, i.e., inter-functional coordination and integration, customer orientation, marketing-like approach, job satisfaction, empowerment, stakeholder's motivation,

quality of service, stakeholder's development, training and development, vision of the firm, strategic rewards, internal communication and senior leadership of internal marketing for tourism industry.

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THE LOGISTICS SYSTEM OF BICYCLE TOURISM DESTINATION*

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The purpose of this paper is to explore the applicability of the theoretical concept of the tourism logistics system to the bicycle tourism market. The objective is to generate a model of a bicycle tourism destination logistics system based on the conceptual framework and compare it with the actual modus operandi of bicycle destinations. Field research was realized by implementing observational and interview techniques on the example of a bicycle destination area in Croatia. Modelling and systems theory scientific methods were combined in generating three models in the process of applying a logistics approach to bicycle tourism destination system research. The paper provides the framework of an optimal bicycle destination structure and offers managerial implications for efficient bicycle tourism destination management. While the tourism logistics system logic is compatible with bicycle destinations' requirements, the theoretically based structure is more advanced than the researched system.

Keywords: *tourism logistics system; bicycle tourism destination; bicycle tourism destination system; Croatia*

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INRODUCTION AND THEORETICAL BACKGROUND

There is a vast body of outdoor adventure (recreation) tourism literature demonstrating a spectrum of research approaches (e.g., Houge Mackenzie & Kerr, 2013; Naidooa, Ramseook-Munhurrumb, Seebaluckc, & Janvierd, 2015; Weber, 2001). Nevertheless, with regard to sports tourism destinations, research has tended to focus on the economic and social impact of major events or on destination image (Weed, 2014: 2). When considering a destination's tourism product, there is a gap in sports tourism research which goes beyond the influence of the events in the destination and it is unclear how sports can be integrated into the destination product portfolio (Weed, 2014). The research also recognizes the lack of an interdisciplinary approach to the fields of destination management and sport-specific tourism destinations.

The logistics system concept of tourism destinations is an under-researched academic field, and there is no known evidence of its application to any form of special-interest tourism. This research focuses on the development of an integrated destination system of bicycle tourism supply and considers all logistics subsystems important to a destination.

The first section of this paper puts this research within the context of the existing body of knowledge on bicycle tourism and logistics in the tourism industry. It suggests a theoretically based model of the logistics tourism destination system as the research base. The second part of the paper deals with the methodological approach to research, elaborating on the design, implementation and potential limitations of the study. The third section focuses on the frameworks derived from the primary research and proposes the logistics models derived from researching the applicability of the tourism logistics system concept in an actual bicycle tourism destination system.

A short overview of theoretical background is provided to establish the context of this research.

Logistics and tourism

The Council of Supply Chain Management Professionals (CSCMP) defines logistics as “the process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods including services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements” (Vitasek, 2010: 114). Defined in this manner, logistics implies all flow movements related to a certain organizational whole □ internal and external, as well as inbound and outbound.

Researchers mostly agree that logistics is part of the Supply Chain Management (SCM) concept (e.g., Christopher, 2011; Lambert & Cooper, 2000) that seeks to achieve the optimal ratio between outcome quality and input resources. Applying SCM to tourism management is considered vital (Piboonrungrroj & Disney, 2009) because of the improvement and upgrade possibility it offers in the context of dealing with tourism demand volatility and sensitivity (p. 135). That it results in consumer satisfaction is essential in service industries such as tourism.

Zhang, Song, & Huang (2009) consider that SCM is applicable to tourism, with the prerequisites of acknowledging the specific features of tourism, (primarily product perishability and complexity, and demand uncertainty) that influence the supply chain, and managing the key issues of Tourism Supply Chain Management (TSCM) accordingly. Although lacking an integrated approach and not being nearly as explored as SCM in the manufacturing industry, TSCM has a growing body of knowledge (Font, Tapper, Schwartz, & Kornilaki, 2008; Piboonrungrroj & Disney, 2009; Song, 2012; Song, Liu, & Chen, 2013; Tapper & Font, 2004; Yilmaz & Bititci, 2006). A Tourism Supply Chain (TSC) is best defined as a “network of tourism organizations” (Zhang, Song, & Huang, 2009: 347). At a

specific tourism destination, those organizations act as parts of the same process, while engaging in various aspects of supplying tourism products and services, creating them, or distributing and marketing them.

The logistics and supply chain relationship research applied to the tertiary sector could be further extended, having in mind that the specifics of tourism and other service industries invite the development of new logistics models, rather than trying to “transfer or apply product-related models” (Daugherty, 2011: 26). The focus of this research is on one point of the tourism supply chain – the destination, whose product integrates all the elements of the offering of a specific area upwards in the supply chain.

Logistics in tourism destination management

Often, destination management is faced with coordinating the objectives of various stakeholders and surpassing inner rivalry in order to perform up to the expectations of demand. It is argued that optimal performance and synergic effects in such a complex and dynamic environment can be achieved through the application of logistics principles.

In a destination, the presence of logistics is evident in flow organization, in establishing supply chains, in organizing logistics networks and business system structures, and in the realization of events (Mrnjavac, 2010: 213-214). The relationship between logistics management and destination management is characterised by functional dependency (Mrnjavac, 2010: 253). When incorporated, the logistics management focuses on coordinating the logistics flows that circulate through the system and are subject to fluctuations. Therefore, logistics inevitably forms a part of unified, integrated destination management.

Mentzer, Flint, & Hult (2001), Mrnjavac (2012) and Zhang, Song, & Huang (2009) define tourism destination logistics as the optimisation of logistics flows in a specific area, with the aim of

providing a quality tourism product, characterised by the process aimed towards improved efficiency of all stakeholders. Generally, given the complexity of the destination product, it is clear that the basis of destination logistics must lie in a logistics systems approach (Mrnjavac, 2012; Mrnjavac & Ivanović, 2007).

The concept of a tourism destination's logistics system is at the core of this research. The theoretical frameworks from which the current research was developed are represented in Table 1. Destination logistics subsystems are formed around four logistics products in tourism (Mrnjavac, 2012; Mrnjavac & Ivanović, 2007) identified in the first framework. In addition to the four product-related logistics subsystems, there is also a fifth - the destination management and organization subsystem (Mrnjavac, 2010). The work of Mrnjavac (Mrnjavac, 2010; Mrnjavac, 2012; Mrnjavac & Ivanović, 2007) is used as a starting point in formulating the theoretically-based model of the destination logistics system (Figure 1) explained in detail under the heading The conceptual framework of bicycle tourism destination logistics system.

Table 1: Destination logistics system components

| Tourism destination logistics system framework | Destination's logistics system elements (product-related logistics subsystems) |
|---|---|
| Framework 1 | <i>the hospitality subsystem products,</i> <i>the products of tourism intermediaries,</i> <i>the traffic subsystem products,</i> <i>the logistics products of tourist attractions</i> |
| Framework 2 | <i>the hospitality subsystem products,</i> <i>the products of tourism intermediaries,</i> <i>the traffic subsystem products,</i> <i>the logistics products of tourist attractions,</i> <i>destination management and organization</i> |

Recognizing tourism as a complex system is not new to the body of knowledge in the field (Jafari, 1974; McKercher, 1999; Piboonrunroj & Disney, 2009; Smith, 1994; Trauer, 2006;

Véronneau & Roy, 2009), but there is an obvious gap in the logistics standpoint. The present work focuses on the application of logistics in modelling as opposed to the general systems approach.

Bicycle tourism and bicycle tourism destination

The differences in the existing definitions of bicycle tourism (Lamont, 2009b; Marcussen, 2009; Ritchie, 1998; Simonsen, Jorgensen, & Robbins, 1998; Sustrans, 1999) often limit the possibilities of comparing studies as well as various market determinants (such as size, value and benefits). Nevertheless, all definitions recognize the involvement of people in cycling as an integral part. Day trips and competitive riders are sometimes excluded from the research (e.g., Simonsen, Jorgensen, & Robbins, 1998).

Bicycle tourism incorporates bicycle traffic, since the bicycle is used as a mean of transportation and there is a vast body of knowledge focusing on different aspects of bicycle traffic and transportation (Bil, Bilova, & Kubeček, 2012; Dill & Carr, 2003; Flynn, Dana, Sears, & Aultman-Hall, 2011; Garrard, Handy, & Dill, 2012; Garrard, Rose, & Lo, 2008; Heinen, Maat, & van Wee, 2011; Jacobsen, 2003; Jacobsen & Rutter, 2012; Jovanović, Lavrič, Kralj, Rus, & Destovnik, 2008; Krizek, 2006; Krizek, Barnes, & Thompson, 2009; Kuijper & Braakman, 2009; Kunieda & Gauthier, 2007; Lin & Yu, 2013; Lumsdon, 2000; Martens, 2004; Smith & Kauermann, 2011; Vandenbulcke, et al., 2009; Weston & Carlos, 2012; Zacharias, 2002).

A destination plays the role of the surroundings for the bicycle tourist's experience. This role is supported by the definition of sports tourism (Weed & Bull, 2009) as a unique interaction of people, activity and place. Bull (2006) indicates that the destination is not the primary motivation for a sport tourist to travel, but this conclusion is limited to observing only competitive cyclists. However, the same study confirms the importance of an attractive

environment for outdoor activities, especially when it is closely related to the sport in question.

Research of the behavioural patterns of bicycle tourists (European Parliament, 2009; Faulks, Ritchie, & Fluker, 2006; Meschik, 2012; Simonsen, Jorgensen, & Robbins, 1998) implies a variety of preferences towards service providers during cycling holidays. Various studies indicate a strong contribution of bicycle tourists to the local economy (Cope, et al., 2003; European Parliament, 2009; Faulks, Ritchie, & Fluker, 2006; Lumsdon, Downward, & Cope, 2004; Ritchie, Tkaczynski & Faulks, 2010; Zovko, 2013; Weed, et al., 2014).

When studying bicycle tourism models Chang & Chang (2003) recognized two approaches. Although there are some bicycle tourism destinations in which the cycling culture existed prior to an adequate infrastructure, the most commonly recorded situation is that in which functional (commuter) cycling precedes the development of leisure cycling and bicycle tourism. Krieger (2007) and Marcussen (2009) support the thesis that functional demand is the basis of bicycle tourism destination development.

Unlike the perception of a destination in the form of an urban settlement, bicycle tourists often perceive a certain route, its natural surroundings and the journey on it as being more important than the destinations visited (Weber, 2001). These are perceived as stopover points while in transit or as node destinations (Lamont, 2009a) where bicycle tourists eat, rest, undertake repairs and maintenance, and obtain supplies for the next day of cycling.

The requirement to meet the vast heterogeneity of cyclist demands with a comprehensive tourism product calls for cooperation, collaboration and sharing of resources among stakeholders of the destination area offering. Mintel's report (Kelly, 2011) indicates that the bicycle tourism offering develops through flexible and demand-oriented service providers that together form a

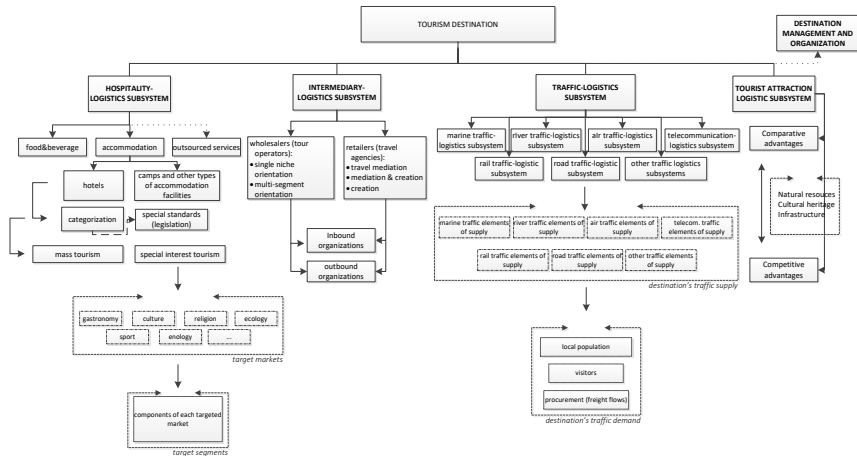
supply system for the target market. Developing specific skills and competences replaces the risk of narrowing the potential demand.

In line with the accepted premise of the need to take a macro perspective to address the variety of needs of a heterogenic market (Lamont 2009a: 610) — not neglecting the fact that the total capacity required to support cycling is considered a distinctive factor of a region appealing to bicycle tourists (Lamont 2009a: 610), the tourism destination system in Figure 1 represents a destination area.

The conceptual framework of tourism destination logistics system

The main criterion used for the analysis of the logistics system of a tourism destination relies on the standpoint present in several studies of logistics in tourism (Mrnjavac, 2012; Mrnjavac & Ivanović, 2007; Mrnjavac, Pavia, & Stipanović, 2011) that has enabled the identification of tourism logistics subsystems (in Table 1). Logistics destination products of hospitality, traffic, attractions and intermediaries are identified as the top level of destination model subsystems (Mrnjavac, 2010), all interdependent and under the supervision of destination management and organization subsystem (Figure 1). Due to its character, the organization and management of the tourist destination system is considered superior to other logistics subsystems and therefore presented one level above the aforementioned four in the context of the emerging logistics model.

Figure 1: Tourism destination area: logistics system approach



This model represents the theoretical background from which it is derived. By providing an overview of the destination logistics system concept applied to a tourism destination, Figure 1 suggests a structure and depicts its processes and functions.

The fundamentals of hospitality allow for the hospitality-logistics subsystem to be analysed based on the division into facilities primarily engaged in providing accommodation services and those primarily engaged in preparing and serving food and beverages. Outsourced services are also acknowledged due to the trends on the hospitality market where specialized service providers are an integral part of the hotel offering (Kelly, 2014). Similar trends are observed in other types of facilities.

Both mass-oriented and specialized accommodation providers are subject to national legislation and categorization. The special-

interest tourism market provides a range of possibilities for the hotel offering, not only at the level of target markets (general categories such as sports, culture, religion, etc.), but also at the level of targeted segments (for example, a particular sport).

It is important to recognize the role of tourism intermediaries in an efficient and functional relationship between supply and demand in tourism. Tourism demand gets concentrated in intermediaries and then dispersed to appropriate stakeholders (Pearce, 2012: 122, Fig.7.12.). The intermediaries act as a logistics hub, channelling information upstream and downstream. In addition to the division on retailers and wholesalers (Kaukal, et al., 2000 as cited in Zhang, Song, & Huang, 2009: 347), the intermediaries can also be viewed as receptive and emissive organizations, both significant for the destination.

Traffic demands of a certain destination require the appropriate modal split, aligned with the specifics of the environment. The successful management of these subsystems implies sufficient traffic system capacity in relation to demand fluctuations, depicting the adequate level of integration of different modes of traffic. Therefore, the destination's traffic-logistics subsystem is analysed according to the thesis that all traffic logistics subsystems are actually transport sectors (Zelenika, 2005: 437).

A tourist attraction logistics subsystem includes the comparative advantages of a destination – the natural surroundings, as well as the cultural and historical heritage and the transport infrastructure.

The need for logistics management implementation and the optimization it offers to the system is greater in tourism destinations that appeal to a certain specific interest of demand. Special interest niches are narrower and require a tailored approach, unlike the mass tourism market. Incorporated into destination management, logistics management should provide a destination with a competitive edge and ensure that the relationships (processes) and functioning of the whole system are as good as possible in a given time and place and

with the use of available resources. In the case of bicycle tourism, destination management is expected to incorporate logistics principles, while faced with the complex relationships and processes of the heterogenic bicycle tourism market.

METHODOLOGY

The primary research results are formed into models of bicycle tourism destination systems by combining the modelling method and the method of systems theory.

The modelling method allows for the researched object to be replaced by a model (Zelenika, 2000: 319) that depicts the structure of the researched system and enables the analysis of the logic of a particular subject's behaviour (processes and functions), and the formation of conclusions by analogy (Zelenika, 2000: 320). The model could be the theoretical reflection of the original and the researcher is allowed to build it using the linguistics and cognitive approach, resulting in a structure, scheme or an image.

Model creation also requires a systems approach. Although characterized by a slightly different orientation, the method of systems theory takes into account the constant movement, change and development of mutually and purposefully dependant elements which determine the operations and existence of the system (Zelenika 2000: 331) while enabling the observation of the complex phenomena in a holistic manner.

Study design and implementation

The figures presented in the following sections conceptualize bicycle tourism destination systems, drawing on a combination of critical thinking, the existing literature and the empirical evidence while applying the identified methods. In line with the need to validate the graphically represented structures and make them applicable in reality, thus enabling the transfer of model-generated

knowledge, the creation of the second and the final model implies modifications based on real data collection and interpretation.

Based on its nature and characteristics, the conducted primary research is categorized as qualitative and its objectives determine it as descriptive research (Marušić & Prebežac, 2004: 69-70). In accordance with the qualitative focus of this study, the author chose to apply two legitimate techniques of quantitative methodology □ the participatory observation and the in-depth interview. These principal techniques of field research (Halmi, 2003: 319) enable the object of research to be examined and interpreted through discourse with people, and also through place and events.

The primary data collection method used was observation (Marušić & Prebežac, 2004: 109). Systematic observation was conducted by the author individually, directly, non-structurally and in a natural setting. It was realized by assuming the role of a bicycle tourist on a cycling holiday during which the processes of each identified subsystem were monitored. In other words, the author acted as the “participant-observer” (Halmi, 2003: 239) in order to acquire better insight into the situation. Although not entirely standardized and selective in data gathering and processing (toward the set research objective), this method is implemented due to its systematic nature (Halmi, 2003: 330-331). It is the author’s responsibility to assess the validity of the data derived from the research, as opposed to the situational discourse and the sources of information from which the data was gathered.

The research was undertaken in May, the month of the beginning of larger bicycle tourism seasonal movements (European Parliament, 2009; Simonsen, Jorgensen, & Robbins, 1998). It is part of the broader study of logistics implementation in bicycle tourism in Croatia.

By implementing Lamont’s hierarchy of destinations (2009a) it is possible to differentiate the levels on which observational techniques were used. The research focuses on the destination area of Istria, a county in Croatia, leading in systematic bicycle tourism

development. Most of the field research was realized in the tourist destination region of north-western Istria, and the range of node destinations involved local administrative units of Umag, Novigrad, Buje and Brtonigla.

Field notes were collected by the identified observer in a systematic manner, after each of the five days of the field research and were collected separately for each subsystem of the bicycle tourism destination offering: accommodation and other hospitality service providers, cycling infrastructure and other traffic-related aspects of the offering, and tourism attractions. Intermediaries were not observed in such detail in the field due to the nature of their operations. An interpretative approach to field notes analysis was taken, and the data gathered were channelized into models generation.

In the final stage of research, observational techniques were complemented by the interview method. In line with the planned outcomes of the interview (testing the final model), the approach taken was an in-depth (semi-structural) interview, which attempts to achieve spontaneity of the interviewees (Halmi, 2003: 320) on the research subject, enabling the researcher to gather both subjective reflections about the current situation and future plans as well as facts about objective circumstances.

Four destination stakeholder representatives were interviewed. The author also assumed the role of an interviewer to ensure a uniform approach. Interviews were conducted at the end of the observation period and involved one regional destination management representative, two hotel management representatives and a professional bicycle guide. The criterion of sample selection was the stakeholder's attachment to a certain level of the bicycle tourism system structure. More precisely, there is only one destination area manager, and the person performing this task was approached. At the tourism destination region level, there is one destination project manager who is also the head of the bicycle

tourism product project team and a hotel company manager. At the hierarchical level below the regional level is the bike hotel manager. One of the two bike hotel managers in the area was available for the interview. The selection of the professional bike guide was not intentional. To sustain impartial data gathering during the observation period, his services were hired through regular channels, like any other tourist would do.

The interviewees offered some insider information on the current system functioning in a chosen destination area. Additional information and some clarification were obtained through e-mail communication during the process of interpreting the research notes. The reliability of the resulting conclusions (represented by the final logistics model) is ensured by crosschecking the formulated model with the gathered statements on the system components. The process ended in model validation.

Research limitations

The concept of the logistics system in tourism is not widely represented in academic research. It represents the current state of the fairly under-researched field of logistics in service industries. Service logistics research is primarily qualitative. Quantitative research is missing that would indicate a possible correlation among researched elements or enable precise performance measurements. The descriptive nature of primary research results could be considered a limitation, but the specific features of tourism allow for the less-tangible approach while there are many variables that cannot be quantified, customer satisfaction being the most important.

The scope of the present study is limited on the supply side of the bicycle tourism market. Although it was researched in a different manner (Chang & Chang, 2003; Cox, 2012; Mrnjavac & Kovačić, 2012; Mrnjavac, Kovačić, & Topolšek, 2014; Ritchie, 1998), the

logistics approach to bicycle tourism has been mostly neglected up until now.

In line with the hypothesis that the bicycle tourism product is the result of the connection between the subsystems of destination stakeholders, another possible limitation of this research is the analysis of regional bicycle destinations without addressing the national framework. Different policies (spatial planning and urban design policies, tourism development policy, policies related to health and sport and other) determine the quality of a bicycle destination's system outcome and are thus an external factor of influence from the perspective of logistics systems. Nevertheless, the field research identified the bottom-up as opposed to the top-down approach in bicycle tourism development nationally. The lack of a systems approach to the development of bicycle tourism in more than one destination area in Croatia is also viewed as a limitation, considering that the actual example studied is both the best practice and the only complete example.

The criticism concerning the following models is that they are deliberately structured in a more general manner. However, the suggested framework should be applicable to particular situations (actual destination areas with specific surroundings, resource base, own target market / segment, values and management structure) and supports such modelling settings.

RESULTS AND DISCUSSION

Pearce (2012) defines development as a process of change and suggests that the subject of research in tourism (at the level of destination) be viewed as a framework. The identified conceptual framework (Figure 1) proposes the model of a tourism destination system founded in the conceptualization of tourism logistics systems. This concept is only theoretically addressed in the prior research and its modelling was non-existent. The logistics system

concept in the context of bicycle tourism was not suggested or studied up until this point.

Modifications to this hypothetical system were sequentially implemented (Figure 2) in line with the content analysis technique applied to the observational research report. The perception of the researched destination area management concerning their destination system was acknowledged in the final suggestion of a logistics model of a bicycle tourism destination system (Figure 3).

An actual bicycle tourism destination logistics system

The implementation possibility of a theoretically based model (Figure 1) was researched in the context of an actual bicycle tourism destination, aiming to identify the existing practice. As the last country to join the EU, Croatia is considered a developing bicycle tourism destination which has yet to achieve the level of the bicycle tourism offering in Europe. Bicycle tourism is a key part of the national tourism product portfolio (Ministarstvo turizma Republike Hrvatske, 2013), but there is only one Croatian region in which bicycle tourism is systematically approached. It served as a model recommended by the Croatian Tourism Development Strategy by 2020.

The region of Istria is a leader of the bicycle tourism offering in Croatia. Nevertheless, focusing on five segments of tourism demand (wellness, tennis, cycling, football, and gourmet), the existing practice is non-selective toward particular forms of the special-interest tourism. Even though there is a visible shift from mass tourism to which most Croatian destinations are inclined, the researched destination area shows a lack of specific offering features directed exclusively towards bicycle tourism.

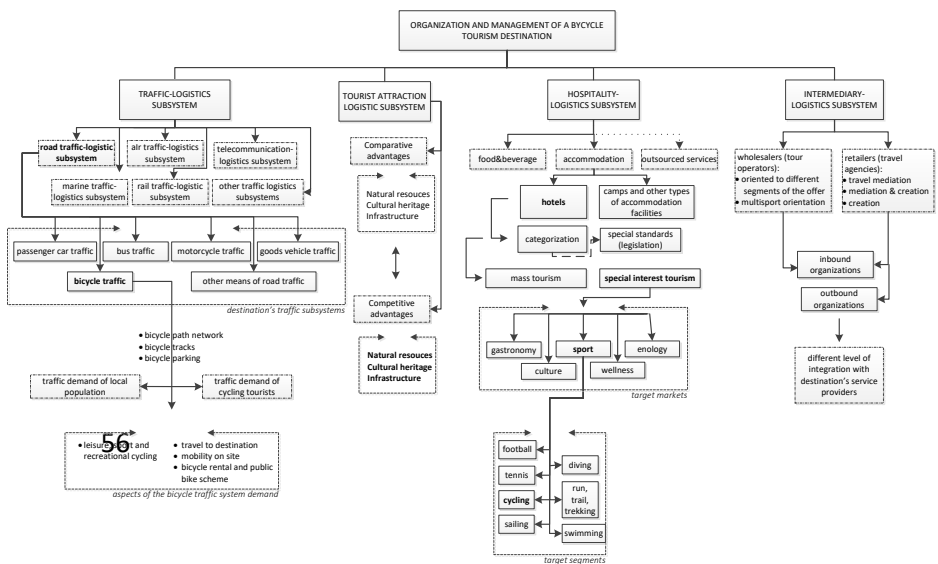
Nevertheless, the total tourism results for the County of Istria published annually by the Croatian Bureau of Statistics (<http://www.dzs.hr>) suggest market recognition of such an approach in the last five years. Likewise, the number of bicycle tourists

(according to internal destination management figures) is increasing. The upward growth trend of the volume and value of European bicycle tourism (European Parliament, 2009) speaks in favour of further specialization of the destination offering.

Based on the research data collected during observation and interviews it can be noted that the bicycle tourism offering relies on five product elements: accommodation (primarily cycling hotels and Bed&Bike facilities), bicycle routes (part of a regional system of a single infrastructure network), cycling events (ranging from professional races to promotional events), a variety of services for cyclists, and specific information availability. These elements aim at satisfying the general segments of cyclists (targeted segments are: mountain bikers, road bikers and families with children) but their effects are limited in addressing the subgroups of more refined interests.

In line with the study design and the chosen methodology and techniques of analysis, an actual bicycle tourism destination logistics model is suggested in Figure 2.

Figure 2: Tourism destination logistics system of an actual bicycle tourism destination



Unlike the original theoretical concepts (Table 1), the nature of bicycle tourism requires ranking the logistics subsystems, thus starting with the traffic subsystem. The modification is justified by the fact that bicycle traffic is the basis of bicycle tourism. Also, the importance of cycling infrastructure is verified in previous research identified in the introductory part of the paper and supported by the field research findings (observed behaviour, and the expressed opinions of all interviewed stakeholders).

A traffic-logistics subsystem integrates road, air, telecommunication, marine and rail traffic subsystems found in the destination offering. Bicycle traffic is a segment of road traffic. The organization of a bicycle traffic subsystem, and its operation and integration into the road traffic system, correlate with traffic demand. Functional demand is easier to predict than leisure demand or tourism-related demand. The sum of cyclist flows, including the flows of bicycle tourists, is an important part of demand forecasting and is influential in building the appropriate system of supply. The determinants of the traffic logistics system are summarized in Table 2.

Table 2: The determinants of the traffic-logistics system in the context of bicycle tourism destination

| | |
|---------------------------|--|
| Logistic flows | people, goods and materials, information and knowledge, money, energy, water, waste |
| Purpose | recreation and leisure, sport, functional cycling, tourism |
| System's features | attractiveness, availability, cohesion, comfort, safety |
| System's function | coordinated realization of the traffic-tourism services, along with the previously specified |
| System's processes | tourism and transportation regulatory framework cohesion, synthesis of the tourism and transportation offer, allocating the responsibility for the output quality (of traffic service), promoting the tourism-traffic network, service quality |

| | |
|----------------------------|---|
| | standardization etc. |
| System's activities | integrating bicycle traffic development planning into other relating subsystems, network specification, service standardization, integrating tourism and traffic service providers, traffic planning towards a coherent system of a 'short distance' destination, promoting system's beneficial features, interacting with demand |
| Demand segments | local population (different purposes), visitors (tourists, excursionists), destination's procurement |

Infrastructure is the only element of the traffic system falling into the 'non-exclusive' category, while it is also identified as part of the attraction subsystem for bicycle tourists. The elements of bicycle traffic found at the destination area (track and path network, parking, public bike scheme, etc.) all aim at attracting a wider audience – including both residents and tourists.

The attraction subsystem is an inevitable part of the bicycle tourism product, as identified. All elements of competitive advantage are found at the destination area, but those are not aimed at satisfying only bicycle tourists.

An observation of the hospitality subsystem in the researched destination system resulted in identifying the two main groups of accommodation service providers - hotels and camps (the Hospitality and Catering Industry Act, 2006). This is significant in relation to the existing diversity of bicycle tourists' accommodation preferences. One end of the spectrum includes cyclists who are oriented towards comfort and a wide range of services, and who prefer hotel accommodation, sometimes even luxury. At the other end are tourists who prefer camping or travel on a budget, and take care of their needs themselves during their journey (Kelly, 2009; Ritchie, 1998).

Some elements of the identified hotel products (e.g., outsourced bike guides) target only bicycle tourists, while other (e.g., accommodation and food & beverage services) aim at a wider audience. The observation resulted in the exact determination of the targeted markets and targeted segments of the sport tourism market, depicting the current situation and destination management as not entirely focused on bicycle tourism. The analysis of the hospitality-logistics subsystem is summarized on the example of the bicycle tourism hotel, the determinants of which are presented in Table 3.

Table 3: The determinants of the hospitality-logistics system, in the context of bicycle tourism

| | |
|---------------------------|--|
| Logistic flows | <ul style="list-style-type: none"> • input: information, goods (raw materials and semi products), services, money, knowledge, energy, water, return logistic flows • output: transformed logistic inputs (the hotel product), money, waste |
| System's functions | <ul style="list-style-type: none"> • experience • expertise • safety |
| System's processes | <ul style="list-style-type: none"> • internal: planning, implementing, control; supply, service creation, sales and marketing • external: supply, service creation, sales and marketing |

Focusing exclusively on bicycle tourists is more frequent at the level of tour operators (Kelly, 2009), than the retailers. Nevertheless, only 10% of bicycle tourists are inclined towards organized package tours (Kelly, 2013). Although not directly researched during observation, the information dependency of the bicycle tourism market (Mrnjavac, Kovačić, & Topolšek, 2014) further stresses the importance of the full integration of the intermediary subsystem into the destination offering. This includes constant information exchange with the wholesalers and the retailers operating in the area.

All logistics subsystems illustrated in Figure 1 are confirmed to be an integral part of the well-integrated bicycle tourism destination, and are considered essential on the destination area level. It is argued that the logistics system has the ability to cope with tourism supply chain issues that reflect the specific features of tourism (such as demand uncertainty or coordination-intensity) and the amplification of these issues when a destination is faced with a special-interest tourism demand, especially one defined by the diversity of its components like the bicycle tourism market.

The implementation of the logistics system: a more sophisticated approach to bicycle tourism

Based on the presented findings, the logistics approach presented in Figure 1, together with the processes it implies, is general enough to be considered applicable in the context of any existing bicycle tourism destination offering. However, the application of the concept to a specific destination system (like the one researched) depends upon clearly defining the system's components in accordance with the specific features of its environment. Therefore, the implementation of the logistics system concept would imply that the existing tourism destination management:

- (1) identifies and analyses all the elements of the bicycle tourism product, and
- (2) develops a more-precise systems approach through the logistics subsystems identified in Figures 1 and 2 (traffic, attraction, hospitality and intermediary).

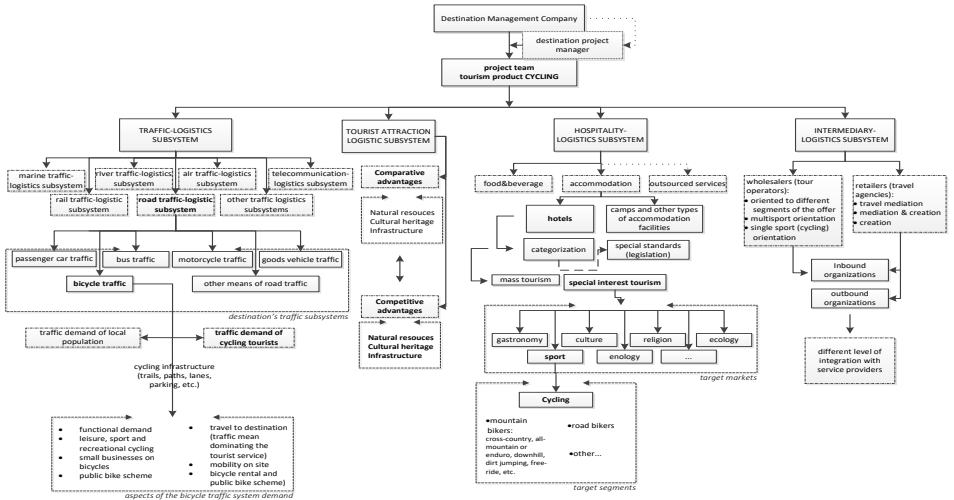
The implementation of a logistics systems perspective is suggested to enable grasping the whole system's potential and moving toward a more sophisticated bicycle tourism product. The possible outcome of the logistics concept applied to the structure of

the existing system of any actual destination is presented in Figure 3.

During the process of model (Figure 2) validation the interviewed stakeholders suggested that the destination management in form of a public-private partnership incorporating project management with permanent project teams (Destination Management Company or DMC) is considered adequate. The existing structure implies one project team per each of the five tourism products. Destination project management fulfils the function of logistics management, since it plans and organizes the processes in this tourism destination region, integrates knowledge into the process outcomes, and supervises the implemented processes, detecting the need for change and improvement. The role of the destination project manager is thus considered a whole-system coordinator.

Although all elements of the bicycle tourism destination logistics sub-systems were not present in the researched example, the framework suggested (Figure 3) acknowledges an entire range of each sub-system's logistics products and services. The tourism destination management should not be limited with the presented framework. Rather, it should seek to differentiate the destination from its competition by expanding the list of sub-system elements in line with the existing potential of the bicycle tourism offering.

Figure 3: Bicycle tourism destination logistics system: upgrading the bicycle tourism product



There are a variety of improvement suggestions and upgrade solutions deriving from the three logistics models presented in this paper. They represent managerial implications general enough to be applicable to a particular setting. When developing and upgrading the bicycle tourism product, destination management is advised to: ensure public and political support; incorporate bicycle infrastructure into related policies (traffic, tourism, spatial planning, building regulations, etc.); develop strategic bicycle tourism documents and support the execution by clearly identifying the actions, resources and the responsible bodies; standardize criteria for cycling-friendly service providers accessible to the public; enable certification for cycling-related service providers; promote specialized service providers; provide incentives for small and medium-sized accommodation providers to target bicycle tourists;

enable service-provider clustering and support interaction between them and destination management; manage traffic demand; form a uniform but diversified cycling network (allocate responsibility for upgrades and maintenance); enable creation of service points on the network; plan access points to the routes by bicycle; support integration of different modes on transit routes; convert abandoned infrastructure for cyclists' use; offer thematic routes; monitor bicycle tourists' arrivals and length of stay all year round; monitor bicycle tourists' satisfaction with the offering; monitor the quality of services provided; provide education, training and assessment of bicycle tourism service providers; communicate information to cyclists through different media; and organize cycling events. These could be further supplemented according to the particular setting.

CONCLUSION

The systems approach has enabled the identification and analysis of the heterogenic variety of tourism destination elements of supply. Regardless of the differences in approach, all the elements of a certain model are considered important parts of a systems whole. From the perspective of a destination area, all identified logistics subsystems are significant in realizing the system's objectives and its operational optimization, while aiming at core process (creating the appropriate service) realization. In approaching the total bicycle tourism market, a tourism destination area needs to involve all indicated core subsystems.

This paper proposes a model of a bicycle tourism destination system founded in the conceptualization of a logistics system, a concept previously not applied to bicycle tourism. The logistics system concept represents a logical option in coordinating and managing a variety of different stakeholders, brought together by a joint focus on bicycle market niche demand. All figures acknowledge the functional dependency characteristic for the relationship between destination management and logistics

management and enable the analyses of the structure, core and supporting elements, the existing and potential relationships, and the functions and activities that each of the identified elements has in the core process realization in each individual case. Elements of the systems are primarily observed as mutually dependant and interactive. Neither of the identified subsystems is considered individually able to provide the entire range of services required by any of the bicycle tourism segments.

Summarizing the research results, the conceptual framework of a logistics system in tourism (Mrnjavac, 2010; Mrnjavac, 2012; Mrnjavac & Ivanović, 2007) is argued to be the appropriate approach in bicycle tourism destination offering research and is considered a contribution to qualitative upgrades of destination management in such destinations. Building logistics subsystems around logistics products in tourism has proved suitable for the systems research of this kind, while the focal points of the general concept agree with the specific features of bicycle tourism. Unlike the original concept, the nature of bicycle tourism requires ranking the logistics subsystems in a different manner.

Recognizing the research limitations, an interdisciplinary approach is suggested for other future research of bicycle tourism.

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CAN PSYCHOLOGICAL WELLBEING BE A PREDICTOR OF CHANGE THROUGH TRAVEL? AN EXPLORATORY STUDY ON YOUNG DUTCH TRAVELLERS

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This paper focuses on the impact of psychological wellbeing on the change perceived after a travel experience by young students. Wellbeing is investigated as a consequence and not as an antecedent of travel, though literature assumes the subjectivity of the travel experience. Expanding on existing literature, it is

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hypothesized that ‘change through travel’ is a three-dimensional concept: travellers may feel changed in their relationship with themselves, the other and the natural environment. In 2015 a survey was designed to explore the impact of wellbeing on change as a benefit from travel and a questionnaire administrated in a Dutch university. PCA confirmed the hypothesis and showed three-dimensionality of change. Logistic regression models assessed the impact of wellbeing on change. Results suggest that four out of six wellbeing components (positive relations to others, autonomy, purpose in life, self-acceptance) influence the dimensions of change. Implications of these results for academics and professionals are discussed.

Keywords: *Psychological wellbeing, Youth, Dutch, Travel experience, Change*

*Not all those who wander are lost.
J.R.R. Tolkien*

INTRODUCTION

While scholars have studied the travel choices and patterns of adults extensively over the years, our knowledge of youth travel behavior is surprisingly limited and uneven. Youth tourism, though, is a dynamic and booming phenomenon that merits more extensive attention than it has received until now.

The research’s objective is to foster the understanding of youth travel behaviour by focusing on the impact of psychological wellbeing on the change perceived after a travel experience. Openness to change is considered one of the main characteristics of the so-called Millennials, i.e. people born between 1980 and 2000 (Glover, 2010). In the context of tourism, the concept of benefits derived from a travel experience has received attention by tourism scholars; yet change as one of these benefits is less profoundly investigated.

In particular, there is a lack of research on the psychological antecedents of change through travel. To addresses both gaps, this

study firstly identifies the main dimensions of change induced in young people by a travel experience and, secondly, examines the impact of psychological wellbeing on the perceived change.

The paper is structured as follows. After a brief literature review, the research method is explained and then the results are discussed. Finally, a conclusion highlights the implications of these results for academics and practitioners.

LITERATURE REVIEW

This paragraph highlights the main theories on which the study is based and how this work will contribute to their development. It is organized in three subsections: wellbeing in relation to travel; change through travel and youth tourism experience.

PSYCHOLOGICAL WELLBEING AND TOURISM

Defining well-being is very complex and, usually, well-being studies consider it an output, not an antecedent of the travel experience. In this section, therefore, we'll try to give a definition of this concept and how the researchers analyzed it in publications on tourism. Finally, in particular, we will make a synthesis of the few scholars who have considered the well-being as an antecedent of the change.

Well-being is a growing area of research, yet the question of how it should be defined remains unanswered. Below we will briefly summarize the different perspective on well-being that have been developed in the economic and psychological research domains.

Well-being has become an increasingly established criterion in the study of economic performance of countries based on the measures of gross domestic product (Van Zanden et al., 2014). However, such approaches to well-being have been criticized by Amartya Sen who proposes that more attention should be drawn to

human values in the assessment of well-being (Sen, 1993). People have preferences about desired social outcomes, beyond the narrow economic focus, which can be expressed in the distinction between functionings (states of being) and capabilities (states of doing) (Sen, 1993; Van Zanden et al., 2014). This breaks from the traditional view of well-being that is related to wealth. According to Sen, Diener (1984), one of the principal researchers in the field of subjective well-being (SWB), looks at well-being from the perspective of psychology. Diener refers to such a perspective as “happiness studies”, and states that it seeks to go beyond objective items to measure wellbeing. Diener argued that the assessment of wellbeing from the point of view of the perception of individuals is termed subjective wellbeing (SWB), which includes positive and negative measures based mostly on measures of mental health and satisfaction. In the Diener’s study, wellbeing is defined as the existence of a healthy body (physical wellbeing) and mind (mental wellbeing) in relation with the surrounding environment; and as an evaluation of the quality of life according to an individual own subjective parameters, i.e. wellbeing as a cognitive judgment.

Following up on these suggestions, according to *Bronfenbrenner (1979)* in more ecological sense, Ryff and Keyes (1995) proposed a multidimensional model of well-being constituted by six distinct components (see Table 2). For this reason, in our study we considered important to use psychometric instruments, as the Ryff and Keyes’s scale, that give a valid conceptual formulation of psychological wellbeing and who know how to provide a satisfactory measurement.

Literature on wellbeing and tourism can be categorized into four main areas: happiness and well-being as a consequence of travel; subjective wellbeing; wellbeing as a destination marketing tool and wellbeing studied in regard to specific types of tourism products (Piuchan, Suntikul, 2016). In the field of tourism wellbeing has mostly been considered an outcome of the tourism experience, as it is already evident in the definition by UNWTO (2016) where

tourism is seen as key to development, prosperity and wellbeing. Generally speaking, wellbeing is considered to be intrinsically linked to tourism's role of relaxation and recreation (Konu and Laukkanen, 2010), but only as a consequence.

Travelling has been highlighted as an activity undertaken to pursue happiness and as beneficial for one's spirit and well-being (Piuchan, Suntikul 2016; Chen, Lehto and Chai, 2013; Konu and Laukkanen, 2010). In this literature, the concept of well-being is often used as a synonym of subjective well-being (SWB), life satisfaction and quality of life (Bimonte and Faralla, 2015) or level of happiness (Milman, 1998). The notion of well-being is also used to promote destinations. In synthesis, empirical studies (Piuchan, Suntikul 2016, Filep, 2014) have discovered that holidaymaking let tourists to experience a higher sense of SWB. Yet, fulfilling tourist experiences are characterized not only by pleasure but also by the way in which tourists find meaning from their travel experiences (Piuchan and Suntikul 2016). However, it remains unclear how different dimensions of SWB change as a result of vacationing, while the role of SWB in the pre travel change has not yet been systematically investigated.

Looking at the components of a tourism experience, research has addressed the linkages between motivation and well-being (Konu and Laukkanen, 2010) but has left unexplored the linkages with change. One of the few exception is, Dodge, Daly, Huyton and Sanders (2012) who propose a new definition of well-being as the balance point between an individual's resource pool and the challenges faced: stable well-being is when individuals have the psychological, social and physical resources that they need to meet a particular psychological, social and/or physical challenge. In this model resources produce well-being and a consequence of it is the change.

Very few scholars have stated that individuals need a minimum state of psychological well-being in order to face stress and cope

with change more effectively (Cicognani, 1999). This notion is especially accepted in the clinical area where to start a therapy a minimum state of well-being is needed; only then, the therapy can cause a positive change.

On a similar line, Caprara et al. (2006) and Fermani et al. (2013) examined the concurrent and longitudinal impact of self-efficacy beliefs on subjective well-being, namely positive thinking and happiness. Positive thinking has been operationalized as the latent dimension underlying life satisfaction, self-esteem and optimism. Self-efficacy and well-being contribute to promote positive expectations about the future and produce positive change.

Literature shows that individuals who and societies that are more stable and possess higher levels of wellbeing deal better with change. For example, well-being has been found to be an indicator of the quality of citizens' engagement, political participation and positive change (Boffi, Riva and Rainisio, 2014). Though these studies are rare they are in our opinion very interesting because they open up the possibility to consider well-being not only as a consequence but also as an antecedent of change. At the theoretical level, in the literature related to tourism, in our opinion, there is a gap that should be filled. Consequently, the question that motivated this research is: "can psychological well-being be considered as a predictor of a certain kind of change in the tourism experience?"

A particularly innovative aspect of this paper is, therefore, our discussion of the impact of well-being as independent variable on the change perceived by youngsters as a benefit from travelling.

YOUTH TOURISM EXPERIENCE

In our research we have chosen to investigate the youth segment because in an era of unprecedented challenges for the travel industry, youth travel represents not just an important market segment, but also a vital resource for innovation and change. The global youth travel industry is now estimated to represent almost

190 million international trips a year, and has grown faster than global travel overall. By 2020 there will be almost 300 million international youth trips per year, according to annual report 2012 UNWTO (2013) forecasts.

The importance of youth tourism as a socio-economic force and an area of study has been already underlined in the 1991 UNWTO Conference (Richards and Wilson 2004). In the following years, youth tourism acquired a well-defined position in the context of tourism studies, especially thanks to its scale (Horac and Weber, 2000; Seeking, 1998; Wheatcroft and Seekings, 1995). Twenty-six years after the UNWTO Conference, the interest in youth and student tourism is still increasing, both from various institutions in the European Union and from the international scientific community. This is especially true for themes such as the characteristics of young tourists.

The UNWTO and WYSE Travel Confederation (2008) defines youth tourism as independent trips shorter than one year undertaken by people aged 16-29 and motivated, in part or in full, by a desire to experience other cultures, build life experience and/or benefit from formal and informal learning opportunities outside one's usual environment. The majority of youth travellers either travel alone, or with one other person. Often, they meet fellow travellers and even form groups along the way.

UNWTO and WYSE Travel Confederation (2008) are convinced that youth travel has moved far beyond its original status as a specialized travel niche to become an important element of the travel mix in any tourism destination. One of the reasons for this is that travel underpins many different aspects of youth lifestyles. For young people travel is a form of learning, a way of meeting other people and other culture, is a source of career development, is a means of self-development and part of their identity – you are where you've been. Young people see travel as an essential part of their everyday lives, rather than just a brief escape from reality. This has

far-reaching consequences for the places they visit. Because of the way they travel, the social and cultural consequences of hosting young people are becoming even more important than the economic effects. The added value to be extracted from youth travel lies in innovation, positioning, cultural links, international trade and exchange, social support, education, learning support for local communities, and so on. In synthesis, in Europe and in the wider international context there are numerous scientific studies on youth and student tourism (Babin and Kuemlim, 2001; Richards, 2011; Mura and Khoo-Lattimore, 2013).

However "these [studies] are too dispersed and structured on certain aspects to allow an overview of the phenomenon" (Moisă, 2010, p. 575). Consequently, even though scholars have studied the travel choices and patterns of adults extensively over the years, our knowledge of youth travel behavior is surprisingly limited and uneven.

In other words, more research is needed into the motivational, behavioral and experiential dimensions of young travellers. This last dimension has recently gained some attention: the emotional implications of travelling have led to a conceptualization of tourism in terms of experience (Pearce, 2005; 2011). It has therefore been argued that the major difference between younger and older tourists lies in the type of experience and the motivation to travel.

In synthesis, the young tourism experience consists of three main components: the need to travel, the consummation of the experience itself and its evaluation. In tourism studies, evaluation is conceptualized as satisfaction and as perceived change. This research focuses on the last aspect of a tourism experience: change as a benefit from travel. The main reason for this focus is that literature has identified openness to change as one of the main characteristics of people born between 1980 and 2000 (Glover, 2010) and there is limited research on how a travel experience impacts on youngsters' openness to change.

CHANGE AS BENEFIT FROM TOURISM AND IMPLICATIONS IN TERM OF IDENTITY

The concept of identity is closely linked to the notion of change while the transformational effect of travel experiences on young people's identity is well documented. The journey, with its power of change, influences the personal and social identity of the traveler. As it has briefly been observed above, according to the UNWTO and the WYSE Travel Confederation (2016) one of the reasons why young people travel is exploring and engaging with cultures. Being exposed to different cultures usually helps young travellers to understand better their own cultural values, biases and sometimes even their own physical selves, which in turn often contribute to shaping new identities. While some young travellers report having discovered their true self during their journey, others indicate that their trip has changed their overall lifestyle in some ways. Very often new paths and new careers arise as a result of travel. Indeed, literature suggests that the benefits that youngsters derive from travel range from cultural exchange, socialization and developing an open-mind, to deepening core values, (re)-constructing the own identity and experiencing personal change (e.g. Leed, 1991; Higgins-Desbiolles, 2006; Smed, 2009).

In synthesis, the power of youth travel is not solely economical. The psychological, social and cultural benefits for the young traveller and the communities that host them are far-reaching, long-term and measurable (Nejati, Mohamed and Omar, 2014; Mohammadi and Khalifa, 2014; Moisă, 2010).

If journey causes an identity revolution, in terms of development and change, then the next question to be asked is whether change through travel is uni- or multidimensional. On the basis of existing literature, a recent study has identified two main dimensions of change: referred to the person self ("I") and referred to the relationship between the person and others ("I and you") (Cavagnaro and Staffieri, 2016). The same study noted that in the

literature no reference is made to change in the relationship with the natural environment. This is surprising because becoming more sustainable is considered one of the major challenges facing tourism development (UNWTO, 2013; Nejati, Mohamed and Omar, 2014; Romagosa and Priestley, 2013). Sustainability on an individual level implies a more caring attitude not only towards people, but also towards the planet (Cavagnaro and Curiel, 2012). More than any other market segment, youth and student travellers are leading with innovation and paving the way for responsible tourism. Therefore, it seems necessary to explore whether and under which conditions a tourism experience may encourage change not only in the way a travellers relate to others, but also to nature.

Moreover, considering that travelling involves a change in the travellers' identity, it can be important to explore this change with reference to the *Social Identity Theory* (Tajfel, 1982; Tajfel and Turner, 1986) and the *Place Identity Theory* (Proshansky, Fabian and Kaminoff, 1983). These two theories are considered here because they constitute the main explanatory models at meso-level of contemporary social psychology and because they share a similar approach to social cognition as a function of intergroup dynamics..

Henri Tajfel (1982), the major exponent of Social Identity Theory, conceived social identity as that part of an individual's self-concept, which derives from the individual's membership of a social group (or groups) and from the value and emotional significance attached to this membership. This was an important step in showing that self-definition varies with the social context, becoming defined at the group level in intergroup contexts as representatives of the salient social categories. A process later labelled "depersonalization" by self-categorization theory—is an important and lasting contribution of *Social Identity Theory*.

The innovation of the personal/social identity theory was threefold: firstly, it disputed the notion of a unitary or fixed self-structure ("the" self-concept); secondly, it explicitly avoided privileging either the personal or the group identity (group identity

does not have to be nested within a more general individual self-concept), seeing them as dependent on the context. And thirdly, just as there may be multiple social identities or group self-categorizations corresponding to situated group memberships, in principle there may also be multiple "personal" identities corresponding to the range of situations, roles, and relationships in which individuals find themselves. From this analysis it can be concluded that both the social and the personal identity may be "social" to the degree that they are constructed and constituted in situ by the local comparative context.

The second theory, *The place-identity theory* has provided important contributions to the field of psychology by emphasizing the influence of the physical environment on identity and self-perception. Unfortunately the contribution of this theory in relation to other identity theories has not yet been clarified. Even though the concept "place-identity" may be relevant, if seen as a part of other identity theories, because identity manifests itself on many levels, one of which is place.

Proshansky, Fabian and Kaminoff (1983) defined Place-Identity as a "potpourri of memories, conceptions, interpretations, ideas, and related feelings about specific physical settings, as well as types of settings" (1983, p. 60). Place attachment is considered a part of place-identity, but place-identity is more than attachment. Place-identity is a substructure of self-identity, like gender, and is comprised of perceptions and comprehensions regarding the environment. These perceptions and conceptions can be organized into two types of clusters; one type consists of memories, thoughts, values and settings, and the second type consists of the relationship among different settings (home, the environment of primary importance, school or city; Proshansky and Fabian, 1987). Identity develops as children learn to differentiate themselves from people around them, and in the same way, place-identity develops as a child learns to see her or himself as distinct from, but related to, the

physical environment. Here social and environmental skills and relationships are learned, and the "lenses" are formed through which the child later will recognize, evaluate and create places. Place-identity changes occur throughout a person's lifetime. Place-identity becomes a cognitive "database" against which every physical setting is experienced (Proshansky Fabian and Kaminoff, 1983).

Within the field of social psychology, theories on identity have been constructed, tested and modified, but the element of the physical environment has largely been neglected (Lappegard, 2007). On the other hand, we think that the connection between SIT (personal and social identity) and Place-Identity is possible. According to Twigger-Ross, Bonaiuto and Breakwell (2003) place can be defined as a social entity or "membership group" providing identity. Finally, place-identity theory, may be seen a supporting our choice to look for change not only in the relationship between the traveller and himself or the travellers and others, but also in the relationship between the traveller and the natural environment.

THE PRESENT STUDY

The main purpose of the present study was to identify the main dimensions of change induced in young people by a travel experience and to examine which dimensions of psychological wellbeing have the greatest influence on this change.

METHOD

This section discusses first the research method and secondly the measure used and their reliability.

PROCEDURE AND PARTICIPANTS

A survey was distributed at a Dutch University in 2015. Students are especially interesting in researching travel experience

because they tend to travel independently, i.e. without a supervising adult (Carr, 2003). The questionnaire identified participants who had an independent travel experience. The sample reached fits the definition of Millennials as the age of participants is 16 to 30 years. The self-selected sample size was set at 395 respondents, safely above the amount of 300 considered as a good sample size by Comfrey and Lee (1992). Usable for the analysis were 297 questionnaires.

The largest age group is formed by the youngest respondents, aged 16-20 (77.4%), followed by those aged 21-25 (21.1%) and 26-30 (1.5%). This distribution matches the target group of the University that students enter after completing high school around 18 years of age and leave after four years of study. The University also offers post-graduate courses and part-time courses and these are usually taken by slightly older students. The gender distribution is not fully balanced with a 63.3% of respondents being female (vs 36.7% males). This unbalance may be considered a consequence of the self-selection of the sample. Most respondents are Dutch (72.7%), an unsurprising result because the survey was held at a Dutch University of Applied Sciences. The rest of the respondents (27.3%) is represented by several nationalities, and is a reflection of the University's international character. Prior to undertaking the investigation, ethical clearance was obtained from respondents.

MEASURE AND FACTOR ANALYSIS

To answer the research questions, the survey was designed on the basis of existing literature (Staffieri, 2016; Ryff and Keyes, 1995) with the addition of items measuring change in relation to nature (see Table 1 for change and 2 for wellbeing). The Likert scale used ranges from *completely disagree* to *completely agree*.

A Principal Component Analysis (PCA) was conducted to reduce the number of variables and identify the main dimensions of change. Through PCA three components were extracted explaining

66.2% of the total variance (Table 1). The suitability of the analysis has been verified ($KMO = 0.864$). The first component is related to the introspective nature of change; the second shows that a travel experience may induce a change in youngsters' perception of nature; and the third component relates to interpersonal change. Following the terminology introduced by Cavagnaro and Curiel (2012), the first component is called 'I' change, the second 'All' and the third 'Me and You' change.)

More specifically, it may be said that the first and the third component of change reflect the dichotomy identified by Leed (1991) between the push towards the other and the push towards the self (Cavagnaro and Staffieri, 2015; 2016). The second component permits to identify a third dimension of change pushing the young traveller to reconsider his or her relationship in respect to nature. That this dimension could be identified without reference to a specific type of tourism, such as ecotourism, is interesting because it reveals that notwithstanding its hedonic character (Kim, Ritchie and McCormick, 2012) a tourism experience still offers the possibility to perceive a change in the relationship with nature, and therefore arguably in self-transcending values. Besides, considering that two out of the three items included in the 'All' component suppose a positive change in the relationship with nature, it may be argued that intrinsic in a tourism experience lies the opportunity to enhance the feeling of connection with and care for nature (Cavagnaro, Staffieri, 2016).

Starting from these three change components, three new binary variables were computed, considering the median value as a discriminator. Then these binary variables were used as dependent variables in logistic regression models in order to verify the influence on the perceived change of psychological wellbeing.

Table 1 – Dependent variables of change from PCA

| <i>Component</i> | <i>Item/category (Items' order corresponds to their contribution to the component)</i> | <i>Description</i> |
|--------------------------------------|---|---|
| <i>CHANGE PERCEIVED: 'I'</i> | <p>The travel/experience changed my way of being</p> <p>The travel/experience changed my life</p> <p>The travel allowed me to know myself better</p> <p>The travel experience has contributed to my personal growth</p> <p>The travel experience opened my horizons</p> | <p>Binary variable, built considering the median value of the First component (FC), obtained from PCA, of the 12 items related to the concept of change.</p> <p>FC variance explained=43.4%</p> <p>Total Variance Explained=66.2%</p> <p>KMO=0.864</p> |
| <i>CHANGE PERCEIVED: 'ALL'</i> | <p>The travel experience helped me to feel in contact with nature</p> <p>The travel experience changed my relationship with the natural environment</p> <p>The travel experience convinced me that we need to protect natural resources</p> | <p>Binary variable, built considering the median value of the Second component (SC), obtained from PCA, of the 12 items related to the concept of change.</p> <p>SC Variance Explained=14.4%</p> <p>Total Variance Explained=66.2%</p> <p>KMO=0.864</p> |
| <i>CHANGE PERCEIVED: 'I AND YOU'</i> | <p>The travel experience gave me a taste for more travel</p> <p>The travel experience increased my openness to other cultures</p> <p>The travel experience helped me gain a greater cultural awareness</p> <p>The travel experience allowed me to socialize with different people</p> | <p>Binary variable, built considering the median value of the Third component (TC), obtained from PCA, of the 12 items related to the concept of change.</p> <p>TC Variance Explained=8.4%</p> <p>Total Variance Explained=66.2%</p> <p>KMO=0.864</p> |

Psychological wellbeing has been measured using the short version of the Psychological Wellbeing Scale developed by Ryff and Keyes (1995). In particular, *autonomy* describe people self-determining and independent, able to resist social pressures, evaluates self by personal standards. Who has *environmental mastery* has a sense of mastery and competence in managing the environment, controls complex array of external activities, makes effective use of surrounding opportunities, able to choose or create contexts suitable to personal needs and values. One who is included in the *personal growth* has a feeling of continued development, sees self as growing and expanding, is open to new experiences, has sense of realizing his or her potential, sees improvement in self and behaviour over time, is changing in ways that reflect more self-knowledge and effectiveness. Who has *positive relations with others* has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy and affection; understands give and take of human relationships. one who is included in the factor *purpose in life* has goals in life and a sense of directedness, feels there is meaning to present and past life, holds beliefs that give life purpose. Finally, the factor *self-acceptance* describes who owns possesses a positive attitude toward the self; acknowledges and accepts good and bad qualities of self; feels positive about past life.

For further analysis, the six components constituting the scale were recoded as binary variables considering the median value as a discriminator (Table 2).

Table 2 – Set of independent variables

| Component | Item/category | Description |
|-----------|---------------|-------------|
|-----------|---------------|-------------|

| | | |
|--------------------------------|--|--|
| AUTONOMY | <p>I tend to be influenced by people with strong opinions (R)</p> <p>I have confidence in my opinions, even if they are contrary to the general consensus</p> <p>I judge myself by what I think is important, not by the values of what others think is important (R)</p> | <p>Binary variable, built considering the median value of the total score obtained summing the values of the Likert scale.</p> |
| ENVIRONMENTAL MASTERY | <p>In general, I feel I am in charge of the situation in which I live</p> <p>The demands of everyday life often get me down (R)</p> <p>I am quite good at managing the many responsibilities of my daily life</p> | |
| PERSONAL GROWTH | <p>I think it is important to have new experiences that challenge how you think about yourself and the world</p> <p>For me, life has been a continuous process of learning, changing and growth</p> <p>I gave up trying to make big improvements or changes in my life a long time ago (R)</p> | |
| POSITIVE RELATIONS WITH OTHERS | <p>Maintaining close relationships has been difficult and frustrating for me (R)</p> <p>People would describe me as a giving person, willing to share my time with others</p> <p>I have not experienced many warm and trusting relationships with others (R)</p> | |
| PURPOSE IN LIFE | <p>I live life one day at a time and don't really think about the future (R)</p> <p>Some people wander aimlessly through life, but I am not one of them</p> <p>I sometimes feel as if I've done all there is to do in life (R)</p> | |

| | | |
|-----------------|---|--|
| SELF-ACCEPTANCE | When I look at the story of my life, I am pleased with how things have turned out I like most aspects of my personality In many ways, I feel disappointed about my achievements in life (R) | |
|-----------------|---|--|

Note: (R) Reverse

The goodness of fit of the logistic models was tested using the Hosmer-Lemeshow (HL) test, especially suitable in the case of small sample sizes. If the HL test statistic is not significant, the model fit is acceptable (Hosmer and Lemeshow, 2000). The HL statistic test confirms the goodness of fit for all of the logistic regression models carried out.

RESULTS AND DISCUSSION

In this section only significant results will be reported and discussed (for a complete vision of the statistical results see Tab. 3).

Tab 3 - Logistic model parameters

| | B | Standard Error | Exp(B) | Sig. |
|---------------------|---|----------------|--------|------|
| <i>CHANGE "ALL"</i> | | | | |

| | | | | |
|----------------------------------|-------|------|-------|----|
| Autonomy | -.466 | .247 | .628 | * |
| Environmental mastery | -.093 | .255 | .912 | |
| Personal growth | .030 | .267 | 1.031 | |
| Positive relations with others | -.082 | .276 | .922 | |
| Purpose in life | -.466 | .259 | .628 | * |
| Self-acceptance | .544 | .268 | 1.723 | * |
| <i>CHANGE "I"</i> | | | | |
| Autonomy | .122 | .248 | 1.129 | |
| Environmental mastery | -.371 | .255 | .690 | |
| Personal growth | .288 | .269 | 1.333 | |
| Positive relations with others | -.792 | .278 | .453 | ** |
| Purpose in life | -.017 | .259 | .984 | |
| Self-acceptance | .148 | .266 | 1.160 | |
| <i>CHANGE "I AND YOU"</i> | | | | |
| Autonomy | .167 | .253 | 1.182 | |
| Environmental mastery | .270 | .259 | 1.310 | |
| Personal growth | .838 | .268 | 2.312 | ** |
| Positive relations with others | .197 | .280 | 1.218 | |
| Purpose in life | .150 | .264 | 1.161 | |
| Self-acceptance | .382 | .268 | 1.465 | |

Note. * $p < 05$, ** $p < 01$, *** $p < 001$.

For each, the regression coefficient B , odds ratio $Exp(B)$ and p value are noted in brackets. The odds ratio, an exponentiation of the B coefficient, measures the strength of the statistical association between two variables, in the present case psychological wellbeing and the type of change perceived ('I', 'I and You' or 'All'). Results of the logistic model show a significant influence of four out of the six dimensions of psychological wellbeing on change. Hereby they are presented and discussed one by one.

All other variables held constant, respondents scoring higher on the dimension *positive relations with others* are 2.207 times less likely to perceive a change related to the self (I change) than respondents scoring lower ($B = -.792$; $Exp(B) = .453$; $p < 0.01$).

As anticipated in the literature review, where these theoretical paradigms are analyzed, tentatively, this result can be explained with reference to the *Social Identity Theory* (Tajfel and Turner, 1986) and the *Place Identity Theory* (Proshansky, Fabian and Kaminoff, 1983). First it could be noted that the three aspects of identity might be associated with the three types of change through travel individuated in this study. More specifically: 'personal identity' with the introspective or 'I' change; 'social identity' with the interpersonal or 'I and You' change; and 'place identity' with change in relation to nature or 'All'. Secondly that, as mentioned above, *Social Identity Theory* postulates a tendency to define the group of affiliation (in-group) positively at the expense of others (out-group). The tendency to favor one's own group at the expense of others is called the in-group bias. Since the dimension 'positive relations with others' describes stable and warm relationships with the in-group, it may be assumed an exclusion of out-groups determined by bias. This may lead to less exchange with people with different values and cultures, and therefore limited opportunities to (re)-construct the own identity and experiencing personal change (Leed, 1991). Finally, a concurrent explanation may be offered considering that people may maximize in-groups' benefits even at the expense of personal wellbeing (Klandermans, 2000). In this case

a de-identification process may be the cause why respondents moves away from the pole of personal identity (I) to the social identity.

For future research, it would be interesting to test whether people high on 'positive relations with other' are indeed lower in openness to other cultures (broad-mindedness values) or are affected by a de-identification process. Following a suggestion by Gilligan (1993) who noted that women are more prone than men to lose their self to please other, the influence of gender should also be analyzed.

Although the significance levels are low, it is still interesting to notice that respondents scoring higher on the dimension 'autonomy' seem less likely to perceive a change related to nature (All) ($B = -.446$; $\text{Exp}(B) = .628$; $p < 0.1$). Similarly, respondents scoring higher on the dimension 'purpose in life' are less likely to perceive a 'All' type of change ($B = -.446$; $\text{Exp}(B) = .628$; $p < 0.1$). These results may be explained with reference to studies on the influence of value orientations on pro-environmental behaviour. These studies show that values such as being influential and not being influenced by others (that are items measuring 'autonomy') are constituent of an egoistic value orientation (Schwartz, 1994). This value orientation is negatively related to pro-environmental behavior (Steg and Vlek, 2009). Looking at the items composing the dimension 'purpose in life', it may be noticed that they do not refer to any specific scope in life. This leaves open the possibility that one's 'purpose in life' is based on egoistic value orientations, or more generally on values not (strictly) related to care and concern for nature. Future research should explore the linkages among values orientations; wellbeing and change though travel more in depth.

Respondents who score higher on 'self-acceptance' are 1.723 times more likely to feel change in relation to nature ($B = .544$; $\text{Exp}(B) = 1.723$; $p < 0.05$), while respondents who score higher on 'personal growth' are 2.321 times more likely to feel change in relation to others ($B = .838$; $\text{Exp}(B) = 2.312$; $p < 0.01$). About the first result (self-acceptance and change in relation to nature) we propose

the following considerations. A place is often associated with a certain group of people, a certain lifestyle and social status. In relation to maintaining a positive self-esteem and personal wellbeing, this means that people will prefer places that contain physical symbols that maintain and enhance positive self-esteem and personal wellbeing, and, if they can, they will avoid places that have negative impacts on their self-esteem and personal wellbeing. Clean and uncontaminated nature is one of these places, as recent literature suggests (Lappégard, 2007). It may therefore be argued that people high in self-esteem look for places supporting it, including uncontaminated nature, and have therefore a higher chance than other to perceive a change in their relationship towards the natural environment.

Alternatively this results and the result concerning the impact of 'personal growth' on perceived change towards other, may be explained with reference to Geller (1995) who shows that people with a high level of self-acceptance and a sense of continued growth/development as a person are able to better focus on others and on the surrounding environment. On the same line Maslow (1943, 1954) affirms that self-achievement forms the basis for self-actualization leading to the peak moments in which a person recognizes to be part of a greater whole.

CONCLUSION

Youth tourism is a very significant phenomenon, both for its material and its immaterial impact on society (UNWTO, 2008). Even though, research on this target group is limited and fragmented in general (Richards and Wilson, 2004; Staffieri, 2016 and regarding the influence of the youngster's psychological wellbeing on the change perceived after a travel experience in particular.

From an academic perspective this study contributes by confirming that three dimensions of change through travel can be identified and by showing that psychological wellbeing may be used

as independent variable impacting on one dimension of the tourism experience, change. Our results open up the possibility to use wellbeing as antecedent also of other dimensions of the tourism experience, such as the meaning given to travel.

Moreover, the new dimension of change, change in relation to nature, may not only be used for further research on antecedents of such a change but also as a measure of success for those travel forms that aim at positively influencing the attitude of travellers towards nature, such as eco-tourism. Researchers call for noteworthy efforts to promote key elements of sustainability and educate actual and future generations, the latter being crucial for the destination's development in the long run. According to Buffa (2015) understanding travel motivations and behaviors of this segment are, therefore, key factors to design proper, effective, and long-term destination strategies.

This study presents some limitations. To start with it refers to only one measurement at a certain moment in time. Though it may be contended that people emotional experience present a high level of coherence (Diener and Larsen, 1993), a longitudinal study is needed to better understand the influence of wellbeing on change through travel and to measure change and not only perceived change as in this study. The used Ryff's scale, moreover, relies on self-reported assessments of psychological well-being. As with all self-report instruments, students may respond in ways that are socially desirable rather than reveal their actual response to each statement. Furthermore, cultural factors are also overlooked in SWB measures in most studies, e.g. there is little information about tourists living in the Eastern cultural context. Replication of this study in other cultural contexts is therefore recommended.

In discussing results some other suggestions for future research have already been given. To these we wish to add that a longitudinal study is also needed to assess the impact of the perceived change on

the further development of the personal, social and local identity of the traveller (Tajfel, 1982; Proshansky, Fabian and Kaminoff, 1983).

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INVESTIGATING PERCEIVED RISKS IN INTERNATIONAL TRAVEL

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This study analyses perceived risks in international tourism and looks at how several key indicators contribute to the individuals' perception of risk in international travel. The purpose of this article is twofold: firstly, to explore the primary risk dimensions associated with international travel; and secondly, to investigate whether sociodemographic variables and past travel experience influence perceived risks. To achieve these purposes, a scale of perceived risks was previously tested using a sample of 530 respondents. An exploratory factor analysis was conducted and a scale of five factors of perceived risks towards travelling internationally was obtained, namely: physical risk, destination risk, value-time risk, personal concerns and inconveniences. This study also revealed that perceptions of risk involved while travelling internationally vary according to personal characteristics, such as gender, age and level of education, as well as past travel experience. Theoretical and practical implications are also discussed.

Keywords: *Risk perception, risk factors, international travel, past travel experience, sociodemographic background*

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INTRODUCTION

The tourism experience is susceptible to the effects of a wide range of natural and manmade risk events such as natural disasters, contagious diseases, wars and terrorist attacks (Chew & Jahari, 2014; Lehto, Douglas, & Park, 2008; Sönmez & Graefe, 1998b). Awareness of these events might exacerbate the level of risk perception and discourage people from travelling internationally to a tourism destination or even to an entire region or country (Fuchs, 2013; Lehto et al., 2008; Sönmez & Graefe, 1998b). Given that, safety and security has become a determining attribute for international travellers (Omar, Abukhalifeh, & Mohamed, 2015). Besides, the impact of such events affects not only the natural environment and the immediate local communities, but also the minds of potential travellers (Lehto et al., 2008). In this regard, it is important to identify what risks potential travellers may perceive when planning an international trip and assess if these perceptions vary according to individuals' characteristics. Hence, this study sheds light on the complexity of risk-related perceptions among travellers.

In an attempt to provide further insights into this field, the purposes of this study are (1) to determine whether the degree of perceived risk associated with each factor differs according to gender, age, level of education and past travel experience and how and (2) to propose a comprehensive scale for risk perception measurement in tourism research. Accordingly, two research questions guide this study: (1) Do sociodemographic variables and past travel experience influence perceptions of risk associated with international travel? And if so how? (2) How can the scale for risk perception measurement in tourism research be operationalized?

This study contributes to the literature by proposing a scientific framework to better assess risk perception in tourism quantitative research for international travel. In addition, it indicates which factors influence perceived risks.

LITERATURE REVIEW

Risk perception in tourism research

The literature on risk perception is well established in tourism research. Originally, academics identified perceived risks associated with consumer behaviour and the main risk dimensions brought to light were physical, financial, performance, social, psychological and time (Conchar, Zinkhan, Peters, & Olavarrieta, 2004; Dowling & Staelin, 1994; Roselius, 1971). In tourism literature, the concept was pioneered by Roehl and Fesenmaier (1992) and the three main dimensions were physical-equipment, vacation and destination risks. Recently and with the current intensification of risk events that may threaten the safety of travellers, numerous authors have examined perceived risks in the tourism field, as shown in Table 1 and Table 2.

Most risk perception studies approach the study of perceived risks differently. Over the past two decades this has resulted in a large number of different scales, with a large variety of risk typologies and risk attributes. A closer analysis of previous scales reveals a lack of homogeneity in conceptualizing and operationalizing the concept. Hence, a lack of consensus on what elements to take into account when determining risk perception and its measurement scale has led to confusion on how to assess risk perception in tourism research.

For some authors 'attributes' are considered 'typologies' and for other authors the opposite is the case. For instance, some authors consider terrorism as an attribute of the political risk typology

(Dolnicar, 2005; Gray & Wilson, 2009; Seddighi, Nuttall, & Theocharous, 2001) or as an attribute of the physical risk typology (Fuchs, 2013; Reichel, Fuchs, & Uriely, 2007), while other authors consider terrorism a risk perception typology (He, Park, & Roehl, 2013; Law, 2006; Reisinger & Mavondo, 2005, 2006; Rittichainuwat & Chakraborty, 2009; Sönmez & Graefe, 1998b). Taking this into account, the concept of risk perception in tourism literature presents numerous and differing typology approximations. Consequently, these elements run the risk of giving results that are incomparable and non-generalizable across studies.

The tourism experience is not only influenced by consumer risks but it is also prone to be influenced by particular events such as adverse weather, natural disasters, contagious diseases, political unrest, hostile locals and crime, among others (Reichel et al., 2007; Simpson & Sigauw, 2008). Therefore, the scope of risks first introduced in consumer behaviour literature has been widened in tourism literature. Even though previous authors developed scales of perceived risks specific to travel, there is still the need to develop a more comprehensive itemized typology of perceived risks related to international travel, and this study addresses that gap.

This study contributes to the existing body of tourism literature by providing a measurement scale for risk perception, which includes all possible aspects of risk that could be used in an instrument to assess the concept. Perceived risks included in scales developed in previous tourism studies were identified, redefined and reorganized as follows. The 26 risk typologies identified are shown in Table 1 and Table 2 presents the 50 risk attributes identified.

Table 1. Risk perception typologie

| | Environment/Natural risk | Financial/Monetary risk | Physical risk | Psychological risk | Social risk | Time risk | Functional–Equipment risk | Satisfaction/Expectation risk | Health/Disease risk | Political risk | Terrorism risk | Travel/Tourism I/General risk | Food risk | Cultural risk | Crime risk | Planning/Performance risk | Political and religious dogma | Property risk | Site/Destination-related risk | Mass risk | Behavioural risk | Interpersonal risk | Transportation risk | Travel service risk | Concern for/about others | Human induced risks | Σ |
|------------------------------------|--------------------------|-------------------------|---------------|--------------------|-------------|-----------|---------------------------|-------------------------------|---------------------|----------------|----------------|-------------------------------|-----------|---------------|------------|---------------------------|-------------------------------|---------------|-------------------------------|-----------|------------------|--------------------|---------------------|---------------------|--------------------------|---------------------|---|
| Chew & Jahari, 2014 | x | x | x | x | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Chiu & Lin, 2011 | | | | | | | | | | | | | | | x | | | | | | | | | | | 1 | |
| Dolnicar, 2005 | | x | | | | | | | x | x | | | | | | x | x | | | | | | | | | 5 | |
| Fuchs, 2013 | | | x | x | x | x | | | x | x | | | | | | | | | x | x | x | | | | | 9 | |
| Fuchs & Reichel, 2011 | x | x | | x | x | | | | | | | | | x | | | | | | | | | x | x | | 7 | |
| Fuchs et al., 2012 | | | | | | | | | | | x | | | x | | | | x | x | | | | | | | 4 | |
| He et al., 2013 | | | x | x | x | x | x | x | x | x | x | x | | | | | | | | | | | | | | 10 | |
| Gray & Wilson, 2009 | | | | x | | x | | | | x | | | | | | | | | | | | | | | | 3 | |
| Jonas et al., 2011 | | | | | | | | | x | | x | | | | | | | | | | | | | | | 2 | |
| Law, 2006 | x | | | | | | | | x | x | | | | | | | | | | | | | | | | 3 | |
| Lepp & Gibson, 2003 | | | | | | | | | x | x | x | | x | x | x | | x | | | | | | | | | 7 | |
| Lepp et al., 2011 | | | | | | | | | | | | | | x | x | | | x | | | x | | | | | 4 | |
| Lin & Hsu, 2013 | | | | | | | | | | | | x | | | | | | | | | | | | | | 1 | |
| Maser & Weiermair, 1998 | | | | | | | | | | | | x | | | | | | | | | | | | | | 1 | |
| Morakabati, 2011 | | | | | | | | | | | | | | | | | | x | | | | | | | | 1 | |
| Morakabati et al., 2012 | | | | | | | | | | | | x | | | | | | | | | | | | | | 1 | |
| Moreira, 2008 | | | | | | | | | | | | x | | | | | | | | | | | | | | 1 | |
| Park & Reisinger, 2010 | x | | | | | | | | | | | x | | | | | | | | | | | | | | 2 | |
| Reichel et al., 2007 | | x | x | x | x | | | x | x | | | | | | | | | x | x | x | | | | | | 9 | |
| Reisinger & Mavondo, 2005 | | x | | | x | | | | x | x | | | | x | | | | | | | | | | | | 5 | |
| Reisinger & Mavondo, 2006 | | x | x | x | x | x | x | x | x | x | x | | | x | x | x | | | | | | | | | | 13 | |
| Rittichainuwat & Chakraborty, 2009 | | x | | | | | | | x | x | x | | | | | | | | x | | | | | | | 5 | |
| Schroeder et al., 2013 | | | | | | | | | | | | x | | | | | | | | | | | | | | 1 | |
| Seabra et al., 2013 | | | | | | | | | | | | x | | | | | | | | | | | | | | 1 | |
| Sedighi et al., 2001 | | | | | | | | | | x | | | | | | | | | | | | | | | | 1 | |
| Sharifpour et al., 2014a | | | x | | | | | | | | | x | | | | | | x | | | | | | | | 3 | |
| Sharifpour et al., 2014b | | | | x | | | | | | | | x | | | | | | x | | | | | | | | 3 | |
| Simpson & Siguaw, 2008 | | x | | | | | | | x | | | x | | x | | | x | x | | | | x | x | x | | 9 | |
| Sönmez & Graefe, 1998 | | x | x | x | x | x | x | x | x | x | x | | | | | | | | | | | | | | | 10 | |
| Tavitiyaman and Qu, 2013 | | | | | | | | | | | | x | | | | | | | | | | | | | | 1 | |
| Tsaur et al., 1997 | | | x | | | | | x | | | | | | | | | | | | | | | | | | 2 | |
| Σ | 4 | 10 | 10 | 7 | 9 | 3 | 4 | 5 | 10 | 9 | 8 | 13 | 2 | 5 | 5 | 2 | 1 | 2 | 9 | 3 | 2 | 1 | 1 | 2 | 1 | 1 | |

Influences on risk perception

In reality, not all travellers perceive risks in the same way. According to Roehl and Fesenmaier (1992), the significance of each risk dimension varies according to individuals and their particular circumstances. Previous studies indicate that risk perceptions are influenced by personal factors such as gender, age, nationality, income and education (Gibson & Yiannakis, 2002; Lepp & Gibson, 2003, 2008; Pizam et al., 2004; Reisinger & Mavondo, 2005, 2006; Roehl & Fesenmaier, 1992; Sönmez & Graefe, 1998a, 1998b) and by stimulus factors, such as travel information search (Kozak, Crofts, & Law, 2007; Pizam et al., 2004; Sönmez & Graefe, 1998a) and past travel experience (Lepp & Gibson, 2003; Sharifpour, Walters, & Ritchie, 2014; Sönmez & Graefe, 1998b). This research is principally interested in gender, age, education and past travel experience as factors that shape tourists' risk perceptions towards travelling internationally.

Regarding the sociodemographic background, researchers revealed that risk perception varies according to gender (George & Swart, 2012; Lepp & Gibson, 2003; Pizam et al., 2004; Qi, Gibson, & Zhang, 2009; Reichel et al., 2007), contrary to Moreira (2008) and Sönmez and Graefe (1998b), who did not find gender influences perceptions of risk. Lepp and Gibson (2003) found that men perceived health and food risks to a lesser degree than women, while war, political stability, crime, cultural barriers and political-religious dogma risks did not vary by gender. Qi et al. (2009) found that women perceived risk of violence more than men and, that men perceived health and cultural risks more than women. Yet, men and women were not different when it comes to perceiving socio-psychological risks. Reichel et al. (2007) revealed that men were concerned about risk dimensions related to socio-psychological, socio-political, mass tourism and behavioural risks, whereas women were more worried about physical, expectations and financial risks.

Researchers have also reported that age influences risk perceptions (George & Swart, 2012; Gibson & Yiannakis, 2002). George and Swart (2012) found that older tourists were more concerned about becoming victims of crime. Gibson and Yiannakis (2002) revealed that perceptions of risk tended to decrease with age. However, Sönmez and Graefe (1998b) did not find age influenced risk perceptions. In addition, education has also been found to impact perceptions of risk (Sonmez & Graefe, 1998b). Individuals with a higher level of education had a more positive attitude towards international travel. As a consequence of these conflicting results, and the need to understand risk perception by the individual's sociodemographic characteristics, this study examines risk perception by gender, age and education.

Finally, previous studies indicate that perceived travel risks are affected by past travel experience. Research shows that risk perception decreases when past travel experience increases (Lepp & Gibson, 2003; Sharifpour, Walters, & Ritchie, 2014; Sönmez & Graefe, 1998b). Lepp and Gibson (2003) found that less experienced international travellers perceived a higher risk in relation to health, terrorism and food than more experienced travellers. Similarly, Sharifpour et al. (2014) found that past international travel experience is significantly related to perceived risk dimensions. Their results show that less experienced travellers perceive more risk in relation to physical, destination-related and general risks than more experienced tourists. However, Qi et al. (2009) found no significant relationship between previous travel experience and the level of perceived risks. Given these diverse results, there remains a need to further address the influences of past travel experience on risk perceptions. This issue is addressed in the present study.

METHODOLOGY

Sampling plan

A population of university members and a convenient sampling method were used. From the 553 questionnaires collected, 23 were deleted due to contradictory answers. The final valid sample was 530 respondents and their profile is shown in Table 3. Sample descriptive and frequency statistics were analysed using statistical software SPSS 21 for Windows.

Table 3. Profile of participants (N=530)

| Variable | Sample (N=530) | Percentage (%=100) |
|--|-------------------|-----------------------|
| Gender | | |
| Female | 393 | 74.2 |
| Male | 137 | 25.8 |
| Age | | |
| 18-27 | 352 | 66,4 |
| 28-37 | 66 | 12,5 |
| 38-47 | 63 | 11,9 |
| 48+ | 49 | 9,2 |
| Education | | |
| High school | 99 | 18.7 |
| Bachelor's degree | 260 | 49.1 |
| Master's degree | 82 | 15.5 |
| Doctorate | 47 | 8.9 |
| Other | 42 | 7.8 |
| Nationality | | |
| Spanish | 502 | 94.7 |
| Other | 28 | 5.3 |
| N° past international trips (Last 5 years) | | |
| 1-5 | 339 | 64.0 |
| 6-10 | 119 | 22.5 |
| 11+ | 54 | 10.2 |

| | | |
|---|-----|------|
| None | 18 | 3.4 |
| Nº of continents visited (Lifetime) | | |
| 1 | 287 | 54.2 |
| 2 | 144 | 27.2 |
| 3 | 64 | 12.1 |
| 4 | 25 | 4.7 |
| 5 | 2 | 0.4 |
| None | 8 | 1.5 |
| Africa | | |
| Visited Africa before | 121 | 22.8 |
| Not visited Africa before | 409 | 77.2 |
| America | | |
| Visited America before | 174 | 32.8 |
| Not visited America before | 356 | 67.2 |
| Asia | | |
| Visited Asia before | 77 | 14.5 |
| Not visited Asia before | 453 | 85.5 |
| Europe | | |
| Visited other European countries before | 502 | 94.7 |
| Not visited other European countries before | 28 | 5.3 |
| Oceania | | |
| Visited Oceania before | 7 | 1.3 |
| Not visited Oceania before | 523 | 98.7 |

Research design and attribute development

The risk attributes were mined from the risk perception literature in the tourism field and the questionnaire was designed according to accumulated literature on perceived risks. In total, 50 risks specific to travel were identified (Table 2).

To ensure that these covered all risk-related issues and that the wording was appropriate, a content validity examination was conducted. The final version of the questionnaire was pilot-tested by

university members through an online version in order to test comprehensibility, clarity and reliability. Finally, minor changes to wording were made.

Data collection

The questionnaire was developed to test the scale of perceived risks resulting from the attribute mining and identification. A structured, self-administered questionnaire was used to collect primary data and required approximately 10 minutes to complete. The questionnaire was online, ensuring anonymity and eliminating interviewer bias as well as the likelihood of socially desirable responses. In order to increase the response rate, an incentive was offered to all participants, with the chance to win a weekend for two people.

The questionnaire was divided into two sections. The first collected sociodemographic data related to gender, age, level of education and nationality. With this the researchers could determine whether differences exist in risk perception among respondents. Information regarding past travel experience was collected using a multi-faceted approach. Respondents noted the number of trips made over the previous five years and continents visited in their lifetime. The second section comprised a multi-dimensional scale of 50 attributes of perceived risks, which had been previously identified in the tourism literature (Table 2). In an international pre-trip context for leisure purposes, respondents were requested to rate their level of perceived risk for each item on a 7-point Likert-type scale. The scale ranged from 1 = “no risk” to 7 = “very high risk”. In line with previous studies (Reichel et al., 2007; Sharifpour, Walters, & Ritchie, 2014), the respondents were asked about pre-trip perceptions in order to assess their level of risk prior to the potential experience. Moreover, all the items were presented randomly every time the questionnaire was conducted in order to reduce possible

biases caused by the item sequence. Note that other available risk perception studies relied on reconstructing past travel experiences (Maser & Weiermair, 1998; Simpson & Siguaw, 2008).

Data analysis

Data analysis was carried out using SPSS 21 software. Firstly, the validity and reliability of the analysis was examined by undertaking an Exploratory Factor Analysis (EFA) with the purpose of ensuring that the scale served the purpose of this research. A series of one-way analysis of variance (ANOVA), Pearson correlations and independent sample *t* tests were performed to investigate the influences of sociodemographic variables and past travel experience variables on perceived risk factors associated with international travel.

FINDINGS

Exploratory factor analysis of risk attributes

An EFA was conducted to examine the appropriateness of each risk item in addition to improving the validity and reliability of the scale for measuring risk perception. The Kyser-Meyer-Olkin (KMO) measurement and Bartlett's test of sphericity were conducted to ensure that the data had sufficient inherent correlations to perform EFA. The KMO result of 0.968 indicated that sufficient items were predicted by each factor and the Bartlett's test was significant at the level of 0.000, which indicated that the variables were correlated highly enough to justify the use of EFA. Hence, EFA with principle component and varimax rotation was undertaken with the aim of reducing the dimensions of the risk attributes and identifying the determinant risk dimensions. The cut-off point of item inclusion in a factor was above 0.4. EFA performed item examination and all 50 risk attributes associated with international travel were grouped into

5 factors: (1) physical risks, (2) destination risks, (3) value-time risks, (4) personal concerns and (5) inconveniences. The total cumulative variance explained by these factors was 60.955%. The value of Cronbach's alpha for all the factors was satisfactory and above the recommended value of 0.7, which assured the reliability of the scale as well as the consistency between responses. These results are presented in Table 4.

Table 4. Exploratory Factor Analysis (N=530)

| | Factor loading | Com-munal ities | Mean score | Eigen-value | Variance (%) | α |
|------------------------------------|-----------------------|------------------------|-------------------|--------------------|---------------------|----------------------------|
| Factor 1: Physical risks | | | | 19.679 | 39.357 | 0.964 |
| Kidnappings | .894 | .814 | 4.12 | | | |
| Murders | .888 | .808 | 4.02 | | | |
| Criminal attacks | .882 | .799 | 4.25 | | | |
| Terrorist attacks | .870 | .774 | 4.51 | | | |
| War | .852 | .748 | 4.71 | | | |
| Contagious diseases | .839 | .731 | 4.40 | | | |
| Sexual harassment | .805 | .696 | 3.82 | | | |
| Being arrested | .772 | .693 | 3.89 | | | |
| Natural disaster | .768 | .661 | 3.86 | | | |
| Harassment by locals | .754 | .666 | 3.47 | | | |
| Muggings | .724 | .688 | 4.32 | | | |
| Drug problems | .681 | .639 | 3.25 | | | |
| Racism | .664 | .646 | 3.38 | | | |
| Political instability | .660 | .556 | 3.75 | | | |
| Not clean food/water | .645 | .618 | 4.33 | | | |
| Lack of healthcare | .610 | .528 | 4.27 | | | |
| Robberies | .595 | .666 | 4.46 | | | |
| Accidents | .525 | .581 | 3.83 | | | |
| Fraud/Deceit | .517 | .637 | 4.15 | | | |
| Police & legal issues | .504 | .450 | 3.45 | | | |
| Hostile locals | .439 | .545 | 3.32 | | | |
| Factor 2: Destination risks | | | | 6.406 | 12.811 | 0.930 |
| Bad roads | .756 | .673 | 2.91 | | | |

| | | | | | | |
|------------------------------------|------|------|------|--------------|--------------|--------------|
| Chaotic traffic | .731 | .634 | 3.20 | | | |
| Transport problems | .649 | .625 | 3.35 | | | |
| Telecom. problems | .638 | .563 | 3.00 | | | |
| Lack of hygiene | .612 | .619 | 3.77 | | | |
| Equip.Org. problems | .602 | .614 | 3.19 | | | |
| Getting lost | .580 | .512 | 3.21 | | | |
| Electrical outage | .596 | .631 | 2.80 | | | |
| Loss of items | .593 | .607 | 3.92 | | | |
| Trip disapproval | .521 | .474 | 2.24 | | | |
| Dislike food | .515 | .463 | 2.64 | | | |
| Lodging problems | .518 | .556 | 3.42 | | | |
| Pollution | .505 | .503 | 3.43 | | | |
| Bad experiences | .480 | .665 | 3.25 | | | |
| Factor 3: Value-time risks | | | | 1.733 | 3.465 | 0.869 |
| Extra expenses | .771 | .689 | 3.57 | | | |
| Extra travel costs | .722 | .608 | 3.67 | | | |
| Bad value for money | .598 | .647 | 3.49 | | | |
| Delays | .553 | .623 | 3.13 | | | |
| Long waiting times | .549 | .642 | 3.13 | | | |
| Crowded attractions | .528 | .383 | 3.55 | | | |
| Waste of time | .489 | .572 | 2.74 | | | |
| Sickness/Illness | .461 | .400 | 3.46 | | | |
| Factor 4: Personal concerns | | | | 1.385 | 2.770 | 0.753 |
| Trip not self-image | .580 | .526 | 2.50 | | | |
| Dissatisfaction | .501 | .658 | 2.93 | | | |
| No adjust to lifestyle | .491 | .548 | 2.48 | | | |
| Factor 5: Inconveniences | | | | 1.275 | 2.550 | 0.737 |
| Cultural barrier | .607 | .610 | 3.10 | | | |
| Language barrier | .561 | .531 | 2.92 | | | |
| Adverse weather | .566 | .514 | 3.15 | | | |
| Strikes | .439 | .454 | 2.75 | | | |

Rotation method: Variamax with Kaiser. Extraction Method: Principal Component Analysis.

Sociodemographic and past travel experience influences

ANOVA was used to determine the effect of certain variables on risk factors associated with international travel. The five risk factors were used as dependent variables, while gender, age groups, education and number of past trips were independent variables. A one-way ANOVA revealed that perceived risks vary based on gender, age and education.

As illustrated in Table 5, physical risk is the only risk factor that varies according to gender. The level of perceived physical risk was significantly different between male participants (Mean $M=3.70$, Standard Deviation $SD=1.48$) and female participants ($M=4.07$, $SD=1.53$). Women showed higher levels of perceived physical risks than men. No significant differences were found across gender for the other risk factors.

Age significantly influenced four risk factors. The youngest age group, from 18 to 27, was characterized by showing the highest levels of risk perception in relation to physical risks ($M=4.18$, $SD=1.50$), destination risks ($M=3.30$, $SD=1.17$), personal concerns ($M=2.73$, $SD=1.30$) and inconveniences ($M=3.07$, $SD=1.19$). The oldest age group showed the lowest levels of risk perception regarding physical risks ($M=3.11$, $SD=1.47$) and personal concerns ($M=2.17$, $SD=1.08$) whereas the 28-37 age group showed the lowest levels of risk perception with regard to destination risks ($M=2.80$, $SD=1.13$) and inconveniences ($M=2.66$, $SD=1.07$). In general, younger participants tend to show higher levels of perceived risks toward international travel than older participants. In other words, risk perception for international travel decreases with age.

Risk perception varies based on education. The level of perceived destination risks was significantly different between those who had high school education ($M=3.46$, $SD=1.30$) or a bachelor's degree ($M=3.19$, $SD=1.17$), compared to those who had a master's degree ($M=2.97$, $SD=1.12$) or a PhD degree ($M=2.78$, $SD=1.02$). Regarding value-time risks, significant differences were found

between those who had high school ($M=3.57$, $SD=1.36$) and those who had a doctorate ($M=2.96$, $SD=1.02$). The level of perceived personal risk was significantly different between those who had high school ($M=2.98$, $SD=1.43$) and those who had a doctorate ($M=2.26$, $SD=1.12$). For risk of inconveniences, there were significant differences between those who had high school ($M=3.28$, $SD=1.24$) and a bachelor's degree ($M=2.91$, $SD=1.15$) compared to those who had a master's degree ($M=2.84$, $SD=1.13$) and a doctorate ($M=2.79$, $SD=1.14$). In general, the degree of perceived risks for these four risk factors decreases the higher the level of education.

Table 5. ANOVA - Influence of sociodemographic variables

| Variables | Mean square | F | Significance | |
|-------------------|-------------|-------|--------------|----|
| Gender | | | | |
| Physical risks | 14.205 | 6.097 | 0.014 | * |
| Destination risks | 4.029 | 2.829 | 0.093 | |
| Value-time risks | 1.237 | 0.842 | 0.359 | |
| Personal concerns | 0.001 | 0.001 | 0.981 | |
| Inconveniences | 3.159 | 2.248 | 0.134 | |
| Age | | | | |
| Physical risks | 19.755 | 8.768 | 0.000 | ** |
| Destination risks | 7.102 | 5.084 | 0.002 | ** |
| Value-time risks | 1.587 | 1.081 | 0.357 | |
| Personal concerns | 5.310 | 3.187 | 0.024 | * |
| Inconveniences | 3.997 | 2.867 | 0.036 | * |
| Education level | | | | |
| Physical risks | 2.091 | 0.888 | 0.471 | |
| Destination risks | 4.914 | 3.503 | 0.008 | ** |
| Value-time risks | 3.587 | 2.470 | 0.044 | * |
| Personal concerns | 4.932 | 2.967 | 0.019 | * |
| Inconveniences | 3.587 | 2.576 | 0.037 | * |

* $p < .05$; ** $p < .01$.

As shown in Table 6, Pearson correlations showed that perceptions of risk varied significantly regarding past travel experience. Risk perception for international travel decreases the higher the number of past trips made and the more continents visited. Therefore, the least experienced travellers perceive higher levels of risk for international travel than the most experienced ones. More experienced travellers perceived less risk for physical risks factor than less experienced travellers; a pattern that is repeated for each of the five factors.

Table 6. Pearson - Influence of past travel experience

| Variables | | N° Past trips abroad (Last 5 years) | N° Continents visited (Lifetime) |
|-------------------|---------------------------|--|-------------------------------------|
| Physical risks | Pearson correlation | -0.132** | -0.149** |
| | Significance (two-tailed) | 0.002 | 0.001 |
| | N | 528 | 530 |
| Destination risks | Pearson correlation | -0.165** | -0.261** |
| | Significance (two-tailed) | 0.000 | 0.000 |
| | N | 528 | 530 |
| Value-time risks | Pearson correlation | -0.059 | -0.175** |
| | Significance (two-tailed) | 0.177 | 0.000 |
| | N | 528 | 530 |
| Personal concerns | Pearson correlation | -0.152** | -0.246** |
| | Significance (two-tailed) | 0.000 | 0.000 |
| | N | 528 | 530 |
| Inconveniences | Pearson correlation | -0.161** | -0.234** |
| | Significance (two-tailed) | 0.000 | 0.000 |
| | N | 528 | 530 |

* $p < .05$; ** $p < .01$.

As presented in Table 7, independent t tests revealed that physical risk varied significantly $t(530) = -2.479$, $p < 0.05$ between those who have been to Africa ($M=3.67$, $SD=1.50$) and those who have not ($M=4.06$, $SD=1.53$), and $t(530) = -3.225$, $p < 0.01$ showed a

significant difference between those who have been to America (M=3.67, SD=1.47) and those who have not (M=4.12, SD=1.54).

According to the results, those who have been to Africa, America and Asia perceive less risk for international travel compared to those who have not been to these continents. Destination risk varied significantly between those who have been to Africa (M=2.78, SD=1.11), America (M=2.83, SD=1.11) and Asia (M=2.67, SD=1.13), and those who have not. The perceived risk for those who have never travelled to Africa was (M=3.27, SD=1.19), America (M=3.32, SD=1.20) and Asia (M=3.25, SD=1.18).

Likewise, value-time risks varied significantly between those who have been to Africa (M=3.04, SD=1.13), America (M=3.11, SD=1.16) and Asia (M=3.00, SD=1.17) and those who have not. For those who had not travelled to Africa the perceived risk was (M=3.43, SD=1.22), America (M=3.45, SD=1.21) and Asia (M=3.40, SD=1.21). Personal concerns also varied significantly between those who have been to Africa (M=2.27, SD=1.17), America (M=2.23, SD=1.11) and Asia (M=2.21, SD=1.23) and those who have not been to Africa (M=2.73, SD=1.31), America (M=2.82, SD=1.34) or Asia (M=2.70, SD=1.29). Equally, inconveniences risk factor varied significantly between those who have been to Africa (M=2.56, SD=1.05), America (M=2.70, SD=1.14) and Asia (M=2.67, SD=1.06) and those who have not been to Africa (M=3.10, SD=1.31), America (M=3.11, SD=1.18) or Asia (M=3.03, SD=1.19). In particular, prior visits to Africa and America reduce the perceived risk levels of the five factors for international travel.

Prior visits to other European countries only reduced the inconvenience risk factor $t(530) = -2.387, p < 0.05$; those who have visited other European countries before perceive lower levels of inconveniences (M=2.95, SD=1.17) compared with those who have not visited the rest of Europe (M=3.50, SD=1.21).

Table 7. Influence of continents visited on risk factors

| <i>t</i> Test for the equality of means | | | | | |
|---|----------|------------------------------|--------------------|------------------------------|---------|
| | <i>t</i> | Significance (two-tailed) | Mean difference | Standard error difference | |
| AFRICA (visited Africa before, not visited Africa before) | | | | | |
| Physical risks | -2.479 | 0.013 | * | -0.39161 | 0.15795 |
| Destination risks | -4.013 | 0.000 | ** | -0.48954 | 0.12199 |
| Value-time risks | -3.083 | 0.002 | ** | -0.38352 | 0.12442 |
| Personal concerns | -3.508 | 0.000 | ** | -0.46647 | 0.13299 |
| Inconveniences | -4.432 | 0.000 | ** | -0.53512 | 0.12073 |
| AMERICA (visited America before, not visited America before) | | | | | |
| Physical risks | -3.225 | 0.001 | ** | -0.45355 | 0.14062 |
| Destination risks | -4.498 | 0.000 | ** | -0.48859 | 0.10863 |
| Value-time risks | -3.045 | 0.002 | ** | -0.33871 | 0.11123 |
| Personal concerns | -4.982 | 0.000 | ** | -0.58544 | 0.11752 |
| Inconveniences | -3.805 | 0.000 | ** | -0.41255 | 0.10842 |
| ASIA (visited Asia before, not visited Asia before) | | | | | |
| Physical risks | -1.139 | 0.255 | | -0.21530 | 0.18900 |
| Destination risks | -3.960 | 0.000 | ** | -0.57568 | 0.14536 |
| Value-time risks | -2,698 | 0.007 | ** | -0.40066 | 0.14851 |
| Personal concerns | -3.066 | 0.002 | ** | -0.48701 | 0.15883 |
| Inconveniences | -2.431 | 0.015 | * | -0.35399 | 0.14564 |
| EUROPE (visited other European countries before, not visited other European countries before) | | | | | |
| Physical risks | -0.980 | 0.328 | | -0.29181 | 0.29783 |
| Destination risks | -1.566 | 0.118 | | -0.36294 | 0.23183 |
| Value-time risks | -0.506 | 0.613 | | -0.11920 | 0.23549 |
| Personal concerns | -1.139 | 0.255 | | -0.28723 | 0.25212 |
| Inconveniences | -2.387 | 0.017 | ** | -0.54781 | 0.22947 |
| OCEANIA (visited Oceania before, not visited Oceania before) | | | | | |
| Physical risks | ,214 | 0.831 | | 0.12499 | 0.58408 |
| Destination risks | ,016 | 0.988 | | 0.00712 | 0.45530 |
| Value-time risks | ,581 | 0.561 | | 0.26823 | 0.46140 |
| Personal concerns | -,907 | 0.365 | | -0.44815 | 0.49423 |
| Inconveniences | ,122 | 0.903 | | 0.05531 | 0.45205 |

* $p < .05$; ** $p < .01$.

DISCUSSION

This study has identified perceptions of risk towards international travel and its influences. The EFA confirmed five significant factors reflecting perceived risks for international travel: physical risk, destination risks, value-time risks, personal concerns and inconveniences. This study identified 50 risk attributes loading on these five risk factors, which constitute a valid and reliable scale for risk perception measurement for international travel.

The physical risk factor in this study corresponds to previous literature (Chew & Jahari, 2014; Fuchs, 2013; Gray & Wilson, 2009; Reichel et al., 2007; Reisinger & Mavondo, 2006; Sharifpour, Walters, & Ritchie, 2014; Sönmez & Graefe, 1998b; Tsaur, Tzeng, & Wang, 1997) and refers to the likelihood of encountering physical danger or injury detrimental to health while travelling or at the destination (Park & Reisinger, 2010; Reisinger & Mavondo, 2006; Roehl & Fesenmaier, 1992). Past studies on physical risk focused on terrorism, political turmoil, crime, accidents, natural disasters, contagious diseases and food issues (Fuchs, 2013; Reichel et al., 2007; Sharifpour, Walters, & Ritchie, 2014). In this study, the physical factor equally covers the same risks, but it goes into more detail regarding what sort of criminal activities travellers may encounter. The physical risk factor of this study also covers hospitality clashes, referring to any form of hostile behaviour from locals towards tourists that could lead to conflicts between hosts and visitors, such as harassment and racism. These risks refer to both human-induced and external dangers that may physically harm travellers or threaten their personal safety, and which are beyond travellers' control.

The destination risk factor refers to the functional difficulties travellers may encounter at the destination regarding transportation, accommodation, communication and orientation. Although many

people like to try out new dishes at the destinations visited, there are still many travellers concerned about food. Hence, food issues are seen as a source of risk as well as the absence of cleanliness, which includes both pollution and lack of hygiene.

According to previous studies, financial and time risks represent separate typologies of risk perception (He et al., 2013; Reisinger & Mavondo, 2005; Sönmez & Graefe, 1998a). In contrast, the results of this study suggest a risk factor that embraces both value and time risks, in accordance with Sharifpour, Walters and Ritchie (2014). Value refers to monetary losses and time refers to the possibility of losing time during the travel experience (Björk & Kauppinen-Räsänen, 2011; Boo & Gu, 2010; Park & Reisinger, 2010; Reisinger & Mavondo, 2006).

The factor of personal concerns expresses that the travel experience may not reflect the travellers' self-image or personality and that the personal self-actualization with the travel experience may not be achieved. These risks associated with personal concerns are congruent with several authors (Fuchs, 2013; He et al., 2013; Park & Reisinger, 2010; Reichel et al., 2007; Reisinger & Mavondo, 2006).

Finally, the last factor gathers perceived risks that are inconveniences for the traveller, for example social barriers that may cause difficulties in communicating with foreigners or comprehending other cultures. These findings are also consistent with previous authors (Lepp, Gibson, & Lane, 2011; Reisinger & Mavondo, 2005; Sharifpour, Walters, Ritchie, & Winter, 2014; Sharifpour, Walters, & Ritchie, 2014).

Regarding the factor loadings revealed by EFA (Table 4), this study demonstrates that the risk items related to crime in an international travel context show the highest factor loadings, followed by the perceived risks of terrorism, war and contagious diseases. In other contexts, e.g. backpacking, crime showed lower factor loadings within the physical risk factor (Reichel et al., 2007).

Instead, food issues were of more concern for backpackers. Sharifpour, Walters, Ritchie, et al. (2014) showed that factor loadings of terrorist attacks and political turmoil are higher than becoming a victim of crime in the Middle East, and Adam (2015) showed that backpackers travelling to Ghana are more concerned with accidents and terrorism than crime. This brief explanation indicates that perceived risks depend on the travel context, on the segment of tourists or on the particular destination analysed. Therefore, some of the perceived risks will be more notorious than others, depending on the case.

Another aim of this research was to consider the influences of sociodemographic variables and past travel experience on the aforementioned five dimensions of risk perception. The findings indicate that perceived risks when travelling internationally vary across gender, age, education and past travel experience. Physical risk is the only factor that differs according to gender, with women showing higher levels of risk perception than men, which supports the findings of Reichel et al. (2007). However, no significant differences were found across gender for the other four risk factors, upholding findings in previous studies (Moreira, 2008; Sönmez & Graefe, 1998a). Regarding age, the results of this study support previous authors (Gibson & Yiannakis, 2002) indicating that the level of risk perception for international travel decreases with age. The results also revealed that the degree of perceived risk decreased with higher levels of education, in accordance with Sönmez and Graefe (1998b). Differences in risk perception were also found between more experienced travellers and less experienced ones, and this was influenced by number of past trips and continents visited. This last point supports previous studies (Lepp & Gibson, 2003; Sharifpour, Walters, & Ritchie, 2014; Sönmez & Graefe, 1998b) indicating that risk perception decreases when past travel experience increases.

Theoretical implications indicate that future studies would benefit from using the scale developed in this article, as it would

make results comparable across studies. Due to the varied content of the scale, it is possible to develop different versions, customizing criteria in the most efficient way for the purpose of the planned research. Therefore, the scale provides an adaptive assessment system to evaluate risk perception in several study contexts. Overall, this study attempts to provide new theoretical insights into perceived risk of people travelling internationally.

Regarding the practical implications, individuals understand that there are some inherent risks associated with international travel. This study demonstrates that an individual's background matters in risk perception. Perceived risks for international travel decrease with age, with higher levels of education and with more past travel experience. Hence, younger individuals who have a lower level of education and less past travel experience tend to show higher levels of perceived risks toward international travel. Tourism managers of a particular destination should acknowledge risk perceptions specifically associated with their destination. If it is known that the destination is perceived as risky or highly risky, according to the findings of this study, they should endeavour to attract more experienced travellers, as they have lower levels of risk perception when travelling internationally.

CONCLUSIONS

This study contributes to the existing body of tourism knowledge by developing a 50-attribute scale of perceived risks for risk perception measurement in international travel. This scale suggests a variety of critical indicators gathered from a thorough literature review. A wide range of risk items was mined from an extensive literature and they were all proven to be significant and to fit in the aforementioned five determinant factors. Furthermore, the resulting five-factor model indicated an adequate level of reliability and validity. The added value of this scale is that it gathered and

considered all possible risk events that could happen to individuals during any travel experience; both those risks that are of a more general nature and those that are specific to a destination. Therefore, this study has established an appropriate scale to measure perceived risks that might discourage people from travelling. In accordance with several authors (He et al., 2013; Reichel et al., 2007; Sharifpour, Walters, & Ritchie, 2014), this study further confirms that risk perception is a multidimensional construct, and that each factor comprises several items, especially the physical and destination factors. For future research, it is recommended that risk factors should not be considered under a single item. This study has also identified significant differences in risk perception due to the effects of gender, age, level of education and past travel experience.

Finally, it should be noted that the data from this study was limited to Spanish university members. Travellers from different nationalities, social cohorts or tourism segments may have different views, as previous studies indicate (Dayour, 2014; Kozak et al., 2007; Pizam et al., 2004; Reisinger & Mavondo, 2006; Seddighi et al., 2001; Sönmez, 1998). Therefore, future studies should contribute to empirically confirm the current findings for a wider range of nationalities, social communities or tourism segments.

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EMPIRICAL ANALYSIS OF THE TOURISM- TERRORISM NEXUS: THE NIGERIAN EXPERIENCE

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This paper examined the relationship among tourism, terrorism and broad economic aggregates. We made use of the impulse response and variance decomposition of the Vector Autoregression (VAR) on the Nigerian economy from 1995Q1 to 2012Q4. Besides the appropriate unit root and cointegration properties of the variables, the result revealed, that terrorism had negative effects on other variables of the study, especially tourism. Also, shocks in other variables are majorly caused by terrorism. The study also revealed that tourism responds positively to FDI, but its response to GDP and FDI are mixed overtime. Therefore, growth-promoting and other complimentary policies that will engender aggregate welfare improvement need to be pursued to ensure that the tourism sector sidestep the adverse consequences of terrorism.



Keywords: *Tourism, Terrorism, Gross Domestic Product, Foreign Direct Investment, Oil revenue.*

INTRODUCTION

Although substantial research effort has been exerted around the concept of tourism, terrorism, and economic growth, the precise nature of the relationship remains inconclusive. For example, major research on economic growth and tourism support that tourism granger causes growth, thus, embracing the tourism-led growth hypotheses (see for instance Dritsakis 2004, Hye and Khan 2013, Lean and Tang 2010, Tranget *et al* 2014). The other side is the growth-led tourism hypothesis which supports that growth has significant impacts on tourism. Such studies like Lee (2008), Oh (2005), Suresh and Senthilnathan (2014) argue for the promotion of a growth-led tourism hypothesis. Another strand of literature on these subjects is a middle ground conclusion that both tourism and growth granger causes each other, Corrie *et al* (2013), Kibara *et al* (2012), Tang and Tan (2013).

Even though the causal relationship between tourism and growth produces different results, it appears more intuitive that tourism positively impacts economic growth. Attention of nations has thus been drawn to the importance and prospects of tourism. Tourism is a fast growing service sector in the world, which can impact the nation's economy through employment creation, investment rise, higher income to the government through tax revenue and increased foreign exchange earnings (Tang and Abosedra, 2014). Increase in tourist arrivals can also boost the economy through innovative ideas of tourists and cross cultural interaction that can be enhanced by tourism activities.

Literature on Foreign Direct Investment (FDI) and growth lines up behind the two theoretical strands of modernisation and dependency theories. The modernisation theory is based on the

capital investment requirements needed for the economic growth of developing nations, which is empirically backed up by studies like Aluko (1961), Ibrahiem (2015), Obinna (1983) and Zhang (2001). Knowing the importance of investment, the dependency theorist however opined that the depending on FDI is like grooming an economy controlled by foreigners and foreign factors. Thus, bringing about the negative effects that FDI has on growth. Studies like Adelegan (2000), Agosin and Mayer (2000), Akinlo (2004), Hermes and Lensink (2003), and Sylvester (2005). Thus, the FDI impact on growth remains inconclusive.

In terms of contribution to GDP and foreign exchange earnings, Nigeria economy can be divided into agro-dominant period (i.e pre-oil discovery; up to 1960) and oil-dominant period (after the discovery of oil). According to Akinlo (2012), the oil subsector has played major and dominant roles in the nation's economy since its discovery in 1958. These roles can be traced to its production, its size in the GDP, its export and share in total export, and its revenue share. Oil production rose from 16.80 million barrels in 1961 to 760.1 million barrels in 1980, while it was recorded that the nation produced 919.3 million barrel in the year 2005. As a percentage of total GDP, oil production contributed a meagre of 0.9% as at 1961, increased to 28.48% in 1980, and then to 47.72% in 2000. Since 1980, oil exports yearly accounts for over 90% of the total export in the country. As at 2005, it accounts for 98.53% of the total year's export. This relatively reflects in her oil revenue and its share in the total revenue of the nation, which has over the years contributed more than 70% of the nation's total revenue. Between 1971 and 2005, Nigeria has gained US\$390 billion in oil-related fiscal revenue, Budina and Wijnbergen (2008). These all gave account of how dependent the nation's economy has relied heavily on crude oil earnings.

Terrorism is the use of violence by a group of individuals with common interest on a larger group, usually the government, in order

to achieve their objectives. In most cases, their activities lead to death of large number of people. Pressures mounted by terrorists can either be conceded to by the government or rejected based on government's weighing the costs of the terrorist's actions and conceding to their demands. The cost, of the destructions can either be direct or indirect. Enders and Olson (2012) define direct costs of terrorism as the value of tangibles damaged or destroyed such as factories, equipment, housing and structures and merchandise. The indirect cost can be linked to the non-monetary or immeasurable damage, such as the psychological effects of terrorist attacks.

Although the motives of different terrorism acts differ, their effects tell on macroeconomic variables. Incidences of terrorism can result in slowdown in foreign direct investment (FDI) flows, as investors seek safe haven for their investments, which also invariably leads to trade diversion. It can also distort public spending by channelling extra funds to destroyed public infrastructures and necessitating undue attention to security spending. All these eventually affect economic growth because both investments and government's expenditures are crucial determinants of growth. Studies such as Bandyopadhyay *et al* (2013), Enders, Sachsidia and Sandler (2006), Rasheed and Tahir (2012) supports the depressed effects of terrorism on FDI. There are also contagion effects of terrorism on neighbouring nations and trading partners of the nation.

Also, withstanding terrorism attack can be a major concern to nations, especially developing ones which have little capacity to absorb shocks. Economic size and diversification has a lot to do with the ability of a nation to withstand attacks without adverse economic impact. Advanced nations have strong economic size to absorb economic losses, brought about by terrorist attack. At the same time, in the wake of any attack on a microeconomic target, such as the tourism industry, these advanced nations can easily reallocate resources to other sectors of the economy and still maintain its growth path. This is not the case with most developing

countries, because they are mostly monoculture in economic structure. Take another instance, where such an attack is targeted towards the primary sector of a developing nation, which happens to be less diversified, the economic effect of such will be too hard for the nation to bear. Thus, for developing countries, terrorism can drastically reduce the growth of gross domestic product and hamper development. Thus, the effects of terrorist attack are more felt by developing nations compared to developed nations who have enough capable institutions to make use of policies to absorb the shocks and buffer the effects of terrorist attack. These macroeconomic impact of terrorism are supported by studies such as Bloomberg *et al* (2003) and Eckstein and Tsiddon (2004).

The effects of terrorism attack will be felt more in a nation like Nigeria as a developing nation whose size of her economy is not large enough and well-structured to absorb high terrorist attack, especially a microeconomic or industry-specific attack. The Nigerian economy is not diversified, thus largely depending on crude oil, as it dictates a large portion of both her gross domestic product (GDP) and government earning. Therefore, terrorist attack and campaign against her oil sector will significantly affect her economy growth and hamper her development. Thus, the main purpose of this study is to look into the shocks and their decomposed nature among the variables of interest, with particular emphasis on tourism, terrorism and growth.

The rest of the study is arranged thus; section two reviewed the literature while section three presented the methodological strategy of the work. The estimated results are presented in chapter four, while section five gave the conclusions and policy recommendations of the study.

LITERATURE REVIEW

Tourism and growth:

In recognition of Africa's potential for growth and her backdrop in its utilization, Kareem (2013) carried out a study among thirty nations in Africa, between 1990 and 2011 using panel cointegration analysis. His findings also support that tourism export also brings about long run growth in Africa. Meaning that tourism export can be harnessed to bring about economic growth in Africa.

Kibaraet *al* (2012) uses an autoregressive distributed lag (ARDL) model on the Kenyan economy between 1983 and 2010. They found that tourism does not only impact economic growth, but also the trade balance. Also, Belloumi (2010) finds that tourism has a positive impact on economic growth in the Tunisian economy after using an annual data between 1970 and 2007.

Studying the South African economy between 1980 and 2005, with focus on the direction of causality between international tourism earnings and growth, Akinboade and Braimoh (2010) using a multivariate vector autoregressive model, found that both in the long run and short run, there exists a unidirectional relationship from international tourism earnings to real GDP.

A point worth noticing from the studies reviewed above is that it entails developing nations; thus, it can be established that tourism serves as an important factor that can be considered to boost the economic growth of developing economy.

Terrorism and growth

Enders and Olson (2012), analyses the economic costs of terrorism with references to various empirical proofs of the effects of terrorism on both microeconomics and macroeconomics. Pointing out the major 9/11 attack, the authors analyse different estimated direct and indirect costs of the incidence with the conclusion that; calculating the full cost of the incidence may not be plausible due to indefinite line of defining the costs. In terms of the microeconomic or sectorial effects of terrorism, the authors pointed out that the size

of an economy, trade and financial openness, and even the economic system play important roles. Countries with more open economic boundaries are vulnerable to terrorist attack, and at the same time since terrorist attack will necessitate the redistribution of resources to various sectors, market-based economies tend to be more efficient in carrying out such. As regards the growth effects of terrorism, it can be deduced from their opinion that terrorism can disrupt growth through its effects on elements that constitutes growth, such as infrastructures, factories and FDI. In conclusion, the authors pointed out that economic diversification cum price mechanism can help reduce the cost of terrorism. The macroeconomic consequence of terrorism can also stem from enacting policies to counter further attack, because when terrorism is on an increasing path it leads to private spending being overshadowed by government spending.

The impact of transnational terrorism on U.S foreign direct investment (FDI) was studied by Enders, Sachida and Sandler (2006). Using both time series and panel estimation techniques on data spanning 1994 to 2002, they arrived to know that the September 11 attack does not have lasting effects on against US FDI flows. The panel estimate grouped the countries into OECD and Non-OECD countries. The result shows that foreign attacks that are US oriented happen to have significant effect on FDI in the OECD countries, but insignificant in the non-OECD countries. This can be deduced that US FDI in OECD countries is more vulnerable to shocks than in Non-OECD countries.

Studying the macroeconomic consequences of terrorism in an unbalanced panel of 177 countries spanning between 1968 and 2000, Blomberg, Hess and Orphanides (2003) focused on the economic impact of terrorism, and the extent to which activities are reallocated across private and public spending, as a result of the incidence of conflicts and terrorism. At the same time, their study uses a structural VAR to check the effects of terrorism and other forms of violence on the per capita GDP. Their study concludes that,

although terrorism has significant negative effects on economic growth, its effects are less than the effects of other forms of violence like external wars or conflict. In particular, the incidence of internal conflicts reduces the GDP per capita ten times more than the reduction in an associated terrorism incidence. It is also evidenced from their study that the OECD economies had more frequent terrorist attacks than other group of economies, but the effects on their growth is smaller compared to that of developing economies. This can stem from the fact that developed nations as a result of their sizes and economic diversification can absorb more shocks from terrorism than developing countries. The study also conclusively found that terrorism leads to redirection of economic activities from investment spending towards government's spending.

In the case of Israel, Eckstein and Tsiddon (2003) researched on the macroeconomic consequences of terror between 1950 to 2003 using a vector autoregressive (VAR) framework. Their result reveals that high rate of terror decreases output, consumption, investments and exports, significantly. Meaning that terrorism negatively affects important macroeconomic variables. If terror, which happens to cause the same death rate with car accident, was absent in the last three years of the study, it was predicted that consumption and output per capita will rise about 5 percent higher than their rates at the end of the study year. Years of terror between 2000 and 2003 lowered the output per capita and nondurable consumption per capita of Israel by over 5% and 10% respectively. Between the periods also, the ratio of governments' expenditure to GNP increased by 3%.

Terrorism and Tourism

Sonmez (1998) studied the relationships between tourism, terrorism and political instability. She pointed out common grounds between terrorism and tourism, as in line with Schlagheck (1988)

that both occurs across national borders, involve citizens of different countries and makes use of both travel and communication technologies. In the case of terrorist incidence, the effects on countries may differ, but their tourism industries face similar challenges, although to different degrees. In the light of this, the author made case studies of countries including; China, Egypt, Israel, Mexico, Spain, North Ireland, Gambia, Turkey, Zambia, Zimbabwe and a host of others, where terrorism and political unrest has affected tourism in various ways. The author made a comprehensive summary of past literatures from 1990 to 1998 that focuses on tourism, terrorism and political instability pointing out various ways in which the latter two have affected the former.

Ahlfeldt *et al* (2015) studied the effects of the 9/11 attack and some other minor attacks before and after the 9/11 attack, on tourism demand. In order to filter the effects of terrorism on tourism demand from unobserved macroeconomic shocks, the authors made use of the Difference-in-Difference Approach (DiD). The study takes account of geographic and religious proximity. It was found that the general tourist trends for countries in Africa, America, and Australia did not significantly deviate after the 9/11. The effects of the 9/11 attack was negatively and significantly felt by the Asia and Middle East countries in their tourist volumes. On the ethnic religious platform, the growth rates of tourist volumes to Islamic destinations few years after were below that of non-islamic countries. This gave a pointer that the consequences of the attack is sensitive to proximity and religious stance.

Karagoz (2008) conducted a study in Turkey to look at the effects of terrorism on tourist arrivals between 1961 and 2006. Using the exogenous structural break tests of Augmented Dickey-Fuller (ADF) and the Phillips's Peron (PP), the study found that there are double shocks between the study periods taking place in the late 1970s and the late 1980s. The study went further to reveal that these shocks have temporary negative effects on the growth rate of tourist

arrivals, but a permanent negative effects on the constant level of tourist arrivals.

Edmonds and Mak (2006),observed that tourism sector, which happens to be fragile, is crucial to many Asia Pacific countries. They found that Japan and the U.S, after the 9/11 attack have significantly substituted domestic travel for overseas travel, and this has drastic effects on Hawaii's tourism market. In relating the effects of terrorism on tourism industry, Singh (2013) finds the role of media very important in neutralising the deteriorating influence of terrorist attack. The author also gave strategies for managing terrorist crisis to include crisis management plan and task force for crisis management.

Having gone through the literature, our concern is to fill the gap of scarcity of shocks-predicated studies. Thus, this study tends to look into shocks relationship among the variables, especially tourism, terrorism and economic growth in the Nigerian context. This will add to the few existing literature on terrorism shocks, in that most related studies, as reviewed above do not include shocks-response in their analysis. Also, this study will help to gauge the effects of terrorist attack on the macroeconomic and tourism industry in Nigeria.

METHODOLOGY

Although, as reviewed above, literature around studies on terrorism and tourism like this are carried out in both time series and panel data forms. However, there are justifications of preference for a time series study than a panel one. These added to the reason for the option of a time series study like this ahead of a panel option.

Time series can easily be used to evaluate shocks and the system's adjustments over time. In addition, microeconomics impacts of terrorism can easily be identified using a time series study. But a panel study of vast number of diverse countries may not depict a true picture of the relationship within specific countries. At

the same time, the diverse nature and definition of terrorism are used by different sources of terrorism data for different countries, thus a panel work might be bias by using different sources of data estimates. Also, countries have different degrees and strengths to absorb terrorist attacks, due to their level of development, economic diversification and institutional structure. Therefore, subjecting them under the same model may produce an average estimation that will not carry the true picture of some of the countries. Lastly, even if the aforementioned weaknesses are conquered, countries that look alike, in terms of development and economic situations, also faces different levels of terrorism incidence. Therefore, facing a country study will bring out the true picture and reality of tourism, terrorism and economic issues in a country.

The essence of this study is to look into the shocks interaction between tourism, terrorism and other important economic variables, such as; FDI, crude oil receipt and economic growth in Nigeria using a Vector autoregressive (VAR) framework. This helps to study the shock effects of terrorism on both macroeconomic – FDI and GDP – and microeconomic or industry specific – tourism and oil sectors. This work serves to add to the few literature on shock-based study on tourism, which also, to the best knowledge of the authors is a new ground in the Nigerian case. The inclusion of crude oil receipt and foreign direct investment (FDI), stems from the importance of both variables for Nigeria's growth.

The study employs the Vector Autoregressive (VAR) model, which are also used by other related studies such as Bloomberg *et al* (2003), Chatziantoniou *et al* (2013) and Dritsakis (2004). It has the advantage of presenting the dynamic structure of the variables, but its shortcoming is the opinion that VAR is a theoretical. The model used is given below:

$$Z_t = A_0 + A(L)Z_{t-p} + u_t.$$

Where Z_t serves as the vector of the variables (tourism, terrorism, oil revenue, GDP and FDI). Z_{t-p} serves as the vector of the variables

up to the lag length p , and U_t is the vector of random error terms. Thus, in the form below:

$$\begin{bmatrix} \Delta TOU_t \\ \Delta TER_t \\ \Delta OIL_t \\ \Delta GDP_t \\ \Delta FDI_t \end{bmatrix} = \begin{bmatrix} A_{1t} \\ A_{2t} \\ A_{3t} \\ A_{4t} \\ A_{5t} \end{bmatrix} + \begin{bmatrix} A_{11}(L) & A_{12}(L) & A_{13}(L) & A_{14}(L) & A_{15}(L) \\ A_{21}(L) & A_{22}(L) & A_{23}(L) & A_{24}(L) & A_{25}(L) \\ A_{31}(L) & A_{32}(L) & A_{33}(L) & A_{34}(L) & A_{35}(L) \\ A_{41}(L) & A_{42}(L) & A_{43}(L) & A_{44}(L) & A_{45}(L) \\ A_{51}(L) & A_{52}(L) & A_{53}(L) & A_{54}(L) & A_{55}(L) \end{bmatrix} \begin{bmatrix} \Delta TOU_{t-1} \\ \Delta TER_{t-1} \\ \Delta OIL_{t-1} \\ \Delta GDP_{t-1} \\ \Delta FDI_{t-1} \end{bmatrix} + \begin{bmatrix} u_{1t} \\ u_{2t} \\ u_{3t} \\ u_{4t} \\ u_{5t} \end{bmatrix}$$

Tourism in this study is proxy by tourism receipt, sourced from the World Development Indicator (WDI). This tourism receipt includes receipts from international visitors, and it's expected to be affected by terrorism, unlike domestic tourists whose tourist expenditure is not likely to be affected by terrorism insurgents, as they are aware of places to avoid. Terrorism is proxied by the number of terrorism incidents in the country, as collated by the National Consortium for the Study of Terrorism and Responses to Terrorism (START), for the Global Terrorism Database (GTD). The oil and GDP are the oil revenue and real GDP of Nigeria sourced from the Central Bank of Nigeria (CBN) *Statistical Bulletin*, while foreign direct investment is represented by the net inflow of the FDI, also sourced from WDI. The data ranges between 1995 and 2012. As a result of data insufficiency and the necessity to fulfil the number of observation criteria, all the data, except terrorism, were sourced in their annual form, but transformed into quarterly data using the approach of Lisman and Sandee (1964). This transformation approach takes into account the seasonality of the data set.

RESULTS AND DISCUSSION

Table 1: Descriptive Statistics and Correlation Matrix.

| | TOURISM | TERRORISM | OIL REV | GDP | FDI |
|-------------------------------|---------|-----------|---------|-----|-----|
| Descriptive Statistics | | | | | |

| | | | | | |
|---------------------------|-------------|------------|------------|------------|------------|
| Mean | 10,400 | 16.15 | 815.20 | 137.22 | 127 |
| Maximum | 31,400 | 200 | 2,309.14 | 227.22 | 65 |
| Minimum | 743 | 0 | 69.07 | 86.58 | 35 |
| Std. Dev. | 11,000 | 35.82 | 676.60 | 41.96 | 11.2 |
| J-B (Prob) | 12.14(0.00) | 6.13(0.05) | 6.57(0.04) | 6.75(0.03) | 8.41(0.01) |
| Correlation Matrix | | | | | |
| TOURISM | | | | | |
| TERRORISM | 0.5107 | | | | |
| OIL REV | 0.7535 | 0.6326 | | | |
| GDP | 0.8814 | 0.6654 | 0.9234 | | |
| FDI | 0.9107 | 0.5439 | 0.8760 | 0.9424 | |

The descriptive statistics of the data used and their corresponding correlation matrix are presented in table 1. The result shows the mean, minimum and maximum values of the variables as well as the extent of dispersion of the observations on each series as captured by the standard deviations. This statistic clearly indicates that the tourism is the most volatile and FDI the least volatile of the series. The results further confirm the normality of the series as evidenced by the probability values of the J-B statistics which were found to be significant. The unit root check for stationarity conditions of the variables are presented in the table 2. The Augmented Dickey-Fuller (Dickey and Fuller, 1979) and Phillips Peron (Phillips and Perron, 1988) unit root tests, which are widely used tests, were used to confirm that all the series used in this study are all stationary at first difference. This implies that, even though they are not stationary at levels, all are stationary when differenced in the first order, some at 5% with most of them at 1% significance level.

Also as a diagnostics test, the Lag Length Selection Criteria was also carried out, which pointed out that the lag length as supported

by all the criteria is 6, as presented in table 3. Thus, this lag length was used to perform the cointegration test as presented in table 3.

In order to ascertain the long run relationship among the variables, the Johansen Cointegration technique (See Johansen, 1996) was used, which proved that both the Trace and Maximum Eigenvalue statistics provide the evidence that there are two cointegrating equations among the variables. The result is reported in table 4.

Table 2: Unit Root Test Result

| | AUGMENTED DICKEY FULLER | | | | DE CIS IO N | PHILLIPS PERRON | | | | DE CIS IO N |
|------------|-------------------------|-------------------------|-----------------------|-------------------------|----------------------|---------------------------------|---------------------|------------------------|------------------------|----------------------|
| | LEVELS | | FIRST DIFFERENCE | | | LEVELS | | FIRST DIFFERENCE | | |
| | CONS TANT | CONST ANT & TREND | CONSTA NT | CONSTA NT & TREND | | CONST TANT & TREN D | CONSTANT | CONSTANT & TREND | | |
| TOU | -0.9873 (0.7533) | -2.1195 (0.5254) | -5.7460 (0.0000)** | -5.7130 (0.0001)** | I (1) | -1.2986 (0.6260) | -2.1952 (0.4847) | -4.2361 (0.0012)** | -4.2174 (0.0070)** | I (1) |
| TER | -0.6798 (0.8437) | -2.4696 (0.3413) | -5.1154 (0.0005)** | -5.7095 (0.0003)** | I (1) | -0.5075 (0.8829) | -1.6617 (0.7578) | -10.6345 (0.0001)** | -10.8351 (0.0000)** | I (1) |
| OIL | -1.4770 (0.5394) | -2.6545 (0.2585) | -4.3359 (0.0008)** | -4.9833 (0.0007)** | I (1) | -1.4052 (0.5751) | -2.0949 (0.5395) | -4.5086 (0.0005)** | -4.5363 (0.0027)** | I (1) |
| GDP | 0.4276 (0.9826) | -2.1613 (0.5031) | -3.0282 (0.0371)* | -3.9533 (0.0148)* | I (1) | 3.2886 (1.0000) | -1.5973 (0.7844) | -2.9263 (0.0474)* | -3.9648 (0.0143)* | I (1) |
| FDI | -0.6851 (0.8429) | -1.9633 (0.6100) | -3.5900 (0.0085)** | -3.5654 (0.0407)* | I (1) | -1.6683 (0.4428) | -2.1272 (0.5218) | -5.0897 (0.0001)** | -5.0924 (0.0004)** | I (1) |

** and * denotes significant at 1% and 5% respectively.

Source: Estimated by the Authors'.

Table 3: Lag Length Selection Criteria Result

| Lag | Lag Log Likelihood | LR statistic** | Final prediction error (FPE) | Akaike information criterion (AIC) | Schwarz information criterion (SC) | Hannan-Quinn information criterion (HQ) |
|-----|--------------------|----------------|------------------------------|------------------------------------|------------------------------------|---|
| 0 | -4367.088 | NA | 2.38e+51 | 132.4875 | 132.6534 | 132.5531 |
| 1 | -3859.426 | 923.0231 | 1.06e+45 | 117.8614 | 118.8567 | 118.2547 |
| 2 | -3782.311 | 128.5239 | 2.21e+44 | 116.2822 | 118.1069 | 117.0032 |
| 3 | -3761.411 | 31.66745 | 2.59e+44 | 116.4064 | 119.0605 | 117.4552 |
| 4 | -3730.713 | 41.86033 | 2.33e+44 | 116.2337 | 119.7173 | 117.6102 |
| 5 | -3600.387 | 157.9705 | 1.07e+43 | 113.0420 | 117.3550 | 114.7463 |
| 6 | -3530.185 | 74.45752* | 3.24e+42* | 111.6723* | 116.8146* | 113.7043* |

The * indicates lag order selected by the criterion.
Source: Estimated by the Authors'

Table 4: Cointegration Test Result.

| Unrestricted Cointegration Rank Test (Trace) | | | | Unrestricted Cointegration Rank Test (Maximum Eigenvalue) | | | |
|--|------------|-----------------|---------------|---|------------|------------------------------|--------------|
| Hypothesized No of CE(s) | Eigenvalue | Trace Statistic | Probability** | Hypothesized No of CE(s) | Eigenvalue | Maximum Eigenvalue Statistic | Probability* |
| None * | 0.5794 | 115.427 | 0.0000 | None * | 0.5794 | 56.3018 | 0.0000 |
| At most 1 * | 0.3979 | 59.1258 | 0.0031 | At most 1 * | 0.3979 | 32.9817 | 0.0092 |
| At most 2 | 0.2271 | 26.144 | 0.1245 | At most 2 | 0.2271 | 16.7458 | 0.1843 |
| At most 3 | 0.1341 | 9.3984 | 0.3298 | At most 3 | 0.1341 | 9.3614 | 0.2573 |
| At most 4 | 0.0006 | 0.0370 | 0.8475 | At most 4 | 0.0006 | 0.0370 | 0.8475 |

Trace and Max-eigenvalue test indicates 2cointegratingeqn(s) at the 0.05 level

* denotes rejection of the null hypothesis of no cointegration at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Estimated by the Authors'

Impulse Response

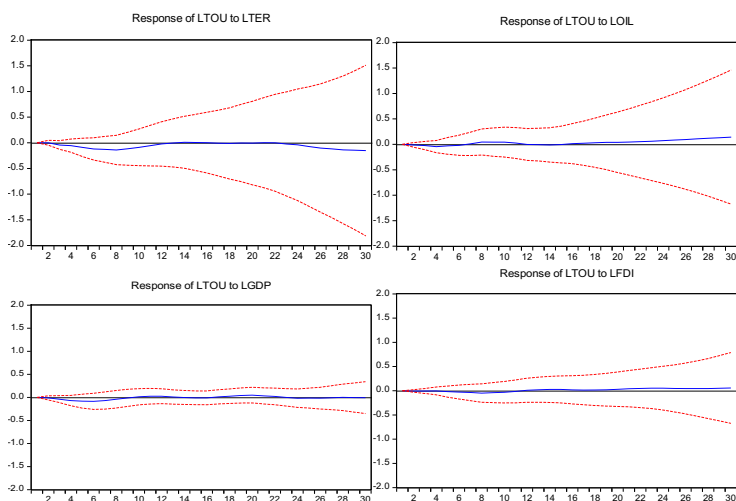
The impulse response measures shocks and the corresponding responses among variables. This depicts how various variables react to sudden disruption from other variables in a model. Here, we paid attention to the response pattern of tourism to other variables in our VAR model. This is showed in our figure 1. At the same time, we also paid attention to the responses of other variables to shocks from terrorism in the model, which is also depicted in figure 2. The

confidence intervals are represented by the dotted lines. How the variables deviate from the baseline as a result of a given shock from other variables is measured by the vertical line. The horizontal line only measures the time path of response after the shock has been introduced.

Response of tourism to each of the other indicators

The sets of graphs below give the responses of tourism to each of the other variables in the study. The first graph gives the response of tourism to terrorism shocks, which as expected is negative. This means that the higher the rate of terrorist incidence, tourism receipt will fall, but latter will converge back to the base line within the approximate time of thirteen (13) quarters. The shocks effect will stabilise overtime but will later in the long run still negatively affect tourism receipt. This can be attributed to the long term psychological effects that terrorist attacks have on the perceptions of tourists. The shocks reaction of tourism to oil revenue is displayed by the second graph, which happens to be initially negative but more of positive in the long run. The explanation to this can be that much of the investments in the oil sector are done by foreigners. Thus, as investments in the oil sector increases, which will also increase the oil revenue, the investors who are majorly foreigners are likely to increase their visits and spending on tourism. Alternatively, the link can be that as tourism grows, the demand for oil increases due to the demand for oil increases due to the derived demand from an increase in the demand for transportation services and other oil consuming tourism activities. The third and fourth graphs show that the response of tourism receipt as a result of shocks from economic growth and foreign direct investment (FDI) happens to be infinitesimal. The shock is recovered back in the tenth and twelfth quarters respectively and hovers very closely around the base line.

Figure 1: Response to Cholesky One S.D Innovations ± 2 S.E

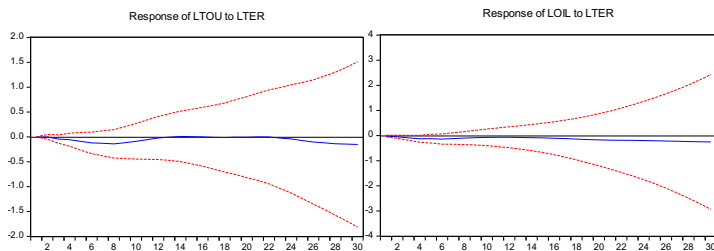


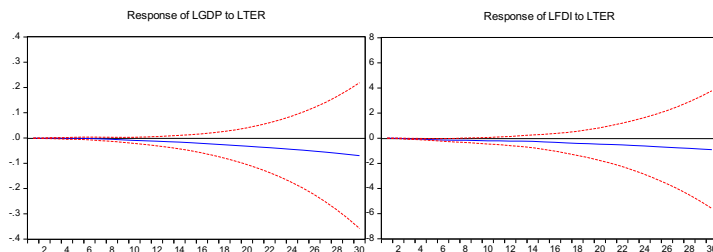
Response of others to terrorism

The negative shock effects of terrorism on other variables are presented in figure 2, which all conforms to *a priori* expectations in various degrees. The first graph shows that tourism receipts falls up to thirteen quarters as a result of a shock from terrorist attack. It is clear from the graph that a rise in terrorism leads to fall in tourism receipts. Nigeria, being an oil dependent state shows that her oil revenue will decline as a result of terrorist incidence, meaning that

oil revenue in Nigeria responds negatively to a shock from terrorist incidence. Industry or sector specific terrorist attack on the oil sector will reduce oil activities in the sector and at the same time the infrastructure in place, leading to a fall in the revenue from the sector. The negative response of oil revenue to terrorist attack is expected to also filter into the reaction of GDP to terrorist shocks as showed in the third graph. This is as a result of the nation's heavy reliance on crude oil as the mainstay of the economy. From the third graph, it can be seen that the gross domestic product (GDP) keeps diverging from the baseline as a result of terrorist shocks. In addition to the changes through the oil sector, the response of GDP can also be linked to the response of foreign direct investment (FDI) as depicted in the fourth graph. Investors typically prefer a safe haven for their investments, this is a more reason why FDI also continues to negatively move away from the baseline, just like the GDP and revenue from oil. Nigeria, being an oil dependent nation and a major attraction of FDI in sub Saharan Africa, will have a negative GDP reaction to terrorist shocks through the oil revenue and FDI channels.

Figure 2: Response to Cholesky One S.D Innovations ± 2 S.E





Variance Decomposition

The evidence of a long run relationship among the variables can also lead to a conclusion that the variance of any of the variables of interest can be apportioned to both itself and other variables. This means that there exist proportional contributions of each of the variables to variation in the other at different periods. This is what the variance decomposition looks into, i.e., how the variances in each of the variables are decomposed among other variables in the study. This is important, as it proportionally attributes the change in a variable to other variables in the model, thereby pointing out major contributors of changes in a variable. A major note here is the fact that the results are plausible and conforms with *a priori* expectations. Table 5 below houses the results. To avoid the jam of data in the table, an abridged version of the result is presented, which reflects the overall pattern of the result. The full result can however be supplied upon request.

The first section of the table gives the variance decomposition of tourism. The result shows that tourism receipts account for all of its variation in the first quarter. By the third quarter, besides tourism, terrorism and the GDP accounts for more of the variations in tourism to the tune of 1.67% and 1.26% respectively. Up to the tenth quarter, the variation of tourism attributed to itself continues to decline, while the contribution of other variables continued to averagely increase with more contribution still coming from both terrorism and GDP. This impact was earlier established by the

impulse response to be negative and positive respectively. It can be deduced from this that the major contributor to changes in tourism receipt in Nigeria is terrorist incidence. Thus, policies meant to increase growth through tourism receipt should equally aim to lower the incidence of terrorism in the country, as this is a major factor that causes a decline in tourism receipt. The role of the oil revenue and FDI to the change in tourism is straight forward; development in the tourism sector will be financed by the oil revenue, which is the major source of revenue of the country. This variance decomposed to oil revenue tends to be positive as proved by the impulse response result. At the same time the Foreign direct investment, directly or indirectly through its growth effects also contributes to variation in the tourism receipt.

From the result, the major contributor to variations in terrorism attack happens to be the oil revenue and GDP. Oil revenue is a major booster of the nation's GDP. Besides oil revenue itself, terrorism and tourism are the major variation inducing factors for oil revenue contributing 2.08% and 9.43% respectively in the third quarter. A major point worth noting from this result is the increasing growth rate of an average of about 90% over the whole quarters of study, played by terrorism in the variation of oil revenue in Nigeria.

Besides GDP itself, the decomposition of GDP variance right from the first quarter has been attributed to oil revenue and tourism, but the contribution of tourism overtime on the average fell while the contribution of terrorism actually rises to predict 20% of GDP variation by the tenth quarter. The contributions of oil revenue to variation in GDP are approximately 29.46%, 48.13% and 52.51% in the first, fifth and tenth quarters respectively. The contributions of FDI also keep increasing overtime with its highest contribution of 11.34% of the variation in GDP in the seventh quarter. It is also worth noting that the contribution of GDP to the variation of itself decreases as the time period increases. As at the first quarter, the FDI variation is largely attributed to itself, the GDP and oil revenue. The

reason for this is not far-fetched, as economic performance is a major short run attraction of foreign investments.

Table 5: Variance Decomposition Result

| PERIOD | S.E. | TOURISM | TERRORISM | OIL REV | GDP | FDI |
|---|--------|----------|-----------|---------|---------|---------|
| Variance Decomposition of Tourism: | | | | | | |
| 1 | 0.1391 | 100.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3 | 0.3549 | 96.6283 | 1.4695 | 0.5908 | 1.2599 | 0.0513 |
| 5 | 0.5588 | 90.4140 | 4.1411 | 1.1728 | 4.1333 | 0.1386 |
| 7 | 0.6683 | 83.1486 | 9.8349 | 0.9176 | 5.5504 | 0.5482 |
| 10 | 0.7234 | 75.4446 | 16.153 | 1.8939 | 5.1048 | 1.4025 |
| Variance Decomposition of Terrorism: | | | | | | |
| 1 | 4.8942 | 0.4700 | 99.5299 | 0.0000 | 0.0000 | 0.0000 |
| 3 | 5.5553 | 2.5098 | 82.0461 | 4.8002 | 6.8960 | 3.7477 |
| 5 | 6.2883 | 1.9768 | 67.5519 | 17.1395 | 9.3948 | 3.9368 |
| 7 | 6.6626 | 8.0312 | 63.9059 | 15.3043 | 8.9508 | 3.8077 |
| 10 | 6.9155 | 8.4193 | 63.4312 | 15.1307 | 8.8516 | 4.1669 |
| Variance Decomposition of Oil Revenue: | | | | | | |
| 1 | 0.1278 | 3.2633 | 2.6660 | 94.0705 | 0.0000 | 0.0000 |
| 3 | 0.3382 | 2.0822 | 9.4303 | 87.7120 | 0.7378 | 0.0376 |
| 5 | 0.5089 | 1.4222 | 16.2445 | 81.2092 | 1.0165 | 0.1073 |
| 7 | 0.5952 | 1.1835 | 21.2592 | 75.7958 | 1.1876 | 0.5736 |
| 10 | 0.6597 | 1.2525 | 22.4375 | 73.5656 | 1.5891 | 1.1551 |
| Variance Decomposition of GDP: | | | | | | |
| 1 | 0.0028 | 11.7054 | 7.6244 | 29.4637 | 51.2063 | 0.0000 |
| 3 | 0.0082 | 15.1827 | 3.3488 | 35.3047 | 44.3405 | 1.8230 |
| 5 | 0.0136 | 10.6043 | 3.5138 | 48.1262 | 31.1726 | 6.5828 |
| 7 | 0.0187 | 6.0219 | 6.9368 | 56.7453 | 18.9585 | 11.3373 |
| 10 | 0.0314 | 8.6324 | 20.3419 | 52.5060 | 7.4722 | 11.0472 |
| Variance Decomposition of FDI: | | | | | | |
| 1 | 0.0586 | 1.8754 | 0.8523 | 3.9884 | 43.2619 | 50.0218 |
| 3 | 0.1411 | 10.7425 | 11.6236 | 5.4209 | 18.5386 | 53.6741 |
| 5 | 0.2660 | 24.6583 | 26.9356 | 9.2160 | 6.4282 | 32.7618 |
| 7 | 0.4308 | 29.0777 | 33.9037 | 15.6629 | 3.7652 | 17.5903 |
| 10 | 0.6505 | 22.9730 | 38.7194 | 24.4339 | 1.9953 | 11.8782 |

Source: Estimated by the Authors'

In general, the variance decomposition shows that the variations in all the variables are attributed mostly to terrorism. This demonstrates the effects of terrorism activities in Nigeria, which over the years has been felt more in the northern states of the country.

Vector Error Correction Model (VECM)

Besides the estimation of the impulse-response and the variance decomposition analyses, the study went further to estimating the vector error correction model (VECM), which result is presented in table 6. Only the significant values are reported for the sake of space. The result shows that all the variables are autoregressive in nature, as they are affected by their various lagged values in different quarters. The result also shows that terrorism is also affected other variables in the study, except FDI. Tourism affects terrorism, because tourist centres are attractions of terrorists, therefore constant tourist visitations to these places propels more terrorism incidence, and vice versa. The result also revealed that the GDP is also affected by terrorist attack and FDI. Terrorism affects FDI as investors are careful of investing their funds terrorist prone areas. Relating to the speed of adjustment, the result shows that an approximate of 11% disequilibrium in oil revenue is corrected in the first quarter.

Table 6: VECM Result.

| | ΔTOU | ΔTER | ΔOIL | ΔGDP | ΔFDI |
|------------------|-------------------------|--------------------------------|--------------|--------------|--------------|
| $\Delta tou(-1)$ | 0.6571 (0.0064) * | | | | |
| $\Delta tou(-3)$ | | -9.9789 (0.0961) ** * | | | |

| | | | | |
|------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| $\Delta tou(-4)$ | -0.6431 (0.0014) * | | | |
| $\Delta tou(-5)$ | | | | -0.2046* (0.0254) * |
| $\Delta tou(-6)$ | 12.8521** (0.0784) * | 0.3212* (0.0776) ** | | |
| $\Delta ter(-1)$ | -0.6138* (0.0002) | | | |
| $\Delta ter(-2)$ | -0.7062* (0.0002) | | | -0.0083* (0.0014) |
| $\Delta ter(-3)$ | -0.5525* (0.0057) | | | -0.0060* (0.0288) * |
| $\Delta ter(-4)$ | | | 0.0003* (0.0226) * | -0.0068* (0.0115) * |
| $\Delta ter(-5)$ | | | | -0.0085* (0.0003) |
| $\Delta oil(-2)$ | | 0.4748* (0.0599) ** | | |
| $\Delta oil(-3)$ | 19.8253* (0.0036) | | | |
| $\Delta oil(-4)$ | | -0.4983* (0.0067) | | 0.3525* (0.0006) |
| $\Delta gdp(-1)$ | 1150.325** (0.0202) | 31.9243* (0.0099) | 1.1280* (0.0003) | |
| $\Delta gdp(-2)$ | -1251.316** (0.0323) | -37.9199* (0.0095) | | |
| $\Delta gdp(-3)$ | | | | 8.0440* (0.0823) ** |
| $\Delta gdp(-4)$ | | | -0.4088* (0.0334) * | -19.6765 (0.0000) * |
| $\Delta gdp(-5)$ | | | 0.8947* (0.0134) * | |
| $\Delta gdp(-6)$ | | -29.8508 (0.0329) ** | | |

| | | |
|------------------|-----------------------------|-----------------------------|
| $\Delta fdi(-1)$ | 1.0854 * (0.0282) * | 0.5780 ** 0.0358 |
| $\Delta fdi(-4)$ | 0.4307 * (0.0266) * | -0.3586 * (0.0010) |
| $\Delta fdi(-6)$ | -0.4126 * (0.0703) ** | -0.0100 * (0.0766) ** |
| ECM | -0.1065 * (0.0097) | |

For the sake of space, only significant values are reported. *, ** and *** denotes significance at 1%, 5% and 10% respectively.

Source: Authors' Estimation.

CONCLUSION AND IMPLICATIONS

This study delves away from the convention, particularly in the case of Nigeria, to look into the shock transmission among tourism, terrorism and some economic variables. Thus, the methodology remains valid in the context of this study. We used the vector autoregressive (VAR) technique on the Nigerian economy between the first quarter of 1995 to the last quarter of 2012, to capture the impulse response and also the variance decomposition among the variables. We made use of the Augmented Dickey-Fuller (ADF) unit root test to detect the stationarity properties of the variables, and also used the Johansen cointegration techniques to establish the long run relationship among the variables.

The result revealed that tourism reacts negatively, as expected, to terrorism, but responds positively to oil revenue. This denotes the fact that tourism receipt of the nation falls when terrorist activities increases, but increases positively along the same path with increase in oil revenue. The result of tourism's response to GDP and FDI shocks are mixed, denoting inconclusive dynamics in different quarters. In addition, we went ahead to look into the response of

tourism, GDP, oil revenue and FDI to a shock in terrorist attack. The result shows that they all respond negatively to a rise in terrorism, with greater fall coming from the GDP. This implies that a combined fall in other variables – tourism receipt, FDI and oil revenue - culminated in a greater fall in the GDP. Decomposing the effects among the series, a major finding reveals that over time, terrorism serves as major determinant of variations in other variables. Moreover, an economic boosting factor is the oil revenue. Joining these with the result of the impulse response, a conclusion cannot be far fetch; terrorism and oil revenue play major roles in determining variation in other factors.

A number of policy recommendations can be drawn from the findings. The oil industry and financial openness does not only directly impact on the GDP, but also indirectly impact the economy through the tourism industry. Meaning that apart from the direct revenue from oil, the oil sector may also boost other sectors of the economy. Thus, better policies guiding the oil sector and financial flows, will not only trigger economic growth, but also help in developing other sectors of the economy. In addition, more attention should be paid to combating terrorism, as its effect is not just a drag on the nation's growth, but on other sectors, as the empirical evidence indicated. It is also recommended that there is a need for the nation to diversify her economy because her oil revenue, which happens to dictate more of her total revenue, is susceptible to external shocks arising in part from terrorism activities at home and abroad.

There are a number of possible directions for future research that arise from some of the limitations of the present study. First, the availability of sufficiently long annual time series observations may not only be insightful to explore but will also obviate the need to statistically transform annual data to quarterly data as done presently. Second, beyond the VAR approach deployed in this paper, some alternative approaches such as threshold regression,

Computable General Equilibrium (CGE) modelling may be explored to better nuance the tourism-terrorism nexus for Nigeria.

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CONCENTRATION IN THE GREEK HOTEL INDUSTRY

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This paper applies the n -firm concentration ratio and the Herfindahl-Hirschman Index to Greek hotel industry. The results indicate that the concentration of the industry is quite low not only for the total market but also for the separate markets of the different stars categories. Moreover, it is found that there is a significant difference between the results obtained for the highest categories and those for the lowest categories, the latter displaying much lower concentration. Since the level of concentration in an industry is an important factor of the market structure, the economic policy implications of the findings of this paper would be of some importance for the relevant authorities.

Keywords: *Greek Hotels, Herfindahl-Hirschman Index, Economic Policy Implications, Market concentration, n -firm concentration ratio*



INTRODUCTION

Tourism is recognized as one of the most dynamic sectors of the global economy. According to the latest report of the World Tourism Organization (UNWTO), tourism contributes about 10% of global GDP and 6% of world's total exports (World Tourism Organization, 2016). In Greece, tourism activities contribute about 5% of GDP and 23% of total exports, whilst its relevant importance in the economy has risen during the last years.

In this paper we shall focus on one of the components of the tourism sector, i.e. the hotel industry. Lately, there has been an ongoing discussion about the competitiveness of the Greek hotel industry and, more specifically, about the legislative restrictions that may affect the structure of the industry resulting to operate in a non-competitive way. This discussion started with the OECD's competition assessment review, published in 2013. According to this review, (a) the hotels are significantly concentrated in a few regions of the country, and (b) there is a significant number of legislative restrictions in the Greek hotel industry that impose entry barriers in the industry and, therefore, are considered as harmful for the competitiveness of the market.

It has been supported by many scholars that the existence of high concentration in an industry reflects entry barriers, which, in the long run, give higher profits for the existing firms.¹ It is widely believed that a concentrated market may result in collusive behaviour amongst the firms operating in the respective market. Therefore, it is not surprising that the study of market concentration in various industries constitutes one of the main concerns not only for economic theory but also for the implementation of government policies regarding anti-monopoly laws.² Thus, the measurement of concentration in an industry, which reflects the market structure of this industry, can be proved a very useful tool for the respective authorities in many cases (e.g., in determining whether they should

allow a merger, whether legislative restrictions should be lifted, etc.).

This paper attempts an estimation of the degree of concentration in the Greek hotel industry. The measurement of concentration is based on the commonly used measures of concentration, such as the n -firm concentration ratio and Herfindahl-Hirschman Index, and the data provided by the database of the Hellenic Chamber of Hotels (HCH). An issue that often arises in such studies is that because of lack of data or censored information, it is necessary to use a sample of the market rather than the whole industry (see, e.g., Nauenberg et al. (2014)). However, in this paper, thanks to the data provided by the HCH, it is possible to provide estimations based on the total hotel market. Moreover, we also estimate the concentration for the separate markets of the different stars categories of hotels.

The remainder is structured as follows: section 2 presents the methodology of our analysis. Section 3 presents the data used in our estimations. Section 4 presents the empirical results of our analysis. Section 5 concludes the paper.

METHODOLOGY

A simple method to estimate the degree of concentration in an industry is to calculate the share of the n largest firms in the industry, or n -firm concentration ratio. These shares are usually denoted by CR_n , where CR_n constitutes an index that gives a concentration ratio based on the share of the n largest (based on their output shares) firms in the industry.³ However, the so-called Herfindahl-Hirschman Index (HHI hereafter)⁴ is considered more suitable index for such estimation and is often used by the authorities of competition policy to determine the degree of concentration in a specific industry.⁵ The HHI is defined as:

$$HHI = \sum_{i=1}^N (s_i)^2$$

where $s_i = (q_i / Q)100$, q_i the output of the i th firm, $Q (\equiv \sum_{i=1}^N q_i)$ the total output in the industry and N the total number of the firms in the industry. In the case where the total output in the industry is

derived by only one firm, say j , (i.e it holds $q_j = \sum_{i=1}^N q_i = Q$ and thus, it holds $s_j = 100$ and $s_i = 0, \forall i \neq j$) or, equivalently, in the case of monopoly, (i.e when it holds $N = 1$ and, thus, $q_1 = Q$ and $s_1 = 100$), then it holds $HHI = HHI_{MAX} = 10000$, which is the theoretical maximum value of HHI. On the other hand, in the case where all the firms in the industry have equal shares of output, i.e.

$$s_1 = s_2 = \dots = s_N = s, \text{ then it will hold } HHI = \sum_{i=1}^N (s_i)^2 = Ns^2$$

But, since $\sum_{i=1}^N (s_i)^2 = 100$, it will hold $Ns = 100 \Rightarrow s = 100 / N$.

Thus, it follows that $HHI = N(1/N)^2 = 1/N$, which is the minimum value of HHI. In the theoretical case where $N \rightarrow \infty$ (which it can be considered as a state of perfect competition), then it holds $s_1 = s_2 = \dots = s_\infty = 0$ and, therefore, $HHI = HHI_{MIN} = 0$, which is the theoretical minimum value of HHI.

The HHI is considered as a more suitable index than CR_n because it takes into account the distribution of all the shares of output in the industry, whilst each firm's share is weighted by the share of this firm.⁷ Thus, it follows that the larger (smaller) the share of a firm in the output, the larger (smaller) its contribution to the determination of HHI. For that reason, HHI could be sensitive to

extreme values of the sample. In alternative versions of the index, the weighting of the shares could be done, e.g., by giving different weights to the larger or smaller values of the shares. Thus, the results obtained by using the HHI in a specific industry are usually interpreted as follows: the higher the value of HHI, the higher the possibility that there is a lack of competition in the industry under consideration. The HHI is also used by the U.S. Department of Justice and the Federal Trade Commission as a measure of evaluation of competition and as a guide in order to approve or reject the merging of firms in an industry.⁸

In this paper, we estimate the degree of concentration in the Greek hotel industry by using the CR_n indices and the HHI. We express the CR_n indices as a percentage (%) of the total output of the n “larger” firms of the industry. Furthermore, we normalize the HHI as follows $H = HHI / HHI_{MAX}$, where H the normalized Herfindahl-Hirschman Index, and express H as a percentage as well. It then follows that H takes values from 0% to 100%, where 0% corresponds to the case of a perfect competitive market and 100% corresponds to the case of monopoly.⁹

DATA

The data used in this paper is derived from the database of the Hellenic Chamber of Hotels and refer to the year 2013. In the middle of this year in Greece operated 9.674 hotel units with 400.578 rooms and 771.896 beds. The Table 1 below shows how these units, rooms and beds are distributed according to the star category they belong. So, we notice that 357 units belong to the 5-star category (5* hereafter), 1.262 units belong to the 4-star category (4* hereafter), 2.340 units belong to the 3-star category (3*

hereafter), 4.230 units belong to the 2-star category (2* hereafter), 1.485 units belong to the 1-star category (1* hereafter), etc.

Table 1. The Greek Hotel Industry, 2013.

| | Total | 5* | 4* | 3* | 2* | 1* |
|--------------|---------|---------|---------|---------|---------|--------|
| Units | 9.674 | 357 | 1.262 | 2.340 | 4.230 | 1.485 |
| Rooms | 400.578 | 57.044 | 100.031 | 95.204 | 119.888 | 28.411 |
| Beds | 771.896 | 115.865 | 193.540 | 182.804 | 225.329 | 54.358 |

Source: Hellenic Chamber of Hotels

In order to get a better picture of the Greek hotel industry, Figure 1 below displays the distribution of units, rooms and beds according to the stars category classification.

Figure 1. Distribution of Hotels According to Star Category, 2013.



In the case of the 4*-5* and 1*-2*, there is an obvious difference between their shares in total units and their shares in rooms and bedrooms. More specifically, although only 16,7% of units belong to 4*-5* hotels yet this share accounts for 39,2% and 40,1% of rooms and beds, respectively. On the other hand, although 59,1% of units belong to 1*-2* hotels yet this share accounts for 37,0% and 36,2% of total rooms and beds, respectively. This is an evidence of the relatively larger size of hotels that belong to highest star categories. Finally, the shares of 3* hotels seem to have a more

balanced distribution, since in this category belongs 24,2% of total units, 23,8% of total rooms and 23,7% of total beds.

Since we are interested in investigating concentration and its implications to the competitiveness of the hotel industry in Greece, it is necessary to identify which of the hotel units belong to the same firm. With the help of HCH's database, we were able to identify 9.513 different owners. Therefore, we shall base our analysis to these firms. A common issue that arises in relevant studies is that rarely are available market share information for all the firms of an industry and, therefore, it is often necessary to construct the necessary data through statistical methods (see, e.g., Nauenberg et al. (2014)). In this paper, we are able to use information for the total hotel industry, thanks to the data provided by the database of HCH. For this purpose, we use the number of rooms and the number of beds as variables to measure the market shares of each firm that operated in the year 2013. Although these variables measure the output potential rather than the actual output of hotels, they allow us to investigate the market structure of the total hotel industry, which, due to lack of the relevant data, it would not be possible if we had chosen to use as a variable, e.g., the sales of each firm.

In the next section we present the results of our analysis regarding the concentration in Greek hotel industry. More specifically, we apply the CR4, CR8, CR16 and HHI indices not only to the total hotel market but also to the markets of 5*-4*, 3*, and 2*- 1* hotels separately.

RESULTS

The application of the previous analysis gives the results presented in Table 2 below.¹⁰ From the first row of the table we notice that the four largest hotels own the 3,66% of the total rooms, the eight largest hotels own the 5,37% of the total rooms and the sixteen largest hotels own the 7,88% of the total rooms. From the

sixth row of the table it follows that the four largest hotels that belong to the 4*-5* category own the 9,23% of the total beds in this category, the eight largest hotels own the 13,23% of the total beds and the sixteen largest hotels own the 19,42% of the total beds. Furthermore, the HHI for the total industry is only 0,08%, which can be interpreted as a value that corresponds to a highly competitive index. The rest of the rows of the table can be read in the same way.

Table 2. Concentration in the Greek Hotel Industry, 2013.

| Size Variable | Hotel Market | CR4 | CR8 | CR16 | HHI |
|---------------|--------------|-------|--------|--------|--------------|
| Rooms | Total | 3,66% | 5,37% | 7,88% | 0,08% |
| | 4*-5* | 9,20% | 13,20% | 19,39% | 0,44% |
| | 3* | 2,09% | 3,34% | 5,33% | 0,09% |
| | 1*-2* | 0,54% | 0,92% | 1,59% | 0,03% |
| Beds | Total | 3,75% | 5,50% | 8,04% | 0,08% |
| | 4*-5* | 9,23% | 13,23% | 19,42% | 0,45% |
| | 3* | 2,08% | 3,34% | 5,33% | 0,09% |
| | 1*-2* | 0,57% | 0,95% | 1,62% | 0,03% |

In general, we notice that there is no significant difference between the results based on rooms and those based on beds. Figure 2 below gives a picture of the three concentration ratios that we applied and, more specifically, it shows the share of total hotel industry that is owned by the four, eight and sixteen largest firms, respectively.¹¹

Figure 2. Concentration Ratios of the Greek Hotel Industry (Size Variable: Rooms).



Now, if we examine the results of the different star categories, we notice that there is a significant difference in the concentration between the hotels in the lower categories and those in the higher, the latter displaying much higher concentration ratios and HHI's. More specifically, the HHI in the 4*-5* hotels is about five times higher than in the 3* hotels and about fifteen times higher than in the 1*-2* hotels. However, even in the case of the 4*-5* hotels, the HHI can be considered as rather low. Figure 3 below gives a picture of the values of HHI in the different categories on the basis of rooms, whilst Figure 4 gives the respective picture regarding the concentration ratios CR4, CR8 and CR16.¹²

Figure 3. The Herfindahl-Hirschman Index per Category (Size Variable: Rooms).

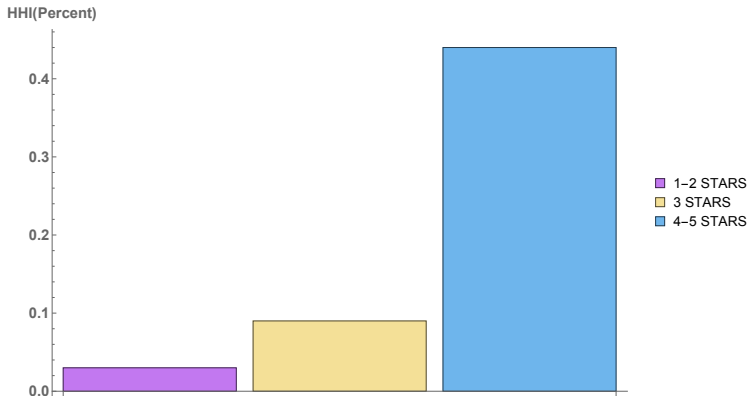
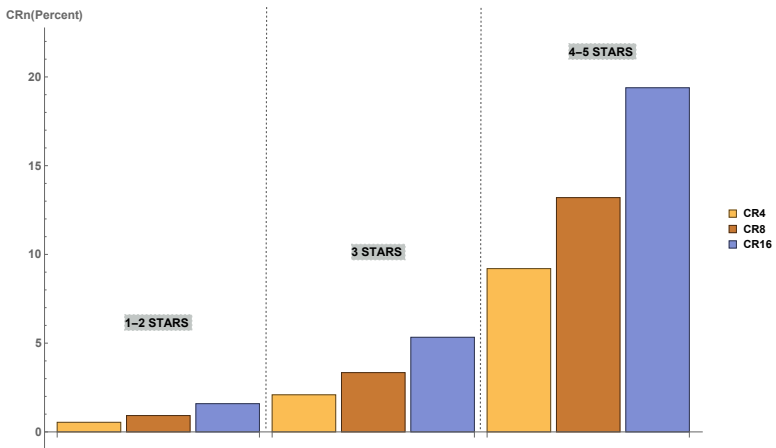


Figure 4. Concentration Ratios (Size Variable: Rooms).



Thus, we may conclude that the application of CR4, CR8, CR16 and HHI to the Greek hotel industry indicates that the industry can be considered as highly competitive, whilst the competitiveness is higher on the markets of the hotels of lower star categories. It has been supported that highly concentrated markets are characterized by entry barriers for new firms and high profits for the existing firms.¹³ Not quite unexpected, most economic policy authorities consider these characteristics as harmful for the competitiveness of the industry and apply measures to improve the structure of the

respective market (see, e.g., OECD, 2014). On the other hand, some scholars have provided evidence that the degree of concentration is not positively related with entry barriers and higher profits (see, e.g., Willis and Rogers, 1998; Davies, 1999). Moreover, it has been pointed out that the larger profits in an industry could be explained on the basis of the higher efficiency of larger firms and not on their dominant role in the market (see Damsetz, 1973). Thus, it seems that there is not an unambiguous relationship between concentration and entry barriers and, therefore, the results of the relative measurements should be considered with caution. In any case, we think that the authorities should also take into account and other factors that may define the market structure, the special characteristics of the industry, and act in accordance with the general interests of the majority of people involved in the economic process.

CONCLUDING REMARKS

This paper applied the Concentration Ratios for the largest 4, 8 and 16 firms, and the Herfindahl-Hirschman Index to the Greek hotel industry for the year 2013. The base of measurement was rooms and beds of hotels. It has been found that:

(i). There is no significant difference between the results based on rooms and those based on beds.

(ii). The results derived from the Concentration Ratios and the Herfindahl-Hirschman index indicate that the Greek hotel industry is highly competitive. This result holds not only for the total hotel market but for the separate markets of the different star categories as well.

(iii). There is a significant difference between the results obtained for the highest categories and those for the lowest categories, the latter displaying much lower concentration ratios and Herfindahl-Hirschman Indices. More specifically, the Herfindahl-Hirschman Index in 4*-5* hotels is about five times

higher than in 3* hotels and about fifteen times higher than in 1*-2* hotels.

Thus, on the basis of the previous analysis, it can be supported that the Greek hotel industry is highly competitive, whilst the competitiveness is even higher on the markets of the hotels of lower star categories. Since there is an ongoing discussion about the implementation of the recommendations of OECD's competition assessment reviews regarding the tourism sector, the results of this paper would be of some importance for the authorities of tourism policy.

Future research efforts should investigate whether alternative measures of concentration and/or methodology could give differentiated results and examine the evolution of concentration in the industry through time.

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ENDNOTES

1. See, e.g., Bain (1951), Rhoades (1970), Amel and Liang (1997), Pan (2005), and Folta et al. (2006).
2. See, e.g., Ijiri and Simon (1971), Bikker (2004), and Nauenberg et al. (2014).
3. For empirical applications of the n -firm concentration ratio, see, e.g., Akehurst (1984), Ratnayake (1999), and Bikker and Haaf

(2002).

4. This index was introduced by Hirschman (1945). A few years latter, it was also proposed by Herfindahl (1950), who was unaware of Hirschman's contribution. See, also, Hirschman (1964).
5. For the theoretical relationships between the various measures of concentration, see Hall and Tideman (1967), Naldi (2003), Hennessy and Lapan (2007), Alegria and Schaeck (2008), and Geronikolaou (2015).

$$\sum_{i=1}^N (s_i) = 100$$

6. Obviously, it holds .
7. The HHI is also proposed as a suitable measure of concentration in an industry by the Competition Assessment Toolkit of OECD (see OECD, 2016).
8. For empirical applications of HHI, see, e.g., Bikker and Haaf (2002), Beck et al. (2006), Pan (2005), and Bai et al. (2014).
9. It is interesting to note that according to the U.S. Department of Justice and the Federal Trade Commission (2010), the values of H can be interpreted as follows:
 $H < 1\% \rightarrow$ highly competitive index
 $1\% < H < 15\% \rightarrow$ unconcentrated index
 $15\% < H < 25\% \rightarrow$ moderate concentration
 $H > 25\% \rightarrow$ high concentration.
10. These results constitute a further elaboration of the findings reported in Soklis (2014).
11. A similar picture can be derived if we focus on the beds instead of the rooms.
12. Essentially the same picture would be derived if we had focused on beds instead of rooms.
13. For evidence that support this view, see, e.g., Bain (1951), Pan (2005) and Niu et al. (2012).

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TOURISM IN TIME OF CRISIS: SPECIALIZATION, SPATIAL DIVERSIFICATION AND POTENTIAL TO GROWTH ACROSS EUROPEAN REGIONS

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Tourism is a pivotal economic sector with major social impact on local communities and a development pillar for both advanced and emerging countries.

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Tourism development has a valuable impact on employment and output, contributing to post-crisis economic recovery. Under the hypothesis that tourism development is a complex phenomenon shaped by economic growth and negatively influenced by the most recent financial crisis, this study proposes a comprehensive analysis of the spatial distribution of tourism activities across European countries and regions during recession time (2008-2014). Changes in the location quotient of tourism jobs were computed to evaluate the importance of this sector across European regions, providing an informative base for policies enhancing tourism competitiveness. The 2007 recession resulted a spatially-heterogeneous impact on tourism specialization across European regions, maintaining a strong (and sometimes declining) base in southern Europe, promoting tourism diversification with sparse employment growth in western and central Europe and strengthening cultural and natural attraction poles in northern Europe.

Keywords: *Tourism, development, employment, financial crisis, sustainability*

INTRODUCTION

Tourism is a fundamental and dynamic pillar of the global economy (Cunha, 2013). Being one of the most important economic sectors at the global scale, tourism relevance has been widely recognized at the European level (Organization for Economic Cooperation and Development, 2014), since Europe is considered the most popular tourism destination in the world (World Tourism Organization, 2012) and tourism is a basic developmental factor in the European economy. Moreover, apart from the monetary dimension of this economic activity, tourism has a pivotal social impact (Deery et al., 2012). As a result, tourism may act as a driver for local development especially in regions specialized in tourism and with natural and cultural endowments, such as in the northern Mediterranean region (Bramwell, 2003). Public and private infrastructures aimed at tourism promotion, could contribute to local

development even in economically-disadvantaged regions (Khadaroo and Seetanah, 2007).

Tourism exerts relevant impacts on regional employment, representing a basic activity that positively contribute to the reduction of short-term unemployment (Ahlert, 2007) and the progressive recovery of regional systems after a period of prolonged crisis (Tribe, 2016). The contribution of tourism in local development and reduction of employment divides among regions has been widely recognized in Europe (e.g. Balaguer and Cantavella-Jordà, 2002). Results from Paci and Marrocu (2014) demonstrate that regional growth is positively affected by domestic and international tourism. According to a recent policy analysis (European Commission, 2010), the contribution of tourism in European gross domestic product and employment is respectively 10% and 12%, indicating tourism as a labor-intensive economic activity (Kusluvan, 2003). Empirical results from earlier studies demonstrate the joint action of tourism in economic development and social cohesion. Tourism contributes significantly to the improvement of the standard of living in these countries and acts as a factor of convergence (Bramwell, 2003). At the same time, the expansion of the European Union in the 2000s has increased diversity of tourism destinations and specialization of hospitality products, forcing regional and local systems to adapt to rapid societal changes. Relevant impacts of the most recent crisis have been also reported for some regional systems, especially in southern Europe (Dritsakis, 2004). As a result, persisting disparities in the expansion of tourism activities have been observed widely across European macro-areas (Paulo, 2000).

However, despite the important socioeconomic impact of tourism, until recently this economic sector did not constitute a priority for common policies at the European level. Actions promoted by European Community were basically restricted to the primary and secondary sectors with a major emphasis to

competitiveness in the industrial sector and in specific tertiary sectors (Villanueva-Cuevas, 2011). An indirect reference to tourism has been made in the Treaty of Rome (1957), one of the most relevant acts of the European Community. As a result, tourism has been regarded as a minor economic activity and the interpretative framework regarding tourism development at the European level has remained relatively unchanged for over 20 years up to the late 1970s. While interconnections between tourism and broader social and economic structures came into the fore during the 1980s (Lane, 2012), stronger efforts were required since the 1990s to support appropriate policies for hospitality promotion and tourism consolidation (Hall et al., 2006). The adoption of a new legal framework concerning tourism in the Treaty of Lisbon has been suggested with the aim to consolidate an increasing network of attractive tourism destinations in Europe (Villanueva-Cuevas, 2011), emphasizing at the same time the importance of this economic sector for development of rural and coastal areas, especially in southern and eastern Europe (Hall, 2008). Based on the Treaty of Lisbon, the need to better coordinate tourism policies for European countries and the associated funding is recognized. Collaboration of European Union with the European Council, the European Parliament and the Committee of Regions has been progressively improved with the aim to improve European tourism competitiveness (Commission of the European Communities, 2001).

Tourism activities face challenges with implicit opportunities and weaknesses (World Tourism Organization, 2015). On the one hand, tourism should consider social challenges that influence the regional and local demand of hospitality products (Nelson, 2013). On the other hand, tourism should face the restrictions that are imposed by spatial disparities in tourism assets and amenities, the inherent territorial characteristics and the socioeconomic framework. A special attention has been also devoted to the environmental consequences of the tourism industry (Gössling, 2002), proposing interpretative frameworks and empirical findings

to inform national and regional strategies for sustainable local development.

While representing one of the most complex economic productions that depend on volatile or dynamic conditions of supply and demand, the prevailing types of tourism are primarily based on natural and cultural amenities concentrated in coastal and mountainous areas as well as in cities (Teuscher and Lang, 1982). Sports, religious, thermal, gastronomic and cultural aspects also contribute to shape tourism demand and supply (Nelson, 2013). In this way, tourists choose hospitality products according to supplied services and the local specialization grounded on a specific amenity. As a result, structural factors that affect supply and demand of tourism product should be addressed at the required spatio-temporal scale (Wanhill and Buhalis, 1999). In addition, the behavior of tourists is particularly volatile and is subjected to psychological and social influences, personal peculiarities and short-term economic and demographic factors (Candela and Figini, 2012).

Even though tourism constitutes one of the most basic economic activities in Europe, serious concerns have been expressed regarding quality, efficiency, competitiveness and sustainability of the tourism sector at the continental scale (European Travel Commission, 2012). Tourism in Europe is currently experiencing an uncertain period of change following societal and economic transformations, under the spectrum of current financial and economic crisis that has affected European countries since 2007. Evidences have been reported demonstrating that the 2007 crisis has exerted a relevant influence on the demand of tourism products (World Tourism Organization and International Labor Organization, 2013). Financial and social crisis have been intimately linked with economic stagnation, affecting tourists' preferences worldwide. Empirical findings indicate that tourists' cutback decisions on tourism expenditure during an economic crisis depend on climate conditions of the place of origin, gross domestic product level and

growth (Eugenio-Martin and Campos-Soria, 2014). As a result, tourists choose less far destinations, and, at the same time, they have limited duration and overall cost of their stay (European Parliament, 2008). With global recession, the European tourism industry has also faced important challenges because of the increased role of emerging countries that attract a significant number of tourists due to economic competitiveness of their services. However, tourism is supposed to be a victim of its success in cases when this industry grows following unsustainable paths (Salvati and Zitti, 2007). For example, uncontrolled tourism development has frequently threatened biodiversity, ecosystem functioning and natural resources (United Nations Environment Programme and World Tourism Organization, 2005).

Size and share of the tourism sector in total economy was and still is highly heterogeneous across member countries and regions, justifying a comprehensive and diachronic analysis of the spatial distribution of tourism activity in Europe, with special regard to the most recent time interval characterized by global crisis and economic stagnation (2008-2014). Within this analytical framework, our study investigates spatial patterns and concentration of tourism activities as a result of short-term socioeconomic dynamics underlying recession, identifying regional comparative advantages in respect with the rest of Europe (Smeral, 2009). We also discussed selected geographical characteristics of these areas (coastal, mountainous, urban) with the aim to detect specific (or prevailing) types of tourism activities. Analysis of tourism dynamics during crisis time allows identification of regional patterns of specialization, diversification, polarization and convergence in this economic sector (Smeral, 2010). We analyzed variables referring to the real economy based on employment volume in the selected sector and in the whole economy. Such variables have been less studied in respect with the attention European Institutions have deserved to the analysis of financial aspect of the economic systems, both national and regional. Under this framework, the next section

introduces data and methodology on which the results of this study are based, being in turn presented in section 3. Section 4 discusses the main findings of this study deriving some policy suggestions for member countries and the European Union as well.

METHODS

Statistical data concerning employment volume in the European Union and EFTA countries (henceforth named 'Europe') were used in this study. These data are available from Eurostat Labor Force Statistics for the years 2008 and 2014 at the country level and for the years 2008 and 2012 at the regional level. These two-time points were selected with the aim to detect changes in tourism specialization during the most recent crisis period. A Location Quotient (LQ) applied to the share of tourism jobs in total jobs has been computed over time (2008 and 2014 or 2012) and space, considering both national and regional spatial scales. LQs were calculated considering the share of employees in tourism sector at a given spatial scale (country or region) and in the whole European economy as follows:

$$LQ = \frac{\frac{Air}{Ar}}{\frac{Ain}{An}}$$

where A is employment, i refers to the tourism sector, r is the r-th European country (or region) and n refers to Europe as a whole. Employment in the tourism sector was assessed considering the NACE2 'Accommodation and Food Service' category of the international NACE-2 nomenclature of economic activities at the NUTS-1 (countries) and NUTS-2 (administrative regions) of European territorial statistics. Thematic maps were prepared to identify countries and regions specialized in tourism activities.

Location Quotients assume positive values ranging between 0 and infinity. A LQ equal to 1 indicates a country or region which concentrates a share of jobs in tourism activity in the total economy jobs equal to the share observed at the European scale. LQs higher than 1 outline countries or regions concentrating a relevant share of jobs in tourism activities in respect with the European economy. The reverse pattern was indicated by a LQ lower than the unity.

RESEARCH RESULTS

Mediterranean countries (Malta, Cyprus, Spain, Greece, Croatia and Portugal) and some other western European countries (Austria, Ireland) emerge as tourism-specialized economic systems, concentrating a proportion of jobs in the tourism sector 25% (or more) higher than the European average in 2008 (Table 1). Italy ranked lower showing a location quotient of 1.15 due to the more mixed and diversified economic structure compared to other Mediterranean countries such as Spain, Greece and Portugal. Bulgaria, Slovenia, Hungary and Slovakia had a location coefficient higher than the unity and represents emerging countries for tourism industry in eastern Europe. Large countries in western Europe, such as France, Germany and United Kingdom, as well as northern countries and the remaining eastern countries ranked low, with location quotients < 1 .

Changes over time (2008-2014) in the location quotient of tourism jobs were found spatially-heterogeneous in European countries with the highest increase observed in Iceland (+69%) and the highest decline experienced by Luxembourg (-44%). Important differences were also observed within countries belonging to the same macro-region. For example, in Mediterranean Europe, Spain, Italy and Greece grew compared with the European average and the reverse pattern was observed for Portugal, Malta and Cyprus (Figure 1). Maps clearly indicate that concentration of tourism activities in Europe has not changed significantly between 2008 and 2014, since

the countries exhibiting the highest concentration of activities are in the Mediterranean basin with few exceptions found at the continental scale (e.g. Ireland).

Table 1. Location Quotient of tourism activities (accommodation and food service jobs) across European countries, selected years.

| Country | 2008 | 2014 | Change (%) |
|----------------|------|------|------------|
| Malta | 1.87 | 1.60 | -14.4 |
| Cyprus | 1.79 | 1.76 | -1.7 |
| Spain | 1.71 | 1.80 | 5.3 |
| Greece | 1.69 | 1.97 | 16.6 |
| Portugal | 1.58 | 1.38 | -12.7 |
| Ireland | 1.40 | 1.63 | 16.4 |
| Austria | 1.35 | 1.15 | -14.8 |
| Croatia | 1.28 | 1.33 | 3.9 |
| Bulgaria | 1.23 | 1.16 | -5.7 |
| Slovenia | 1.22 | 1.01 | -17.2 |
| Italy | 1.15 | 1.25 | 8.7 |
| Hungary | 1.07 | 1.01 | -5.6 |
| Slovakia | 1.06 | 1.14 | 7.5 |
| United Kingdom | 1.01 | 1.14 | 12.9 |
| Luxembourg | 0.99 | 0.55 | -44.4 |
| Germany | 0.87 | 0.82 | -5.7 |
| Czech Republic | 0.86 | 0.91 | 5.8 |
| Estonia | 0.84 | 0.90 | 7.1 |
| Finland | 0.80 | 0.75 | -6.3 |
| Iceland | 0.79 | 1.31 | 65.8 |
| France | 0.76 | 0.79 | 3.9 |
| Belgium | 0.71 | 0.85 | 19.7 |
| Sweden | 0.71 | 0.70 | -1.4 |
| Denmark | 0.70 | 0.85 | 21.4 |
| Netherlands | 0.66 | 0.87 | 31.8 |
| Norway | 0.66 | 0.74 | 12.1 |
| Latvia | 0.57 | 0.66 | 15.8 |

| | | | |
|-----------|------|------|-------|
| Lithuania | 0.55 | 0.54 | -1.8 |
| Poland | 0.49 | 0.44 | -10.2 |
| Romania | 0.41 | 0.51 | 24.4 |



Figure 1. Spatial distribution of the location quotient in tourism sector (accommodation and food service activities) in European countries for the year 2008 (left) and 2014 (right).

Figure 2 indicates a substantial convergence in growth and decline of tourism specialization in the European countries. Growth rates in the location quotient of tourism jobs were linearly correlated ($r = 0.80$) with the location quotient observed at the initial observation year. The largest deviations from the linear trend illustrated in Figure 2 were observed for Luxembourg, Austria, Slovenia, Malta and Portugal (with location coefficients decreasing more than proportionally in respect to the linear trend) and for Greece, Ireland and Iceland (with location coefficients decreasing more than proportionally in respect to the linear trend). Such findings indicate a substantial heterogeneity in tourism development across Europe during the most recent crisis, with leading and lagging countries benefiting from the pre-crisis growth path and the consolidated position in the European hierarchy. Our results are not supporting specific patterns of convergence or divergence in tourism development among macro-regions in Europe. Crisis has stimulated tourism development in both highly affected and less impacted areas

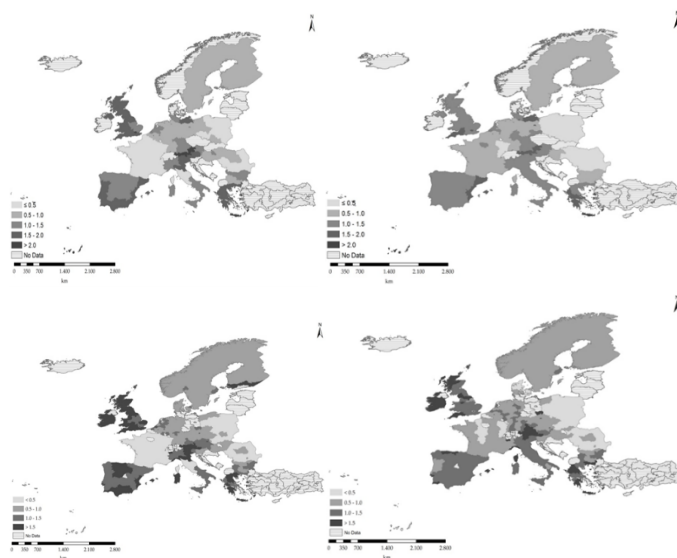


Figure 3. Spatial distribution of the location quotient in tourism sector (accommodation and food service activities) in European NUTS-1 regions (upper panels) and NUTS-2 regions (lower panels) for the year 2008 (left) and 2012 (right).

The rate of change (2008-2012) in tourism jobs at the regional scale in Europe (Figure 4) followed a linear trend with a less-than-proportional growth in respect to the LQ observed for the initial time point (2008). This evidence complements and enriches the results previously illustrated, suggesting that several regions with medium-high specialization in tourism sector ($LQ > 2$) were growing less than proportional the initial level of 2008 and, in some cases, declined markedly. On average, regions with medium-low specialization in tourism grew at a relatively faster rate compared with specialized regions; however, the rate of growth in tourism LQ was relatively modest in absolute terms, reflecting the results obtained at the country scale and presented earlier in this paper.

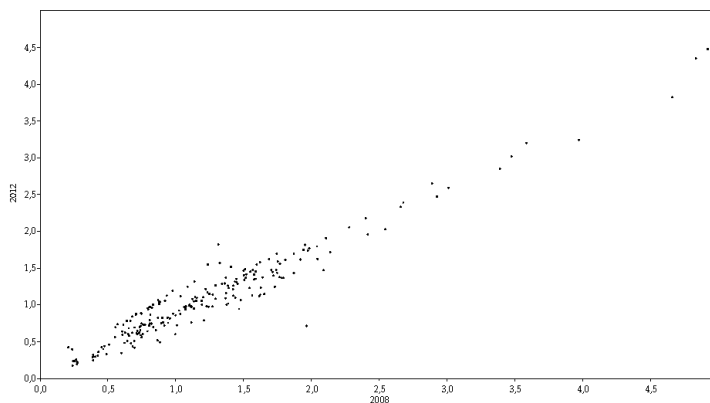


Figure 4. Convergence in location quotients of tourism activities across European NUTS-2 regions during recession (dashed line indicates a stable concentration of jobs in tourism proportional to the European average during the study period, 2008-2012).

Table 2 provides analytical data confirming the results illustrated above. Apart from Berlin and Hamburg (two metropolitan regions in Germany offering mainly cultural and business tourism products) all regions with $LQ > 1.15$ in 2008 experienced negative rates of growth in the LQ during 2008-2012, with particularly heterogeneous values observed in the Mediterranean region and in Western Europe. The highest decline was observed in both urban and peri-urban regions. However, negative rates of growth were also found in some coastal regions (e.g. Aegean islands in Greece, Canary Islands in Spain, Madeira and Azores islands in Portugal).

Table 2. Location Quotient in the sector of tourism (accommodation and food service activities) for European regions (NUTS-2 level) with available data for both years and a $LQ > 1$ for the year 2008.

| Region | 200 | 2012 | Change |
|--------|-----|------|--------|
|--------|-----|------|--------|

| | 8 | (%) | |
|------------------------------|----|-------|-------|
| | | 3.2 | |
| Nisia Aigaiou, Kriti | 84 | 2.846 | -13.3 |
| | | 3.2 | |
| Canarias | 66 | 2.782 | -14.8 |
| | | 3.0 | |
| Região Autónoma da Madeira | 96 | 2.261 | -27.0 |
| | | 2.1 | |
| London | 49 | 1.719 | -20.0 |
| | | 2.0 | |
| Région de Bruxelles-Capitale | 49 | 1.538 | -24.9 |
| | | 2.0 | |
| Westösterreich | 24 | 1.624 | -19.8 |
| | | 1.9 | |
| South West (UK) | 03 | 1.637 | -14.0 |
| | | 1.8 | |
| Scotland | 72 | 1.338 | -28.5 |
| | | 1.8 | |
| Kentriki Ellada | 55 | 1.749 | -5.7 |
| | | 1.7 | |
| North West (UK) | 79 | 1.308 | -26.5 |
| | | 1.7 | |
| Wales | 47 | 1.375 | -21.3 |
| | | 1.7 | |
| Nord-Est | 40 | 1.429 | -17.9 |
| | | 1.7 | |
| Mecklenburg-Vorpommern | 27 | 1.993 | 15.4 |
| | | 1.7 | |
| North East (UK) | 13 | 1.200 | -29.9 |
| | | 1.6 | |
| Este (ES) | 90 | 1.530 | -9.5 |
| | | 1.6 | |
| South East (UK) | 50 | 1.229 | -25.5 |
| | | 1.6 | |
| Südösterreich | 18 | 1.351 | -16.5 |
| | | 1.6 | |
| West Midlands (UK) | 14 | 1.137 | -29.6 |

| | | | | |
|------------------------------------|----|-----|-------|-------|
| | | 1.6 | | |
| Yorkshire and The Humber | 10 | | 1.106 | -31.3 |
| | | 1.6 | | |
| Northern Ireland (UK) | 08 | | 1.033 | -35.8 |
| | | 1.5 | | |
| Voreia Ellada | 96 | | 1.397 | -12.5 |
| | | 1.5 | | |
| Continente | 52 | | 1.266 | -18.4 |
| | | 1.5 | | |
| Sur (ES) | 14 | | 1.339 | -11.6 |
| | | 1.4 | | |
| Noroeste (ES) | 74 | | 1.330 | -9.8 |
| | | 1.4 | | |
| Comunidad de Madrid | 57 | | 1.189 | -18.4 |
| | | 1.4 | | |
| Berlin | 35 | | 1.628 | 13.4 |
| | | 1.4 | | |
| East of England | 27 | | 1.147 | -19.6 |
| | | 1.4 | | |
| East Midlands (UK) | 25 | | 1.036 | -27.3 |
| | | 1.4 | | |
| Ostösterreich | 13 | | 1.203 | -14.9 |
| | | 1.3 | | |
| Noreste (ES) | 84 | | 1.210 | -12.6 |
| Região Autónoma dos Açores (PT) | 81 | | 1.028 | -25.6 |
| | | 1.3 | | |
| Hamburg | 67 | | 1.665 | 21.8 |
| | | 1.3 | | |
| Centro (ES) | 57 | | 1.171 | -13.7 |
| | | 1.2 | | |
| Attiki | 94 | | 0.900 | -30.4 |
| | | 1.2 | | |
| Isole | 67 | | 1.079 | -14.8 |
| | | 1.2 | | |
| Sud | 54 | | 1.09 | -13.1 |
| Nord-Ovest | | 1.2 | 1.08 | -13.4 |

| | | | |
|------------------------|-----|-------|-------|
| | 47 | | |
| | 1.1 | | |
| Zuid-Nederland | 92 | 1.018 | -14.6 |
| | 1.1 | | |
| West-Nederland | 89 | 1.018 | -14.4 |
| | 1.1 | | |
| Åland | 50 | 0.980 | -14.8 |
| | 1.0 | | |
| Bremen | 79 | 1.301 | 20.6 |
| | 1.0 | | |
| Közép-Magyarország | 68 | 0.956 | -10.5 |
| Severna i yugoiztochna | 1.0 | | |
| Bulgaria | 52 | 0.991 | -5.8 |
| | 1.0 | | |
| Oost-Nederland | 45 | 0.887 | -15.1 |
| | 1.0 | | |
| Schleswig-Holstein | 34 | 1.144 | 10.6 |
| | 1.0 | | |
| Bayern | 11 | 1.134 | 12.2 |

The statistical distribution of LQ growth rates for regions with a $LQ < 1$ in 2008 is more mixed (Table 3), presenting both positive rates (especially in German and Austrian regions) and negative rates (mainly observed in eastern European regions). Data for a selection of metropolitan regions in Europe with $LQ > 1$ (Table 4) confirm a mixed pattern of tourism development, as presented in previous analysis. In all cases, apart from Berlin, a relevant reduction in the location quotient was observed, possibly indicating a progressive shift towards other advanced services, indirectly promoted by economic stagnation and progressive reduction in visitors' flows following crisis. Recent findings indicate that specific 'soft' elements of the urban tourism product are keys for cities' attractiveness, and yet they are often overlooked by planning and development strategies (Russo & Van der Borg, 2002).

Table 3. Location Quotient in the sector of tourism (accommodation and food service activities) for European regions (NUTS-2 level) with available data for both years and a LQ < 1 for the year 2008.

| Region | 2 008 | 20 12 | Change (%) |
|---------------------------------|----------|----------|---------------|
| | 0 | 0.8 | |
| Noord-Nederland | .998 | 53 | -14.5 |
| | 0 | 1.0 | |
| Hessen | .990 | 98 | 10.9 |
| | 0 | 1.1 | |
| Sachsen | .965 | 09 | 14.9 |
| Yugozapadna i yuzhna tsentralna | 0 | 0.9 | |
| Bulgaria | .950 | 70 | 2.1 |
| | 0 | 0.8 | |
| Östra Sverige | .936 | 56 | -8.5 |
| | 0 | 0.7 | |
| Vlaams Gewest | .917 | 13 | -22.2 |
| | 0 | 0.6 | |
| Dunántúl | .869 | 10 | -29.8 |
| | 0 | 0.9 | |
| Brandenburg | .842 | 98 | 18.5 |
| | 0 | 0.9 | |
| Niedersachsen | .829 | 29 | 12.1 |
| | 0 | 0.9 | |
| Rheinland-Pfalz | .823 | 27 | 12.6 |
| | 0 | 0.9 | |
| Baden-Württemberg | .804 | 35 | 16.3 |
| | 0 | 0.7 | |
| Norra Sverige | .798 | 10 | -11.0 |
| | 0 | 0.8 | |
| Sachsen-Anhalt | .797 | 99 | 12.8 |
| Région wallonne | 0 | 0.6 | -18.6 |

| | | | |
|----------------------------|------|-----|-------|
| | .786 | 40 | |
| | 0 | 0.8 | |
| Thüringen | .779 | 77 | 12.6 |
| | 0 | 0.8 | |
| Nordrhein-Westfalen | .747 | 46 | 13.3 |
| | 0 | 0.6 | |
| Södra Sverige | .741 | 98 | -5.8 |
| | 0 | 0.6 | |
| Manner-Suomi | .729 | 66 | -8.6 |
| | 0 | 0.8 | |
| Saarland | .711 | 23 | 15.8 |
| | 0 | 0.4 | |
| Alföld és Észak | .703 | 98 | -29.2 |
| | 0 | 0.3 | |
| Region Północno-Zachodni | .565 | 59 | -36.5 |
| | 0 | 0.3 | |
| Region Południowy | .545 | 74 | -31.4 |
| | 0 | 0.4 | |
| Macroregiunea unu | .508 | 45 | -12.4 |
| | 0 | 0.3 | |
| Region Północny | .502 | 23 | -35.7 |
| | 0 | 0.3 | |
| Region Południowo-Zachodni | .480 | 96 | -17.5 |
| | 0 | 0.4 | |
| Macroregiunea trei | .460 | 50 | -2.2 |
| | 0 | 0.2 | |
| Region Centralny | .376 | 97 | -21.0 |
| | 0 | 0.3 | |
| Macroregiunea patru | .353 | 17 | -10.2 |
| | 0 | 0.3 | |
| Macroregiunea doi | .346 | 01 | -13.0 |
| | 0 | 0.1 | |
| Region Wschodni | .262 | 91 | -27.1 |

Taken together, these results evidence a quite heterogeneous picture with a persistent north-south gradient in tourism specialization and a slightly changing east-west gradient. After recession, highly specialized regions in the Mediterranean basin still remain the leaders of the tourism hierarchy in Europe but, in many cases, they are progressively losing activities and jobs. Regions with mixed economic structure and moderate specialization in tourism consolidate or, at least, maintain their position in the continental ranking. Tourism specialized urban regions, especially in western and southern Europe, are losing activities and jobs. Central European regions, especially from Germany, are progressively emerging as local tourism attractors (Ahlert, 2007). Northern regions are relatively stable in the continental ranking and, finally, eastern European regions - apart from few exceptions - occupy a marginal position in Europe, which does not seem to undergo a significant recovery in recent times. Recession has in some way increased the uneven regional disparities in tourism specialization across European countries, indirectly promoting diversification in tourism destination and the emergence of non-specialized regions in affluent economic systems such as Germany.

Table 4. Location Quotient in the sector of tourism (accommodation and food service activities) for selected metropolitan regions in Europe and years.

| Metropolitan region | 2008 | 2012 | Change (%) |
|---------------------|------|------|------------|
| London | 2.15 | 1.72 | -20.0 |
| Bruxelles | 2.05 | 1.54 | -24.9 |
| Lisbon | 1.98 | 1.74 | -11.9 |
| Prague | 1.81 | 1.61 | -10.8 |
| Vienna | 1.75 | 1.59 | -9.3 |
| Madrid | 1.46 | 1.19 | -18.4 |
| Berlin | 1.44 | 1.63 | 13.4 |
| Athens | 1.29 | 0.90 | -30.4 |

DISCUSSION

Based on the empirical analysis performed in this study, it can be argued that tourism is an economic activity that does not contribute to employment in the same way across European countries. While concentrating jobs in Mediterranean countries and in specific regions of western and northern Europe, including large metropolitan regions, tourism activities are less important in central and eastern Europe, showing a relatively moderate spatial variability. Relative abundance and considerable spatial variability of tourism jobs in Mediterranean countries is justified with concentration of natural and cultural amenities in many places, constituting a relevant advantage in respect to the rest of Europe. However, natural amenities are present also in some other countries, e.g. eastern Europe, that require specific policies of regional development at the country scale for post-crisis recovery of tourism sector. The current size of the international tourism market in the centrally-planned economies of Europe has been long considered as under-performing in comparison with Western destinations. According to Hall (1992), major constraints have included travel restrictions, poor quality of touristic provisions, inadequate marketing and promotion, and political instability, that are only partly addressed and solved in the most recent times. Based on their innate attractiveness, opportunities exist to develop tourism in these countries through increasing openness and receptivity to joint foreign-capital ventures, and improved marketing.

International competitiveness affects concentration and diversification of hospitality products in tourism-specialized places, and especially in the Mediterranean region, showing territorial disparities that have been progressively enhanced by economic crisis (Carlucci et al., 2017; Cuadrado-Ciuraneta et al., 2017; Pili et al., 2017). Regions that have increased competitiveness of tourism

products are more frequently specialized in dynamic tourism assets that were consolidating over time, even in a time of recession (Gunduz and Hatemi, 2005). Regions with a general decline in economic competitiveness are expected to host a stagnating or poorly developed tourism sector, possibly facing a short-term fall in employment driven by crisis or persisting conditions of economic backwardness, in turn influencing tourism competitiveness and potential to change. Growth and spatial redistribution of jobs in tourism sector across European regions during the 2007 recession can be thus explained referring to this interpretative framework.

Empirical results of our analysis indicate that several regions of Greece and Spain, concentrating tourism activities and facing socioeconomic problems and fiscal imbalances, have developed under crisis with moderately increasing or stable tourism jobs. These processes have widened the within-country disparities in tourism specialization already observed in the pre-crisis period, with a progressive increase of tourism's role in the total economy. These recent dynamics can be explained considering the negative impact of crisis on other economic sectors including heavy and light industry and traditional tertiary sectors (e.g. constructions, commerce and public services due to fiscal cuts). In this line of thinking, measures of fiscal discipline applied at the country level and policies of internal devaluation adopted in response to European Union monetary targets, may have an indirect, positive influence on the competitiveness of tourism products. At the same time, the shift toward a tourism-oriented economic structure may be viewed as an effort to respond to the reduction of income from other sources due to financial crisis and a proactive way to face extensive unemployment.

Based on the analysis, the tourism sector is increasingly required to adapt to new challenges and more complex issues of ecological sustainability and socioeconomic resilience which are expected to evolve in a post-crisis global scenario. Due to

heterogeneous socioeconomic conditions at the continental scale, the design of a coherent development action framework at the European level is necessary to ensure sustainability of European tourism and improved resilience of regional systems to economic stagnation and recovery after crisis (Commission of the European Communities, 2007). In this line of thinking, tourism-specialized systems offer a unique opportunity to ascertain (latent and apparent) links between economic development, socio-ecological resilience and environmental sustainability. As an economic activity that integrates social, cultural and natural assets, tourism finally represents a powerful factor improving attractiveness of local and regional communities, acting as an incentive for the adoption of sustainable and environmentally-friendly practices at the European level. According to the challenges and the rising competition in tourism industry, European countries are increasingly competing in supply of sustainable, high-quality tourism production based on comparative advantages that include diversity of natural environment and cultural wealth.

The stable (or only moderately declining) competitiveness of classical touristic places in the Mediterranean region can be attributed to the expanded range of provided tourism services through the development of new activities indirectly driven by the economic crisis (Gavalas et al., 2014; Rontos et al., 2016; Salvati, 2016) and the moderate expansion of urban-rural divides (Salvati et al., 2013; Ceccarelli et al., 2014; Serra et al., 2014). These findings confirm that competitive advantages in the sector of tourism are evolving rapidly. Appropriate state policies should be designed especially for those countries that have limited competitive advantages in other economic sectors because of recession. Greece is one of the best examples in this line of thinking. Intimate characteristics of tourism products and supply conditions deserve further investigation, since products and prices are multifaceted and dynamic over time and space.

CONCLUSION REMARKS

The main efforts of the European tourism policy have been directed to enhance sector competitiveness by promoting sustainable prospects of growth and change responding (and adapting) to global challenges. For this aim, economic, social and environmental sustainability are considered fundamental pillars for supporting and improving competitiveness in tourism sites, increasing the prosperity of people, reducing unemployment, developing and consolidating these natural and cultural poles of attraction. Inter-country collaboration is encouraged especially at the level of best practice exchange. In this way, Europe is expected to consolidate its position as a leading tourism destination at the global scale. As a result, regional systems - and especially the most disadvantaged ones - can improve their economic asset and social background. A research agenda is increasingly required to emphasize the need to investigate the intimate relationship between economic dynamics and policy coordination in regional tourism models across Europe.

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- Encouraging international scientific cooperation and understanding, and enhancing multi-disciplinary research across all tourism sectors.

The scope of the journal is international and all papers submitted are subject to strict blind peer review by its Editorial Board and by other anonymous international reviewers. The journal features conceptual and empirical papers, and editorial policy is to invite the submission of manuscripts from academics, researchers, post-graduate students, policymakers and industry practitioners. The Editorial Board will be looking particularly for articles about new trends and developments within different sectors of tourism, and the application of new ideas and developments that are likely to affect tourism, travel, hospitality

and leisure in the future. TOURISMOS also welcomes submission of manuscripts in areas that may not be directly tourism-related but cover a 236 topic that is of interest to researchers, educators, policy-makers and practitioners in various fields of tourism.

The material published in TOURISMOS covers all scientific, conceptual and applied disciplines related to tourism, travel, hospitality and leisure, including: economics, management, planning and development, marketing, human resources, sociology, psychology, geography, information and communication technologies, transportation, service quality, finance, food and beverage, and education. Manuscripts published in TOURISMOS should not have been published previously in any copyright form (print or electronic/online). The general criteria for the acceptance of articles are:

- Contribution to the promotion of scientific knowledge in the greater multi-disciplinary field of tourism.
- Adequate and relevant literature review.
- Scientifically valid and reliable methodology.
- Clarity of writing.
- Acceptable quality of English language.

TOURISMOS is published twice per year (in Spring and in Autumn). Each issue includes the following sections: editorial, research papers, research notes, case studies, book reviews, conference reports, industry viewpoints, and forthcoming events.

JOURNAL SECTIONS

Editorial

The Editorial addresses issues of contemporary interest and provides a detailed introduction and commentary to the articles in the current issue. The editorial may be written by the Editor, or by any other member(s) of the Editorial Board. When appropriate, a “Guest

Editorial” may be presented. However, TOURISMOS does not accept unsolicited editorials.

Research Papers

For the Research Papers section, TOURISMOS invites full-length manuscripts (not longer than 6000 words and not shorter than 4000 words) from a variety of disciplines; these papers may be either empirical or conceptual, and will be subject to strict blind peer review (by at least three anonymous referees). The decision for the final acceptance of the paper will be taken unanimously by the Editor and by the Associate Editors. The manuscripts submitted should provide original and/or innovative ideas or approaches or findings that eventually push the frontiers of knowledge. Purely descriptive accounts are not considered suitable for this section. Each paper should have the following structure: a) abstract, b) introduction (including an overall presentation of the issue to be examined and the aims and objectives of the paper), c) main body (including, where appropriate, the review of literature, the development of hypotheses and/or models, research methodology, presentation of findings, and analysis and discussion), d) conclusions (including also, where appropriate, recommendations, practical implications, limitations, and suggestions for further research), e) bibliography, f) acknowledgements, and g) appendices.

Case Studies

Case Studies should be not longer than 3500 words and not shorter than 2500; these articles should be focusing on the detailed and critical presentation/review of real-life cases from the greater tourism sector, and must include - where appropriate - relevant references and bibliography. Case Studies should aim at disseminating information and/or good practices, combined with critical analysis of real examples. Purely descriptive accounts may be considered suitable for this section, provided that are well-justified and of interest to the readers of TOURISMOS. Each article

should have the following structure: a) abstract, b) introduction (including an overall presentation of the case to be examined and the aims and objectives of the article), c) main body (including, where appropriate, the review of literature, the presentation of the case study, the critical review of the case and relevant discussion), d) conclusions (including also, where appropriate, recommendations, practical implications, and suggestions for further study), e) bibliography, f) acknowledgements, and g) appendices. All Case Studies are subject to blind peer review (by at least one anonymous referee). The decision for the final acceptance of the article will be taken unanimously by the Editor and by the Associate Editor.

Research Notes

Research Notes should be not longer than 2000 words and not shorter than 1000; these papers may be either empirical or conceptual, and will be subject to blind peer review (by at least two anonymous referees). The decision for the final acceptance of the paper will be taken unanimously by the Editor and by the Associate Editors. The manuscripts submitted may present research-in-progress or my focus on the conceptual development of models and approaches that have not been proven yet through primary research. In all cases, the papers should provide original ideas, approaches or preliminary findings that are open to discussion. Purely descriptive accounts may be considered suitable for this section, provided that are well-justified and of interest to the readers of TOURISMOS. Each paper should have the following structure: a) abstract, b) introduction (including an overall presentation of the issue to be examined and the aims and objectives of the paper), c) main body (including, where appropriate, the review of literature, the development of hypotheses and/or models, research methodology, presentation of findings, and analysis and discussion), d) conclusions (including also, where appropriate, recommendations, practical implications, limitations, and suggestions for further research), e) bibliography, f) acknowledgements, and g) appendices.

Book Reviews

Book Reviews should be not longer than 1500 words and not shorter than 1000; these articles aim at presenting and critically reviewing books from the greater field of tourism. Most reviews should focus on new publications, but older books are also welcome for presentation. Book Reviews are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor and by the Book Reviews Editor. Where appropriate, these articles may include references and bibliography. Books to be reviewed may be assigned to potential authors by the Book Reviews Editor, though TOURISMOS is also open to unsolicited suggestions for book reviews from interested parties.

Conference Reports

Conference Reports should be not longer than 2000 words and not shorter than 1000; these articles aim at presenting and critically reviewing conferences from the greater field of tourism. Most reports should focus on recent conferences (i.e., conferences that took place not before than three months from the date of manuscript submission), but older conferences are also welcome for presentation if appropriate. Conference Reports are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor and by the Conference Reports Editor. Where appropriate, these articles may include references and bibliography. Conference reports may be assigned to potential authors by the Conference Reports Editor, though 239 TOURISMOS is also open to unsolicited suggestions for reports from interested parties.

Industry Viewpoints

Industry Viewpoints should be not longer than 1500 words and not shorter than 500; these articles may have a “commentary” form, and aim at presenting and discussing ideas, views and suggestions by

practitioners (industry professionals, tourism planners, policy makers, other tourism stakeholders, etc.). Through these articles, TOURISMOS provides a platform for the exchange of ideas and for developing closer links between academics and practitioners. Most viewpoints should focus on contemporary issues, but other issues are also welcome for presentation if appropriate. Industry Viewpoints are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor and by the Associate Editors. These articles may be assigned to potential authors by the editor, though TOURISMOS is also open to unsolicited contributions from interested parties.

Forthcoming Events

Forthcoming Events should be not longer than 500 words; these articles may have the form of a “call of papers”, related to a forthcoming conference or a special issue of a journal. Alternatively, forthcoming events may have the form of a press release informing readers of TOURISMOS about an event (conference or other) related to the tourism, travel, hospitality or leisure sectors. These articles should not aim at promoting sales of any products or services. The decision for the final acceptance of the article will be taken by the Editor.

TOURISMOS

An International Multidisciplinary Journal of Tourism

NOTES FOR CONTRIBUTORS

Manuscript Submission Procedure

Manuscripts should be written as understandably and concisely as possible with clarity and meaningfulness. Submission of a manuscript to TOURISMOS represents a certification on the part of the author(s) that it is an original work and has not been copyrighted elsewhere; manuscripts that are eventually published may not be reproduced in any other publication (print or electronic), as their copyright has been transferred to TOURISMOS. Submissions are accepted only in electronic form; authors are requested to submit one copy of each manuscript by email attachment. All manuscripts should be emailed to the Editor-in-Chief (Prof. Paris Tsartas, at ptsar@aegean.gr) and to the Editors (Prof. Evangelos Christou, at e.christou@tour.teithe.gr and Prof. Andreas Papatheodorou, at a.papatheodorou@aegean.gr), and depending on the nature of the manuscript submissions should also be emailed as follows:

- Conference reports should be emailed directly to the Conference Reports Editor (Dr. Vasiliki Galani-Moutafi), at v.moutafi@sa.aegean.gr.
- Book reviews should be emailed directly to the Book Reviews Editor (Prof. Marianna Sigala), at marianna.sigala@unisa.edu.au.
- Full papers and all other types of manuscripts should be emailed directly to the Editors (Prof. Evangelos Christou and Prof. Andreas Papatheodorou), at e.christou@tour.teithe.gr and a.papatheodorou@aegean.gr.

Feedback regarding the submission of a manuscript (including the reviewers' comments) will be provided to the author(s) within six weeks of the receipt of the manuscript. Submission of a manuscript will be held to imply that it contains original unpublished work not being considered for publication elsewhere at the same time. Each author of a manuscript accepted for publication will receive three complimentary copies of the issue, and will also have to sign a "transfer of copyright" form. If appropriate, author(s) can correct first proofs. Manuscripts submitted to TOURISMOS, accepted for publication or not, cannot be returned to the author(s).

Manuscript Length

Research Papers should be not longer than 6000 words and not shorter than 4000. Research Notes should be not longer than 2000 words and not shorter than 1000. Case Studies should be not longer than 3500 words and not shorter than 2500. Book Reviews should be not longer than 1500 words and not shorter than 1000. Conference Reports should be not longer than 2000 words and not shorter than 1000. Industry Viewpoints should be not longer than 1500 words and not shorter than 500. Forthcoming Events should be not longer than 500 words. Manuscripts that do not fully conform to the above word limits (according to the type of the article) will be automatically rejected and should not be entered into the reviewing process.

Manuscript Style & Preparation

- All submissions (research papers, research notes, case studies, book reviews, conference reports, industry viewpoints, and forthcoming events) must have a title of no more than 12 words.

- Manuscripts should be double-line spaced, and have at least 2,5 cm (one-inch) margin on all four sides. Pages should be numbered consecutively.
- The use of footnotes within the text is discouraged – use endnotes instead. Endnotes should be kept to a minimum, be used to provide additional comments and discussion, and should be numbered consecutively in the text and typed on a separate page at the end of the article.
- Quotations must be taken accurately from the original source. Alterations to the quotations must be noted. Quotation marks (“ ”) are to be used to denote direct quotes. Inverted commas (‘ ’) should denote a quote within a quotation. If the quotation is less than 3 lines, then it should be included in the main text enclosed in quotation marks. If the quotation is more than 3 lines, then it should be separated from the main text and indented.
- The name(s) of any sponsor(s) of the research contained in the manuscript, or any other acknowledgements, should appear at the very end of the manuscript.
- Tables, figures and illustrations are to be included in the text and to be numbered consecutively (in Arabic numbers). Each table, figure or illustration must have a title.
- The text should be organized under appropriate section headings, which, ideally, should not be more than 500-700 words apart. • The main body of the text should be written in Times New Roman letters, font size 12.
- Section headings should be written in Arial letters, font size 12, and should be marked as follows: primary headings should be centred and typed in bold capitals and underlined; secondary headings should be typed with italic bold capital letters; other headings should be typed in capital letters. Authors are urged to write as concisely as possible, but not at the expense of clarity.

- The preferred software for submission is Microsoft Word.
- Authors submitting papers for publication should specify which section of the journal they wish their paper to be considered for: research papers, research notes, case studies, book reviews, conference reports, industry viewpoints, and forthcoming events.
- Author(s) are responsible for preparing manuscripts which are clearly written in acceptable, scholarly English, and which contain no errors of spelling, grammar, or punctuation. Neither the Editorial Board nor the Publisher is responsible for correcting errors of spelling or grammar.
- Where acronyms are used, their full expression should be given initially.
- Authors are asked to ensure that there are no libellous implications in their work.

Manuscript Presentation

For submission, manuscripts of research papers, research notes and case studies should be arranged in the following order of presentation:

- First page: title, subtitle (if required), author's name and surname, affiliation, full postal address, telephone and fax numbers, and e-mail address. Respective names, affiliations and addresses of co-author(s) should be clearly indicated. Also, include an abstract of not more than 150 words and up to 6 keywords that identify article content. Also include a short biography of the author (about 50 words); in the case of co-author(s), the same details should also be included. All correspondence will be sent to the first named author, unless otherwise indicated.

- Second page: title, an abstract of not more than 150 words and up to 6 keywords that identify article content. Do not include the author(s) details, affiliation(s), and biographies in this page.
- Subsequent pages: the paper should begin on the third page and should not subsequently reveal the title or authors. In these pages should be included the main body of text (including tables, figures and illustrations); list of references; appendixes; and endnotes (numbered consecutively).
- The author(s) should ensure that their names cannot be identified anywhere in the text.

Referencing Style

In the text, references should be cited with parentheses using the “author, date” style - for example for single citations (Ford, 2004), or for multiple citations (Isaac, 1998; Jackson, 2003). Page numbers for specific points or direct quotations must be given (i.e., Ford, 2004: 312-313). The Reference list, placed at the end of the manuscript, must be typed in alphabetical order of authors. The specific format is:

- For journal papers: Tribe, J. (2002). The philosophic practitioner. *Annals of Tourism Research*, Vol.29, No.2, pp.338-357.
- For books and monographs: Teare, R. & Ingram, H. (1993). *Strategic Management: A Resource-Based Approach for the Hospitality and Tourism Industries*. London, Cassell.
- For chapters in edited books: Sigala, M. and Christou, E. (2002). Use of Internet for enhancing tourism and hospitality education: lessons from Europe. In K.W. Wober, A.J. Frew and M. Hitz (Eds.) *Information and Communication Technologies in Tourism*, Wien: Springer-Verlag.
- For papers presented in conferences: Ford, B. (2004). Adoption of innovations on hospitality. Paper presented at the 22nd

EuroCHRIE Conference. Bilkent University, Ankara, Turkey: 3-7 November 2004.

- For unpublished works: Gregoriades, M. (2004). The impact of trust in brand loyalty, Unpublished PhD Tourismos. Chios, Greece: University of the Aegean.
- For Internet sources (if you know the author): Johns, D. (2003) The power of branding in tourism. [Http://www.tourismabstracts.org/marketing/papers-authors/id3456](http://www.tourismabstracts.org/marketing/papers-authors/id3456). Accessed the 12th of January 2005, at 14:55. (note: always state clearly the full URL of your source).
- For Internet sources (if you do not know the author): Tourism supply and demand. [Http://www.tourismabstracts.org/marketing/papersauthors/id3456](http://www.tourismabstracts.org/marketing/papersauthors/id3456). Accessed the 30th of January 2004, at 12:35. (note: always state clearly the full URL of your source).
- For reports: Edelstein, L. G. & Benini, C. (1994). Meetings and Conventions. Meetings market report (August), 60-82.