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The Economic Effects of Tourism in the Group of the Least Developed Countries

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Abstract

Tourism is one of the largest industries in the world. Besides, it is also considered by many international organizations as having the broad impact in the group of the least developed countries. The article aims to analyze the economic effects of tourism on the group of the least developed countries and discuss the potential positive and negative effects of tourism. For our purpose of creating the groups of the similar least developed countries, we use the cluster analysis and analyze the countries according to the Economic Impact Research. As a result, we group the countries into a number of clusters based on the specific components.
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1. Introduction

Tourism is often stated to be one of the most important socio-economic sectors of our time, considered as having the broad impact among the least developed countries and as a tool for the poverty alleviation. Indeed, tourism is considered as an effective vehicle of development and has long been recognized as a growth industry. However, the connection between tourism and development is still an important area of the research (Sharpley, Telfer, 2015). Internationally, Tourism creates one in eleven jobs directly or indirectly, accounts for as much as 10 % of the world's gross domestic product and 6 % of the global exports are generated by international tourism (WTTC, 2015). The issue of the least developed countries (LDC) and their further development opportunities has long been a discussed topic at the international level. It is related to tourism, as it has been one of the sources of their

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potential economic growth and development. Tourism is already the first or second source of exports earnings for almost the half of the world's forty-eight least developed countries and one half of all the those countries already consider tourism as one of the main drivers of their development (UNWTO, 2010) .

The article aims to analyze the economic effects of tourism on the group of the least developed countries, introduce an overview of the pro-poor (PPT) tourism approaches by the international organizations and discuss the potential positive and negative effects of tourism. For our purpose of creating the groups of the similar least developed countries, we use multivariate statistical technique - cluster analysis. Based on the evaluation of the different methods in the different situations, we use Ward method in conjunction with the square of the Euclidean distance measure. In case of the non-identical measurement units we use standardization of variables. We analyze the countries according to the Economic Impact Research by the World Travel and Tourism Council and the Oxford Economics, based on the input-output model. We focus especially on the contribution of tourism to the gross domestic product, as well as other different indicators from the supply and the demand point of view. As a result, we grouped the countries into a number of clusters based on the specific tourism economic impact analysis components. The paper proceeds as follows: firstly, the theoretical discussion, following the method. The next parts present the empirical results and conclusion in the last section.

2. Theoretical framework

Since 1990s, poverty alleviation and PPT approaches has become the main development agenda by many international organizations. Among the first were The World Bank and United Nations Development Programme (UNDP), followed by the Development Assistance Committee of the Organization for Economic Co-operation and Development (OECD) that established the International Development targets (Scheyvens, 2005). Pro-poor tourism "aim to increase the net benefits for the poor from tourism, and ensure that tourism growth contributes to poverty reduction. PPT is not a specific product or sector of tourism, but an approach. PPT strategies aim to unlock opportunities for the poor – whether for economic gain, other livelihood benefits, or participation in decision-making" (Ashley, Roe, Goodwin, 2001).

Many international, governmental, non governmental and private sector organizations promote the PPT approaches with a belief that tourism can contribute to the poverty relief: United Nations (UN) agencies, for example UNWTO, UNDP, UNCTAD, UNEP, ILO; European Union, The World Bank, World Travel and Tourism Council and many more. UNEP has coordinated a major initiative for the establishment of a Global Partnership for Sustainable Tourism (GPST), a main objective of which is promoting tourism as a way of alleviating poverty (UNEP, 2010). Another UN agency - the International Labor Organization - concentrates on the poor employment conditions and decent work in the context of poverty alleviation strategies.

The United Nations Conference on Trade and Development (UNCTAD) with the participation of The United Nations World Tourism Organization (UNWTO) issued in 2001 the set of recommendations to promote the principles of sustainable tourism development in the least developed countries. Emphasis should be placed primarily to the economic aspects of tourism, to advance the principles of sustainability into legislation, integration of tourism into the strategic and tactical planning, emphasis on quality after the rapid increase of tourism over mass-tourism, establishment of the quality standards, innovations, etc. Sustainable development is often an important part of the United Nations programs. UNWTO and the Development Assistance program, focusing on the sustainable tourism support, which is a part of the Sustainable Tourism – Eliminating Poverty STEP program) and national strategies for growth and development (Benavides, 2001).

3. Method

We analyse the countries according to the Economic Impact Research by the World Travel and Tourism Council (WTTC) and the Oxford Economics, based on the information from the national accounts, macroeconomic research and the input-output model. We focus especially on the contribution of tourism to the gross domestic product, as well as other different indicators from the supply and the demand point of view. As a result, we grouped the countries into four clusters based on the specific tourism economic impact analysis components in the years 2005-2014. We have selected the LDCs according to the classification by the United Nations (UNCTAD; 2015. The

tourism economic impact is currently being measured in 35 of the least developed countries, with one exception of Lesotho, where data were not available for the year 2010 (Oxford Economic & WTTC).

In practical terms, WTTC and Oxford Economics implemented the TSA: RMF 2008 to develop a method for computing the demand- side components of GDP as consumption, government investment and net exports. Besides, by using input-output tables to translate demand-side expenditures into supply-side outputs and also to split the total GDP and employment into direct and indirect components (Hrubcova, Loster, 2015). WTTC defines Travel & Tourism as "the activity of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not remunerated from within the place visited" UN, . In our analyses, we focus especially on the Total Contribution of Travel & Tourism to the Gross Domestic Product and we also take into consideration other different components as the direct contribution to GDP, visitor exports, domestic travel and tourism spending, government individual spending, internal tourism consumption, business travel and tourism spending, leisure travel and tourism spending and capital investment (WTTC, 2015).

For our purpose of creating the groups of similar least developed countries, we use multivariate statistical technique - hierarchical cluster analysis. For clustering we use Ward-Wishart method based on the evaluation of different methods in different situations (Loster, 2014; 2015), in conjunction with the square of the Euclidean distance measure. In case of non-identical measurement units we use standardization of the variables. Ward method (Ward-Wishart method) solves clustering principle by minimalizes of heterogeneity of the clusters – the method creates cluster by maximization intragroup homogeneity (Rezankova, Husek, & Snasel, 2009).

The calculation of Euclidean distance D between i-th and j-th object is based on Pythagoras:

$$D_{\mathrm{E}}(\mathbf{x}_i, \mathbf{x}_j) = \sqrt{\sum_{t=1}^{m} (x_{it} - x_{jt})^2} \, , \qquad (1)$$

where x_i represents i-th object a where x_j represents j-th object and finally, we set four clusters of the countries as optimum based on the evaluating coefficients, namely CHF coefficient, PTS coefficient and Dunn or Davies-Bouldin coefficient. To determine the allocation of the individual countries in the clusters we used IBM SPSS version 20.

4. Results and discussion

We used hierarchical cluster analysis to analyze tourism economic impact in thirty-five least developed countries during the years 2005 – 2014, compared the countries from the point of view of the different components with special focus on the Travel & Tourism Total Contribution to GDP. As a result, we finally set four clusters of the individual countries as optimum based on the evaluating coefficients and concentrated on the differences within the clusters composition. Table 1 shows the development of the clusters regarding the mean of the component Travel & Tourism Total Contribution to the gross domestic product in the years 2005-2014 in US$ bn. Figure 1 displays the development of the Travel & Tourism Total Contribution to the gross domestic product during the years 2005-2014 in the group of the least developed countries.

Countries in the cluster number three reached the lowest Travel & Tourism total GDP values. Yet, with the increasing trend from the mean 0,22 US$ bn in 2005 to 0,27 US$ bn in 2010 and 0,68 US$ bn in 2014. The highest values shows cluster number two; from the mean 3,24 US$ bn in 2005 to 5,61 US$ bn in 2010 and 8,10 US$ bn in 2014. During the observed years, certain countries demonstrate more stable development (e.g. Bangladesh, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Dem. Rep of the Congo, Gambia, Guinea, Kiribati, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Uganda, United Rep. of Tanzania). Most of those countries are included in the cluster number three. Besides, those countries also reached the lowest overall values from the tourism economic impact point of view. Best overall results reached Bangladesh, as seen in the Figure 1.

As our results showed, tourism has become a relevant sector of the national economy for many of the least developed countries. It might be seen as one of the viable and sustainable economic development options and if

managed with focus on the poverty alleviation, it might directly benefit the local communities and the poor, e.g. through the employment. Nevertheless, the negative impact of tourism must not be neglected. Tourism itself is not an admission to fast development and poverty reduction.

Discussion of the issues as redistribution of tourism income in favour of the poor, meaningful participation of the communities and reduce of leakages is essential. For most countries, no data regarding leakages are available. The World Bank estimates as average leakage level of 55 % for developing countries. Reports from UNCTAD and UNEP point out that leakages in some of the LDCs and remote small island states can amount to more than 80 % (Pleumarom, 2012). This year is for the UN set to be a milestone for sustainability, as the Post-2015 Development Agenda is about to be adopted. The proposed Sustainable Development Goals (SDGs) building and expanding on the Milenium Development Goals (MDGs) comprise 17 goals and 169 targets. It should frame the developing agenda for the coming 15 years. According to the UNWTO, tourism has the potential to contribute directly and indirectly to all of the goals, however, in the Goals number 8, 12 and 14 is tourism included as a target (UNWTO, 2015).

Table 1: Ward Method: Travel & Tourism Total Contribution to GDP (US$ bn) 2005 – 2014

Year	Cluster	Mean	Year	Cluster	Mean
2005	1	1,160571	2010	1	3,010800
	2	3,241000		2	5,612000
	3	,218115		3	,267700
	4	1,920000		4	1,384125
2006	1	,898364	2011	1	3,534000
	2	3,812000		2	5,831000
	3	,147650		3	,258556
	4	1,859333		4	1,407417
2007	1	2,082429	2012	1	4,046500
	2	4,372000		2	5,995000
	3	,184684		3	,284150
	4	,748625		4	1,783500
2008	1	2,588400	2013	1	4,617250
	2	5,006000		2	7,124000
	3	,256000		3	,340524
	4	1,291000		4	2,084222
2009	1	2,810000	2014	1	5,107000
	2	5,157000		2	8,096000
	3	,270095		3	,676444
	4	1,283875		4	4,101600

Figure 1: Development of the Travel & Tourism Total Contribution to GDP 2005-2014.
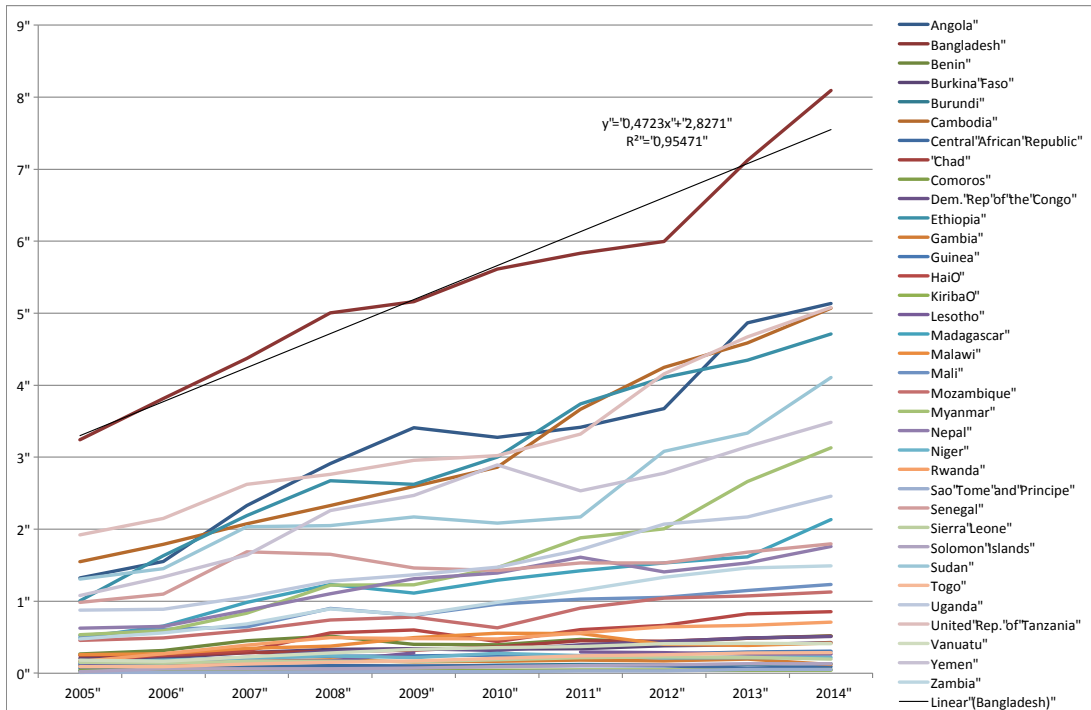
5. Conclusion

The aim of this paper was to analyse possible economic effects of tourism on the group of the least developed countries, introduce an overview of the pro-poor tourism approaches by the international organizations and based on the results, discuss the potential positive and negative effects of tourism. We used the cluster analysis and analysed the countries according to the Economic Impact Research by the World Travel and Tourism Council and the Oxford Economics, based on the input-output model. We focused on the different indicators from the supply and the demand point of view (e.g. visitor exports, domestic spending, government spending, internal tourism consumption, business and leisure spending or capital investments), with special focus on the component of the Total Contribution of Tourism to the GDP. As a result, we set four clusters of the countries as optimum based on the evaluating coefficients.

We showed the development of the clusters regarding the mean of the component Travel & Tourism Total Contribution to the GDP in the years 2005-2014 in US$ bn and the development of the Travel & Tourism Total Contribution to the GDP during the years 2005-2014. The structure of the clusters slightly changes during the observed years. However, certain countries demonstrate more stable development. The biggest number of countries is included in the cluster number three and also, those are the countries reaching the lowest overall values from the tourism economic impact point of view. Yet, with the increasing trend. The highest overall values attained the cluster number two.

We conclude that according to the results of our analysis, tourism has become a relevant sector of the national economy for many of the least developed countries and might be seen as one of the viable and sustainable economic development options. Without a doubt, tourism can contribute to the improvement of living standards of the residents. Nevertheless, obstacles are still in the way. The negative impacts of tourism as the redistribution of tourism income, meaningful participation of the local communities and reduction of leakages must not be neglected.

Acknowledgements

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