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Impact of the Regional Macroeconomics Indicators on Tourism Entities in Plzen and Zlin regions

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Abstract

The aim of this article is to examine the differences between individual regions in the various macroeconomic aspects, indicators such as occupancy, number of guests and in other areas so as to make clear what the expectations of the investor can realistically have when making investment decisions. The considered hypothesis based on mathematical economic model should be able to reflect regional differences in economic performance, geographic diversity and willingness to accept the average market price for average rented a room so that the investor can calculate with magnitudes as profitability and payback period within the variable investment-refresh cycle. Thus, this way considered model will reflect regional differences in the above aspects and subsequently generate monetary value that is necessary to verify the correctness of selected investments. In the period 2002-2013 amounted to revenue ratio of tourism income to the GDP in the Czech Republic was averaged 3.5%. This figure constitutes a significant share in the revenue budget and at the same time contributes 4.55% of total employment. These values clearly show the importance of the sector, which even the UNWTO expects to grow dynamically in the future. To choose a suitable investment plan, as well as in other sectors, is a complex process whose justification must be based on real economic indicators. The intention of the thesis is to find the useful indicators and verify their direct influence. The considered indicators are GDP, unemployment and average income of the selected region. Model considers to enhance these macroeconomic variables also with additional values, such as regional differences, infrastructural assumptions and other phenomena, such as the number of UNESCO monuments etc.

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1. Introduction

Achieving economic performance of the state, the region, and especially the various entities of the national economy, ie individual enterprises, is inextricably linked with knowledge of the demand for individual products or goods. An obvious part of this condition is also knowledge of demand for services, where the accommodation and the hotel industry belongs to. The tourism sector in this mention is two times important because, as it shows Guncik (2008, p. 8), the tourism industry has become the largest maker of world national product.

Although the demand for tourism is an important factor, equally important are factors that affect this demand. The most important of these factors are macroeconomic variables such as GDP, GDP per capita, population, number of foreigners, monthly salary, the development of unemployment etc.

Right regional differences in these variables play an important role in the impact on the level of demand for accommodation services in the surveyed regions and the associated occupancy or, if the average cost of services.

Nomenclature

GDP Gross domestic product
TSA Tourism Satellite Account
UNWTO United Nation World Tourism Organization

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2. Conceptual framework

According to the world organization UNWTO tourism continues to expand and becomes the largest and fastest-growing economic sector in the world. The number of international tourists increased from 25 million in 1950 to 278 million in 1980, 527 million in 1995 and to 1133 million in 2014. Revenue from international tourism increased from 2 trillion dollars in 1950 to 104 trillion in the year 1980, 415 trillion in 1995 and 1245 trillion in 2014. (UNWTO Tourism Highlights, 2015) In the year 2014 recorded the largest growth in the region of the Americas with 8% increase in international visitors. America followed the regions of Asia and the Pacific, and the Middle East both with an increase of 5 % of the visitors. In Europe the increase in visitors hovering at 3 %, while in Africa increased by 2 %.

Europe is the leading region, but all indicators showing a declining balance, in favor of the Asia-Pacific region. This region took place in 2009 about 460 miles off-riders (52.2% in international arrivals) and 413 bn. USD revenues. Trips in 2009 showed a region 481 miles. (54.7% of world trips). Due to the high strength of tourism between relatives and neighbors, as well as shorter distances between countries is a typical European region the highest share of intraregional arrivals and departures (approximately 90%). (Palatkova, 2011, p. 97)

A high proportion of domestic tourism in most developed Western European economies (except eg. Spain) is typical for the European region. This proportion is decreasing and the reason is the focus of demand on the foreign population passive tourism. The obvious reason is the ever-increasing standard of living or even easier accessibility of air transport services. Europe is a heterogeneous region, which includes economically and culturally different countries from Western Europe via Central Asian Republics to the Kamchatka Peninsula. Western Europe is the European focus of international tourism, inbound and outbound. This part of Europe is characterized by a greater number of smaller states, geographical proximity, but also the favorable transport links and historical, cultural and political relations. Developed infrastructure and result in different types of attractions talking about the development of tourism.

The high degree of economic maturity is also a high proportion of the European population participate in international tourism. Participation in tourism has become an integral part of his life-style of the Europeans. The integration process that began in the 50s, became an important factor in the formation of relationships in the tourism and contributed to progress in several areas that are key to the development of tourism (eg. currency liberalization). For the European Union, but also the European free trade area (EFTA). Throughout the postwar period the European region lacks its weight in favor of it-mentioned Asia-Pacific region. As there are pressures cheap overseas destinations, which is distressing for European destinations (eg. France, Switzerland), who are trying to compete in

the international market through the quality of services offered in tourism. (Palatkova, 2011, p. 97). Tuckova, Tucek (2013) say the European Union is making great efforts to encourage creative activity, to somewhat mitigate the gap with the U.S. in science and technology and, if possible, keep up with the "Asian tigers", particularly China and India

3. Methodology

The aim of the comparison of selected regions is accurately determine the greatest differences in observed macroeconomic indicators and determine the degree of influence on the average price of a product or service. Work focuses on a detailed analysis of individual variables and indicators which in both regions report the mismatch. Thus disaggregated indicators subjected to extra direct comparison best reflect the particular differences in the macroeconomic indicators, which are for the following practical use crucial.

Research methods and especially the variable of these methods are based on the results of research available in domestic and foreign scientific literature. These were subjected to content-causal analysis and the results thus obtained are implicated in individual examined variables.

From the theoretical methods of scientific research is used analysis, synthesis, induction, deduction, correlation analysis.

Song, With (2000.2012, p. 1301) admit three variants of measuring the demand in tourism: the number of visitors, number of overnight stays and the amount of funds in the target area of tourism spent. Freichtling (2012) believes that to express the values of tourism and its measurement is best quantities of heterogeneous units, such as the national currency and their measurement in relation to the estimated intake of visitors and the number of guests or occupancy capacity. From this list it is most easily verifiable figure the number of guests. With this statement also identifies Lim (1997), in which the determination of aggregate demand is mostly used number of visitors. Even by Botti, Peypoch and Solonandrasana (2008, p. 134) the number of guests, or visitors, described as an endogenous variable is used in up to 75% of empirical studies published in scientific journals for the past 30 years. As there could be found other opinions of the theorists dealing with tourism (Gucik, Marakova, Sipkova, 2007), the number of guests can be seen as a very important factor, it is necessary to measure this and the resulting differences confront with the monitored variables.

Definition of demand and in particular the conclusions that follows, provides that key factor is the price. Sloman (2006, p. 36) also sees that in addition to price of particular goods or services and the prices of substitutes is also important income or disposable income. As the first indicator variable can be determined the gross wage. Authors (Pompurova, Marakova, Simockova, 2015) explore in more details regarding the different models of consumer behavior that have been constructed over a past decade. Competitiveness along with outbound, inbound and domestic tourism represents statistical data that compare the economic situation of tourism to other world destinations, or states, say Jurigova, Tuckova, Palatkova. (2015).

4. Results and findings

4.1.Mutual lodgings analysis

Accommodation data at the exact expression corresponds to the values published by the Czech Statistical Office. Confrontation of these values clearly shows that the Pilsen Region surpasses Zlin Region in all analyzed years more than one hundred entities in absolute terms and from 20% in 2013 to almost 30% in 2009 in relative expression.

Table 1: Lodging Capacities, own processing

Lodging capacities	2009	2010	2011	2012	2013	*average*
Zlin Region	338	348	351	469	463	*393,8*
Plzen Region	488	460	468	599	573	*517,6*

30,7%	24,3%	25,0%	21,7%	19,2%	*24,20%*

Larger quantities of lodgings can be explained only by the fact, which demand for accommodation services is higher in the Pilsen region. This assumption is clearly evidenced by the number of guests staying in accommodation establishments, which is in the Pilsen region compared to Zlin about 6% higher, excluding the year 2013.

From this graph it is clear that in both regions was practically identical development curves, respectively, that the impact of the economic cycle in both lines did not show significantly difference. It can therefore be concluded that even in the event of a sharp fluctuation of the economic cycle, this would, in relative terms, both monitored regions hit by analogy. On the other hand, can be similarly considered that the investigated Macroeconomic variables acting on the number in long term way and almost identically and at the same level so both curves show a very close correlation.

4.2. Mutual analysis of macroeconomic indicators

The main difference indicators affecting the normal differentiation of the rack-room-price can certainly be considered macroeconomic variables such as GDP, GDP per capita, economic activity, the average wage and the average wage in the industry, unemployment and others.

4.2.1 The GDP development comparison

The GDP indicator is indeed frequently criticized for not fully adequate ability to describe the economy's performance relative to its absolute expression, but it is still used for this purpose. In addition to the absolute expression of performance GDP and its conversion to a per capita compared to the national average, this indicator can be used for a relative comparison of the two studied regions.

Table 2: Comparison GDP relative way

						Average
GDP (nom. prices) PLZ vs ZLN	2,0%	5,8%	10,2%	9,2%	4,2%	*6,26%*
GDP per capita PLZ vs ZLN	6,2%	9,0%	13,0%	11,9%	6,8%	*9,38%*

4.2.2.   Comparison of economic activity development

All economically active persons representing the workforce - employed (workers) and the unemployed. The employed were all persons aged 15 and over who were in the decisive moment in paid work as employees, they were among the self-employed (employers, self-employed people, members of producer cooperatives), or assisting family members. Involved were also working pensioners, students and women on maternity leave (28 resp. 37 weeks). For the inclusion of people were critical conditions at the decisive moment of summation - their formal link to employment regardless of the length of employment, nature of work activity (permanent, temporary) or type of employment agreement or contract.

4.3. Analysis of usual prices for accommodation

The normal price, the price generally available, sometimes the rack-price is crucial variable for estimating the future cash flows. Together with the number of guests is an essential pillar of financial planning.

To determine the usual prices were used such hotels that meet the following conditions:
- Level of service is equivalent to 4 ****, ie the category of First Class
- The hotel is in the center or near the center of the regional capital

- The hotel focuses more on business clientele
- The hotel features a congress hall with a corresponding number of seats

An analysis of usual prices the following conclusions resulted: the average hotel rack rate in Zlin is 2 250 CZK, in Pilsen 2 710 CZK. Comparison of average prices showed a 17% greater difference in the Pilsen Region which means an average difference of 460CZK in absolute way of expression for one usually hotel room rental.

4.4.The influence rate of examined variables

Previous chapters examined and compared the differences in macroeconomic indicators. The table below summarizes the average values and also compares them and determines the relative differences. At the same time these values are assigned to the considered coefficients degree of the impact which affect the average price of rooms.

Table 3: The influence rate of examined variables

	Average Values Pilsen Region	Average Values Zlin Region	Percentage difference	Considered weight of influence
Lodging Capacities	517	393	24,2%	6
Amount of arriving Guests	522 543	511 051	2,4%	11
Population	572 355	588 885	-2,9%	5
Amount of Foreigners	24 810	8 050	67,5%	4
GDP in nominal prices	195 749	183 390	6,3%	14
GDP per capita	343 062	310 761	9,4%	9
GDP vs. average performance of the Czech Rep (100)	91	85	7,0%	2
Economic Activity	60	57	3,7%	3
Gross monthly wage	22 536	20 747	8,0%	14
Gross monthly wage in industry	24 188	21 759	10,1%	16
Unemployment	7,38	9,85	-33,3%	14
				100

5. Conclusion

Article is comparing two selected regions of the Czech Republic, Plzen and Zlin region. Both are border regions, they both have a common border with a foreign country. Their size and population are also similar.
Among other things, differences are in the prices of accommodation at hotels of a comparable standard, the number and range of services. This study examined the causes of the usual rack-price and the factors that difference may affect.
The biggest differences are in the focused years (2009 - 2013) in the total number of accommodation capacities, which in the Plzen region is average of 517 accommodation entities compared to the average 393 hotels, guest houses and other accommodation facilities in Zlin Region. In relative point of view it´s 24% more for Pilsen Region. While the total number of arrivals nor the total population did not show significant differences noticeable difference is reflected in the number of foreigners living. In this regard, in the Plzen region lives 24,810 compared to 8,050 foreign residents in the region of Zlin, which is a fundamental difference of 67%. However, the impact on the final price of the room, this factor is rather small.
Substantial impact has, however, GDP, which reflects the performance of the economy in the monitored region.

Plzen region in this regard represents a powerful economy on average by 6.3%. This value represents one of the key differentiating circumstances resulting regular room rate. Adjusted GDP per capita, GDP levels even when compared with the national average, don´t show a big difference and additionally the level of influence on the average price of rooms is also insignificant.

A significant effect, however, has the average monthly wage, which is in Plzen region at an average level of 22 536 CZK, which represents the relative difference of 8%. An even bigger difference is in the indicator the average monthly wage in industry, which is in the Pilsen Region 24 188 CZK, while in the Zlin region it is only 21 759 CZK, thus Pilsen Region is doing in this regard more than 10% better.Last researched factor is crucial due to the level of impact and it´s nothing less important than unemployment. While in the Zlin region in the researched years this figure corresponds to an average level of 9.85%, in the Pilsen region this quantity averaged on 7.38%.

Research this way directly confronted macroeconomic variables can easily be used for investment decisions about renew cycles of entities in tourism. At the same time, these findings can easily be modeled using trend curves, in the short term additionally with a relatively high degree of probability of correct predictions. Hotel operations and management decisions of investment into the hotel industry in different regions of the Czech Republic can rely on this data, or even could be expanded with other factors such as the performance of construction output and the number of guests and foreign guests.

Acknowledgements

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