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En Route to the Competitive Destination

Ph.D Thesis Summary

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1. Aims and Importance of the Research

Tourism is a dominant branch of service sector in Hungary, and also became a strategic sector (Nemes, 2008). Possibilities given by Hungary’s facilities are planned more and more targeted (the first independent tourism development strategy were written for the period of 2005-2013), which is manifested in better and better performance. Between 2004 and 2010 the number of incoming tourists increasedly 17.6% (from 33.9 million tourists to 39.9 million – after the Hungarian Statistical Office), while their spends increased with 44.8% at the same time – as the tourism income of local governments also increased (it almost doubled). The importance of tourism is also shown by the fact that the employment rate in tourism has still increased unlike the other sectors’ rate.

The Hungarian development program (called New Széchenyi Plan) has a strategic development program (furthermore it is the first) designed for tourism, specifically for health tourism. Therefore this sector has a special and main role – and also a key element in other plans, too (e.g. employment policy). The pamphlet of the second Tourism Development Strategy (published in May 2011) contains sector-specific tasks and five main goals to reach. The first goal is to improve the competitiveness. In the document it is also fixed that competition among destinations is stronger and stronger (pp. 16.) therefore another important task is to formulate and develop destination management organisations (DMOs), which is responsible for the destinations. These organisations are able to influence the competitiveness of the destinations, too.

There is no consensus, however, which destination can be regarded as competitive and which needs to be improvde or developed to be competitive. To answer this question it is important to compare the competitiveness of the various destinations. There are many limitations, although, the first question is how to define the spatial unit to be called a destination.

This thesis deals with a current and practically important topic: to define and analyse tourism destination as a phrase and as a spatial unit. Focusing on the goal to have practicable results research questions are as follows:

1. Which spatial unit can be regarded as tourism destination?
2. How can the competitiveness of a destination be defined?
3. How can the competitiveness of a destination be measured?
4. What are the characteristics of the Hungarian tourism destinations’ competitiveness?
Beside these general research questions more practical and more exact questions have also been drawn, and exact research objectives have been connected to all the questions, which are summarized in Table 1.

**Table 1** The research questions and objectives connected

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What <em>Hungarian</em> spatial unit can be regarded as destination?</td>
<td>To explore, what factors can determine a tourism destinations in Hungary.</td>
</tr>
<tr>
<td>2. Which competitiveness <em>model</em> is the most appropriate to examine the Hungarian destinations?</td>
<td>To find or to formulate a framework (theoretical model), which is suitable for the examination of the destinations.</td>
</tr>
<tr>
<td>3. What <em>indicator</em> or group of indicators are able to measure competitiveness?</td>
<td>To make a suggestion for measuring the competitiveness of the Hungarian destinations.</td>
</tr>
<tr>
<td>4. What are the <em>characteristics</em> of competitiveness in Hungarian destinations?</td>
<td>To map the competitive situation of the Hungarian tourism destinations.</td>
</tr>
</tbody>
</table>

Source: own compilation

The logical setup of processing and research of the topic follows the order of the objectives (Table 1). The framework of the contexture (and the logic of the thesis) is shown in the Figure 1.

**Figure 1** The framework of the thesis

Source: own compilation
2. Statements and Results on which the Research is Based

After the overview of significant amount of literature it became obvious, that several definition and research had been published in the wider topic of the thesis. Analysing and systematizing the relevant literature the conceptual framework was delimitated which were used all over the research and the thesis.

2.1. The Definition of the Hungarian Tourism Destination

Within the Hungarian circumstances those spatial units can be considered as tourism destinations, which have a local destination management organisation (DMO) (independently from the fact that DMO might contain one or more settlements). There are several definitions and delimitations of the destinations among which the definition phrased by the World Tourism Organisation (UNWTO\(^1\)) can be regarded as the most accurate (UNWTO 1989). This assumes that the destination have an organisation which is responsible for its management. In Hungary these DMOs are still being formulated and founded with the definitive goal to help in any way to improve the competitiveness of the destination they are responsible for. Therefore it seems to be subservient (in harmonisation with the chosen definition) to consider those spatial units as a Hungarian tourism destination, which belong to a DMO. Although there are places\(^2\) without destination management organisations, and therefore the comparison of destinations is now possible only in a limited way using this definition – yet the delimitation of the destinations on the basis of the DMOs gives an ideal starting point for the research. These local DMOs are in an intermediate status: they are official, so they are also administratively more or less approved but at the same time they aggregate the tourism destinations based on experiences and partnerships. Since tasks can be slightly different and as the local destinations success are critically important in terms of bottom up building, the most appropriate spatial units to be researched are those belonging to local DMOs – at the first stage.

2.2. Finding the Suitable Theoretical Model for Examining the Competitiveness of Tourism Destinations

The pyramid-model elaborated by Lengyel for researching the regional economic competitiveness is the most suitable for the examination and research of the Hungarian tourism destinations.

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1 UNWTO: United Nations World Tourism Organization

2 Of course it can not be a goal to cover the whole territory of Hungary – but now some „typical” destinations, (like Szeged) are still missing.
In the relevant literature several models can be found (e. g. Hassan 2000, Heath 2003, Tőzsér 2010), which try to find a system of competitiveness factors for various types of destinations (e. g. counties: Armenski et al. 2011; or cities: Go – Govers 2000). There are significant amount of researches however, which focus on the overall examination of destinations (like Enright – Newton 2005, Vanhove 2002). The research fields and the depth of the examination are however very different. It can be stated that the tourism destination competitiveness models (and also other researches like the tourism competitiveness index worked out by WEF\(^3\)) mostly concentrate on the research of whole countries or larger territories – and these are not or only limitedly available for the examination of „small” destinations. Special indices and measurement methodologies are also published by various researches, but most of them are applicable only in the exact case and/or destination – they cannot be adopted. The largest incompleteness of the examined models and methods is that the used factors are not separated by the cause-result logic. It is however important to separate the indicators as „ex ante” and „ex post” factors (Török 2003). Then it could be evident what factors are able to show the results (and therefore are usually able to be measured, too), and which can be developed in order to modify (of course to improve) the results.

Comparing these incompletenesses with the pyramid-model of competitiveness elaborated by Lengyel (2003), the experiences show that the pyramid-model is much more logical, consistent and easy to use – furthermore it is more suitable to examine small territories, small destinations. The main advantages of the model are the following:

- the model was elaborated specifically for the smaller spatial units within countries;
- it was made specifically within the Hungarian circumstances;
- it also fits together with the accepted definition of competitiveness of the tourism destinations (Ritchie – Crouch, 2003);
- in the model the cause-result factors can easily be separated.

General regional economic competitiveness is however slightly different from the competitiveness of tourism destinations. Therefore the pyramid-model needed some modification (Papp – Raffay 2011).

\(^3\) WEF: World Economic Forum
2.3. The Application of the Pyramid-model for Tourism Destinations

The pyramid-model applied to tourism destinations is appropriate to examine the competitiveness of Hungarian tourism destinations (with DMOs) regarding both its content and its shape.

The logic and the setup of the basic model (Lengyel 2003) were fully kept during the application of the model for tourism destinations: the top of the pyramid-model shows the final goal of competitiveness and success: to reach the welfare of local residents. From bottom up first the success factors, the base factors and the base categories are built on each other.

During the application for tourism destinations the base factors and the success factors has been changed a lot in content, as the general economic characteristics needed to be replaced by tourism-specific characteristics: new factors were selected on the basis of the destination characteristics – mostly using the relevant literature (Figure 2).

The part of the model called base categories shows the measureable elements. This section was modified both in content and in shape while applying the model to tourism destinations. The base categories in the original pyramid-model (regional income/GDP, employement and productivity) are not useable or only in a limited way in the modified model – therefore this part was replaced by the phrase „measurement the competitiveness”.

Figure 2 Applying the piramid-model to tourism destinations

Source: own compilation after Lengyel (2003)
It was necessary to modify the pyramid-model because of the special characteristics of the tourism destinations. This alteration happened mostly on the basis of the relevant literature. But it was also necessary to validate the modified model so that it would be suitable for the examination of the defined destinations. It was needed to prove that the modified model is convenient (Creswell 2009), to avoid what Mazanec et al. (2007) emphasize in their criticism: a significant proportion of the researches is “detached from reality”, because drew attention is paid on what practical experts think.

The validation process was implemented in terms of the content and the shape (Churchill 1995), using one of the validation strategies Creswell suggests (Creswell 2009) called „member checking”. This is a qualitative method based on interviews. The method made it possible to thoroughly get to know the opinions about the elaborated model, and the interviewees could be selected carefully. The most appropriate interviewees to validate the applied model are the managers of the DMOs, who know well the destination as a spatial unit, its characteristics – and who are responsible for its management and development and who are able to improve its competitiveness.

To summarize the validation procedure, the following findings may be made:

- In terms of the success factors and base factors of the modified pyramid-model there is no further element, which is missing from the theoretical model.
- There are however some elements which were declared as not important by the interviewees. As these elements can well shade the picture of the destinations competitiveness potential – it is still reasonable to keep them in the model.
- Many of the interviewees argued on the objective measurability of the competitiveness position. They had some suggestions but these notions were not applicable to assess the competitiveness of the researched territory. It can be stated that the content (like applicable indices) of the competitiveness position could not be formed by the validation procedure because of the differences in the opinions. Therefore further action is needed to be done in terms of the measurement of the competitiveness position.
- The shape, form and logic of the modified pyramid-model is clear, the collected element of destination competitiveness are methodized in a system, which is clear and understandable for practical experts, too.

It is important to note, that the foundation of DMOs is still possible – this is a running process. Therefore it is worthwhile to implement a new validation later on, when the number of the DMO-destinations increase or other circumstances change appreciably (but at least in 5 years time).
2.4. Separating the Competitiveness Position and the Competitiveness Potential of Tourism Destinations

Compared to the original form of the model one more modification was made: the pyramid-model was divided by a horizontal line. The line represents the separation of the cause and result (so called „ex ante” and „ex post”) parts. The part above the line shows the measurable part of competitiveness (this is the „ex post” or result side), which was named as competitiveness position – as the position or competitive situation of the examined destination can be given by measurement. Under the line there is the part of competitiveness, which cannot be objectively measured (this is the cause-side or „ex ante” part). This part was named as competitiveness potential. The name was chosen because of the fact that this part shows the endowments and possibilities the destination has.

3. The Research

With the application and validation of the pyramid-model the objective was to determine a starting point and a theoretical-logical framework to research the competitiveness of the Hungarian tourism destinations. Henceforward the research concerns to the mapping of the possibilities given by the model and to the examination of the Hungarian tourism destinations.

The aim of the research at the first step is the „reconstitution” of the base categories in the pyramid-model; that is to sort and categorize all those indices which are applicable and appropriate to measure the competitiveness position of a destination, and which make the destinations and their competitiveness comparable. This step appears as an exploratory research, therefore no hypothesis was defined.

After solving the problem of the measurement of the competitiveness position it became possible to analyse the Hungarian tourism destinations’ positions in a complex way. The used methods were in connection with the descriptive research therefore specific hypotheses were determined in advance.

3.1. Hypotheses

**Hypotesis 1**

The measurement-problem of the competitiveness position, determined by the pyramid-model can be solved easily, also in a practically applicable way with the help of the available indices.
This hypothesis assumes that one unique index can be formulated with the help of the indicator kit determined in the first step of the research, which is easy to calculate and interpret even by the managers of the DMOs. Thus the measurement of the competitiveness position becomes simple in practice to ease the evaluation of the destination’s situation.

**Hypothesis 2**

In case of the competitiveness position the success factors of the applied pyramid-model appear as comparative advantage, but in the case of the same destination types the existence of the competitive advantages are determinative.

In view of the competitiveness position of the destinations the research has focused on the competitiveness potential in this step. The hypothesis refers that the endowment elements (that is the success factors of the pyramid-model) are necessary, but not enough conditions for the good competitiveness position of a tourism destination.

### 3.2. Data Sources

#### 3.2.1. Secondary Data

The destinations determined in the thesis are not functioning as an administrative unit, but all of them contain one or more settlements. Therefore data were needed and gathered at the settlement level. The needed single data were collected from various sources (KSH, MÁK⁴, KÓH⁵) with the help of the TeIR⁶ system. After the collection data were aggregated to the destination level (in the case of the destinations containing more settlements). The newest available data at the settlement level refered to the year 2010. Since the data were collected from an official source, the checking of the reliability was neither possible nor needed.

Data gathered from secondary sources were used mostly to measure the competitiveness position of the destinations.

#### 3.2.2. Primary Data Collection

There are no available and appropriate data to analyse DMOs or DMO-destinations. Although the Hungarian DMO Association gathers some data regarding its member

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⁴ Hungarian State Coffers
⁵ Cultural Heritage Office
DMOs, but these data are not beyond peradventure according to reliability and actuality. Since data collection is not in an exact time or period, also the coherence of the gathered data is a matter of question. In addition, not all the local DMOs are member of the Association, so the database is neither complete. (To prove that the system is immature it can be mentioned also, that in some cases it was not even clear if one exact DMO is a local or a regional one, and which settlements are parts of it. These cases were cleared up by a phone interview with the particular DMOs.)

To complement the missing information primary data collection was needed. In the time of the research officially 65 local DMO-destinations operated in Hungary. Although the aim was to collect the data of all the organisations, finally the coverage is 92% (60 DMO managers answered).

A questionnaire was used to ask the DMO managers, which was delivered online\(^7\) to be as efficient as possible. During the construction of the questionnaire it was possible to have questions compulsory to answer – thus the number of missing answers was reduced to zero in the case of the important questions.

According to its topics the questionnaire can be divided into three main parts:

- questions about the destination management organisation (e. g. size, main characteristics, etc.) are in the first part;
- in the second part DMO managers had to evaluate their own destination (after given aspects, in a given scale);
- finally there were some questions about the competitors of the destination.

The data collected by using primary sources are important for analysing Hypothesis 2.

Both secondary and primary data were systematized by the programme of Microsoft Excel, while for the analysis SPSS software was used.

### 3.3. Research Methodology

The first step of the analysing process is descriptive statistics. This is applicable to evaluate the inner structure of the examined indicators (Héra – Ligeti, 2005). In the thesis descriptive statistics were used to explain the sample and also to examine the hypotheses. Principal component analysis was used for the first step of the research: to filter the indicators suitable to measure the competitiveness position.

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\(^7\) The online questionnaire was constructed by the software of the faculty of Business and Economics of University of Pannonia.
For the first analysis of the competitiveness position of the Hungarian destinations a cluster analysis was applied, which is an applicable method when the aim is to find the tipical characteristics during the analysis.

4. Research Results

Implementing the research steps the first task was the „reconstitution” of the competitiveness position in the pyramid-model applied to the tourism destinations. After that a complex analysis of the Hungarian destinations took place and also the hypotheses were examined.

4.1. Competitiveness Position Measurement

Several sources were used to gather the potential indicators, which could be appropriate to measure the competitiveness position. The principal component analysis of the selected indicators resulted in the definition of two principal components in one hand and in the reduction of the indicator kit to the minimum in the other hand. The evolved principal components:

- the first contains these indicators: average number of employees (in tourism) per year, number of the guests (all and inbound), and the income (originated from accommodation and catering). This complex index was named as the Key performance indicator of the destination;
- the second principal component contains the indicators: occupancy rate according to beds nad rooms, htherefore this principal component was named as Capacity utilisation index.

The two principal components explain 93%.

In the pyramid-model applied to tourism destinations the competitiveness position can be defined by two principal components: the capacity utilisation index and the key performance indicator. The final shape of the pyramid model with these findings are shown in figure 3.

The results harmonise with the original pyramid-model: the income and the employment (that is its part according to the tourism suprastructure) appear in the key performance indicator. The expectation is also fulfiled to have a managable number of the indicators as enough (to measure the competitiveness position of tourism destinations relatively simply and quickly): the two principal components contain seven indicators altogether.
The result of the principal components analysis for practical experts is that the indicators suitable for the measurement of competitiveness have been restricted. One stressed goal of the thesis was to implement a complex evaluation about the competitiveness position of the Hungarian tourism destinations. To reach the goal a cluster analysis was implemented with the help of the seven indicators resulted in the principal components analysis. The first attempt was made to group and standardisation the Hungarian destinations.

After excluding the overhanging elements the solution of five clusters was found to be stable and professionally reasonable, therefore this was explained. The clusters resulted in the cluster analysis were named as follows:

- Destinations with relatively strong competitiveness position: the **number ones**: cluster K5 (5,17% of the destinations).
- Destinations **strong in utilisation**: cluster K4 (6,9%).
- **Significant towns**: cluster K3 (5,17%).
- **Mass base**: destinations with competitiveness positions under the average, but not the weakest: cluster K2 (56,9%).
- Destinations with relatively weak competitiveness position, the **laggings**: cluster K1 (25,86%).

For the further analysis of the clusters I used the information from the primary research, too. The answers of the DMO managers were sorted by the clusters and I examined if there were any characteristics to show difference in comparison with the other clusters.
Summarizing the cluster analysis it can be stated, that the destinations can be standardized by their competitiveness position, which helps the complex analysis of the destinations and also helps to explore the power relations. At the same time the methodology of cluster analysis is not common enough to be used safely and routinely by a DMO manager. Since my aim is that the results of the research and the thesis would be useful also in practice, I think it is much more useful to give an instrument to the DMO managers, which is easy and simple to use and with which they can determine their own competitiveness position themselves. In harmonysation with this aim the first hypothesis was articulated.

4.2. Testing the Hypotheses

Hypothesis 1
The measurement-problem of the competitiveness position, determined by the pyramid-model can be solved easily, also in a practically applicable way with the help of the available indices.

It is expediental to create a complex index to measure the competitiveness position really simply. According to the fact that the indicators have various unit of measurement, the first step must be to make them compareable. Therefore a scale coordination transformation was applied (Barna 2007), to have all the indicators at the same level scale. Thus the indicators became easy to summarize. It is reasonable, however to weight the indicators – practically with the rotated factor weight. The created index was named as destination competitiveness index (DVP – after its Hungarian name), with the formula as follows:

\[
DVP = 0.942 \cdot \text{ÁL} + 0.926 \cdot \text{ÖV} + 0.915 \cdot \text{KV} + 0.925 \cdot \text{SZB} + 0.913 \cdot \text{VB} + 0.943 \cdot \text{FK} + 0.926 \cdot \text{SZK}
\]

Where
ÁL: average number of employees per year in accommodation and catering branch of business;
ÖV: number of guests (all);
KV: Number of inbound guests;
SZB: income from accommodation;
VB: income from catering;
FK: capacity utilisation of beds;
SZK: capacity utilisation of rooms.
After substitution of the formula and calculating the indices the competitiveness position of the examined tourism destinations can be explained and featured by one single number. The DVP index is mostly appropriate to make comparisons:

- to compare the competitiveness position of several destinations at the same time, or
- to compare the competitiveness position of one destination in various periods.

With the examination of the destinations ranking by DVP index, the experiences show that the ranking harmonize with the results of the cluster analysis. It can be stated therefore that the DVP index can provide results fitting to those results reached by more difficult methodologies. Therefore the competitiveness position of the Hungarian destinations can be explained easily by the DVP index, without exact knowledge in serious research methods and this index can paint a real picture of the destinations’ position.

**Hypotesis 2**

*In case of the competitiveness position the success factors of the applied pyramid-model appear as comparative advantage, but in the case of the same destination types the existence of the competitive advantages are determinative.*

To prove the hypothesis I had a much more shaded analysis of the destinations: I examined the competitiveness within categories formulated according to the competitors of one another. Four categories were isolated on this basis in harmonasation with the tipology of Aubert (2011):

- Beach destinations: the category contains the DMOs around the Lake Balaton, plus Gárdony and Velence (at the Velencei-lake).
- Health tourism destinations: those DMO destinations are in this group which are mainly famous of medical or wellness supply (like Hévíz, Bük or Kehidakustány).
- City destinations: the criterion was here that the DMO should contain only one or two settlements.
- Rural destinations: those which have no clear-cut attractions cannot be ranked in another type and the DMO is also „rural-like”: contains more than two but usually more connecting settlements.

Within the groups I examined the competitiveness position by the DVP index as the first step, and I created new rankings. Since the success factors (situated in the lower part of the pyramid-model) that is tha endowments are almost the same among competitors (that is why they can be regarded as competitors) the little differences can
be evaluated as special unique characteristics. It was reasonable therefore to involve the success factors of the competitiveness potential (next to the competitiveness position). During the questionnaire research DMO managers evaluated their own destinations’ success factors – it was evident to have these evaluations as a base. With the help of the analysis I was able to map the situation among the competitors, and it was also possible to have a much more complex analysis, and to paint a much more detailed picture about the destinations – like never before.

The analyses showed that the competitiveness position is not determined by the success factors of the competitiveness potential, the position and its improvement depends on competitive advantages. Competitive advantage can appear as the efficiency of the management, the success of the marketing activity, the grounded and expedient attraction development or other development activities – thus mostly these elements, which appear in the pyramid-model as base factors. The closer examination of the base factors is therefore a further interesting research field.
4.3. Composition of Theses

1. The applied pyramid-model is appropriate for analysing the Hungarian local tourism destinations.

2. The competitiveness of a tourism destination can be divided into two parts: (1) competitiveness position on the ex post side, which can be measured and (2) competitiveness potential on the ex ante side.

3. The measurement of the competitiveness position given by the pyramid-model can be easily solved (also in practice) by the disposable indicators.

4. The success factors of the pyramid-model applied to the destinations can appear as a comparative advantage, but in terms of the same destination categories the competitive advantages will be determining.
4.4. Further Research Directions

There is a long route to become competitive. I think the results of the thesis can be helpful for the Hungarian destinations to identify where they are in the route compared to the other destinations, or specifically to those destinations which are in the same route.

In the research of the destination competitiveness I also see possibilities to move forward: new analyses reside in the further application of the created DVP index and the applied pyramid-model has also many reserves.

The created DVP index can be used for dynamic analysis: with its help the competitiveness position of a destination can be evaluated in tie, too. At the same time the index can be a method to assess the impact of a special activity to improve competitiveness. But it can be easily used to feature the „walk of life” of a destination as well.
Since the destination definition used in this thesis can be verified in other countries as well (where DMOs are existing), the elements of the pyramid-model can be the base of international comparisions. If the selected indicators are available in other countries, too the international comparision becomes possible with also the help of the DVP index.

Within the limits of the thesis the analysis of the „middle” factor group of the pyramid-model, which is the base factors could not take place. The connections among these factors and the competitiveness position can be another interesting research topic, mostly examined by qualitative methods.

In the thesis the most neglected element is the final goal (in the top of the pyramid-model), the welfare of the local residents. With the DVP index it is another exciting research field to find connections between destination competitiveness and welfare. It is also interesting to find out if the success of the destination can really contribute to the quality of the local residents’ life. Hereanent I made an attempt to find connections. Since only few statistical data can be reached at the settlement level, however, this research focused on the examination of the competitiveness and the economic welfare of the Hungarian counties (Papp – Molnárné Barna 2013).
5. References


6. Related Publications

Book Chapter in Foreign Language

Article Published in Foreign Language


Article Published Abroad (Written in Hungarian)

Book Chapter in Hungarian


Conference Publication in Foreign Language


Conference Publication in Hungarian


**International Conference Presentation**


**Hungarian Conference Presentation**


