

SZENT ISTVÁN UNIVERSITY

**COMPETITIVENESS ANALYSIS OF SMALL
AND MEDIUM SIZED ENTERPRISES
IN THE SOUTH-WESTERN SLOVAKIAN
BORDER REGION**

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**GÖDÖLLŐ
2015**

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1. INTRODUCTION

The aim of the thesis is to identify those external environmental factors which influence the effectiveness of Slovakian small and medium-sized enterprises operating in the South-West Slovakian region along the Slovakian-Hungarian border; as well as to assess the importance and state of quality of the above mentioned factors.

The research was triggered partly by my own observations (I myself also was born and still live near the border), partly by my studies at the Doctoral School and, finally, by the mission of my workplace – János Selye University, Komárno, Slovakia – and the research I and my colleagues conducted there to map the characteristics of the region along the Slovakian-Hungarian border and to draw conclusions, formulate proposals to improve the living conditions of people living in the region.

I plan to reach the abovementioned aims through several sub-aims, so the structure of my thesis is formulated accordingly:

A. Aims connected to the review of literature

A/1. to review and evaluate of literature on the environment of small and medium sized enterprises, identify and classifying factors which influence the operation of enterprises,

A/2. to study and evaluate literature on the concept of competitiveness and its measuring, formulate an own definition of competitiveness,

A/3. to review and evaluate of literature on regional economics and borders, border researches and identify factors which influence enterprises and are probably borders-specific

A/4. by synthetizing the different sources in literature, to formulate a model which shows the external environmental factors which influence the competitiveness of enterprises operating in the border region.

B. Sub-aims connected to the elaboration of the research method:

B/1. to prepare a questionnaire based on the main goal of the thesis and the results of the review of the literature

B/2. to determine, implement and conduct the research with the appropriate methods

B/3. to select the statistical methods suitable for the database analysis

C. Sub-aims connected to the evaluation of the research results:

C/1. to select the interpretable and graphic way to interpret the results

C/2. to draw conclusions and write recommendations

Prior to my research I asked myself what the purpose of this research was.

What are the expected results? The answers are as follows:

- a) I can prepare the rank of importance of the external environmental factors which are essential for SMEs for their competitiveness*
- b) I can rank and classify the factors on the basis of their state of quality and importance*
- c) I can discover the importance of external environmental factors which derive from the closeness of the border in the operation of enterprises in the region*
- d) I can classify the enterprises based on their description and on the importance and state of quality of factors deriving from the closeness of the border*
- e) I can make recommendations to improve the position of small and medium-sized enterprises*

The thesis can be divided into four main parts. The first part deals with the theoretical background, which lies on three pillars. The first one focuses on the notion of entrepreneurship, it reviews the literature on the classification of enterprises. The second pillar deals with the notion of business environment and competitiveness, while the third pillar concentrates on the borders, the notion of them, and their roles. Based on the relevant literature, I formulated three hypotheses:

H1: I suppose that – depending on the descriptive features [size, sector, legal form, ownership, market, duration of existence, main goal, and distance from the border] – the people surveyed can perceive a difference in the importance and state of quality of the business environment factors.

H2: I suppose that enterprises pay special attention to border-related factors and there is a difference in their importance and state of quality based on the descriptive features of the businesses [size, sector, legal form, ownership, market, duration of existence, main goal, and distance from the border].

H3: I suppose that location and operation in the border region, the reduction of the separating role of the border, as well as the evolvement of a “cross-border region” strengthens the competitiveness of small and medium-sized enterprises.

The second part of the doctoral thesis deals with the methods used in my research. The target group was small and medium-sized enterprises. To gain insight into the opinion of entrepreneurs about business environment, I decided to conduct a primary questionnaire research. Thus, in this part of the thesis I presented the structure of the research and the methods used for evaluating the data I collected and analyzed with statistical methods. The third part of the thesis is the detailed presentation of the results deriving from the abovementioned analysis. The fourth part deals with the conclusions and the recommendations based on the research results. New findings and novelties are also presented here.

2. MATERIAL AND RESEARCH METHODOLOGY

In accordance with the aims of the thesis, I distinguished the following research phases:

- 1) formulating the motivation, the research problem and the research aims,
- 2) reviewing literature,
- 3) formulating hypotheses,
- 4) selecting and formulating research methods,
- 5) data collection,
- 6) analysis,
- 7) presenting the results and drawing conclusions.

The motivation, the research problem and the aims were presented in the Introduction part. The results gained from the review of literature are summarized in the model of external environmental factors which influence the competitiveness of small and medium-sized enterprises operating in the border region (Figure 1). The model represents a border region (a black square). A region like this normally lies on the two sides of a border (green dashed line) separating two countries (Country A and B) and performing its functions (barrier, filter, conflict and contact zone) as described by NEMES NAGY (1998). It regulates flows and relations, which are represented in the model based on FLEISCHER's interpretation (2001). Flows and relations in the region the model describes are as follows:

- 1a) avoiding: flows/relations in one of the countries, which stay away from the border region,
- 1b) avoiding: flows/relations which stay away from both countries, including the border region
- 2a) through-cut: flows/relations cutting through the border region in one of the countries
- 2b) through-cut: flows/relations cutting through a border region in each country

- 3) accessibility: accessing a border region in one of the countries the affected border (cross-border flows/relations directed to or starting from the country, when the target or starting point is the border region of the neighboring country).
- 4) accessibility: accessing the border region of one of the countries across a different border (flows/relations directed to or starting from the country, which do not cross the affected border or do not cross the border at all).
- 5) provision: flows/relations among the elements in the border region of the neighboring countries.

In the center of the model there is a business (orange circle) which is situated in the border region. The business in the border region is affected by the following factors:

- a) external environmental factors (political, technological, social, environmental, legal, ethical),
- b) sector-related features.

These function can occur at different (global, national, regional, local) levels (marked with red in the model) and can act for different intervals (short, medium, and long term) as KOVÁCS (2010) pointed out.

Following the logic of the model, the intensity and direction of the certain relations is affected by the border. Its influencing impact can be depicted not only in the flows/relations of the two neighboring countries, but it also affects the given country as well as the part of the country in the border region. The presence of the border and its functions may lead to changes in the intensity/direction/starting point and target of the flows/relations.

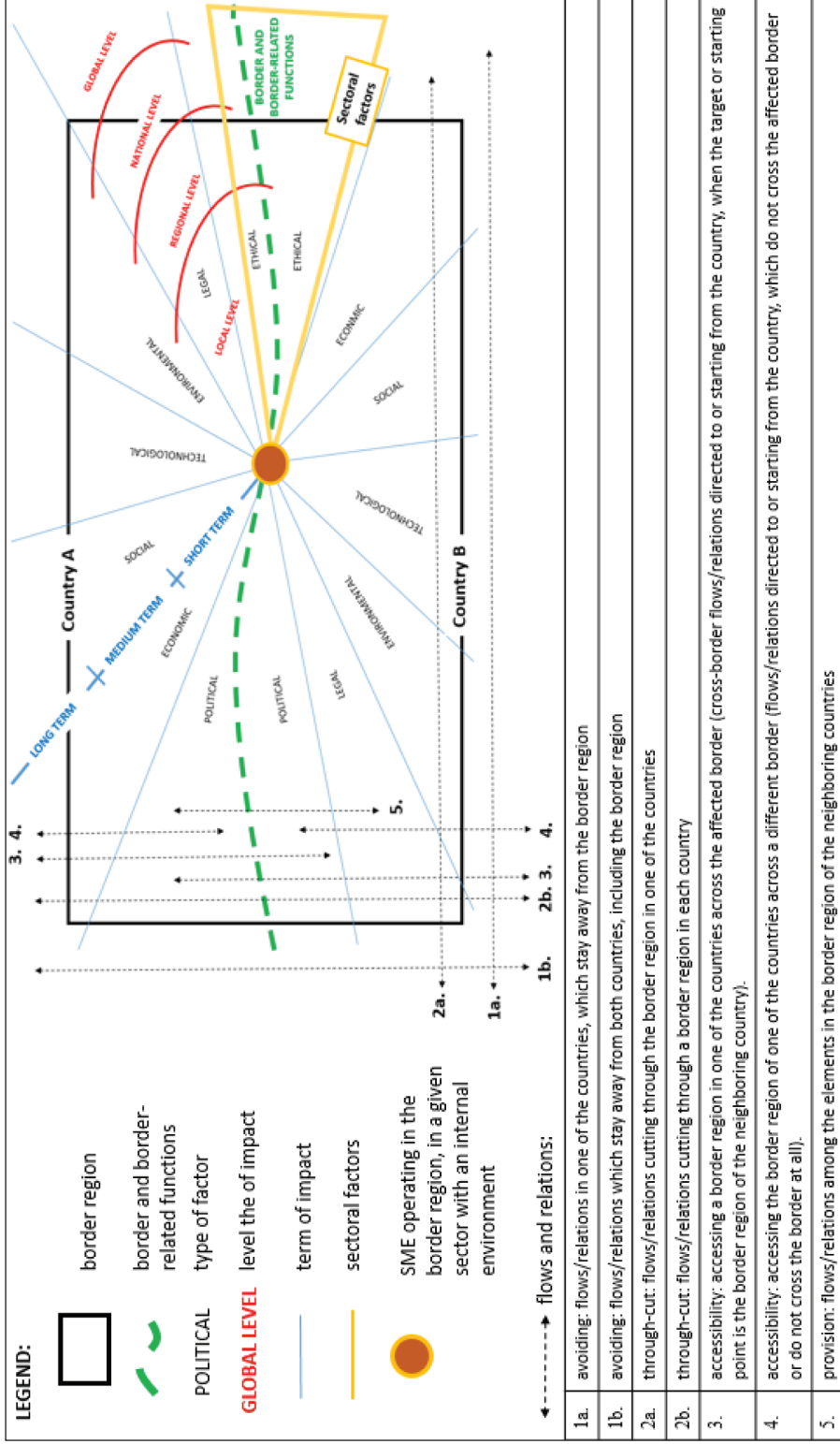


Figure 1. Model of external environmental factors which influence the competitiveness of SMEs
 Source: own edition based on relevant literature

The model also includes the different external environmental factors which influence the competitiveness of small and medium-sized enterprises, since based on the relevant literature I defined the notion of competitiveness as *the presence of internal conditions and available resources, which can be successfully used, according to concretely defined rules, in order to gain competitive advantage against others, or to win over them*. In our case the business can be in a special situation due to its close location to the border, since on its markets the well-defined rules (peculiarities) may have more intense effects (e.g. to its markets may belong two different sets of regulations, macro-economic environment, etc.; border functions may come into effect, its target market may be more versatile, etc.). This influences the way the business should formulate its internal operation conditions and the forces which will give it advantages in the competition.

To test my hypotheses, I surveyed small and medium-sized enterprises in South-Western Slovakia, operating within 60 km of the border. In my questionnaire –based on the relevant literature – I asked their opinion about 147 factors, identified and arranged in groups (political, economic, social, technological, ethical, legal and environmental). In the questionnaire I asked about the factors with scaled questions from three different aspects:

1. how important they consider the given factor (a scale of five)
2. what they think about the state of quality of the given factor? (a scale of five)
3. what they think about the state of quality of the given factor on the other side of the border? (better, the same, worse or cannot tell)

The descriptive features were provided by the categories chosen on the basis of the literature [size, sector, legal form, ownership, market, duration of existence, main goals at present, distance from the border crossing].

The results were then examined by the statistical methods shown in Table 1.

Table 1. Statistical methods used in the thesis

Methods	Application
Descriptive statistics (mean, dispersion)	setting up a rank of importance
Levene-test	controlling dispersion homogeneity
Variance (Eta-squared)	determining connection and their closeness between the difference of the values of average importance and state of quality
Cluster analysis, hierarchical (Ward's method)	determining the optimal number of clusters
Cluster analysis – non-hierarchical (K-means method)	formulating clusters
Crosstable analysis (khi-square test, Cramer's V)	describing clusters, setting up the profile of the companies, grouping the average importance and state of quality of border-specific factors

Source: own edition

3. RESULTS

3.1. Sample composition

The questionnaire survey was conducted in April 2015, the sample contains the answers from 257 businesses altogether. 69.26% of the respondents operate in the service sector, 24.90% in industry, and the remaining 5.84% of the businesses work in the field of agriculture. The major part of the sample (89.90%) comprises of domestic private companies. As for their legal form, mainly limited liability companies (49%) and private entrepreneurships (45.50%) provided the answers. When describing their market, 36.2% of the enterprises indicated local market (not crossing the border), 21.8% the regional market (Slovakia's neighboring countries), 14% the national market, 13.6% the European market (not only the neighboring countries), 10.1% the local market which crosses the border, and 4.3% the world market. Considering their size, mainly micro and small enterprises were included in the sample. Almost half of the companies are situated closer than 20 km to the border, 40% of them are in the belt of 20-40 km distance from the border, while the remaining part (8.90%) have their location from 41-60 km from the border.

3.2. The average state of importance and quality of the business environment

The average value of importance of the examined 147 factors of the business environment among the businesspeople surveyed was 3.45, while in the case of the average state of quality, this number was 2.98%. Listing the factors among the political, economic, social, technological, ethical, legal and environmental factors, generally higher values were given to importance than to the state of quality (Figure 2).

In the values of the average importance and state of quality of the factors in the business environment, a tendency is appearing, according to which businesses generally consider those factors more important for their operation which were ranked worse.

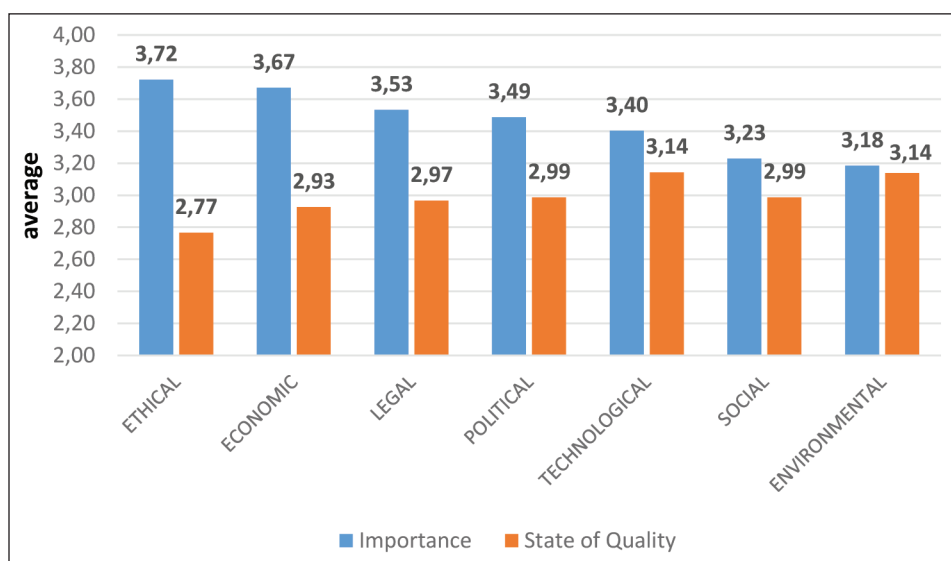


Figure 2. The average importance and state of quality of factors in groups according to the surveyed businesses

Source: own edition based on the research in April 2015

For the examined 147 factors, the values of average importance and state of quality were ranked. The most important factors include the existence and features of the circle of domestic customers, the working moral of employees, the quality and costs of Internet service and income tax rate. As the least important factors for the operation of their business, respondents listed religiousness in the population, topographical features, possibilities of air transport, history and wind force.

In the case of average values in the importance and state of quality of business environment and in the case of average values in the importance and state of quality among the factor-groups, I aimed to discover significant differences by applying variance analysis in the functions which describe the businesses. The strength of the discovered significant relationships was examined by Eta-square. As a result of the variance analysis, in the functions which describe the businesses I could identify more significant differences among the average values in the case of average values of importance than in the case of average state of quality.

The enterprises in the sample were separated more in the case of the importance of external environmental factor-groups than in the case of their assessment. Significant relationships both in average values of importance and in average values of state of quality are shown in Table 2. All the relationships among the identified correlations can be considered weak.

Table 2. Differences between average values in the case of average values of importance and state of quality identified by variance analysis

	SIGNIFICANT DIFFERENCES BASED ON VARIANCE ANALYSIS	
GROUP OF FACTORS	AVERAGE VALUES OF IMPORTANCE	AVERAGE VALUES OF STATE OF QUALITY
Political (22 factors)	sector, legal form, market, aim of the business	no significant difference
Economic (46 factors)	legal form, aim of the business	no significant difference
Social (20 factors)	sector, market, duration of operation, legal form	size, duration of operation, distance from the border crossing
Technological (23 factors)	market	legal form, size, duration of operation
Environmental (14 factors)	legal form, aim of the business	no significant difference
Legal (21 factors)	market, size	size
Ethical (8 factors)	sector, market	sector
Environmental, total (147 factors)	market, legal form, sector, aim of the business	size, duration of operation
Environmental, total, across the border	N/A	person of the owner, market

Source: own edition based on a research in April 2015

3.3. Opinion on the state of quality of business environment across the Slovakian-Hungarian border

In the next phase of the research I analyze the opinion of the surveyed businesses on the state of quality of business environment across the border. “The grass is always greener on the other side of the hill” – the saying proved to be true for those enterprises which were able to judge the state of quality of business environment on the other side of the border. In case of some factors 22.96-57.98% of the businesses surveyed could not, or did not judge whether the state of quality of the given factor is worse, better or the same as it is in Slovakia.

Among the businesses surveyed in the Hungarian business environment the state of quality of factors like preserving traditions, research activities at universities, training and educating entrepreneurs, the effectiveness of trade unions, the applicability of research findings, and ethnic compositions of companies were considered better in most cases. Respondents considered the stability of exchange rate, the rate of state debt, the country image from a political point of view, the rate of excise duties, and, for example, impartial political decision making processes in business environment worse on the other side of the border.

In the case of the average state of quality of the factors and factor-groups, the differences between the average values were also examined by applying variance analysis. The significant relationships here are shown in Table 2.

3.4. The opinion of enterprises on the border-related factors

From the examined 147 factors 35 were chosen depending on whether there was a difference in their case compared to the other parts of the country, and/or whether they have a direct influence on the cross-border flow of factors. For these factors a cluster analysis was carried out, and four clusters – entrepreneurial groups – were identified on the basis of the average values of importance and the average values of state of quality. The clusters then were examined with cross-table analysis to identify the significant features (khi-

square test) and the strength of the relationship (by calculating Cramer's V). The clusters, according to the location of the businesses surveyed, are shown in a map (Figure 3).

In the case of the clusters, regarding the results the following general features and cluster-names can be elaborated in the sample:

- a) "*border-specific dissatisfied*" (number of enterprises: 68, average importance: 3.79, average value of state of quality: 2,80). In general, border-related factors are fairly important for them, but they are rather dissatisfied with their state of quality. Mainly businesses in the industrial and service sector belong here, situated in a 0-40 km radius near the border, which have interest in cross-border businesses as well (local cross-border market, regional market, European market) to increase sales, market share, profits, and to satisfy consumer demand.
- b) "*border-specific averages*" (number of enterprises: 56, average importance 4.08, average value of state of quality: 3.28), border-related factors have average importance of them, they consider their state of quality average. The majority of businesses which belong here operate in agriculture, or are businesses with cross-border interest (local cross-border market, regional market, European market). A great number of enterprises wishing to maintain the present market situation also belong here. Their location from the border crossing is not important.
- c) "*neutrals*" (number of enterprises: 85, average importance 3.32, average value of state of quality: 3.10). This is the cluster with the largest number of elements, where businesses have a rather neutral attitude towards border-related factors. They considered their state of quality average. From the companies in the sample a major part of private entrepreneurs belongs here, while businesses with cross-border interests (local cross-border market, regional market) have only a small rate in it. Enterprises which concentrate on satisfying consumer demand and generating cash in the first phase of their lifecycle, located further off the border crossing also belong to this cluster.

d) “ignorant” (number of enterprises: 39, average importance 2.68, average value of state of quality: 2.76). This cluster comprises of the lowest number of elements, agricultural companies are not included, but enterprises operating in the local market not crossing the border have a significantly great share in it. They are mainly in their start-up and adolescence, their distance from the border crossing is insignificant.

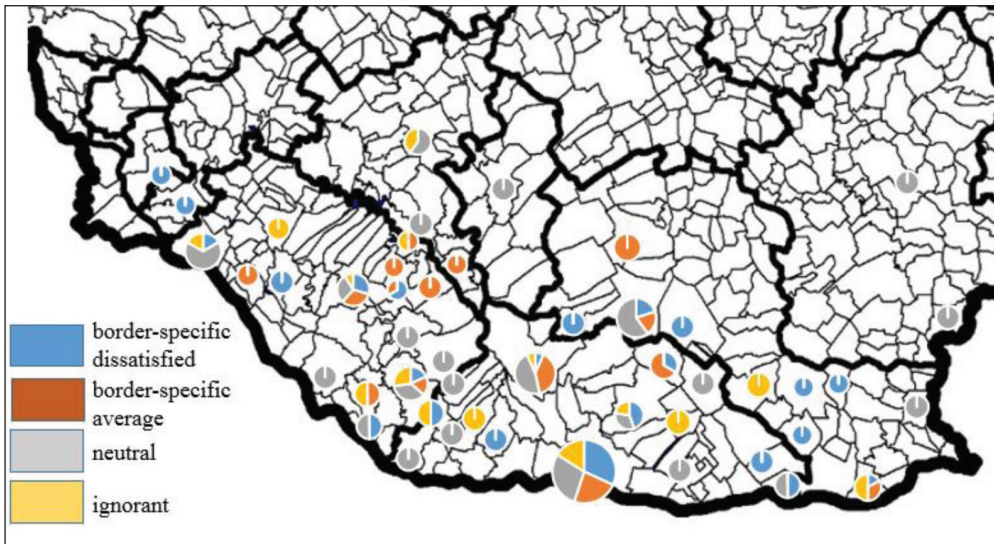


Figure 3. Clusters of enterprises based on their opinion on average importance and state of quality of border-related factors, and their location

Source: own edition based on a research in April 2015.

Source of map: geograf5.webnode.cz

3.5. Practical significance of the research in improving the competitiveness of enterprises

My research results provide the opportunity to give recommendations to improve the competitiveness of enterprises. To this end, I have prepared a chart which also helps to draft projects. The practical significance of the research lies in assessing all the environmental factors individually. The points to be considered factors are as follows:

1. Which (global, national, regional, or local) level does the factor appear on?
2. Which level does the factor have impact on? (global, national, regional, or local)
3. What term does the factor have impact on? (short, medium, long term)
4. Can its impact be directly influenced? (yes, no)
5. Its impact on the operation of the business (positive, neutral, negative)
6. What is the state of quality of the factor in the country? (very good/ good/ medium/bad/very bad)
7. What is the state of quality of the factor on the other side of the border? (better, the same, worse)
8. Is there a sectoral feature? (yes, no)
9. Is there a border-related feature? (yes, no)
10. What impacts does the interference have on other social sub-systems and participants?

By answering the above listed ten questions can we find the “correct answer” to what impact a certain factor has.

The rank of importance can tell us the order in which the factors should or have to be dealt with. The rank is given on the basis of the assessment of businesses. The combinations given by the answers to the ten questions provide outputs which describes those features which the recommendation on the research results - or other, unexamined factors - should have (Table 4).

Table 4. Assistance to formulate recommendations to improve competitiveness of SMEs

QUESTION	ANSWER	CONTRIBUTION TO THE RECOMMENDATION
FACTOR LEVEL	global, national, regional, local	shows the level where the factor appeared
LEVEL OF THE IMPACT OF THE FACTOR	global, national, regional, local	shows the level where the factors has impact on, where interruption or changes are needed
TERM	short, medium, long term	shows how long an impact lasts or how quickly interruption is needed or how fast the impact takes place
SUGGESTIBILITY	suggestible, not suggestible	we can find out what to do with the factor: if it is suggestible, actions are needed (elimination, correction, improvement, tracking, etc.) if it is not suggestible: strengthening/weakening/tracking the impact
IMPACT	positive, neutral, negative	we can find out what to do with the factor: if it is neutral, we track it, if it is negative, we eliminate it or reduce its impact, if it is positive, we keep it or improve it
STATE OF QUALITY OF A FACTOR AT THE LEVEL OF IMPACT	very good/good/ or medium/bad/ very bad	clarifies what to do with the factor
STATE OF QUALITY OF A FACTOR ON THE OTHER SIDE OF THE BORDER	better, worse, the same	a possible competitive advantage or disadvantage in the operation of a business, helps in explanation and recommendation, defining the circle who are affected, and in addressing the participants
SECTORAL FEATURE	exists/does not exist	should the actions cover all sectors or just individual ones?
ROLE OF BORDER	exists/does not exist	should the presence of a border be considered when writing the recommendations?
OTHER FACTORS	impacts on other social sub-systems and participants, the interests of participants, other features	do the questions have any other peculiarities to be considered?

Source: own edition

3.6. Evaluation of the Hypotheses

H1: I suppose that – depending on the descriptive features [size, sector, legal form, ownership, market, duration of existence, main goal, and distance from the border] – the people surveyed can perceive a difference in the importance and state of quality of the business environment factors.

The results given by variance analysis *proved the hypothesis correct*, both in the case of the importance and in the state of quality of the factors significant differences can be seen between the average values in the descriptive features of the businesses (see Table 2).

H2: I suppose that the enterprises pay special attention to border-related factors and there is a difference in their importance and state of quality based on their descriptive features [size, sector, legal form, ownership, market, duration of existence, main goal, and distance from the border].

By applying cluster analysis, four entrepreneurial groups were identified on the basis of their opinion on of the average values of importance and the average values of state of quality of factors deriving from the close distance to the border. The hypothesis *proved to be partly correct*, a large part of the businesses surveyed considered the border-related factors to be important or to be of average importance, while for group of them these factors were “not important”. The partial acceptance of the hypothesis can be supported by the fact that a considerable part of the respondents could, or did not decide what the state of quality of these factors is on the other side of the border.

H3: I suppose that location and operation in the border region, the reduction of the separating role of the border as well as the evolvement of a “cross-border region” strengthens the competitiveness of small and medium-sized enterprises.

Increase in the permeability of borders holds another possibility for business in the border region on the one hand, on the other hand it also poses new challenges. The versatility of small and medium sized enterprises brings along the differences in opinions on the state of quality of individual factors, e.g. the changes in the exchange rate (the strengthen of the euro against the forint) means savings in purchases for some companies, while for another it means that they lose business partners because they use the services of their competitor on the other side of the border. A part of the businesses surveyed in general did not even consider the border-related factors important, and their state of quality was rated rather bad or average. So based on the results, *I partly accepted* the hypothesis.

3.7. New findings and novelties in the research

(1) After assessing and evaluating the relevant literature, results in several different fields of study were synthesized from a new and fresh point of view, and I elaborated a new *model of external environmental factors which influence the competitiveness of small and medium-sized enterprises operating in the border region* (Figure 1).

(2) I explored the followings concerning the factors of business environment in the Slovakian part of the border region in South-Western Slovakia:

a) *the opinion of SMEs on average importance*

b) *the opinion of SMEs on state of quality*

c) *the opinion of the surveyed SMEs on business environment on the Hungarian side of the border*

(3) In the case of *average values of the importance and the state of quality among the factor-groups describing business environment, I discovered differences* on the basis of the descriptive features of the groups, formed from the surveyed businesses operating in the border region in South-Western Slovakia, near the Slovakian-Hungarian border, along to the Danube.

(4) In case of the border-related factors in business environment, *I identified and described four groups of enterprises regarding their opinion on the average importance and state of quality of these factors.*

(5) *To help strategic thinking and formulate recommendations* to improve the state of SMEs in the border region, I prepared a table which contains ten factors (level on which the factor appears, level of impact, term, suggestibility, nature of impact, state of quality of the factor, state of quality of the factor on the other side of the border, sectoral feature, border-related role, other factors).

4. CONCLUSION AND RECOMMENDATIONS

In my doctoral thesis I dealt with the importance and state of quality of external environmental factors which influence the competitiveness of small and medium-sized enterprises, and with the opinion of small and medium-sized enterprises in South-Western Slovakia on the business environment in Hungary. I approached the research problem with strategic thinking in a system.

As a result of my research, I was convinced that small and medium-sized enterprises form a heterogeneous group, and based on their descriptive features, they have different opinions on the importance and state of quality of the factors of business environment, as well as the border-related factors. The presence of the border and the changes in the role of the border affect the flows of the factors, their direction in the border region, the relations there, and, consequently, it has an impact on the efficiency of the businesses. Thus when writing recommendations to improve the state of the sector, the border, and the business environment on the other side of the border should also be considered.

The research of the topic should be carried on in multiple directions: for example a comparative research might be carried out by surveying the opinion of Hungarian businesses operating in the border region, or by narrowing the research down to a certain sector, by examining other border regions, by conducting out the same research later in time, or by examining the different external environmental factor-groups or factors individually.

5. LIST OF PUBLICATIONS

5.1. PUBLICATIONS RELATED TO THE TOPIC OF THE THESIS

Scientific Articles

a) Published in Foreign Journals

1. **Antalík, I.** – Juhász, T. – Madarász, I. – Poór, J. – Szabó, I. (2014): A magán és az állami szervezetek hozzáállása az atipikus foglalkoztatáshoz válság idején [Attitudes of privately and publicly owned organizations towards atypical employment in crisis time] In: Selye e-studies, 5 (2), pp. 29-37., ISSN 1338-1598
2. Poór, J. - **Antalík, I.** - Kollár, P. - Alas, R. - Szabó, K. - Kerekes, K. – Slavic, Á. (2014): Üzleti etika - fókuszban észak-dél és közép-kelet-európai összehasonlítások In: Selye e-studies, 5. (1), pp. 51-61., ISSN 1338-1598
3. Poór, J. – Juhász, T. – **Antalík, I.** – Madarász, I. – Szabó, I. – Tamás, G. (2013): Traditional and Atypical Employment in Light of Empirical Data In: Journal of Engineering Management and Competitiveness, Vol. 3, no. 2 (2013), pp. 50-55, ISSN 2217-8147
4. Poór, J. - Slavic, A. - Slocinska, A. - Kerekes, K. - Zaharie, M. - Ferencikova, S. - Vanhala, S. - Alas, R. - **Antalík, I.** - Berber, N. – Kollár, P. (2013): International research results on business ethics position - idealism and relativism in seven European countries In: Managerial challenges of the contemporary society, Vol. 6., pp. 29-34. ISSN 2069-4229
5. **Antalík, I.** - Juhász T. – Madarász, I. – Poór, J. – Szabó, I. - Pinnel P. (2013): Traditional and atypical employment in light of empirical data atypical employment - focus Hungary In: Managerial challenges of the contemporary society, Vol. 5, pp. 1-5., ISSN 2069-4229
6. Fekete, P. - **Antalík, I.** (2012): A “KAP” támogatási rendszerének reformja. In: Acta Oeconomica Universitatis Selye, pp. 71-80. o. ISSN 1338-6581

b) Published in Hungarian Journals

1. **Antalík, I.** – Juhász, T. – Madarász, I. – Poór, J. – Szabó, I. – Tamás, G. (2014): Az atipikus foglalkoztatás gyakorlata szlovákiai és magyarországi munkavállalók körében (empirikus vizsgálat alapján). In.: Munkaügyi Szemle, 58. (I.), pp. 34-44., ISSN 0541-3559
2. **Antalík, I.** – Dócs, A. (2013): A szociális vállalkozások és az inkluzív piac szerepe a hátrányos helyzetű régiók felzárkóztatásában In: Munkaügyi Szemle. 57 (III.), pp. 63-71. ISSN 0541-3559
3. **Antalík, I.** (2011): A kis- és középvállalkozói szféra fejlődése és jellemzőinek alakulása Szlovákiában In: A virtuális intézet Közép-Európa kutatására: Vezetéstudományi szám, III. (1-2.), pp. 333-341., ISSN 2062-1396.

Scientific publications (Books, Book Chapters, Research Reports)

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2. **Antalík I.** – Dús, M. – Gábríelné, T. Gy. – Gösi, M. – Horbulák, Zs. – Juhász, T. – Kollár, Cs. – Kovács, I. É. – Madarász, I. – Mihály, N. – Poór, J. – Strázovská, H. – Strázovská, G. – Szabó, I. – Szabó, K. – Vinogradov, Sz. (2014): Foglalkoztatás – atipikus foglalkoztatás a magyar szlovák határ mentén Komárno-Komárom és Párkány-Esztergom térségében, SJE GTK – SZIE Gödöllő, 225 p., ISBN 978-80-8122-116-3
3. **Antalík, I.** (2013): Versenyképesség és vállalkozói környezet - trendek és folyamatok Szlovákiában In: A falutipológiától a marketingföldrajzig: tanulmányok Sikos T. Tamás tiszteletére, SZIE GTK RGVI, pp. 9-24., ISBN 978-963-269-364-4.

4. **Antalík I.** – Juhász, T. – Kovács, I. É. – Madarász, I. – Poór, J. – Szabó, I. (2013): Foglalkoztatás és atipikus foglalkoztatás Komárom-Komárno térségében, Selye János Egyetem Gazdaságtudományi Kar, 256 p., ISBN 978-80-8122-079-1
5. **Antalík, I.** – Poór, J. – Vozák, E. (2013): Foglalkoztatás és foglalkoztatási formák: Magyarország – Szlovákia, Selye János Egyetem Gazdaságtudományi Kar, Komárno, 77 p., ISBN 978-80-8122-081-4
6. **Antalík, I.** (2010): A kis- és középvállalati (KKV) szektor helyzete Komárom-Komárno térségében In: Cégek célkeresztben: Vállalkozások a szlovák-magyar határ mentén, Selye János Egyetem Gazdaságtudományi Kar, Komárno, pp. 81-107., ISBN 978-80-89234-89-9

Publications in Conference Volumes

a) Publications in Foreign Conference Volumes

1. Poór, J. - Kovács, I. – **Antalík, I.** - Szabó, I. - Juhász, T. - Horbulák, Zs. – Gábríelné, T. Gy. - Vinogradov, Sz. - Strážovská, H. - Dús, M. – Kollár, Cs. (2015): Employment and Atypical Employment in Slovakia and Hungary in 2013 and 2014 – Empirical Research. In: Krajčík, D. (szerk.): Central and Eastern Europe in the Changing Business Environment 15th International Scientific Conference, (Proceedings), Praha-Bratislava, Ekonóm, pp. 218-236., ISBN 978-80-225-4085-8
2. **Antalík, I.** – Lelkes, G. (2014): Határ menti térségekben működő kis- és középvállalkozások versenyképességét befolyásoló tényezők az idegenforgalomban In: Zborník z medzinárodnej vedeckej konferencie Univerzity J. Selyeho 2014 : “Vzdelávanie a veda na začiatku XXI. storočia” - Sekcia ekonomických vied, Selye János Egyetem, Komárno, pp. 52-60., ISBN 978-80-8122-105-7
3. Poór, J. – Juhász, T. – **Antalík, I.** – Madarász, I. – Szabó, I. – Tamásová, G. (2013): Traditional and atypical employment in light of empirical data In: III. International Symposium Engineering Management and Competitiveness: EMC2013, Zrenjanin, pp. 23-28., ISBN 978-86-7672-202-0

4. Poór, J. - Ferencikova S. – Vanhala, S. – Alas, R. – Slavic, A. – **Antalík, I.** – Kerekes, K. – Zaharie, M. – Kollár, P. (2013): “Business Ethics - Focus on North and South and Central-Eastern European Comparisons” In: “Management Challenges in the 21st Century”, Bratislava, pp. 26-34., ISBN 978-80-89306-20-6
5. **Antalík I.** - Poór, J. - Szabó, I. – Juhász, T. (2013): A magyar és a szlovák szervezetek véleménye a válságról és annak hatásairól a foglalkoztatásban empirikus kutatás alapján In: A Komáromi Selye János Egyetem Tudományos Konferenciájának Tanulmánykötete: „Új kihívások a tudományban és az oktatásban“, Komárno, pp. 12-21., ISBN 978-80-8122-074-6
6. **Antalík, I.** (2012): A versenyképesség fogalmának értelmezése a szakirodalomban In: Mura – Rózsa (szerk.): Podnikanie v konkurenčnom prostredí: Zborník príspevkov, Komárno, pp. 14-25., ISBN 978-80-8122-025-8
7. **Antalík, I.** (2012): Innovációs kultúra a kis- és középvállalkozásoknál egy Zselíz és Isaszeg kisvállalkozóinak körében elvégzett felmérés tükrében In: “Társadalmi-gazdasági kihívások a határ menti térségekben”, Komárno, pp. 68-73., ISBN 978-80-8122-027-2
8. **Antalík, I.** (2011): Kis- és középvállalkozások helyzete, trendjei, támogatási rendszere Szlovákiában In: Csata-Elek (szerk.): Gazdasági válság - regionális kitekintés, Csíkszereda, pp. 319-327., ISBN 978-606-8052-51-9
9. **Antalík, I.** (2011): A kis- és középvállalkozások trendjei és folyamatai Szlovákiában In: “A tudomány és az oktatás a tudásközpontú társadalom szolgálatában”: III. Nemzetközi Tudományos Konferencia SJE, Komárno, pp. 773-781., ISBN 978-80-8122-017-3
10. **Antalík, I.** (2010): Formy a črty využívania podpory sektora MSP v okresoch Komárno a Rimavská Sobota. In: Sborník příspěvku: III. Mezinárodní vědecké konference doktorandu a mladých vědeckých pracovníku. Opava, pp. 27-35., ISBN 978-80-7248-620-5

11. Antalík, I. - Kiss, A. (2010): A kis- és középvállalkozások támogatási formái és kihasználtságuk jellemzői a Komáromi és Rimaszombati járásokban In: Szellemi tőke, mint versenyelőny: avagy a tudásmenedzsment szerepe a versenyképességben, Komárno, pp. 54-67., ISBN 978-963-216-270-6

b) Published in Hungarian Conference Volumes

1. Poór, J. – Juhász, T. – Madarász, I. – Horbulák, Zs. – Szabó, I. – **Antalík, I.** – Kovács, I. É. – Dús, M. – Gáabrielné, T. Gy. – Vinogradov, Sz. – Muataz, F. M. – Kollár, Cs. (2015): Examination of the attitudes towards atypical employment from the perspective of Slovak and Hungarian unemployed In: Dunay, A. (szerk.): Proceedings of the 5th International Conference on Management 2015: Management, Leadership and Strategy for SMEs' Competitiveness, Szent István Egyetemi Kiadó, Gödöllő, pp. 214-219. ISBN 978-963-269-492-
2. **Antalík, I.** - Šeben, Z. (2014): A versenyképesség és a vállalkozói környezet kérdései Szlovákiában In: 5. Báthory - Brassai Konferencia: "Kárpát-medencei (magyar) versenyképesség". - Budapest: Óbudai Egyetem, pp. 15-24, ISBN 978-615-5460-38-8
3. **Antalík, I.** – Juhász, T. – Poór, J. (2014): Attitudes of Privately and Publicly Owned Organizations towards Atypical Employment in Crisis Time In: Alexandra Vécsey (szerk.): Management, Enterprise and Benchmarking In the 21st Century: Volume of Management, Keleti Károly Faculty of Business and Management, Óbuda University, Budapest, pp. 185-194., ISBN 978-615-5460-06-7
4. **Antalík, I.** (2013): A KKV-szektor finanszírozásának jellemzői - eszközök, trendek, szlovákiai sajátosságok In: VIII. KHEOPS Tudományos Konferencia, "Sokszínűség a közgazdaságban", Mór, pp. 4-14., ISBN 978-963-897790-8

5. Poór, J. - **Antalík, I.** – Kollár, P. – Alas, R. – Szabó, K. (2013): Üzleti etika - Fókuszban észak-dél és közép-kelet-európai összehasonlítások In: Bizalom és etika a társadalmi és gazdasági életben: Szimpózium, 2013. május 15., Óbudai Egyetem, pp. 27-40., ISBN 978-963-08-5685-0
6. **Antalík, I.** – Szabó, I. (2012): A munkaerő-piaci folyamatok és a gazdasági szerkezet változásai Dél-Szlovákia járásaiban 2001-2010 között In: Aktuális gazdasági és társadalmi attitűdök Magyarországon: VII. Kheops Tudományos Konferencia előadaskötet, Mór. pp. 54-62., ISBN 978-963-87553-9-1
7. **Antalík, I.** (2011): A kis- és középvállalkozások szektorának trendjei Szlovákiában a rendszerváltástól napjainkig In: VI. KHEOPS Tudományos Konferencia: Paradigma- és stratégiaváltási kényszer a gazdaságban, pp. 400-409., ISBN 978-963-87553-8-4

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1. **Antalík, I.** (2012): Bevezetés a kis- és középvállalkozások gazdaságtudományába. Selye János Egyetem Gazdaságtudományi Kar, p. 80., ISBN 978-80-8122-038-8
2. **Antalík, I.** (2012): Kis- és középvállalkozások menedzsmentjének alapjai Selye János Egyetem Gazdaságtudományi Kar, p. 90, ISBN 978-80-8122-037-1
3. **Antalík I.** – Strážovská, H. – Strážovská, L. – Sirotková, A. (2008): Malý a stredný podnikateľ: A kis- és középvállalkozó. Selye János Egyetem Gazdaságtudományi Kar, (2008), p. 153-201., ISBN 978-80-89234-56-1

5.2. PUBLICATIONS NOT RELATED TO THE TOPIC OF THE THESIS

Scientific Articles

1. Szabó, I. – **Antalík, I.** (2008): A Selye János Egyetem Gazdaságtudományi Karának fejlődési folyamata és fejlesztési lehetőségei In: Fórum Társadalomtudományi Szemle. 10. (4) pp. 147-157., ISSN 1335-4361

Publications in Conference Volumes

1. **Antalík, I.** (2014): Dél - Szlovákia járásainak demográfiai helyzete és trendjei In: IX. KHEOPS előadaskötet: Szervezetek és vállalatok aktuális kérdései, Mór: KHEOPS Automobil-kutató Intézet, p. 5-16. ISBN 978-963-89779-2-2

Editorial Work

1. **Antalík I.** (2013) (szerk.): Foglalkoztatás és foglalkoztatási formák: Magyarország – Szlovákia, Selye János Egyetem Gazdaságtudományi Kar, Komárno, 77 p., ISBN 978-80-8122-081-4
2. **Antalík I.** – Szabó, I. (2012) (szerk.): Társadalmi-gazdasági kihívások a határ menti térségekben - Tanulmánykötet, SJE GTK – MÜTF, Komárno, 215 p., ISBN 978-80-8122-027-2
3. **Antalík I.** – Szabó, I. (2012) (szerk.): Társadalmi-gazdasági kihívások a határ menti térségekben - Absztraktkötet, SJE GTK – MÜTF, Komárno, 40 p., ISBN 978-80-8122-028-9
4. Sikos, T. T. - **Antalík, I.** - Szalai, P. (2010) (szerk.): Szellemi tőke, mint versenyelőny: avagy a tudásmenedzsment szerepe a versenyképességben, SJE GTK – Lifelong Learning Alapítvány – Harsányi János Szakkollégium, Komárno, 1200 p., ISBN 978-963-216-270-6

Other Publications

1. Andrásy, Zs. – **Antalík, I.** – Bődök, K. és mtsai. (2014): Baross Gábor Terv: Dél-Szlovákia/Felvidék regionális gazdasági fejlesztési terve. Szlovákiai Magyar Közgazdász Társaság, Győr, ISBN 978–80–971604–7-0.
2. **Antalík, I.** – Szabó, I. (2014): Applying information and communication Tools in teaching economics-related subjects (abstrakt) In: Modern education in the renewable energies for the Visegrad region, February, 9 - February, 11, 2012, Podkylava, Slovakia, p. 9., ISBN 978-80-552- 0800-8.

6. LIST OF RESEARCH PROJECTS

1. Inviter of the Project: International Visegrad Fund

Category: IVF – Cross-border cooperation

Project Leader: Dr. Poór József

Duration of the Project: July 2013. – December 2014.

Institutions: Szent István University, Gödöllő – J. Selye University, Komárno

Name of the Project: Employment – atypical employment in cross-border areas of Hungary and Slovakia

2. Inviter of the Project: Közösen Jövő Munkahelyeiért Alapítvány Kutatói pályázata (Research Fellowship of Foundation for Future Jobs)

Project Number: KJM 33022

Project Leader: Dr. Poór József

Duration of the Project: September 2012 – September 2013

Institution: Szent István University, Gödöllő

Name of the Project: Analytic research on forms of atypical employment to increase employment in the non-market sector and cross-border employment in the Komárno-Komárom region

3. Inviter of the Project: Szlovák Köztársaság Kormányhivatala (Government Offices of Slovakia)

Project Number: KNM-584/2013/1.1.10

Project Leader: Antalík Imrich

Duration of the Project: 1 January 2012 – 31 December 2013

Name of the Project: Situácia a východiská maďarskej menšiny na Slovensku z ekonomického hľadiska, výskum a analýza (Situation of and opportunities for Hungarian minorities and break-out points from an economic point of view – research and analysis)

4. Inviter of the Project: MTA DOMUS szülőföldi ösztöndíjprogram (HAS DOMUS Homeland Research Fellowship Program)

Duration of the Project: 1 October 2013 – 31 March 2014

Research Topic: Assessment of factors which influence competitiveness of small and medium-sized enterprises in the border region