Ekonomika Economics

Management Management
Inovace Innovation

COMPARISON OF THE DEVELOPMENT OF SMALL AND MEDIUM-SIZED ENTERPRISES IN THE OLOMOUC REGION IN THE CZECH REPUBLIC

Lucie Meixnerová

Moravian University College Olomouc, Department of Economics, Olomouc, Czech Republic lucie.meixnerova@mvso.cz

Roman Weiser

Moravian University College Olomouc, Olomouc, Czech Republic romanweiser11@gmail.com

Abstract:

The aim of this paper is to to analyze mutual relation of small and medium-sized enterprises in the Olomouc region and in the Czech Republic, which is described by factors related to population, employment rate and basic characteristics of business entities. The paper analyzes the mutual relation of small and medium-sized enterprises of the Olomouc region of the Czech Republic in the context of space and time and the factors that affect it. This article reflects the preferences of small and medium-sized enterprises which focus more on the regional markets having significant influence on the development activities of the region. The quantitative analysis of the research itself draws data from 1,050 business entities in the period 2009-2014 and confirms the growing number of small and medium-sized enterprises in the Czech Republic. Analysis indicated that number of companies and micro enterprises has the greatest influence on the development of enterprises of the Olomouc region and number of inhabitants has the weakest influence.

Key words:

Employees, gross domestic product, small and medium-sized enterprises, Olomouc region, population

JEL: M21, L25

1 Introduction

Considering the current development of small and medium-sized enterprises (SMEs), they play an irreplaceable role in the entire business sector. They have an important role not only in the regional but also in the economic development of regions and contribute significantly to the overall development of the country, especially because the SMEs compete against large enterprises and thus contribute to the increased market competition. Being on the market, they force large enterprises to improve continuously the quality of their products or services and they contribute positively to the end customer's satisfaction. As they are flexible, they are able to respond more quickly to any changes: legislative or tax, demand or supply or production processes. The SMEs respond to the current labor market situation quickly and flexibly. Furthermore, they are an important accelerator in science and innovation because it is much more difficult and more expensive to promote innovation in large, national, and international businesses.

The aim of this paper is to analyze mutual relation of SMEs in the context of the area (region) and time and factors by using knowledge of regional economics and business economics. The paper follows the research implemented at Moravian College Olomouc in the field of small and medium-sized enterprises Sikorová et al. (2013-2016). Currently, there is no similar research in the region and the paper



as well as the implemented research have become integral parts of the information and confirmation of business entities development in Olomouc region. This article extends the initial research authors Zaplatelová et al. (2015). Although the description of SMEs of the Olomouc region is well-elaborated in this article, in our opinion it lacks comparison of the regions in the Czech area. This article deals with the mutual relations of SMEs and selected factors of the Olomouc region and the Czech Republic. The data of the Olomouc region come from the quantitative survey of 1,050 SMEs and the database of the Czech Statistical Office. In the first part of the paper, small and medium-sized enterprises of the Olomouc region and in the Czech Republic are defined, including aspects of business in the regional country. The second part presents the results of the research conducted among the SMEs in the Czech Republic anfd in the Olomouc region in the period 2009-2014 and it is a comparison of their characteristic factors. The final part of the paper is the evaluation of the development of Czech business entities in the regional and national context.

2 The businesses in the regional and national context

A defining of the term "region" and its use is used both in daily discussions and in the scientific literature (Haig, 1926; Žítek, 2012). Following the definition of the regional sciences and regional economics new approaches are being searched for an evaluation of regional policy, emphasizing the increasing importance of education, innovation and they try to offer conditions for the functioning of enterprises in the regional environment where they get a certain advantage which they wouldn't gain in another region or in lesser extent (Morgan and Nauvelaers, 1999; Diez, 2001). Besides regional localization factors (technical infrastructure, workforce skills or building for business etc.) the categorization of business entities is an important characteristic, too (Kraftová and Prášilová, 2013). The law which sets out Czech legal regulation of regional development policy, it is the Act no. 248/2000 Coll. on regional development support, as subsequently amended. Although the frame of National Program for Integration of the Czech Republic into the European Union (EU), the Czech Republic committed to unify the small and middle-sized enterprises term definition with the European Union. For this reason, the Act no. 47/2002 Coll. concerning support of small and medium-sized enterprises was passed in the Czech Republic in 2002 which clearly defines the term of a small and middle-sized entrepreneur and accustoms this terminology with the norms valid within the EU (Commission of the European Communities, 2003; Zapletalová et al., 2015).

In the amended version since 1 January 2016 in the Czech Republic a new categorization of the accounting units came into force. The criteria by which businesses are divided remained the same as in previous years, i.e.the number of employees, an annual turnover and the value of assets but the accounting entity is classified in the appropriate category if it exceeds at least two of the three criteria (Zákon č. 563/1991 Sb., o účetnictví).

The micro accounting unit – employs less than 10 employees, its annual turnover does not exceed CZK18 million, or the annual balance sheet total does not exceed CZK9 million. It is independent.

The small accounting unit – employs less than 50 employees, its annual turnover does not exceed CZK100 million, or the annual balance sheet total does not exceed CZK200 million. It is independent.

The medium accounting unit – employs less than 50 employees, its annual turnover does not exceed CZK500 million, or the annual balance sheet total does not exceed CZK1000 million. It is independent.

As mentioned above, we have a new categorization in the Czech Republic for the micro, small and medium-sized enterprises and we use one name for all units as small and medium-sized enterprises (SMEs).

The SMEs play an important economic role in the national economy. The business entities have to perceive space and the surroundings of their region and lines of business is usually selected by the region which the entrepreneur is connected to. It is valid that the characteristics of a particular market are determined by regional specifics (Kraftová and Prášilová, 2013). Although the Czech Republic has a relatively small regional differences, which are lower than in many Western European countries, the

EMI, Vol. 8, Issue 3, 2016 ISSN: 1804-1299 (Print), 1805-353X (Online) www.emijournal.cz

Ekonomika Economics

Management Management
Inovace Innovation

Czech business environment of regions affected by a number of parameters, some of which can be quantified and thus facilitate their comparison. Causes of regional differences unwind from economic structure of the region, location of its area, its environmental conditions as well as interest or disinterest of governmental authorities. Moreover, these regional differences deepened in time, which was caused by developmental trends in regions. Deepening of interregional differences is influenced by population mobility, industry restructuring, unemployment, population qualifications, new business activities, and research and development allocation (Zapletalová et al., 2015). The benefit of SMEs in the regions is that they facilitate the development of cities and municipalities and complete the edge areas of business which big businesses do not seem to be interested in. Author Kraftová and Prášilová (2013) deals with the integrating of knowledge in the fields of regional business. In her study she used the data from the Czech Statistical Office and ESHA 1995 methodology. She examined the regional accounts indicators: the gross domestic product, the employees and employment rate when she analyzed all regions of the Czech Republic. A monograph, however, is the comparison of the regions without detailed analysis of individual regions and factors.

In the Czech Republic the regional business are studied in few monographic publications (Kraftová and Prášilová, 2013), (Lukeš and Jákl, 2012), (Srpová, 2004), (Stejskal and Kovárník, 2009), (Wokoun et al., 2008). These publications deal with the problems of praxis regional business only in sub-chapters and generally deal with these theme and dealing with general linking knowledge of microeconomics, business economics and regional science disciplines. The influence of the region in the context of the space is confirmed by various researches and studies nowadays (Acs and Armington, 2004), (Castellani et al., 2016), (Nistotskaya et al., 2015). The international role of SMEs is quite well researched and documented, as can be easily demonstrated by several studies (Nicolau, 2015), (Dixit and Kumar, 2011) or (Maria et al., 2008) and others. The research on this field is also traditional, as there are studies covering the area for more than 30 years, for example (Jinjoo and Young-suk 1986). All these papers state the importance of SMEs in GDP or GNP and employment. These studies also research the above mentioned issues on the national level, the level of the whole country. There are studies which brings in the topic of international and are connecting SMEs and their international links, such as the ownership (Chen et al., 2014) which is focused on debt costs or (Jinjoo and Young-suk, 1986) which is focused on behaviour and performance or (Majocchi and Zucchella, 2003) which is focused on performance. Or author Succurro and Mannarino (2013) focused on the impact of financial structure on SMEs probability of bankruptcy in Western Europe convergence regions. Author Majocchi et al. (2015) showed in their paper on the accounting data of a panel of 403 Italian manufacturing SMEs collected over a period of 5 years, they founded that multinationality per does not impact on the economic performance of international small and medium sized enterprprises.

The report on the development of small and medium-sized enterprises and its support in 2014, which is published annually by the Ministry of Industry and Trade (2015), shows that the business activity was performed by 99.84% of SMEs at the end of 2014. Their share in added value made 53.11% and their share of the total employment rate in the business sector reached 59.39% (more than 1.8 million employees) (Czech Invest, 2016). The above-mentioned data show the importance of SMEs in the Czech Republic-they participate from more than one-half in the added value that Czech companies produce during the year and they also provide jobs for more than half of those who are employed in the business sector.

According to the Czech Statistical Office (2016), Olomouc region belongs to long-term backward regions of the Czech Republic, even though certain development has been recorded in the past few years. However, in 2014 the Gross domestic product (GDP) per region capita reached only 77.67 % of the Czech Republic average. The main factor influencing GDP per capita is the labour productivity which is one of the lowest when compared to the Czech Republic average and in compare to GDP per capita of the EU-27, the Olomouc region has achieved sixty percent.



3 Methods

The primary objective of the research was to explore the development of business entities, small and medium-sized enterprises, in the Olomouc region and in the Czech Republic. With regard to the appointed research aim, a short-term research of primary information of descriptive character was chosen. A documentary data analysis was carried out and used as a basis for the research realization. The data were acquired via the database accessible on the web portal www.justice.cz which is managed by Telefónica O2 Business Solutions for the Ministry of Justice. Complementary information was acquired from the web pages of the companies (from their balance sheet and profit and loss account) and from official diallers and lists of the Czech Statistic Authority. The data of 1,050 companies in years 2009-2014 were acquired, cleaned, and the data of 895 entrepreneurial subjects were used for the research.

The respondents were selected based on the assumption and a casual choice. Based on the assumptions and with regard to the research aims the business entities were included in the research:

- the micro, small and medium-sized enterprises according to the categorization and valid Czech legislativ,
- the SMEs in the Olomouc region and in the Czech Republic.

With regard to the stated objective, the factors related to the development SMEs have been determined:

- the number of business entities, in paper marked "number_OR" for the Olomouc region and "number CR" for the Czech Republic,
- the number of micro, small and medium-sized enterprises, in paper marked "number_OR" for the Olomouc region and "number_CR" for the Czech Republic,
- the gross domestic product, in paper marked "GDP_OR" for the Olomouc region and "GDP_CR" for the Czech Republic",
- the number of employees, in paper marked "employees_OR" for the Olomouc region and "employees_CR" for the Czech Republic",
- the number of population, in paper marked "population_OR" for the Olomouc region and "population CR" for the Czech Republic",
- the year of the enterprise establishing,
- the field of activity.

Linking of the findings facilitates the understanding of current developments and the role of businesses in the context of time and space. The partial conclusions pointed out in the paper including the evaluation are influenced by both time periods and the research sample data. This research is still ongoing.

The qualitative data acquired in primary research were evaluated using Microsoft Office Excel, the SPSS 19 statistical software and methods of analysis, correlation, ANOVA, synthesis, induction, description and comparison. In order to find out the dependencies of the selected variables, the correlation analysis was used to find out the dependency intensity and the Pearson correlation coefficient, the form of which is determined (1), was used to confirm the relationship. Testing the hypothesis was at the level α - 0,01 (1%) a α - 0,05 (5%).

$$r = \frac{\sum_{i=1}^{n} (x_i - \tilde{x})(y_i - \tilde{y})}{\sqrt{\sum_{i=1}^{n} (x_i - \tilde{x})^2 \sum_{i=1}^{n} (y_i - \tilde{y})^2}}$$
(1)

where \tilde{x} and \tilde{y} are averages in the formula. As Fuller (1976) states, the coefficient values lie within the interval $\langle -1; 1 \rangle$. The value 0 expresses the independence among variables, the closer the value is to 1, the higher the degree of direct dependency is among the observed characteristics. In the case of negative values, on the contrary, there is an indirect dependency. More on the correlation analysis can be found in e.g. Brooks (2002) or Davidson and Mackinnon (1993).



4 Results

The aim of the analysis was to evaluate, on the basis of current knowledge, experience and abovementioned information, whether:

Hypothesis 1: There is a connection of development of SMEs in the Czech Republic and the Olomouc region between population (a), GDP (b), the number of SMEs employees (b) the number of SMEs (d) and the total number of employees (c).

Hypothesis 2: The size of business entities in the Olomouc region is affected by population (a), GDP (b), the number of SMEs (c) and the number of employees (d). All factors from the Olomouc region.

Development of the number of business enterprises

Figure 1 shows that there was a major increase in both new legal persons (about 33,933 enterpreneurs) and natural persons (about 25,662 entrepreneurs) in the years 2009 to 2011, in total we recorded an increase in the number of SMEs by 59,595 business entities in these years. As a current trend (from 2012 to 2014), it is possible to observe a decrease in the number of natural persons (about 37,135) but also there was an increase in the number of legal persons (18,297 entrepreneurs). Overall, during the period there was a reduction in the number of SMEs by 18,838 business entities. The period 2009 - 2014 can be described as successful in terms of the number of SMEs. There was an increase in the number of legal persons (by 8,590 entrepreneurs) and also an increase in the number of natural persons (by 37,946 entrepreneurs). In total, within five years there was an increase in the number of SMEs from the original 1,077,844 to 1,124,380, it is possible to observe an increase by 46,536 entities, which is approximately 4.32%. It can be stated that the increase in the number of entities since 2009, is also because of the European economy was recovering from the economic crisis which began in 2008. The conditions and opportunities for the business were improving each year. Nowadays, the business entities are an important part of the advanced economy. They are especially important for the society both in terms of the employment and the economic performance of the entire business.

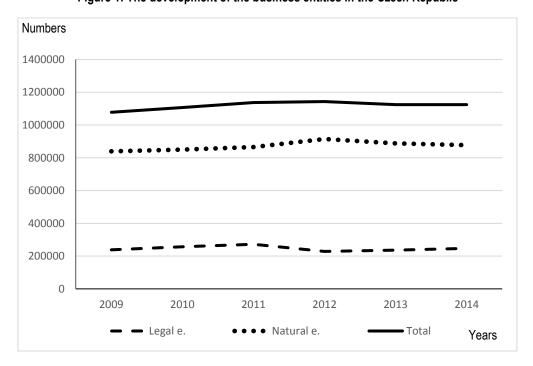


Figure 1: The development of the business entities in the Czech Republic

Source: Own calculations by the Ministry of Industry and Trade



Development of employment rate in the small and medium-sized enterprises in the Czech Republic As Figure 2 shows, the small and medium-sized enterprises employed about 1,893,000 people in 2009 which was about 61.1% of the total number of employees working in the business sector. In 2010 a decrease in total number of employees could be recorded which was caused by the economic crisis and resulted in a reduction of employees in the small and medium-sized enterprises which is not particularly significant. The SMEs employed about 60.6% of all employees in the business sector in that year. In 2011 a proportion of employees in small and medium-sized enterprises decreased to 59.9% because the European economy was still recovering from the economic crisis. The data from 2014 show that the total number of employees who found a job in small and medium-sized enterprises was 1,784 000. The ratio was about 59.4% that year. The decrease in total number of employees in the business sector in the monitored period is caused partly by the fact that there are generally more elderly people in the Czech Republic who gradually retire. On the other hand, at the present there are not many young people who would be able to and willing to work. The current trend is rather to extend the period of study and to delay one's start in the workforce as much as possible.

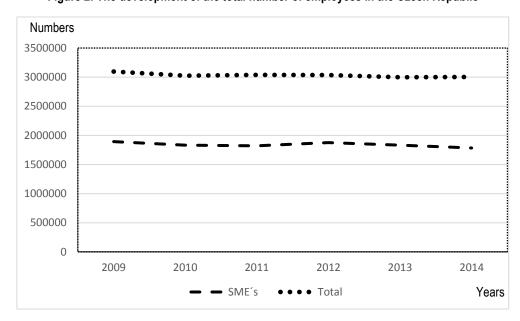


Figure 2: The development of the total number of employees in the Czech Republic

Source: Own calculations by the Ministry of Industry and Trade

Development of employment rate in the small and medium-sized enterprises in the Olomouc region Figure 3 shows a dividing of businesses into six groups and a finding to which extent they participate in the total number. The majority of small and medium-sized enterprises (namely 107) in the Olomouc region belongs to the group of 0-10 employees and with 53.5% is in the first place. Enterprises with 11 to 25 employees have the second largest proportion, with 23%. On the contrary, the enterprises with 200 or more employees are the least represented in the total number, reaching only 2.5%.

The Olomouc region can be characterized from the perspective of small and medium-sized enterprises as one of those where, in terms of a number of employees, micro and small-sized enterprises dominate. Enterprises with fewer than 25 employees participate in the total number of small and medium-sized enterprises from more than three quarters. We can say that the influence of these enterprises is quite significant. A large number of enterprises belong to the first group (0-10 employees) and it can be stated that there are many micro enterprises in the Olomouc region, i.e. small enterprises who mostly cannot afford to employ more people. It can be presumed that these enterprises are more flexible and able to respond better to the needs of customers, since they picked up the approach to clients and use the market gaps to which the big enterprises have no access. The micro, small and medium-sized



enterprises are more flexible. They better absorb the free work force and have higher productivity than large enterprises. They consolidate their place mainly due to the fact that big enterprises have no interest in their positions. At the same time the establishing of a business with more employees is very often associated with high costs for which starting or current entrepreneurs usually do not have enough financial resources.

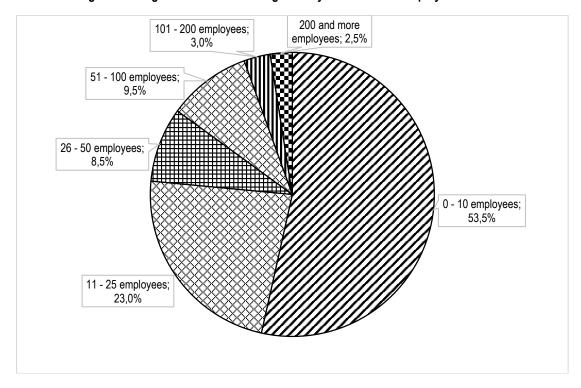


Figure 3: Categorization of accounting units by the number of employees

Source: Own calculations

Development of small and medium-sized enterprises in the Olomouc region

The analysis of the surveyed SMEs was divided into eight groups with the reference period between the years 1950-2014. Figure 4 gives evidence that the conditions for business were not favourable in the Czech Republic before 1990. From surveyed enterprises only one was established, namely the agricultural cooperative Unčovice in 1951. Just the opposite, according to the research, it was after the fall of communism between 1991-1993 when the most enterprises in the Olomouc region were established. In the period from 2000 to 2002 a proportion of overall established enterprises reached 15.1%. Subsequently, in the period from 2003 to 2005 26 enterprises were established (14.5%), almost the same amount as in the previous three years. 20 enterprises (11.2%) confirmed their establishment in the following years 2006-2008 and 13 enterprises (7.3%) were established in the last reported period 2009-2012.

As the analysis shows a number of newly established, small and medium-sized enterprises in the Olomouc region has a clearly decreasing trend, especially given the number of enterprises founded in the years 1991-1993 and 1993-1995. The subsequent reduction may be due to various factors of which the most likely one seems to be a competition - the more business entities there are on the market, the more difficult situation is for the new beginning ones, especially when they do not have a unique business plan or a larger amount of financial recourses.

Another reason can also be the economic stagnation or crisis. During the crisis, even stable and large enterprises experience numerous problems so it is rather unrealistic that new enterprises would be established. The economic crisis is defined particularly by a reducing demand which is crucial for most



enterprises. The consequences of the economic crisis are obvious between 2009-2012. Despite the fact that the surveyed period is even one year longer than others, the number of newly established enterprises is the lowest from all groups (since 1991). The high number of established enterprises in the years 1991-1993, with regard to the other periods, was due to elimination of the legislative barriers which stood entrepreneurs in the way by this time. Another factor was certainly the massively growing demand when people were particularly interested in the goods that were not available during the previous regime. The analysis emphasizes political and economic optimism that was apparent in our country at that time.

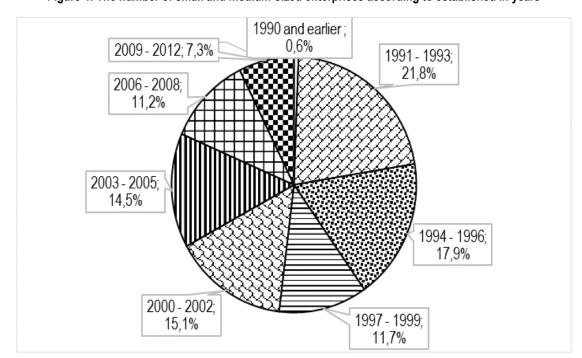


Figure 4: The number of small and medium-sized enterprises according to established in years

Source: Own calculations

4.1 Statistical evaluation

Hypothesis 1: There is a connection of development of SMEs in the Czech Republic (CR) and the Olomouc region (OR) between population (a), GDP (b), the number of SMEs employees (b) the number of SMEs (d) and the total number of employees (c), Table 1 shows their correlations.



Table 1: Correlation between factors 1

		Popula tion_O R	Population _CR	DP_OR	DP_CR	Number_ CR	Number_O R	Employe es_CR	Employ ees _OR
Population_ OR	Pearson Correlation Sig. (2- tailed)	1	-,525	,928	,875	-,726	-,616	,583	,347
			,284	008	022	,102	,193	,022	,500
	N	6	6			6	6	6	6
Population_ CR	Pearson Correlation	-,525	1	684	702	,348	,433	-,684	-,616
	Sig. (2-tailed)	,284		013	012	,048	,039	,134	,193
	N ,	6	6			6	6	6	6
GDP_OR GDP_CR	Pearson Correlation	-,928	,684	1	969	,693	,697	-,745	-,358
	Sig. (2- tailed)	,008	,013		001	,012	,012	,089	,485
	N	6	6			6	6	6	6
	Pearson Correlation	-,875	,702	969		,494	,628	-,763	-,317
	Sig. (2-tailed)	,022	,012	001		,031	,018	,077	,540
	N ,	6	6			6	6	6	6
Number_CR	Pearson Correlation	-,726	,348	693	494	1	,655	-,421	-,379
	Sig. (2-tailed)	,102	,048	012	319		,015	,405	,459
	N	6	6			6	6	6	6
Number_OR	Pearson Correlation	-,616	,433	697	628	,655	1	-,904	-,709
	Sig. (2- tailed)	,193	,039	012	018	,015		,013	,115
	N ´	6	6			6	6	6	6
Employees_ CR	Pearson Correlation	,583	-,684	,745	,763	-,421	-,904	1	,731
	Sig. (2-tailed)	,022	,134	089	077	,405	,013		,009
	N	6	6			6	6	6	6
Employees _OR	Pearson Correlation	,347	-,616	,358	,317	-,379	-,709	,731	1
	Sig. (2-tailed)	,500	,193	485	540	,459	,115	,099	
	N	6	6			6	6	6	6

Source: Own calculations

Very strong dependence (R=0.702) is between the variables – population in the Czech Republic and GDP in Czech and weak dependence (R=0.347) is between the variables number of emploeeys in OR and population in OR. There are other dependencies between the population and number of emploeeys in CR and OR, all significance is less then 0.05 and therefore the results are statistically significant. This is confirmed that the number of employees is depends on the population in CR and OR. And confirms the interest of the population live in this country. Futher is confirmed by the dependence of the number of companies in the CR and OR on the GDP. The annual increase in the number of SMEs can be explained by the fact that the conditions are becoming better for the business year by year. There is a gradual reduction in claims on starting entrepreneurs or the amount of so-called start-up programs



that are aimed to help starting entrepreneurs, no matter whether they are consultancy services, providing contacts, favourable loans or other forms of assistance. In the Olomouc region the number of SMEs and an interest of people to live and work in the region is an important indicator. A space for business entities is thus created in a variety of their activities and in the development of the field in this region.

Hypothesis 2: The size of business entities in the Olomouc region is affected by population (a), GDP (b), the number of SMEs (c) and the number of employees (d). Table 2 shows their correlations.

Table 2: Correlation between factors 2

		Population	GDP	Numbers	Employees
Population	Pearson Correlation	1	-,928	-,616	,347
	Sig.(2-tailed)		,008	,193	,050
	N	6	6	6	6
GDP	Pearson Correlation	-,928	1	,697	-,358
	Sig. (2-tailed)	,008		,012	,485
	N	6	6	6	6
Numbers	Pearson Correlation	-,616	,697	1	-,709
	Sig. (2-tailed)	,193	,012		,115
	N	6	6	6	6
Employees	Pearson Correlation	,347	-,358	-,709	1
	Sig. (2-tailed)	,050	,485	,115	
	N	6	6	6	6

Source: Own calculations

A field of activity was found that on the one hand is very strong dependency between the numbers of companies and GDP (R = 0,697) and on the other hand is a weak relationship between variables - number of employees and population (R = 0,347). Significance is less than 0,05, and therefore the results are statistically significant. This is confirmed that the number of companies contributes significantly to the GDP and growth of companies is connected with the development of enterprises. Statistical weakest influence has number of population and since the population is the main element and holder of the economic and social activities in the region, it is very worrying that the number of inhabitants is declining. The population is declining, and this can have a negative impact on the society as a whole. The Olomouc region should focus on keeping population on its territory, searching measures to maintain primarily young and educated persons as well as providing the public support in terms of e.g. social and public services in the region.

Table 3 shows ANOVA test and that there exists a positive dependency between numbers of companies and GDP. It has been confirmed that numbers of companies are an important the keystone of GDP. Small and medium-sized enterprises are an important part of the advanced economy. They are especially important for the society both in terms of the employment and the economic performance of the entire business.



Table 3: ANOVAoutput

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	8225965488	1	8225965488	295,154825	0,0009	3,9646
Within Groups	278700017	10	27870001,7			
Total	8504665505	11				

Source: Own calculations

In order to determine the potential of SMEs, it is necessary to perform a deeper analysis, including other regions of the country, since each region has a different development potential and is not made up of the same factors, conditions and characteristics. The prediction of the future development of the following years is dependent on a number of key economic variables (GDP, investment, business or production development) as well as on the analysis of book values of the enterprise in the monitored period in connection with the last data. with the level of economic development of the region and the country.

5 Conclusion

The economic environment of small and medium-sized enterprises at a regional and country level is described by factors related to population, employment rate and descriptive characteristics of enterprises. When we compare context of the development the Olomouc region and the Czech Republic according to the statistical significance and correlation coefficient so there are strong links between variables: number of emploeeys and population and number of SMEs.

The conducted analysis shows that in the years 2009-2014 the number of registered subjects slightly increased. Business entities are very important for the Czech Republic and it should necessarily focus on the support of these business entities, their needs, spheres of their development and innovation. At the same time, it should provide the services which will help small and medium-sized enterprises to develop their potential. The overall strengthening of entrepreneurship in the region can have an influence on the improvement of the status of the region, which will improve the economy of the region and, at the same time, the region will become attractive for potential investors.

This paper shows a favourable business environment in the Olomouc region for the development of micro, small and medium-sized enterprises which is influenced by improving of business conditions in the legislative, social, accountant and social field. Is apparent that the development of SMEs is associated with households, where individuals or groups of people have their own business activities associated with the level of economic development of the region and the country. An analysis of 895 business entities (after statistical adjustment) showed that the most enterprises were established during the period from 1991 to 1993 which confirms that establishing of enterprises was unusual before 1990 because of the political situation of that time. The most business entities in the Olomouc region were established after the fall of communism, i.e. between 1991-1993. Analysis indicated that number of companies and micro enterprises has the greatest influence on the development of enterprises of the Olomouc region and number of population has the weakest influence. It can be stated that particularly these micro enterprises focus on the regional market and support the development of the Olomouc region.

EMI, Vol. 8, Issue 3, 2016 ISSN: 1804-1299 (Print), 1805-353X (Online) www.emijournal.cz

References

- [1] Acs, Z. J., Armington, C. (2004). Employment growth and entrepreneurial activity in cities. *Regional Studies*. 38(9), 911-927.
- [2] Brooks, CH. (2002). Introductory econometrics for finance. Cambridge: Cambridge Press. ISBN 978-0521793674.
- [3] Castellani D., Meliciani V., Mirra L. (2016). The Determinants of Inward Foreign Direct Investment in Business Services across European Regions. *Regional studies*. 50(4), 671-691.
- [4] Chen, D., Shujun, D., Zhenyu, W. (2014). Effect of foreign ownership on cost of borrowing: Evidence from small and medium-sized enterprises in China. *International Small Business Journal*. 32(6), 693-715.
- [5] Commission of the European Communities (2003). Green Paper Entrepreneurship in Europe. In Enterprise Editor: Enterprise Publications.
- [6] Czech Invest (2016). Definice malého a středního podnikatele. [cit. 2016-03-23]. Retrieved from http://www.czechinvest.org/definice-msp.
- [7] Czech Statistical Office (2016). HDP, regionální účty. [cit. 2016-05-29]. Retrieved from https://www.czso.cz/csu/xm/hdp-xm.
- [8] Davidson, R., Mackinnon, J. G. (1993). Estimation and Inference in Econometric. NewYork: Oxford University Press. ISBN 0-19506-011-3.
- [9] Diez M. A. (2001). New Approaches to Evaluating Regional Policy. *The Potential of a Theory-Based Approach*. 9(7), 907-923.
- [10] Dixit, A., Pandey, Kumar, A. P. (2011). SMEs and Economic Growth in India: Cointegration Analysis. *IUP Journal of Financial Economics*. 9(2), 41-59.
- [11] Fuller, W. A. (1976). Introduction to Statistical Time Series. 2nd ed. New York: John Wiley. ISBN 0-471-55239-9.
- [12] Haigh, R. M. (1926). Towards an Understanding of the Metropolis. *The Quaterly Journal of Economics*. 40(3), 402-434.
- [13] Jinjoo, L., Young-suk, H. (1986). Small and Medium-Sized Japanese Joint Venturtes in Korea. *EMAJ: Emerging Markets Journal*. 5(1), 26-40.
- [14] Kraftová, I., Prášilová, P. (2013). Prosperující podnik v regionálním kontextu. Praha: Wolters kluwer ČR. ISBN 978-80-7357-989-0.
- [15] Lukeš, M., Jákl, M. (2012). Podnikání v České republice. Praha: Vysoká škola ekonomická. ISBN 978-80-245-1884-8.
- [16] Majocchi, A., Dalla Valle, L., D'Angelo, A. (2015). Internationalisation, cultural distance and country characteristics: a bayesian analysis of SMEs financial performance. *Journal of Business Economics and Management*. 16(2), 307-324.
- [17] Majocchi, A., Zucchella, A. (2003). Internationalization and performance findings from a set of Italian SMEs. *International Small Business Journal*. 3, 249-268.
- [18] Maria, N. R., Spulbar, C. M., Buziernescu, R. (2008). Considerations regarding growing financing capacity of SME's. *Annals Of The University Of Oradea, Economic Science Series.* 17(3), 380-385.
- [19] Makoto, N., Nguyen, P. (2013). Foreign ownership and firm performance: evidence from Japan's electronics industry. *Applied Financial Economics*. 23(1), 41-50.
- [20] Ministry of Industry and Trade (2015). Zpráva o vývoji malého a středního podnikání a jeho podpoře v roce 2014. [cit. 2015-10-05]. Retrieved from http://www.mpo.cz/dokument164106.html
- [21] Morgan, K., Nauvelaers, C. (1999). Regional Innovation Strategies: The Challenge for Less-Favored Regions. Regions, Cities and Public Policy Series. London: The Stationery Office and the Regional Studies Association.
- [22] Nicolau, C. (2015). Are SMEs still profitable in an economic crisis? Qualitative research on Romanian entrepreneurship and crisis management. *Bulletin Of The Transilvania University Of Brasov. Series V: Economic Sciences.* 8(2), 217-232.

EMI, Vol. 8, Issue 3, 2016 ISSN: 1804-1299 (Print), 1805-353X (Online) www.emijournal.cz

[23] Nistotskaya, M., Charron, N., Lapuente, V. (2015). The wealth of regions: quality of government and SMEs in 172 European regions. *Environment and planning c-government and policy*. 33(5), 1125-1155.

- [24] Sikorová, E., Meixnerová, L., Menšík, M., Pászto, V. (2015). Descriptive Analysis and Spatial Projection of Performance among the Small and Middle Enterprises in the Olomouc Region in the Czech Republic in the Context of Accounting and Tax Legislation. *Procedia Economics and Finance*. 34, 528-534.
- [25] Sikorová, E., Meixnerová, L., Novák, P., Menšík, M. (2015). Business, financial, accounting and legislative aspects of development of small and medium-sized enterprises in the Czech Republic. *In Proceedings of the 17th International Scientific Conference FINANCE AND RISK 2015.* 1, 125-135.
- [26] Srpová, J. (2004). Analýza současného postavení MSP v ČR. Pokrok ve výzkumu malých a středních podniků v ČR a na Slovensku, kulatý stůl. Praha: VŠE. ISBN 80-245-0739-0.
- [27] Stejkal, J., Kovárník, J. (2009). Regionální politika a její nástroje e-kniha. ISBN 978-80-7367-588-2.
- [28] Succurro, M., Mannarino, L. (2013). The impact of financial structure on firms probability of bankruptcy: A comparison across western Europe convergence regions. *Journal of Banking and Finance*. 37(11), 4073-4086.
- [29] Wokoun, R., Malinovský, J., Damborský, M., Blažek, L. et al. (2008). Regionální rozvoj (Východiska regionálního rozvoje, regionální politika, teorie, strategie a programování. Praha: Linde. ISBN 978-80-7201-699-0.
- [30] Zapletalová, Š., Meixnerová, L., Menšík, M., Pászto, V., Sikorová, E. (2015). Character of Entrepreneurial Subjects in Olomouc Region. *Economics Management Innovation*. 7(3), 21-31.
- [31] Zákon č. 563/1991 Sb., o účetnictví, ve znění pozdějších předpisů.
- [32] Žítek, V. (2012). Regionální politika a trvale udržitelný rozvoj. *In Udržitelný rozvoj a funkce moderního evropského státu*. České Budějovice: Vysoká škola evropských a regionálních studií, 26-30.