

DETERMINANTS OF REGIONAL BUSINESS ENVIRONMENT IN CZECH REPUBLIC: AN EXPERT DILEMMA

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Abstract. The main goal of this paper is to evaluate regional business environment in Moravian-Silesian region (Czech Republic). The results are based on qualitative survey among experts on selected factor rating. A comparison is made with previous quantitative survey results among entrepreneurs. Questionnaire-based research was undertaken within 215 organizations of various legal forms operating in the area of the Moravian-Silesian Region in 2015. Considering the results of the expert evaluation, a summarizing conclusion has been made that the most essential factors of external business environment are as follows: quality of business environment, the level of cooperation and influence of tertiary education on business development.

Key words: entrepreneurship, experts, Moravian-Silesian region regional environment.

Introduction

In current changing economic environment of the world, characterized by continuous structural changes and competitive pressures, the importance of small and medium sized enterprises (SMEs) has increased in many regions. The sector of small and medium sized enterprises in regional economy plays a very important role; it is the driving force of growth and innovation. Recent literature and research studies focus significantly on measuring turbulence in the industry (Baptista, Thurik 2007; Stacey et al. 2000), based on the start-up and exit rate of emerging companies and the relationship between GDP growth and company ownership (Carree, Thurik 2008; Močník 2009). The last few decades brought more opportunities to use strategic and creative thinking and apply its flexible implementation on market failures, which come not only from final customers but from threats within new technologies and these factors

together apply pressure on factors which came from business environment (Evans 1991; Grewal, Tansuhaj 2001; Drucker 2008).

A positive relationship between the regional level of start-ups and subsequent strategic growth within positive sense of business environment was confirmed in several countries like United Kingdom (Ashcroft, Love 1996), United States and Sweden (Acs, Armington 2002). But a number of other studies could not identify such a positive relationship between the level of start-ups and regional employment, growth and business strategy (Audretsch, Fritsch 1994; Fritsch 1996, 1997). Therefore, the main goal of this paper is to present the main results of the qualitative research based on a case study from Moravian-Silesian region (Czech Republic). It describes a current situation, and experts play the role of a tie between local government advisors and consultants for local SMEs, so they need to deal with day-by-day dilemma, which institutions or entities will be criticised or supported in their evaluation and how they differ from “mainstream” opinion.

1. Dilemma of business environment evaluation

Entrepreneurship is based on decision making in an environment full of uncertainty whilst pushing businesses into an innovative but risky strategy application and finally acquiring new knowledge (Nijkamp 2003). Most previous studies simply describe the effect of new business formation activity using a performance measure with some control variables based on macroeconomic data; however, some studies have applied an explicit production function framework that also contains indicators for the contribution of other inputs to growth and regional development (Wong et al. 2005; Audretsch, Keilbach 2004; Audretsch et al. 2006). Business success is one of non-financial indicators how to measure the stability of a company and successful regional business policy.

The main cause of business decline (mostly in 45 % of cases) is based on incompetence of the owners or managers responsible for its creation (Evans 1991; Bocatto 2002; Altman et al. 2010). Here arises a conflict perspective on corporate strategy from the perspective of the owner or an authorized manager and final solution to the dilemma of the relationship owner – external expert in role of consultant (De Alwis 2010). Experts need to solve many dilemmas to play a role of mediator between policy makers in chosen region and entrepreneurs. Entrepreneurs expect that experts could change current political and legislative barriers in area of entrepreneurship; on the other hand policy makers expect full support for their SME policy. Finally they solve internal dilemmas how to evaluate current state of business environment, such as (Šebestová, Cooney 2011):

- the dilemma of ethics and business. It is necessary to do good things or things correctly as in role of entrepreneur? It is really good to combine both roles, i.e. professionalism and entrepreneurial role?,
- the dilemma of choosing strategic partners. Is it better to advice own

- philosophy of life or involve more people to prepare unique strategy?
- the dilemma of survival and growth. What managerial skills and business strategies are necessary in a competitive environment? The growth and development of the company is good or vice versa will endanger the quality of products or services? How can we distinguish the service to be perceived as “niche”? How to recognize that the business is getting out of hand and need to seek professional help? How to resist external threats and make use of it challenges the market opportunity arises?
- the dilemma of financial management for innovation and control. Which external financial resources we will recommend? What kind of innovation will be beneficial for the company? Will bring our advice sustainable competitive advantage for the enterprise?

Finally, regional business environment represents the supportive infrastructure for entrepreneurship such as entrepreneurship-friendly laws and regulations in the area of establishing a business, the existence of supporting services for business founders as well as for established firms. Spatial analysis is needed to find deeper connections with the location of the company and their local business condition to evaluate regional business environment in the Moravian-Silesian Region, Czech Republic.

2. Experts dilemma: the case of Moravian-Silesian region

The key task of the questionnaire based research is to ascertain the respondents’ awareness of and attitudes towards the basic elements of cooperation between the region – municipality and the entrepreneur and the definition of factors influencing small and medium-sized enterprises in the Moravian-Silesian (MS) Region (Figure 1). We used two layer analyses – one layer was qualitative research between randomly chosen experts, then we compared their opinion with the field study between entrepreneurs.

Figure 1. Location of Moravian-Silesian region



The Moravian-Silesian region, as the fourth largest regional economy according to a RIM Plus (2014) generated 10,2% of the national GDP, and reached 97% of the national average of GDP in PPS per the employed, the second highest value in the Czech Republic. Despite the modernisation of many companies, the innovation activities in the business sector are rather below-average. The region consists from 6 districts (LAU 1) which are also different in socioeconomic indicators. Socioeconomic indicators evaluated in Table 1 are presented in the form of Index (I), where indicator data were compared to year 2007 as a baseline:

$$Index_{2007/2014} = \frac{Indicator_{2014} - Indicator_{2007}}{Indicator_{2007}} * 100[\%] \quad (1)$$

The main weakness of the examined region is index of migration, i.e. the population of the region is still decreasing, comparing with the year 2007. The same situation could be seen in productivity, measured by regional gross value added with the same trend.

Table 1. Regional macroeconomic indicators 2007-2014

Macroeconomic impacts (GDP contribution and other macroeconomic indicators)	Index 2007/2014	Socioeconomic impacts and linkages (education, employment)	Index 2007/2014
GDP growth	8.5 %	Wages and Salaries	4.0 %
Disposable income of private households	33.3 %	Employment rate	2.1 %
Real growth rate of regional gross value added (GVA)	-141.9 %	Unemployment rate	1.2 %
		Tertiary educational attainment, age group 25-64	42.7 %
		Business units	-69.1 %
Community impacts (changes in settlement, social structure, migration)	Index 2007/2014	Environmental impacts	Index 2007/2014
Migration	-280 %	Population connected to wastewater collection and treatment systems	5.7 %
Population growth	-2.6 %	Environmental protection expenditure	28.70 %
People at risk of poverty or social exclusion	-3.0 %		
Total patents – inventors	3 %		
Researchers	29 %		

Source: Czech statistical office 2015.

The Moravian-Silesian region is traditionally considered as a problematic region. In the past fairly major structural changes underwent which were followed by a higher unemployment rate and a higher proportion of long-term unemployment, compared with other Czech regions (Adámek et al. 2015). Addi-

tionally, many business units shift their residence into more attractive locations (decrease in number of business units).

2.1. Description of qualitative research results

Our qualitative research was based on personal visit of an expert (after previous appointment) and the structured interview was conducted. The advantage of this method was the scientific objectivity and data accuracy (getting real feelings about current treats from business environment). Applying the qualitative method of the expert evaluation, recommendable number of the experts can range from 10 to 100 people (Vasauskaite 2013). Competence and impartiality of the experts were considered while making the sample. In our case more than 40 experts, whose activity is related to the start-ups, consultancy work, life-long entrepreneurship education were randomly included in the research, but only 11 of them completed our structured interview. Correlation between the variables was researched using Pearson correlation coefficient. The results presented are influenced by final size of an expert panel. Factor evaluation could help to compare a survey data with that group, in that case as pilot group of experts.

First of all, we evaluated their opinion on positive and negative factor, which have influence on a business success in Moravian-Silesian region. Expert’s opinions on these arguments were evaluated below as a number of responses. We filtered the most important factors from those interviews.

Table 2. Summary of positive and negative factors in key areas of business environment

	Number of responses	+
Low labour costs	4	++++
Region location	3	+++
Industrial and technical background	3	+++
Universities	3	+++
Transport infrastructure	6	++++ --
Landscape suitable for recreation	2	++
Human potential	2	++
IT technologies	1	+
Low operating costs	1	+ -
Knowledge of the environment	1	+
Subsidies and investment incentives	2	+ -
Educated workforce	2	+ -
Level of entrepreneurship	3	+ --
Tax burden	1	-
Lack of specifically educated people	1	-

Low wages, salaries	1	-
Environment	1	-
Bureaucracy	2	--
Region image	2	--
Unemployment	2	--
Entrepreneurial literacy, education	2	--
Brain drain	4	----
Promotion of entrepreneurship	4	----
		-

Source: own research

If we compare the results from Table 1, we could see the first dilemma in area of human capital development. In the first place we see attractive factor of low labour costs for potential investors. On the other hand, they made the comment on lack of educated people and low wages. This is in conflict with current regional policy of Moravian-Silesian region called “Smarter Region” 2014-2020. In this policy the priorities are given to the education and increase of wages.

The second part of standardized interview was based on evaluation of several areas which were compatible with questionnaire for entrepreneurs. Experts used ordinal scale, when one means “I agree”, and five “I do not agree”.

Table 3. Factors influencing quality of business environment

		Mean	Standard deviation	Skewness		Kurtosis	
		Statistic	Statistic	Statistic	Standard error	Statistic	Standard error
1	Quality of infrastructure	2,00	0,894	1,025*	,661	1,563#	1,279
2	Tax burdens	2,09	1,04	1,074*	,661	,581#	1,279
3	SMEs have positive reputation	2,36	,674	1,800*	,661	2,611+	1,279
4	Support of R&D	2,63	,809	,847*	,661	-,764##	1,279
5	B2C market is different to other regions	2,81	1,16	,422*	,661	-,293###	1,279
6	Qualified labour force	2,90	1,30	,201*	,661	-1,507#	1,279
7	B2B market is different to other regions	3,09	1,13	-,211**	,661	-,065#	1,279
8	Start-up and spin-off are usual	3,36	1,02	-,229**	,661	-1,134###	1,279

9	Number of private investors	3,36	1,02	-,229**	,661	-1,134##	1,279
10	Quality of SME support	3,63	0,924	-,951**	,661	,373#	1,279
11	SME gazelles dominating	3,63	1,02	-,448**	,661	-,594##	1,279
12	Cooperation between universities and SMEs	4,09	1,22	-1,012**	,661	-,559##	1,279

* slight positive skew, **slight negative skew, #slight peak (leptokurtic), ## light flatness (platykurtic), + extreme flatness (Platykurtic)

Source: own research data

When we examine variable distribution (skewness), first six factors have slight positive skew; unfortunately, most of them have a negative skew. The most negative tie we observed in factors 10-12 (Quality of support, SME gazelles, and weak cooperation). Detailed analysis found relationship between there areas – cooperation, B2B market and SME reputation. Those factors are closely connected with expert’s dilemmas mentioned in section 1. Confirmation of those ties was made by Pearson correlation coefficient at significance level of $p < 0.05$.

Table 4. Correlation matrix of significant factors

		Start-up and spin-off are usual	Number of private investors	Qualified labour force	Quality of infrastructure	B2B market is different to other regions	B2C market is different to other regions
Cooperation between universities and SMEs	Pearson Correlation	,131	,290	,636*	,092	,066	,013
	Sig. (2-tailed)	,702	,387	,036	,789	,848	,970
B2B market is different to other regions	Pearson Correlation	,312	-,203	,412	,689*	1	,843**
	Sig. (2-tailed)	,351	,550	,208	,019		,001
SMEs have positive reputation	Pearson Correlation	,657*	-,643*	,041	,829**	,605*	,600
	Sig. (2-tailed)	,028	,033	,904	,002	,048	,051

*significance at level of $p < 0.05$, ** significance at level of $p < 0.01$

Source: own research data

2.2. Entrepreneurs evaluation

The second layer of our research was based on the field study. Original sample size consists of 215 respondents (when the minimum was computed on 153 respondents); the sample was representative to the original structure

of businesses in the region in 2015 (Czech statistical office 2015). Researchers conducted several random checks for internal consistency in responses when Cronbach's Alpha was in whole sample 0.845. In accordance with the previously mentioned results, we compared our main findings with entrepreneurial opinion, where the most important factors are summarized in the Table 5. We used the Likert scale (5 – the worst, 1- the best) for evaluation. Most factors with the higher mark in the responses (top five), have the same rate of standard deviation (fluctuation) in the responses. The more stable group is to be seen in the last five factors which have a minimum rate of deviation.

Table 5. Significant factors influencing business behaviour

Top 5	Mean	Standard deviation	Last 5	Mean	Standard deviation
Quality of labour force*	2.03	1.396	Cluster cooperation*	2.66	.190
Ample number of customers	2.10	1.442	Regional export support*	2.68	.171
Legislation*	1.92	1.138	Brownfield regeneration policy*	2.81	.171
Local Bureaucracy*	1.89	1.193	Lack of alternative financial sources*	2.90	.122
Location in region	1.87	1.253	Available housing for employees*	3.13	.122

* means statistical significance at level of $p < 0.05$

Source: Šebestová 2015.

When we compare Tables 3 and 5 we can assume that experts and entrepreneurs had quite similar responses in the area of labour force, financial sources and SME support. It seems that experts are closely connected with entrepreneurial life and they know their common problems. If we compare these results with some international studies like the Lithuanians (Vasauskaite 2013), there is the same tie and significance in area of support and financial resources. This comparison confirmed that experts still solve dilemma “how” to evaluate current situation in regional business environment. It seems that experts support more entrepreneurial community than regional business policymakers. Finally, the last dilemma came what is better – to support entrepreneurs' opinion or try to make changes in level of regional governmental policy.

Conclusions

Presented determinants based on survey was supported by socioeconomic indicator as migration growth, decrease in number of business units in region or decline in real added value. It seems that they made regional business environment less favorable for business development. Utilization of the expert panel in this research was very interesting supplement to the classical quantitative

research within entrepreneurial community. There is, however, a limitation of presented study in the size of current expert panel and examined area. But when the standardized questionnaire is used, it is possible to prepare comparable data from other regions of the Czech Republic. On the other hand, experts are very good counselors for small business owners. Many of them had their private entrepreneurial history, so it is so important to connect their experience and knowledge with feelings and sensitiveness of current business owners to push them into the success.

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