REGIONAL ENTREPRENEURSHIP CULTURE AND THE BUSINESS LIFECYCLE: PATTERNS FROM THE MORAVIAN-SILESIAN REGION

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Abstract


The main goal of the paper is to focus on relationship between business cycle under regional entrepreneurial culture. Many of the trends found were less than positive, although there were some new positive trends that could be identified as a source of sustainability in the area of the connection between the sector of small and medium sized enterprises and the local entrepreneurship environment as well as a source of entrepreneurial culture. Moreover, the frequency of co-operational activities with local government was investigated. Questionnaire-based research was undertaken within 194 organizations of various legal forms operating in the area of the Moravian-Silesian Region. The main factors, which had an influence on their current business stage (49.5% in the growth stage, 9.8% in stagnation, 31.96% in decline and the other 0.52% in crisis), were the locality in the region, the quality of the labour force, cooperation with local public bodies and the business relationships between suppliers. Finally, we have defined the current stage of the entrepreneurial culture as the “Sandbox”.

Keywords: business culture, business stage, cooperation, entrepreneurship, Moravian-Silesian region, local government, policy layer

INTRODUCTION

Locally embedded values and attitudes towards entrepreneurship exert a strong influence on the rate and level of entrepreneurial activity in regions. The concept of the regional entrepreneurship culture aims to capture such a phenomenon, and refers in a general sense to the level of social acceptance and encouragement of entrepreneurs and their activities in a region (Beugelsdijk, 2007; Audretsch, Keilbach, 2004; Westlund, Bolton, 2003). A historically rooted social acceptance of entrepreneurship in a region may thus influence entrepreneurship in a direct way, but also in an indirect way through long-term influence on the ‘formal rules of the game’ in the region as well as ‘playing the game’ (Andersson, 2012).

In the past decades, an increase in interest could be found in examining the relationship between entrepreneurship in society and shifting forces coming from local government and public and private organizations. Policy makers place great emphasis on supporting the outcomes of entrepreneurship, because this generates economic development in the examined area. Little is known about the influence of entrepreneurship on economic performance of the region (Wennekers, Thurik, 1999; Toma, Grigore and Marinescu, 2014).

The main goal of this paper is to highlight the relationship between the business lifecycle in the sector of small and medium sized entrepreneurs, when their contribution to the economic structure is almost 99% of active business units (CSO, 2015). The paper is divided into three parts. The first part is focused on the relationship between entrepreneurship and the entrepreneurial culture – a two layered model is defined. The second part is presented by own research findings within
Entrepreneurship and the Entrepreneurial Culture

Entrepreneurship based on tradition and the appropriate culture represents the centre of the functioning of market economies (Baum et al., 2007). A country and its entrepreneurial tradition may well identify specific factors, which have an influence on public policy success. Governmental policies are crucial, because they set the rules for “playing” in the market (High, 2009). Entrepreneurial culture affects the political preferences of an entrepreneur, i.e. what the government should do and how it will regulate the market and support SMEs (Guiso et al., 2006). If we adopt not only the classical “behavioral” definition of entrepreneurship (Schumpeter, 1911; Kirzner, 1973), but other viewpoints such as the creative human process, we would be able to find other patterns for the evaluation of the relationship such as chaos, contraindication and confusion (Toma, Grigore and Marinescu, 2014).

For years policy makers have paid great attention to supporting and encouraging entrepreneurship and for this reason they often modify their approach and initiatives according to the economic cycle (Spar, 2001; Wennekers et al., 2002; Petty, Bonardi, 2006) through tax reductions and education (Poterba, 1989; Verheul et al., 2002). Previous studies showed a much broader view in this initiative in the national and regional context (Lundström, Stevenson, 2005, 2008; Zahra, Wright, 2011). The impact of this situation is well documented and reduces the level of uncertainty for entrepreneurs, but the whole connection must produce more entrepreneurial activity and progress, which predominately supports start-up stages, but not a transition among the lifecycle stages of businesses (Freytag, Thunk, 2006; Petty, Bonardi, 2006).

We focus on relationships between policy makers as active players in the regional entrepreneurial culture quality and lifecycle stages of business units rather than examining tools promoting entrepreneurial activities. Finally, we are able to evaluate the current stage of the “culture” in the examined region, according to Petty and Bonardi (2006). It reflects five types of environments, basically influenced by traditions, culture, and actual regional policy, where the relationship is compared via the cooperation between an Institution and Policy.

These cultures are divided as follows:

- **Type A (The Jungle)** is characterized by a low level or total absence of institutions reducing market uncertainty as well as a low level or total absence of policies to incentivize entrepreneurship. This will make it difficult to attract entrepreneurs. A low level of growth is typical in this case.

- **Type B (The Pitch)** could be seen as a developed institutional framework that enables entrepreneurs to exploit opportunities and develop a business but at the same time lacks external incentives to pursue the same, this will be attractive to market driven entrepreneurs. This environment may be perceived as being less favorable to start-up activity, but even though some entrepreneurs may be dissuaded by this somewhat challenging environment this ecosystem is well equipped.

- **Type C (The Sandbox)**. The cultural environment is based on the presence of incentives to pursue entrepreneurship combined with a commercial and financial setting that is supported by a strong institutional framework to attract more entrepreneurs from a wider range of the population. In the short term this ecosystem would be expected to produce an overall above average rate of entrepreneurial activity, over the longer term the strength of the institutional environment should achieve a similar outcome to Type B.

- **Type D (The Cliff)**. The fourth and potentially most counterproductive, institutional context, is one in which governments may attempt to incentivize entrepreneurship within an otherwise weak or underdeveloped institutional setting.

- **Type E (The Maze)**. This setting is the most ambiguous and is in some instances contradictory, in terms of the perceived institutional-policy context. Government will have certainly made an effort to develop policies in order to promote entrepreneurship or reduce the barriers to it but there is little evidence that this environment is overly conducive for business and lacks an overarching logic or objective. Several dimensions of policies that are designed to promote entrepreneurship are ranked above average while an equal number fall below average.

Based on this, we can highlight an examined region in the entrepreneurial ecosystem as well as being able to identify factors, which had an influence on the examined region (Petty, Bonardi, 2006; Veselá, Šebestová, 2013).

Regional Entrepreneurship Culture and Policy Layer Connection

A regional culture is typically understood “as a positive collective programming of the mind” (Beugelsdijk, 2007, p. 190), or an “aggregate psychological trait” (Freytag, Thunk, 2007, p. 123). An entrepreneurial culture may include the regional population being oriented toward entrepreneurial values such as individualism, independence and achievement, resulting in the social acceptance of entrepreneurs and their activities.

As a set of institutions that are mainly informal in character, a culture typically changes only gradually over time and may even survive disruptive changes in economic conditions. We can distinguish two main layers (see Fig. 1) in the structure of
entrepreneurship culture (Fritsch, Wyrwich, 2012, p. 85).

The normative-cognitive layer of an entrepreneurship culture encompasses attitudes towards entrepreneurial activity in connection with norms and values such as individualism, autonomy, and achievement or mastery in a specific business area. The models do not only include persons with entrepreneurial characteristics such as extraversion, openness to experience, conscientiousness, and the ability to bear risk. Finally, we can evaluate the dependence on local support or dealing with regional risks.

Contrary to this, the policy layer 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, including good access to financial resources for start-ups and small businesses as well as training and consulting services. They also try to encourage entrepreneurs by promoting a positive image of entrepreneurs or by way of an appropriate business education system. The existence of regional entrepreneurship cultures is one theoretically plausible explanation for spatial variations in entrepreneurship activity (Andersson, 2012).

MATERIALS AND METHODS

Entrepreneurs as individual entities in the market, require resources such as labour, information, skills and capital for their businesses. They often use friends or informal contacts to acquire these and to contribute to knowledge generation. During the period of the economic crisis, the role of the entrepreneur has changed.

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). According to the two layers of entrepreneurial culture, based on previous studies (Andersson, 2012; Fritsch, Wyrwich, 2012) the survey based research was conducted.

The questionnaire consisted of eight main parts, which were to predominantly describe the current stages of entrepreneurial culture:

- Political layer – consists of the evaluation of the business environment and its structure, firstly the main barriers which have an influence on behavior, secondly the relationship with local government and municipalities.
- Normative-cognitive layer – includes the main motivation to start the business, strategic, personal policy, innovations and communication strategy and finally a demographic description of the examined business unit.

The questionnaire survey was conducted with owners and managers of small and medium sized businesses (fewer than 250 employees) in the Moravian-Silesian Region, operating between the years of 2009–2013. The companies fulfilled the criteria of 1) being designated as small and medium sized companies by their number of employees – fewer than 250, 2) operating a business in the area of the Moravian-Silesian Region and 3) agreeing to a personal visit during autumn 2014.

The instrument was validated through the assessment of scale reliability, construct validation and un-dimensionality of the research constructs. Cronbach’s Alpha was used to assess the scale reliability of each construct in the research model. The alpha of every factor was greater than the suggested threshold value of acceptable reliability of 0.6. Results were graded using the Likert scale (1–5 for non-numerical data) so as to be comparable with other sections of the questionnaire (41 items).
As a supporting analysis, cross-tabs were used to identify significant and non-significant values. In the next stage we provide analysis of data reliability, presented by Cronbach $\alpha$ and with a recommended value above 0.5 (Nunnally, 1978), other items were deleted. The instruments for the constructs were then validated by exploratory factor analysis (i.e., principal components analysis with varimax orthogonal rotation). Unfortunately, for partly performed analysis the the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was applied, but did not achieve the recommended minimum value of 0.6 (Sharma, 1996), so we decided to use cross tabs and forward stepwise regression analysis on a confidence level of 90%. Data obtained from questionnaires (108 companies in the pilot phase, 194 in the final phase) is to be analyzed through the SPSS statistical packet programme.

Sample Size Description

The data had to be sorted, respondents, who did not meet the criteria (size, operating in the Moravian-Silesian region) were deleted, and finally we obtained 194 valid respondents. In the Moravian-Silesian Region, 250,028 business units were in operation, the growth rate in 2014 was +0.6% regarding the number of start-ups (CSO, 2015). The sample size ($n$) was calculated by using the formula recommended by Olaru, Dinu, Stoleriu, Şandru and Dincă (2010, p. 15).

$$n = \frac{t^2 \times p \times (1 - p)}{\omega^2},$$

(1)

where

- $t$..... confidence level, corresponding to probability with which the accuracy of the results will be guaranteed, from the statistical tables of the Student distribution,
- $p$..... prevalence, probability or proportion of the sample components that will explore the problem,
- $\omega$..... acceptable margin of error.

The sample size corresponds to recommended minimum value in probability of 0.95. The minimum sample size was computed according equation (1) as follows:
- $t$ value in $\alpha = 0.05$ is 1.645;
- $p$ value = 0.1699 is counted as proportion of businesses, which are active in year 2014 in Moravian-Silesian Region (250,028) to whole number businesses in the Czech Republic 1,470,929 (CSO, 2015);
- $\omega = 0.05$ is acceptable error limit of 5%.
- Minimum sample size $= 1.645^2 \times 0.1699 \times (1 - 0.1699)/0.05^2 = 153$ respondents.

Original sample size consists on 194 respondents (when the minimum was computed on 153 respondents); the sample was representative to original structure of businesses in the region (CSO, 2015). Researchers conducted several random checks for internal consistency in responses, when Cronbach's Alpha was in whole sample 0.845.

All the analysis is based on the relationship of the business lifecycle and other variables, which have an influence on regional entrepreneurial culture. As can be seen (Tab. I), the sample consists of 194 active business units, where the main group reports growth in the last three years and it is based mostly on sole proprietors (SP) and limited liability companies (LLC).

The relationship between the current stage and the legal form was not confirmed (Cramer's $V = 0.126$, Sig. = 0.987, confidence level 0.95). If we continue in the sample description, in the number of employees, there is quite a similar situation (Tab. II).

We confirmed, from the numbers in the Tabs. I and II that the main growth of business units is in those with up to 9 employees and is connected with sole proprietors and limited liability companies. The relationship between these factors (legal form and business cycle) was not confirmed (Cramer's $V = 0.154$, Sig. = 0.545). On the other hand, the relationship between business cycle and current area of business is more significant (Cramer's $V = 0.526$, Sig. = 0.000, Tab. III).

The most growing areas were manufacturing (60.9%) and services (47.9%). In case of construction companies we found nearly the same number of companies in growth (46.7%) as well as in decline (40%). Finally, the relationship between the current lifecycle stage and annual turnover was examined (Tab. IV).

### I: Relationship between Business lifecycle and Legal form

<table>
<thead>
<tr>
<th></th>
<th>JSC</th>
<th>COOP</th>
<th>NGO</th>
<th>SP</th>
<th>LLC</th>
<th>SO</th>
<th>GP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>7.22%</td>
<td>0.52%</td>
<td>1.03%</td>
<td>15.98%</td>
<td>23.71%</td>
<td>1.03%</td>
<td>0.00%</td>
<td>49.48%</td>
</tr>
<tr>
<td>Stagnation, Maturity</td>
<td>1.03%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>5.15%</td>
<td>3.61%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>9.79%</td>
</tr>
<tr>
<td>Decline</td>
<td>2.06%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>15.46%</td>
<td>13.92%</td>
<td>0.00%</td>
<td>0.52%</td>
<td>31.96%</td>
</tr>
<tr>
<td>Crisis</td>
<td>0.52%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.52%</td>
<td>1.03%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>2.06%</td>
</tr>
<tr>
<td>Destruction and decrease</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.52%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.52%</td>
</tr>
<tr>
<td>Missing</td>
<td>1.03%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>2.58%</td>
<td>2.58%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>6.19%</td>
</tr>
<tr>
<td>Total</td>
<td>11.86%</td>
<td>0.52%</td>
<td>1.03%</td>
<td>39.69%</td>
<td>45.36%</td>
<td>1.03%</td>
<td>0.52%</td>
<td>100%</td>
</tr>
</tbody>
</table>

JSC...joint stock Company, COOP...Cooperative, NGO...non profit, SO...state-ownership, GP...general partnership
As companies, which stated that they were growing, made up the main percentage share, we were not surprised to discover that given the small size of the companies (see Table IV), the turnover of the companies was relatively small (mostly up to CZK 10 million). For the third time, the relationship between the lifecycle and turnover was not confirmed (Cramer’s V = 0.133, Sig. = 0.898).

The only positive relationship to be confirmed was between the company size and the turnover, which is connected in the case of the EU definition of Small and Medium sized entrepreneurs (Sperman’s coeff. 0.753, sig. = .000).

### RESULTS

**Regional Entrepreneurship Culture in the Moravian-Silesian Region**

In accordance with the previously mentioned model, we divided our main findings into two layers i.e. the Political layer and the Normative-cognitive layer where the most important factors are summarized in the Table IV below. When we used the Likert scale (1 – the worst, 5 – the best), we obtain the first draft of the current state of regional culture. Most factors, which have a 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. It can be seen, that regional culture may have a group of subcultures, dependent on the location in the region (see Table V).

After this principal review, we used a linear regression model (forward stepwise method), when the predictors for entry were chosen by adjusted R² and the model includes only factors, with the effect in p value of 0.05 to 0.01. The confidence level of the proposed model is 90%, R² = 0.786. The description of factors was made according to Fritsch, Wyrwich (2012) and Andersson (2012) in Table VI.

If we compare these layers, the most important of them came from the side of entrepreneurs and their active participation in business life. The sides of environmental development in the policy layer are quite balanced. As can be seen, the municipalities and their cooperation with local businesses have the main effect on an entrepreneurial culture. This model supports our research issue, that they are existing subcultures within regions, dependent on the region location.
V: Factors influencing Entrepreneurship culture

<table>
<thead>
<tr>
<th>Factors, which have an influence on the current state</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of labour force</td>
<td>3.17</td>
<td>1.396</td>
<td>Previous industrial activity in the region</td>
<td>2.19</td>
</tr>
<tr>
<td>Location in region</td>
<td>3.13</td>
<td>1.253</td>
<td>Lack of alternative sources of financing</td>
<td>2.10</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>3.11</td>
<td>1.193</td>
<td>Legislation</td>
<td>3.08</td>
</tr>
</tbody>
</table>

Factors, which could support an entrepreneurial culture

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.90</td>
<td>1.442</td>
</tr>
</tbody>
</table>

VI: Pattern of regional culture: Case of the Moravian-Silesian region

<table>
<thead>
<tr>
<th>Policy layer (0.21)</th>
<th>Factors, which have an influence on the current state</th>
<th>Predictor value</th>
<th>Factors, which could support an entrepreneurial culture</th>
<th>Predictor value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Satisfaction in total</td>
<td>0.05</td>
<td>Supply of labour force</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Bureaucracy</td>
<td>0.06</td>
<td>Ample amount of suppliers</td>
<td>0.04</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
<td>0.11</td>
<td>Total</td>
<td>0.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Normative-cognitive layer (0.34)</th>
<th>Entrepreneurial values</th>
<th>Predictor value</th>
<th>Cooperation – role models</th>
<th>Predictor value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest in local policy</td>
<td>0.04</td>
<td>Satisfaction with municipality services</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Preparation of projects</td>
<td>0.05</td>
<td>Satisfaction with municipality services [Purchase real estate into company ownership]</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>Average annual turnover</td>
<td>0.05</td>
<td>Satisfaction with municipality services [Willingness of officials]</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.14</td>
<td>Satisfaction with municipality services [Support of entrepreneurs]</td>
<td>0.20</td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION AND CONCLUSION

All of our work is limited by the intervals of company evaluation and the availability of data which is a common problem among other studies (von Stein, Ziegler, 1984), but further research must be conducted to improve the quality and predictive power of the presented models to avoid bias and to be able to describe more factors influencing local entrepreneurial culture.

We believe that the presence of positive examples of entrepreneurs in the social environment has a positive influence in culture development and could support types of cooperation. Entrepreneurial role models demonstrate that they may increase social acceptance of an entrepreneurial lifestyle. Entrepreneurs provide opportunities to learn about entrepreneurial tasks and capabilities. In particular, the presence of entrepreneurial role models in the social environment reduces the uncertainty that potential entrepreneurs may feel about starting their own business and may help them acquire the necessary information and entrepreneurial skills (Minniti, 2005).

Cross-tab divided companies into three groups, influenced by the regional entrepreneurship policy, based on number of employees, turnover and business stage. Those groups are characterized by these indicators (based on the Tab. V):

- Satisfied entrepreneurs (average scale value between the values of 1 and 2.5). This group consists from companies in growth and average turnover till 1 mil CZK and 10–49 employees and the stagnation companies with 1–9 and 10–49 employees and turnover till 1 mil.CZK. Two quite continuing groups by the stage, where maximum turnover is 1 million of CZK. Typical behaviour: cooperation with clusters, export support, disappointment with the local policy, bureaucracy and their location in the region.
**Mid-satisfied entrepreneurs** (average score in the middle of Likert scale 2.5–3.5). This group isn’t so homogenous. It differs in economic vitality (all scale) and consists from all stages; there is no significant cut-off value for the next group. Main problems are ample amount of customers, quality of labour force, location and the local [municipal] approach to entrepreneurship.

**Dissatisfied entrepreneurs** (average score more than 3.5). The group is base on companies in decline, sized 50–249 employees and with the 100–250 mil. CZK. Typical behaviour is overall dissatisfaction with most of the factors.

If diverse municipalities were affected differently, it is conceivable that one would expect that the crisis had an impact on the spatial distribution of start-ups and other types of entrepreneurial units. On the other hand, as previously argued, an entrepreneurship culture should, because of its slow change and historical embeddedness, survive even major changes in the general economic environment (Andersson, 2012).

According previous findings we could classify the current state of the entrepreneurial culture in the Moravian-Silesian Region as a “Sandbox” (Fritsch, Wyrwich, 2012) when in the region we can find a strong supporting framework, but in the long term it could face problems due to the number of bureaucratic measures undertaken. As being said, 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 Moravian-Silesian Region.

Acknowledgement

This paper was supported by Moravian-Silesian Regional Authority within the Programme of Support for Science and Research in Moravian-Silesian Region 2014, [programme RCR/07/2014, reg. Nr. 14/2014].

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