Institute of Economic Research Working Papers

No. 12/2017

Influence of the Cultural Background at Small and Medium Sized-Enterprises Innovations in Regional Dimension

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Article prepared and submitted for:

9th International Conference on Applied Economics Contemporary Issues in Economy, Institute of Economic Research, Polish Economic Society Branch in Toruń, Faculty of Economic Sciences and Management, Nicolaus Copernicus University, Toruń, Poland, 22-23 June 2017

Toruń, Poland 2017

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JEL Classification: *O31; O47; R11*

Keywords: *innovations in small and medium enterprises; SME's growth; innovation; cultural background; SME's regional dimension*

Abstract

Research background: SME's play crucial role in economy's development. In EU they make up 99% of all enterprises and are at the forefront of technological innovations (Kotler et al., 1999, pp. 139-140; EC 2013, p. 2; Jasińska-Biliczak, 2016, p. 30). Being the flywheel for economies (Soininen et. al., 2012, p. 614) are called "hidden champions" of 20th century. Over past few years Europe-wide analyses (Griffin, 2004, p. 424) have emphasised the importance of investing in SME's. Taking into consideration that cultural environment is the background to decisions: social, managerial, development (Hofstede et al., 2011, p. 46), so innovations, knowledge, skills and competences as well as culture reinforce each other.

Purpose of the article: Research is the attempt of pointing the cultural background role in the SME's innovations and in the regional economy at the example of Opole Region. Results will contribute to stimulate, develop and adopt the policies at regional level, which aim regional dimension of SME's growth and their cultural base.

Methodology/methods: Methods of desk research were applied with fields research using in-depth interviews to achieve research purpose. Mapping as the interdisciplinary visualization technology permitted to clarify research results.

Findings & Value added: The phenomenon of cultural background for innovations in SME's was studied in regional dimension. Research allows to state that in analysed region, strongly settled in multicultural environment, cultural background turns out to be factor influencing innovations in SME's. So regional authorities should take that finding into account when planning regional policy, especially focused on enterprises' development. The use of cultural factor as strong side of the enterprise should be promoted as well as experiences based at the cultural backgrounds exchanged between SME's in region. So integrated action plans may enhance the best practise spreading in region and contribute innovative growth in SME's sector.

Introduction

Taking into consideration the problem of entrepreneurship it is impossible do not mention the sector of small and medium enterprises, constituting the majority of enterprises in economies of the EU. Supporting SME's sector, promoting entrepreneurship is the key to economic boom. The role of SME's in development of the region constitutes the source of actions concerning supporting that sector of the economy.

23 million of European SME's are representing 98% of the economic activity, are delivering the 67% of places of employment, creating 85% of all newly created places of employment. To help these enterprises with administrative formalities and accommodating for legal requirements, supporting their trans-border activity, facilitate the access to funds and other actions addressed to this sector, some supporting instruments were developed (EC, 2013, p. 2).

Present research is focused on the cultural background role in the SME's innovations at the example of Opole Region.

Method of the Research

Authors collected research data in two steps. First, data was collected from qualitative methodology using an in-depth interview. Next, there was used mapping technics completing the survey, also being the interdisciplinary visualization technology. Methods of desk and field research were used to achieve so stated research purpose.

Anonymously representatives of Opole Region enterprises – owners and managers - took part in the questionnaire survey. 383 enterprises were evaluated, in it 366 microenterprises, 12 small enterprises and 3 medium-

sized enterprises, what corresponds to the number and the structure of the SME's sector in the Opole Region (PARP, 2015, pp. 37-42).

Cultural background at the Opole Region

Culture is the way in which people solves problems and resolves dilemmas (Crozier, 2009, p. 17). It affects all societies functioning aspects including research activity as evidenced by the notion of *homo oeconomicus* of Smith. That notion was challenged by economic schools (Schmoller, 1925, p. 52; Weber, 2007, p. 71, Veblen, 1958, p. 13-27) as simplistic and rooted in culture of individualism, or by Marx as a result of economic processes (Bernat & Bruska, 2014, p. 48). Currently, science of complexity proponents question the former approaches to the study of economic processes according to national group (Wojtyna, 2008, p. 14).

Culture shapes paths of development and the competitive position of domestic economies (Porter, 1991, p. 596). It can be a source of new value and lead to a higher level of needs satisfaction (Hampden-Turner & Trompenaars, 2002, p. 114). Confidence as measurable pragmatic value, the ability to rely on partner word (Fukuyama, 1997, p. 179) and related values such as loyalty and truthfulness are examples of externalities, which are considered to be cultural feature determining success.

Strategic approach to building national wealth treats culture as a lasting component of this process (Kotler, Jatusripita & Maesincee 1999, pp.139-140). But it would be wrong to perceive any culture as an obstacle to the economy modernization (d'Iribarne, 2002, p. 243-256). Cultural explanations of national innovations difference are ambiguous: Shane found that risk-avoiding cultures are less innovative (Hofstede, 2011, p. 218), while D'Irbarne proved that greater avoidance of uncertainty does not necessarily lowed creativity, so cultural determinism in the innovations creation processes doesn't exist (Hofstede, 2011, p. 219). Bell added that people with collective ethos spread information faster (Hampden-Turner & Trompenaars, 2002, p. 41).

Opole Region is characterized by a fully unrecognized cultural mosaic - result of historical processes. It formed the populations' structure with the lowest in the country percentage of Polish inhabitants (80.9%), thus preserving the historically well-known Poland's multi-ethnicity feature, destroyed by the Second World War. The regional background was mainly shaped by Polish and German cultures assigned to type 4 (Polish: moderately relations-oriented, formal, polychronic, expressive) and to type 7 (German: deal-oriented, moderately formal, reserved) (Gesteland, 2000, p. 26).

Table 1. Polish and German cultures dimensions.

Culture dimension	The scale od answears	Poland	Germany
Universalism – particularism	32-97	75	87
individualism – communitarianism	40-88	80	62
specific – diffuse	11-89	71	75
neutral – emotional	15-81	70	35
achievement – ascription	50-94	80	74
Time horizon	4,18-6,17	4,81	5,29

Source: Hampden-Turner & Trompenaars, 2002, p. 83.

Cultural dichotomy of the region imposes a differentiated approach toward economy, inducing both: assimilation process and tendency to maintain one's own distinctness (Hofstede, 2011, p. 60).
Regional culture is a blend of the features that can be described with the cultural attributes. The "Silesian stereotype" meaning the fast way to the profession and the achievement of self-reliance by young people (Kania, 2007, p. 49), limits their willingness to pursue higher education. If studies are taken, then - by German influence – with a technical profile, which creates the predisposition to technological innovation. German long-term orientation (Hofstede & Minkov, 2010, p. 493) influence the tendency to save and create financial reserves (Fukuyama, 1997, p. 58). Reduced propensity to create business entities is characteristic for the migrant population earning social benefits in Germany (Jończy, 2006, p. 49). Collectivism characteristic for German culture translate into a high propensity to create family businesses (Bernat, 2012, p. 277–294). Diversity is a valuable capital of the region (Bruska, 2007, pp. 243-244). The role of the cultural factor is complementary to the others, and the nature of the relationship often takes the form of feedback.

Innovations in small and medium-sized enterprises

Horizon 2020 is a part of EU regional policy which supports SME's by providing direct financial and indirect support to increase their innovation capacity (EU, 2015, p. 12). Europe *2020 Strategy* assumes supporting by dialogue, cooperation and technology transfer among the scientific and business communities - so constructed inventions can become products simultaneously (Jasińska-Biliczak, 2013, p. 141). Innovativeness, risk-taking and proactivity are the basic characteristics of entrepreneurial orientation. Innovation has been defined as any and all processes of research and development aiming to applying solutions to current techniques, new technology within an organization (Griffin, 2004, p. 128). In accordance to

Schumpeter - first implementing the notion "innovations" for economic studies – the innovations can be related to a few coincidences:
- new products's creation or provision of existing product with features being some *novum*,
- new production's implementing methods,
- new market's opening for some type of domestic industry,
- new source's of raw materials or semi-finished products acquiring,
- new organizational structure's introduction in industry (Schumpeter, 1960, p. 104).

The concept of innovation also comprises:
- the ability to develop products to meet the market needs,
- the ability to use existing technology to develop products,
- the ability to develop new products or update existing products to meet the market needs,
- the ability to acquire new technology to create new opportunities (Alder at al., 1990, pp. 25-37; Probst et al., 2002, pp. 14-15) understood the "innovation" as newness, success, and change (Damanpour, 1996, pp. 693-716; Pettigrew & Whipp, 1991, p. 319).

EU countries fall into four performance groups: innovation leaders (more than 20% above the EU average), innovation followers (less than 20% above or more than 90% of the EU average), moderate innovators (relative performance rates between 50% and 90% of the EU average) and modest innovators (less than 50% of the EU average) (EC, 2015, p. 16).

The investment activity of SME's sector in Poland quote an increase amounted to 13% (2011/2010 yr/yr) reaching PLN 80 billion (approximately € 20 bln) that mean 50 % of all enterprises investment outlays PLN 161 bln (approx. € 41 bln). Outputs' on a company rised in SME's sector in 2011 to PLN 45 400, PLN 4 000 more than in 2010. Investment outlays rose in 2011 (compared to 2010): micro – by 13.8%, medium – by 14.1% and big enterprises - by 13.9%. In SME's sector investment outlays are made by 2/3 of firms, in it 35% are service companies and 31% - industrial. 2/3 of investments realized by the SME's sector in 2011 was financed by own resources. In 2010 Polish enterprises increased outlays on fixed assets by approximately 1000€, whereas, the majority of European enterprises significantly limited outlays compared to 2009 (EC, 2013, p. 2; Kowal et al., 2016, p. 30).

Innovations implemented and their correlation with cultural conditioning in Opole Region

The Opole Region, the smallest region in Poland, stands out nationally due its large economic and investment potential and quick rate of ownership transformations. Industry is characterised by a uniform distribution across the region and by a diversified structure.

Companies with foreign capital account for 26% and SME for 90%. To maximise benefits from foreign investments and trade, local governments of the Opole Region allocate new sites for business and industrial development, modernize technical infrastructure, promote local business, create investment friendly climate for business, provide information, as also legal and business assistance to the potential investors.

Innovative changes in enterprises marks their internal development at using own resources and development of the innovative capacity. These enterprises are increasing their self-awareness of the own development's need, including the innovative one. Analysed sector often displays the tendency of seeking and implementing innovative solutions.

Taking above up into account, an analysis was conducted of particular types of innovations in SME's in Opole Region, which results are pointed in following table.

Table 2. Innovations implemented in the sector of small and medium enterprises of the Opole Region in years 2013-2015.

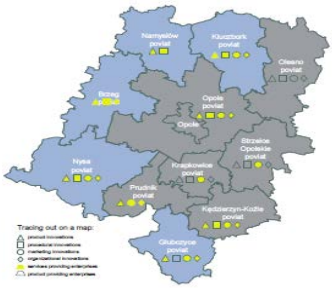
Implemented innovations in %	Enterprise					
	Micro		Small		Medium-sized	
	Service	Industrial	Service	Industrial	Service	Industrial
Product	4,6	7,4	12,9	23,2	8,1	29,7
Process	1,7	5,8	4,2	11,8	6,3	14,8
Marketing	0,4	2,5	11,7	16,9	7,3	14,6
Organizational	0,6	2,1	14,9	12,4	16,3	15,1

Source: own elaboration.

Data allows to state, that industrial enterprises are characterized by a higher level of innovation than services providers. In the entire sector dominate implementations of product and organizational innovations. Implementations of process and marketing innovations in medium enterprises reached the similar level, but in small enterprises (including micro) marketing innovations outweigh the process.

In poviats with a dominant share of residents of a German minority, innovative activity is carried out mainly in manufacturing companies. The full spectrum of all innovations was introduced in 8 out of region's 12 districts. Following map depicts territorial schedule of implemented types of the innovation.

Map 1. Spatial view of SMEs innovations in Opole Region (in 2013-2015) versus German minority presence.



Source: Own elaboration.

The innovative orientation in the manufacturing of SME's sector reflects the pragmatic and cautious attitude towards risk and uncertainty typical of German culture. In poviats with domination of Polish population, innovations are introduced in both production and service enterprises, sometimes only in the latter (Brzeg poviat).

Conclusions

There was studied the phenomenon of innovations in SME's with their cultural background in regional dimension. Research allows to state that in analysed region, which has strong settling in multicultural environment, it is possible to point cultural background as the factor having influence at innovations in SME's as well as to point the need to take that finding into account by regional authorities during regional policy planning, especially connected to enterprises' development. Innovative activity of enterprises, the influence of culture in Opole Region is manifested in the activity profile of entities. Counties dominated by residents who identify with German culture undertake innovative activity in manufacturing companies. The other territorial units of region exhibit innovation in production and service sectors. The structure of surveyed entities reflects the proportion of SME's in region, this type of research should be systematically conducted to determine the direction of changes in innovation activity.

The use of cultural factor as strong side of the enterprise and cultural backgrounds exchanged between SME's in region should be promoted. Integrated action plans may enhance best practise spreading in region and contribute innovative growth in SME's sector. As the future directions of this research it would be interesting to deepen current results by verifying the presence of "close neighbourhood effects" likewise to study the confidence degree and its role in innovation processes at the individual firm level.

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