

Entrepreneurship as a Factor of Regional Development

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Abstract

The main goal of this paper is to characterize the level of entrepreneurship in the Opolskie Voivodship. The structure of the paper consists of two parts. First one contains the results of literature studies on entrepreneurship as a factor of regional development while second part includes the results of empirical research on entrepreneurship in the Voivodship in question for period 2002–2014.

Keywords: entrepreneurship, regional development, Opolskie Voivodship, natural persons running economic activities, microenterprises

Introduction

Regional development is an important issue of “EUROPE 2020.”¹ It is determined by heterogeneous factors (Kosiedowski 2008, 232–237; Mach 2012; Zygmunt 2014) which incorporate, among others, entrepreneurship which is believed nowadays as a principal factor of development in question. The significant substance of entrepreneurship has an impact on research which increasingly focuses on relationships between entrepreneurship and regional development (Benneworth 2004; Klasik 2006; Kosiedowski 2008; Valliere and Peterson 2009). Therefore, the main goal of the paper is to characterize the level of entrepreneurship in the Opolskie Voivodship, Poland. The paper’s structure consists of two sections. First part includes discussion of the essence of entrepreneurship, particularly in terms of regional development, while the second refers to an empirical analysis of entrepreneurship in the Opolskie Voivodship for period 2002–2014.

1 Entrepreneurship and regional development

Entrepreneurship may be considered as a feature of activity, as well as creation and development both enterprises and business communities in a region (Klasik 2006, 18). As state Huggins and Williams “the regional level is an important dimension for understanding entrepreneurship” (Huggins and Williams 2011, 907). A key substance of entrepreneurship in regional development is emphasized, inter alia, by Klasik (2006, 29), Broszkiewicz et al. (2006, 219), Strzelecki (2008, 78), Kuciński (2010, 240), Pakulska (2010, 155). The substance of entrepreneurship in regional development is regarded in numerous economic theories, including both post-Keynesian theory of regional growth and neoclassical exogenous growth theory. According to the first, entrepreneurship is an endogenous factor of growth and may be stimulated for example by investment climate creation, local cooperation and by supporting local companies. An important function should be played by local authorities in a development of strategies which on one hand would impel entrepreneurial behaviors and, on the other would incorporate such behaviors for the benefit of a region (Szewczuk 2011, 66). The second one seeks an entrepreneurship resources in attracting external investors, spatial aggregation of businesses for costs reduction (Pakulska 2010, 159), etc.

1. See: Communication from the Commission. Europe 2020. A strategy for smart, sustainable and inclusive growth. Brussels, 3.3.2010. COM(2010) 2020, p. 20.

An influence of entrepreneurship on regional development may be heterogeneous. It may impact on the growth of pro-innovation activities (Audretsch and Keilbach 2008, 281–310; Marszał 2003, 48–49), a level of region's competitiveness (Valliere and Peterson 2009), as well as on productivity, and knowledge creation (Benneworth 2004). It may also contribute to jobs creation, living condition improvement, and finally, regional economics enhancement (Leszczyński 2011, 244).

Some studies provide an evidence that the impact of entrepreneurship on regional development may vary depending on country. With regard to Global Entrepreneurship Monitor data for 43 countries in 2004–2005, Valliere and Peterson (2009) found out that in developed countries, high- expectation entrepreneurs have considerable influence on economic growth, with the absence of such link in emerging countries. However, there are some opinions against the existence of direct links between entrepreneurship and regional development. For example Fritsch and Mueller (2004, 963) claim that there is no “clear and indisputable proof” of the relationship in question. On the ground of data for 211 UK nascent entrepreneurs, Jayawarna et al. note that their observations do not “provide direct evidence of links between new business formation and improved regional economic development” (Jayawarna, Jones, and Macpherson 2011, 754). Nevertheless, the influence of entrepreneurship on regional development may be long-delated. On the basis of data for UK regions Van Stel and Storey suggest that new enterprises' formation impact on regional growth has an “U-shaped” with the peak influence after 5 years (Van Stel and Storey 2004).

It should be stressed that the level of entrepreneurship may be determined by region's capabilities (Heffner and Klemens 2008, 148). Strużycki (2011, 102) argues that essential here are: region's economy, its competitiveness, as well as regional policy. Kuciński (2010, 241) claims that entrepreneurship is dependent also by social situation. Szewczuk (2011, 26) maintains that an important issue is to create a regional environment which encourages new business formation by proving modern infrastructure, highly qualified human resources, research and development activities. Godlewska-Majkowska (2011, 14) specifies regional factors which impact on entrepreneurship as: level of development and structure of the economy, cultural heritage of a region, geopolitical location, previous path of development, natural and human resources. As a result, regions differ not only in the level of entrepreneurship, but also in the dynamics and structure of entities, as well as in the types of businesses (Audretsch and Keilbach 2008, 113–124).

On the above it may be concluded that the relationship between entrepreneurship and regional development is bidirectional. On one way, entrepreneurship influences regional development, while on second, it is determined by the level of development in question. This opinion is confirmed by majority of researches, including Kuciński (2010, 241–242), Leszczyński (2011, 244). It should be said though, that some researches query the existence of this link. Based on observations of 300 Polish enterprises in 2009, Suszyński (2011, 78) maintains that there is no proof of such two-way relationship.

Relevant issue of studies on entrepreneurship is its measurement. In this respect, Acs and Armington (2004), as well as Van Stel and Storey (2004) suggest that entrepreneurship should be approximated by the rate of new enterprises formation. This opinion is also followed by Audretsch and Fritsch (2002). However, Wennekers et al. claim that entrepreneurship can be measured not only by the rate in question, but also by the level of self-employment (Wennekers, Uhlaner, and Thurik 2002, 29). Klasik (2006, 25) states that it may be proxied by an annual change in the number of newly established enterprises. He also suggests to use: an average number of new businesses in a given year, a percentage of new businesses in which employment increases and that employ more than 5 people, and also an average annual number of new businesses for every 1000 human resources as standards of entrepreneurship.

2 Entrepreneurship level in the Opolskie Voivodship in the period 2002–2014

Based on the previous considerations the following research questions can be formulated:

- What is the entities fluctuation in the Opolskie Voivodship?
- What is the structure of these entities with regard to employment and legal form?

- What are the main economic activities of those entities which predominate in the Opolskie Voivodship?
- What is entrepreneurship level in the Opolskie Voivodship?

The studies are based on data from the Central Statistical Office, Poland for the period 2002–2014. However, to recognize dominant areas of business activities of entities from the Opolskie Voivodship, research period was established to 2011–2014. The lengths of respective periods were determined by the data availability. Structure, dynamics and time series analysis were employed to describe entrepreneurship in the Opolskie Voivodship. With the accordance to Klasik (2006, 25), Acs and Armington (2004), Van Stel and Storey (2004), Audretsch and Fritsch (2008, 113–124), Wennekers et al. (Wennekers, Uhlaner, and Thurik 2002, 29) entrepreneurship level was estimated by the rate of new enterprises formation. It was assumed that the formation in question is proxied in the number of newly registered entities in the Polish National Official Business Register.²

The structure of entities in the Opolskie Voivodship is dominated by the private sector. In each year of research period, the participation of these entities in the total number of entities was not less than 94%. With the exception of 2009 and 2011, the increase of these entities was evident (fig. 1), remaining at relatively persistent level in period 2009–2011. The dynamics of public sector entities was relatively high in research period. For years 2007–2009 and 2013 the number of entities in question decreased in relation to previous years. This trend was not registered for private sector entities.



Fig. 1. The dynamics of entities in the Opolskie Voivodship

Source: Own study on the base of Central Statistical Office data

With regard to the structure of employment, in the Opolskie Voivodship prevail entities with up to 9 employees (microenterprises). In research period the participation of those entities was higher than 95% of total entities each year. The population of entities in question was increasing year on year on comparatively low level (1–5%) but consequently the growing tendency was noticeable, from 80 900 entities in 2002 to 95 865 in 2014. Only for 2009 and 2011 a minor decline of the number of microenterprises was observed (respectively 3,78% and 7,08%).³

The analysis of entities, in terms of small, medium and large companies provides an evidence that regardless the level of employment, the number of these entities in research period was relatively on the same level (fig. 2). However, minor changes were observed concerning those entities which employed from 10 to 49 employees. The number of large companies in the Opolskie Voivodship was low compared to the number of the small and medium entities. Decreasing tendency was identified in relation to those entities.

If legal form of entities is considered, the structure of entities in research period was dominated by natural persons running economic activities (at least 72%). Besides, it should be emphasized that the dominance in question had a decreasing tendency, from 76% in 2002 to 72% in 2014. Another types of companies which took significant positions in the structure of entities in the

2. The analysis does not include the issues of the temporary suspension of activity due to the fact of insufficient data. These data are available in regional statistics since 2011. See more in *Zmiany strukturalne grup podmiotów gospodarki narodowej w rejestrze REGON, 2012 r.*, p. 124–132.

3. [In the journal European practice of number notation is followed—for example, 36 333,33 (European style) = 36 333.33 (Canadian style) = 36,333.33 (US and British style).—Ed.]

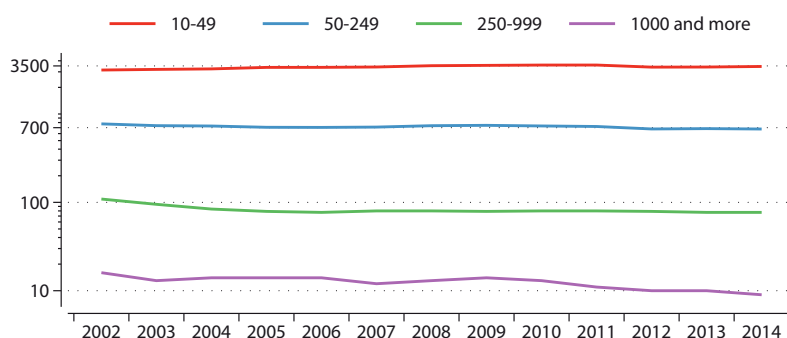


Fig. 2. The number of entities by the number of employees (with the exception of microenterprises) in the Opolskie Voivodship in the period 2002–2014 (caution: logarithmic scale on vertical axis)

Source: Own study on the base of Central Statistical Office data

Opolskie Voivodship in terms of legal form, were both partnerships and commercial companies (fig. 3). Increasing number of the latter should be stressed, with an average 5% growth in each year of research period. The growing tendency was also identified in a case of associations and social organizations. The analysis of entities with regard to their legal form allows to recognize the growing tendency for foundations, with 11% increase in each year of research period. For cooperatives the declining trend was observed with 543 entities in 2002 and 488 in 2014. The number of state-owned companies was low (2 in 2014, while 34 in 2002).

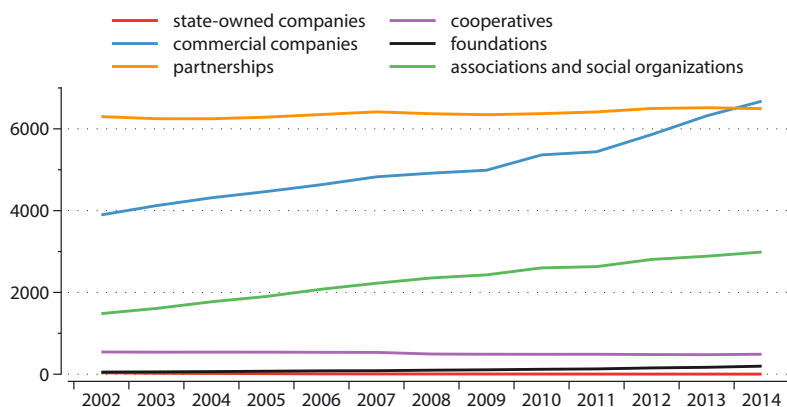


Fig. 3. The number of entities 2014 by the legal form (with the exception of natural persons running economic activities) in the Opolskie Voivodship in the period 2002–2014

Source: Own study on the base of Central Statistical Office data

Above considerations lead to the conclusion of dominance of natural persons running economic activities in the structure of entities in the Opolskie Voivodship during research period. On the basis on the available data it could be said that the business activities of entities in question were related in 2011–2014 to the following sections of Code List of Classification of Business Activities in Poland (PKD 2007):

- C—manufacturing
- F—construction
- G—wholesale and retail trade; repair of motor vehicles and motorcycles
- H—transportation and storage
- M—professional, scientific and technical activities

Main fields of economic activities of entities in question were in 2011–2014 as follows: wholesale and retail trade, repair of motor vehicles and motorcycles (fig. 4). In each year of the period considered at least 28% of natural persons run the above mentioned activities.

Another type of activity was construction, with at least 16% of entities in question carried out this business activity. Manufacturing, as well as professional, scientific and technical activities were also the types of activities which were run by entities in question. The contribution of these

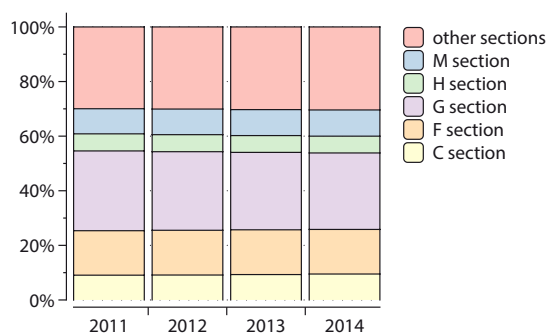


Fig. 4. The structure of business activities of the natural persons running economic activities in the Opolskie Voivodship in the period 2011–2014 in terms of sections of Code List of Classification of Business Activities

Source: Own study on the base of Central Statistical Office data

activities in the Opolskie Voivodship with regard to sections of Code List of Classification of Business Activities was similar, with an average level respectively 9,5% and 9,4%. In each year of the considered period more than 6% entities in question run activities related to the transportation and storage. In addition, it should be said that further 30% of the activities of the natural persons running economic activities had diversified structure („others sections” on the fig. 4). It included, among others, such activities as: human health and social work activities (5%), agriculture, forestry and fishing (4%), financial and insurance activities (4%), and accommodation and food service activities (3%).

The research on the number of newly registered and deregistered entities from the Polish National Official Business Register provides an evidence of a significant outperformance of newly registered entities with comparison to the number of deregistered entities in the period 2002–2008 (fig. 5). In 2009 considerable increase in the number of deregistered entities was observed, exceeding the number of newly registered entities for more than 2 000 businesses. A similar trend was observed for 2011. The structure of deregistered entities in 2009 included primarily the natural persons running economic activities, as well as cooperatives and partnerships. Such changes in the structure did not take place in 2011, concerning mostly the natural persons running economic activities.

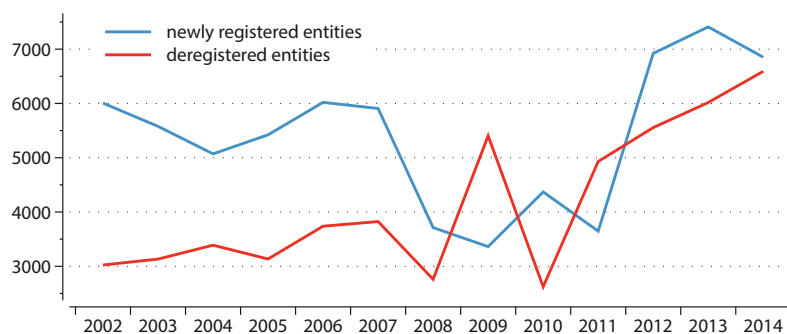


Fig. 5. The number of newly registered and deregistered entities in the Opolskie Voivodship in the period 2002–2014

Source: Own study on the base of Central Statistical Office data

The level of entrepreneurship in the Opolskie Voivodship was variable in research period (fig. 6). In this period the rate of new enterprises formation was characterized by high changeability, especially in the period 2008–2013. In previous years the rate in question remained at a relatively similar level. Significant changes could be observed particularly for 2010 and 2012, where the rate of new enterprises formation in the Opolskie Voivodship was respectively 29% and 89%. In 2014 the rate in question reached the level which was observed before the economic slowdown in Poland (before 2008).

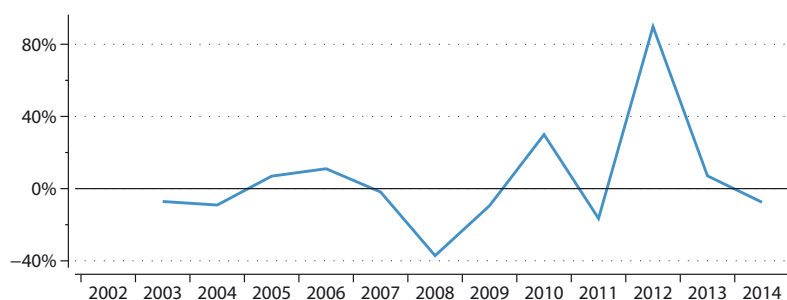


Fig. 6. The rate of new enterprises formation in the Opolskie Voivodship in the period 2002–2014

Source: Own study on the base of Central Statistical Office data

Conclusions

The main goal of this paper was to characterize the level of entrepreneurship in the Opolskie Voivodship. Research period covers the years: 2002–2014. Based on the analysis it was observed that the structure of business entities in the Opolskie Voivodship is dominated by microenterprises. It was also found that the majority of entities in the Opolskie Voivodship comprises the natural persons running economic activities. Meaningful conclusion from empirical research is relatively high volatility of entrepreneurship level in the Opolskie Voivodship. On the background of the above results it seems appropriate to undertake further research focused primarily on the identification of macro and microeconomic factors which determined the level of entrepreneurship in the Opolskie Voivodship (especially in the context of observations for 2010 and 2012). It seems also essential to conduct further research with regard to the types of activities of entities from the Opolskie Voivodship, with special attention to „smart specialization” and their impact on regional development. It seems also important to verify the innovative potential of enterprises from the Opolskie Voivodship as an important factor of sustainable regional development.

References

- ACS, Z.J., and C. ARMINGTON. 2004. “Employment Growth and Entrepreneurial Activity in Cities.” *Regional Studies* no. 38 (8):911–927. doi: 10.1080/0034340042000280938.
- AUDRETSCH, D.B., and M. FRITSCH. 2002. “Growth Regimes over Time and Space.” *Regional Studies* no. 36 (2):113–124. doi: 10.1080/00343400220121909.
- AUDRETSCH, D.B., and M. KEILBACH. 2008. “Entrepreneurship, Growth and Restructuring.” In *The Oxford Handbook of Entrepreneurship*, edited by A. Basu, M. Casson, N. Wadeson and B. Yeung. Oxford: Oxford University Press.
- BENNEWORTH, P. 2004. “In What Sense ‘Regional Development?’ Entrepreneurship, Underdevelopment and Strong Tradition in the Periphery.” *Entrepreneurship and Regional Development* no. 16 (6):439–458. doi: 10.1080/0898562042000249786.
- BROSZKIEWICZ, R., K. WILK, S. KORENIK, K. SZOŁEK, and T. DROZDOWSKI. 2006. “Przedsiębiorczość i konkurencyjność a rozwój regionów na przełomie XX i XXI wieku w warunkach globalizacji na przykładzie Dolnego Śląska.” In *Przedsiębiorczość i konkurencyjność a rozwój regionalny*, edited by A. Klasik, 213–249. Katowice: Wydawnictwo Akademii Ekonomicznej im. Karola Adamieckiego w Katowicach.
- FRITSCH, M., and P. MUELLER. 2004. “Effects of New Business Formation on Regional Development over Time.” *Regional Studies* no. 38 (8):961–975. doi: 10.1080/0034340042000280965.
- GODLEWSKA-MAJKOWSKA, H. 2011. “Przedsiębiorczość regionalna i atrakcyjność inwestycyjna regionów jako zjawisko ekonomiczno-społeczne.” In *Atrakcyjność inwestycyjna a przedsiębiorczość regionalna w Polsce*, edited by H. Godlewska-Majkowska, 13–23. Warszawa: Szkoła Główna Handlowa. Oficyna Wydawnicza.
- HEFFNER, K., and B. KLEMENS. 2008. “Funkcjonowanie inicjatyw klastrowych jako czynnik rozwoju przedsiębiorczości w regionie.” In *Współczesne problemy polityki ekonomicznej*, edited by S. Korenik and Z. Przybyła. Jelenia Góra: Uniwersytet Ekonomiczny. Wydział Gospodarki Regionalnej i Turystyki.

- HUGGINS, R., and N. WILLIAMS. 2011. "Entrepreneurship and Regional Competitiveness: the Role and Progression of Policy." *Entrepreneurship and Regional Development* no. 23 (9–10):907–932. doi: 10.1080/08985626.2011.577818.
- JAYAWARNA, D., O. JONES, and A. MACPHERSON. 2011. "New Business Creation and Regional Development: Enhancing Resource Acquisition in Areas of Social Deprivation." *Entrepreneurship and Regional Development* no. 23 (9–10):735–761. doi: 10.1080/08985626.2010.520337.
- KLASIK, A. 2006. "Przedsiębiorczość i konkurencyjność a rozwój regionalny. Podstawy teoretyczne i metodologiczne." In *Przedsiębiorcze i konkurencyjne regiony w perspektywie spójności przestrzeni europejskiej*, edited by A. Klasik, 11–37. Katowice: Wydawnictwo Akademii Ekonomicznej im. Karola Adamickiego.
- KOSIEDOWSKI, W. 2008. "Zarządzanie rozwojem regionalnym i lokalnym." In *Gospodarka regionalna i lokalna*, edited by Z. Strzelecki, 221–241. Warszawa: Wydawnictwo Naukowe PWN.
- KUCIŃSKI, K. 2010. "Przedsiębiorczość i rozwój regionalny a bezpieczeństwo ekonomiczne państwa." In *Przedsiębiorczość a rozwój regionalny w Polsce*, edited by K. Kuciński, 210–252. Warszawa: Difin.
- LESZCZYŃSKI, Z. 2011. "Przedsiębiorstwa w rozwoju regionalnym." In *Przedsiębiorstwo, region, rozwój*, edited by M. Strużycki. Warszawa: Difin.
- MACH, Ł. 2012. "Determinanty ekonomiczno-gospodarcze oraz ich wpływ na rozwój rynku nieruchomości mieszkaniowych." *Ekonometria* no. 4 (38):106–116.
- MARSZAŁ, T. 2003. "Some Remarks on Entrepreneurship in Poland. Experiences of Small and Medium Enterprises in the Last Decade." In *Spatial Aspects of Entrepreneurship*, edited by T. Marszał, 37–50. Warszawa: PAS. CSERP.
- PAKULSKA, T. 2010. "Bezpośrednie inwestycje zagraniczne w rozwoju przedsiębiorczości w regionie." In *Przedsiębiorczość a rozwój regionalny w Polsce*, edited by K. Kuciński. Warszawa: Difin.
- STRUŻYCKI, M. 2011. "Konkurencja jako mechanizm sprawczy rozwoju regionalnego." In *Przedsiębiorstwo, region, rozwój*, edited by M. Strużycki. Warszawa: Difin.
- STRZELECKI, Z. 2008. "Polityka regionalna." In *Gospodarka regionalna i lokalna*, edited by Z. Strzelecki. Warszawa: Wydawnictwo Naukowe PWN.
- SUSZYŃSKI, C. 2011. "Ewolucja współczesnego przedsiębiorstwa a regionalne aspekty jego funkcjonowania." In *Przedsiębiorstwo, region, rozwój*, edited by M. Strużycki. Warszawa: Difin.
- SZEWCUK, A. 2011. "Rozwój lokalny i regionalny — główne determinanty." In *Rozwój lokalny i regionalny. Teoria i praktyka*, edited by A. Szewczuk, M. Kogut-Jaworska and M. Ziolo. Warszawa: Wydawnictwo C. H. Beck.
- VALLIERE, D., and R. PETERSON. 2009. "Entrepreneurship and Economic Growth: Evidence from Emerging and Developed Countries." *Entrepreneurship and Regional Development* no. 21 (5–6):459–480. doi: 10.1080/08985620802332723.
- VAN STEL, A.J., and D.J. STOREY. 2004. "The Link between Firm Births and Job Creation: Is There a Upas Tree Effect?" *Regional Studies* no. 38 (8):893–909. doi: 10.1080/0034340042000280929.
- WENNEKERS, A.R.M., L.M. UHLANER, and A.R. THURIK. 2002. "Entrepreneurship and its Conditions: a Macro Perspective." *International Journal of Entrepreneurship Education* no. 1 (1):25–64.
- Zmiany strukturalne grup podmiotów gospodarki narodowej w rejestrze REGON, 2012 r.* 2013. *Informacje i opracowania statystyczne*. Warszawa: Główny Urząd Statystyczny.
- ZYGMUNT, A. 2014. "R&D Expenditures in Poland. Voivodship Perspective." *Barometr Regionalny. Analizy i Prognozy* no. 12 (2):13–20.