

The Creative Class in Poland and Its Impact on Innovation in Polish Regions

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The aim of this study is to investigate and discuss the importance of the creative class as a significant factor affecting innovation in geographical regions, and to promote the idea of the creative class and its impact at the level of regional innovation. The empirical material was collected and analysed on the basis of data gathered by the Central Statistical Office for years 2009–2013. The data relates to the number of dynamically operating business entities classified as belonging to the creative class. Research results reveal that geographical regions with bigger share of business entities belonging to the creative class show significantly higher level of innovation than regions with lower share of such entities.

Key words: creative class, innovation, human capital, regional development, management

Introduction

Innovation contributes to economic growth. Identification of factors influencing innovation might therefore be a meaningful task to increase organisational, regional, as well as national performance. People might also represent one of the major factors influencing the level of innovation – especially individuals who are able to create new things or introduce new solutions. Human capital (HC) as a synonym for human resources (HR) has a positive impact on social and economic development because it boosts innovation and competitiveness and encourages global development in science, engineering and culture.

Knowledge about groups of people who significantly contribute to the innovation and about other factors can be decisive for organizational, regional or national performance. Identification of groups who exert impact on the level of innovation enables action directed into determining, activating and making the use of people's skills

and their abilities. Emphasizing the meaning of *HC*, Florida (2002) identifies the so-called creative class as a group of people – workers whose job function is to create new meaningful forms – innovation.

The aim of the paper is to explore existence of the creative class in Poland and to verify the relationship between existence of the creative class and the level of innovation in Polish regions (voivodships). To verify the relationship (i) the conceptual model is developed in order to measure the size of the creative class in Poland, and (ii) statistical data concerning the number of dynamically operating and registered business entities conducting economic activity and classified in accordance with the Polish Classification of Activities 2007 (PKD) in Q4 2009, 2010, 2011, 2012 and 2013 is used. The existence of the creative class and its relationship with innovation is explored in all Polish regions.

Creative Class

DEFINITION OF THE CONCEPT

The concept of the creative class relates to some other concepts like creative nation, creative industries or creative city. The concept of creative nation was developed in the beginning of 1990s in Australia as a response to challenges resulting from increase of innovation in information technology. In 1997, in the UK, the term creative industries appeared with the attempt to map the enterprises in industries such as advertising, architecture, art, crafts, design, fashion, film, music, performing arts, publishing, R&D, software, toys and games, tv and radio, and video games (Howkins 2001, 88–117). In the late 1980s, the term creative city was coined by Charles Landry (Landry and Bianchini 1995). Finally, in the beginning of 21st century, Richard Florida (2002) presented his concept of the creative class.

Florida (2002) uses the term creative class to refer to groups of individuals performing a job whose purpose is to create meaningful new forms of ideas, products, services, etc. Such forms are created by the super-creative core of a group; selection and commercial use of these forms on the other hand, are the responsibility of a group of knowledge-intensive employees – creative professionals. The two groups of workers are surrounded by the third, smaller group of people-bohemians. Their role is usually to give their opinions on the new forms, but very often mocking them or even protesting against them. Bohemians are represented by groups of artists, celebrities, creators of niche or/and alternative arts, performers, active anar-

chists, minority movement activists, etc. In some cases, these groups might also participate in the processes of developing the new forms providing intellectual anchor and revival of the forms.

The difference between the creative class and other classes lies in what the members of these two groups are primarily paid to do. Members of the working class and the service class are mostly paid to deliver activities according to their plan, while members of the creative class are primarily paid to create and commercialise new forms, thus they have considerably more autonomy and should be more flexible than the other two classes (Florida 2010, 9). Moreover, the creative class is dominant in terms of wealth and income, with its members earning on average nearly twice as much as members of the remaining two classes.

As mentioned, the creative class consists of two sub-groups – the super-creative core and creative professionals. Members of the super-creative core are scientists and engineers, performing artists, actors, designers and architects, poets and novelists, as well as representatives of opinion-forming environments existing in contemporary society – authors of non-fiction publications, publishers, cultural figures, analysts, think-tank researchers etc. (Florida 2010, 83). Super-creative core covers professional fields (Florida 2010, 338) such as computer-related occupations and jobs using mathematical knowledge, architecture and engineering, jobs related to social science, natural science and life science, education, training and libraries, art, design, entertainment, sport, media, etc. Individuals included in the super-creative core are directly involved in the creation of new forms that are readily transferable and broadly useful. Their work is related not only to solving but also to searching for problems.

Creative professionals are individuals working in a wide range of knowledge-intensive industries, such as high-tech sectors, financial services, legal and healthcare professions, and business management. The sub-group of creative professionals primarily includes individuals having the occupations (Florida 2010, 338) such as managerial positions, financial and business services, legal professions, healthcare jobs (doctors), technicians, sales management, sales (high-end segment) etc. This kind of workers engages in creative problem-solving drawing on complex bodies of knowledge. Such work typically requires high degree of formal education and thus high level of *hc*. Workers who do such kind of work may sometimes come up with methods or new ideas about the products that turn out to be widely useful, but such kind of achievements are not

expected from them. For example, their jobs usually require testing and enhancement of new methods, applying new medical treatment methods or new management techniques etc., but when a worker from the creative professionals' sub-group focuses more on developing new solutions, e.g. by embarking on a new career or getting a promotion, he or she might be transferred to the super-creative core. His or her primary function becomes therefore production of new, readily transferable and widely used forms (Florida 2010).

THE GEOGRAPHY OF THE CREATIVE CLASS

Concentrations of skilled workers and skilled industries may increase local productivity. Yet, one can be worried due to the equity consequences of the spatial policy encouraging such concentrations, especially because skilled people already tend to move disproportionately into skilled areas where skills are already abundant (Glaeser and Gottlieb 2008).

According to Landry (2013, 41), people and their wellbeing become key resources for every city. Thus, cities' physical infrastructure is expected to provide comfort to city residents. Urban planning should therefore take into account the emotional perspective closely related to human beings. Nowadays, it is crucial to promote solutions stimulating imagination, skills, abilities and entrepreneurship. Competitive advantage of a city is no longer determined only by its natural resources but by cognitive, emotional and behavioural characteristics of its residents. Talents, skills and creativity are becoming more important than location, mineral resources, workforce and market access. Future success of any city depends on ingenuity and innovation skills of people, who live, work and govern in the city (Laundry 2013). Glaeser (2011) identifies cities as the world's key economic actors. He indicates that not far more than physical infrastructure explains which cities would succeed in today's competitive environment and which not (Glaeser 2011). Access to talented and creative people is going to determine the places where companies will be located in the future, because such people are their key assets (Florida 2010). Cities making new investments in advanced technologies but failing to provide a broad range of cultural experiences fall behind (Laundry 2013). Creative people have always gravitated to certain kinds of communities, which provide the stimulation, diversity, and a richness of experiences that are the wellsprings of creativity (Florida 2010, 36).

There are studies that have been conducted worldwide measuring the proportion of the creative class in the active population of

a country. In 2011, the top ten nations were Singapore (47.3%), the Netherlands (46.3%), Switzerland (44.8%), Australia (44.5%), Sweden (43.9%), Belgium (43.8%), Denmark (43.7%), Finland (43.4%), Norway (42.1%), and Germany (41.7%). United States (us) lag behind in this scale – ranking 27th in the world, just behind Slovakia. One of the BRIC (Brazil, Russia, India and China) nations, Russia ranks higher than the us. It is in the 20th place (38.6%), while Brazil on 57th (18.5%) and China 75th (7.4%) (Florida 2011). The creative class in the us has grown from roughly 3 million workers in 1900 to 38.3 million workers in 2002, which means that their number has increased more than tenfold. The creative class represents roughly 30% of the entire us workforce (Florida 2010, 74). In 2010, the creative class represented more than 40% of the entire workforce in larger metropolitan areas like San Jose Silicon Valley, Washington, DC, and Boston, as well as smaller college towns such as Durham, North Carolina; Ithaca, New York; Boulder and Ann Arbor (Florida 2011, 11). Recently, many regions and cities have taken up the challenge of attracting and keeping representatives of the creative class. Florida (2010, 17) points out that there are no ‘universal strategies’ for attracting and keeping the creative class. He shows that developing a creative ecosystem is an integrated process relying on specific assets of a given region, whereas solutions are based on knowledge, intelligence and abilities of the residents of a given region. The role of decision-makers should be to attract creative people and keep them by establishing attractive conditions for living and development. Florida points out the need to block the hindering parties – e.g. authority structures and decision-makers, who quash energy and direct it to the sidetrack. Centres of creativity and innovation have been developed not due to traditional economic factors or decisions of local authorities but due to lifestyle attractions making the creative class willing to live there. This claim is supported by Landry (2013, 46) who notes that the most diversified, tolerant and artistic places are the most successful in a new economy.

Creative Class as a Driver of Innovation

CREATIVE CLASS AND HUMAN CAPITAL (HC)

Discussions about economic value of human beings have been around since antiquity, when Xenophon made a distinction between the work of a qualified artisan on the one hand and an artisan having no relevant qualifications on the other, as well as addressed the issues of differences in work performance and work management. The be-

ginnings of the *HC* theory were based on studies by T. W. Schultz, G. S. Becker and J. Mincer, and related to the analysis of the ways of decision making on human self-investment dating back to 1960s. T. W. Schultz developed the concept of *HC* in 1981 claiming that 'all human abilities are either innate or acquired qualities [which] may be developed through proper investments and they shall comprise human capital' (Armstrong 2010, 75).

HC can be divided into general and organisation-specific *HC* (Swart 2006; Wright and McMahan 2011). General *HC* is mostly generated outside the organisation, and the costs of its generation are mostly covered by the individuals in which this kind of *HC* is embedded. It is highly transferable and therefore related to social capital, i.e. knowledge coming from networks of relationships beyond the organisation. On the other hand, organisation-specific *HC* is mostly generated within an organisation depending on the volume of individual's experience in an organisation, number of specific projects in which this individual is involved, etc. This kind of *HC* is mostly tacit and almost impossible to transfer beyond the boundaries of the organisation, therefore it can be related to intellectual capital (Edvinsson and Malone 1997), i.e. knowledge gathered in an enterprise and flowing through the organisation, or even organisational capital (Edvinsson and Malone 1997), i.e. knowledge gathered by the organisation in databases, manuals etc.

INNOVATION AT REGIONAL LEVEL

Regional sciences emphasize that innovation is a process, which is geographically rooted. It is characterized as a factor influencing regional performance and growth (Bottazzi and Peri 2003; Sternberg and Arndt 2001). High levels of innovation have positive influence on performance at the company level (business performance, see e.g. Bhaskaran 2006) as well as on economic performance at regional or national levels (see e.g. DiPietro and Anoruo 2006). Besides innovation, other factors affect economic performance as well, such as the legal system and culture (North 1990), social capital (Putnam 2001), infrastructure (Mamatzakis 2003) and natural resources (Winter-Nelson 1995). Nonetheless, innovation might be the key factor for regional development (Klomp and Roelandt 2004; Gössling and Rutten 2007, 254). Innovation is of key importance for economic growth and an underlying element of the European Union policy for the years 2007–2013 as well, with the aim of accelerating the construction of knowledge- and innovation-based economy and reinforcement of regional innovation systems.

It is important to know the factors that affect the level of innovation in a region. In this respect, influence of regional factors such as *HC* and the number of companies have been analysed (see e.g., Weibert 1999; Brenner 2004). Florida (2010, 14), on the other hand, argues that regions with high share of creative people perform economically better because they generate more innovations, are more entrepreneurial/have a higher level of entrepreneurship, and attract more creative businesses. He notes that it is human creativity that predominantly drives innovation in a country and in specific regions. Creativity and innovation management are therefore extremely important in today's changing social, economic, technological and cultural environment and may prove to be the right way to increased competitiveness and market responsiveness (Suciu, Iordache, and Ivanovici 2009, 211).

As an example we may point out, that the level of innovation in *EU* Member States is assessed annually on the basis of selected indicators, and published in 'Innovation Union Scoreboard' (*IUS*). In 2013, in terms of innovation performance, Poland, for example, fell into the group of countries referred to as modest innovators. Assessment of regional innovation, on the other hand, is made every second year with the use of *IUS* indicators at the regional level for all *EU* Member States and other countries participating in the European Innovation Partnerships for which sufficient data is available.

RELATIONSHIP BETWEEN *HC* AND INNOVATION

There are many theories developed in recent years concerning the *HC* concept (see for example, Folloni and Vittadini 2010), however from the point of the creative class concept, attention should be paid to the *HC* model developed by R. E. Manuelli and A. Seshardi who believe that *HC* (considering its quantity and quality) is able to influence countries' gross national income. The study by R. Florida and S. Youl Lee confirmed the impact of creativity and diversity on innovation across different countries (measured by the number of patents per capita), and taking into account other factors such as *HC* or enterprise differentiation (Florida 2010, 273).

Perception of the important role *HC* plays in encouraging organisational, regional or national development has been strengthened together with the perception of increased importance of knowledge of specific economic processes. One of the major carriers of knowledge is a human (Hicks, Dattero, and Galup 2006; Nonaka 1994; Nonaka, Toyama, and Konno 2000), as only human beings, having access to information and data, are able to process and interpret it

so as to create knowledge (Huber 1989). Therefore, HC might be regarded as the prerequisite for the creation of knowledge. In addition, for this reason, only HR (defined by size and quality) are able to ensure smooth and uninterrupted process of creating, collecting, transmitting and implementing knowledge in the field of economy (Nowakowska, Przygodzki, and Sokołowicz 2011, 43). Moreover, HC acting as a factor of promoting innovation not only expands possibilities of developing innovative businesses, but also is, in fact, their determinant. According to J. Dyer, the DNA of an innovative enterprise is composed of three components: people, processes and philosophies, as parts of the organisational structure (Dyer, Gregersen, and Christensen 2011, 167–73).

The HC theory emphasizes the meaning of value added by workers who contribute to an enterprise, which depends on the determination of workers' impact on the enterprise and their share in the goodwill. According to Florida (2005, 249), it is the intrinsically human ability which creates new ideas, new technologies, new businesses models, new cultural forms, and new industries that really matters. Florida calls it creative capital. For an economy to grow and prosper, individuals, organizations, companies, cities, regions, states, and even nations must nurture, harness, mobilize, and invest in creativity across the board (Florida 2005, 32–3). Florida indicates that (i) creativity is the most important source of wealth in the modern world, that (ii) every human being is creative, and that (iii) people everywhere in the world attach importance to engaging into creative work.

The importance of deploying HC is stressed also by Trias de Bes and Kotler (2011, 2) who argue that HC should be developed in the whole company because when a company limits its approach to the technological aspect or to its R\&D department, it also misses out on the creative potential of professionals working in other departments:

[...] we are not saying that R\&D shouldn't innovate or be involved in the innovation process. What we are saying is that, in addition to R\&D and technology, there are lots of other departments and ways to generate innovation in the company. Part of the gap between the need to innovate and the limited capacity to do so has to do with narrow-minded policies that restrict innovation policy and strategy exclusively to technical departments. The consequence of such a limited vision is that managements in many companies don't have much to show for their investments in innovation.

Based on the review of literature, we can assume that the creative class seems to be an important factor, which influences innovation in organizations, regions and countries. In the paper, we are going to verify the following research hypotheses: *Creative class positively affects the level of innovation in a geographical region.*

Research Methodology

In the study, the conceptual model is developed to measure the size of the creative class in Poland. In reference to Florida's (2005) concept, the creative class is defined as a group, which integrates two sub-groups of workers: (i) the super-creative core, corresponding to the scope of operation of creative industries, and (ii) other employees, corresponding to the scope of operation in the rest of the knowledge-intensive industries. The size of the creative class in a geographic area is defined by a set of industries and the number of businesses operating in those industries within the geographic area. The conceptual model consists of business entities operating in six groups of industries regarded as the creative class (Karasek 2012, 181–2). Among them, there are business entities operating in the 'Creative Activities and Entertainment' industry engaged in film, sound and music making, journalism, radio and television, advertising, publishing, cultural activities, designing service, and retail sales of cultural property. The second group of industries is 'Information and Communication Technologies' (ICT) which combine entities in manufacture of ICT, including computers, electronic and optical devices, provision of ICT services, software and games. The conceptual model includes also the following groups of industries: financial intermediation, legal and business services, R&D and higher education, architecture and engineering.

As already mentioned, size of the creative class is defined as the number of actively operating business entities in one of the industries mentioned above, which are also formally entered into the National Official Register of Business Entities (REGON). The sample consisted of all micro, small, medium and large Polish enterprises under NUTS II in 16 regions (voivodships). Evaluation of the size of existing creative class in Poland is based on the data gathered by the Central Statistical Office at the end of the year (Q4) 2009, 2010, 2011, 2012 and 2013. The methodology of measuring the size of the creative class gives the possibility to measure only active and registered entities. The measurements were taken over the period of five years in the last quarter of the year, to show changes in the size of the creative class.

Discussion and Results

CREATIVE CLASS IN POLISH REGIONS

Study results show distribution of the creative class in specific regions, according to all types of enterprises, based on the adopted measurement model for the creative class in Q4 2009, 2010, 2011, 2012 and 2013, as shown in table 1. As can be seen, since 2009 the share of entities belonging to the creative industry in relation to all dynamically operating entities entered into the National Official Register of Business Entities (REGON) has been growing continuously.

In the fourth quarter of 2013, there were altogether 525,868 business entities dynamically operating in Polish regions (voivodships) belonging to the creative industry, which represents increase of 8.2% when compared to 2009. The largest growth was observed in 2012. As showed in table 1, in 2013, the highest concentration of enterprises operating in the creative industry was in the Mazovian (124,815 entities), Silesian (58,679 entities) and Wielkopolskie (50,246 entities) voivodships. The smallest number of entities belonging to the creative industry was recorded in Lubuskie (10,974 entities), Podlaskie

TABLE 1 Business Entities Classified as Belonging to the Creative Class in Specific Voivodships in Q4 of 2009, 2010, 2011, 2012 and 2013

Regions (voivodships)	2009	2010	2011	2012	2013
Lower Silesian	40148	42014	33161	42724	43987
Kujawsko-Pomorskie	21999	22345	17403	21923	22409
Lubelskie	18341	19062	15031	18380	18952
Lubuskie	10914	11286	8712	10885	10974
Lodzkie	26720	28174	21970	28147	28790
Malopolska	40162	42630	34198	43811	45040
Mazovian	108781	114894	91608	118235	124815
Opolski	12168	12562	9223	11856	12008
Podkarpackie	15698	16689	13610	16652	17749
Podlaskie	10642	10702	8406	10789	11097
Pomeranian	31173	32375	26301	32394	33368
Silesian	56033	58705	45378	57421	58679
Swietokrzyskie	11224	11371	9108	10942	11144
Warminsko-Mazurskie	11878	12340	10098	12083	12420
Wielkopolskie	46040	47932	38253	48445	50246
West Pomeranian	24112	24589	18646	23466	24190
Total	486033	507670	401106	508153	525868

NOTES Calculations based on data from the Central Statistical Office.

The Creative Class in Poland and Its Impact on Innovation

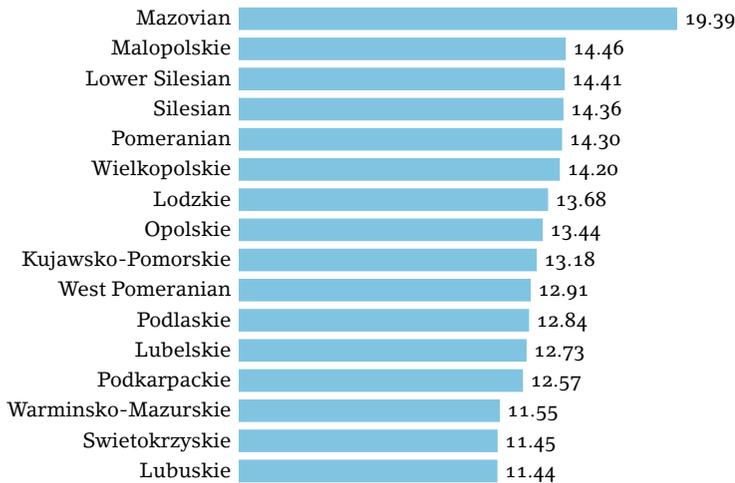


FIGURE 1 Share of Entities Belonging to Creative Class to All Entities in Voivodship (calculations based on data from the Central Statistical Office)

(11,097 entities) and Swietokrzyskie (11,144 entities) voivodships.

At the level of regions (voivodships), increase in the number of entities operating in creative industries between 2009 and 2013 may be observed in 14 out of 16 Polish regions (voivodships). The largest increase is reported in the Mazovian (114.7%), Podkarpackie (113.1%), Malopolskie (112.1%), Lower Silesian (109.6%) and Wielkopolskie (109.1%) voivodships. On the other hand, decrease in the number of entities occurs in two voivodships: Opolskie (98.68%) and Swietokrzyskie (99.29%). In 2013, entities belonging to the creative class accounted for 14.65% of all registered entities. At the country level, the share of business entities belonging to the creative class has increased since 2009. Nevertheless, the share of business entities classified as the creative class differed across specific regions (voivodships). The largest share is reported in Mazovia (19.39%), Malopolska (14.46%) and Lower Silesia (14.5%). The smallest share is recorded in Lubuskie and Swietokrzyskie (11.44%) as well as Warminsko-Mazurskie (11.55%) voivodships. This data points to high diversification of business entities operating in the creative class in specific regions (voivodships), which is shown in figure 1.

REGIONAL INNOVATION LEVEL

Measurement of the level of innovation in regions is based on data available in the Regional Innovation Scoreboard (RIS) prepared by the European Commission. The measurement is based on a set of 12

indicators available in a given region, grouped into enablers, firm activities and outputs. In the group of enablers, percentage population aged 25–64 having completed tertiary education, and R&D expenditure in the public sector as percentage of GDP are analysed. Firm activities are measured by indicators such as: R&D expenditure in the business sector as percentage of GDP, non-R&D innovation expenditure as percentage of GDP in SMSS, SMSS innovating in-house as percentage of SMSS, innovative SMSS collaborating with others as percentage of SMSS, public- private co-publications per million population and EPO (European Patent Office) patent applications per billion regional GDP (PPS€). The outputs of innovation in regions are measured by indicators such as: SMSS introducing product or process innovations as percentage of SMSS, SMSS introducing marketing and organisational innovations as percentage of SMSS, employment in knowledge-intensive services, employment in medium-high/high-tech manufacturing as percentage of total workforce and sales of new to market and new to firm innovations as percentage of turnover in SMSS. Depending on the obtained score, a region may be classified as an innovation leader, innovation follower, moderate innovator or modest innovator.

Regional assessment showed that in 2011, 15 out of 16 regions were classified as moderate innovators and only the Mazovian voivodship was allocated in the group of modest innovators. By analysing the levels of innovation in specific regions in the years 2009–11, it may be noted that 11 regions maintained their ranks whereas the Mazovian voivodship improved its level of innovation (in 2009, it was classified as a medium moderator and in 2011 as a high innovator). In four regions (voivodships) on the other hand, the level of innovation deteriorated. In 2009, Silesian voivodship was classified as a high innovator, but in 2011, it was found in the group of medium innovators. In case of Opolskie, Lubelskie and Podkarpackie voivodships, their status was changed from modest innovators to low innovators.

RELATIONSHIP BETWEEN THE CREATIVE CLASS AND INNOVATION IN A REGION

In our study, we measured the level of regional innovation on the basis of output indicators – patents and rights of protection for utility models granted in 2012 to domestic entities broken down by the voivodship or patent applications and utility model applications filed in 2012 in Poland by domestic entities broken down by the voivodship per each 100 thousand inhabitants. This indicator is used by

OECD to measure the level of innovation (*Oslo Manual* 2005, 26).

Pearson's correlation coefficient was calculated for patents and rights of protection for utility models granted to domestic entities (2012) and the size of the creative class in 2012. Pearson's correlation coefficient for Polish regions (voivodships) is 0.931 at significance less than 0.001, which indicates a strong correlation between the size of the creative class in each voivodship and the number of patents and rights of protection for utility models granted to domestic entities.

DISCUSSION

In the research hypothesis, we focused on the impact of the creative class on the level of innovation in Polish regions (voivodships). The hypothesis was verified using statistical data of the number of dynamically operating, registered business entities conducting their economic activity classified in accordance with the Polish Classification of Activities 2007 (PKD) in Q4 2009, 2010, 2011, 2012 and 2013. Data pertaining to the year 2013 shows that Mazovian voivodship with the largest number of dynamically operating business entities is the most innovative region of all regions in Poland. Moreover, there is a strong correlation between patents and rights of protection for utility models granted to domestic entities and the size of the creative class in 2012.

When comparing data for 2009 and 2013 in Poland, it should be noted that the number of entities belonging to the creative class has clearly increased (by 8.2%). As far as individual regions (voivodships) are concerned, we have observed an increase in the number of dynamically operating business entities classified as belonging to the creative class in 14 out of 16 regions (voivodships), and in case of 2 a slight decrease.

Conclusions

Identification of factors influencing the level of regional innovation is an important source of information for entrepreneurs and decision-makers. The study confirms that one of such factors is the existence of the creative class. The aforementioned identification will allow starting actions providing for attracting, sustaining and triggering active involvement of the creative class, which consequently may lead to an increased level of regional innovation.

Analyses conducted in the study have confirmed that regions with a larger number of actively operating business entities identified as belonging to the creative class show a higher level of innovation.

However, we may observe some diversity across regions as regards prevalence of business entities identified as belonging to the creative class, and their share in the structure of all actively operating entities. Moreover, between 2009 and 2013, the number of entities identified as belonging to the creative class in Poland has grown rapidly and the ratio of business entities classified as the creative class to all registered enterprises has grown as well.

The essence of creative class impact on the level of innovation was grasped in the report 'Poland 2030,' where it was shown that the key to boosting development of Polish cities is increasing their general attractiveness, domestically and internationally. Investments should be made in the infrastructure and city space, and quality should be enhanced and conditions for development of the creative class should be provided (Poland 2030, 266).

Creative people constitute the most significant capital of any country, region or an enterprise, influencing the level of innovation and competitiveness. Therefore, creation of favourable conditions enabling their development should serve as a challenge for decision-makers, at the level of enterprises, regions and the country as well.

LIMITATIONS/FURTHER RESEARCH

During this research, some limitations have occurred during measurement of the creative class as the number of business entities. The research could be more precise if we measured the size of the creative class through the number of employees belonging to the creative class who actually represent the human capital. Further research in this area could include such research in the future.

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