

ZBIGNIEW ZIOŁO

Pedagogical University of Cracow, Poland ■ Podkarpacka Higher Education School in Jasto, Poland

## The Determinants of Entrepreneurship Development in Spatial Systems

**Abstract:** the processes of technological progress create new opportunities for economic, social and cultural growth, shape new relations between economic entities and their environment, and influence changes in the determinants of entrepreneurship development. These processes vary significantly in certain geographic locations, characterised by an enormous diversity of natural, social, economic and cultural structures. As a consequence, this creates different opportunities and different conditions for the development of entrepreneurship in certain spatial scales, from the continental scale, through national and regional to local scales. The article presents complex conditions for the development of entrepreneurship, highlights its limitations resulting from institutional barriers, and the importance of knowing the mechanisms of mutual relations between spatial systems and the influence of control instruments. The quality of central and local government authorities is of particular significance here, which do not always properly use the mechanisms of rational business support. A serious barrier to the development of entrepreneurship is the low quality of social capital, manifested in a lack of trust in institutional authorities and reluctance to engage in entrepreneurship and business development. The conclusions point out that further research should be developed that will take into account changing business conditions, with a defined strategic goal of raising the quality and standard of living, international competitiveness of the country and products in different market categories.

**Keywords:** spatial systems; conditions of development; geographical space

**Received:** 2 January 2017

**Accepted:** 30 June 2017

**Suggested citation:**

Zioło, Z. (2017). The determinants of entrepreneurship development in spatial systems. *Przedsiębiorczość – Edukacja [Entrepreneurship – Education]*, 13, 8–24. DOI: 10.24917/20833296.13.1

The intensifying processes of technological progress create new opportunities for economic, social and cultural growth, shape new relations of commercial entities with their environment, and influence changes in the conditions of enterprise development. These processes vary significantly in certain geographic locations, characterised by an enormous diversity of natural, social, economic and cultural structures (Zioło, 2003).

As a consequence, this creates different opportunities and different conditions for the development of entrepreneurship in certain spatial scales, from the continental scale, through national and regional to local scales. Therefore, in order to rationally stimulate the development of the entrepreneurial activity, within the structure of spatial systems that are diverse in terms of their potential and functions and the developing economic entities within them, the knowledge of the underlying conditions and rules of the development of entrepreneurship is indispensable (Armington, Acs, 2002; Lee, Florida, Acs, 2004; Rachwał, 2003; Zioło, Rachwał, 2006, 2008, 2016; Kudełko, 2013).

The change in the determinants of entrepreneurship development is primarily influenced by the civilisation development process that manifests itself in the transition from the industrial and post-industrial phases of development to the information phase. As a consequence, the role of industry and services is diminishing, while the importance of science, which takes over as an economic base, and enables the development of a knowledge-based economy, is growing. The expression of this is the extensive process of automation and robotisation of production and services, which increasingly eliminate the size of employment. Employees are replaced by cheaper, more efficient machines and robots, which will entail the implementation of new information delivery, management and work organisation systems, as well as staff training.

As a result of developing telecommunications, the world space becomes more and more accessible and enables the transmission of information, regardless of the physical distance. This feature permits the development of spatial relationships concerning production, cooperation, raw materials, services, technology, capital, finance and the use of knowledge and new technological solutions. These processes affect the increasing demand for new quality staff, changes in market connections, and sometimes new social, economic, cultural and political relationships.

The outlined tendencies modify the conditions, as well as create new opportunities for the development of entrepreneurship, as well as production and service activities for economic entities, diversified regarding the branches and technical and economic potential and functions. Literature of the subject (Wach, 2015), as well as many in-depth empirical studies, presented in successive volumes of the journal "Entrepreneurship – Education", allow for trying to synthesise this complex and interdisciplinary research problem concerning the determinants of entrepreneurship development in spatial systems<sup>1</sup>.

We assume that the attempt to synthesise existing research results will also be the basis for conducting more and more precise research into the development of economic activity and determining their impact on the economic, social and cultural development potential of different spatial scales. We recognise that the development of entrepreneurial attitudes of society will have a significant impact on economic growth,

---

<sup>1</sup> The issues of entrepreneurship development and entrepreneurship education at the school and academic level, as well as studies in this field, were intensified with the establishment of the Department of Entrepreneurship and Spatial Management in the structure of the Institute of Geography of the Pedagogical University of Cracow. It has been assumed that in the face of the growing role of economic entities in the context of escalating globalisation, there is a need to shape entrepreneurial attitudes in society. It is the subject of a series of conferences devoted to the issues of entrepreneurship development and education, as well as the "Entrepreneurship – Education" series. To date, 13 scientific meetings have been held together with the Conference of Teachers of Entrepreneurship and 12 volumes have been published. The list of all publications is included in the paper by T. Rachwał in this volume.

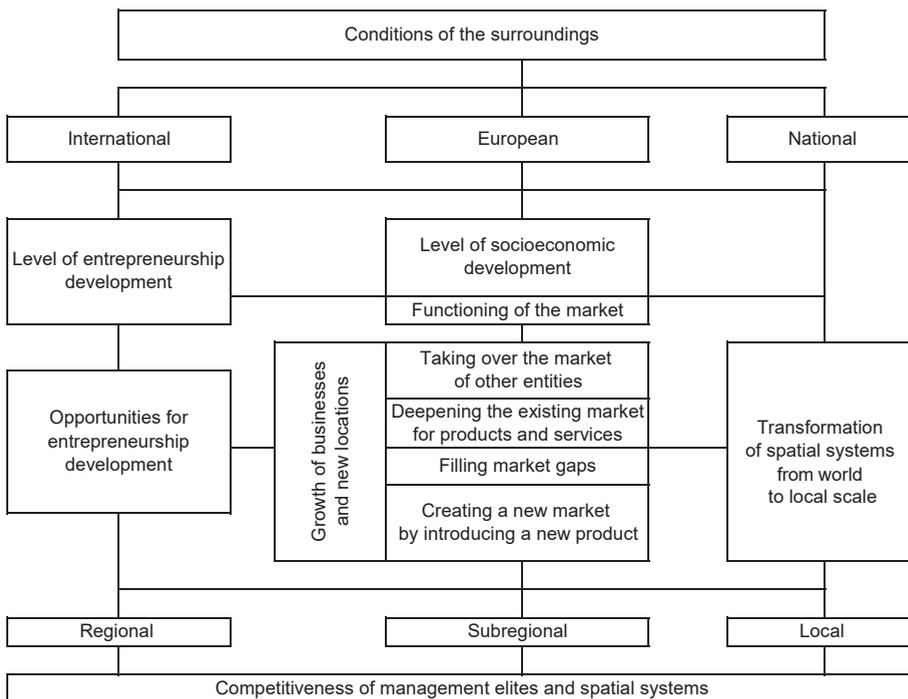
and on the levelling spatial disparities in this area, as well as the level and quality of life of the population.

We assume that in order to intensify the development processes of different spatial scales, it is crucial to promote the dissemination and enhancement of the quality of entrepreneurship education, both at the school and academic levels (Zioło, 2012; Kurek, Rachwał, 2009; Zioło, Rachwał, 2012; Wach, 2013; Rachwał, Kurek, Boguś, 2016; Nowak, 2016). An important role in this respect is played by education, further training and improvement of entrepreneurship teachers and the society. Fundamental to the intensification of civilisation development and the active involvement of the economy in modern development processes, is to strive for the best possible preparation of the entire society for new challenges. It can be achieved by increasing its intellectual resources and building human and social capital (Westlund, Bolton, 2003; Kamińska, Heffner, 2010; Zioło, 2010).

### Conditions for the development of entrepreneurship

The determinants of entrepreneurial development and activity are both internal structures of spatial systems and relations with different categories of the environment (Fig. 1). The international, European and national environments, as well as regional and local contexts, play a significant role in the development of entrepreneurship. Under conditions of increasing competitiveness, the environment creates demand for products or services.

Fig. 1. Conditions of entrepreneurship development in regional systems



Source: own development

The formation of entrepreneurship in regional arrangements is fundamentally affected by the extent of their openness to the environment, absorption and the potential for deepening international, European and national markets. Internal determinants of the economic, social and cultural potential of sub regional, supra-local and local systems also play a significant role. To stimulate and increase the effectiveness of this process, the quality and level of intellectual resources of entrepreneurs and elites in the local, social and political structures, and their ability to undertake joint efforts for the economic and cultural development of the spatial layout are also important. The level of their professional preparation and their ability to use internal resources and market mechanisms to stimulate and intensify the development of business entities are of particular importance. It is achieved through the development of appropriate direct and indirect impact tools tailored to the specific conditions of a given spatial scale, regarding the market needs of their environment.

The influence of international, European and national circumstances on business development often changes and is reflected in the current economic, social and political situation in their internal structures. On the global scale, the interactions between the global growth poles, namely the United States, China, Japan and Russia, and the potential for strengthening their links with the Polish economy are exerted by mutual relations. Reciprocal relationships, and especially the degree of intensification of cooperation, can influence the stimulation of typical development, stagnation or even recession<sup>2</sup>.

A significant influence on the development of entrepreneurship of regional systems is exerted by the potential of capital and financial resources, political stabilisation and developing markets. They affect the intensification of investment processes, increasing the size of production and services offered. They also stimulate the growth of existing businesses and the opportunities for new locations for diverse activities. They can influence the takeover of other market players, deepen existing markets, fill market gaps, and create new markets for new, most often more competitive products or services.

The economic potential and spatial structure of individual regions are distinguished by their different attractiveness for stimulating development processes (Kudęłko, 2003). It is why the outlined mechanism can variously influence change, leading to levelling the existing differences in the development of regions, changing their proportional increase or intensification of polarisation processes, by spatial concentration of locations and activities of enterprises in particular areas or local systems<sup>3</sup>.

---

<sup>2</sup> An example is an embargo of Russia on Polish agricultural products, mainly from eastern regions, which is the result of worsening political relations, as well as the increase in oil and gas prices relative to Western European countries, the need to seek new markets for agricultural products. The influx of cheap knitwear, clothing and shoes from the Far East, the impact of the decline of these branches in the country, including craft establishments located in local arrangements. Many fears for European countries prompted the postponed trade agreement with the countries in North America – TTIP. It was recognised that some points of this agreement were very unfavourable for the European Union countries. In particular, these include the potential for private corporate governance above the legislation of sovereign governments; the banking sector policy set by the Federal Reserve, Wall Street and the European Central Bank; the introduction of the US agricultural policy, especially regarding GMOs and subsidies for agriculture and the proposed rule that no European country can impose laws prohibiting access to its food market and GMO seeds; and adopting standards introduced by the Food and Drug Administration (GlobalResearch, 7.09.2016).

<sup>3</sup> It is indicated by, among other things, the changing number of headquarters of the 500 largest domestic companies. Between 2000 and 2014 the number of them in the Mazowieckie Voivodship increased from

In the process of socio-economic development in the structure of various spatial systems, there have always occurred diverse conditions of the development of economic activity. They refer to changing management systems, which are characterised by certain features enabling the location and development of business (Fierla, Kuciński, 1999; Kuciński, 1997, 2006). Hence, in the structure of spatial systems, we encounter companies emerging in different periods of development: in the pre-war years, the years of the centrally controlled economy, in the years of implementation of market economy rules and in recent years in the developed market economy. These changes often diversely influenced the shaping of socioeconomic and spatial structures (Kieżun, 2012; Karpiński et al., 2015; Dwilewicz, Morawski, 2015; Ślęzak, 2016).

At the same time, individual spatial arrangements sometimes create different conditions for the development of entrepreneurship, the location of new businesses and the possibility of increasing the activity of economic entities. In general, it can be assumed that the conditions underlying their existence are differences in natural, economic, social and cultural conditions (Zioło 2003). Conditionally delimited factors create a variety of opportunities for location and development of production and service activities (Table 1). The natural conditions are determined by geological structure, weather, water conditions, relief, soil quality, as well as flora and fauna<sup>4</sup>.

Social determinants include the resources and quality of material culture, the demographic potential, the level of development and the quality of human and social capital, as well as the infrastructure and the settlement network.

Cultural considerations play an increasingly important role in the development of economic activity. These include, but are not limited to, the spiritual culture, aspirations of society, level of education, intellectual resources, as well as quality of social, cultural and political consciousness that fundamentally influence the level of community's innovation. Change starts in the knowledge base of a properly educated individual and society, who, by using basic and laboratory research, take the risk of producing a new or existing product, assess the market absorption, and determine further business opportunities.

Production and service functions of companies and their location in the global, European, national, regional or local space play a significant role in the attractiveness of business areas. Access to decision centres, access to capital and various categories of markets (product outlets, raw and cooperation materials supplies, etc.) are of particular importance.

---

191 to 210, in the Dolnośląskie Voivodeship from 28 to 49. In the Lubuskie Voivodeship it remained constant and amounted to 7. However, in Zachodniopomorskie it decreased from 13 to 4, in the Śląskie Voivodship from 62 to 45 and Podkarpackie from 17 to 9. It was accompanied by a change in the concentration of their economic potential and management (Śleszyński, 2007).

<sup>4</sup> For example, geological resources allow the exploitation of existing resources, which may have international (copper and associated resources of silver, gold), domestic (oil, natural gas, rock), regional or local (ceramic clay, gravel, sand) importance. In the process of economic development their role can be changed, e.g. decrease in importance of coal and sulphur or increase in the importance of copper. Areas of exploitation of resources or post-mining areas may be the basis for the development of new activities such as tourism, education or leisure. The quality of the geological substrate also influences the location of particular groups of objects that require specific strengths of the ground or hydrogeological relationships (e.g. hydrothermal resources), and others.

Table 1. Conditions for the development of entrepreneurship in spatial systems

	<b>Groups of conditions</b>	<b>Selected features of conditions</b>
<b>Environmental</b>	Geological resources	Resource exploitation, tourism – geological peculiarities
	Climatic conditions	Power industry, tourism, health and leisure services
	Water conditions	Power industry, transport, tourism, sport, health and leisure services
	Landforms	Power industry, transport, tourism, sport, health and leisure services, crops
	Soils	Competitive crops of cereals, root crops, industrial crops, grasslands
	Vegetation	Crops, tourism, health and leisure services, ecosystems
	Animals	Hunting tourism, ecosystems
<b>Economic (level of development)</b>	Potential and structure of agriculture	Growing of cereal crops, root crops, industrial crops, meadow crops
	Potential and structure of industry	Development or change of production of existing companies, acquisition of companies and recapitalisation or liquidation, location of new companies or branches, development of production, raw materials and cooperation, service activities
	Infrastructure and transport accessibility	Temporal, road and IT availability
	Quality of service network	Utilising the existing or developing new ones
	Institutional efficiency	Legal, administrative, financial, health and educational services
	Capital resources	Business entities, institutions of the population as consumers of products and services
	Financial resources – market absorption	Potential absorption of the market for products and services
<b>Social</b>	Material culture	Technical condition and quality of housing, communal and institutional infrastructure
	Demographic structures	Gender, age, birth rate, migration, occupational activity
	Potential and quality of labour resources	Resources, level, quality and structure of professional qualifications
	Human capital	The ability to work together, the level of professional qualifications, ability and willingness to improve and further develop
	Social capital	Degree of social trust, ability to set and achieve development goals, willingness to mutual help, mutual investment and management
	Settlement network	Potential, functions, quality, location of towns, villages, degree of concentration of settlements and buildings, infrastructure and functional links, costs of functioning of settlements and relations between them (economic, temporal)

<b>Cultural, subordinated to the preservation of traditions, the development of entrepreneurial attitudes, the improvement of quality and standard of living, and the acceleration of the information society</b>	Spiritual culture	Principles of religious denominations (ritual, superficial, spiritually deepened), accepted principles of ethics
	Preservation of national, regional, local traditions	Respect, preserve and transmit the traditions of the national, intellectual, material and cultural heritage of the global, European, national, regional and local economy, society and culture
	Aspirations of society	Building and improving visions of directions for the development of the world, the European Union, the state, the region, the settlement unit, the household, the life plans of the adults, the youth and the children to address the challenges of the information society
	Education	The level, quality and directions of education of the population referring to the current and developing job markets of the developing information society
	Intellectual resources	Ability to analyse, willingness to learn about social, economic and cultural mechanisms of reflection to stimulate entrepreneurial attitudes of adults, adolescents and children
	Social awareness	Relationship of social opinion to entrepreneurs (conviction: entrepreneurs are bad people, entrepreneurs are creative people and hard workers, influencing economic development). Degree of understanding and willingness to acquire knowledge and skills in the use of economic and social processes to generate development and increase the competitiveness of society and individuals
	Cultural awareness	Degree of understanding and willingness to acquire knowledge and skills to raise cultural resources in the community to generate the development and increase the competitiveness of societies and individuals
	Political awareness	The level of understanding of the mechanisms shaping global, European, national and regional policy, and its use to stimulate social, economic and cultural growth in society and individuals. Ability to analyse historical processes and use their rules to stimulate socio-economic and cultural growth in a country, region, local jurisdiction
	Level of innovation of society	Constant tracking and readiness to implement new products, services and improvement of management methods as well as social and family cohesion
<b>Spatial location and market accessibility</b>	World	Accessibility to decision centers, physical distance, time, communication, capital and financial constraints and availability to specific market categories
	European	
	National	
	Regional	
	Local	

Steering instruments	World institutions	They define the possibilities of functioning and shaping economic entities, institutions, activities of public authorities and behaviour of the society. The degree of co-ordination of legal instruments is essential to reduce the conflicts of interests of different scales and to stimulate their socio-economic and cultural growth
	European Union	
	National	
	Voivodeship local government authorities	
	Gmina local government authorities	

Source: own development

Economic activity is established within the framework of certain economic rules and the quality and stability of the adopted law. It enables the introduction of specific direct and indirect impact instruments that create more or less favourable conditions and even barriers to the pursuit of a particular type of economic activity.

An important role is also played by the location of areas (or settlement units) in the European, national, regional and local space, accessibility, as well as the quality of legal instruments implemented by the relevant governmental and local authorities.

The outlined conditions in various spheres enable to stimulate entrepreneurship and development of companies with different technical and economic potentials and different functions in the economy of the various spatial scales.

In business activities, there are specific relationships between diverse groups of conditions, which may create a favourable development situation, but they may also have conflicts between them, such as environmental issues, different interests between competing business entities over market takeovers, and also between companies and institutions or the society.

It means that entrepreneurial development is a complicated process requiring a complete analysis of the concept stage, through the programming and design phases to the implementation of the investment, and subsequent running the business and prospective development opportunities. An important role in this respect is also the identification of the possibility of changing the conditions of different spatial scales, direction of technical progress, behaviour of products on the market and others. Among the regional and local structures, the quality of local government, which may create more or less favourable opportunities and even some barriers to business start-up and development, has a significant impact on the development of entrepreneurship<sup>5</sup>.

In general, it is important to assume that every economic activity is carried out within the framework of microeconomic rules in which the pursuit of maximising profit is paramount. In this process, the entrepreneur takes their own decisions with their interests and risks. Active decisions influence potential growth, but incorrect decisions expose an entity to specific losses. It entices entrepreneurs to build development strategies based on current knowledge and anticipated opportunities for changes in location conditions and business development. On the other hand, spatial systems develop by mesoeconomic rules and the national economy based on macroeconomic rules. The natural thing is that between these rules there are certain conflicts to be expected and negotiated between the two. For example, companies would like to pay the lowest taxes and local, regional or state governments would like to increase their financial income. A rational compromise

<sup>5</sup> Examples of negative behaviour of local and legal authorities in this regard have been presented by Wybranowski (2012a, b), Cieślak-Wróblewska (2014), Zatoński (2016).

in this respect can be made by knowledge of the mechanisms of economic activity and the rules of the development of different scales of spatial systems.

### Doing business in Poland in the opinion of foreign investors

According to the view of foreign investors, domestic conditions create favourable opportunities for location and business development. In the first years of transformation and implementation of market economy rules, the main advantage was the possibility of using large well-prepared resources of cheap labour. Thus, the newly-established companies were often to assemble finished products out of the components manufactured mainly in economically developed countries. This activity required a lot of work, which was much more expensive in Western countries than in Poland.

Among the essential prerequisites for undertaking a business activity in Poland, foreign investors mention economic stability, internal market, resources availability, political stability, organisational culture, employee loyalty, work efficiency, etc. (Table 2).

Table 2. Assessment of Poland by foreign investors

<b>Criteria</b>	<b>Points (scale 1–5)</b>
Economic stability	3.91
Internal market	3.79
Availability of materials	3.75
Political stability	3,71
Organisational culture	3.69
Employee loyalty	3.68
Work productivity	3.64
Quality of land	3.59
Acquiring funding	3.57
Availability of personnel	3.53
State of infrastructure	3.42
Public help	3.38
Cooperation with administration	3.37
Labour costs	3.34
Level of corruption	3.34

Source: Woźniak (2015)

As a result of the experience gained in cooperation with Polish companies and favourable conditions for business development, many foreign corporations decide to locate branches that are also producing state-of-the-art products, as well as locate their research and development centres and business service institutions. It is possible due to considerably competitive and qualified staff with various levels of education.

For example, the German concern Trumpf, the world leader in the production of industrial laser machines for the plastic processing of metals, plastics, sheet metal and glass, also develops modern, industrial laser processing. In the last year, the company's production value increased by 10% and reached USD 12 billion. The branch which produces

electronic components for laser machinery for cutting sheet metal has operated in Poland for ten years. The Trumpf Polska branch has grown from a sales point which initially employed only seven employees. It currently employs over 300 workers in the sales department in Warsaw and its manufacturing facility in Zielonka (Trumpf..., 2016). In total, the company invested more than 10 billion euro. The development of a new hall of 3200 m<sup>2</sup> of the available floor is being constructed. The company representatives in Poland highly value the level of education of their employees and recognise their serious intellectual potential. Using these conditions, it creates jobs in the high technology sector for highly skilled workers, mainly electrical engineers, physicists and engineers. The company is still looking for polytechnic graduates and is going to develop its research and development activities. The whole production from Poland is exported, such as power supplies mainly sold to Japan and South Korea. Poland's qualities are also picking up due to changing international conditions, including the weakening of economic growth in China and Brazil, sanctions against Russia, the UK's exit from the European Union, chaotic situation in Turkey, and uncertainty surrounding terrorist attacks. Moreover, the favourable situation results from the always-developing Polish economy, strong links with the German economy and potential domestic market, which absorbed over 1,800 machines dedicated to sheet metal working. The requirements of the Polish market are evidenced by the fact that 80% of the machines are state-of-the-art devices equipped with a crystal to produce a laser beam, transmitted by an optical fibre.

Similarly, the situation in Poland is assessed by S. Mehra (2017), the HSBC director of service centres. The branches of this company operate in Asian countries: China (2 centres), India (6 centres) and Malaysia, Sri Lanka and the Philippines, as well as in Egypt. The new branch office in Kraków has grown from about 300 employees to 2200. The director emphasises that Kraków creates highly favourable conditions for the development of the business, which manifests itself in the high quality of available staff, mainly young university graduates, with knowledge of foreign languages and new management methods, as well as the presence of companies with similar business profiles. The director emphasises that the best conditions for the development of this type of activity are provided by university cities which have a didactic cadre and the possibility of adapting education profiles to the needs of a given sector of activity. The advantage of Kraków concerning the existing Asian locations is the continuous flow of university graduates for the expanding labour market, high quality and modern office space, developed transport infrastructure, the opportunity to gain work experience and a convenient location in the European area. A serious vehicle is also a common knowledge of English while a barrier is the lack of staff with knowledge of French, Italian and other languages.

Recently, Whirlpool, the world's largest appliance maker, has decided to launch the Common Service Centre in Łódź. Among the potential locations, Poland, according to Vice-President M. Fossataro is "a great place to build and develop a shared service centre". He claims that there are plenty of well-educated people with technical and analytical skills. The Centre is looking for individuals with accounting and analytical skills, knowledge of foreign languages and information systems. "Young people are motivated, energetic, and willing to take part in building something entirely new" (Frąk, 2017). The centre is expected to handle 45 markets from Portugal to Russia and from Scandinavia to Italy and Greece. Labour costs play a smaller role, while the quality of service is of paramount importance, so people are the most important here.

Representatives of foreign companies emphasise that the most favourable conditions for the location of service centres in Poland and branches of modern technology corporations are predominantly in university cities which have adequate scientific staff and considerable resources of the appropriately educated cadre.

### Assessment of business conditions by domestic entrepreneurs

The innovation rankings indicate that Poland is usually in the end position among European countries, which means that in this respect it is one of the least developed countries (Duszczuk, 2016; Rochowicz, 2012; Rachwał, 2012; Rachwał, Wiedermann, 2015). It is due in large part to unfavourable fiscal rules, which do not encourage entrepreneurs to indicate the size of expenses on finished development work. As one of the criteria, these rankings take into account the value of companies' R&D expenditures. Meanwhile, the study of the Faculty of Economic Sciences of the University of Warsaw indicates that most domestic companies do not report on expenditures for this purpose in their financial statements. The university research centre, together with the Polish Business Council, based on research conducted in nearly 30,000 private companies, has shown that 37% of them have innovative activity, but only less than 4% have shown it in their financial statements. Companies did not provide this data because unfavourable tax regulations did not encourage the disclosure of expenditures on completed development as intangible assets due to the need for their depreciation.

There is, therefore, the need to create more favourable conditions for companies increasing their R&D expenditures. It is expedient to introduce a new financial relief consisting of, for instance, income tax exemption from the commercialisation of research and development results. It should be emphasised that for entrepreneurs innovative activities are risky, and losses arising from this can be treated by financial institutions as deliberate actions to the detriment of their business. It is also important to create a more friendly atmosphere around entrepreneurs in the public opinion, which will also influence the improvement of the conditions of business development and encourage the establishment of new companies<sup>6</sup>.

New favourable conditions for the development of economic activity have recently appeared in the government and are related to the promotion of Polish products by supporting export and global expansion of the Polish companies (Osiecki, 2016). The Intelligent Development Program is designed to provide entrepreneurs with the right export subsidies. It is supported by the new rules for promoting export and foreign investment, prepared by the Ministry of Development. A new Polish Trade and Investment Agency was established with a network of international retail outlets, replacing existing agencies such as Polish Information and Foreign Investment Agency. The new conditions envisage the possibility of increasing access to finance export as well as pro-export and investment activities of companies. The Foreign Expansion Fund established for this purpose was

---

<sup>6</sup> Especially promising is the development of the production of drones. In the years 2015–2016 the value of the Polish drones market increased from PLN 165 million to PLN 201 million, i.e. up by 121.8%. It covers mostly trade (55%), services (33%) and production (12%). Sources of finance for the economic activity are the barrier to development, though. Firms base their expansion mainly with their income (87%) and owners' savings (43%).

strengthened by the Corporation of Export Credit Insurance and the National Economy Bank with the capital and organisational know-how.

The research results of the Maison Research House conducted by the Association of Entrepreneurs and Employers indicate that running a business is becoming more difficult (Ćwiek, Marczuk, 2013). The biggest barrier to entrepreneurship is high non-wage costs, which in 2012 was indicated by 45% of people in business, and in 2013 by as much as 77%. The next barriers include bureaucracy for which 20% and 60% respectively complained, followed by unstable law (21%, 57%), high taxes (32%, 54%), complicated economic law (10% and 44%), offices and officials (10%, 28%), etc.

The authors of the Millennium Index who report on the potential of regional innovations have presented various ways to speed up the processes of innovation of the local economy and enterprises (Niewiadomski, 2016). The report states that there are different conditions in the domestic space in those terms. It was emphasised that the leaders of the implementation of new technologies are companies located in the following voivodeships: Mazowieckie, Małopolskie, Dolnośląskie and Pomorskie. It has also been pointed out that in low-industrialised regions (Podlaskie, Lubelskie, Podkarpackie), a significant influence on the favourable shaping of the innovation potential may be the mutual trust on which social capital can be built.

In other studies, entrepreneurs indicate that weakening of business activity is significantly affected by institutional barriers. Amongst them are the lack of stability of tax regulations, indicated by 52% of entrepreneurs, bureaucracy and administrative burden (50%) and labour costs (42%), as well as grey area and unfair competition (25%), low efficiency of legal system (17%), low quality of human capital (17%), investment processes (15%) and others.

This situation pours into our country's place in world rankings. The ranking "Doing Business" authored by the World Bank showing the ease of doing things, includes Poland in 45<sup>th</sup> place. However, in several categories it occupies more distant positions, e.g. regarding starting a business it is 116<sup>th</sup>, concerning taxes it takes 113<sup>th</sup> place, and regarding obtaining construction permits, it occupies 88<sup>th</sup> position.

In the following years, Poland significantly increased its competitiveness. In the Global Competitiveness Index prepared by the World Economic Forum, Poland achieved the best result and moved up to 36<sup>th</sup> place. It is located between a group of countries that compete mainly on productivity thanks to low labour costs, and countries competing to a large extent through innovation (Kozieł, 2016). The report was based on the opinion of more than 14.000 companies around the world, which assessed national infrastructure, macroeconomic environment, education, health and innovation better than in previous years. However, institutional evaluations, capital market developments, higher education and technological openings declined. Among the barriers were the years of unfavourable tax regulations, barriers to labour law, economic policy instability and excessive fiscalism. The ranking indicates a real pillar of development – knowledge, but reduced innovation. It means that well-educated society does not translate into real innovative effects.

The conditions that limit the activities of domestic firms remain mostly the same. For micro- and small companies that do not have an extensive administrative system, the particular difficulties are related to: too high labour costs, as indicated by 57% of entrepreneurs, imprecise business rules (53%), unstable law (41%), complicated tax system (37%), nonconformity of the labour law to the reality of the company's operation,

excessive administrative procedures, grey area and unfair competition, etc. (Table 3). It seems that many of these barriers are due to the legislative body's poor knowledge of the rules governing the functioning and diversification of economic entities and their adoption of similar legal principles.

Table 3. Conditions limiting the activity of companies

Conditions	Percent
Too high labour costs	57
Imprecise regulations	53
Unstable legal rules	41
Complicated tax system	38
Failure to align labour law to the realities of operation	32
Too long administrative procedures	28
Grey zone and unfair competition	24
Payment delays	24
Difficult access to finances	15
Excessive checks	12
Too long court proceedings	12

Source: Piątkowska (2012)

## Final remarks

The outlined reflections show that the conditions for the development of entrepreneurship in spatial systems are very complex. Increasingly precise knowledge of them is essential for rational management processes at various scales of spatial systems from national to regional to local regimes. It requires both further refinement of theoretical concepts and in-depth empirical research aimed at defining their structure and mechanisms in the context of the intensifying civilisation development process leading to the elaboration of a knowledge-based economy. Closer identification is required by a slogan that economic development is linked to adequate support and implementation of innovation and the need for efficient business, science and central and local government cooperation.

It is important to know the mechanisms of mutual relations between spatial systems, mainly local and regional, and the national, European and international environments. These relationships are constantly evolving both under the influence of technological progress and increasing competition on the market as well as changing the political situation in the country, in Europe and the world.

In the light of selected practical examples, it appears that in recent years there has been little change regarding limiting the institutional barriers to entrepreneurship. It results not only from defective instruments exerting direct and indirect impact but also from the quality of authorities that do not always know and have the ability to implement and use mechanisms to rationally support business.

A serious barrier to the development of entrepreneurship is the low quality of social capital, manifested in a lack of trust in the institutional authorities and a reluctant attitude towards business and business development. It results not only from negative attitudes

towards entrepreneurs shaped in the years of the centrally controlled economy but also due to the current lack of positive climate created by an entrepreneur and small building of positive social attitudes towards entrepreneurship. The large dose of populism in social activity triggers a more claiming attitude than the attitude of commitment to creating new values.

Shaping the rational directions of change requires the dissemination of comprehensive analyses in place of fragmentary studies. The expression of such attitude is the recent discovery by government agents of the lack of engineers, technicians and qualified employees, while previously vocational education was undermined; and the recession of the industry and the limitation of the importance of mathematics in education has reduced the interest of young people in technical education. At the vocational and technical school level, it is necessary to return to the model of in-service education, training for the needs of developing different sectors of economic activity. It also requires departing from the departmental management system to an integrated approach, referring to existing and strategic objectives, particularly regional and supra-local arrangements. The eternal problem of reconciling the sectoral agreement with territorial systems is emerging in the economic policy of the state, ignoring the principle that every business is carried out in a precise geographic location (Zioło, 2003).

The primary factor for stimulating entrepreneurship is to raise the capacity of representatives of both legislative and executive, judicial and local authorities, who will treat their functions as fulfilling an individual calling. Their primary objective will be to strive to improve the quality and standard of living of the society, attentiveness for improving its competitiveness as a result of its growing intellectual resources, raising human and social capital and taking care of the country's social, economic and cultural development in the European and world space. It can be achieved through the rational use of democratic rules in electoral processes. A fundamental role there is played by the respect of intellectual competition among the candidates seeking to govern. They are manifested in rational programs of economic, social and cultural development rather than a non-medical selection of people with little professional qualifications and low morale.

Only representatives of the authorities, elected by rational democratic mechanisms, will provide the necessary freedom for the development of entrepreneurship and increase its social prestige. They will aim to implement appropriate regulation of social, economic and cultural life and popularise perspective thinking in society not only to enhance sectoral directions of development but also to different scales of spatial systems, including society.

In this context, further theoretical and empirical research should be developed, taking into account the changing conditions of entrepreneurship development, with a defined strategic goal of raising the quality and standard of living and increasing the country's competitiveness in the international system and products in different categories for the market. It is necessary to develop complementary thinking skills so that only sectoral actions do not lead to the developmental dissonance of the entire economy and spatial systems.

## References

- Armington, C., Acs, Z.J. (2002). The Determinants of Regional Variation in New Firm Formation. *Regional Studies*, 36(1), 33–45.
- Cieślak-Wróblewska, A. (2014). Co boli przedsiębiorców. *Rzeczpospolita*, 9 czerwca. [What hurts entrepreneurs]

- Ćwiek, J., Marczuk, B. (2013), Biznesowa droga przez mękę. *Rzeczpospolita*, 21 lutego. [*Business road through the torment.*]
- Duszczyk, M. (2016). Innowacyjność w polskich spółkach może prezentować się znacznie lepiej, niż wskazują raporty. *Rzeczpospolita*, 15 września. [*Innovativeness in Polish companies may appear much better than the reports indicate.*]
- Dwilewicz, Ł., Morawski, W. (red.), (2015). *Historia okręgów i regionów przemysłowych*. Warszawa. [History of industrial districts and regions.]
- Fierla, I., Kuciński, K. (red.) (1999). *Lokalne uwarunkowania przedsiębiorczości. Monografie i opracowania*. 408. Warszawa: SGH. [*Local determinants of entrepreneurship.*]
- Frańk, M. (2017). Jakość ważniejsza niż koszty. Mój biznes. Rozmowa z wiceprezesem koncernu Whirlpool. *Gazeta Wyborcza*, 27 marca. [*Quality is more important than costs.*]
- Gierańczyk, W., Rachwał, T. (2012). Structural changes in the industry of Poland against the background of eastern European Union states. *Quaestiones Geographicae*, 31(2), 83–93.
- Kamińska, W., Heffner, K. (red.) (2010). Kapitał ludzki i społeczny w procesie rozwoju obszarów wiejskich. *Studia Komitetu Przestrzennego Zagospodarowania Kraju. PAN, CXXVII*. [*Human and social capital in the process of rural development.*]
- Karpiński, A., Paradysz, S., Soroka, P., Żółkowski, W. (2015). *Od uprzemysłowienia w PRL do deindustrializacji*. Warszawa: Muza SA. [*From industrialisation in the People's Republic of Poland to deindustrialisation.*]
- Kieżun, W. (2012). *Patologia transformacji*. Warszawa: Wydawnictwo Poltext. [*Pathology of transformation.*]
- Kozieł, H. (2016). Polska mocno zyskała na konkurencyjności. *Rzeczpospolita*, 29 września. [*Poland is gaining on competitiveness.*]
- Kraska, M. (2010). Uwarunkowania rozwoju przedsiębiorczości w Polsce. *Miscellanea Oeconomicae*, 14(1). [*Conditions of entrepreneurship development in Poland.*]
- Kuciński, K., (1997). Przestrzenne aspekty przedsiębiorczości. *Monografie i Opracowania Instytutu Funkcjonowania Gospodarki Narodowej*, 430. Warszawa: Szkoła Główna Handlowa. [*Spatial aspects of entrepreneurship.*]
- Kuciński, K. (red.) (2006). Polskie przedsiębiorstwa wobec globalnej konkurencji. *Materiały i Prace Instytutu Funkcjonowania Gospodarki Narodowej*, t. XCV, Warszawa: Szkoła Główna Handlowa. [*Polish Enterprises for Global Competition.*]
- Kudęłko J. (2003). Położenie centrów wzrostu społeczno-gospodarczego wschodniego pogranicza jako wyraz kształtującego się ładu przestrzennego. *Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN*, 205, 176–182. [*The location of the centers of socio-economic growth of the eastern borderland as an expression of spatial order.*]
- Kudęłko, J. (2013). Uwarunkowania rozwoju województw Polski Wschodniej jako regionów słabo rozwiniętych. *Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN, CLI*. [*Conditions of development of Eastern Poland voivodeships as poorly developed regions.*]
- Kurek, S., Rachwał, T. (2009). The Role of Business Education in the Development of Entrepreneurship in the Member States of the European Union. *Europa XXI*, 19, 127–142.
- Lee, S.Y., Florida, R., Acs, Z. (2004). Creativity and Entrepreneurship: A Regional Analysis of New Firm Formation. *Regional Studies*, 38(8), 879–891.
- Mathieu, M. (2016). Nowy etap obecności Thesela w Polsce. *Rzeczpospolita*, 16 września, B16. [*The new stage of presence Thesela in Poland*]
- Mehra, S. (2017). Kraków to doskonały wybór. *Rzeczpospolita*, 5 stycznia. [*Kraków is an excellent choice.*]
- Niewiadomski, M. (2016). Szukając klucza do innowacji. *Rzeczpospolita*, 8 września. [*Looking for the key to innovation.*]
- Nowak, H. (2016). The Role of the Polish Higher Education System in the Development of Entrepreneurship. *Entrepreneurial Business and Economics Review*, 4(4), 43–59. DOI: <http://dx.doi.org/10.15678/EBER.2016.040104>

- Oniszek-Jarząbek, A. (2011). Otoczenie a przedsiębiorczość w warunkach globalizacji. *Przedsiębiorczość – Edukacja*, 7, 42–57. [Surrounding and Entrepreneurship in Globalization.]
- Osiecki, A. (2016). Polskie marki ruszają w świat. *Rzeczpospolita*, 24 października. [Polish brands are moving into the world.]
- Piątkowska, M. (2012). Więcej przyjęć niż zwolnień. *Gazeta Wyborcza*, dodatek „Praca”, 9 January. [More hires than layoffs.]
- Rachwał, T. (2003). Globalne uwarunkowania restrukturyzacji przedsiębiorstw Polski południowo-wschodniej. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 6, 129–138. [Global determinants of the restructuring of south-eastern Poland companies.]
- Rachwał, T. (2012). Innowacyjność przedsiębiorstw przemysłowych jako czynnik rozwoju miast. *Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, CXLI, 135–152. [Innovativeness of industrial enterprises as a factor of urban development.]
- Rachwał, T., Wiedermann, K. (2015). Industrial and R&D Activity in Emerging Economies – Poland versus other EU Countries. In: Micek, G. (ed.), *Understanding Innovation in Emerging Economic Spaces Global and Local Actors. Networks and Embeddedness*. Farnham: Ashgate, 33–51.
- Rachwał, T., Kurek, S., Boguś, M. (2016). Entrepreneurship Education at Secondary Level in Transition Economies: A Case of Poland. *Entrepreneurial Business and Economics Review*, 4(1), 61–81, DOI: <http://dx.doi.org/10.15678/EBER.2016.040105>
- Rochowicz, P. (2012). System fiskalny jest nieprzyjazny innowacjom. *Rzeczpospolita*. Prawo, 5 grudnia. [The fiscal system is unfriendly to innovation.]
- Ślązak, R. (2016). *Czarna księga prywatyzacji 1988–1994*. Wrocław: Wektory. [Black Book of Privatization.]
- Śleszyński, P. (2007). Gospodarcze funkcje kontrolne w przestrzeni Polski. *Prace Geograficzne*, 213 [Economic control functions in the Polish space.]
- Trump mocno stawia na Polskę (materiał promocyjny). (2016). *Rzeczpospolita*, 29 września [Trump firmly puts on Poland.]
- Wach, K. (2015). Przedsiębiorczość jako czynnik rozwoju społeczno-gospodarczego – przegląd literatury. *Przedsiębiorczość – Edukacja*, 11, 24–36. [Entrepreneurship as factors of socio-economic development – literature review.]
- Wach, K. (2013). Edukacja na rzecz przedsiębiorczości wobec współczesnych wyzwań cywilizacyjno-gospodarczych. *Przedsiębiorczość – Edukacja*, 9, 246–257. [Education for entrepreneurship in view of modern civilizational and economic challenges.]
- Westlund, H., Bolton, R. (2003). Local Social Capital and Entrepreneurship. *Small Business Economics*, 21(2), 77–113.
- Woźniak, A. (2015). Polska wciąż atrakcyjna. *Rzeczpospolita B*, 4. [Poland still attractive.]
- Wybranowski, W. (2012a). Biznes bez wolności. Przedsiębiorcy bez ochrony. *Rzeczpospolita*, 17 lutego. [Business without freedom. Entrepreneurs without protection.]
- Wybranowski, W. (2012b). Biznes wypłoszony. *Rzeczpospolita*, 11 kwietnia. [Business driven out.]
- Zatoński, M. (2016). Przedsiębiorcy nie są hamulcowymi. *Puls Biznesu*, 17 listopada. Pozyskano z: <https://www.pb.pl/przedsiębiorcy-nie-sa-hamulcowymi-847567> [Entrepreneurs are not braking]
- Zioło, Z. (2003). Przestrzeń geograficzna jako miejsce realizacji idei ładu przestrzennego. W: T. Ślązak, Z. Zioło (red.), *Społeczno-gospodarcze i przyrodnicze aspekty ładu przestrzennego*. Biuletyn KPZK PAN, 205, 25–43. [Geographical space as a place of realization of the idea of spatial order.]
- Zioło, Z. (2010). Kapitał ludzki i społeczny w procesie rozwoju obszarów wiejskich. *Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, CXXVII. [Human and social capital in the process of rural development.]
- Zioło, Z. (2012). Miejsce przedsiębiorczości w edukacji. *Przedsiębiorczość – Edukacja*, 8, 10–23. [Place of entrepreneurship in education.]
- Zioło, Z., Rachwał, T. (red.) (2006). Międzynarodowe uwarunkowania rozwoju przemysłu. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 8, [International conditions for the development of industry.]

- Zioło, Z., Rachwał, T., (red.) (2008). Rola przedsiębiorczości w gospodarce opartej na wiedzy. *Przedsiębiorczość – Edukacja*, 4. [*The role of entrepreneurship in a knowledge-based economy.*]
- Zioło, Z., Rachwał, T. (2012). Entrepreneurship in geographical research. In: P. Churski (ed.), *Contemporary Issues in Polish Geography*. Poznań: Bogucki Wydawnictwo Naukowe, 135–155.
- Zioło, Z., Rachwał T. (red.) (2016). Międzynarodowe i krajowe uwarunkowania rozwoju przedsiębiorstw. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 30(1). [*International and national conditions of enterprises development.*]

**Zbigniew Ziolo**, professor, Pedagogical University of Cracow, Institute of Geography, Department of Entrepreneurship and Spatial Management; Podkarpacka Higher Education School in Jasło. He holds a ScD title. He is also a professor of Economics. His research interests include: land management, economic geography, socio-economic policies, economics and policies of regional development.

**Address:**

Uniwersytet Pedagogiczny im. Komisji Edukacji Narodowej w Krakowie  
Instytut Geografii  
Zakład Przedsiębiorczości i Gospodarki Przestrzennej  
ul. Podchorążych 2  
30-084 Kraków, Poland  
e-mail: zbziolo@onet.eu