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Business Models and Knowledge Management – New Challenges

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Wiesława Caputa

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Wydawnictwo Wyższej Szkoły Bankowej w Poznaniu
ul. Powstańców Wielkopolskich 5, 61-895 Poznań, tel. 61 655 33 99, 61 655 32 48
e-mail: wydawnictwo@wsb.poznan.pl, dzialhandlowy@wsb.poznan.pl, www.wydawnictwo.wsb.poznan.pl

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Introduction

It is commonly accepted that the way a company functions is determined by changes that occur in the environment. Among various processes and phenomena associated with the current business environment, which are described in the literature, special significance is given to advances in computer hardware, telecommunications and software, all of which drive the digitisation process. As a result, business operations in the real world are being increasingly replaced by processes happening in the virtual space.

The information technology revolution is changing the global economy, including the behaviours of customers and businesses, and, consequently, has an effect on the way relationships between companies and stakeholders are created[1]. This change is so evident that it has given rise to concepts such as "new consumers," "new relationships," "new businesses," or even "the new economy."[2] It is therefore not surprising that value creation is one of the most frequently explored areas in business studies, which attempt to develop and implement business models that can ensure the company's long-term survival and development.

The articles included in the present volume contribute to the current scientific discourse by addressing issues related to designing, implementing and maintaining the effectiveness of business models. The presented analyses based on literature reviews and empirical studies not only systematise the knowledge in this area but can be used as an important source of organisational learning, which, under strategic discontinuity, is a prerequisite for the survival and development of any business or institution.

[1] Ph. Kotler, J.A. Caslione, *Chaos. Zarządzanie i marketing w erze turbulencji*, MT Biznes, Warszawa 2009.

[2] W. Caputa, *Responsible Market Offer as an Element of Customer's Creation of capital. Theoretical and empirical study*, "Business and Non-profit Organizations Facing Increased Competitions and Growing Customers' Demands" 17/2018 (eds. A. Nalepka, A. Ujwary-Gil).

In the article entitled *Participation in Business Networks and Barriers to the Development of Small and Medium-sized Enterprises*, Alina Czapla analyses barriers to growth faced by small and medium-sized enterprises in an attempt to verify to research hypotheses. The first one maintains that the creation of networks alleviates difficulties caused by some of the barriers to growth in the SME sector; according to the second hypothesis, legal instability is the most burdensome barrier encountered by SMEs. The author concludes that one strategy in which SMEs can reduce barriers to their growth is to create relationship networks, which are becoming the foundation of modern business models

Influence of Changes in the Environment on the Business Model of Municipal Enterprises is the topic of a study conducted by to Tadeusz Chruściel, Rafał Tyszkiewicz and Monika Tyszkiewicz, who demonstrate that municipal enterprises in Poland are still rather reluctant to change their business model. This attitude, however, needs to be revised, given the growing requirements made by local authorities and customers, which must be taken into account in order to adjust the current business model to the expectations of stakeholders.

Business models are not only relevant for typical enterprises but also for public benefit organisations. In the article entitled *Business Model in Animal Shelter Management*, Jarosław Graziadei-Darmas and Karina Irczyk describe changes in the way these entities function and try to develop of business model for them. The proposal is based on the business model canvas, which can be used to modify the way in which a PBO responds to the needs of a given commune and which contains key elements that can help to create or reform an animal shelter.

A business model for adventure tourism is the topic addressed by Mateusz Ziemba and Krystyna Górna-Łukasik in their article entitled *Business Model for Adventure Tourism and the Barriers to Physical Activity*. In addition to and reviewing existing studies in this field, the authors report results of their own survey about main barriers to physical activity. They conclude that these barriers affect people's choices concerning physical activity. For this reason, they believe that in order to create a successful business model for an adventure tourism company, it is crucial to focus efforts on countering three phenomena: lack of time, energy and strong will.

A sustainable business model should preserve existing ecosystems, support sustainable development and be based on social responsibility. This foundation must be more than a mere appearance. In the article *Green Lies in the Operation of Enterprises*, Martyna Musiał discusses the nature and impact of greenwashing on activities undertaken by businesses and on customer behaviour. Using examples of companies such as McDonald, BP or Walmart, she describes their efforts to design and maintain processes of value creation that meet the expectations of consumers. However, there are cases when "green values" are abused and customers are intentionally misinformed, which can have a negative effect on future profits.

In the article entitled *Financial Leverages of Structural Changes in Transition Economy* Iryna Pasinovych emphasises the need to for a qualitative reform of the economic system. Drawing on experiences of Ukraine, she presents arguments in favour of the state's use of the financial leverage effect to stimulate structural changes in the economy, which will support value creation at micro and macro scale.

The impact of the business environment on the functioning of selected companies in Ukraine is also discussed in Olga Sych's article entitled *Regional Aspects of the Development of Small and Medium-sized Enterprises*. The author not only shows that the relationship between the development of the environment and the growth of the MSE sector but also identifies the most effective mechanisms of supporting and improving their institutional environment.

The form of a business model is also affected by social changes, which are manifested, among other things, by the growing level of entrepreneurship among women. This issue is addressed by Joseph Ohimor in his article *Significance of Female Entrepreneurship in Rural Development*, where the author focuses on the need to increase entrepreneurship among women in rural areas, which is presented as a factor that could stimulate economic growth in these areas.

Although the articles certainly do not exhaust the topic, they can be of interest to students, scientists and practitioners wanting to enrich their knowledge and looking for new solutions.

Wiesława Caputa PhD

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Alina Czapla

Uniwersytet Ekonomiczny w Katowicach
Katedra Zarządzania Relacjami Organizacji
orcid.org/0000-0001-6027-495X
e-mail: alina.czapla@edu.uekat.pl
phone: +48 696 085 909

Participation in Business Networks and Barriers to the Development of Small and Medium-sized Enterprises

Abstract. *The article focuses on barriers to development of small and medium-sized enterprises (SMEs) in the context of networking. It shows that the most-known important barriers: high taxes, high labor costs and bureaucracy should be supplemented with recruitment problems and the most burdensome group of barriers are administrative and legal ones. Belonging to business networks can limit market barriers. In addition, attention was paid to the fact, that the perception of barriers by entrepreneurs is very diverse, even for companies operating in one business network, in the same branch, carrying out the same type of business.*

Keywords: *business networks, networking, small and medium-sized enterprises, SMEs, barriers to development*

1. Introduction

The importance of small and medium-sized enterprises (SMEs) for the economy is often underestimated. However, it should be noted, that in developed countries they constitute around 99% of the number of all enterprises and they employ about 70% of all employees [OECD 2017: 6]. In Poland, these companies constitute 99.8% of companies, they produce nearly three quarters of GDP and employ almost 60% of the total number of employees in the enterprise sector [PARP 2018]. SMEs build solid foundations for economic growth – they are flexible, they can easily adapt to customer expectations, as well as changing market conditions [Zuzek 2011: 348].

Although we are on a high place in Europe in terms of the number of emerging companies, unfortunately, the number of liquidated companies is not much smaller. The answer to the question of why small businesses are closing down seems to be fundamental to the development of this business sector. It is important to identify and analyze barriers to SMEs development in Poland. In dynamic environment, it is becoming more and more important to have current knowledge about the factors and conditions limiting the development of SMEs [Danielak, Mierzwa, Bartczak 2017: 5].

Barriers to SMEs development depend on many factors, e.g.: company location, industry, company size [Kogut 2017: 56]. They can be divided into internal and external. Internal barriers to SMEs development result mainly from the disturbed organizational structure and ill-considered strategy. We can observe incorrect management, wrong decisions or lack of contractor structure analysis [Ołówko 2016: 204]. In other words, the limitations of SMEs often result from their weaknesses [Piorunowska-Kokoszko 2018: 48].

However, entrepreneurs are most affected by external barriers, related to changes taking place in the business environment of these companies, e. g. unfavorable economic and financial as well as institutional and legal conditions [Szczepaniak 2010: 266]. These barriers result from the company's environment and are associated with its low potential, high complexity and uncertainty of operation in a changing economic environment [Danielak, Gębska 2017: 84].

The purpose of this article is to answer the question, what most disturbs entrepreneurs in running and developing their small and medium-sized companies and whether perception of development barriers is different for companies which are a part of business networks.

The following research hypotheses were made:

– networking reduces the burdensomeness of some barriers to SMEs development,

– legal instability is the most burdensome barrier to running SMEs.

The desk research method was used to analyze scientific literature and various types of reports. In addition, as part of the pilot study, a survey was conducted among owners and managers of SMEs from one business network.

2. Barriers to SMEs development in the light of previous research

The literature review was focused on Polish literature, because the article concerns Polish enterprises, and the results are compared to other Polish studies. Barriers to the development of SMEs were often at the center of scientific interest around 2010 [Borowiecki, Siuta-Tokarska 2008; Szczepaniak 2010; Zuzek 2011;

Steinerowska-Streb 2012]. In the review of the research results on this subject Sławomir Wawak [2018] mainly refers to scientific papers from this period.

Numerous studies on SMEs development barriers often focus on selected group of barriers, and as a result their order in terms of nuisance is established. High taxes, high labor costs and bureaucracy are usually on top places. Other barriers often differ from each other. There are even opinions that conducting such research does not make sense, because employers still answer the same.

Currently, part of the research on barriers to SMEs development are rather review articles [for instance: Danielak, Gębska 2017; Kogut 2017; Wawak 2018]. Another group of authors focuses on specific business development barriers, for instance Adam Samborski [2017] analyzes fiscal barriers to entrepreneurship development in Poland and Małgorzata Stawicka [2017] barriers to innovation of SMEs. Part of the research concerns particular industries [Jarosz, Zowada 2017; Jeznach et al. 2016], some areas of Poland [Wardęcka 2017; Zuzek 2018; Puciato, Puciato 2016] or comparison of the nuisance of development barriers for various groups of enterprises [Steinerowska-Streb 2014]. It should be noted, however, that the number of scientific publications on the barriers to SMEs development in Poland has declined recently.

The analysis of research and opinions related to the business environment brings interesting results. It turns out that the biggest barriers to SMEs development are perceived here slightly differently. President of the Employers of the Republic of Poland Andrzej Malinowski claims: "Broadly understood bureaucratism – unclear regulations, lack of stability of the legal environment, excessive reporting, administrative tardiness and lengthy procedures – is a bigger problem for Polish entrepreneurs than business competition" [Grant Thornton 2016: 2]. The Polish Employers' Association also notices this problem. In 2016, in a commissioned study of the biggest barriers to running your own business in the first three places they were in order: labor costs, legal instability and excess bureaucratic obligations. In 2017 and 2018, the instability of the law definitely moved to the first position and it is already indicated by over 70% of respondents [Maison & Partners 2018: 3].

3. Networking and development barriers

Networks multiply the capabilities of an individual, giving it an advantage in the ecosystem, social and economic life [Czakon 2012: 14], what in the era of globalization, growing competition and a constantly changing environment has a great value. Among others, in order to reduce development barriers, small and medium-sized enterprises create business networks, which allow them to gain a competitive advantage and give them the opportunity to enter new markets or acquire new groups of recipients. Access to new suppliers, option to extend existing offer, gain an advantage among independently operating companies in the same industry whether saving time are just some of the benefits obtained [Piorunowska-Kokoszko 2018: 51-52]. Good commercial conditions, access to a wide range of goods and brand value are other positive aspects of belonging to a business network [Czapla 2018: 128]. Katarzyna Tubielewicz [2017: 98] emphasizes the synergy effect resulting from cooperation between enterprises in the network, the opportunity to co-create key competences and distinctive abilities being the basis of success in a given sector, improving the knowledge management, efficient flow of key technological and information resources, building a broadly understood positive image of network businesses, creating business platforms within existing networks based on knowledge, experience and competences of network participants.

The above benefits contribute to increasing the competitiveness of SMEs belonging to network structures. They can also contribute to reducing the burden of some development barriers. This is especially true for barriers from the market category, as it is shown in Table 1.

Table 1. Benefits of networking and market barriers to SMEs development.

Market barriers to SMEs development	Examples of networking benefits
– too much competition	– increase of competitiveness – synergy effect – brand value
– difficulties in getting clients	– possibilities to enter new markets – possibilities of acquiring new groups of recipients – possibilities to extend the offer
– shortages on the market	– favorable contracts with suppliers – access to a wide range of goods
– difficulties in getting suppliers	– access to new suppliers
– unattractive supplier offers	– obtaining good commercial conditions
– insufficient access to information	– improving the knowledge management – efficient flow of information resources – creating knowledge-based business platforms

Source: own elaboration.

In the case of financial barriers, such as for example high taxes, too high credit costs or lack of funds for investments creating such table seems impossible. The situation is similar with regard to legal and administrative barriers, such as the instability of law, complicated regulations or an excessive number of inspections. As for internal barriers, the corresponding benefits can be indicated for some of them (Table 2).

Table 2. The benefits of networking and the internal barriers to SMEs development

Internal SMEs development barriers	Examples of networking benefits
– problems in management – insufficient management knowledge – insufficient staff skills – aiming to avoid risk – problems with succession	– know-how – possibility of co-creating key competences – training organized by the network

Source: own elaboration.

Based on the analysis of the literature, it can be concluded that networking helps mainly to eliminate market barriers to development.

4. Research methods

The study was prepared in the form of a survey for entrepreneurs. Closed questions were used to easily compare the results obtained. A comprehensive list of possible barriers was created on the basis of available research results. Twenty seven barriers were selected based on literature review, then they were divided into four groups: financial barriers, legal and administrative barriers, internal problems of the company and problems related to the functioning of the market. The questions were placed in the survey in a random order (within each group).

The research uses an estimated scale. The results on the estimated scales can be treated in the social sciences as quantitative variables [Wieczorkowska, Wierzbiński 2007: 54]. A seven-point Likert scale was used (1 means that a given factor does not interfere with running a business, and 7 means that it is very disturbing in running a business). This is due to the belief that the number of possible answers should be unpaired, to allow respondents to choose the middle option. In addition, the frequently used 5-point scale was considered insufficient, because respondents often tend to reject extreme answers.

The research is a pilot study, which aims to pre-verify hypotheses. It is the first stage of research, in the future it is planned to conduct a quantitative research using a prepared questionnaire.

The survey was conducted during the conference of the partners of the Grupa Polskie Składy Budowlane network in November 2018. It was a meeting of owners and managers of commercial enterprises operating in this business structure. The PSB Group has about 400 members, nearly half of them have participated in the conference. Most companies have been represented by several people. So the questionnaires were filled not only by competent people, but in most cases several managers from the same company worked together. As a result, 57 questionnaires have been correctly completed.

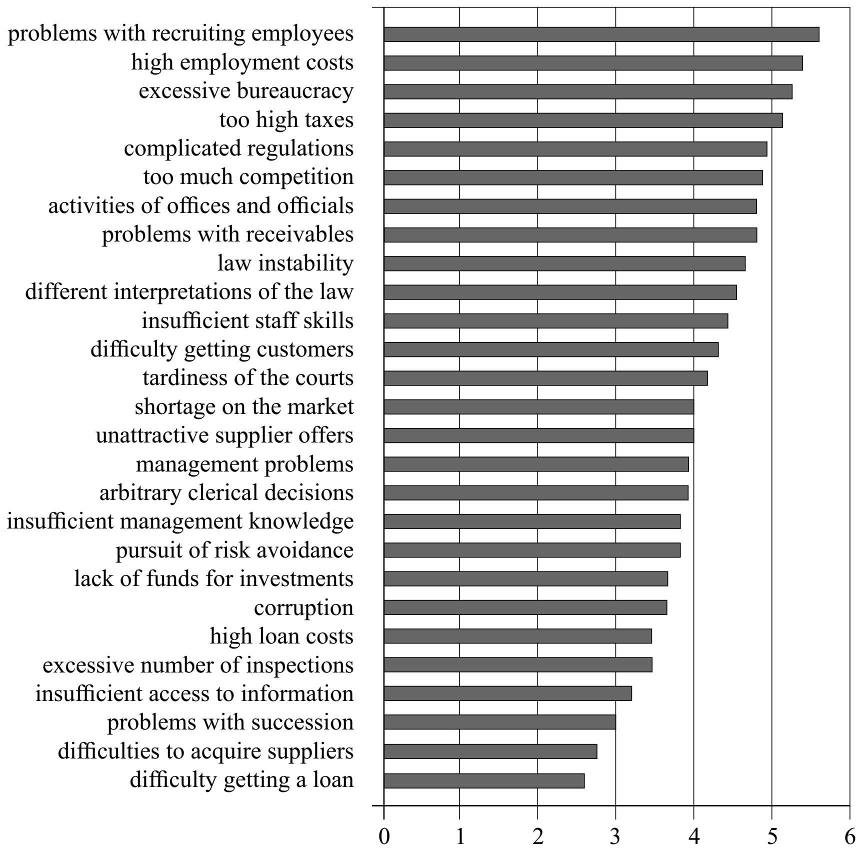
The sample cannot be considered representative. Not only the number of completed questionnaires is too small, but also the companies participating in the survey cannot be considered randomly selected. However, if we treat the conducted research as exploratory and concerning this particular network of enterprises (PSB Group), then response of around 15% of all network partners should be considered sufficient.

5. Research results

The obtained data were statistically processed. First of all, all questionnaires and all barriers to running a business were taken into account.

It turned out that for the examined group of companies problems with employees, both with obtaining them (1st place) as well as with high employment costs

Chart 1. Barriers to the development of small and medium-sized enterprises

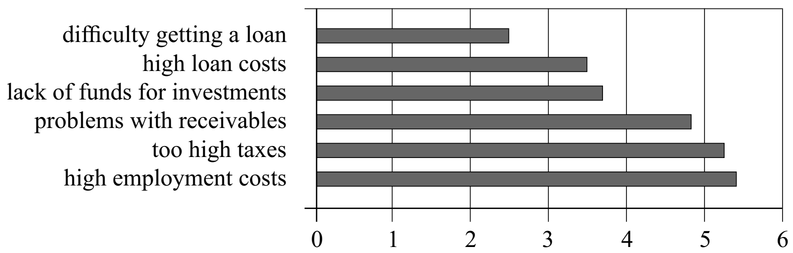


Source: own elaboration.

(2), are the most burdensome. Excessive bureaucracy (3) and high taxes (4) were also highly classified. Each of these four barriers obtained an average score well above five points. Next, we have complicated regulations (5), too much competition (6), activities of offices and officials (7) and problems with receivables (8) (Chart 1). A large group of successive barriers was assessed at a similar level of nuisance.

Due to the fact that the barriers have been divided into groups, we can determine the most burdensome ones in each group. Among financial barriers, high employment costs (1), high taxes (2) and problems with receivables (3) deserve special attention (Chart 2).

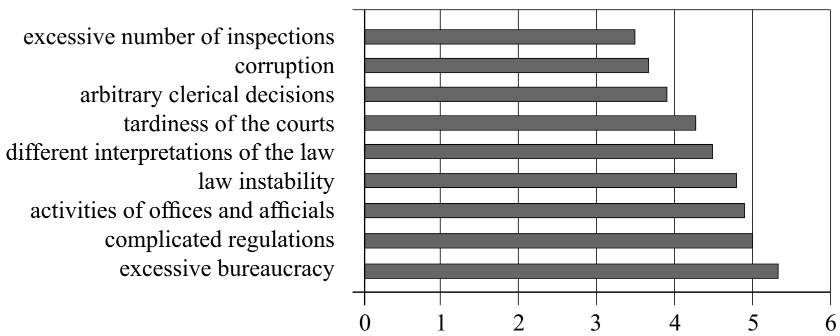
Chart 2. Financial barriers to the development of small and medium-sized enterprises



Source: own elaboration.

Among the legal and administrative barriers, excessive bureaucracy comes first (1), but complicated regulations (2), activities of offices and officials (3) and instability of the law (4) are also emphasized (Chart 3).

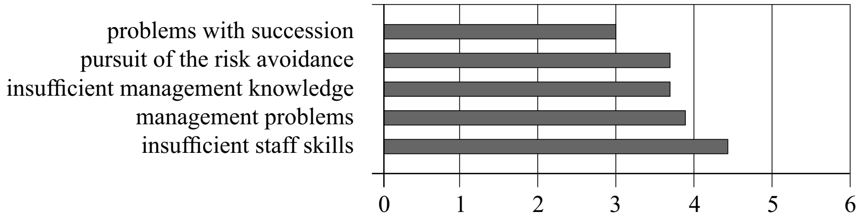
Chart 3. Legal and administrative barriers to the development of small and medium-sized enterprises.



Source: own elaboration.

Among the internal barriers to SMEs development, particularly insufficient staff skills were highlighted (1) (Chart 4).

Chart 4. Internal barriers to the development of small and medium-sized enterprises



Source: own elaboration.

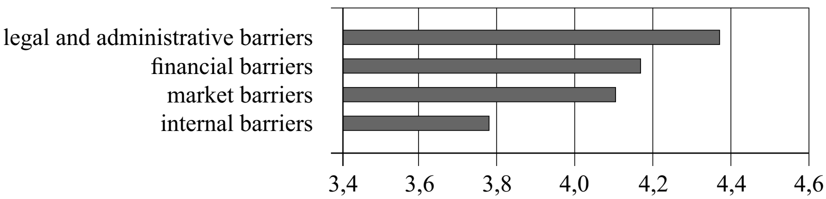
In turn, the most important market barrier is the problem with recruiting employees (1), too much competition (2) and difficulty getting customers (3) (Chart 5).

Chart 5. Market barriers to the development of small and medium-sized enterprises

Source: own elaboration.

Analyzing individual barriers, the conclusion is that problems with employees are most difficult for entrepreneurs to run their business. However, if we analyze the results obtained in terms of which of the groups of barriers is the most impor-

Chart 6. Nuisance of particular groups of development barriers for small and medium-sized enterprises



Source: own elaboration.

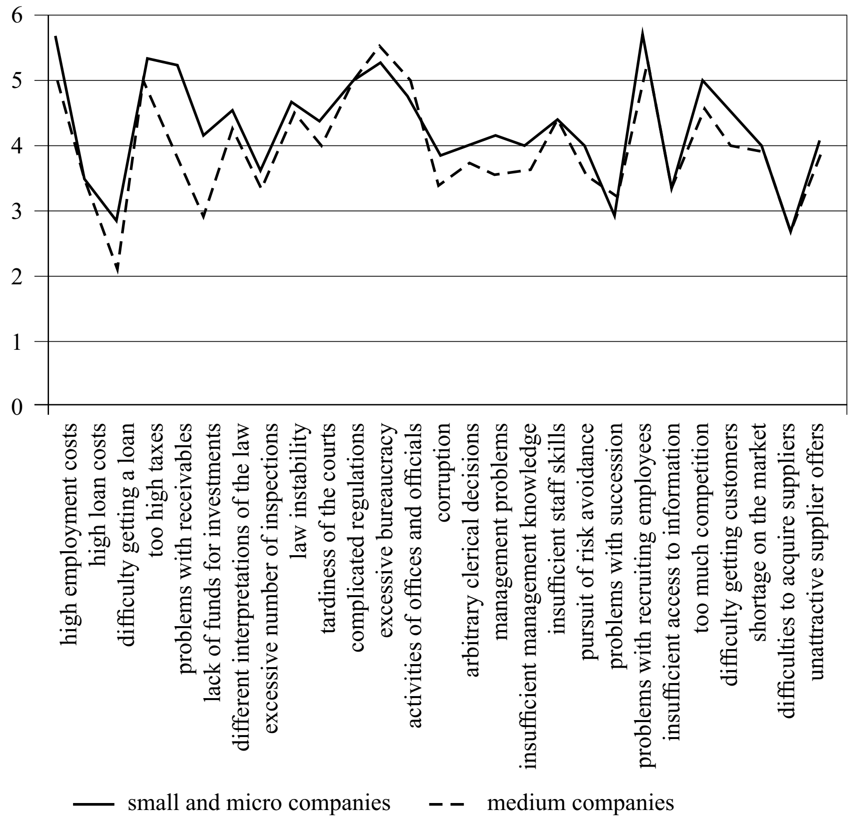
tant, it turns out that the most burdensome group of barriers are legal and administrative barriers (Chart 6).

On the basis of the results obtained, a comparative analysis was also carried out due to the size of the enterprise. 37 small and micro enterprises (0-49 employees) and 20 medium enterprises (50-249 employees) took part in the study.

In the category of small and micro companies, the most troublesome barriers are also problems with recruiting employees (1) and high employment costs (2), but in the next places we note changes: 3 – too high taxes, 4 – excessive bureaucracy, 5 – problems with receivables, 6 – too much competition. A significant change also appears in the issue of the most important groups of barriers – financial barriers come first, but legal and administrative barriers received almost the same number of points.

In the group of medium-sized enterprises, excessive bureaucracy comes first, followed by problems in recruiting employees, high taxes and high employment

Chart 7. Perception of development barriers depending on the company's size.

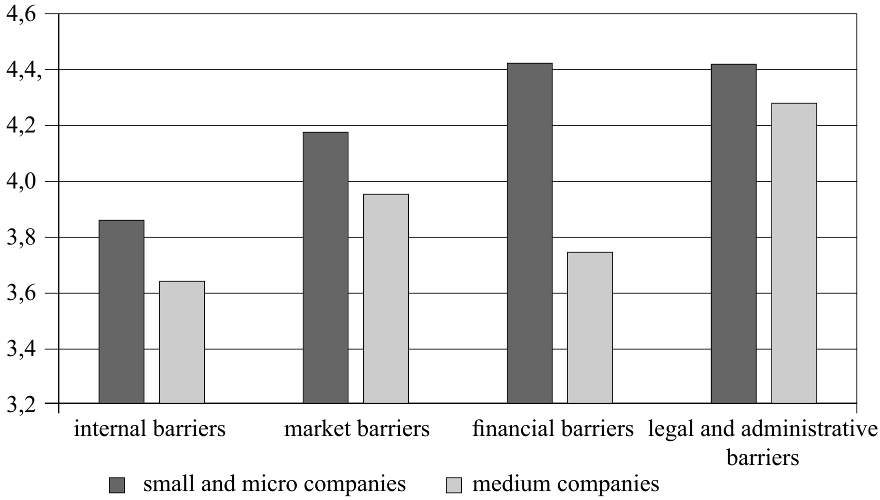


Source: own elaboration.

costs. The group of legal and administrative barriers ranks definitely first, but generally perceived barriers are slightly less onerous than for small and micro companies. Comparison of results for companies depending on the size is presented in charts 7 and 8.

Based on chart number nine, we can see that larger companies are better able to deal with development barriers. This is particularly true of financial barriers.

Chart 8. Comparison of groups of development barriers depending on the company's size



Source: own elaboration.

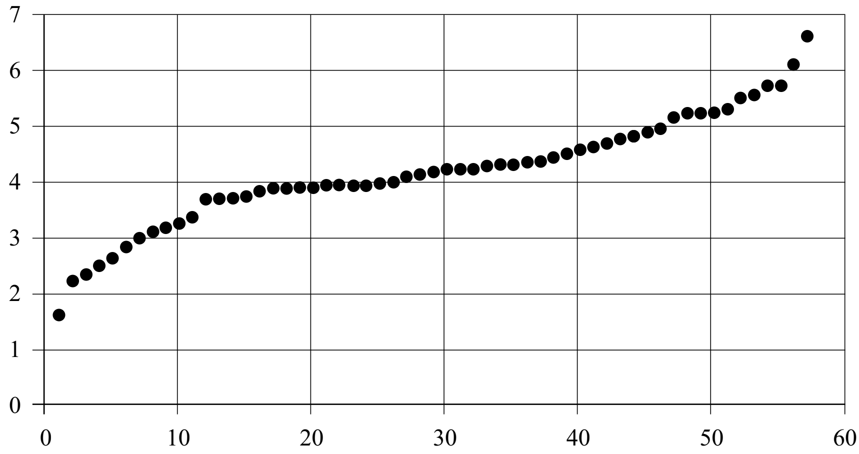
Attention should be paid to the large discrepancy in the responses of entrepreneurs. The standard deviation for particular responses ranges from 1.41 up to 2.09. Further analysis shows that also the perception of the degree of nuisance of barrier groups among entrepreneurs is not the same. Although most entrepreneurs emphasize legal and administrative barriers, each group of barriers is particularly burdensome for some companies. It is also interesting to compare the average degree of nuisance declared by individual companies (Chart 9).

Some companies emphasize the burden of business barriers – the highest average is 6.63, and some hardly see them – the lowest average is 1.59.

Research conducted so far was most often limited to the single or multiple-choice question about the most burdensome barriers to doing business. To compare the obtained results with previous studies, it was assumed that the most burdensome barrier for a given company is the one which received the most points. The obtained results are presented in Chart 10.

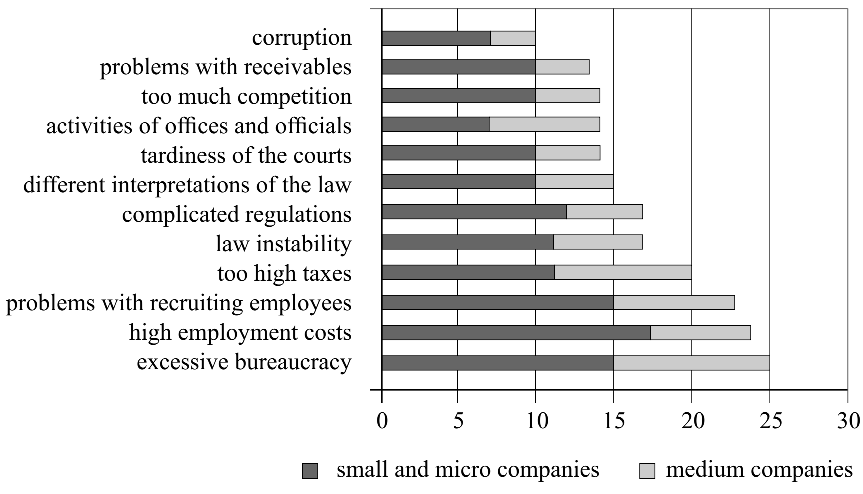
This time, excessive bureaucracy came first, followed by high employment costs, problems with recruiting employees and too high taxes. The change in the

Chart 9. Average level of nuisance for development barriers for individual SMEs



Source: own elaboration.

Chart 10. SMEs development barriers, which are most often mentioned as the most important



Source: own elaboration.

way data is interpreted has changed the order of the most important barriers to SMEs development, although the first four places again took the same problems. In addition, six of the first nine places were taken by legal and administrative barriers. However, this approach showed something different. None of the barriers was mentioned as the most important even by half of the surveyed entrepreneurs.

We can therefore conclude that the perception of the biggest problems in running and developing companies is very diverse.

6. Discussion

The exploratory study does not support the hypothesis, that legal instability is the biggest barrier to doing business by SMEs in Poland. On the other hand, the group of legal and administrative barriers is the most burdensome for the examined group of entrepreneurs. Importantly, the perception of barriers by entrepreneurs is very diverse. The discrepancies in the responses of the respondents were very large, although the surveyed companies belong to one business network, deal with the same industry and conduct the same type of business.

During the analysis of research results, a discrepancy was found in the conclusions received, depending on how the data received was interpreted. Therefore, only information that has been confirmed in both approaches can be considered as the result of the analysis. It was established that the biggest barriers to SMEs development are: bureaucracy, problems with recruiting employees and the costs of their employment, as well as too high taxes. The order of these barriers has not been clearly established. It was also found that the group of legal and administrative barriers is the most burdensome for entrepreneurs. Of course, the results obtained cannot be generalized, they concern a specific group of companies from a specific business network and a selected industry. They can, however, form the basis for formulating hypotheses for future quantitative research.

The ambiguity of the results depending on the method of interpretation is also important information regarding the comparison of the results of various studies in this area. In order for such comparisons to be justified, the method of conducting research and the method of analyzing results should be known. Literature review shows that barriers to business development are examined primarily using surveys, while the questions asked to respondents are different. Multiple or single choice closed questions are usually asked:

Which development barriers are the most burdensome?

Which development barrier is the most burdensome?

Sometimes respondents have a different task – ordering developmental barriers by level of nuisance. It should be noted that the conclusions, depending on the command variant, may differ significantly. For this reason in the study conducted by the author the respondents were asked to assess the degree of nuisance of particular development barriers. This method provides a lot more information, however, the results cannot be directly compared with other studies. Because among recent research on barriers to the development of SMEs in Poland, analogical research has not been found, so, based on the answers received in the survey, it cannot be concluded whether networking has an impact on the perception of SMEs development barriers.

Nevertheless, this issue was discussed based on a literature review. It can be said with certainty that such an impact exists especially in the case of market barriers, although its significance is difficult to estimate.

7. Conclusions

The barriers to SMEs development have certainly not yet been thoroughly explored, and their complexity is far greater than it may seem. Problem analysis should not be limited to identifying the most significant barriers, it should take into account the size of the company, experience, industry specificity, type of business and other relevant aspects, such as belonging to a business network. The most important results of the conducted study show, that the main barriers to development most frequently mentioned by entrepreneurs: high tax burdens, high labor costs and bureaucracy should be supplemented with problems in recruiting employees. It should also be emphasized that the most important group of barriers are administrative and legal barriers. Reducing the burden on some barriers to SMEs development can certainly be achieved through networking, but the data received is not sufficient to estimate a size of this impact. In addition, the survey showed that the perception of barriers by entrepreneurs is very diverse, even for companies operating in one business network, in the same industry, carrying out the same type of business.

The study has some limitations. Only one network organization was analyzed, and the number of respondents was small. Comparing the results with the previous ones also proved to be problematic.

Therefore, it is advisable to conduct quantitative research based on a prepared questionnaire both among networked and non-networked companies. An in-depth comparative analysis of the results obtained can yield interesting results.

Please note that the results obtained may also have practical applications. Conclusions from the research on the factors limiting barriers to conducting business by small and medium-sized enterprises can be the basis for right actions not only on the part of entrepreneurs.

References

Borowiecki R., Siuta-Tokarska B., 2008, *Problemy funkcjonowania i rozwoju małych i średnich przedsiębiorstw w Polsce,* Warszawa: Difin.

Czakon W., 2012, *Sieci w zarządzaniu strategicznym*, Warszawa: Wolters Kluwer Polska.

Czapla A., 2018, Efekty funkcjonowania w sieci międzyorganizacyjnej na przykładzie składów budowlanych Grupy PSB S.A., *Ekonomika i Organizacja Przedsiębiorstwa*, 4, 120-129.

Danielak W., Gębska K., 2017, Bariery rozwoju i kluczowe czynniki sukcesu małych i średnich przedsiębiorstw, *Zeszyty Naukowe Polskiego Towarzystwa Ekonomicznego w Zielonej Górze*, 7, 83-96.

Danielak W., Mierzwa D., Bartczak K., 2017, *Małe i średnie przedsiębiorstwa w Polsce. Szanse i zagrożenia rynkowe*, Wrocław: Exante.

Grant Thornton, 2016, *Biurokracja w Polsce raport 360°. Biurokratyczne bariery rozwoju polskiej przedsiębiorczości*, http://grantthornton.pl/wp-content/uploads/2016/01/RaportBiurokracja_GT_PracodawcyRP.pdf [accessed: 20.05.2019].

Jarosz D., Zowada K., 2017, Bariery i perspektywy rozwoju małych i średnich usługodawców logistycznych, in: K. Jędralska, W. Dyduch (eds.), *Nauki o zarządzaniu: dokonania, trendy, wyzwania*, Katowice: Wydawnictwo UE w Katowicach.

Jeznach M., Tul-Krzyszczuk A., Gębski J., Kosicka-Gębska M., Gutkowska K., 2016, Strategie działania a bariery rozwoju i innowacyjności małych i średnich przedsiębiorstw przemysłu mięsnego i mleczarskiego, *Roczniki Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich*, 103(4), 58-68.

Kogut J., 2017, Bariery rozwoju małych i średnich przedsiębiorstw – ujęcie teoretyczne, *Studia Ekonomiczne, Prawne i Administracyjne*, 3, 56-67.

Maison & Partners, 2018, *Bariery prowadzenia działalności gospodarczej w Polsce*, https://zpp.net.pl/wp-content/uploads/2018/02/BarierydlaMSPwPL.pdf [accessed: 5.05.2019].

Ołówko N., 2016, Polityka podatkowa państwa a funkcjonowanie sektora małych i średnich przedsiębiorstw, in: K. Pujer (ed.), *Zarządzanie organizacją w turbulentnym otoczeniu*, Wrocław: Exante.

OECD, 2017, *Enhancing the Contributions of SMEs in a Global and Digitalised Economy*, https://www.oecd.org/mcm/documents/C-MIN-2017-8-EN.pdf [accessed: 5.05.2019].

PARP, 2018, *Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce 2018*, https://businessinmalopolska.pl/images/publikacje/raporty/Raport-PARP-o-stanie-sektora-MP-2018.pdf [accessed: 20.05.2019].

Piorunowska-Kokoszko J., 2018, Perspektywy rozwoju grup zakupowych w Polsce w sektorze MŚP, *Przegląd Nauk Ekonomicznych*, 30, 45-62.

Puciato D., Puciato W., 2016, Prawno-administracyjne bariery funkcjonowania przedsiębiorstw z sektora MŚP z województwa opolskiego, *Zeszyty Naukowe WSB we Wrocławiu*, 16(2), 77-89.

Samborski A., 2017, Bariery fiskalne rozwoju przedsiębiorczości w Polsce, *Problemy Zarządzania,* 65(1), 50-68.

Stawicka M., 2017, Bariery innowacyjności małych i średnich przedsiębiorstw w Polsce, *Journal of Modern Science*, 33(2), 247-260.

Steinerowska-Streb I., 2012, Bariery rozwoju małych i średnich przedsiębiorstw w Polsce – zmiany spowodowane dekoniunkturą gospodarczą, *Przegląd Organizacji*, 7, 18-21.

Steinerowska-Streb I., 2014, Bariery rozwoju polskich małych i średnich przedsiębiorstw zaangażowanych i niezaangażowanych w działalność międzynarodową, *Studia Ekonomiczne Regionu Łódzkiego*, 12, 149-159.

Szczepaniak I., 2010, Czynniki i uwarunkowania oraz bariery rozwoju małych i średnich przedsiębiorstw, in: T. Wawak (ed.), *Komunikacja i jakość w zarządzaniu*, Kraków: Wydawnictwo UJ, 257-269.

Tubielewicz K., 2017, *Charakterystyka powiązań sieciowych przedsiębiorstw w aspekcie zarządzania strategicznego*, Opole: Oficyna Wydawnicza Polskiego Towarzystwa Zarządzania Produkcją.

Wardęcka M., 2017, Bariery rozwoju małych i średnich przedsiębiorstw powiatu konińskiego, *Acta Universitatis Nicolai Copernici. Zarządzanie*, 44(1), 7-18.

Wawak S., 2018, Stymulanty i bariery rozwoju małych i średnich przedsiębiorstw, *Journal of Modern Management Process*, 3(1), 8-15.

Wieczorkowska G., Wierzbiński J., 2007, *Statystyka. Analiza badań społecznych*, Warszawa: Scholar.

Zuzek D., 2011, Bariery rozwoju małych i średnich przedsiębiorstw w Polsce, *Studia i Materiały*, 57, 337-350.

Zuzek D., 2018, *Wyzwania wobec rozwoju małych i średnich przedsiębiorstw w gminach na obszarach Natura 2000: aspekty ekonomiczne, społeczne i ekologiczne*, Warszawa: Difin.

Uczestnictwo w sieciach biznesowych a bariery rozwoju małych i średnich przedsiębiorstw

Streszczenie. *Artykuł dotyczy barier rozwoju małych i średnich przedsiębiorstw (MŚP) w kontekście usieciowienia. Pokazuje, że powszechnie znane najbardziej uciążliwe bariery: wysokie podatki, duże koszty pracy oraz biurokrację należy uzupełnić o problemy z pozyskiwaniem pracowników, zaś najbardziej uciążliwą grupą barier są bariery administracyjno-prawne. Przynależność do sieci biznesowych ogranicza przede wszystkim uciążliwość barier rynkowych. Ponadto zwrócono uwagę, że postrzeganie barier przez przedsiębiorców jest bardzo zróżnicowane, nawet w przypadku firm działających w jednej sieci biznesowej, w tej samej branży, prowadzących ten sam rodzaj działalności.*

Słowa kluczowe: *sieci biznesowe, usieciowienie, małe i średnie przedsiębiorstwa, MŚP, bariery rozwoju*

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Tadeusz Chruściel

Social Academy of Sciences in Łódź
Off-site department in Szczecinek
orcid.org/0000-0002-8470-1204
e-mail: apromodeni@wp.pl
phone: +48 606 832 747

Rafał Tyszkiewicz

WSB University in Wrocław
Faculty of Finance and Management
orcid.org/0000-0003-1525-0697
e-mail: rafal.tyszkiewicz@wsb.wroclaw.pl
phone: +48 662 011 174

Monika Tyszkiewicz

WSB University in Wrocław
Faculty of Finance and Management
orcid.org/0000-0001-6785-966X
e-mail: monika.tyszkiewicz@wsb.wroclaw.pl
phone: +48 665 685 665

Influence of Changes in the Environment on the Business Model of Municipal Enterprises

Abstract. *Urban development largely depends on the effectiveness of the service offer of municipal utilities that carry out their own tasks of local government units. The ongoing and uninterrupted satisfaction of residents' needs requires municipal enterprises to develop a business model that takes into account the turbulent changes in the external environment of enterprises in the long run.*

Keywords: *change, business model, municipal enterprise*

1. Introduction

The processes of changing the business model are still an unparalleled phenomenon occurring in municipal enterprises in Poland. Changing the business model may not be an easy mission for enterprises, however, the constant need to adapt to changing conditions forces the necessity of transformations in specific areas. All market participants, regardless of their specialization or sector, are facing turmoil, are more or less vulnerable to changing trends, new technologies, increasingly sophisticated needs and expectations of customers. Therefore, it seems that only those entities that are able to design the organization to capture the most important values for the company in a changing reality, which will create the most adapted business model, will be able to increase their resources and maintain competitive advantage in the most effective way.

The measure of the competitive advantage of the commune is the dynamic economic development of the region, which reflects the quality of life of its inhabitants. Access to green areas, parks, their aesthetics and development is undoubtedly an asset. Similarly, good road infrastructure, an extensive network of bicycle paths, the way they are maintained, the possibility of using modern public transport, access to water and heat management, high-level waste management and utilization are factors that shape the residents' satisfaction. However, it should be emphasized that the ongoing and continuous satisfaction of the collective needs of the population by providing publicly available services can be attributed to municipal enterprises that operate in the field of public utilities.

Pursuant to the Act on commune self-government, satisfying the collective needs of the community is the commune's own tasks. In particular, own tasks include the following matters:

– spatial order, real estate management, environmental and nature protection, and water management,

– municipal roads, streets, bridges, squares and traffic organization,

– water supply and water supply, sewerage, municipal sewage disposal and treatment, maintenance of cleanliness and order and sanitation, landfills and disposal of municipal waste, electricity and heat supply, and gas.[1]

Meeting the needs defined in these areas, guaranteeing at the same time a permanent increase in the standard of living for the residents, and an increase in the economic potential for the region, requires municipal companies to develop a business model that will take into account market turbulence and turbulence in the long run.

Rational actions taken already at the stage of creating a business model, taking into account various situations, will allow the municipal enterprise to go more gently through previously anticipated scenarios. In other words, decisions made in the past very often cast a shadow on the scope of the company's activities and often associated with a change in the business model [Chesbrough, Rosenbloom 2002: 529-555].

However, how to interpret the business model in the context of a municipal enterprise whose goal is to effectively provide technical services and not to maximize benefits for owners [Falencikowski 2017: 91-98]. The literature on the subject does not have a uniform definition of the business model, it is captured

[1] Act of 8 March 1990 on commune self-government, Journal of Laws 2019, item 506.

by many authors and in many ways. Mark W. Johnson expressed it as a representation of how business creates and delivers value to both customers and the enterprise [Johnson 2010: 22].

From the perspective of strategic management, it can be considered that the business model should be seen as an manifestation of the organization's strategy, which is externalized by modeling the value chain in order to effectively use and reconstruct resources and skills [Porter 2006: 45]. On the public utility level, the above-mentioned aspects of the business model approach in municipal enterprises will be strongly correlated with the uninterrupted satisfaction of the collective needs of municipal residents.

Polish enterprises are increasingly changing the business model to improve competitiveness, quality policy, restructuring or cost reduction. Changes made in organizations are to ensure their stability, development and a higher level of quality of their functioning. Unfortunately, there is a phenomenon of implementing ill-considered changes in enterprises. There is also the effect that after a short time the company gives up implementing the change in the light of subsequent changes.

Internal changes repeatedly slow down the employees of the enterprise themselves, who perceive this type of process as a threat to themselves and often approach each occurring change in a passive manner.

The role of the manager, i.e. the change promoter, who initiates the changes, tries to ensure their implementation and inspires employees participating in the process of change in the enterprise is unquestionable in this process.

According to Ramon Casadesus-Masanell and Joan Enric Ricart business model is a reflection of the implemented strategy, i.e. one of the possibilities (options) specified in the multi-variant strategy [Casadesus-Masanell, Ricart 2010: 195-215]. Therefore, it contains a set of managerial choices, as well as the consequences of these choices. Therefore, changing the business model requires well-thought-out managerial decisions made especially in the past, because in the long term they affect the market condition in the future.

The purpose of the article is to identify the impact of changes in the environment on the business model of municipal enterprises from the West Pomeranian Voivodeship.

The article poses research questions: how are the processes of changing the business model in municipal enterprises, as well as what determinants and mechanisms affect the processes of changing the business model.

Defining the purpose of the article and research questions allowed to adopt the research hypothesis, which reads: the more susceptible to changes the business model of municipal enterprises carrying out the municipality's own tasks, the higher the quality of municipal services provided that affect the development of the local government unit.

The research was carried out using literature data and the diagnostic survey method was used. The study was of a pilot nature and is just the beginning of empirical research on the specificity of the business model of municipal enterprises in Poland.

2. Change and the organization's business model

The activity of enterprises in a turbulent environment requires constant monitoring of changes. The variability and negligible predictability of customer expectations as service recipients triggers the need to track changes in the exogenous environment, to verify the strategy and the assumed business model. The algorithm adopted in this way (this approach), designed to keep up with the observed changes, results in the need to adapt the organizational structure, and thus prepare resources for the implementation of business processes. Human resources play a special role in service processes, hence the effectiveness of the changes depends on the ability to adapt employees to new conditions of exogenous but also endogenous environment: customer expectations, technologies used, internal communication, configuration of organizational structure, acquisition and processing of information, new skills and qualifications. Such crew preparation can be determined by the ability or readiness to change. Therefore, the ideal solution would be to overtake the preparation of human resources, e.g. in terms of the necessary knowledge to carry out new tasks.

The essence of the functioning of every enterprise is development and generating income to achieve it, every enterprise must be prepared to constantly adapt to changing external conditions. These conditions change in a turbulent manner, and the enterprise which is a closed system is exposed to increasing chaos in accordance with the principle of entropy. Trends characterizing the turbulence of the environment can be divided into Józef Machaczka [1996]: increase in the intensity of change, increase in the intensity of the environment, increase in the speed of change, increase in the complexity of the environment.

Change is defined as a process taking place over time, transferring an enterprise from a given state to another state, with the involvement of resources. Change takes place in an economic, social and technological context. The purpose of the change is to improve the company's operating efficiency. The change concerns areas such as vision, mission, goals and strategy, culture, structure, staff, technology [Ouang Tien 2012: 18].

The motives for changes in enterprises are different and most often result from necessity (forced changes), but the literature on the subject is divided into two main causes from the point of view of the origin of their creation [Grouard, Meston 1997: 16-17]:

– external causes originating from the company’s environment, originating in the field of contact with the client or in competition with competitors. External factors also include all legal restrictions on operations, technological progress, geopolitical and demographic situation,

– internal reasons resulting from the need to develop or willingness to build your own brand. It should be remembered that the primary goal of every enterprise is to earn money, therefore any changes should be considered in terms of improving the financial result of the organization.

The following classification of determinants of changes in enterprises is also encountered:

– imposed (forced) changes resulting from the need to introduce. The direction of changes determines the environment, the organization is forced to adopt a specific scenario,

– spontaneous changes (voluntary, independent) most often resulting from the need or desire to improve results, develop the enterprise or the manager’s vision [Zając 2015: 316].

Research on the business model was initiated by the development of enterprises in the late 90s. According to Jan Brzóska, the most important guidelines in building business models are based on the following theses and principles of approach to business: ensuring proper marketing and innovation relations, productive use of resources, innovative creation of added value and value for the client, gaining a competitive position on the market, the imperative of achieving profit [Brzóska 2009: 12-17].

Hence the business model is a system consisting of interrelated and interacting over time the following elements: the value offered to customers by the company in the segment to which the company directs this value, the necessary activities related to the provision of the offered value, the scope of the product offer along with the price policy , sources of income, organizational possibilities creating the basis of activity, skills and projects enabling to maintain and sustain all aspects of competitive advantage [Brzóska 2009: 12-17].

Elements of the business model indicated by Jakub Drzewiecki are: proposed values for clients and customer relations, economic business model, network of partners, target market, value chain structure [Drzewiecki 2013: 67].

A broad definition of the business model according to Chesbrough is given by Marek Jabłoński, indicating the functions:

– articulating value propositions for clients,

– identifying and determining market segments,

– revenue generation mechanisms,

– defining the structure of the value chain for creating and distributing the offer and complementary assets to support positions in the value chain,

– cost structure and potential profit,

– formulating a competitive strategy,
– description of the company's position in the network connecting suppliers and customers [Jabłoński 2014: 738].

In general, business models should mean a plan or structure that helps explain what value is provided by the company and its network partners to clients [Casadesus-Masanell, Ricart 2010: 529-555]. Nevertheless, business models must be adapted to the changes introduced and be profitable, especially in the context of changing conditions in the enterprise environment [Amit, Zott 2012: 41-49].

Changing the business model seems to be a requirement for enterprises to be able to realize opportunities related to services [Kastalli et al. 2013: 169-180].

3. The Determinants of changes in the business model of municipal enterprises

In the group of public utilities, despite apparent stability, one can notice the growing dynamics of changes that is difficult to clearly identify, and the growing turbulent environment makes it necessary to analyze the environment.

The specificity of the functioning of municipal enterprises consists in performing their own tasks of local government units in order to meet the needs of the local government community. According to Zbigniew Grzymała, municipal economy, implemented by municipal enterprises, includes public utility tasks. Their purpose is ongoing and continuous satisfaction of the collective needs of the population by providing publicly available services [Grzymała 2010: 20].

Elżbieta Weiss lists the objectives of municipal entities according to five categories, which are summarized in Table 1.

Table 1. Objectives of municipal entities

Goal category	Specification
Social goals of the commune and residents	Social acceptance of prices of municipal services, quality of services, diversity of service offerings
Economic goals of the commune	Minimization of budget expenditure with a constant scope and quality of services, additional budget revenues from new solutions
Economic goals of the municipal enterprise	Possibility of making a profit by: reducing costs, creating new service markets and expanding existing markets, making profit protects stakeholders and secures development in investment
Ecological goals	Preservation and improvement of the natural environment, shaping the level of awareness and ecological attitudes of the inhabitants
Social goals	Creating efficient mechanisms for carrying out tasks through privatization and activation of the local community

Source: own study based on Weiss 2001: 121-122.

The objectives of municipal entities listed in Table 1 refer to a large extent to service operators, which most often are self-government municipal enterprises. These enterprises are responsible for responding to changes: legislative, expectations of residents, quality and costs of services provided, environmental effects, and finally the opinions of residents about the management of municipal property. A survey of 19 self-government municipal enterprises with a multi-task service structure and a diverse organizational and legal form, operating in the West Pomeranian Voivodeship, conducted in 2018 with interview questionnaire, confirmed the importance of premises, external and internal factors of environmental changes, and thus analyzes and verification of the strategy and business model.

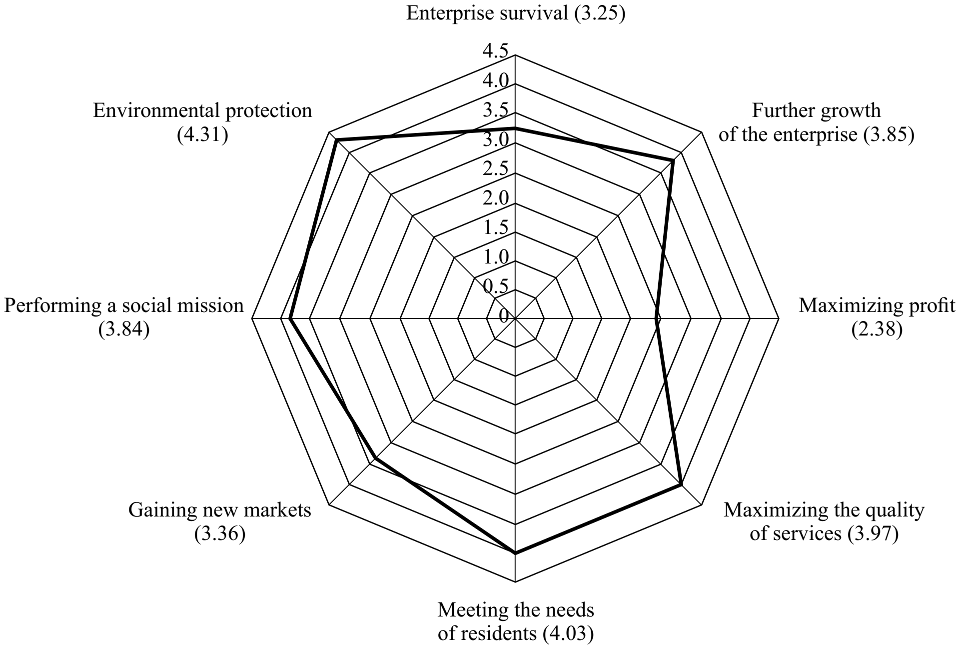

Diagram 1. Premises for changes in municipal enterprises of the West Pomeranian Voivodeship

Source: own study.

The average values obtained of indicators in 19 surveyed enterprises, using a five-point Likert scale, allow to state that the dominant premise is an increase in the level of environmental protection, followed by: satisfying the growing needs and expectations of residents, improving the quality of municipal services offered, further development of the enterprise and fulfilling the social mission.

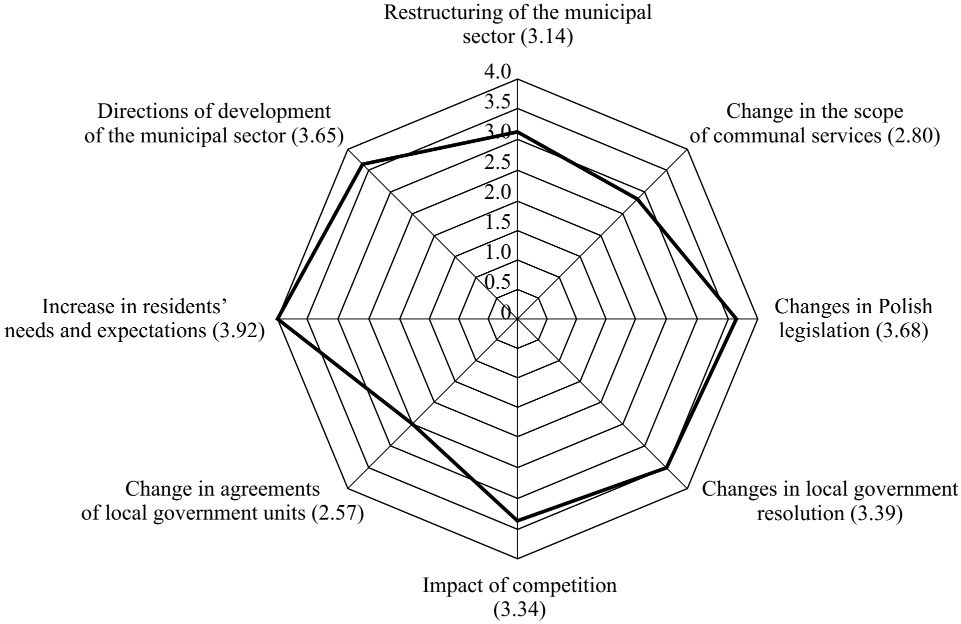

Diagram 2. Exogenous factors of change in municipal enterprises of the West Pomeranian Voivodeship

Source: own study.

The exogenous factors of change in the examined municipal enterprises, shown in Diagram 2, were: an increase in the needs and expectations of residents, legislative changes and directions of development of the municipal sector, the impact of competition, and the restructuring of the municipal sector. To a lesser extent, external factors of change were changes in the scope of services or changes as a result of agreements of local government units.

In addition to external factors of change, internal factors, which are presented in Diagram 3, are equally important.

Referring to the internal factors of change in municipal enterprises, the importance of: orientation to the external customer (resident), improvement of the company's efficiency, improvement of the financial situation, improvement of communication, introduction of a process approach, improvement of internal customer service, application of IT technologies should be emphasized. The diversification of services, change of technology and finally the implementation of ISO quality standards are less important.

Assuming the significance of a given factor above 60% (value above 3.0 on the five-point Likert scale), it should be noted that the vast majority of the examined premises as well as external and internal factors of change affect the change of strategy and business model in municipal enterprises.

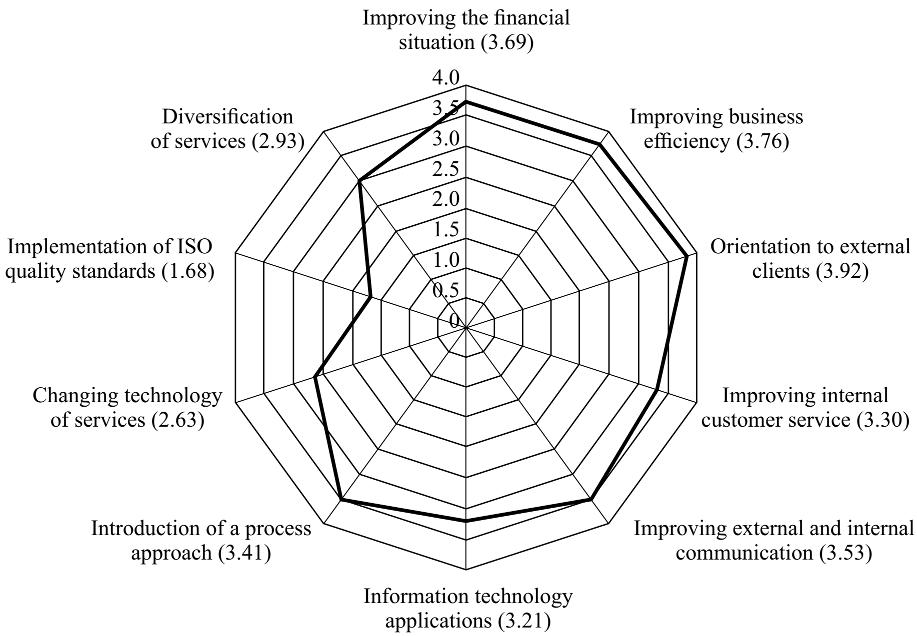

Diagram 3. Endogenous factors of change in municipal enterprises of the West Pomeranian Voivodeship

Source: own study.

Table 2. Impact of causes and factors of change on elements of the business model in local-government municipal enterprises of the West Pomeranian Voivodeship

Causes and factors of change	Elements of the business model
Performing a social mission, focusing on an external customer, protecting the natural environment, meeting the needs of residents, increasing the needs and expectations of residents	Values offered to residents
Directions and development of the municipal sector, change in the scope of municipal services, agreements between local government units	Range of activities
Changes in Polish legislation, changes in local government resolutions, application of IT technologies, introduction of a process approach, improvement of internal and external communication	Organizational possibilities
Enterprise survival, financial improvement, service diversification, municipal sector restructuring, gaining new markets, improving internal customer service, maximizing profit, further enterprise growth	Cost structure, revenue and profit generation
Impact of competition, improvement of operational efficiency, implementation of ISO quality standards, change of service technology, maximization of service quality	Formulating a competitive strategy

Source: own study.

The synthesis of the most important causes and factors of change affecting the elements of the business model in local-government municipal enterprises of the West Pomeranian Voivodeship is presented in Table 2.

The presented elements of the business model, taking into account the values offered to clients (residents), scope of operations, organizational possibilities and formulation of a competitive strategy, as well as generating revenues, cost structure and making a profit at a level ensuring further development of municipal enterprises were influenced by a number of reasons and factors of change in the examined enterprises municipal economy operating in the West Pomeranian Voivodeship.

4. Conclusions

Increasingly higher requirements imposed on municipal enterprises by local authorities in terms of effectiveness in meeting the growing needs of residents, quality and competitiveness of services provided, imply the need to adapt the business model to changes.

The development of cities largely depends on the effectiveness of the service offer of municipal utilities, implementing the own tasks of the local government unit. The ongoing and continuous satisfaction of the residents' needs requires the development of a business model that takes into account market turbulence and turbulence in the long run. Individual elements of the business model are influenced by changes in the environment, which was confirmed by the presented research results. Correlations between the business elements of municipal enterprises with the causes and factors of environmental changes, presented in Table 2, exhaust the most important research assumptions.

Economic practice proves that the more susceptible to changes the business model of municipal enterprises implementing commune's own tasks, the higher the quality of public space affecting the development of the local government unit. The assumed volume of the article does not allow to develop this hypothesis.

References

Act of 8 March 1990 on commune self-government, Journal of Laws 2019, item 506.

Amit R., Zott Ch., 2012, Creating Value Through Business Model Innovation, *MIT Sloan Management Review*, 53(3), 41-49.

Brzóska J., 2009, Model biznesowy – współczesna forma modelu organizacyjnego zarządzania przedsiębiorstwem, *Organizacja i Zarządzanie*, 2(6), 12-17.

Casadesus-Masanell R., Ricart J.E., 2010, From strategy to business models and onto tactics, *Long Range Planning*, 43(2-3), 195-215.

Chesbrough H., Rosenbloom R., 2002, The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies, *Industrial and Corporate Change*, 11(3), 529-555.

Drzewiecki J., 2013, Model biznesu jako narzędzie zarządzania strategicznego: zastosowanie, dylematy i wyzwania, *Przedsiębiorczość i Zarządzanie*, 14(13), cz. II, 65-75.

Falencikowski T., 2017, Modele budowy wartości dla klienta – charakterystyka i rozwinięcie, *Handel Wewnętrzny*, 3(1), 91-98.

Grouard B., Meston F., 1997, *Kierowanie zmianami w przedsiębiorstwie. Jak osiągnąć sukces*, Warszawa: Poltext.

Grzymała Z., 2010, *Restrukturyzacja sektora komunalnego w Polsce. Aspekty organizacyjno-prawne i ekonomiczne*, Warszawa: Oficyna Wydawnicza SGH.

Jabłoński M., 2014, Projektowanie i dojrzewanie modeli biznesu przedsiębiorstw przez wymagania rynku kapitałowego na przykładzie NewConnect, *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia*, 66, 735-745.

Johnson M.W., 2010, *Seizing the white space: Business model innovation for growth and renewal*, Cambridge, Mass.: Harvard Business Press.

Kastalli V., Looy I.B. van, 2013, Servitization: Disentangling the Impact of Service Business Model Innovation on Manufacturing Firm Performance, *Journal of Operations Management*, 31(4), 169-180.

Machaczka J., 1996, Przedsiębiorczość, zarządzanie, zmiana – tryptyk rozwoju organizacji, *Przegląd Organizacji*, 5, 9.

Ouang Tien N., 2012, *Zarządzanie zmianami w nowoczesnej gospodarce. Ujęcie modelowe*, Warszawa: PTM.

Porter M.E., 2006, *Przewaga konkurencyjna. Osiąganie i utrzymywanie lepszych wyników*, Gliwice: Onepress.

Weiss E., 2001, *Metoda oceny ekonomicznej procesów przekształceń w gospodarce komunalnej w Polsce*, Wrocław: Wydawnictwo AE we Wrocławiu.

Zając S., 2015, Teorie i problematyka zmian w zarządzaniu organizacją, *Prace Naukowo Dydaktyczne Naukowe Państwowej Wyższej Szkoły Zawodowej w Krośnie*, 68, 311-330.

Wpływ zmian w otoczeniu na model biznesu przedsiębiorstw komunalnych

Streszczenie. *Rozwój miast w dużej mierze zależy od skuteczności oferty usługowej przedsiębiorstw gospodarki komunalnej, które realizują zadania własne jednostki samorządu terytorialnego. Bieżące i nieprzerwane zaspokajanie potrzeb mieszkańców wymaga od przedsiębiorstw gospodarki komunalnej opracowania modelu biznesowego, który na dłuższą metę uwzględnia burzliwe zmiany zachodzące w otoczeniu zewnętrznym przedsiębiorstw.*

Słowa kluczowe: *zmiana, model biznesu, przedsiębiorstwo komunalne*

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Jarosław Graziadei-Darmas
WSB University, Dąbrowa Górnicza
Management Department
orcid.org/0000-0003-2551-1221
e-mail: jaroslaw.graziadei@gmail.com
phone: +48 662 044 462

Karina Irczyk
WSB University, Dąbrowa Górnicza
Management Department
orcid.org/0000-0002-5183-553X
e-mail: karina.irczyk@gmail.com
phone: +48 605 594 500

Business Model in Animal Shelter Management

Abstract. *Throughout the 20th and 21st centuries, animal shelters have evolved in both their operation and manner of organization. New challenges concerning humane treatment of animals result not only from national and international regulations, but also from public expectations. Meeting the newly set standards requires efficient management. The article presents legal aspects of animal shelter operation, as well as data concerning the functioning of animal shelters in Poland. In addition, it shows a business model and its applicability. The aim of this paper is achieved through determining the assumptions for a business model of an animal shelter.*

Keywords: *animal shelter, NGO, business model, Business Model Canvas*

1. Introduction

Research conducted in 2018 by Public Opinion Research Centre (CBOS) indicates that 80% of Poles believe that animals feel pain in the same way as humans do [CBOS 2018]. This translates into anthropomorphic perception of animals, their role in human's life and their treatment by people in individual terms, as well as by entities such as animal shelters or animal care societies [Konecki 2005: 85]. This perspective is one of the foundations for creating legal regulations ensuring decent living conditions for animals, with particular emphasis on pets. Animal shelters are key entities in ensuring the implementation of such assistance.

The latest report of the Supreme Audit Office (NIK) noted an improvement in the living conditions of animals in shelters. At the same time, irregularities were identified which consisted in lack of control over the manner and quality of tasks implementation by entities entrusted by the municipalities with catching or caring for stray animals. In most of the audited local governments the activities were focused on catching animals and transporting them to shelters, whereas those aiming at preventing homelessness and promoting animal adoption were marginalized or even overlooked.[1] The results of research and control indicate the importance of animal protection issues and homelessness policies. The issue of using business models in the management of animal shelters has not been a subject of scientific research yet. There are, however, guidebooks and sets of guidelines on how animal shelters should be organized. One such document is the Information Guide of the Polish Society for the Protection of Animals (OTOZ) written by Danuta Mikusz-Oslislo and Ewa Gebert, referring mainly to the issue of human resource management in an animal shelter.[2] Nina Kinitz, in her article dealing with modern animal shelters, writes about the perspective of a collection of good practices at home and abroad [Kinitz 2015]. After a thorough analysis of legal acts and available documents and having conducted interviews with people involved in the care of homeless animals, the authors of this article analysed the legal status and the possibilities offered by the application of business models in running animal shelters.

The aim of the article was to determine the assumptions for a business model of an animal shelter regarding the existing legal provisions and specifying the key factors affecting its functioning. The authors applied the following methods: critical literature analysis, source document analysis, as well as elements of statistical data analysis and method of analysis and logical construction.

2. Legal aspects of the operation of animal shelters in Poland

The first shelters in what is now Poland, called shelters or asylums, were established in the 19th century as charities, and their purpose was to protect animals [Kaliski 2012: 45]. In the 20th century, animal shelters were organized as state units, which were to ensure order and safety of residents. Their task was to catch stray animals and then kill them – dogs after fourteen days, cats after five days [Kaliski 2012: 46]. When the Act on maintaining cleanliness and order in municipalities entered into force in 1996, councils were obliged to organize protection against stray animals.[3] The new provision generated a demand for stray animal catching servic-

[1] www.nik.gov.pl/aktualnosci/nik-pomaga-rozwiazac-problem-bezdomnych-zwierzat.html [accessed: 12.04.2019].

[2] www.otoz.pl/pliki/dokumenty/projektowanie.pdf [accessed: 12.04.2019].

[3] Act of 13 September 1996 on maintaining cleanliness and order in municipalities, Journal of Laws of 1996, No. 132, item 622.

es, which mobilized private entrepreneurs. Unfortunately, the Act did not specify the ways or conditions for conducting such economic activity. Animal shelter as an organization having specific legal framework has been functioning in Poland only since 2011, when, with the amendment to the Act on the protection of animal health and eradication of infectious animal diseases from 2004, municipalities were obliged to provide homeless animals with care and a definition of an animal shelter was introduced.[4] The new obligation and economic factors compelled municipalities to build their own facilities having standards that were not regulated by law yet.

Regulations relating to the keeping of companion animals and the treatment of stray animals were introduced in many European countries as early as in 1987, when representatives of eight Council of Europe countries (Belgium, Denmark, Greece, the Netherlands, Luxembourg, Norway, Portugal and Italy) signed the European Convention for the Protection of Pet Animals.[5] An important part of the treaty is the section on information and education programs aimed at promoting awareness and knowledge related to keeping companion animals. In the following years the treaty was ratified by sixteen countries, including Ukraine, Turkey and Azerbaijan. Poland has never ratified the Convention,[6] but since 1998, the help for homeless animals and the operation of animal shelters have been regulated by introducing national law. Currently Polish law defines homeless animals as domestic or farm animals, "which have escaped, strayed or been abandoned by man, and it is not possible to determine their owner or another person in whose care the animal remained under care" (§ 1).[7] Municipal authorities are obliged to inform their residents about the date of the planned catch and about the address of the animal shelter where the animals caught will be placed. The legislator enabled municipalities to conclude contracts with entities running animal shelters or other economic entities for constant or periodic catching of stray animals (§ 5.1). These entities are not allowed to use agents or devices that cause suffering or pose a threat to animal's life or health. They also undertake to provide medical and veterinary care if necessary (§ 7). The contract concluded by municipal authorities with the aforementioned entity should specify the means for catching animals, means of transporting animals and indicate the place of their detention before they are transported to the shelter (§ 5.2). According to the law, a stray animal should immediately be placed in animal shelter (§ 6).

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[4] Act of 11 March 2004 on the protection of animal health and eradication of infectious animal diseases, Journal of Laws of 2004, No. 69, item 625.

[5] www.coe.int/en/web/conventions/full-list/-/conventions/treaty/125 [accessed: 14.04.2019].

[6] www.coe.int/en/web/conventions/full-list/-/conventions/treaty/125/signatures [accessed: 14.04. 2019].

[7] Regulation of the Ministry of Internal Affairs and Administration of 26 August 1998 regarding the rules and conditions for catching stray animals, Journal of Laws of 1998, No. 116, item 753.

Animal shelter is defined as "a place intended for the care of domestic animals that meets the conditions set out in the Act of 11 March 2004 on the protection of animal health and eradicating infectious animal diseases (Journal of Laws of 2018, item 1967)" (art. 4, p. 25).[8] The shelter may be run by social organizations whose statutory purpose is to protect animals, in consultation with the relevant municipal bodies (art. 11, § 4). Preventing animal homelessness, providing care for them and catching them belong to municipal tasks (art. 11, § 1). Commune councils are obliged to determine annually by 31 March, by resolution, a stray animal prevention and care program (art. 11a, § 1). Pursuant to the provisions, this program should contain an indication of the amount of financial resources allocated for its implementation and the manner of spending these resources (art. 11a, § 5). Among the tasks that should be included in the program, the legislator indicates in particular: "1) providing stray animals with a place in an animal shelter; 2) providing care for free-roaming cats, including their feeding; 3) catching homeless animals; 4) obligatory neutering of animals in animal shelters; 5) re-homing animals; 6) euthanasia of blind litters [...]" (art. 11a, § 2). All costs generated by the program are covered by the commune.

Additionally, Polish law regulates veterinary requirements for running animal shelters. The shelter should be located at a distance of at least 150 meters from human abodes, public facilities and facilities where products of animal origin are made, and its area should be paved and fenced (§ 1).[9] The legislator specifies eight types of rooms that should be separated in animal shelters, including a room for medical and surgical procedures, a room for isolating sick and suspected to be sick animals, rooms for keeping healthy animals, a room for storage of veterinary medicinal products and medical devices, a room for storing animal feed, a room for storing disinfectants, a room for administrative and office purposes and a room for social purposes (§ 2.1). The room or kennel should allow animals to move freely, they should be equipped with a bedding and provide constant access to drinking water (§ 5).

Additional requirements for shelters include having an incinerator or a cold room for temporary storage of carcasses (§ 3). The entities running the shelter are also obliged to keep a registry of animals including animal description, date of admission to the shelter with details of the person who delivered it, information about quarantine, vaccinations and veterinary procedures that have been carried out, the date of leaving the shelter with details of the person collecting the animal, and – if applicable – also the date and reason of death of the animal (§ 6.2). In addition, the above regulation obliges the shelter operator to provide ken-

[8] Act of 21 August 1997 on animal protection, Journal of Laws of 2019, item 122.

[9] Regulation of the Ministry of Agriculture and Rural Development of 23 June 2004 regarding the detailed veterinary requirements for running animal shelters, Journal of Laws of 2004, No. 158, item 167.

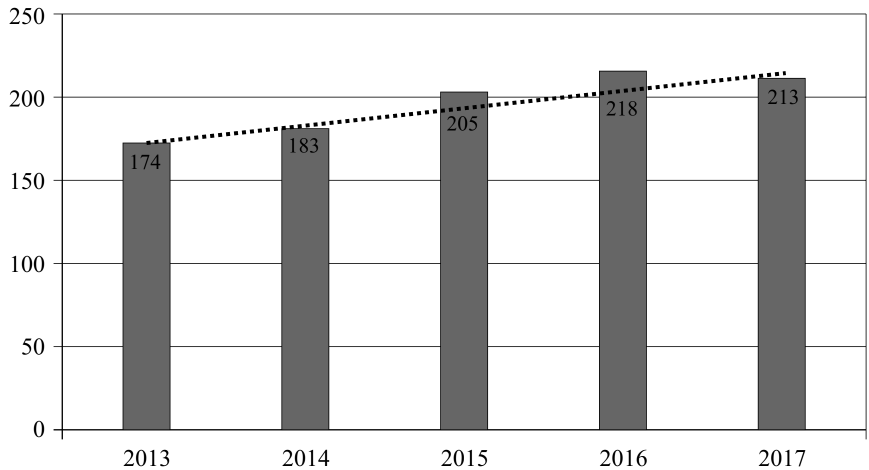
neled animals with veterinary care, in particular, they are obliged to control their health, conduct treatment, eradicate parasites and keep a veterinary inspection book (§ 7).

3. Operation of shelters for homeless animals in Poland

The problem of animal homelessness and care in Poland has been growing for years. Statistical data on the activities of animal shelters in Poland are gathered by the General Veterinary Inspectorate (GIW) and published annually in the form of reports. GIW reports contain data on dogs, cats and horses. The data analyzed in this paper will be limited to data regarding dogs and cats, because these animals are the main subject of animal shelters activity. Animal shelters for horses, due to their unique characteristics and small number, will not be included below. Reports published by GIW show that the problem of animal homelessness has been increasing. A growing tendency can be observed both in the number of shelters and in the number of animals under their care (Charts 1 and 2). The year 2017 was the first in many when the number of shelters and dogs kept in them slightly decreased. At the same time, the number of cats held in animal shelters continued to increase.

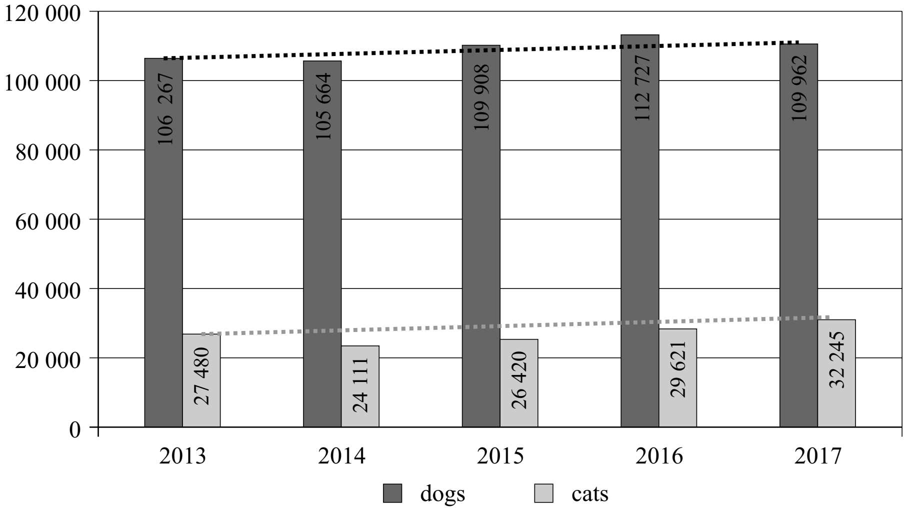
Data that allows assessing in a measurable way whether animal shelters fulfill their function are the number of adoptions, cases of euthanasia and deaths of animals. With respect to current legal regulations in Poland, it is assumed that the

Chart 1. Number of shelters for homeless animals in 2013-2017



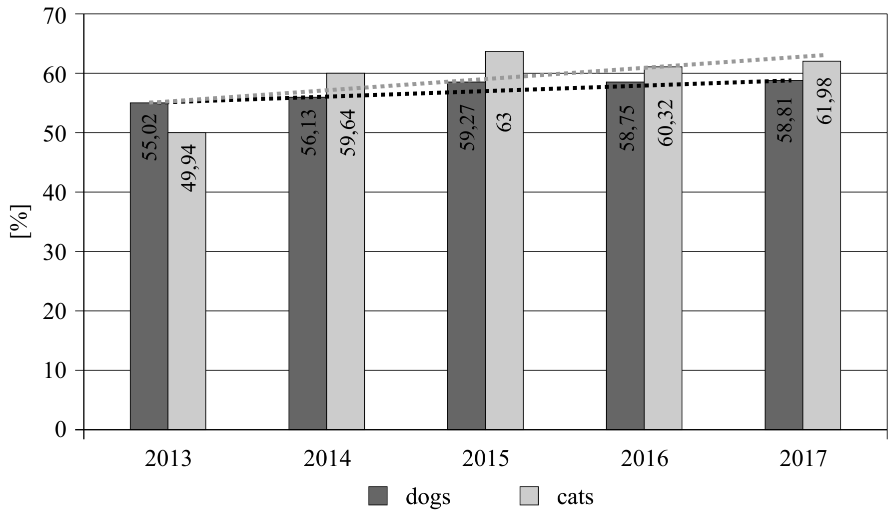
Source: own study based on https://www.wetgiw.gov.pl/nadzor-weterynaryjny/schroniska-dla--bezdomnych-zwierzat [accessed: 16.04.2019].

Chart 2. Number of dogs and cats held in animal shelters in 2013-2017



Source: own study based on https://www.wetgiw.gov.pl/nadzor-weterynaryjny/schroniska-dla--bezdomnych-zwierzat [accessed: 16.04.2019].

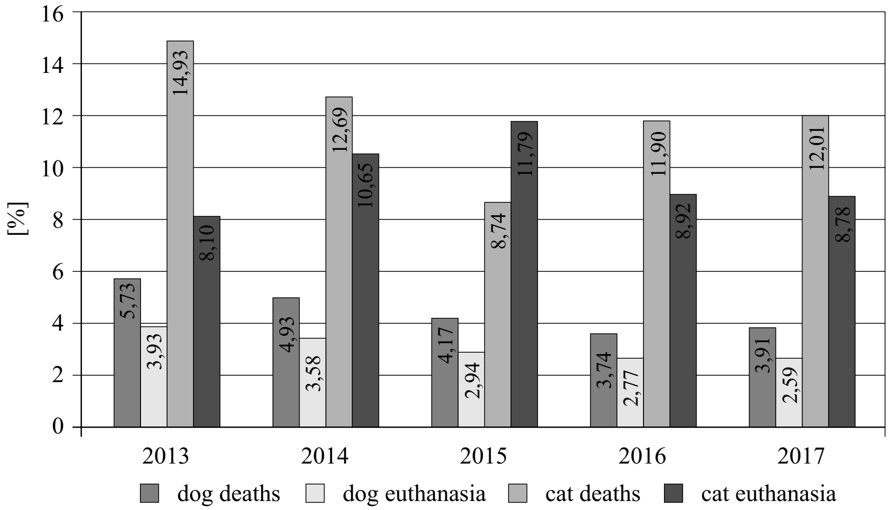
Chart 3. Rates of animal adoptions in 2013-2017



Source: own study based on https://www.wetgiw.gov.pl/nadzor-weterynaryjny/schroniska-dla--bezdomnych-zwierzat [accessed: 16.04.2019].

optimum way to solve the problem of homelessness of animals is searching for new owners. The number of animal adoptions is the sum of animals adopted by new owners and those who have been reclaimed by their original caregivers. In recent years, there has been a gradual increase in the number of adoptions from animal shelters (Chart 3). Yet another indicator of how an animal shelter functions is the rate of deaths, which is correlated with the conditions that animal shelters provide. As previously mentioned, in certain legal and factual circumstances animal shelters are permitted to euthanize animals. The data published by GIW shows a gradual decrease not only in the number of animal deaths in shelters, but also in the number of euthanasia cases, which proves that these organizations are taking better care of animal welfare (Chart 4).

Chart 4. Rates of animal deaths and euthanasia in animal shelters in 2013-2017



Source: own study based on https://www.wetgiw.gov.pl/nadzor-weterynaryjny/schroniska-dla--bezdomnych-zwierzat [accessed: 12.04.2019].

The ways in which shelters achieve their basic goals differ, which is reflected in the report published by the Supreme Audit Office.[10] Contracts between municipalities and animal shelters often contain only provisions obliging shelters to perform tasks specified in legal acts and regarding the amount and date of payment for services.[11] Increasingly, municipalities oblige animal shelters to pub-

[10] https://www.nik.gov.pl/aktualnosci/nik-o-zapobieganiu-bezdomnosci-zwierzat.html [accessed: 12.04.2019].

[11] Cf. contract with Maciejowice Commune: http://www.boz.org.pl/dokumenty/2017/140307_u_e0.pdf, contract with Lipno Commune: http://www.boz.org.pl/dokumenty/2018/040806_u_e0.

lish information about animals caught, to organize actions aimed at finding new caretakers or homes, meetings with children as part of educational campaigns, or money collections for the shelter.[12] The most precisely formulated contracts determine the number of employed nurses and their tasks (for example taking dogs for walks),[13] the number of free-roaming cats that ought to be sterilized and fed by shelter operator, the minimum number of adoptions per month, and the number of hours weekly when the shelter should be made available to volunteers.[14] Such motivation to take additional actions results in better animal welfare, as well as in higher number of sterilizations and adoptions, and the improvement of the municipality's reputation. It should be expected that the requirements for organizations dealing with homeless animals will increase in the coming years, which should be an incentive to develop a business model that will ensure effective goal achievement.

4. Definitions and examples of business models

Both commercial and non-commercial entities face the need to adapt their functioning to the dynamically changing reality [Nogalski 2009: 4]. The dynamics of economic processes often involves global conditions which cause that individual entities do not have adequate resources at their disposal [Nogalski 2017: 4].

One possible answer to such challenges is the use of business models which provide solutions to existing challenges. Bogdan Nogalski distinguishes four approaches, responding to external challenges faced by enterprises (Table 1).

The presented list illustrates the main differences in the directions of the organization's activities distinguishing two key factors i.e. the time and scope of decisions that are within the organization or outside of it. Although they relate to commercial sector, their level of generality allows for transferring them to a significant extent onto the plain of public management and NGOs. The diagnosis of decision-making propensity and of the manner of reaching them is important in assessing the possibilities of building a business model for a given entity.

In the literature on the subject numerous attempts have been made to define business models, with regard to various leading factors. In foreign literature, the

pdf, contract with Somonimo Commune: http://www.boz.org.pl/dokumenty/2018/220505_u_e0.pdf [accessed: 20.04.2019].

[12] Cf. contract with Drelów Commune: http://www.boz.org.pl/dokumenty/2018/060104_u_e0.pdf, contract with Augustów Commune: http://www.boz.org.pl/dokumenty/2018/200101_u_e0.pdf [accessed: 20.04.2019].

[13] Cf. contract with Chorzów Commune: http://www.boz.org.pl/dokumenty/2017/246301_u_e0.pdf [accessed: 20.04.2019].

[14] Cf. contract with Rybnik Commune: http://www.boz.org.pl/dokumenty/2018/247301_u_e0.pdf [accessed: 20.04.2019].

Table 1. Management models in enterprises

Type of enterprise	Characteristics of the approach
Passive enterprise	– no strategic decision making aimed at reorienting activities – conviction of difficulty being only temporary – faith in external help
Reactive enterprise	– decisions are taken late – often as a result of legal changes and not to adapt to market expectations – taking action only when facing critical situation
Proactive enterprise	– decision making is based on scenario planning and readymade decision drafts – actions are taken in line with forecasts – it is important to anticipate events in the external environment
Active enterprise	– has resources that allow to create reality – external environment does not influence the process of decision making

Source: Nogalski 2009: 4.

definition proposed by Alexander Osterwalder and Yves Pigneur deserves attention. They propose that a business model is "a description of the premises behind the way in which an organization creates value and ensures and derives profit from this created value" [Osterwalder, Pigneur 2014: 18]. For Stephen Downing, on the other hand, the business model „is a set of expectations as to how the company will succeed in its environment" [Downing 2005: 186].

Tadeusz Falencikowski compiled several dozen business model definitions, highlighting their key components, and at the same time proposed his own business model definition as „a relatively isolated multi-component conceptual object describing business operations, through articulating the logic of creating customer value and capturing part of this value by the company" [Falencikowski 2019: 37]. Krzysztof Obłój presents a business model in a broader perspective claiming that the paramount task for the business model is to answer the following questions:

1. What will the company do?
2. What are its basic resources and competences?
3. How are the resources and competences configured in everyday practice?

From the set of questions presented, the author derived the following definition of a business model: „a combination of the strategic concept of the company and the technology of its practical implementation, understood as the construction of a value chain allowing for efficient use and renewal of resources and skills" [Obłój 2002: 98].

Similarly, Oliver Gassmann, Karolin Frankenberger and Michaela Csik present their concept in the form of questions underlying the business model. According to them, the subject and object of the organization's activity are connected by values and a revenue model (Figure 1). As a tool supporting business model,

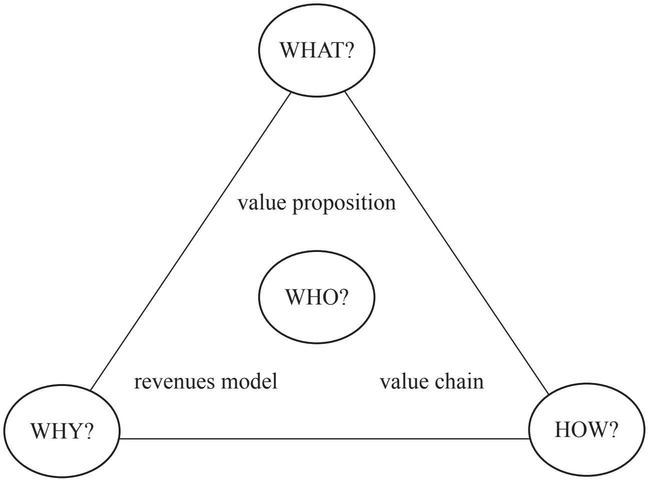


Figure 1. Business model according to Gassmann, Frankenberger and Csik

Source: Gassmann, Schweitzer, 2014: 91.

they chose a triangle scheme that responds to key issues in the functioning of an organization [Gassman 2014: 91].

In the simplest terms, "a business model" is the way a business operates. It should be noted that the term covers elements that interact with each other. The most adequate approach to the concept of "model" for the sake of this paper will be understanding it as a pattern, something that exists in a universal, ideal version. Therefore, it is the process of modeling itself which is important – the fact of presenting reality in a generalized, simplified version, showing only the most important elements and dependencies. Business models, as practice shows, do not have to reflect the activities of profit-oriented organizations only. In management

Table 2. Business Model Canvas

Key partners	Key activities	Value proposition	Customer relationships	Customer segments
	Key resources		Channels	
Cost structure		Revenue streams		

Source: Osterwalder 2012.

sciences, business models are with increasing frequency considered for non-profit organizations as well as in the area of public management.

One of the most popular ways of presenting a business model is the so-called Business Model Canvas, proposed by Osterwalder (Table 2). The fact that it has been applied in non-governmental organizations – mainly in the west – makes it even more interesting. Such attempts have not been made in Poland, at least not on a large scale. This model is often used in organizations that are new or that undergo major transformations. In the long term its application allows to assess whether the organization acts in accordance with the needs of beneficiaries, partners and the organization itself.

5. Adaptation of the business model to the needs of an animal shelter

The purpose of the paper is to determine the assumptions for a business model that can serve as an example of the organization of animal shelters. The main principle of such model is to capture the value in the subjective dimension, related to the basic functions of the shelter, and in the objective dimension, related to the cooperation between the units of the commune and non-governmental organizations. This cooperation facilitates the possibility of obtaining funds and increases the range of possible activities.

Krzysztof Firlej claims that devising adequate, optimum structures is a challenge facing various types of enterprises and organizations regardless of their size or ownership relations [Firlej 2007: 1]. It is important to adopt adequate indicators of achievements of such organizations which will make it possible to assess their efficiency. It is obvious that neither the amount of income nor animal satisfaction can be such indicators, because the former does not correspond to the purpose for which the shelter was established, and the latter is difficult to verify. Ewa Wiktoria Babuśka draws attention to the peculiarity of the public sector and its limitations, which may result, for example, from the sources of funds and methods of their rational spending. Babuśka considers the quality of services provided to be an important criterion for assessing the organization's functioning [Babuśka 2016: 26]. This approach meets the requirements imposed on the peculiar service which is the protection of homeless animals by providing them with adequate living conditions, which are regulated in art. 11 of the Act on the protection of animals.

In order to assess the functioning of non-governmental organizations, including animal shelters, various tools can be used, which measure the degree of goal achievement, the level of implementation of the action, and the level of impact. Donors and local communities financially or personally involved in functioning of non-governmental organizations, e.g. of an animal shelter, are increasingly interested in monitoring the results and goal achievement [Kafel 2014: 117]. Organizations frequently evaluate their results using such measures as the number of clients and volunteers, the amount of revenues and costs, although these do not determine the efficiency of the organization [Juraszek-Kopacz et al. 2008: 16]. Since the primary goal of non-governmental organizations is to introduce changes in the environment and in themselves, they should seek to find such way of measuring their activities that will show the relationship between their goals and medium and long-term results. These may be the change in attitude, in the state of knowledge, skills or living conditions. Emphasis should be put on capturing the added value of the organization, which shows the change in status after taking an action [Kafel 2014: 120-121].

In the following part of the article, the authors will present the assumptions for a model of an animal shelter based on Business Model Canvas (Table 3), whose important part is the value that the shelter offers to the environment.

Table 3. Assumptions for a business model of an animal shelter

<table>
<tr>
<td rowspan="2">Key partners
– business
– educational institutions
– universities community*</td>
<td>Key activities
– organization of adoption
– providing daily care
– veterinary care
– keeping a registry of homeless animals</td>
<td rowspan="2">Value proposition
– care for homeless animals
– making the community aware of the needs of animals
– promoting voluntary activities
– regulation of the population of homeless animals</td>
<td>Relations with clients
– direct contact
– networking activities</td>
<td rowspan="2">Customer segment
– commune
– local society
– individual customers interested in adopting animals
– people looking for lost animals
– people leaving animals in the shelter</td>
</tr>
<tr>
<td>Key resources
– competent employees
– volunteers
– functional facility that meets legal requirements</td>
<td>Channels
– social media
– events promoting volunteering and adoption
– media (television, radio, press)</td>
</tr>
<tr>
<td colspan="3">Cost structure
– facility maintenance
– animal feed
– veterinary care
– salaries and external services
– administrative costs</td>
<td colspan="2">Revenue structure
– revenue obtained from contracts with communes
– revenue from adoption fees and for hotel services for animals
– permanent and occasional donations, including 1% income tax</td>
</tr>
</table>

* The commune appears in the model as a partner and client, e.g. a partner in organizing promotional events and a client ordering care services for homeless animals.

Source: own elaboration.

The value proposition is the answer to the question about the goals set by stakeholders for an animal shelter. The key value is to provide care for homeless animals in terms of adequate living conditions, from their proper protection to ensuring a dignified existence. This is the only value that has an internal dimension. The regulation of pet populations through neutering should be considered an important factor. It is important to shape such values as promoting a volunteer attitude through active participation in animal care, as well as increasing public awareness of animal needs.

The key activities are strategic and operational activities that allow for the efficient implementation of the goal, which is finding homes for the greatest possible number of animals housed in shelters. These activities should include the strategy of adopting animals, providing daily care, securing veterinary care and preventing the occurrence of infectious diseases dangerous to humans and animals. One of the basic responsibilities of a shelter is keeping a registry of animals. Undoubtedly, the efficiency of the shelter would increase if the recording was accompanied by marking animals with electronic chips. Such marking not only facilitates the work in the shelter, but also helps to identify stray animals, which allows to shorten the animal's stay in the shelter.

The direct clients of an animal shelter are municipalities that, having regard to the health and safety of the inhabitants, commission the shelters to catch, record and care for homeless animals. Hence, the local community is a group of clients that indirectly benefit from the services of the shelter. The shelter also has individual clients: those looking for their stray animals and those who want to adopt an animal.

The relationship with clients should be based on one of the shelter's main goals – care for homeless animals. This will help mobilize the local community to support animal care, to find owners of stray animals and to search for new homes for stray and abandoned animals. Relationships with new owners should also be maintained, including the post-adoption support. Such solution is a kind of networking activity: building a community of people supporting the shelter's activity and creating the basis for exchange of experiences between the owners of adopted animals. This will also add value by enabling the shelter to monitor the living conditions the animals are kept in. Alison Gilchrist believes that a network gives the opportunity to achieve common goals and tasks while having a semi-autonomous nature, and therefore does not engage the shelter itself [Gilchrist 2014: 88]. Cooperation with local community, especially if open social networking sites and events promoting volunteering and adoption serve as the channel, will be an excellent form of marketing. The media, including television, radio and press may also serve as a communication channel.

For the shelter to function more efficiently, support from key partners will be of high importance. One of key partners may be the commune (being also a client), which can organize and support promotional events. Other partners of shelters may be local companies, educational institutions, universities that will support collections of financial and material donations or encourage the members of their communities to engage in volunteering (understood as spending time on, e.g. walking a dog and teaching it basic commands, carrying out auxiliary works in the shelter).

The shelter's key resources necessary to generate value and reach customers will be competent, well-trained and compassionate employees, devoted volunteers, as well as the facility that not only meets the legal requirements for such buildings, but is also functional for employees and volunteers.

The main source of revenues of animal shelters are contracts concluded with communes. Additional revenues may be adoption fees from new owners and fees charged for hotel services for animals. A fair promotion of the shelter's activity will also make it possible to derive revenues from permanent and occasional donations (including 1% of income tax). The costs for which the shelter must be prepared are those associated with maintaining the facility, including charges for electricity, water, heating and other utilities, renovation costs, administrative costs, employee remuneration and fees for external services. Variable costs are those related to animal nutrition and veterinary care. Efficient shelter management involves cost optimization by, for example, limiting the number of animals held in the shelter.

6. Conclusion

The issue of animal shelter management is multi-dimensional – beginning from management in a narrow sense, referring to the management of human resources, through the selection of a legal form which will ensure implementation of the shelter's tasks, and ending with matters relating to sanitary and epidemiological safety.

Challenges posed to animal shelters compel them to take actions aimed at the effective use of both material and non-material resources. This goal can be achieved through the application of a business model, whose universal character will allow to ensure decent living conditions for animals. The presented proposal based on Business Model Canvas gives the possibility of modifying the way of operating with regard to the needs of a given commune, and it contains key components on the basis of which an animal shelter can be created or modified. Determining the assumptions for a business model of an animal shelter, the authors compiled applicable normative acts, taking into account the guidelines and restrictions contained therein, and analyzed source documents.

The assumptions for a business model adapted to the needs of an animal shelter, as proposed by the authors, constitute an original study. It is recommended that the proposal is evaluated in terms of its universality after its implementation.

Due to diversity of their legal forms and the environments in which animal shelters operate, the values that guide entities may have different weights. Hence, the shelter's efficiency may also be assessed differently in different shelters. Seeking to determine the assumptions for a universal business model for an animal shelter, the authors applied certain generalizations, which is why this paper is limited in several ways. Nevertheless, they hope that it will be an inspiration for further research in this field.

References

Act of 13 September 1996 on maintaining cleanliness and order in municipalities, Journal of Laws of 1996, No. 132, item 622.

Act of 21 August 1997 on animal protection, Journal of Laws of 2019, item 122.

Act of 11 March 2004 on the protection of animal health and eradication of infectious animal diseases, Journal of Laws of 2004, No. 69, item 625.

Babuśka E.W., 2016, Mierniki realizacji celów i zadań w jednostce budżetowej, *Finanse, Rynki Finansowe, Ubezpieczenia*, 84(6), 23-34.

CBOS, 2018, *Postawy wobec zwierząt*, Warszawa: Centrum Badania Opini Społecznej.

Council of Europe, https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/125 [accessed: 12.04.2019].

Downing S., 2005, The social construction of entrepreneurship: narrative and dramatic process in the coproduction of organizations and identities, *Entrepreneurship Theory and Practice*, 29(2), 185-204.

Falencikowski T., 2019, *Spójność modelu biznesu. Koncepcja i pomiar*, Warszawa: CeDeWu.

Firlej K., 2007, *Modele systemów zarządzania – model Levitta i Wattermana w ujęciu holistycznym*, Kraków: Wyd. Uniwersytetu Ekonomicznego.

Gassmann O., Schweitzer F., 2014, *Management of the Fuzzy Front End of Innovation*, Cham: Springer International Publishing.

Generalny Inspektorat Weterynaryjny (GIW), https://www.wetgiw.gov.pl/nadzor-weterynaryjny/schroniska-dla-bezdomnych-zwierzat [accessed: 16.04.2019].

Gilchrist A., 2014, *Dlaczego relacje są ważne? – networking w rozwoju społecznościowym*, Warszawa: Centrum Wspierania Aktywności Lokalnej CAL.

Juraszek-Kopacz B., Sienicka A., Zagrodzka T., 2008, *Ekonomizacja organizacji pozarządowych – wyzwania i szanse okiem praktyków*, Warszawa: Fundacja Inicjatyw Społeczno-Ekonomicznych.

Kafel T., 2014, *Metody profesjonalizacji organizacji pozarządowych*, Kraków: Wyd. Uniwersytetu Ekonomicznego.

Kaliski K., 2012, Schroniska dla bezdomnych zwierząt, vol. I: Wczoraj i dziś, *Wiadomości Zootechniczne*, 2, 45-56.

Kinitz N., 2015, *Nowoczesne schroniska dla zwierząt*, https://portalkomunalny.pl/gminy-stawiaja--na-innowacje-314022 [accessed: 12.04.2019].

Konecki, 2005, *Ludzie i ich zwierzęta. Interakcjonistyczno-symboliczna analiza społecznego świata właścicieli zwierząt domowych*, Warszawa: Scholar.

NIK, https://www.nik.gov.pl/aktualnosci/nik-pomaga-rozwiazac-problem-bezdomnych-zwierzat.html [accessed: 12.04.2019].

NIK, https://www.nik.gov.pl/aktualnosci/nik-o-zapobieganiu-bezdomnosci-zwierzat.html [accessed: 12.04.2019].

Nogalski B., 2009, Modele biznesu jako narzędzia reorientacji strategicznej przedsiębiorstw, *Master of Business Administration*, 17(2), 3-14.

Nogalski B., 2017, Wyzwania i wnioski na przyszłość dla rozwoju nauk o zarządzaniu w Polsce, *Przegląd Organizacji*, 10, 4-13.
Obłój K., 2002, *Tworzywo skutecznych strategii*, Warszawa: PWE.
Osterwalder A., 2012, *Tools for Business Model Generation*, https://ecorner.stanford.edu/video/tools-for-business-model-generation-entire-talk/ [accessed: 15.04.2019].
Osterwalder A., Y. Pigneur, 2014, *Tworzenie modeli biznesowych*, Gliwice: Helion.
OTOZ, *Projektowanie i zarządzanie schroniskiem dla bezdomnych zwierząt*, http://www.otoz.pl/pliki/dokumenty/projektowanie.pdf [accessed: 12.04. 2019].
Reese L.A., 2019, *Strategies for successful animal shelters*, East Lansing: Academic Press of Michigan State University.
Regulation of the Ministry of Internal Affairs and Administration of 26 August 1998 regarding the rules and conditions for catching stray animals, Journal of Laws of 1998, No. 116, item 753.
Regulation of the Ministry of Agriculture and Rural Development of 23 June 2004 regarding the detailed veterinary requirements for running animal shelters, Journal of Laws of 2004 No. 158, item 167.

Model biznesu w zarządzaniu schroniskiem dla bezdomnych zwierząt

Streszczenie. *Schroniska dla bezdomnych zwierząt na przestrzeni XX i początku XXI wieku ewoluowały w zakresie swej działalności i sposobów organizacji. Oczekiwania społeczne dotyczące humanitarnego traktowania zwierząt, a także normy prawa krajowego i międzynarodowego stawiają przed nimi nowe wyzwania. Sprostanie wyznaczonym standardom wymaga sprawnego zarządzania. W artykule przedstawiono aspekty prawne działalności schronisk oraz dane dotyczące funkcjonowania schronisk dla bezdomnych zwierząt w Polsce. Ponadto zaprezentowano model biznesu oraz możliwości jego adaptacji. Cel artykułu zrealizowano poprzez określenie założeń do modelu biznesu schroniska dla bezdomnych zwierząt.*

Słowa kluczowe: *schronisko dla zwierząt, NGO, model biznesu, Business Model Canvas*

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Mateusz Ziemba

WSB University in Poznan
Faculty in Chorzow
orcid.org/0000-0003-1040-4466
e-mail: mziemba@poczta.chorzow.wsb.pl
phone: +48 604 260 123

Krystyna Górna-Łukasik

The Jerzy Kukuczka Academy
of Physical Education in Katowice
Department of Physical Education
and Adapted Physical Activity
orcid.org/0000-0002-8410-328X
e-mail: gorna1@op.pl
phone: +48 602 112 165

Business Model for Adventure Tourism and the Barriers to Physical Activity

Abstract. *This is a research article. The theoretical introduction addresses the issues of adventure tourism and barriers to physical activity. The text was localized in the context of business models. The research covered 589 students of Silesian universities (337 women, 252 men). We adopted diagnostic survey as our research method and a questionnaire as the tool. We applied basic methods of statistical description and nonparametric tests: Mann-Whitney U test, Chi-square test and effect-size indices: Glass's biserial correlation coefficient (r_g) and Cramer's phi (V) to our statistical analyses. The main objective of the study was to identify barriers to physical activity of students, while taking the gender of our subjects into account. Analysis of the results allows us to create recommendations for business models in the context of barriers to taking physical activity and implement them in practice.*

Keywords: *physical activity, business model, physical activity barriers, physical recreation, adventure tourism*

1. Physical activity and adventure tourism

In the light of previous studies, the physical activity of various social groups does not meet the postulated health standards. This applies to both the volume and intensity of physical effort undertaken by both adults [Kubińska, Pańczuk 2018; Gorbaniuk, Chuchura 2018; Sińska et al. 2018] and children and youth [Górna et al. 2010; Wojtyła, Byliński, Bojar 2011; Vasickova et al. 2012; Humeniuk et al. 2018]. The available research results indicate the existence of relationship between physical activity and the following variables: age, gender, parents' level of education, socio-economic status, self-efficacy, perception of benefits, perceived barriers, perceived behavioural control, parental support, parent modelling, peer support, physical activity, depressive symptoms, smoking, alcohol consumption and environmental determinants. However, they are not sufficiently documented to form generalizations for wider public [Hyoungsook, Kim 2008].

Active tourism occupies a special place among the dynamically developing forms of tourism participation. We can associate it directly with performing physical activity outside of your place of residence. This activity does not always require professional equipment, comprehensive preparation and specialist knowledge, but there are also forms where knowledge, competence and equipment are prerequisite [Cymańska-Grabowska, Steblik-Wlaźlak 2011]. The authors do not agree as to the definition of the concept of adventure tourism [Bończak 2013]. Active tourism forms include: adventure, discovery and extreme tourism [Cymańska-Grabowska, Steblik-Wlaźlak 2011]. Among the "tourism of physical activities" we also find sports tourism [Hincha, Highama 2001; Gammon, Robinson 2003; Mokrasa-Grabowska 2015]. There is an increasingly frequent use of the concept of sports/adventure tourism interchangeably with active tourism [Mokrasa-Grabowska 2015]. The most common criterion differentiating active and adventure tourism is the level of preparation and skills of the participant required. An adventure tourist should be psychophysically prepared, hardened to the hardships of participation [Bończak 2013]. The importance of being able to behave in the natural environment is also emphasized [Merski 2009; Cymańska-Grabowska, Steblik-Wlaźlak 2011], while at the same time adventure tourism can not be excluded in urban areas too [Merski 2009]. There are also forms of participation requiring qualifications confirmed by associations/unions and the requirement to effectively use specialized equipment [Cymańska-Grabowska, Steblik-Wlaźlak 2011].

Tourism forms involving the participant to a greater extent give something more than just rest. They allow you to experience phenomena directly. What is also of added value is the struggle with oneself or the natural environment; Crossing borders – but without "sporting" goals, and definitely more so for the pleasure of participating alone. Adventure tourism, due to its specificity, also provides, apart from impressions, new skills – often at an objectively high technical level. Mastering subsequent "levels of initiation" may form a condition for satisfactory participation in the activity for the adventure tourist.

2. Barriers to physical activity

Research of the condition of physical activity is conducted in multiple disciplines. Particular importance is attributed to three factors: forms, motives and barriers. They are all associated with the process of making a decision on multi-faceted participation in physical activities. Our behaviours are driven by expectations regarding: the situation, results of action and our own effectiveness [Bandura 1977]. The higher the sense of self-efficacy, the greater the motivation to act and better achievements, the more ambitious the goals of action [Locke 1990; Schwarzer 1996].

The issue of forms of physical activity was frequently raised in theory as well as in research. Attention was drawn to differences between men and women of different ages [Marcysiak et al. 2010; Pasek, Olszewski 2017; Pańczyk 2018; Gorbaniuk, Chuchura 2018].

Motivation is the activating focus of the current life activity on the positively assessed target condition [Rheinberg 2006]. Motives for undertaking physical activity were analyzed both in terms of review and research [Winiarski 1995; Górna 2001; Sas-Nowosielski 2003].

The complexity of determinants of human behaviour, as well as a diverse research approaches to the issue, make it difficult to clearly determine the reasons for the lack of physical activity in significant percentage of society. One of the research approaches is to identify the reasons for not taking physical activity. Currently, this issue is most often referred to as the concept of physical activity barriers. Compared to motives and forms, barriers are, so far, the least analyzed in the subject literature. National reports [Jodkowska, Oblacińska 2015; Baj-Korpak et al. 2016] and above all foreign literature [Booth et al. 1997; Allison et al. 1999; De Sousa et al. 2012; Ibrahim et al. 2013; Aceijas et al. 2016] emphasize the importance of physical activity barriers as a foundation for taking action not only for the activity itself but also for a healthy lifestyle. This can be directly related to participation in adventure tourism. The review of subject literature demonstrates, that with age, the most frequently perceived barriers are those health-related. What was listed by a group of 139 residents of stationary care – most often at the age of 70 and more – were: poor health, lack of knowledge about the benefits of regular physical activity, lack of social contact, lack of encouragement from healthcare professionals, and inaccessibility of exercise equipment and trainers [Aro et al. 2018]. Similar conclusions stem from studies of people over 60 years of age by subsequent authors [Booth et al. 1997]. Teachers' research also demonstrated that age alters the most significant barriers – after 45 years of age health appears as one of them [Janasa, Kovar 2010]. A particularly common reason for not taking up physical activity is the lack of time [Allison et al. 1999; Janasa, Kovar 2010; De Sousa et al. 2012; Ibrahim et al. 2013; Aceijas et al. 2016]. There are also reports emphasizing the lack of strong will or low motivation to undertake physical activity [Booth et al. 1997; Daskapan, Emine, Levent 2006; Janasa, Kovar 2010; Ibrahim et al. 2013]. Attention is also drawn to the lack of resources and opportunities to participate in physical activity [De Sousa, Fonseca, Barbosa 2012; Ibrahim et al. 2013; Aceijas et al. 2016]. Research also found that less active people underestimated the health benefits of exercise [Leavy 2010]. The less active people also see more barriers to physical activity [Serrano 2017]. Adventure tourism is directly dependent on the "attitude" of the potential participant.

3. Business model and barriers to physical activity

Multi-path analysis was considered justified in the case of present work. This allows for the implementation of conclusions in practice, which in the authors' opinion forms an additional value of the study.

A business model is a combination of a strategic concept of the company and the technology for its practical implementation understood as building a value chain allowing for efficient operation and renewal of resources and skills [Obłój 2002]. The business model answers the questions of how, and for whom the organization creates value, what is the source of the organization's competences, what position does the organization occupy with respect to its competitors in the market, how does it generate profits, and what are the organization's plans regarding: the horizon of its activities, and the scope and size of organization [Drzewiecki 2013]. What counts in the business model is that the business entity makes profit. Comprehensively, it is a set of activities, methods and times of their implementation, using resources, in order to offer benefits to customers [Michalak 2012]. Attention should also be paid to flexibility in the activities of economic organizations. The dynamics of phenomena of both the external and internal environment affect the modification of the business model [Jabłoński, Jabłoński 2013; Grzywa 2015]. Values also form a significant element in creating business models [Jabłoński, Jabłoński 2013; Brzóska 2015]. Active tourism – and therefore adventure tourism – is frequently used in promotional materials of Polish regions, determining its importance for promotional activities of tourism in general [Cholewa, Hadzik, Tomik 2012]. Knowledge of barriers to participation in physical activity also allows us to effectively create the idea of place and service [Kaczmarek, Stasiak, Włodarczyk 2002; Fijałkowski 2003]. In such a characteristic field of tourism, as adventure tourism, the idea takes on special significance. The scope of adventure tourism gives many opportunities for marketing activities – it allows us to focus not only on the product, but especially on values (health, sport, victory, communing with nature, joy, active leisure or contacts with people, family). Attention is paid, ever more often, to the problems of mature tourist resorts [Twardowski 2016]. The effective implementation of adventure tourism in tourist resorts in the stagnation phase may protect them from downfall. Such activities will allow them to benefit from potentially unattractive assets of the region. It is enough to adapt the space to the appropriate form of physical activity to definitely increase its tourist and recreational attractiveness. Postindustrial areas are a simple example here. It is possible to adopt unused facilities for purposes of climbing or the modern forms of urban gymnastics – parkour. Mining spoil tips adopted as an area for "mountain" cycling, or former mine tunnels for diving. In addition, the low level of physical activity of the general public proves great potential for activities directed at "movement" and gives additional importance to adventure tourism. What is formed here is a niche market. The possibilities of its filling concern practically every recipient, regardless of their level of mobility, preferences or age. Adventure tourism can also be treated as a way of raising the level of general physical activity, which is of great importance in the context of the reviewed literature.

4. Material and method

The basis for determining the barriers to physical activity, taking into account the gender of the respondents, are the results regarding the perception of physical activity barriers by students. The research was conducted in 2017 among first and second year students of the Academy of Physical Education in Katowice and the WSB University in Poznan, Faculty in Chorzow. A total of 589 people were surveyed, including 337 female and 252 male students. The persons conducting the survey were academic teachers familiarized with its aims and methodology[1]. Participation of students in the study was voluntary and anonymous. The research was conducted in an auditorial manner. Before starting the research, students were thoroughly acquainted with the main purpose of the research and the expected use of its results. The "RM 5-FM: Barriers to Physical Activity Quiz" questionnaire was translated into Polish, in accordance with scientific principles.[2] The questionnaire consists of 21 statements, three statements each verifying the following as barriers: lack of time, social impact, lack of energy, lack of strong will, fear of injury, lack of skills and lack of resources. Each statement was rated by respondents on a scale of 0 (very unlikely barrier) to 3 points (very likely). The individual index of each barrier is the sum of the score for three statements, a maximum of 9 points, and the individual index is the sum of all points. In accordance with the instructions of the authors of the questionnaire, it was assumed that the respective barrier is present, when the sum of scores for the three evaluated theorems (components) equalled at least 5 points.

[1] We would like to thank the following academic teachers of the Academy of Physical Education in Katowice for their participation in the research: dr hab. Dorota Groffik, dr Wojciech Chudy, dr Monika Marszołek, mgr Arkadiusz Mynarski, dr Agnieszka Nawrocka, dr inż. Robert Roczniok.

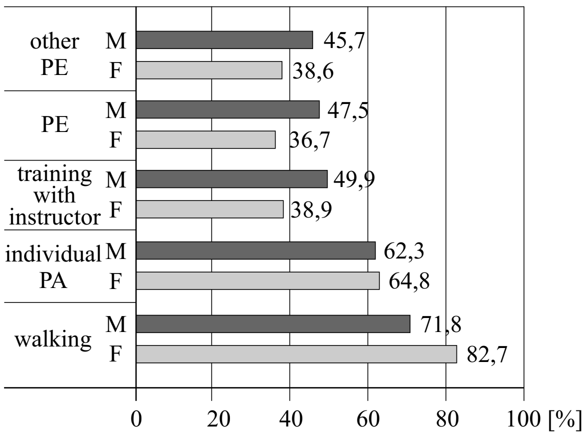
[2] The translation was made in cooperation with Pawlik as part of master's thesis.

Information on the forms of physical activity undertaken by respondents was obtained through a closed survey question with a gap. We applied basic methods of statistical description and nonparametric tests: Mann-Whitney U test, Chi-square test and effect-size indices: Glass's biserial correlation coefficient (r_g) and Cramer's phi (V) to our statistical analyses.

5. Results

The survey question diagnosing the forms of physical activity undertaken by students allowed them to indicate more than one answer, therefore the data does not add up to 100% (Chart 1). The dominant forms of physical activity of students are walking (walks) and individual physical activity. Walking (walks) is most often mentioned by the respondents. Women undertake this form of physical activity more often (83%) than men (72%). Almost 2/3 of respondents undertake individual physical activity, which should be welcomed. Almost half of the respondents – 11% more men than women, participate in recreational and sports activities under the guidance of an instructor, in physical education classes, but also in other various forms, including sports training as an instructor or participant.

Chart 1. Forms of physical activity undertaken by (F) and (M) students



Source: own elaboration.

The individual barriers to physical activity, as perceived by the respondents, are characterized by assessments covering almost the full spectrum of scores – from 0 to 9 points (Table 1). The highest average values for both female and male students refer to the lack of time, lack of energy and lack of strong will (3.70 to 4.04 points; 2.75 to 3.16 points, respectively). The lowest rated barriers are lack of skills and fear of injury ($M < 1.5$). Women perceive, statistically significantly, more barriers to their physical activity ($p < 0.05$). The differences between male and female students, as assessed by the Mann-Whitney U test are statistically significant, except for the perception of lack of funds as a barrier ($p > 0.05$). According to the effect-size ratio (r_g), the relationship between the perception of barriers and gender is not strong, and the barrier: lack of strong will demonstrates the strongest value thereof.

Table 1. Barriers to physical activity by total points

Barrier	Gender	*n*	min	max	*M*	*Mo*	*Me*	Average rank	U	*p* (r_g)
Lack of time	F	337	0	9	3.77	3	4	286.43	30442.5	0.0032 (0.13)
	M	252	0	9	3.16	3	3	247.30		
Social impact	F	337	0	9	2.56	2	2	294.30	28216.0	0.000 (0.19)
	M	252	0	8	1.85	0	2	238.47		
Lack of energy	F	337	0	9	3.70	4	4	294.48	28165.5	0.000 (0.19)
	M	252	0	9	2.84	2	2	238.27		
Lack of strong will	F	337	0	9	4.04	3	4	302.31	25949.0	0.000 (0.25)
	M	252	0	9	2.75	0	2	229.47		
Fear of injury	F	337	0	8	1.27	0	1	256.08	32286.0	0.048 (0.09)
	M	252	0	9	1.49	0	1	281.38		
Lack of skills	F	337	0	9	1.47	0	1	285.46	30716.5	0.003 (0.13)
	M	252	0	7	1.00	0	0	248.39		
Lack of resources	F	337	0	9	2.24	0	2	268.83	35432.0	0.894 (0.01)
	M	252	0	9	2.27	0	1	267.07		
Total score	F	337	0	49	19.04	15[1]	19	293.12	28548.5	0.000 (0.20)
	M	252	0	40	15.35	16	16	239.79		

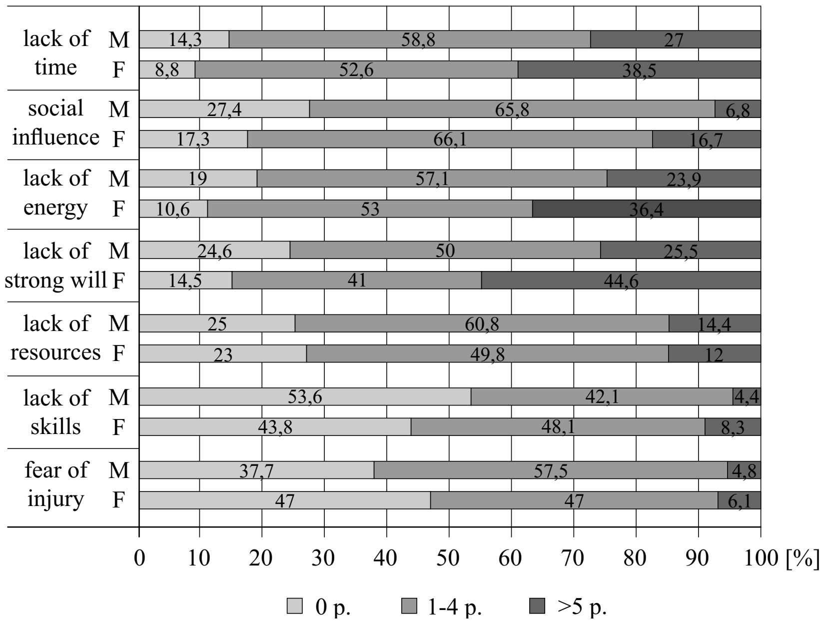
F – female students; M – male students; [1] – smallest modal; Mann-Whitney U test; r_g – Glass's biserial correlation coefficient – confidence interval [–1, 1].

Source: our own elaboration.

To assess what percentage of respondents perceive the assessed barriers as significant obstacles to undertaking physical activity, three categories of people were distinguished, based on the value of the individual indicator: a given barrier does not exist (0 points), occurs to a limited extent only (1-4 points), it is a significant obstacle (5 points and above) (Chart 2).

In relation to most barriers, the most numerous group are female (41-66%) and male (42-66%) students, who perceive numerous difficulties in undertaking physical activity, but their intensity is small. There is a considerable diversity of the examined barriers in terms of the number of people indicating that these do not constitute an obstacle at all – in case of female students ranging from 9% to 47%, and in case of male students from 14% to 54%. Similarly, there is a large diversity of barriers in terms of the number of people assessing them as significant obstacles to their physical activity (women: from 6% to 45%; men: from 4% to 27%). For the most numerous group of women and men surveyed the lack of strong will, lack of energy and lack of time were indicated as significant barriers. The least people indicate fear of injury (F – 6%, M – 5%) and lack of skills (F – 8%, M – 4%) as significant barriers.

Chart 2. Distribution of respondents according to their assessment of respective barriers to PA



F – female students; M – male students.

Source: own elaboration.

The subsequent analysis was aimed at assessing, whether the three statements (situations) indicating the existence of a respective barrier are homogeneous in terms of student assessment, or whether there are differences between them (Chart 3). The assessment of individual statements was ordered in two categories, based on the structure of the questionnaire itself:

I. total – 0 points (very unlikely) and 1 point (rather unlikely),

II. total – 2 points (quite likely) and 3 points (very likely).

Family responsibilities, free time and time that should be allocated to physical activity are three constituents of the lack of time. The time to meet their obligation was most frequently (with over 40%) assessed as significant barrier by students. Not much fewer people indicated the lack of free time, with 10% more women than men. This difference was confirmed as significant by the Chi-squared test ($p = 0.01$). Over 1/5 of respondents, regardless of gender, said that undertaking exercises would come at the cost of failure to fulfill their other obligations.

Social impact as a barrier to physical activity was verified by statements regarding the attitude of friends and family to physical activity, their own appearance and the type of social gatherings. For the majority of respondents (some 90%) the interest in physical activity among their friends and relatives did not form a barrier for their physical activity . Concerns about appearance are more important for women (1/5 of respondents) than for men (10%) – and this difference is statistically significant $p < 0.01$. In this group of claims, the biggest obstacle – for more than 1/3 of respondents regardless of their gender – was the way they spent free time with friends and family, because it was not linked with physical activity.

Among the components of the "lack of energy" barrier, excessive fatigue after work and the need to rest at the weekend are indicated, as barriers to their physical activity, by a significant proportion of respondents – some 1/3 of the male students, and even more – some 50% – of female students. Differences in the context of gender are statistically significant ($p = 2.00\text{E-}08$; $p = 0.004$, respectively).

Restriction of sleep time as a consequence of physical activity is an important reason not to exercise for about 1/5 of respondents, regardless of their gender.

Among the statements indicating the existence of the "lack of strong will" barrier, these were, in descending order of their number: fear of regularity, lack of perseverance (excuses), and the issue of mobilization to start exercises. In all cases, they are indicated as significant reasons for the lack of physical activity by a significant percentage of respondents, more female students (from 41% to 50%) than students (about 1/4-1/3). Chi-squared test differences in distribution of scores between male and female students are statistically significant ($p < 0.000$) for each of these theorems.

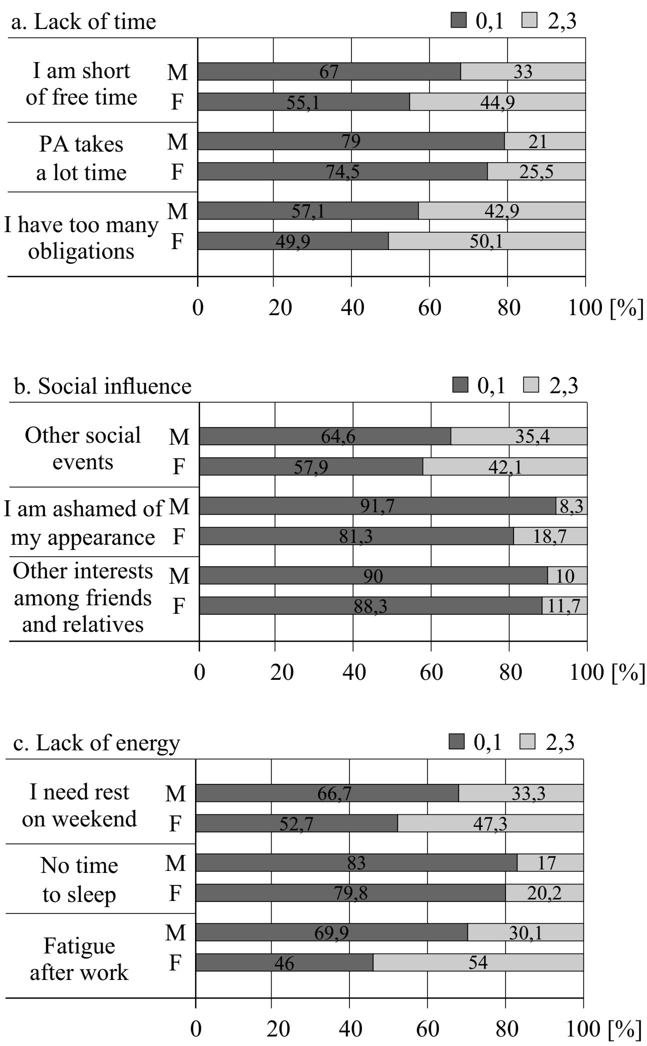
The fear of adverse health effects of physical activity in terms of the risk and likelihood of injury and the experiences of others is not a significant obstacle for some 90% of the respondents. There are also no differences in the score distributions (Chi-square) between female and male students ($p > 0.05$) in all theorems.

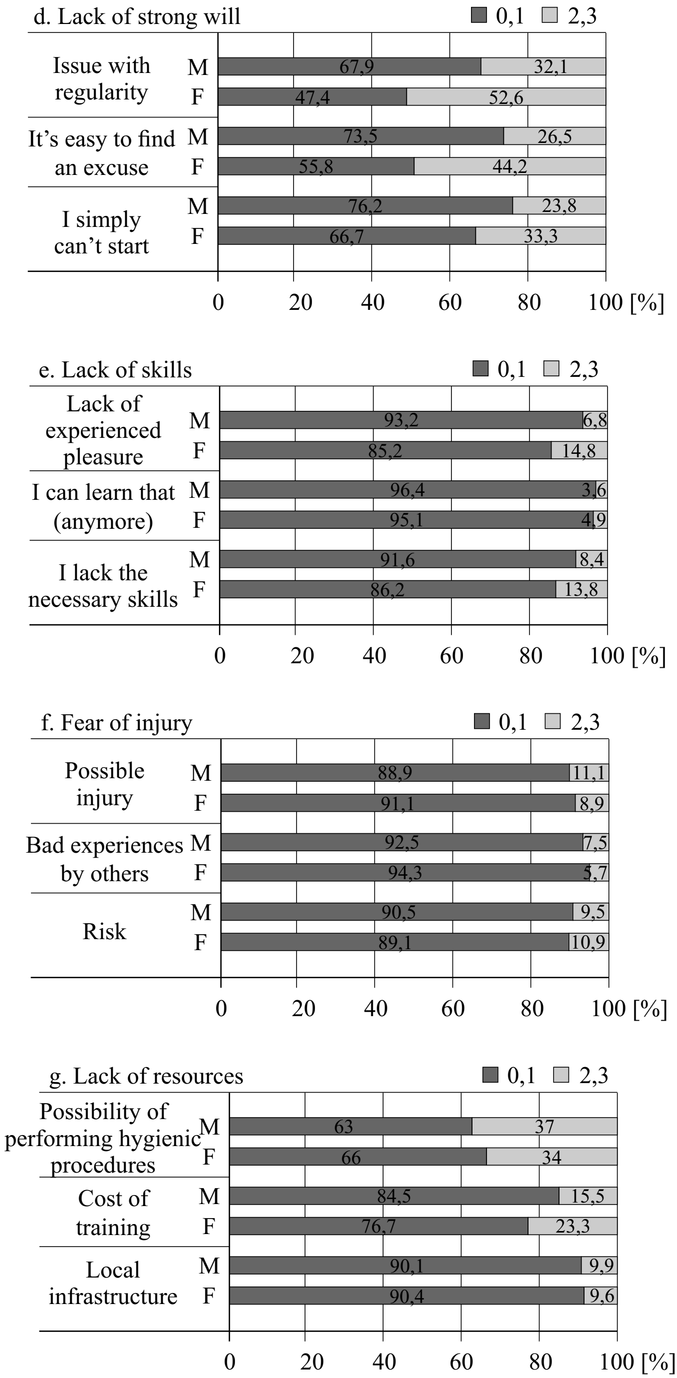
Lack of skills, opportunities to learn new sports or lack of pleasure from physical exercise are an obstacle for less than 9% of students. In students, skills deficiencies are slightly more frequently indicated as barriers (12%), especially in case those that would be pleasing to practice (approx. 14%). Comparison of assessments by genders demonstrates that lack of pleasure from exercise is more often indicated as a barrier by female students. The difference, as assessed by the Chi-square test, is statistically significant ($p < 0.01$).

Of the obstacles that make up the barrier, the lack of resources is the least often experienced, as the lack of base for exercise (approx. 10%), and the cost of training is indicated by almost twice the number of respondent. The lack of the possibility of using hygienic procedures after physical activities is most often indicated, by some 1/3 of respondents of both genders, as a barrier. Compared to men, the cost of training is a greater obstacle for women ($p = 0.026$).

The Cramer's V coefficients calculated for statistically significant ($p < 0.05$) differences indicate that even with high statistical significance of these differences the relationship between the perception of barriers to physical activity and gender is weak.

Chart 3. Components of the respective barriers to physical activity





Source: own elaboration.

6. Discussion

There is a wide range of possibilities that the tourist forms of physical activity offer, catering for the needs of very differentiated groups of service recipients. Our own research revealed "walking" as the main form of physical activity of respondents. It fits perfectly into many forms of adventure tourism – by adding additional attractiveness to "walking," e.g. Nordic walking in various areas and conditions, we can effectively sell it as a service. What may prove to be of particular importance for the offer of adventure tourism is the fact that majority of respondents prefers individual training. Different results were discovered during a study of a group of 300 Canadians over 18 years of age. Nearly 80% preferred to satisfy their physical activity needs in their household or through lifestyle rather than by organizing or planning exercises. What's more, men and women believe that engaging in physical activity in this way is a more natural and enjoyable part of the day than exercising. This approach fits in with the modern trend to promote physical activity through daily activities and lifestyle modifications, not just intentional physical activities [Cavallini et al. 2017].

The main barrier to undertaking physical activity regardless of the gender of respondents was the lack of time. Similar results were reported in many scientific works. Studies of over 700 men at the age of over 20 years from Malay and China have shown that the amount of time forms a frequent barrier to undertaking physical activity [Ibrahim et al. 2013]. We also find a similar research report – concerning 1084 students from Brazil [De Sousa, Fonseca, Barbosa 2012]. It also follows, from the study of 1041 high school students in the Toronto District, that the trending barrier to physical activity is lack of time after completing duties [Allison et al. 1999]. Similar conclusions can be drawn from the research of 468 students from United Kingdom [Aceijas et al. 2016]. A study of 2,298 adult Australians also revealed lack of time as a major barrier to physical activity [Booth et al. 1997]. When the age criterion is considered, lack of time was used to justify the lack of physical activity of teachers aged 35-45 [Janasa, Kovar 2010]. This is not confirmed by the results of youth research – the lack of time was only significant for boys [Jodkowska, Oblacińska 2015]. The lack of time for exercises is also noted by office workers (n = 937) [Kowalczyk, Kozłowska 2015]. On this basis, it can be concluded that the lack of time is one of the main barriers to undertaking physical activity throughout the world. More research should be undertaken, providing detailed answers to the questions arising here. Are we really lacking time, or is it just a matter of inappropriate organization? The solution to this problem may be applications available via a smartphone. One of their functions is monitoring physical activity – it can be motivating – as well as showing actual daily physical activity, not just the effects of intentional recreational or tourist activities. Also competitions in the use of applications – by correspondence – can be motivating for activities, which is especially important in the context of individual training as one of the most frequently mentioned forms of physical activity. The organization of time is also important. Information on the most easily accessible places for physical activity speeds up searching and facilitates transport.

In our own research, one of the most important reasons for not taking physical activity was a lack of energy. Nevertheless the subject literature does not perceive this reason as significant. Studies of 937 office workers of the Lubelskie Voivodeship revealed fatigue as one of the three most important barriers to undertaking physical activity [Kowalczyk, Kozłowska 2015].

The responding students drew attention to the lack of strong will as a reason for not being active. Self-discipline appears, also in the research of further authors, as a barrier to undertaking physical activity [Booth et al. 1997; Ibrahim et al. 2013]. The BPAQ questionnaire (used for our own research) was also used in the study of a group of 303 students in Turkey. The results deviate from the research of the authors of the above study. The main barrier to physical activity was the lack of strong will [Daskapan, Emine, Levent 2006]. Regardless of age, laziness was one of the main barriers among the surveyed teachers ($n = 750$) [Janasa, Kovar 2010]. Also the office workers indicated similarly [Kowalczyk, Kozłowska 2015]. Therefore, regular physical activity should be given importance in all promotional campaigns. Focusing on value and, to a lesser extent, the proposed service could be an effective way of working.

Our own research demonstrated statistically significant differences between male and female students in case of almost all barriers to physical activity. Only the barrier related to lack of funds proved to be statistically insignificant. It was also not mentioned by the respondents as significant. This barrier appears in literature as a significant obstacle to undertaking activity in Malay and China [Ibrahim et al. 2013], Brazil [De Sousa, Fonseca, Barbosa 2012], and the United Kingdom [Aceijas et al. 2016].

Adventure tourism requires relatively high skills. What can discourage us to undertake the activity is also the awareness of the risk associated with the level of its difficulty. Own research proved that the importance of lack of skills and fear of injury as a barrier to physical activity is very limited. There are few reports from the literature that would raise these two factors as significantly discouraging for physical activity. Studies have revealed this barrier among girls [Jodkowska, Oblacińska 2015].

It should also be noted that women, in general, perceive more barriers than men. In our own research, for most of the barriers investigated, we found statistically significant differences in terms of gender. Other studies show similar results [Jodkowska, Oblacińska 2015]. Different results are found in the research of 392 university students of physical education course. Gender did not differentiate between motives or barriers to undertaking physical activity [Baj-Korpak et al. 2016]. Furthermore, the studies of 100 Vancouver students did not reveal statistically significant differences between women and men [Chu et al. 2015].

The selection of participants for the study was purposeful, therefore it cannot be generalized to the entire population. The present analysis allows to take into account another factor, when creating business models for adventure tourism. As shown by studies carried out by the authors as well as literature reports: barriers to physical activity significantly affect the undertaking of activities in the field of physical culture. What is thus the most significant for an effective business model of an adventure tourism enterprise will be to focus on counteracting three phenomena: lack of time, energy and strong will.

References

Aceijas, C., Bello-Corassa, R., WaldhausIN, S., Lambert, N., Cassar, S., 2016, Barriers and determinants of physical activity among UK university students, *European Journal of Public Health*, 26.

Allison K.R., Dwyer Ph.D., Makin S., Ed M., 1999, Perceived Barriers to Physical Activity among High School Students, *Preventive Medicine*, 28, 608-615.

Aro A.A., Agbo S., Omole O.S., 2018, Factors influencing regular physical exercise among the elderly in residential care facilities in a South African health district, *African Journal of Primary Health Care & Family Medicine*, 10(1), 1493.

Baj-Korpak J., Korpak F., Szepeluk A., Sudoł G., 2016, Czynniki warunkujące motywy i bariery aktywności fizycznej studentów kierunku wychowanie fizyczne, *Rozprawy Społeczne*, 10(4), 60-72.

Bandura A., 1977, Self-efficacy. Toward a Unifying Theory of Behavioral Change, *Psychology Review*, 84, 191-215.

Bończak B., 2013, Aktywne formy turystyki – problemy terminologiczne, in: R. Wiluś, J. Wojciechowska (eds.), *Nowe-stare formy turystyki w przestrzeni. Warsztaty z geografii turyzmu*, t. 3, Łódź: Wyd. UŁ.

Booth ML, Bauman A, Owen N, Gore CJ., 1997, Physical activity preferences, preferred sources of assistance, and perceived barriers to increased activity among physically inactive Australians, *American Journal of Preventive Medicine*, 26(1), 131-137.

Brzóska J., Jelonek D., 2015, Koncepcja pomiaru wartości tworzonej przez aplikacje modeli biznesu : podstawy teoretyczne i studium przypadku, *Przegląd Organizacji*, 9, 48-55.

Cavallini M.F., Kolen A.M., Sui X., Spriet L.L., King B., Kraft E., Heischmidt K., Blair S.N., 2017, Introducing My House Activity and My Work Activity: A Paradigm Shift towards Lifestyle Physical Activity Supported by Evidence from a Focus Group Study, *Journal of Physical Activity Research*, 2(1), 61-67.

Cholewa J., Hadzik A., Tomik R., 2012, Turystyka aktywna w materiałach promocyjnych województw w Polsce, in: *Wyzwania współczesnej polityki turystycznej. Problemy współczesnej polityki turystycznej*, Wrocław: Wyd. UE we Wrocławiu.

Chu E., Liang J., Lu T., An X., 2015, Perceived barriers to becoming physically active for students at UBC, *UBC Undergraduate Research*, 1-8.

Cymańska-Grabowska B., Steblik-Wlaźlak B., 2011, *Podstawy turystyki*, Warszawa: WN PWN.

Daskapan A., Emine H.T., Levent E., 2006, Perceived Barriers to Physical Activity in University Students, *Journal of Sports Science and Medicine*, 5(4), 615-620.

De Sousa T.F., Fonseca S.A., Barbosa A.R., 2012, Perceived barriers by university students in relation the leisure-time physical activity, *Brasilian Journal of Kinanthropmetry and Human Performance*, 15(2), 164-173.

Drzewiecki J., 2013, Model biznesu jako narzędzie zarządzania strategicznego: zastosowanie, dylematy i wyzwania, *Przedsiębiorczość i Zarządzanie*, 14(13), 65-75.

Fijałkowski D., 2003, Produkt turystyczny w ujęciu marketingowym a turystyka, *Słupskie Prace Geograficzne*, 1, 81-90.

Gammon S., Robinson T., 2003, Sport and tourism: a conceptual framework, *Journal of Sport Tourism*, 8(1), 21-26.

Gorbaniuk J., Chuchra M., 2018, Aktywność fizyczna kobiet i mężczyzn w czasie wolnym od pracy, *Roczniki Teologiczne*, 10, 161-175.

Górna K., 2001, *Przygotowanie młodzieży do uczestnictwa w kulturze fizycznej*, Katowice: AWF.

Kowalczyk, A., Kozłowska, E., 2015, Motywy i ograniczenia aktywności fizycznej w grupie zawodowej pracowników biurowych, *Journal of Education, Health and Sport*, 5(9), 413-438.

Górna K., Groffik D., Fromel K., Skalik K., Wąsowicz W., 2010, Aktywny i zdrowy styl życia, *Wychowanie Fizyczne i Zdrowotne*, 8, 11-15.

Grzywa E., 2015, Modele biznesu w naukach o zarządzaniu – główne nurty badawcze, *Przegląd Organizacji*, 3, 20-27.

Hinch T.D., Higham J.E.S., 2001, Sport tourism: a framework for research, *International Journal of Tourism Research*, 3(1), 45-58.

Humeniuk E., Dąbska O., Pawlikowska-Łagód K., Rumińska M., 2018, Ocena wybranych zachowań zdrowotnych młodzieży z terenu Polski środkowo-wschodniej, *Rozprawy Społeczne*, 12(2), 73-81.

Hyoungsook P., Kim N., 2008, Predicting Factors of Physical Activity in Adolescents: A Systematic Review, *Asian Nursing Research*, 2, 113-121.

Ibrahim S., Karim N.A., Oon N.L., Ngah W.Z.W., 2013, Perceived physical activity barriers related to body weight status and sociodemographic factors among Malaysia men in Kang Valley, *BMC Public Health*, 13, 275.

Jabłoński A., Jabłoński M., 2013, Modele biznesu w cyklu życia przedsiębiorstwa – wyzwania strategiczne, *Przegląd Organizacji*, 9, 17-22.

Jabłoński M., Jabłoński A., 2013, Cykl życia wartości przedsiębiorstw wobec kondycji modelu biznesu, *Kwartalnik Nauk o Przedsiębiorstwie*, 4, 57-63.

Janasa P., Kovar K., 2010, Vybrane determinanty zivotniho stylu ucitelu zakladnich skol, *Telesna Kultura*, 33, 57-68.

Jodkowska M., Oblacińska M., 2015, Perceived barriers to physical activity among Polish adolescents, *Przegląd Epidemiologiczny*, 69(1), 73-78.

Kaczmarek J., Stasiak A., Włodarczyk B., 2002, Produkt turystyczny, *Turystyka i Hotelarstwo*, 1, 33-54.

Kubińska Z., Pańczuk A., 2018, Potrzeby zdrowotne realizowane przez aktywność fizyczną osób starszych, *Rozprawy Społeczne*, 12, 73-79.

Leavy B., Aberg A.C., 2010, 'Not ready to throw in the towel': Perceptions of physical activity held by older adults in Stockholm and Dublin, *Journal of Aging and Physical Activity*, 18(2), 219-236.

Locke E.A., Latham G.P., 1990, *A theory of goal setting and task performance*, New York: Prentice Hall.

Marcysiak M., Zagroba M., Ostrowska B., Wiśniewska E., Marcysiak M., Skotnicka-Klonowicz G., 2010, Aktywność fizyczna a zachowania żywieniowe dzieci i młodzieży powiatu ciechanowskiego, *Problemy Pielęgniarstwa*, 18(2), 176-183.

Merski J., Warecka J., 2009, *Turystyka kwalifikowana, turystyka aktywna*, Warszawa: Almamer Wyższa Szkoła Ekonomiczna.

Michalak J., 2012, Model biznesowy i jego wpływ na odwzorowanie sytuacji finansowej jednostki w systemie rachunkowości, *Zeszyty Teoretyczne Rachunkowości*, 66(122), 133-142.
Mokras-Grabowska J., 2015, Turystyka aktywna – zagadnienia terminologiczne i klasyfikacje, *Wczoraj, dziś i jutro turystyki aktywnej i specjalistycznej*, 10, 11-20.
Obłój K., 2002, *Tworzywo skutecznych strategii*, Warszawa: PWE.
Pańczyk W., 2018, Aktywność fizyczna jako element polityki zdrowotnej społeczeństwa konsumpcyjnego, *Facta Simonidis. Zeszyty Naukowe Państwowej Wyższej Szkoły Zawodowej w Zamościu*, 11, 313-337.
Pasek M., Olszewski J., 2017, Aktywność fizyczna studentów turystyki i rekreacji w świetle dostępności do terenów zieleni, *Turyzm*, 2, 89-94.
Rheinberg, F., 2006, *Psychologia motywacji*, Kraków: WAM.
Sas-Nowosielski K., 2003, *Wychowanie do aktywności fizycznej*, Katowice: AWF.
Schwarzer R., Fuchs R., 1996, Self-efficacy and Health Behaviours, in: M. Conner, P. Norman (eds.) *Predicting Health Behaviour*, Buckingham-Philadelphia: Open University Press.
Serrano S., Pizarro P., Casterad Z., Villar Á. del, García-González, L., 2017, Barreras percibidas para la práctica de actividad física en estudiantes universitarios. Diferencias por género y niveles de actividad física, *Universitas Psychologica*, 16(4), 303-317.
Sińska B., Kucharska A., Sienkiewicz Z., Dykowska G., 2018, Wpływ systemu zmianowego pracy pielęgniarek na ich sposób odżywiania i aktywność fizyczną, *Zdrowie Publiczne i Zarządzanie*, 16(2), 105-111.
Twardowski D., 2016, Problemy dojrzałych ośrodków turystycznych na tle koncepcji cyklu ewolucji obszaru turystycznego, *Problemy Rozwoju Miast*, 3, 57-66.
Vasickova J., Górna-Łukasik K., Groffik D., Fromel K., Skalik K., Svozil Z., Wąsowicz K., 2012, Knowledge in adolescent girls and boys reated to physically active and health lifestyle, *Acta Universitatis Plackianae Olomucensis, Gymnica*, 42, 27-33.
Winiarski R., 1995, *Aktywność sportowa młodzieży. Geneza – struktura – uwarunkowania*, Kraków: AWF.
Wojtyła A., Byliński P., Bojar I., 2011, Aktywność fizyczna młodzieży gimnazjalnej w Polsce, *Problemy Higieny Epidemiologicznej*, 92(2), 335-342.

Model biznesu dla turystyki kwalifikowanej a bariery aktywności fizycznej

Streszczenie. *Artykuł ma charakter badawczy. We wprowadzeniu poruszono problematykę turystyki kwalifikowanej oraz barier podejmowania aktywności fizycznej. Całość umiejscowiono w kontekście modeli biznesu. Badaniami objęto 589 studentów śląskich uczelni (337 kobiet, 252 mężczyzn). Metodą badawczą był sondaż diagnostyczny, a narzędziem kwestionariusz ankiety. Do analizy statystycznej zastosowano podstawowe metody opisu statystycznego oraz testy nieparametryczne: test U Manna-Whitneya, test Chi-kwadrat oraz wskaźniki effect-size: współczynnik korelacji dwuseryjnej Glassa (r_g) oraz V-Cramera (V). Celem badań było określenie barier aktywności fizycznej z uwzględnieniem płci badanych. Analiza wyników pozwala na stworzenie rekomendacji dla modeli biznesu w kontekście barier podejmowania aktywności fizycznej i wdrożenie ich do praktyki.*

Słowa kluczowe: *aktywność fizyczna, model biznesowy, bariery aktywności fizycznej, rekreacja fizyczna, turystyka kwalifikowana*

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Martyna Musiał
Częstochowa University of Technology
Faculty of Management
orcid.org/0000-0003-3061-1876
e-mail: martyna.musial@poczta.onet.pl
phone: +48 785 134 817

Green Lies in the Operation of Enterprises

Abstract. *The main purpose of the article is to present the essence of greenwashing in the company's activities. The theoretical part shows the genesis, the essence of greenwashing and the impact of the phenomenon on consumer behavior. The practical part was prepared on the basis of a thorough analysis of foreign language articles. Therefore, the presentation of the struggles of enterprises in the area of greenwashing was made on the example of international companies such as: Mc Donald, BP and Walmart.*

Keywords: *ecology, green consumerism, greenwashing, sin, environment*

1. Introduction

Customers are aware of an enterprise's impact on the society and the environment. Therefore, they expect the products they purchase to be fully authentic and the information about them accurate. Corporate social responsibility or green marketing enable continuous communication between an enterprise and the customer. This communication can be used to highlight the environmental values of offered products. An enterprise that builds relationships with the customer should put a particular emphasis on the advantages of its products and accompanying processes. This demonstrates a conscious approach to the issue of environmental protection. It includes the way in which the product was manufactured, transported, stored and packed. Such information makes it easier for an enterprise to reach an environmentally-conscious customer, and allows the customer to make a choice.

2. Genesis and essence of greenwashing

The term "greenwashing" was coined in 1986 by Jay Westerveld, who described how one hotel induced its guests to have their towels replaced less often. It was under the pretence of caring for the environment. In reality, it wanted to spend less money on washing.

Greenwashing, also called green sheen or greenscam, is a trick used by producers to make customers believe that their products or services are environmentally friendly. This is mainly done through abusing ecological symbols. By stressing green aspects, producers divert attention from faulty areas of their operation. According to N. Ćwik, the author of the paper "Wybielanie za pomocą zielonego" (Whitewashing by means of green), greenwashing is manipulation that seeks to achieve the halo effect. An enterprise hopes that the brand's green image will result in perceiving the whole organisation in the same way.[1]

Greenwashing is a practice of giving untrue information, intentionally misleading, abusing ecological slogans and using terms incomprehensible to the customer. The aim is to present an enterprise, products, principles or goals in an environmentally friendly light. It is thus misinformation created by an organisation that relies on falsehood and intentionally deceptive image to portray itself as an entity responsible for society and the environment.

The negative phenomenon of greenwashing is known as sins. These sins are presented in Table 1.

Enterprises constantly seek cheap and easy ways to increase profits. Greenwashing allows them to achieve their goal. Companies win environmentally-conscious customers, and being environmentally-friendly is a way of standing out from the competitors and achieving competitive advantage. However, it should be borne in mind that the costs of eventually losing consumers' trust can significantly exceed the benefits of fraudulent, manipulative practices.

In Poland, greenwashing is not as common as abroad yet. Nonetheless, signs are that over time this concept will grow in popularity. Green products are usually more expensive, which leads to higher profit. It is often enough to advertise a product as healthy to earn more money and gain a positive image. Organic business sounds good.

Greenwashing can be used with anything. From a food product to furniture or an expensive hybrid car. Therefore, one should not trust advertisements blindly, buying products in green packaging with "eco" label. It is reasonable to look for opinions about the product and read the list of ingredients. It is also important to check the authenticity of the certificates that an enterprise claims to have. In the age of the Internet, everything can be checked, but not everybody is aware of that.

[1] http://www.proto.pl/artykuly/wybielanie-za-pomoca-zielonego [accessed: 5.05.2019].

Table 1. Main sins of greenwashing

Sins of greenwashing	Characteristic
Sin of the hidden trade-off	Based on a few attributes, an enterprise suggests that its product is green. At the same time, it ignores a significant, negative impact on the environment or society.
Sin of no proof	An enterprise does not have credible certificates to confirm that its product is green.
Sin of vagueness	An enterprise presents green aspects in an unclear way. This may mislead the customers. Examples include products that are perceived by customers as fully natural but contain substances that are harmful to health.
Sin of worshiping false labels	An enterprise uses labels containing green images or terms. This practice misleads the consumer.
Sin of irrelevance	An enterprise presents facts that are detached from the reality. An example is using products containing substances that have been prohibited for many years.
Sin of lesser of two evils	Through environmental measures an enterprise avoids addressing serious issues connected with its product, e.g. promoting green cigarettes or environmentally-friendly pesticides.
Sin of fibbing	An enterprise unlawfully uses certificates confirming its environmental activities.

Source: Witek 2013: 124-125.

Cases of greenwashing can be reported to the body Advertising Council by filling in a simple form. To do that, one should visit the website www.radareklamy.pl, and open the "File a complaint" link.[2]

Denying greenwashing is possible though brand fan pages in the social media. Any doubts concerning green products can be clarified by posting a comment or sending a private message. It is also a good way to express dissatisfaction when encountering a green scam. A customer's consistent stance is the best form of objection against a company trying to pull his/her leg, even a green one.[3]

3. Greenwashing and customer behaviour

Consumers are constantly bombarded with ubiquitous advertisements. They are surrounded by information about healthy snacks, environmentally-friendly cleaning materials and biodegradable packaging. So, how to make informed choices and distinguish goods that are environmentally-friendly? How to make purchases without harming Mother Earth? What to watch for and what to look for when reading product labels?

[2] https://www.radareklamy.pl/zloz-skarge [accessed: 10.05.2019].

[3] https://stressfree.pl/greenwashing-czyli-ekosciema-wokol-nas/ [accessed: 10.05.2019].

Consumers' environmentally-friendly behaviours are determined by increasing ecological awareness. Ecological awareness is a set of beliefs and information about the natural environment and the cause-and-effect relationship between the environment and the society's quality of life [Burger 1986: 18].

Environmental awareness is shaped by the following factors:

- level of knowledge,
- sense of personal insecurity,
- sense of responsibility for the natural environment,
- awareness of health protection,
- readiness for limitations [Łuczka-Bakuła 1996: 51].

Sense of personal insecurity is a key factor shaping consumers' emotional attitudes towards the natural environment. A person concerned about the negative consequences of the environmental issues is more likely to put an emphasis on ecological criteria when making purchasing decisions. The more directly the threat affects the consumer, the more important the ecological aspect is. The consumer notices the relationship between the natural environment and his/her health condition.

Consumers are increasingly aware that their behaviour impacts the natural environment. As a result, in all phases of the process of purchasing a product people take into account the aspect of environmental protection. Such behaviour is defined as green consumerism.

Green consumerism refers to cutting down on products that have a negative impact on the environment and involve:

- products that are dangerous to the society and the environment,
- the use of excessive quantity of resources,
- waste,
- damage inflicted as a result of the manufacturing and use of a product,
- cruelty towards animals [Peattie 2001: 132].

A conscious consumer should respect a few important principles:

1. A shopping list.
2. A reusable shopping bag.
3. A product's country of origin.
4. A product's labelling.
5. A product's packaging [Kodeks Świadomego Mieszczucha; Code of a conscious city slicker 2016: 21-23].

The first rule is to prepare a list of the products that are needed. By doing so one can avoid rash decisions and making choices on the spur of the moment. A shopping list should be made on the phone or on the back of an unneeded sheet of paper.

The use of reusable shopping bags reduces the amount of disposable plastic bags. In Poland, 10 million plastic bags are taken by customers every day. In order

Table 2. Examples of product labels

ekoland®	Organic food
POLSKIE CENTRUM BADAŃ I CERTYFIKACJI BIO BIO BIO BIO	Organic farming
RAINFOREST ALLIANCE CERTIFIED EST 1987	Food produced in an environmentally-friendly and man-friendly way
	Products not tested on animals
Kontrollierte Natur-Kosmetik BDIH	Production using only natural raw materials
BEZPIECZNY DLA OZONU POZBAWIONY FCKW	Safe for ozone
energy ENERGY STAR	Energy-efficient product
	Throw into a garbage bin

Source: https://www.ekologia.pl/, https://www.ekoszyk.mos.gov.pl [accessed: 5.05.2019].

to produce them, around 3 thousand tonnes of crude oil are used and 3 million tonnes of carbon dioxide are emitted to the atmosphere. Moreover, plastic bags pose a serious danger to animals. During a play with a plastic bag, it can be tightened around the neck of an animal or damage its bowels.

Monitoring the product's country of origin is important in terms of supporting the local economy. Choosing a product that was manufactured in the country benefits the environment and society. A local product is fresh, less processed and healthy. All that thanks to travelling a shorter distance. A shorter distance means less noise and pollution, whereas by supporting local suppliers we enable organic farms to develop.

In order to avoid the traps set by companies that use green tricks, it is useful to know eco-labels. Eco-labels are symbols designed to inform the consumer that the product is environmentally-friendly (Table 2). Knowing a few eco-labels makes it easier to make a choice. Eco-labels are awarded by state and private organisations. The symbols can be found on cosmetic and food products, textiles, cleaning materials and electronic equipment. Farms applying for an eco-label have to meet the following criteria:

– water protection,
– soil protection,
– no risk to birds,
– no interference in the development of plants,
– no practice of grass burning,
– grazing of animals without risk to grassland birds.

In Poland, the most popular symbol is "Ekoland," which is awarded to organic food by the Polish Association of Food Producers Using Organic Methods. [Kodeks Świadomego Mieszczucha 2016: 24-25].

A conscious consumer pays attention to the packaging of products. More and more often, goods are packed in several boxes. This practice is mostly seen with household cleaning products and cosmetics. A tube of paste or a glass jar placed in a paper box – these are just a few examples. By making conscious choices, one can avoid unnecessary rubbish. The best option is paper or glass packaging. Glass can be processed unlimited number of times, and paper is biodegradable.

4. Greenwashing in practice

McDonald's, after modernising its restaurants all over the world, decided to implement a project to improve its image. The fast food chain plans to place the corporate logo on a green background in the future. This measure is meant to symbolise care for the natural environment.[4]

[4] https://www.focus.de/panorama/vermischtes/mcdonalds-fastfood-kette-wird-gruen_aid_456774.html [accessed: 4.05.2019].

However, how can one talk about ecology and not address the issue of waste at the same time. The company admits to generating enormous amount of waste. The use of cutlery and disposable accessories alone accounts for around 81 289 tonnes of waste produced annually by McDonald's – 13 772 tonnes of plastic and 32 218 tonnes of paper waste.[5] Changing the colour of the logo will not be enough to protect the environment. But it may camouflage certain activities.

Another reprehensible practice is using genetic engineering during poultry feeding. Growing generically modified soya has negative consequences for the natural environment in the form of water, soil and air pollution. McDonald's tries to convince the public that it protects agricultural land, natural resources, animal welfare and controls all stages of production. However, these promises are a sham, so-called greenwashing. McDonald's cannot promise all of that and at the same time use generically modified soya in animal feed. Inappropriate production of cheap meat will be expensive for future generations and the environment. Consumers do not want genetic engineering in food, even if it is used in animal feed. Most of them would rather pay more and get a sandwich with poultry which was fed in an appropriate, rational way.[6]

Another example of greenwashing is the practice of Walmart. The largest retailer sold plastic products that were misleadingly labelled as biodegradable or compostable, violating the law of the State of California. Walmart claims that sustainable development is its priority and the products sold to Californian consumers conform to the norms. This is highly misleading. The state law prohibits the sale of plastic products labelled as biodegradable. The same applies to selling plastics labelled as compostable. Californians, who are willing to reduce the amount of waste in landfills, are misled. Consequently, Walmart agreed to pay 1 million dollars to settle greenwashing claims. This payment is a win for consumers and the environment.[7]

The company also misled consumers about the impact of its stores on the natural environment. A report by the Institute for Local Self-Reliance (ILSR) reveals that Walmart's sustainability campaign is designed to improve the company's image rather than the natural environment. Over the last eight years, its greenhouse gas emissions have increased despite advertising claims about solar installations and efficiency measures. The company only generates 2% of electric energy from wind and the sun.[8]

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[5] https://www.premiumpark.de/mcdonalds-cr-report/ [accessed: 4.05.2019].

[6] https://www.greenpeace.de/themen/mcdonalds-gruene-schminke [accessed: 5.05.2019].

[7] https://www.environmentalleader.com/2017/02/greenwashing-costing-walmart-1-million/ [accessed: 7.05.2019].

[8] https://www.climatechangenews.com/2013/11/18/walmart-accused-of-greenwashing-over-clean-energy-claims/ [accessed: 7.05.2019].

In 2017, right before Earth Day Procter & Gambel created Pampers Dry Max. These remarkable nappies are designed to help parents to reduce the negative impact on the environment. Thanks to a special design they contain less material, thus ensuring that the use of resources is minimal. In theory, Pampers Dry Max are designed to save landfill space. But are disposable nappies better than reusable cloth nappies. A reusable cloth nappy is unrivalled in terms of ecology and waste reduction. Studies show that Pampers Dry Max contain Sodium Polyacrylate, which is a chemical water absorber. It can cause burns and rash in children. An identical chemical was removed from tampons as a cause of toxic shock syndrome. Thus, Pampers Dry Max are not "green" at all. These nappies cost much more money without offering any special qualities that protect the environment.[9]

Huggies Pure & Natural nappies are a similar story. According to the producer, the nappies contain organic materials and ingredients that ensure a perfect protection. The nappies are latex, fragrance free and hypoallergenic. They contain a breathable outer cover made of organic cotton. Are they certified organic? - this fact has not been documented. What's more, the packaging is sourced from only 20% recycled materials. In fact, many companies boast 100% recycled materials. Huggies nappies, like Pampers, contain Sodium Polyacrylate. However, parents believe that they are a green, natural product. This shows how skilfully the company plans its marketing campaigns.

The last case of greenwashing to be analysed is BP's declaration. The company spent millions of dollars portraying itself as a leader in green technologies. In reality, it is responsible for the most destructive oil spill in the history of the world. The spill disturbed natural habitats and the ecosystem. It inflicted harm on fishermen, fish industry and local population. What happened along the Gulf coast is in contrast to BP's logo. The green and yellow colours communicate the advent of spring. A flower is a symbol of life, bloom. It is a perfect visual trick that diverts attention from the real product. The graphic representation of the company proves to be the antithesis of its identity. This contradiction required well-thoughout marketing campaigns. But BP will always be a company that derives profits from oil. A company associated with a drilling rig, oil tanker, petrol station and air pollution. Interestingly, in 2009 Greenpeace awarded BP the Emerald Paintbrush award for greenwashing. Greenpeace operating in the United Kingdom presented the company with a trophy featuring a paintbrush covered in green paint. This is a sign of disapproval of the company's practices.[10]

[9] https://www.growingagreenfamily.com/greenwashing-fun-with-disposable-diapers/ [accessed: 6.05.2019].

[10] https://www.greenpeace.org/usa/recapping-on-bps-long-history-of-greenwashing/ [accessed: 7.05.2019].

5. Conclusions

Companies put a lot of effort into receiving relevant certificates, sourcing alternative materials, implementing environmentally-friendly technologies or designing without compromising available resources. Sometimes, a company unintentionally abuses green values and qualities in its communication and misleads the customer. Cases of intentionally suggesting that a product is environmentally-friendly to make it stand out from the competitors are less frequent. Companies that consciously use greenwashing should consider the negative consequences of this practice. Disappointed customers will chose competitive products, and the company will be punished for violating the law – it will take a long time before the damaged reputation is rebuilt.

Greenwashing comes under increasing criticism not only from environmental organisations, but also consumers and public administration institutions. Deceit may pay off in the short run. But in the long run it will result in unrecoverable losses.

References

Burger T., 1986, Uwagi o świadomości ekologicznej, *Przegląd Powszechny*, 12, 374-388.

https://www.climatechangenews.com/2013/11/18/walmart-accused-of-greenwashing-over-clean-energy-claims/ [accessed: 7.05.2019].

https://www.ekologia.pl/ [accessed: 5.05.2019].

https://www.ekoszyk.mos.gov.pl [accessed: 5.05.2019].

https://www.environmentalleader.com/2017/02/greenwashing-costing-walmart-1-million/ [accessed: 7.05.2019].

https://www.focus.de/panorama/vermischtes/mcdonalds-fastfood-kette-wird-gruen_aid_456774.html [accessed: 4.05.2019].

https://www.greenpeace.de/themen/mcdonalds-gruene-schminke [accessed: 5.05.2019].

https://www.greenpeace.org/usa/recapping-on-bps-long-history-of-greenwashing/ [accessed: 7.05.2019].

https://www.growingagreenfamily.com/greenwashing-fun-with-disposable-diapers/ [accessed: 6.05.2019].

https://www.premiumpark.de/mcdonalds-cr-report/ [accessed: 4.05.2019].

http://www.proto.pl/artykuly/wybielanie-za-pomoca-zielonego [accessed: 5.05.2019].

https://www.radareklamy.pl/zloz-skarge [accessed: 10.05.2019].

https://stressfree.pl/greenwashing-czyli-ekosciema-wokol-nas/ [accessed: 10.05.2019].

Kodeks Świadomego Mieszczucha, 2016, Warszawa: Wojewódzki Fundusz Ochrony Środowiska i Gospodarki Wodnej.

Łuczka-Bakuła, 1996, Czynniki warunkujące proekologiczne zmiany modelu konsumpcji, *Człowiek Przyroda*, 4, 52-56.

Peattite K., 2001, Towards Sustability: The Third Age of Green Marketing, *The Marketing Review*, 2(2), 129-146.

Witek L., 2012, Zjawisko greenwashingu a zachowanie konsumentów, *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Problemy Zarządzania, Finansów i Marketingu*, 32, 123-134.

Zielone kłamstwa w działaniu przedsiębiorstw

Streszczenie. *Zasadniczym celem artykułu jest przedstawienie istoty greenwashingu w działaniach przedsiębiorstwa. Część teoretyczna ukazuje genezę, istotę greenwashingu oraz wpływ zjawiska na zachowania konsumenta. Natomiast część praktyczną przygotowano w oparciu o wnikliwą analizę artykułów obcojęzycznych. W związku z tym dokonano prezentacji zmagań przedsiębiorstw w obszarze greenwashingu na przykładzie międzynarodowych firm, takich jak: McDonald, BP i Walmart.*

Słowa kluczowe: *ekologia, green consumerism, greenwashing, grzech, środowisko*

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Iryna Pasinovych
Ivan Franko National University of Lviv
Department of Economic Theory
orcid.org/0000-0003-4899-7498
e-mail: irunchyk@hotmail.com
phone: +380 979 664 693

Financial Leverages of Structural Changes in Transition Economy

Abstract. *Assessment of the modern structure of economy of Ukraine is given, factors, which caused existing disproportions are defined. The inevitability of structural changes in economy, which have to take place within the structural politics of the state are justified. The analysis showed that Ukrainian business entities are in a difficult financial situation, which complicates their investment activity and inhibits structural changes. This means that state incentives are needed for the progressive structural changes in the economy, including financial ones. However, state support should help increase the financial potential of economic entities in order to have a positive impact on the economy.*

Keywords: *structure of economy, structural policy, branch, investment, structural changes, financial support, financial assistance, financial potential of the enterprise*

1. Introduction

The topic of structural changes in economy is of particular interest both for Ukraine and for countries with transition economy. This is due to active reforming after 2013 for qualitative renewal of economic system, ensuring economic growth and development. System reforms are required by international collaborates, in particular the IMF and the World Bank.

Problems of structural reforming of Ukrainian economy and its financial support are highlighted in the works of well-known scholars and economists, such as V. Geyets, L. Shynkaruk [2011], V. Gusev [2011], D. Chernikov [2013] and others.

The purpose of the research is to substantiate the expediency of implementation of state active structural policy and the use of financial leverages to stimulate of progressive structural changes in economy of Ukraine.

2. Presenting main material

The economic system is a complex structural entity. The structure (from the Latin *structura* − construction, placement) is determined by the internal form of the organization of elements of the system, the set of stable relationships between its parts, ensuring its integrity, functioning and development. The structure is one of the defining characteristics of the system, the determining factor of its functioning.

The structure of the national economy is most often viewed through the prism of industries (the industry is understood as a set of enterprises grouped by the types of activity), regions, sectors, technological processes, respectively, the economic structure can be represented as a system of proportions and relationships between them.

To the peculiarities inherent in the structure of the economy, we include:

– the structure of the economy is a determining factor in its competitiveness (developed service sector, the dominance of high-tech manufacturing industries in the economy is a sign of all developed countries);

– the stability of economy depends on its structure (depending on the formed structure, the economy of the country is more or less sensitive and vulnerable to fluctuations of the world economy, its state of affairs; the more diversified the structure of the economy is, the more resistant it is to external influences);

– the external environment of activity of the business entities changes faster compared with changes in the internal environment, therefore, the structure of the economy is formed both under the influence of market factors and under the influence of the state; The state sets the vector for structural changes, based on national interests;

– the economic structure is inert, changes in the structure of the economy are of a long-term nature, therefore, should take place in the context of a defined development strategy.

The structure of the economy should guarantee the economic sovereignty of the state, its economic security, and also ensure a high level of competitiveness of national production, the active participation of national producers in the world market. If these conditions are not met, the necessary structural changes are required.

Structural changes are one of the results of economic development. Structural changes are quantitative or qualitative changes in the components and links of the structure of the economy. The result of a change in the proportions of the structure that arises as a result of the accumulation of structural changes is a structural shift. In its turn, structural transformation is the result of consolidation of structural changes, which leads to changes in the proportions of social production. Therefore, any transformation involves the implementation of a number of structural changes in the system, which leads to changes in its functional characteristics.

Structural changes can be considered broadly and narrowly. In the narrow sense, these are changes in the product-sector structure of the economy. In the broad sense, these changes should be accompanied by changes in the composition of production and consumption of resources: investment and fixed capital, labor, material and energy resources [Shynkaruk 2011].

Changes in the structure of the economy can be both positive and negative, causing the modernization or degradation of the economy. Structural changes can be expressed by different economic characteristics – the number and qualification of workers, volume of production, size of capital and investments. Consequently, structural changes concern not only the quantitative proportions between sectors and branches of the economy, but also their qualitative content – the range of products, technologies used, qualifications of employees, organizational and economic forms of enterprises, etc.

Structural changes and their most significant manifestations, such as structural changes, have a decisive influence on the formation of further trends of economic development. An economy dominated by high-tech industries requires highly skilled workers, education and science, respectively, and there is a demand for interesting and creative ideas.

The structure of the economy includes a set of business entities that arose on the basis of the social division of labor, natural resources, historical traditions and territorial specificity. We consider the indicators that characterize the structure of the Ukrainian economy and give an estimate of structural changes.

Under favorable starting conditions, for 28 years Ukraine shows a lagging up to 25 times in comparison with EU countries according to the indicator of gross national income per capita. For example, GDP per capita in Poland in 2017 amounted to about 29,6 thousand dollars in terms of the parity of purchasing power, and in Ukraine these figure amounted to 8.8 thousand dollars in accordance.

The root cause of the failure of the Ukrainian economy is that its structure has not been systematically upgraded since the times of the USSR. Scientists point out that the structure of Ukraine's economy is characterized by "weak innovation, progressive primitization, a significant reduction of self-reproduction opportunities on an effective basis" [Shynkaruk 2011].

When we compare the structure of economy in Ukraine and the most developed countries in terms of three sectors we see, that the service sector, which characterizes the post-industrial economy, is dominant in all countries. For a more in-depth analysis, it is worth analysing the service sector, highlighting its subsectors. The sector of agriculture is significant in Ukraine, and the industry dominates in the G7.

The basis of the Ukrainian economy is traditionally agriculture, relatively well-developed industry (food, metallurgical, coal, machine- and shipbuilding), as well as the rapidly evolving service sector.

The generally accepted macroeconomic indicator, reflecting both the volume of national wealth and its structure, is gross value added (GVA). The structure of gross value added is shown in Table 1.

Table 1. The structure of Gross Value Added in Ukraine by types of economic activity (%)

Type of economic activity	2010	2014	2018
Agriculture, forestry and fishery	8.4	11.7	13.8
Industry	25.7	23.4	20.1
Construction	3.7	2.7	2.3
Wholesale and retail trade; transport; temporary placement and organization of food	25.8	24.9	24.3
Information and telecommunications	3.5	3.8	4.4
Financial and insurance activities	6.4	5.1	3.2
Real estate activities	6.1	7.2	7.2
Professional, scientific and technical activities; administrative and support services activities	4.1	4.7	4.9
Public administration and defence; education; healthcare and social assistance	14.8	14.6	15.1
Other services	1.5	1.9	0.8

Source: State Statistics Service of Ukraine, http://www.ukrstat.gov.ua/ [accessed: 15.09.2019].

Unfortunately, there is a tendency to reduce the contribution of industry to the creation of value added with the simultaneous growth of the contribution of agriculture. The sphere of trade, transport services, temporary placement and organization of food generates a quarter of value added in the economy. At the same time, total financial and insurance activities, information and telecommunications sectors account for less than 10% of gross value added.

The average rate of innovative enterprises is 15.6% in 2018. Pprocessing industry prevails in the volume of industrial products; the share of extractive industry remains large – more than 10%. By volume of sales, the leader is the food industry, which has quite high profitability indicators. Significant is the share of metallurgy, the enterprises of which are large exporters. We negatively assess the decline in the share of sales of machinery in the volume of sales, as well as the decrease in profitability of machine-building enterprises.

Table 2 lists the enterprises by type of economic activity (excluding banks).

Table 2. Indicators of Ukrainian enterprises by types of economic activity

Types of economic activity	The level of profitability (loss) of all activities		Enterprises that have suffered losses (%)		Share of equity in the liabilities (%)		Retained earnings (uncovered loss)		Share of short-term bank loans in liabilities (%)	
	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018
Total	0.5	4.5	42.7	41.0	35.2	24.68	57.0	433	6.2	5.43
Agriculture, forestry, fishery	16.3	13.0	30.8	10.8	53.6	47.86	80.2	67	5.7	5.14
Industry	0.8	3.3	43.0	43.6	38.7	17.48	37.2	156	4.5	7.39
Construction	–4.2	1.1	46.1	45.6	11.3	–5.43	–18.2	5.6	4.0	3.53
Wholesale and retail trade	1.7	11.8	39.7	35.4	9.6	1.32	–5.5	88.1	10.8	7.64
Transportation	0.7	–4.0	47.2	46.9	50.7	61.15	12.2	–20.7	3.7	0.72
Temporary placement and nutrition	–3.8	5.7	43.6	44.9	36.4	–6.89	–5.6	2.8	2.6	4.11
Information and telecommu-nications	2.7	8.4	43.1	43.6	40.0	19.06	–7.0	18	5.0	4.51
Financial and insurance acti-vities	4.2	14.5	43.2	43.1	54.0	35.18	30.7	85.6	3.0	2.41
Professional, scientific and technical acti-vities	–8.6	0.3	44.0	48.5	34.9	–4.07	8.5	0.8	8.5	4.09

Source: State Statistics Service of Ukraine, http://www.ukrstat.gov.ua/ without banks [accessed: 15.09. 2019].

The analysis of financial results, the ratio between equity and loan capital of enterprises, suggests that most of them are in a financial crisis. Over the past few years, the activity of key industries for the industrial revival – extractive industry, metallurgical, chemical, food, mechanical engineering, and energy has been unprofitable. In such a situation, enterprises do not have an internal development potential.

In general, profits of profitable enterprises (in 2018 they accounted for UAH 746.0 billion) were bigger than losses of unprofitable enterprises (in 2018 they accounted for UAH 313 billion). In 2015 we had the opposite picture – losses were bigger than profits. The share of unprofitable enterprises exceeds 26% of their total number. Negative financial results testify to the inability of producers to cover their expenses by their own revenues. This is a factor in their additional capitalization; it deprives investment resources, redirects management to survival, not development.

In the face of a lack of revenue, enterprises are increasing their debts. At the same time, the share of bank loans in liabilities is low, due to the high cost of credit resources – rates on bank loans hugely exceed the profitability of industrial activity.

The industry is locked on its own funds as a source of investment in development, but this source is also limited, given that its own funds in the industry amounted to about 20%. In the structure of sources of investment, the share of borrowed funds, funds of foreign investors, population, investment institutions, funds of the state and local budgets decreases. The lack of funds and the inability to attract financial market resources for investment doomed manufacturers to further loss of technological competitiveness. In general, the lack of capital in the manufacturing sector remains a serious obstacle to the industrial recovery of the country's economy.

Not the best situation is with financial results and in small business. Analysis of the results of financial activity for 2015-2018 showed that among small business 68.6% were profitable, and 31.4% were loss-making.

Consequently, we can conclude that progressive structural changes in Ukraine are impossible without an active state structural policy.

Active structural transformations require adequate financial support. As we know, structural changes are accompanied by the movement of capital – more profitable and promising industries are flowing from the sectors of less profitable and unpredictable financial resources. In this case, the benchmark for investment is the market factor – the rate of profit.

At the same time, this is the task of the state to determine the prospects of one or another type of activity, its expected profitability in view of existing trends. It is the state which seeks to keep track of global trends, shape economic strategy and transform them into structural and investment policy decisions, contributing to this positive structural change.

For example, the determinants of growth in a post-industrial information economy are the level of development of high-tech industries and the potential of human capital. It has already been recognized that deep structural changes in the types of economic activity taking place in most developed countries will destroy sectors and professions in the near future, especially those that do not require high qualifications. Accordingly, it makes no sense to provide support to the industries of low technological processes. The state should stimulate investment in science and education, and financially support those enterprises that carry out innovative activities.

During 2014-2018, Ukrainian government officials adopted a series of legislative acts and strategies aimed at improving the fiscal and regulatory environment in order to stimulate investment, which could lead to positive structural changes. In particular, these legislative acts provide exemptions from VAT and corporate income tax for certain sectors and territories of priority development, as well as for economic entities participating in industrial and technological parks.

In developed countries, the state took an active position in stimulating progressive structural changes [Pasinovych, Sych 2018]. Thus, in most countries, they have taken a course on active industrialization with a new technological way, with the focus of industrial policy being knowledge economy. Industrial policy is one of seven major initiatives in the context of Europe 2020 strategy launched in 2010. The European Commission (EC) stated in 2012: "The political focus on industry is based on the awareness that a strong production base is essential for a rich And an Economically Successful Europe."

The process of reforming state aid to business entities has been carried out by many European countries that have been integrated into the European Union. It is based on the idea that in the presence of a common European market, common rules are needed for companies to ensure they have a level playing field. The EU mainly uses horizontal state aid, which includes measures to support a wide range of enterprises in order to achieve goals that are important for the whole of society, and not for individual sectors of the economy. An example of horizontal measures is the support of small and medium-sized enterprises, regional development, research and development, employment, etc.

Instead, vertical (sectoral) assistance prevails in Ukraine. The Government of Ukraine can provide support to certain types of economic activities in order to ensure the viability and competitiveness of domestic producers, in particular, in the strategic sectors of the national economy. The list of grounds for such support is defined in Article 16 of the Commercial Code of Ukraine.

The term "state support" covers any form of state support for business entities, including state aid. State support aimed at promoting the development of certain priority sectors or certain types of economic activity, including measures to preserve and support the national heritage, culture and sport, is classified as "sectoral" support.

It has to be noted that the provision of state aid to economic entities in Ukraine is non-transparent, information on its provision is not published on a single resource, and statistics on volumes are not generalized by any agency.

As a rule, Ukrainian governments provided direct financial assistance in the form of subsidies and grants to certain sectors (sectoral assistance). In 2014, according to the Ministry of Finance of Ukraine, direct subsidies to the Ukrainian economy amounted to 2.8% of GDP, and in 2013 to 3.3% of GDP.

Selective subsidization has the most negative impact on competition, since it directly reduces the running costs of enterprises, thereby creating unequal conditions for their operation, and does not stimulate enterprises to invest in efficiency. In addition to subsidies, in various years there were tax breaks for enterprises in the mining and smelting complex, shipbuilding, aircraft engineering, automotive, light industry, chemistry, and energy.

A study conducted by authoritative scholars has made it possible to state that "the influence of state support on the level of competition, trade and the efficiency of spending public funds in Ukraine is practically not controlled. Similarly, little attention is paid to the study of state needs, the analysis of the feasibility and proportionality of any type of direct or indirect state support of economic entities" [Höllzler, Libanova, Efimenko et al. 2015].

Ukraine became aware of the need to change the forms of state support, increase control over the use of public funds, as well as the effectiveness of their use. In August 2017, the Law of Ukraine "On State Assistance to Business Entities" (hereinafter – the Law), adopted in July 2014, come into force. It is positive that this Law establishes the legal basis for implementation of the system of control over state aid to economic entities.

During the transitional phase envisaged by the Law (2014-2017), all relevant public authorities should have a clear understanding of the criteria under which support for business entities can be considered as state aid.

The membership of a measure to support business entities in the category of state aid is determined solely on the basis of an appropriate assessment conducted in accordance with the Law and the decision of the official decision of the Antimonopoly Committee of Ukraine.

Article 1 of the Law of Ukraine "On State Aid to Business Entities" defines state aid as follows: "state aid to economic entities (hereinafter – state aid) is a support in any form of economic entities at the expense of state resources or local resources, distorting or threatening distortions of economic competition, creating preferences for the production of certain types of goods or the conduct of certain types of economic activity." The Law also provides for "individual state assistance."

State aid consists in the transfer of state resources or local resources to individual economic entities, as well as to the loss of revenue of the respective budgets.

Article 4 of the above-mentioned Law defines the following forms of state aid:

1) grant of subsidies and grants;

2) grant of subsidies;

3) granting of tax privileges, deferrals or instalments of payment of taxes, fees or other obligatory payments;

4) write-off of debts, including debt for the provided public services, write-off of penalties, compensation of losses to economic entities;

5) provision of guarantees, loans on preferential terms, servicing of loans at preferential tariffs;

6) reduction of financial obligations of economic entities to funds of compulsory state social insurance;

7) the provision, directly or indirectly, to economic entities of goods or services at prices below the market or the purchase of goods or services of economic entities at prices above market;

8) sale of state property at prices below market;

9) increase of the state share in the authorized capital of economic entities or increase of the value of the state share on conditions unacceptable for private investors.

As we see, the vast majority of state aid forms are of a financial nature. The stimulation by the state of progressive structural changes through the use of financial leverage should affect the financial potential of industry enterprises and the industry as a whole. Realization of financial potential by economic entities will promote positive structural changes.

T. Paientko gives the following determination to the financial potential: "This is a set of financial resources aimed at the implementation and increase of economic potential in order to maximize profits" [Paientko 2009].

Since financial elements constitute financial resources, it is primarily determined by the ability of the entity to form an amount of financial resources sufficient to finance operating activities and development. The ability to attract financial resources in the transit economy depends to a large extent on the state and is characterized by availability, alternatives, cost, and risk.

Considering the financial potential of the industry in the resource approach, we will define it as the volume of own, borrowed and attracted financial resources of its enterprises, which they can dispose for operating and investment expenses. In order for these resources to have an impact on the structure of the economy, they should not only serve the production and economic activities and improve the performance of the enterprise, but also be involved in financing investment and innovation projects and other strategic directions of the enterprise development in order to ensure sustainable and balanced development.

3. Conclusions

Consequently, the state must implement structural policy in the context of the established development strategy for progressive structural changes in the economy. In spite of the fact that developed countries prefer the horizontal support of business entities, the vast majority of business entities are in a difficult financial situation in Ukraine, which makes it impossible to develop them. Accordingly, the state should stimulate, including financial levers (in direct and indirect forms) strategically important branches. At the present stage of development, the need to modernize the state aid system according to the criteria defined by the goals and objectives of European integration has matured. State aid should help to increase the financial potential of the industry.

References

Analytical report to the Annual Address of the President of Ukraine to the Verkhovna Rada of Ukraine “On the Internal and External Situation of Ukraine in 2016,” 2016, Kyiv: NISS.

Chernikov D.O., 2013, *Modernizatsiya systemy derzhavnoyi pidtrymky sub’yektiv hospodaryuvannya v Ukrayini* [Modernization of the system of state support of business entities in Ukraine], Kyiv: NISS.

Gusev V.O., 2011, *Upravlinnya strukturnymy zrushennyamy ta innovatsiyamy ta investytsiynymy protsesamy v ekonomitsi Ukrayiny: navchal'nyy posibnyk* [Management of structural shifts and innovation and investment processes in the economy of Ukraine: curriculum. Manual], Kyiv: NAPA.

Höllzler H., Libanova E., Efimenko T. et al., 2015, *Report on the results of a study on state support for business entities in Ukraine*, www.eupublicprocurement.org.ua [accessed: 15.09.2019].

Law of Ukraine “On State Aid to Business Entities” of 1.07.2014 No. 1555-VII, http://zakon3.rada.gov.ua [accessed: 15.09.2019].

Paientko T.V., 2009, *Podatkove rehulyuvannya v konteksti formuvannya finansovogo potentsialu na pidpryyemstvi* [Tax regulation in the context of formation of financial potential at the enterprise], “Biznes-inform: Mizhnarodnyy naukovo-ekonomichnyy zhurnal,” 9, 96-98.

Pasinovych I., Sych O., 2018, *Modernizatsiya mekhanizmiv derzhavnogo rehulyuvannya ekonomiky Ukrayiny* [Modernization of mechanisms of state regulation of economy of Ukraine], “Finansovo-kredytna diyal’nist’: problemy teoriyi ta praktyky,” 1(24), 398-408.

Shinkaruk L.V. (ed.), 2011, *Strukturni zminy ta ekonomichnyy rozvytok Ukrayiny: monohrafiya* [Structural changes and economic development of Ukraine: monograph], Kyiv: National Academy of Sciences of Ukraine, Institute of Economics and Forecasting.

State Statistics Service of Ukraine, http://www.ukrstat.gov.ua/ [accessed: 15.09.2019].

The World Factbook, https://www.cia.gov/library/publications [accessed: 15.09.2019].

Dźwignie finansowe zmian strukturalnych w gospodarce w okresie przejściowym

Streszczenie. *W arykule przedstawiono ocenę nowoczesnej struktury gospodarki Ukrainy i czynniki, które wywołują jej dysproporcje. Konieczne zmiany strukturalne w gospodarce, będące efektem polityki strukturalnej państwa, są w pełni uzasadnione. Analiza wykazała, że ukraińskie podmioty gospodarcze znajdują się w trudnej sytuacji finansowej, co utrudnia inwestycje i hamuje zmiany strukturalne. Oznacza to, że potrzebne są zachęty państwowe, aby możliwe było przeprowadzenie takich zmian w gospodarce i finansach. Wsparcie państwa powinno przyczynić się do zwiększenia potencjału finansowego podmiotów gospodarczych w celu wywarcia pozytywnego wpływu na gospodarkę.*

Słowa kluczowe: *struktura gospodarki, polityka strukturalna, branża, inwestycje, zmiany strukturalne, wsparcie finansowe, pomoc finansowa, potencjał finansowy przedsiębiorstwa*

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Olga Sych
Ivan Franko National University of Lviv
Department of Financial Management
orcid.org/0000-0002-9322-8105
e-mail: olga.sych.lviv@gmail.com
phone: +380 672 845 584

Regional Aspects of the Development of Small and Medium-sized Enterprises

Abstract. *The article discusses the impact of the institutional environment for the activation of small and medium enterprises (SMEs). The analysis of the dynamics of the main indicators of institutional environment and the number of SMEs is given. In the article it is characterized the relationship between the level of development of business environment and the dynamics of SME, calculated the correlation coefficients between the dynamics of creating of institutions for business support and registered number of SMEs. The most effective institutional support mechanisms and ways of improvement of the institutional environment of SMEs are singled out – spreading the international practice of creating business incubators and technology parks, expanding the range of services provided to SMEs.*

Keywords: *SME sector, institutional environment, business environment, institutional support, business incubators, technology parks*

1. Introduction

Today, despite the positive dynamics of quantitative indicators of SMEs numbers, small and medium enterprises in Ukraine are developing slowly and less innovatively in comparison with our European neighbors. Important role is played by the institutional environment of SMEs, and quality of it is not always able to meet the needs and problems of business entities. A favorable institutional environment of entrepreneurship can be a significant factor in the socio-economic development of regions and the whole country through its impact on regional investment attractiveness and competitiveness.

The works of Ukrainian scientists are dedicated to the study of general aspects of the development of small business in Ukraine [Berezhnyy 2014; Pasinovych, Yasinovska 2015], issues of the institutional environment of entrepreneurial activity in the regional aspect [Zaplatynskyy 2008; Vasyltsiv 2009]. The role of the business environment in regional development in Poland is described in the researches of J. Dominiak [2013]. However, analysis of influence between the levels of development of the region and the development of institutional support for SMEs need to be deepen. The issue of institutional support requires additional researches for developing effective models of regional management and promotion of small business and economic development.

The main objective of this study is to determine the relationship between the level of development of institutional environment of SMEs and the level of regional development. Also we need to describe the characteristic of regional environment factors that are stimulating and give positive organizational impact on the development of small and medium enterprises in the region.

2. Presenting main material

The high concentration of SMEs in a particular area gives the incentive and new abilities to business, introduce new knowledge and technical solutions and create conditions to increase the competitiveness of the local economy.

Analyzing of the territorial concentration of the subjects of SMEs in Ukraine outline some important issues – irregularity, instability and slowdown of growth: in 2017-2018 years the largest number of businesses SME sector were registered in the city Kyiv and such regions as Kharkiv, Dnipro, Odessa, Lviv, Kyiv, Zaporizhia, Donetsk, Vinnytsia and Khmelnytsky regions. In general, in all regions of Ukraine, the increase in the total number of SME entities in 2017 was more than 10%, but in 2018, the level of growth is only 5% (Table 1).

In 2018 some regions demonstrate the decrease of the number of SME entities – in Herson region, and small changes in amount of SME entities (near 1-2%) in Ivano-Frankivsk, Mykolaiv, Odessa and Sumy regions. However, the problematic situation in Eastern Ukraine remains, where in connection with military actions of the occupation in 2014 we can see a sharp reduction of business entities in the Donetsk – by 44% and Luhansk regions – by 67.6%.

There is a negative fact, that in some regions the number of employed and employees of SME entities has significantly reduced (Table 2), in total amount we can notice the decrease of their number for only 2,6-2,9%.

The main reasons of the situation are:

– changing in taxation system in Ukraine and increasing of the level of taxation of SME entities;

Table 1. Analysis of the number of SME entities in the regions of Ukraine in 2016-2018

Region	2016	2017	2018	Dynamics 2017/2016 (%)	Dynamics 2018/2017 (%)
Ukraine	291 154	322 920	339 382	10.91	5.10
Vinnytsia	8 154	8 706	9 163	6.77	5.25
Volyn	4 734	5 293	5 591	11.81	5.63
Dnipro	24 325	26 603	27 772	9.36	4.39
Donetsk	9 893	9 909	9 201	0.16	–7.15
Zhytomyr	5 545	6 108	6 502	10.15	6.45
Zakarpattya	4 800	5 543	6 173	15.48	11.37
Zaporizhia	12 877	13 975	14 375	8.53	2.86
Ivano-Frankivsk	6 587	7 342	7 973	11.46	8.59
Kiev	16 860	18 403	19 045	9.15	3.49
Kropyvnytsky	6 859	7 406	7 721	7.97	4.25
Lugansk	3 303	3 205	3 240	–2.97	1.09
Lviv	14 749	17 064	18 237	15.70	6.87
town Kyiv	9 706	10 459	87 766	7.76	739.14
Mykolaiv	20 191	23 203	11 077	14.92	–52.26
Odesa	8 429	9 609	23 803	14.00	147.72
Poltava	4 409	4 995	10 345	13.29	107.11
Rivne	4 916	5 324	5 213	8.30	–2.08
Sumy	4 017	4 481	5 564	11.55	24.17
Ternopil	19 328	21 461	4 778	11.04	–77.74
Kharkov	6 882	7 824	22 564	13.69	188.39
Herson	5 865	6 575	7 924	12.11	20.52
Khmelnytsky	7 605	8 414	7 039	10.64	–16.34
Cherkassy	3 345	3 759	8 691	12.38	131.21
Chernivtsi	4 886	5 560	3 913	13.79	–29.62
Chernihiv	72 889	81 699	5 712	12.09	–93.01

Source: State Statistics Service of Ukraine, http://www.ukrstat.gov.ua/ [accessed: 18.10.2019].

– the existence of SME entities, that do not really work and have not stop their registration yet;

– increasing of the level of the shadow employment.

On the Figure 1 it is shown the connection between the dynamics in number of SMEs and the dynamics of employment in small and medium business via the regions.

As it was mentioned before, Lugansk and Donetsk regions demonstrate decreasing in those two indicators, also Chernihiv has bad marks.

Only Poltava and Cherkassy regions have increased number of SMEs and employees during 2017-2018 years. The main group of Ukrainian regions demonstrates lowering level of employment in SMEs but still positive dynamics in

Table 2. Number of employed and employees in small and medium-sized enterprises in the regions of Ukraine in 2017-2018

Region	Number of employed (thsd)			Number of employees (thsd)		
	2017	2018	Dynamics (%)	2017	2018	Dynamics (%)
Ukraine	1562,4	1521,9	–2.59	1658,9	1611	–2.89
Vinnytsia	48,0	48,5	1.04	51,4	51,7	0.58
Volyn	27,3	27,1	–0.73	29,4	28,9	–1.70
Dnipro	129,1	124,7	–3.41	135,9	131,1	–3.53
Donetsk	42,3	40	–5.44	44,6	41,9	–6.05
Zhytomyr	35,7	35,7	0.00	37,6	37,3	–0.80
Zakarpattya	24,6	24,3	–1.22	27,2	27,3	0.37
Zaporizhia	63,0	62,1	–1.43	68,4	66,9	–2.19
Ivano-Frankivsk	32,7	32,5	–0.61	35,3	35	–0.85
Kiev	91,6	90,5	–1.20	95,6	94	–1.67
Kropyvnytsky	34,9	33,9	–2.87	38,5	37,5	–2.60
Lugansk	15,9	14,7	–7.55	17,1	15,9	–7.02
Lviv	93,4	92	–1.50	98,5	96,4	–2.13
Mykolaiv	40,7	40,7	0.00	45,9	45,6	–0.65
Odesa	108,1	103,8	–3.98	115,4	109,6	–5.03
Poltava	48,3	48,5	0.41	51,5	51,6	0.19
Rivne	28,3	27,1	–4.24	30,2	28,8	–4.64
Sumy	30,1	29,2	–2.99	31,8	30,8	–3.14
Ternopil	26,0	25,9	–0.38	27,6	27,5	–0.36
Kharkov	110,4	108,5	–1.72	116,4	114	–2.06
Herson	33,4	32,5	–2.69	36,8	35,6	–3.26
Khmelnytsky	35,7	36,3	1.68	38,4	39	1.56
Cherkassy	40,0	40,1	0.25	43,2	42,9	–0.69
Chernivtsi	20,0	19	–5.00	21,5	20,3	–5.58
Chernihiv	32,3	29,8	–7.74	34,2	31,4	–8.19
town Kyuv	370,6	354,5	–4.34	386,5	370	–4.27

Source: State Statistics Service of Ukraine, http://www.ukrstat.gov.ua/ [accessed: 18.10.2019].

number of small and medium enterprises. The average level of dynamics in SMEs for Ukraine is +5,1% and in dynamics of employment – 2,7%. But in some regions the indicators can differ for more than 10%. Therefore, certain regions need significant support to stimulate SMEs. As well as the use of opportunities of institutions that promote development of SMEs.

After analyzing the statistical information we can provide a clear line of influence between the number of SMEs and their employees and the GDP of the region. However, there is also a very important inverse relationship - the level of development of the region, the human potential in this region, favorable policies of local authorities and the level of investment attractiveness significantly affect

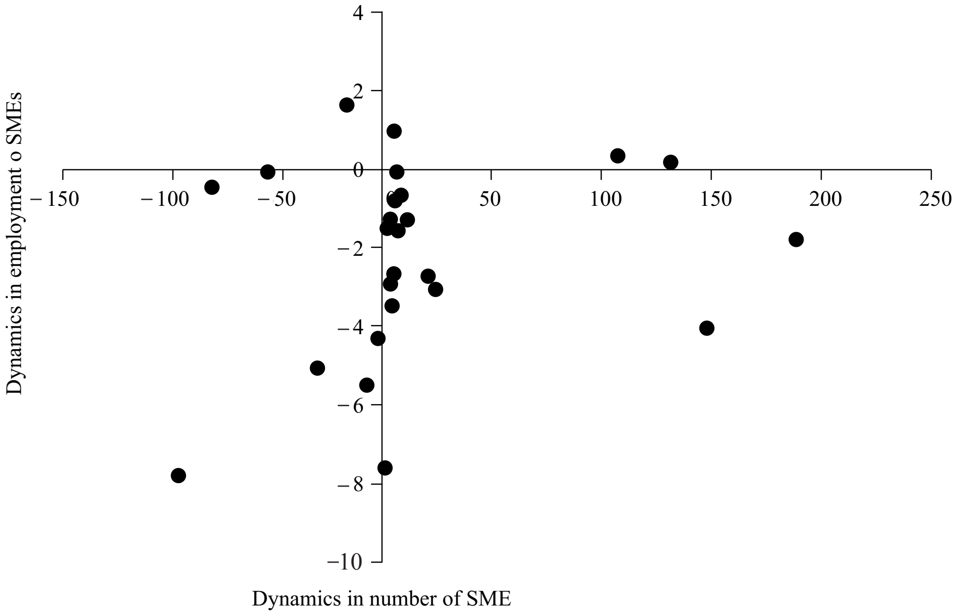

Figure 1. Regional particularities in development of the SMEs in 2018

Source: based on the Table 1 and Table 2.

the growth of the SME sector in the region. It is a benefit to the economy in general and the regional economy in particular, that small and medium enterprises work efficiently and demonstrate sustainable growth from small and medium to large companies. There is a need of implementation of new tools to support institutional environment to start-ups and existing SMEs.

The increasing of regional development puts a request to the institutional environment of SMEs, which should meet the needs of the sector.

In the socioeconomic changes taking place in Ukraine, the established work of the institutional environment of entrepreneurial activity is an important factor in national growth. The development of entrepreneurship environment institutions should be an integral part of state support both in general and at the regional level. Such a state policy should combine actions of the authorities of different levels in the direction of stimulating entrepreneurship. Indeed, a well-developed and effective network of small and medium-sized businesses can be a major factor in the development and competitiveness of both the region and the state as a whole.

Institutions designed to support SMEs form the institutional environment of this sector and play an important role in entrepreneurial activity. On the one hand, their activity is dependent on the dynamics of economic development, since at low rates of economic growth and in times of crisis, SME institutions also do not evolve and depend more on decisions of state government or local authorities, state financing, etc. On the other hand, there is a relationship between the quality of the institutional environment of SMEs and the development of such entrepreneurship, first of all, through the provision of consulting, information, intermediary and educational services by the institutions that promote the effective operation of business entities.

The importance of forming an effective institutional environment for SMEs is reflected in the program documents at the state level. Thus, two of the three goals of the Strategy of the Development of SMEs in Ukraine 2020[1] are related with the infrastructure solutions. According to the Strategy, its successful implementation will contribute to the following goals: firstly, to the creation of the best conditions for business activity; secondly, building of the institutional capacity of the state to effectively formulate and implement the policy for entrepreneurship development; thirdly, to the development of the SME sector. The first goal involves the positioning of entrepreneurship as the basis for the economic development of Ukrainian society, deregulation reform, the creation of a competitive environment, the providing the SMEs the access to financial, property, natural resources, elimination of barriers to the external markets. Achievement of the goal is impossible without the formation of a network of institutions that help collecting financial resources, provide information support, and simplify access of SMEs to the foreign markets.

The second goal includes the following components: the possibility of studying entrepreneurship is open throughout the life; competence "entrepreneurship" is integrated into educational programs, providing a constructive dialogue between government and SMEs, ensuring wide access of SMEs to participation in public procurement, raising the level of statistical and analytical awareness of state authorities about the SME sector. The achievement of the third goal will be the increasing of the competitiveness of Ukrainian SMEs and the added value generated by SMEs.

To implement the Strategy, it is necessary to move from the existing institutional environment of SME support to an effective one [Sych, Volos 2018]. According to the results of an expert survey of the Center for Public Evaluation,[2] the vision of an effective infrastructure for supporting and developing entrepreneurship in Ukraine became known.

The expert opinion of the institute, which is responsible for implementing the state strategy in the field of SME has been divided. One half – 54% of the respondents - consider necessity of transferring all powers to the specialized state agency for the development of small and medium enterprises (to create a new in-

[1] Strategy for SME development in Ukraine by 2020, https://issuu.com/mineconomdev/docs/short_sme_strategy_apr2017_revas [accessed: 19.10.2019].

[2] Center of Public Expertise, http://expertise.org.ua/ [accessed: 19.10.2019].

stitution like the European ones), and 43% of the respondents decided to leave the opportunities to the Ministry of Economic Development and Trade. Obviously, both variants have their supporters, advantages and disadvantages, so the choice of the state regulator in this area requires additional discussion and consultations for reaching consensus.

According to experts, the most effective business support institutions were entrepreneurs associations (89%), business incubators (65%), cluster associations (60%) and professional associations (57%).

The existing SME support infrastructure in Ukraine in 2018 includes business centers (447 units), business incubators (82 units), technology parks (58 units), leasing centers (447 units), non-bank financial institutions (2812 units), entrepreneurship support funds (216 units), investment and innovation funds and companies (2825 units), information and advisory institutions (4054 units)[3]. In general, there are about 11,000 institutions and organizations of different levels, forms of ownership, and sources of financing, founders' structures and kinds of activity. Certain institutions only partially relate to the support of the SMEs (such as non-bank financial institutions and leasing centers), others are created exclusively for small and medium-sized enterprises (business incubators, business support funds). However, a significant number of institutions do not indicate the stability of their work, as well as the effectiveness of the support they provide to SMEs. According to respondents, existing associations of entrepreneurs, business incubators and other types of institutions need strengthening and development, as well as stimulating the creation of new organizations at all levels. The table shows the growth rates of quantitative indicators in terms of types of institutions. Most institutions show unstable or negative growth rates in the last period – there is a reduction in the network of such institutions and organizations.

Making comparison with the number of newly created small and medium enterprises (including private entrepreneurs), you can see the following trends:

– in general, the growth of the number of registered SMEs was accompanied by an increase in the number of institutions that promote the development of SMEs in 2018;

– in 2014 there was a significant reduction in the number of institutions against the backdrop of an increase in the number of small businesses;

– the dynamics of the number of institutions and SME entities allows to divide the infrastructure objects into three groups. In the first group we have such institutions whose appearance is slightly correlated with the number of SME entities (non-bank financial institutions, investment companies, business centers). In the second group we have institutions showing a negative correlation with the amount of SMEs (leasing centers, entrepreneurship funds). And in the third group

[3] State Statistics Service of Ukraine,.http://www.ukrstat.gov.ua/ [accessed: 19.10.2019].

we have institutions with a high degree of correlation (technology parks, business incubators).

Consequently, there is a relationship between the creation of institutions that support the development of SMEs and the number of SMEs that appear in the country. According to the statistics, only business incubators and technology parks demonstrate a positive trend. At the same time, it is the business incubators that experts have chosen as the best promotion institutions for SMEs. Therefore, we consider it necessary to intensify the creation of business incubators and technology parks with the expansion of the range of services provided there and the implementation of emphasis on the innovative component.

SME support institutions should offer a wide range of quality services, also the portfolio of services of each institution should include different types of support. According to experts, the most popular services are the protection of entrepreneurial rights in relations with controlling institutes (84%), financial and credit support (73%). Trainings and workshops, consulting support, joint marketing of products (services) and advocacy of interests in relations with the authorities as demanded services, received more than half of the votes (from 57% to 62%).

3. Conclusions

Proceeding from the experience of European countries and analysis of the domestic situation, we consider that business incubators and technoparks have a leading role in creating the favorable business environment for SMEs. Techno parks allow to get:

– consulting and training services (in particular, in the field of legal protection, accounting and payment of taxes, commercialization of technologies, marketing researches);

– technological consulting (technological audit, management, strategic planning);

– administrative services (provision of office, conference hall, parking, areas for recreation);

– specific services of the techno park (laboratories, space for researches, transport and communication infrastructure, technology transfer);

– cooperation with research institutes (universities, scientific institutes);

– access to financing (simplify the search for interested investors, venture financing, EU grants);

– marketing and promotional events;

– simplified contact with other SMEs – potential partners.

Creating a business incubator as a separate business entity that has its own property and budget allows SMEs to start their activities in favorable conditions because of:

– attractive conditions in the price terms of lease of premises;
– administrative and office service;
– business counseling (forming a company profile, accessing legal assistance, patenting, information and technology provision, accounting);
– opportunities for «spin-off» as newly created SMEs, based on the close collaboration of the research institution and the business environment;
– platforms for innovative startups and crowd funding.

References

Berezhnyy Y.V., 2014, *Problemy ta shlyakhy stvorennya spryyatlyvoho instytutsiynoho seredovyshcha dlya pidpryyemnyts'koyi diyal'nosti v Ukrayini: analitychnyy zvit* [Problems and ways of creating favorable institutional environment for business activities in Ukraine: analytical report], Kyiv.
Center of Public Expertise, http://expertise.org.ua/ [accessed: 19.10.2019].
Dominiak J., 2013, Rola otoczenia biznesu w rozwoju regionalnym w Polsce [The role of the business environment in regional development in Poland], *Prace Komisji Geografii Przemyslu Polskiego Towarzystwa Geograficznego*, 22, 44-64.
Pasinovych I.I., Yasinovska I.F., 2015, Rehional'ni aspekty aktyvizatsiyi pidpryyemstva [Regional aspects of enterprise activation], *Naukovyy chasopys Khersons'koho derzhavnoho universytetu*, 13(1), 114-118.
State Statistics Service of Ukraine, http://www.ukrstat.gov.ua/ [accessed: 19.10.2019].
Strategy for SME development in Ukraine by 2020, https://issuu.com/mineconomdev/docs/short_sme_straegy_apr2017_revas [accessed: 19.10.2019].
Sych O.A., Volos I.I., 2018, Suchasnyy stan ta umovy kredytuvannya maloho ta seredn'oho biznesu v Ukrayini [The current state and conditions of lending to small and medium businesses in Ukraine], *Molodyy vchenyy*, 2(54), 421-424.
Vasyltsiv T.G., 2009, Polipshennya instytutsiynoho seredovyshcha maloho biznesu v malykh mistakh [Improving the institutional environment of small businesses in small towns], *Stratehichni priorytety*, 3(12), 184-190.
Zaplatynskyy M.V., 2008, *Instytutsiyna pidtrymka rozvytku maloho biznesu v rehioni* [Institutional support of small business development in the region], extended abstract of PhD thesis, Lviv.

Regionalne aspekty rozwoju małych i średnich przedsiębiorstw

Streszczenie. *W artykule omówiono wpływ otoczenia instytucjonalnego na aktywację małych i średnich przedsiębiorstw (MŚP). Dokonano analizy dynamiki głównych wskaźników środowiska instytucjonalnego i podano liczbę MŚP. Scharakteryzowano związek między poziomem rozwoju otoczenia biznesowego a dynamiką MŚP, obliczono współczynniki korelacji między dynamiką tworzenia instytucji wsparcia dla biznesu a zarejestrowaną liczbą MŚP. Stwierdzono, że najbardziej skutecznymi mechanizmami wsparcia instytucjonalnego i sposobami poprawy otoczenia instytucjonalnego MŚP są upowszechnianie międzynarodowej praktyki tworzenia inkubatorów przedsiębiorczości i parków technologicznych, rozszerzanie zakresu usług świadczonych na rzecz MŚP.*

Słowa kluczowe: *sektor MŚP, otoczenie instytucjonalne, otoczenie biznesu, wsparcie instytucjonalne, inkubatory przedsiębiorczości, parki technologiczne*

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Joseph Ohimor

SGH Warsaw School of Economics
Collegium of Management and Finance
orcid.org/0000-0001-5600-6637
e-mail: johimor@hotmail.com
phone: +48 601 259 357

Significance of Female Entrepreneurship in Rural Development

Abstract. *The article presents Poland's rural area as a significant social-cultural and economic entity, whose main sustenance, agriculture has declined in recent years. The economic activity of the rural populace, including rural females and their potential for rural development is elaborately discussed. Activating the female population through female rural entrepreneurship is presented in the article as a potential stimulant of rural economic development. The study relies on the analysis of secondary data sourced from statistical records (GUS/CSO), government ministerial publications and findings of empirical studies. The article contributes to research in the field of female entrepreneurship and rural development.*

Keywords: *rural development, female entrepreneurship, rural women, diversification, skills acquisition*

1. Introduction

Agriculture has been acclaimed the most potent and enduring symbols of Poland's rural development and sustainability. The liberalization of economic life, privatization and commercialization, following the systemic transformation of 1989 and Poland's ascension to the European Union in 2004 resulted in some farming families setting up their own businesses. For some, on-farm generated incomes were no more the only or main source of household income, but secondary, having given grounds for the flourishing of non-farming businesses [Szepelska 2014].

Some consequences of the changes are declining agrarianism and rural depopulation. Encouraging development of agribusinesses in rural areas, including the entrepreneurial skills of farmers for a competitive agricultural sector remains a cornerstone of the EU's framework for rural development 2014-2020 under the Common Agricultural Policy (CAP).

There has been increased concern on female entrepreneurship and rural development in the agricultural and social sciences. However, majority of these often concentrate on the roles of women in rural farm households. Very little study has been devoted to understudying the potentials of rural women entrepreneurship for sustainable rural development. Hence the objective of the paper is to draw attention to the abundance of labour reserve, especially females, based on available statistical data from GUS, thus contributing to the debate on investing in female entrepreneurship as a potential driver of rural development and sustainability.

2. Rural Poland: characteristic features

The rural landscape constitutes a key driver of Poland's socio-cultural and economic development, accounting for as much as 93% of Poland's total land area and providing residence for about 40% of the population in 2010 [Terelak 2012; GUS 2012; OECD Poland 2018]. Moreover, over 40% of all unregistered (hidden) unemployment in Poland reside in rural areas, majority (80.2%) of which are men and women, related to agriculture, below 34 years of age [Nurzyńska, Wilkin 2012; FIR 2011]. Table 1 is an illustration of the state of rural labour force compared to overall national data between 2010 and 2018. Hidden unemployment refers to the percentage of the population that do not seek gainful employment

Table 1. Economic activity of persons aged 15 and more regarding employment status and place of residence in Poland in 2010-2018

Years	Poland				Rural areas in Poland			
	Total (thsd)	Hidden unemployment (%)	Employment rate (%)	Unemployment rate (%)	Total (thsd)	Hidden unemployment (%)	Employment rate (%)	Unemployment rate (%)
2010	30955	44.6	50.2	9.3	11904	44.7	50.3	9.0
2012	31050	44.0	50.4	10.1	12062	43.6	50.8	10.0
2014	30970	43.7	51.7	8.1	12144	43.8	51.4	8.5
2016	30696	43.7	53.2	5.5	12171	43.6	52.9	6.1
2018	30411	46.0	54.0	3.8	12148	44.3	53.4	4.2

Source: own elaboration based on OECD Polska 2018; Nurzyńska, Wilkin 2018; Polska Wieś 2018; European Commission 2018.

despite being unemployed and therefore not covered by the official unemployment figure.

Poland's agriculture has been influenced by two predominant features namely, diminishing agrarianism, and intense fragmentation. The diminishing agrarian role of the rural sector is manifested in its inability to generate enough new jobs to cater for the employment needs of rural dwellers. The intensity of farmland fragmentation varies across Poland. The greatest is in Podkarpacie province with average farm size of 3.5 ha compared to Poland's average of 8.3 ha [Stanny, Rosner, Komorowski 2018].

Small scale production impacts significantly on the functioning, profitability and income generation of farm holdings. Poland's rural area with over 2.5 million farm holdings [GUS 2009] contributed 26.3% of the GDP in 2000, diminishing to about 25% in 2009 and 2014 respectively [OECD Poland 2018]. This has encouraged members of rural households to seek employment in non-farm related businesses [McElwee 2005].

3. Economic down-turns

The poor availability of non-farm related businesses in rural areas, coupled with their limited employability has spurred rural-urban migration, especially by skilled working age persons [Nurzyńska, Wilkin 2012]. Studies show that the male population with ready skills moves more readily [Weist 2016; OECD Polska 2018]. The result is rural depopulation, leaving the women and the post-production age (65 and over) behind. The role of females in rural economic life has registered a slow but steady growth from 46.6% in 2006 to 48.4% in 2011. The impact of the three phenomena, declining agrarianism, intense fragmentation and depopulation, has continued to exert pressure on farming households to become more entrepreneurial and multifunctional in approach, diversifying into non-farming rural business to improve the economic attractiveness of rural life. This is corroborated by the view held by the Dutch government that sees diversification in agribusiness as a stimulator of growth and development of the rural area [McElwee 2005].

Traditional agricultural farming business cannot be said to be profitable and attractive enough to sustain farm holdings. Better earning opportunities in urban areas encourage emigration from rural areas or share abandoning of farm holdings. A sizeable percentage of respondents with non-agricultural education in a 2012 survey ($N = 3200$) by Focus Group and Centrum Rozwoju Społeczno-Gospodarczego amongst rural women indicated their willingness to quit on-farm work and/or rural life (Chart 1).

4. Rural entrepreneurship and development

The need to initiate measures to boost economic life for sustainable rural development seem overtly obvious. Studies conducted by Mickiewicz and Mickiewicz [2016: 90] indicate that a sizeable percentage of farm holdings obtained more than 50% of their overall incomes from non-agricultural activities. Various solutions have been suggested in subject literature including diversification of rural economic activity, investing and engaging in non-farming rural business activities, encouraging rural as well as female entrepreneurship.

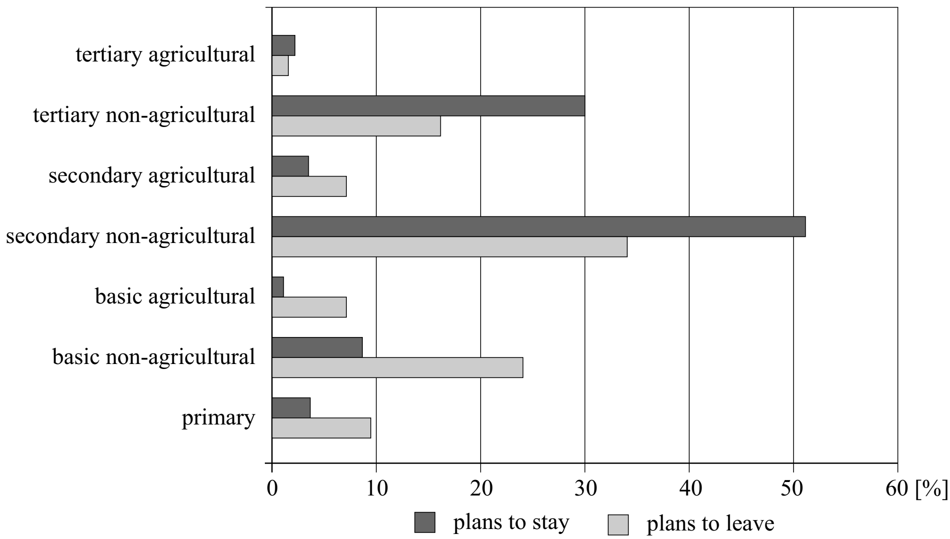
Managing own enterprises or being gainfully employed in rural enterprises is often suggested in literature [Rykowska, Sawicka, Stolarczyk 2013; Grotkiewicz, Peszek 2016; Otłowska, Buks, Chmieliński 2006] and amongst policy makers [OECD, Polska 2018] as a means for sustaining rural development and meeting the 2014-2020 goals of rural development framework. Poland's rural areas boast of abundant, still untapped potential, human resources, in the form of actively unemployed and hidden unemployed persons (Table 1), that could attract investments in non-farming business capable of generating employment and reasonable incomes for the sustenance of rural households. This does not seem to have happened as rural depopulation has continued unabated.

One emerging fact is that despite the low productivity and profitability of agriculture [Szepelska 2014: 151], non-farming business has not flourished to take advantage of the available labour (Chart 1). Indeed, incomes from non-agricultural work ranged between 10-30% for most farming families in 2013 [OECD Polska 2018]. The question that arises at this point is if anything can be undertaken by policy makers interested in rural development and sustenance to unleash the potentials existing in rural Poland? It is the contention of this paper that female entrepreneurism can be the untapped link.

5. Female entrepreneurial potentials

Empirical studies conducted on *Situation of women in agriculture and in rural areas* in 2011 [Terelak 2012] indicated that 51.4 % and 30.3% of females, holders of secondary and tertiary non-agricultural qualifications, respectively want to be attached with rural life, while another 27% aspire to gain employment in non-agricultural businesses (Chart 1). The study also revealed that women constituted more than half of the hidden unemployment in rural areas in 2010. Moreover, only about 30% of women respondents in a study conducted by the Ministry of Agriculture and Rural Development in rural areas declared having a professional qualification [Sikora 2014]. An earlier report put together by the Focus Group in

Chart 1. Rural female population in Poland, aged 15 and more, their education and residence intentions



Source: own elaboration.

2011 indicated that a mere 21.7% of rural women, aged 15-64 years, claimed to possess a tertiary degree. The conclusions from these studies are pointers to two facts. First, there is abundance of potential labour force, females, in rural areas. Second, based on deduction since there is lack of comprehensive data on the issue, is that a large chunk of females in rural Poland may not have the necessary skills and competences to fulfill the employment requirements of in-coming businesses or to efficiently manage own businesses. This is reflected in the EU sponsored study which concluded that women living and working in the countryside would willingly spend their lives in rural communities if provided the opportunity to gain professional experience and raise their qualifications, thus improving their skills, competences and employability, amongst others [European Commission 2000; Grotkiewicz, Peszek 2016].

Rural non-farming employment is achievable via two approaches namely, inflow of new enterprises or self-employment by rural women. The high rate of women, with non-agricultural qualifications, willing to abandon the rural communities is an indication that job offers from inflowing enterprises have been limited and discouraging. What, then makes the rural area unattractive for business investors? A report put together by Polish Society for Social Policy under the Sectoral Operational Program "Human Resources Development" [Auleytner 2007] provides the following, amongst others, as barriers to rural investments:

– bureaucratic difficulties in registering and setting up enterprises,
– lack of vision and strategy by local government authorities, especially in designing social policies regarding rural women,
– rather passive approach by local authorities in creating employment as well as attracting entrepreneurs,
– limited demand existing in rural markets,
– lack of rural entrepreneurs,
– an entrepreneurial ecosystem that is lacking in advisory and training institutions, information sources as well as service and media providers.

Entrepreneurship is generally accepted as a driver of economic development, rural development and sustainability. In deed the European Commission's Green Paper on Entrepreneurship in Europe which emphasis the need for Europe to encourage entrepreneurial drives for more efficiency [European Commission 2003: 2] defines entrepreneurship as "a mindset and process to create and develop economic activity by blending risk-taking, creativity, and/ or innovation with sound management within an organization" [McElwee 2005; European Commission 2003]. This reflects Man et al. 2002 [Ohimor 2017] competency clusters namely, opportunity, relationship, conceptual, organizing, and strategic and commitment competencies. Two questions arise following the EC definition. First, does the rural woman have the mindset to set up and grow a rural enterprise and provide employment, thus contributing to rural development? Second, does the local environment, political and social institutional frameworks, facilitate females' efforts to develop non-agricultural businesses? The questions suggest activating rural women by demonstrating to them the possibility and benefits of combining family and professional roles.

Table 2. Factors militating against female entrepreneurship in Poland's rural areas

Objective factors	Subjective factors
– distance to educational institutions – lack of care facilities for babies and the elderly – difficulties communicating to work places – limited access to the Internet – lack of job offers in their closest localities – inconsistency between qualifications of rural women and labour market requirements – non-availability/ scarcity of training offers (rebranding) for adult rural females – inadequate possibilities of employment with flexible working patterns – limited access to financial institutions	– burdens of family roles as family carers – passive attitudes in seeking employment – lack of motivation to accept job offers – low motivation to undertake lifelong learning – lack of faith in one's capabilities – gender discrimination in work places – insufficient interest in the use of business advice networks – low entrepreneurial culture amongst rural women

Source: own elaboration based on Sikora 2014; Terelak 2012; OECD Polska 2018.

Rural women have, however, faced upheavals in their attempts to marry tasks of household maintenance with working outside their local communities. Some barriers rest within the rural women themselves, e.g., their feeling of embarrassment in new work situation [Sikora 2014], their readiness to ditch ambitious carrier plans for the well-being of their families as well as their passive attitude in searching for work [Terelak 2012]. Women also have the tendency to perceive themselves as deficient in entrepreneurial skills [OECD 2018]. However, the most commonly mentioned hurdles to female entrepreneurship in rural Poland can be grouped into objective and subjective factors (Table 2).

Other factors also mentioned in subject literature include: difficulties in accessing investment capital, almost inexistent or ineffective entrepreneurial networks as well as discouraging tax policies of local governments, access to mentors and cultural ideals of strong women business.

6. Supporting female entrepreneurship for rural development

Female population in rural Poland constitute a significant force that cannot be neglected in matters of improving quality of life for rural development and sustainability. It seems obvious, therefore to implement programs encouraging the development of non-agricultural sources of incomes for rural females. This seems to reflect the opinion of the International Labour Organization [ILO 2016] regarding fostering rural development. This is also supported by an interview-based study conducted by the Development Initiatives Forum (FIR) of the European Fund for the Development of Rural Poland in 2011 [FIR 2011], confirming the need for rural entrepreneurs, including female, to possess key skills and competences as:

– managing, organizing and planning competences,
– capital acquisition skills,
– creativity,
– risk-taking,
– communication and networking skills,
– visionary and opportunity catching skills,
– problem-solving and crisis management skills.

If female entrepreneurship is to enhance development, then measures ought to be taken to eliminate or reduce impacts of some of the listed barriers and also provide skills acquisition opportunities. Such measures, commonly mentioned in relevant literature [MRiRW 2014] include:

– improving access to education and training for skills acquisition. Effective ownership and management of non-agricultural enterprise requires the possession of technical and managerial competences,

– developing rural transportation infrastructures to enhance mobility,

– provision of social infrastructures – care centres for children and dependent aged persons,

– creating business favourable environments through relevant policies to encourage business inflows to rural areas, e.g., preferential lending for rural targeted businesses,

– advancing policies by governments, local and central, taking cognisance of women potentials for efficient rural development,

– encouraging women active participation in establishing rural micro businesses. Women need support in preparing documentations for financial support e.g., EU funds.

Poland has been implementing several programs to address these and other issues. One of such programs is the Rural Development Program for 2014-2020 (RDP 2014-2020), based on EU regulations, e.g., Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013, to provide support for rural, including female entrepreneurial development through the European Agricultural Fund for Rural Development (EAFRD). Also worthy of mention is the National Program for the Prevention of Poverty and Social Exclusion 2020. It is a new dimension of active inclusion by ensuring universal access to high quality education at all levels (including dissemination of lifelong learning, e-education, cultural education) and to culture, increasing the availability and quality of flexible forms of childcare, with particular emphasis on rural areas and small towns.

6. Conclusion

Sustaining Poland's rural areas is strategic, hence implementing development programs is paramount.

Non-farming activities have the potential to revitalize and sustain rural development in Poland. Indicators of rural-urban migration and unemployment, including hidden unemployment especially amongst the female population seem to suggest the opposite. This paper contends, however, that there is need for intensified skills and competence development of females in rural areas to achieve the goals of rural development and sustainability.

Despite the limitations of the paper, being based on secondary data, it contributes to knowledge about the role female entrepreneurship can play in rural development and adds to calls for increased female involvement in rural development.

References

Auleytner J. (ed.), 2007, *Wieloaspektowa diagnoza sytuacji kobiet na rynku pracy SPO RZL 1.6(b). Raport końcowy*, Warszawa.

European Commission, 2003, *Com Green Paper Entrepreneurship in Europe*, Brussels.

European Commission, 2014, *Agriculture and Rural Development. Rural development 2014-2020*, https://ec.europa.eu/agriculture/rural-development-2014-2020_en [accessed: 17.07.2019].

European Parliament Resolution of 12 March 2008 on the situation of women in rural areas of the EU (2007/2117(INI)), Strasbourg.

Forum Inicjatyw Rozwojowych, 2011, *Bariery instytucjonalne rozwoju przedsiębiorczości na obszarach wiejskich*, https://www.efrwp.pl/raporty/show/year/2011 [accessed: 16.07.2019].

Grotkiewicz K., Peszek A., 2016, Czynniki kształtujące wydajność pracy kobiet zatrudnionych w rolnictwie w krajach Unii Europejskiej, *Problemy Drobnych Gospodarstw Rolnych*, 4, 57-68.

GUS/CSO, 2009, *Rocznik Statystyczny Rzeczypospolitej Polskiej*.

GUS/CSO, 2011, *Rocznik Statystyczny Rzeczypospolitej Polskiej*.

ILO, 2016, *Women's Entrepreneurship Development*, https://www.ilo.org/empent/areas/womens-entrepreneurship-development-wed/lang--en/index.htm [accessed: 17.07.2019].

McElwee G., 2005, *Developing entrepreneurial skills of farmers. A Literature Review of Entrepreneurship in Agriculture*, http://www.esofarmers.org/documents/ESoFliteraturereview [accessed: 16.07.2019].

McElwee G., 2006, Farmers as entrepreneurs: developing competitive skills, *Journal of Developmental Entrepreneurship*, 11(03), 187-206.

MRiRW, 2014, Program rozwoju obszarów wiejskich 2014-2020, https://www.gov.pl/web/rolnictwo/-program-rozwoju-obszarow-wiejskich-2014-2020-prow-2014-2020 [accessed: 17.07.2019].

MRPiPS, 2018, *Przeciwdziałanie ubóstwu w Polsce*, https://www.gov.pl/web/rodzina/przeciwdzialanie-ubostwu-w-polsce [accessed: 16.07.2019].

Nurzyńska I., Wilkin J. (eds.), 2011, *Raport o stanie wsi. Polska wieś 2010*, Warszawa: FDPA, Scholar.

OECD, *Przeglądy polityki rozwoju obszarów wiejskich. Polska 2018*, https://www.oecd.org/cfe/oecd-przeglady-polityk-rozwoju-obszarow-wiejskich-polska-2018-9788376106625-pl.htm [accessed: 16.07.2019].

Ohimor J., 2017, Owner/Manager Core Competencies in Enterprise Performance in SMEs – Selected Competency Models, *Przedsiębiorstwo i Region*. *Prace Naukowe Uniwersytetu Rzeszowskiego*, 10, 23-37.

Otłowska A., Buks J., Chmieliński P., 2006, *Przedsiębiorczość na obszarach wiejskich-stan i perspektywy rozwoju*, Warszawa: Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej.

Rykowska J., Sawicka J., Stolarczyk P., 2013, Przedsiębiorczość na obszarach wiejskich z perspektywy gender, *Polityki Europejskie, Finanse i Marketing*, 10(59), 607-619.

Sikora J., 2014, Społeczno-zawodowa sytuacja kobiet w procesie przemian obszarów wiejskich w Polsce, *Journal of Agribusiness and Rural Development*, 4(34), 137-145.

Stanny M., Rosner A., Komorowski Ł., 2018, *Obszary wiejskie w województwie podkarpackim na podstawie badania monitoringu rozwoju obszarów wiejskich (MROW). Etap III*, Rzeszów – Warszawa: Instytut Rozwoju Wsi i Rolnictwa PAN.

Szepelska A., 2014, Przedsiębiorczość kobiet szansą na rozwój obszarów wiejskich, *Organizacja i Zarządzanie. Zeszyty Naukowe Politechniki Poznańskiej*, 62, 147-158.

Terelak A., 2012, *Sytuacja kobiet w rolnictwie i na obszarach wiejskich: specyfika, standardy, parytety i oczekiwania*, Warszawa: MRiRW.

Znaczenie przedsiębiorczości kobiet w rozwoju obszarów wiejskich

Streszczenie. *W artykule przedstawiono obszar wiejski w Polsce jako znaczący podmiot społeczno-kulturowy i gospodarczy, którego główne źródło utrzymania, tj. rolnictwo, podlega w ostatnich latach dynamicznym zmianom. Omówiono aktywność gospodarczą ludności wiejskiej, w tym kobiet zamieszkałych na terenach wiejskich. Aktywizacja populacji kobiet poprzez rozwój przedsiębiorczości tej grupy została przedstawiona jako potencjalny czynnik stymulujący rozwój gospodarczy obszarów wiejskich. Badanie opiera się na analizie danych wtórnych pochodzących z rejestrów statystycznych (GUS, CSO), rządowych publikacji ministerialnych oraz wyników badań empirycznych. Artykuł wpisuje się w nurt badań w zakresie przedsiębiorczości kobiet i rozwoju obszarów wiejskich.*

Słowa kluczowe: *rozwój obszarów wiejskich, przedsiębiorczość kobiet, kobiety wsi, dywersyfikacja, zdobywanie umiejętności*

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• ORCID number
• phone number, e-mail address, mailing address
• title of book/paper in English and Polish
• summary in English and Polish (up to 1000 words including spaces)
• keywords in English and Polish (up to 8 words)
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• body text – organized into chapters, each with unique title
• conclusion (findings, recommendations)
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Size limit – up to 40 000 characters (roughly 22 pages, 1800 characters per page) including tables and figures

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Page numbering – continuous throughout the text, using Arabic numerals, placed at the bottom of page (footer)

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• foreign (non-vernacular) words and expressions: *italicized*
• people's names: give full name (including all given names and last name) at first mention; for any further references – quote last name only
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Spenner P., Freeman K., 2012, To keep your customers, keep it simple, *Harvard Business Review*, 90(5): 108-114.
• **books** – last name and first name initial of author/editor, publication year, *title of book* [*italicized*], place of publication [colon], publisher:
Lane W.R., King K.W., Reichert T., 2011, *Kleppner's Advertising Procedure*, Upper Saddle River, NJ: Prentice Hall.
• **chapters in edited books** – last name and first name initial of chapter author, publication year, title of chapter [not italicized], in: first name initial(s) and last name(s) of editor(s) (ed. or eds.), *title of edited book* [*italicized*], place of publication [colon], publisher, page range:
Cornwall W., 1991, The Rise and Fall of Productivity Growth, in: J. Cornwall (ed.), *The Capitalist Economies: Prospects for the 1990s*, Cheltenham, UK: Edward Elgar, 40-62.
• **legislation**
Council Directive 90/365/EEC of 28 June 1990 on the right of residence for employees and self-employed persons who have ceased their occupational activity.
Act of 4 February 1994 on Copyright and Related Rights, Journal of Laws No. 24, item 83, as later amended.
• **studies and reports**
World Energy Council, 2013, *World Energy Resources: 2013 Survey*, London.
• **online sources** [in square brackets, indicate when website was last accessed]
www.manpowergroup.com [accessed May 28, 2015]

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- **rozdział pracy zbiorowej** – nazwisko autora rozdziału, inicjał imienia, rok, tytuł rozdziału (prosto), w:, inicjał imienia, nazwisko redaktora + (red.), *tytuł pracy zbiorowej* (kursywą), miejsce wydania: wydawnictwo, zakres stron:
  Michalewicz A., 2001, Systemy informacyjne wspomagające logistykę dystrybucji, w: K. Rutkowski (red.), *Logistyka dystrybucji*, Warszawa: Difin, 102-123.
- **akt prawny**
  Ustawa z dnia 8 marca 1990 r. o samorządzie gminnym, t.j. Dz.U. 2001, nr 142, poz. 1591.
  Ustawa z dnia 19 listopada 1999 r. Prawo działalności gospodarczej, Dz.U. nr 101, poz. 1178 z późn. zm.
  Dyrektywa Rady 2004/67/WE z dnia 26 kwietnia 2004 r. dotycząca środków zapewniających bezpieczeństwo dostaw gazu ziemnego, Dz. Urz. UE L 127 z 29.04.2004.
- **raporty, analizy**
  GUS, 2015, *Pomorskie w liczbach 2014*, Gdańsk.
- **źródło z Internetu** (w nawiasie pełna data korzystania ze strony WWW):
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- skróty użyte w tabeli – objaśnione pod nią

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