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Impact of business environment institutions on initiating and performing business activities

Summary: The creation of adequate conditions for business activities by business environment institutions may contribute to the overall economic development by attracting new investments and expanding the existing ones. The main aim of this research was to identify the potential changes in time concerning the importance of business environment institutions and their impact on initiating and operating economic activities, and to establish whether these changes were statistically significant. The research indicates that both the representatives of various business environment institutions and the entrepreneurs found that the measures implemented by institutions during the time of this research became more significant in comparison to the period of 10 and more years before. In addition, the impact of the measures implemented by all the institutions enumerated in the questionnaire was statistically different between the two periods under investigation.

Keywords: entrepreneurship, economic development, business environment institutions, entrepreneurs

Wpływ instytucji otoczenia biznesu na inicjowanie i prowadzenie działalności gospodarczej

Streszczenie: Tworzenie odpowiednich warunków do prowadzenia działalności gospodarczej przez instytucje otoczenia biznesu może przyczynić się do ogólnego rozwoju gospodarczego poprzez przyciąganie nowych inwestycji i rozszerzanie już istniejących. Głównym celem badań była identyfikacja potencjalnych zmian dotyczących znaczenia instytucji otoczenia biznesu i ich wpływu na inicjowanie i prowadzenie działalności gospodarczej oraz ustalenie, czy zmiany te są istotne statystycznie. Z badań wynika, że zarówno przedstawiciele instytucji otoczenia biznesu jak i przedsiębiorcy uważają, że działania realizo-
wane przez instytucje w czasie trwania badania nabrały większego znaczenia w porównaniu z okresem przed 10 i więcej lat. Ponadto, wpływ działań wdrażanych przez wszystkie wymienione w kwestionariuszu instytucje był statystycznie różny pomiędzy dwoma badanymi okresami.

Słowa kluczowe: przedsiębiorczość, rozwój gospodarczy, instytucje otoczenia biznesu, przedsiębiorcy

JEL: D02, L26, F63

Introduction

Running a business often carries a huge risk. Moreover, the decision to start a business is difficult due to the necessity to incur financial resources and the complexity of legal or tax regulations. Business environment institutions (BEI), which can help not only in starting a business, but also in running it, may be helpful in such a situation.

Review of the literature

Entrepreneurship has taken various forms depending on socio-economic systems. According to Griffin (2015), entrepreneurship is a process of organizing and conducting economic activity and taking the risk it involves. In turn, an entrepreneur is someone who organizes and conducts economic activity and takes the risk it involves. Entrepreneurship does not only involve starting new companies, but also launching new products, industrial processes, or services (Paz, Cabrer-Borras, 2019). Braunerhjelm et al. (2010) indicate that introducing innovations as well as launching new products or processes may not happen without an entrepreneur willing to perform these activities and take on risk. Therefore, the entrepreneurship capital is one of the factors generating external effects which contribute to the economic growth. Entrepreneurship enables the full utilization of tangible and intangible resources, knowledge and intellectual capital – and constitutes a foundation of modern economies.

Many scientific articles confirm that entrepreneurship is a major factor contributing to the economic growth (Baumol, Strom, 2007; Duran, Peralta, 2019; Paz, Cabrer-Borras, 2019; Wennekers, Thurik, 1999). This factor played a significant role in economies under transformation, which were going through a profound change in the institutional structure (Marks-Bielska, 2014). In the times of economic downturn, the importance of entrepreneurship increases. The authors of many publications (e.g. Aidis et al. 2008; Alvarez et al. 2011; Urbano, Alvarez, 2014) maintain that some of the economic growth can be attributed to specific institutional environment in which entrepreneurs operate. What is important for economic activities, and for the economy in general, are an effective state and law as formal institutions. Informal institutions are also of importance, as they shape the attitudes of entrepreneurs through acceptance or rejection of some business practices. The quantity and quality of regulations has direct impact on the amount of production generated by the business sector (Escandon et al., 2019).
Productive activity requires strong formal institutions and well executed, stable, and clear regulations for entrepreneurs. It is also important that formal institutions are assisted by informal ones – thank to informal rules there is an opportunity to encourage entrepreneurs to follow formal regulations (Godlewska, 2019).

Institutions may facilitate economic, political, and social interactions, creating incentives for various directions of business and guiding economic entities (Wierzbicka, 2013, Boettke, Coyne, 2009; Godlewska-Majkowska, 2018).

In the countries (regions) where effective institutions, among other things, secure property rights, maintain sustainable justice and judiciary system as well as the execution of contracts, curb the government’s desire to enrich itself through taxes and regulations, and are creative, there is higher probability that entrepreneurs will engage in productive business activities. On the other hand, in the countries deprived of strong institutions, the same entrepreneurs would be more willing to undertake non-productive practices or manipulations (e.g. in political or legal processes) (Knowles, Weatherson, 2006; Sobel, 2008; Fuentelsaz et al, 2019; Escandon et al., 2019).

Davidson and Mariev’s (2019) research indicates that the investment risk generated by the business environment has an adverse effect on decisions made by entrepreneurs concerning the location of business. Their research has confirmed the need for the creation of favourable institutional business environment.

Business environment institutions are part of the institutional background and play a vital role in the development of entrepreneurship in the region. By providing services of informative, advisory, technical, financial, or educational character, they create conditions conducive to the creation of new and expansion of existing enterprises (Lizińska et al., 2014; Lisowska, 2016).

Formal and informal institutions provide various opportunities and incentives to entrepreneurs. If these incentives promote productive business, entrepreneurs adapt their activities to these opportunities. However, if the cost of illegal business is much lower than the potential profit, entrepreneurs may engage in destructive or non-productive conduct (Aidis et al., 2009).

The expectations of entrepreneurs are in constant flux, which follows from changes in the economic and political system, scientific and technical progress and economic globalization. This calls upon the regulators of the business environment, who operate within certain legal limits, to adapt their services to these various expectations. It is impossible to launch and continue a business away from the institutional environment. Proper and skillful management of the business environment by institutions may contribute to the economic development of particular regions and attracting new investments or expanding the existing ones. This is what led to the following research hypothesis: H1: The role of business environment institutions in the perception of business location decisions is on the rise.

**Methodology**

The main aim of the conducted research was to determine whether the importance of the measures implemented by business environment institutions, which have impact
on initiating and conducting business activities, has changed in time and whether such changes have been statistically significant. The respondents were asked to evaluate the importance of these measures in two periods: 10 and more years before (1) and at the moment of the research, i.e. at the turn of 2017 and 2018 (2).

The achievement of the primary aim required the collection and comprehensive analysis of original data obtained through questionnaires performed with entrepreneurs and managers of BEI at the turn of 2017 and 2018.

The questionnaire were sent by post across Poland to randomly selected non-finance enterprises employing 10 or more employees. According to the Statistics Poland (GUS), in 2017 there were 72,739 non-finance enterprises operating in Poland which employed 10 or more staff. Assuming the maximum error of 5% and the level of confidence at 95%, the required number of enterprises which should take part in the survey stood at the minimum of 382. The questionnaire was answered by 391 respondents, which rendered the sample representative. The authorities of municipalities sent back 1257 properly filled questionnaires, which meant a 50.7% rate of return. In addition, 219 questionnaires were obtained from various business environment institutions – the rate of return was 27%.

Because the character of activities varied between different BEIs, the measures undertaken by these institutions to create conditions for business activities were comprehensively investigated.

In order to interpret the collected data, first the weight indicator was calculated to demonstrate the differences of perceptions of BEIs activities between the two periods. We used the following equation (Kola et al., 2005):

$$ W = \frac{\sum_i^k n_i w_i}{k \cdot N} $$

Where:
- $W$ – weight indicator
- $i$ – grade index
- $n_i$ – number of indications of a particular activity
- $w_i$ – grade corresponding to the factor location (weight indicator takes values between 0 and 1 – the higher the value, the more important the activity)
- $k$ – maximum grade on the scale from 1 to $k$
- $N$ – number of respondents who answered the question

The primary data obtained in this way was further investigated by the Kolmogorov-Smirnov and Shapiro-Wilk tests. On the basis of these tests, it was determined that the distribution of the variables used in the study was not consistent with the normal distribution, which is why the nonparametric Wilcoxon’s signed-rank tests were carried out. This enabled the determination of the incidence of statistically significant changes in the perception of BEI activities in time, by both entrepreneurs and representatives of BEIs.
Research results

By engaging in various activities, business environment institutions shape the institutional conditions for conducting business. The research assumed that the significance of the activities undertaken by BEIs for the initiation and continuation of business varies in time and increases with time. Table 1 includes synthetic evaluations (weight indicator) for the activities of the researched institutions – 10 years before and at the moment of the study. The weight indicator was first calculated separately for every activity. Then, the obtained weight indicators were averaged out, generating one indicator evaluating the significance of activities of particular institutions (table 1).

Taking into account the values of the weight indicator, the highest evaluated activities were undertaken in special economic zones (0.85), technological incubators (0.84) and marshal offices (0.84). The activities implemented 10 and more years before were most highly evaluated in special economic zones (0.84), regional development agencies (0.74) and investor service centers (0.74). The main aim of the research was to investigate whether the significance of the implemented activities had grown between the two researched periods. The research indicates that in the view of BEI representatives the largest increase in significance concerned the activities of such institutions as scientific and technological parks (change of 0.33 of the weight indicator value), technological incubators (0.33) and technology transfer centers (0.24). To sum up, what follows from the research is that all representatives of particular institutions maintained that the activities which were being implemented at the time of the research had grown in significance over the previous 10 years or more, as the difference in the evaluations of the two periods, calculated with the weight indicator, was positive and varied between 0.01 and 0.34 points.

Table 1 Significance of the activities undertaken by BEIs for the initiation and continuation of business 10 years before and in years 2017-2018 – evaluation by the representatives of institutions

<table>
<thead>
<tr>
<th>Activities implemented by:</th>
<th>Weight indicator for activities by particular institutions</th>
<th>10 or more years before</th>
<th>turn of 2017 and 2018</th>
<th>difference between studied periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Development Agencies</td>
<td></td>
<td>0.74</td>
<td>0.75</td>
<td>0.01</td>
</tr>
<tr>
<td>Investor Service Centers</td>
<td></td>
<td>0.74</td>
<td>0.75</td>
<td>0.02</td>
</tr>
<tr>
<td>Technology Transfer Centers</td>
<td></td>
<td>0.49</td>
<td>0.73</td>
<td>0.24</td>
</tr>
<tr>
<td>Loan Funds</td>
<td></td>
<td>0.70</td>
<td>0.78</td>
<td>0.08</td>
</tr>
<tr>
<td>Municipalities</td>
<td></td>
<td>0.64</td>
<td>0.75</td>
<td>0.11</td>
</tr>
<tr>
<td>Technological Incubators</td>
<td></td>
<td>0.51</td>
<td>0.84</td>
<td>0.33</td>
</tr>
<tr>
<td>Education and Training Centers</td>
<td></td>
<td>0.69</td>
<td>0.81</td>
<td>0.12</td>
</tr>
<tr>
<td>Scientific and Technological Parks</td>
<td></td>
<td>0.47</td>
<td>0.81</td>
<td>0.34</td>
</tr>
<tr>
<td>Special Economic Zones</td>
<td></td>
<td>0.84</td>
<td>0.85</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Source: elaboration based on own research results.
The results could confirm the research hypothesis if the study included only representatives of BEIs. However, to gain deeper insight into the significance of the measures implemented by BEIs for the initiation and continuation of business activities, the questionnaire was also addressed to entrepreneurs (table 2).

The results retrieved from evaluations made by entrepreneurs demonstrated that they ascribed the highest value to the measures implemented 10 or more years ago to municipalities (0.56), special economic zones (0.49) and loan funds and training centers (each 0.46). The ranking of the weight indicator of the measures implemented at the time of the research was nearly identical to that related to 10 or more years before; one difference was that indicators for particular institutions are all of a higher value, but the educational and training centers scored 0.02 point lower than loan funds. Summing up, all of the entrepreneurs admitted that the measures implemented by BEIs at the turn of 2017 and 2018 had grown in significance as compared to those undertaken 10 and more years before. Again, the difference between the two researched periods evaluated with the weight indicator was positive and varied between 0.07 and 0.10 points.

In the light of the weight indicator obtained from the study, the research hypothesis should be seen as corroborated, meaning that the role of the measures implemented by business environment institutions for decisions concerning business locations increases with time.

There is, however, a discernible difference in the values of the weight indicator between the replies obtained from the two groups of respondents: representatives of BEIs and entrepreneurs. The representatives of BEIs ascribed a higher value to their own activities than entrepreneurs did. What is more, the measures of the institutions which were given the highest grades (i.e. scientific and technological parks, technological incubators, and tech-

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Table 2: Significance of the activities undertaken by BEIs for the initiation and continuation of business 10 years before and in years 2017-2018 – evaluation by entrepreneurs

<table>
<thead>
<tr>
<th>Activities implemented by:</th>
<th>Weight indicator for activities by particular institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 or more years before</td>
</tr>
<tr>
<td>Regional Development Agencies</td>
<td>0.47</td>
</tr>
<tr>
<td>Investor Service Centers</td>
<td>0.37</td>
</tr>
<tr>
<td>Technology Transfer Centers</td>
<td>0.36</td>
</tr>
<tr>
<td>Loan Funds</td>
<td>0.46</td>
</tr>
<tr>
<td>Municipalities</td>
<td>0.56</td>
</tr>
<tr>
<td>Technological Incubators</td>
<td>0.36</td>
</tr>
<tr>
<td>Education and Training Centers</td>
<td>0.46</td>
</tr>
<tr>
<td>Scientific and Technological Parks</td>
<td>0.38</td>
</tr>
<tr>
<td>Special Economic Zones</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Source: elaboration based on own research results.
The study results suggest that entrepreneurs perceive the measures undertaken by institutions differently and grade them lower than those who manage these institutions. It is the entrepreneurs who engage in competition in the free market, securing sustainable growth for their businesses and generate profit. This is why representatives of BEIs should constantly monitor the needs of entrepreneurs (e.g. by maintaining direct contact, surveying their needs, monitoring social websites, etc.), and adapt their activities accordingly. Another important conclusion following from the responses to the questionnaire is the fact that municipalities were graded the highest by entrepreneurs, but graded themselves lower than the institutions of the highest indicator value. The municipality is where entrepreneurs complete administrative procedures before initiating the business activity and during its operation. Despite the fact that municipalities are also responsible for many other obligations not related to entrepreneurs and business, they are undoubtedly one of the most important institutions of the business environment.

The research has also used the nonparametric Wilcoxon’s side-rank tests. This enabled the determination of statistically significant changes in the perception of BEIs in time, both by entrepreneurs and BEI representatives (Table 3).

The results demonstrated that, as far as the evaluation by representatives of BEIs was concerned, only the measures undertaken by technology transfer centers, municipalities, education and training centers and scientific and technological parks were statistically different between the two studied periods. The results of the evaluation by entrepreneurs were completely different. According to entrepreneurs, the significance of the measures adopted by all of the enumerated institutions was statistically different between the two studied periods.

### Table 3: Significance of the activities undertaken by BEIs for the initiation and continuation of business 10 years before and in years 2017-2018 – evaluation by the representatives of institutions

<table>
<thead>
<tr>
<th>Measures implemented by</th>
<th>Wilcoxon’s side-rank test – weight level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>evaluation by institutions</td>
</tr>
<tr>
<td>Regional Development Agencies</td>
<td>0.682</td>
</tr>
<tr>
<td>Investor Service Centers</td>
<td>0.566</td>
</tr>
<tr>
<td>Technology Transfer Centers</td>
<td>0.019</td>
</tr>
<tr>
<td>Loan Funds</td>
<td>0.171</td>
</tr>
<tr>
<td>Municipalities</td>
<td>0.000</td>
</tr>
<tr>
<td>Technological Incubators</td>
<td>0.317</td>
</tr>
<tr>
<td>Education and Training Centers</td>
<td>0.034</td>
</tr>
<tr>
<td>Scientific and Technological Parks</td>
<td>0.003</td>
</tr>
<tr>
<td>Special Economic Zones</td>
<td>0.427</td>
</tr>
</tbody>
</table>

When $p<0.05$ it must be assumed that respondents’ answers are statistically significantly different.

Source: the authors, based on own research results.
Conclusions

The impact of business environment institutions on the decisions concerning the location of the business and then its operation is deemed to be significant and hence often emphasized in national and international literature. However, it has not been thoroughly investigated in Poland (across all Poland and with a comprehensive insight into opinions of not only BEI representatives, but also entrepreneurs themselves).

The research results corroborate the working hypothesis posed herein: the role of measures implemented by business environment institutions in the decisions about business location is increasing. All representatives of particular institutions maintained that their activities had grown in significance over the previous 10 or more years, which is confirmed by the difference in evaluations between the two studied periods, which was positive and ranged between 0.01 and 0.34 point. Also, all the entrepreneurs who took part in the study declared that the measures adopted by BEIs at the turn of 2017 and 2018 had become more important than those implemented 10 or more years before. The difference between the two studied periods measured with the weight indicator was positive and within 0.07-0.10 point.

On the basis of the weight indicator values achieved, a conclusion was drawn that entrepreneurs perceive differently and rank the activities of the business environment institutions less favourably than BEI managers do. This may follow from the fact that activities undertaken by BEIs are not properly adjusted to the needs of entrepreneurs. Therefore, BEI managers should constantly monitor the needs of entrepreneurs, using various instruments, not necessarily the most expensive ones. It is worth maintaining contact with the entrepreneurs who have already been serviced by these institutions. Another possible method could be short online questionnaires concerning the needs of entrepreneurs. Open internet forums are another source of valuable information, as this is where entrepreneurs may implicate obstacles in their business activities and what assistance they expect from institutions.

The research has also implicated out the institutions which were most favourably evaluated by entrepreneurs in the two studied periods, and in both cases the respondents pointed to municipalities. In light of the fact that municipalities are responsible for numerous tasks not related to the business sector, they are definitely underrated in terms of their positive impact on the creation of proper conditions for business activity, even by their own managers. The research results have demonstrated the significance of this institution for the shaping of proper business conditions.

References:


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