BARRIERS TO DEVELOPMENT OF THE INNOVATION POTENTIAL IN THE SMALL AND MEDIUM-SIZED ENTERPRISES IN POLAND

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Abstract. Small and medium enterprises have an important role in the Polish economy. They are a dominant type of business entities. In Poland, great importance is paid to the creation of conditions for the development of the sector of small and medium enterprises.

The trend of the last several decades towards increased integration of global markets or globalisation has meant that many companies are experiencing continuously increasing pressure to remain viable as their markets expand, and they begin competing with a larger number of companies. The SMEs in particular are vulnerable to these factors, since they tend to be disadvantaged relative to larger firms that generally have better access to funding and other resources. The ways in which SMEs operate to remain economically viable and contribute to the economic performance is of special interest to governments given the prominent roles that they play in most economies.

For SMEs, innovation is one way of surviving. In this paper, the author has presented the role of the innovation process in small and medium enterprises in Poland. The article presents the results of research on barriers to innovation in small and medium-sized enterprises located in the Malopolska province. The study was conducted in 2013.

Key words: small and medium-sized enterprises, barriers, innovation.

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Introduction

The sector of small and medium enterprises covers over 99% of all the enterprises in the Polish economy and they generate 35% of GDP. According to the investigations, over 65% of all the people employed by the Polish economy are employed in small and medium enterprises. Small and medium enterprises have a big impact on the improvement of functioning market competition mechanisms. The condition of efficient functioning of the market is the economy based on operation of a high number of small enterprises.

The number of small and medium enterprises in the economy considerably improves functioning of the mechanisms of market competition. A precondition for efficient functioning of the market is the economy based on a high number of small enterprises. Underdeveloped sector of small and medium enterprises results in the economic slowdown (Dziadkiewicz M., Calus T., 2011).

Several authors have highlighted various barriers faced by SMEs, such as non-supporting legal and regulatory environment, which is connected with complicated and unstable legal regulations; lack of market access due to negative image of SME work treated as an incompetent entity; limited access to

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finance, which contributes to low credit credibility that results in the impossibility of raising external capital; educational barriers, which manifest themselves in the imperfection of education, especially in the scope of marketing, finances and managing, limited business premises, lack of access to resources and technology, poor infrastructure, bureaucratic hurdles and a lack of managerial competencies (Goodwell M., Karabo M., Battle K., Mbohwa C., 2013).

The article presents the results of the research on barriers to innovation in small and medium-sized enterprises located in the Malopolska province. The study was conducted in 2013 and 250 companies took part in it. The research questions were related with innovation and the barriers to its development. This article also shows the characterisation of the SME sector as well as classification of the main barriers to the development of innovation in small and medium-sized enterprises.

Results and discussion

General characteristics of the SME sector

Small and medium-sized enterprises constitute the most important element of each economy. The highest increase in newly created jobs is noted in this sector, and such companies lose work much slower in case of the market collapse than larger businesses. The condition for efficient operating of the market is economy that is based on a big number of small enterprises.

The literature on the subject distinguishes two ways of determining the size of an enterprise including:

- quantitative criteria, based on the use of absolute magnitude measures, e.g. the number of employed persons, value of fixed assets or value of turnover etc.;
- qualitative criteria referring to non-measurable features, comprising among others innovativeness, creativity or management system on the basis of which the state or position of an enterprise among the other enterprises may be assessed (Piasecki B., 2001).

Experiences of many countries show that over the past decades small and medium-sized enterprises have been the group of businesses that in a decisive manner have affected the processes in economy.

Defining small and medium-sized enterprises according to the European Union criteria

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Micro-enterprises</th>
<th>Small</th>
<th>Medium-sized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>&lt;10</td>
<td>&lt;50</td>
<td>&lt;250</td>
</tr>
<tr>
<td>Annual income</td>
<td>-</td>
<td>&lt; EUR 7 million</td>
<td>&lt; EUR 40 million</td>
</tr>
<tr>
<td>Balance sheet</td>
<td>-</td>
<td>&lt; EUR 5 million</td>
<td>&lt; EUR 27 million</td>
</tr>
<tr>
<td>Independence</td>
<td>-</td>
<td>No more than 25% of capital or votes at the partner meeting may be owned by an enterprise that is not a SME</td>
<td></td>
</tr>
</tbody>
</table>

Source: Broda M., Szubra M., 2000, Small and medium-sized enterprises in the EU, Malopolska Investment Market, 1, pp. 11-13

According to the classification recommended by the EU directives, there are three types of enterprises: micro (employing up to 10 persons); small (employing between 10 and 49 persons) with annual turnover of less than EUR 7 million and the annual balance within EUR 5 million); medium-sized (respectively
between 50 and 249 employees, EUR 40 million, EUR 27 million) and big enterprises employing over 249 employees (Broda M., Szubra M., 2000).

A vast majority of companies in the SME sector are private businesses; thus, primarily private companies of this sector participate in generating of GDP (Zuzek D., 2008).

**Innovation concepts**

The term “innovation” can be understood or defined in many different ways that use common or opposed elements. Innovation can be defined as a change that leads to gaining profit for an individual, an enterprise, or for the whole society; moreover, this profit is not regarded as accounting profit but economic profit (Tabas J., Beranova M., Vavrina J., 2011).

Innovation is meaningful, dynamic, and developing process, which results in a positive change oriented towards improving of transformation process in enterprises and better satisfying of customer needs (Jac I., Rydvalova P., Zizka M., 2005).

Joseph Schumpeter is often referred to as the first economist who assigned significance to the concept of innovation in economics. The innovation has been specified as:

- the introduction of a new/improved product, generally referred to as *product innovation*;
- a new/improved process to a particular industry, commonly referred to as *process innovation*;
- changes in industrial organisation, both inter-organisational and intra-organisational such as the creation of a monopoly firm or a change in management structure. This is commonly termed as *organisational innovation*;
- opening of a new market: this includes targeting a niche market for the first time and is very likely to involve product innovation for obvious reasons; this gives a rise to the notion that these various types of innovation are often interconnected;
- new sources of supply of inputs into production: this strategic type of innovation includes inputs that may be raw materials and/or supplier products (Olsen J., Lee BC., Hodgkinson A., 2006).

The OECD definition describes an innovation as a restoration and widening of products and markets’ portfolio as a new designing, manufacturing and distributing methods, implementation of changes in work organisation and labour force skills etc. This definition recognises product, technological, and organisational innovation.

The present approach to innovation claims that innovation is a key word for entrepreneur and emphasises global approach to innovation as a philosophy (the way of managing enterprises), which influences all parts of transformation process in enterprise (marketing, research and development, planning, manufacturing, managing etc.) (Jac I., Rydvalova P., Zizka M., 2005). The ability to compete in innovation plays a very important role as a factor of enterprises’ competitiveness.

Innovation in all European countries is declared to be their priority, and many various programmes within the European Union are developed in order to support innovation activities in small and medium enterprises.

The most important barriers to enterprise development in Polish small and medium enterprises’ sector are shown in Figure 1.
Innovation activities are supported primarily by those business entities that are motivated by the competitive pressure, the necessity to develop and implement new technologies, to make production more effective, to penetrate into new markets, or react to the changes of business environment (Lesakova, 2007). There is no doubt that one can consider innovation to be a result, an instrument, and a way at the same time that enables an enterprise to overcome the mentioned necessities.

Innovation can be essential precondition for competitiveness of enterprises. However, there are many objective and subjective factors that limit the innovation potential of enterprises or that can even eliminate any innovative activities of enterprises. Therefore, these factors are regarded as barriers of innovation.

**Specification of innovation barriers**

Innovation barriers can be primarily divided into two groups, external or exogenous barriers, which cannot be influenced from the side of business entity, and internal or endogenous barriers objectively or subjectively occurring on the side of an enterprise where these barriers can be minimised or eliminated by the actions of a business entity.

The supply side barriers involve, e.g. scarcity of raw materials or unavailability of financial resources. The demand side barriers are connected with customers’ needs and their attitude to risk of innovation and with limitations of domestic or foreign market. The barriers of general environment consist of different government regulations, anti-trust interventions of the relevant government authorities etc.

The endogenous factors can be further divided into the factors that are connected with resources, i.e., for instance, lack of internal resources, technical and technological facilities or lack of time as well as those related to the corporate culture and corporate systems, e.g. obsolete management system and mainly the factors of human nature like manager’s perception of risk or employees’ attitudes toward changes (Tabas J., Beranova M., Vavrina J., 2011).
The author can distinguish the following barriers to innovation:

- **internal barriers:**
  1) lack of financial resources;
  2) inappropriate human resources;
  3) high costs;
  4) high risk.

- **external barriers:**
  1) business environment;
  2) lack of external opportunities;
  3) lack of information;
  4) lack of government support.

Innovation requires permanent overcoming of both types of innovation’s barriers mentioned above consisting especially of the forthcoming changes, which are inevitably connected with innovation processes. In its substance, innovation inevitably forces an enterprise to face more or less serious risk of both exogenous and endogenous factors (Tabas J., Beranova M., Vavrina J., 2011).

### Table 2

<table>
<thead>
<tr>
<th>TYPE OF BARRIER</th>
<th>CHARACTERISTICS</th>
</tr>
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<tbody>
<tr>
<td>Financial limitations of SMEs</td>
<td>1. High costs of innovation</td>
</tr>
<tr>
<td></td>
<td>2. Accessibility of external financial resources</td>
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<tr>
<td></td>
<td>3. High economic risk</td>
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<tr>
<td>Lack of qualified personnel</td>
<td>1. Finding and keeping qualified employees</td>
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<td></td>
<td>2. Employee resistance to change</td>
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<td></td>
<td>3. Management resistance to change</td>
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<td></td>
<td>4. Training of employees</td>
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<tr>
<td>Market</td>
<td>1. Growing competitiveness</td>
</tr>
<tr>
<td></td>
<td>2. Limited demand</td>
</tr>
<tr>
<td>Resulting from the policy regarding SMEs</td>
<td>1. Unfavourable government policy</td>
</tr>
<tr>
<td></td>
<td>2. Excessive fiscalism</td>
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<tr>
<td></td>
<td>3. Complicated tax system</td>
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<tr>
<td></td>
<td>4. Vagueness of tax regulations</td>
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<td></td>
<td>5. Limited public aid</td>
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<tr>
<td>Organisational barriers</td>
<td>1. Limited internal know-how of innovation management</td>
</tr>
<tr>
<td></td>
<td>2. Managing style</td>
</tr>
<tr>
<td></td>
<td>3. Bureaucratization of business entity</td>
</tr>
<tr>
<td></td>
<td>4. Corporate culture</td>
</tr>
<tr>
<td>Infrastructural</td>
<td>1. Difficulties and high costs of access to infrastructure</td>
</tr>
<tr>
<td></td>
<td>2. Technological parks and incubators</td>
</tr>
<tr>
<td></td>
<td>3. Knowledge sharing</td>
</tr>
<tr>
<td></td>
<td>4. External partners’ cooperation</td>
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<tr>
<td></td>
<td>5. Information about technologies</td>
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<tr>
<td></td>
<td>6. Marketing know-how</td>
</tr>
<tr>
<td>Social</td>
<td>1. Low mobility of the labour market</td>
</tr>
<tr>
<td></td>
<td>2. Inability to accept self-employment</td>
</tr>
</tbody>
</table>

Economic practice and the literature on the subject regarding the operation of small and medium enterprises in Poland enable one to differentiate a variety of barriers and difficulties that the SME sector encounters (Table 2).

The most important innovation’s barriers are defined as high costs of innovation, which have to be spent during the innovation process. If the factor of high innovation costs is put together with risk and uncertainty, which are inevitably connected with innovation process, another barrier to innovation appears.

It is the lack of internal financial resources needed and difficulties to access external financial resources. A significant risk of innovation, which is derived especially from high costs of innovation, is related with managers’ attitude to risk. Corporate management’s attitude to risk seems to be a serious innovation barrier, especially in SMEs, which usually have to face extremely limited financial resources.

This problem area is also associated with a lack of financial resources in SMEs. SMEs, compared with larger companies, are more sensitive to loss of qualified labour force than larger companies are, because the last ones are financially more stable business entities and usually present themselves as an attractive and prestigious brand.

Conclusions

Poland’s accession to the EU requires fast adjustment of Polish economy to the economies of other EU Member States in all aspects of its functioning. The whole adjustment process refers also to SME sector, and its chances to achieve competitive position on a common market largely depend on its ability to break down the barriers to development.

The aim of the paper was to determine the barriers to innovation, respectively the barriers to the development of innovation potential of small and medium-sized enterprises in Poland.

Based on the results of the given assessment, these barriers are as follows:

- lack of financial resources;
- structure of tertiary education that does not answer future needs of the industry;
- insufficient mutual relation between the research and development and business entities.

Bibliography

