AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

**EVALUATION OF INNOVATION ACTIVITIES
OF SMALL AND MEDIUM-SIZED BUSINESSES
IN SLOVAK REPUBLIC**

EVA SOPKOVA, PH.D.,
SILVIA KOSTIVIAROVA

Faculty of Economics
Matej Bel University, Slovakia

JEL Classifications: O31, O32

Key words: Innovation, innovation activities, small and medium-sized businesses.

Abstract: The aim of the presented paper is to contribute to the discussion on innovation activities of small and medium-sized businesses of the Slovak Republic and the European Union. It is based on the results of research carried out by the National Agency for the Development of Small and Medium Enterprises (NADSME), where the focus was on the innovation capacity of small and medium firms in Slovakia. And it was complemented by the results of an analysis of firms' innovation activities in the Banská Bystrica region carried out within the project "Regional Innovation Strategy of the Banská Bystrica Region".

ISSN: 1804-0527 (online) 1804-0519 (print)

PP. 18-19

The concepts of knowledge, science, research or innovation are frequently used in the 21st century. They are of great importance also for Slovakia, which has taken the pledge to support the building of the knowledge economy, with innovations being a major factor of its further development. Innovations are a key concept in the European Union as they are considered a driving force of the economy. Each business concerned with its position in the competitive environment has to keep coming up with new ideas. The focus is on innovating products, services as well as the related processes. It is a continuous process of transferring research outcomes to the practice.

The word innovation comes from a Latin word "innovatio", meaning renewal. The issue of innovations was in focus of Schumpeter before World War I, who worked out the theory of innovations. According to Lesakova (2008, p. 8), innovation is the activity of transforming a new idea into the practical life.

The OECD defines innovation as renewing and extending a range of products and services and the related markets; creating new methods of designing, manufacturing, delivering and distributing; introducing changes in management, organization of labour and work conditions and in the skills of the staff. In a broader context innovation means new approaches to doing business (Slavik, 2002, p. 43).

There are a number of definitions of innovation, out of which 38% consider it as an application of a new idea. 26% of definitions present innovation as a new idea, 16% of authors define it as a change for the better and 6% of authors consider innovation an invention. The remaining percentage (14%) represents a variety of different definitions of innovation (Kovalova, 2009, p. 183).

In order to make an objective assessment of innovation activities of individual countries of the European Union, the European Commission has made up an index based on 29 factors¹. According to the report the performance of the Slovak Republic is far behind the average of EU. Slovakia

has reached better results than Poland, but has lagged behind Hungary and the Czech Republic.

The National Agency for the Development of Small and Medium Enterprises (NADSME) carried out research to find out the innovation activity of small and medium-sized businesses. The sample was 1070 small and medium-sized businesses with staff up to 249, the majority of which (33%) deal with trading. The second biggest group (28%) was made up by businesses dealing with services in trading, 10% were businesses in the construction industry and the remaining 29% companies were businesses from different industries, where in each business their share was below 10%.

Based on the research, innovations are of great importance for Slovak businesses. Almost 3/5 of the responded businesses said that permanent innovation activity is part of their long-term business strategy. Between 2002 and 2004 1/8 of businesses launched a entirely new product and 1/3 reported a considerable improvement of their product. Then 1/7 of those who introduced a new or improved current technological activity, and/or launched or innovated a product answered that their product or technology has some kind of copyright protection. 6 in 100 businesses declared the leadership in introducing technologies within Slovakia. Considering the effect of the introduction of innovations almost 3/4 Slovak businesses reported an increased turnover. Almost one half respondents declared cutting costs on their business due to innovations.

The major supplier of innovations for Slovak small and medium-sized businesses is the business itself. 2/5 innovations are generated in a business's own research and development centers. In more than 1/3 businesses the developer of innovations is another business based in Slovakia and in less than 1/5 firms the supplier of particular solutions is a business from abroad.

Based on the research of the NADSME the financing of innovation activities is significantly provided from own resources, as reported by 9 in 10 businesses. The second major source of finance are bank loans, used by 1/4 businesses. Non-bank loans are less widely used in financing innovations; and the least used sources are grants from EU funds or from the state budget, venture capital or other sources.

In the following part we will make an analysis of innovation needs of business people on the basis of the

¹ See for details: European Innovation Scoreboard 2008: Comparative analysis of innovation performance at <http://www.proinno-europe.eu/metrics>

Regional Innovation Strategy of the Banská Bystrica Region. It is a long-term strategic document aiming to create conditions for innovations to become one of the major instruments of the region's development.

The aim of the research of the business people's innovation needs in the Banská Bystrica region (carried out within the project of the Regional Innovation Strategy) was to identify the attitudes to innovations and cooperation on innovation activities, constraints for innovation activity and other factors. There were selected 333 firms, but in the final phase only 108 of them made up the sample.

90% managers from all the firms answered positively, that they understand the role of innovations on all levels as means to achieve the business goals and that they develop and support new ideas leading to developing innovations. In about 90% businesses there are processes facilitating the creativity of the staff, but only 60% of the studied companies have a worked out system of rewarding for innovative ideas. Though the managers understand the importance of developing innovations at all levels, more than 60% firms have no innovation strategy.

Between 2004 and 2005 about 79.4% firms launched new or improved products onto the market, out of which 8.6% introduced only new services, 7.4% new products as well as new services, and 84% launched only new products. Almost 21% of the all studied businesses did not bring any product innovations in that period.

The answers to the question "Who developed the particular innovations?" reported that similar to businesses within the whole of Slovakia 52.9% of product innovations were developed by the business itself. 25.4% businesses developed innovations in cooperation with other businesses, domestic or foreign institutions. 21.6% businesses subcontracted another business or institution for the development of product innovations, which means they did not have sufficient internal capacity for their development. 48% firms answered that their product innovation was first introduced by their competitors and was new in the whole market, which can be considered a significant success in the area of introducing product innovations in a new market. 39.2% businesses said that their product innovation was new within the business, but not within the whole market.

The research report shows that the businesses either did not receive or did not apply for the finance from public sources. Beside other sources, the most firms got subsidies from the structural funds (8.8%) or from the government (7.8%).

Another question concerned the cooperation on innovation activities with other firms or institutions in the field of innovations. The cooperation was used by 51% of the responded firms, out of which 43.1% specified the area of cooperation.

In 2004 and 2005 businesses mostly cooperated on their innovation activities with suppliers of equipment, materials, components or software and also with clients and customers. In selecting the most efficient type of partner from the aspect of contribution to the development of innovations 31 businesses chose suppliers of equipment, materials, components and software. While 45 questioned firms chose their clients and customers. The weakest cooperation was developed with the government institutions (2 firms), competitors (6 businesses) and universities (7 businesses).

The most restricting factor for a business's innovation activities are costs, especially lack of finance within the business and a very high cost of innovations. Businesses consider missing information on possibilities to support innovations in the region as a major obstacle. Then they selected other factors in their free answers, above all problems in management and managerial processes. The following factor with a high impact is uncertain demand for innovated products.

Introducing innovations into practice increases competitiveness and contributes to new products and technologies. Based on the research of the National Agency for the Development of Small and Medium-sized Businesses almost 60% Slovak businesses have included innovation activity in their long-term business strategy. The businesses in Banská Bystrica also understand innovations and their positive effect on the development of the business. Yet, more than 60% have no worked out innovation strategy.

The reason for low innovation activity of businesses may be the fact they do not have enough financial resources and the cost of innovations is high. Only a small number of businesses obtained financial support from other sources, out of which the most of them obtained subsidies from the government and structural funds. Despite some improvement in the financing in the recent years Slovak small and medium-sized businesses are still behind other EU countries.

References

- Analýza inovačného potenciálu Banskobystrického kraja, 2008. Banská Bystrica, KB press.
- Inovačná kapacita malých a stredných podnikov. 2005. (online), Bratislava, NARMSP, Dostupné na internete: <http://www.nadsme.sk> (cit. 28.09.2009).
- Lesaková, L., 2008. "Inovácie - imanentná súčasť podnikania v globálnom ekonomickom prostredí", In: Determinanty inovačnej aktivity malých a stredných podnikov v SR. Banská Bystrica, Ekonomická fakulta UMB, pp. 7 - 20.
- Koval'ová, M., 2009. "Inovácie ako kritický faktor zvyšovania výkonnosti podniku v strategickom systéme merania výkonnosti", In: Inovácie - faktor konkurencieschopnosti malých a stredných podnikov v globálnom ekonomickom prostredí, Banská Bystrica, Ekonomická fakulta UMB, pp. 182-193.
- Slávik, Š., 2002. *Anatómia konkurenčnej výhody*, Bratislava: Ekonóm.