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INSTRUMENTS SUPPORTING INNOVATIVENESS OF POLISH ENTERPRISES

Abstract:

Competitive advantage of the enterprise may come from different sources. Undoubtedly, the important factors determining it must include the information potential of the enterprise. The company, providing an innovative, distinctive product, uses, so called, bonus for newness. This allows to achieve better competitive position and higher revenue, at least by the time of the achievement of skills and experience enabling the provision of a similar product by competitors. Polish government administration is interested in an increase of innovative potential of Polish enterprises. A higher innovative potential should amount to higher competitiveness of the whole Polish economy.
The major part of the paper includes the characteristics of the instruments which Polish government administration have prepared to support innovativeness of Polish enterprises. They have been characterized in the three major groups. The first one includes direct instruments which must be understood as the support given directly to entrepreneurs, another one includes the institutions supporting entrepreneurs and the last one refers to the instruments supporting business environment institutions.

Keywords:

innovativeness, competitiveness, strategy, enterprise, SME

JEL Classification: O32

Introduction

Effective competition requires from the enterprise to identify the sources of its potential competitive advantages and consider them in the overall development strategy of the company. The enterprise may achieve particular benefits as a result of the orientation towards building competitive advantage on the basis of innovation. The enterprise disposing of an innovative product obtains a premium for innovation on the market. This amounts to the situation in which a specific enterprise achieves better results from the sales than its competitors since it disposes of the product which is distinctive compared to competitive products, particularly in the field of the suggested technical solutions. In such a case, copying the solutions proposed by the innovator or proposing own solutions requires the appropriate time. The innovator strengthens their own competitive position at this time.

However, the competitive strategy, which is based on the potential to create innovation, cannot be applied by every enterprise. Most of all, there must be appropriate atmosphere in the company, which is favorable for innovation, resulting from the fact that the owners, managers and also employees understand the role of innovation in building the position of the company. The enterprise should also possess some specific resources: material, capital, knowledge resources enabling the creation of such innovative environment. However, most of all, the enterprise should possess the capability for using different instruments supporting innovative attitudes in the company. Such instruments are created by the governments of home countries which are directly interested in an increase in innovativeness of domestic enterprises since this amounts to an increase in innovativeness of the whole economy.

The main objective of the paper is the presentation of the instruments prepared and offered by the Polish government administration in the framework of supporting innovativeness of Polish enterprises. There will be characterized direct and indirect instruments, and also the instruments supporting business environment institutions.

Theoretical background

Innovation and innovativeness of the enterprise

The concept of innovation comes from Latin (*innovatio*) and means creating something new. It is often assumed that innovation is the process consisting in transformation of the existing opportunities into new ideas and their implementation into practical use. The phenomenon of innovation is inextricably linked with the concept of change, newness or the idea which is regarded as new.

The concept of innovation was brought into economic sciences by J.A. Schumpeter. He assumed that innovation is one of the basic elements of the economic development, resulting from innovative combination of capital and means of production.

According to him, innovation was understood very widely: as the introduction of new or developed goods into production, implementation of a new or developed method of production, opening a new market, acquiring a new source of raw materials or semi-finished products, unknown so far, introduction of a new way of organizing production. The concept of “new” becomes of the key importance for understanding this definition. J.A. Schumpeter referred innovation to the first application of a specific solution. Therefore, he did not relate innovation to its spreading, calling it *imitation*. Apart from that, this researcher distinguished the concept of innovation from the concept of *invention*, noticing that many inventions do not enter production, therefore, they never become innovation. Schumpeter, most of all, focused on technical innovation (Schumpeter, 1960). After World War II, as a result of changes in the economy, consisting in a decrease in the significance of industry for the benefit of services, information and knowledge, there occurred the necessity to broaden the concept of innovation

Generally, the authors of the subsequent definitions can be divided into the supporters of the wide or narrow approach towards the concept. In the narrow approach, it is an invention which is specifically applied. Among the supporters of the narrow approach there are S. Kuznets, Ch. Freeman and E. Mansfield (Janasz, Kozioł, 2007, p.14). In the wide approach, innovation is the whole management process, including different activities leading to the creation, development and implementation of new values in products or new combinations of resources, which are newness for the implementing entity. In this approach, innovation also includes transferring these values into the existing or new market partners and it can be the result of work of a group of enterprises (Niedzielski, Rychlik, 2006, p. 21). Among the supporters of the wide approach there are A.J. Herman, E. Hagen and J. Parker. In this current, the definition by P.R. Whitfield seems to be particularly important. He defines innovation as a sequence of complicated activities consisting in solving problems. The result of the above is the emergence of the complex and completely developed newness (Whitfield, 1979).

It should be underlined that, beginning with the seventies of the 20th century, the economic aspect of innovation was brought to the fore rather than the technical one. Such an approach to innovation was, among others, propagated by P.F. Drucker, Ph. Kotler, R.W. Griffin, M.E. Porter (Janasz, Kozioł, 2007, p. 18).

For the purposes of the economic practice, e.g. for the purposes of the development of regional programs in the framework of National Cohesion Strategy (EU programs), it is assumed that innovation must be understood as works connected with the preparation and activation of manufacturing and also preparation of sale of new or developed products and services intended for the introduction onto the market, the implementation of the modernized process of distribution. Depending on the field of innovation, it is possible to identify: product, process (technological), organizational and marketing innovation.

The concept of innovativeness is connected with innovation. Innovativeness can be defined as the ability of the specific economic entity to create and implement innovation. The problems of innovation and innovativeness constitute an important point of interest of the EU. EU activities are directed towards aiming at better use of the existing potential (of work, knowledge, capital), and also building new forms of competitive advantage through an increase in expenditure on pro-development activities, education, infrastructure of information society and methods of its efficient use for economic purposes. It is assumed that innovation is the basis of the sustainable economic growth for EU Member States and amounts to the improvement in economic and social conditions. It is assumed that the State aid policy in this field may contribute to an increase in innovativeness of the economy not only by protection of market competitiveness of products as the stimulator of innovativeness but also by establishing the framework allowing the Member States to develop efficient forms of aid for the benefit of innovation. Such activities, undertaken by Polish government administration, are described in the following part of the paper.

The sector of small and medium enterprises in Poland[1]

The share of enterprises in generating budgetary revenues in Poland is very big. According to Central Statistical Office, enterprises generate almost ¾ of Polish GDP, out of which nearly half refers to small and medium enterprises.

In Poland, individual groups of enterprises (assuming the criterion of size) generate gross value added, which is different from an average equivalent in the group of EU countries. Medium and large enterprises are characterized by significantly higher, than in the EU countries, contribution to creating gross value added. Micro and small enterprises show a significantly lower contribution in this field. In Poland, microenterprises generate 16.5%, and in the EU 21.4% of the value added whereas small ones - 13.5%, compared to 18% in the EU.

Polish enterprises generate lower gross value added than an average enterprise in the EU. Small enterprises generate only 55.6% of their equivalent in the EU, medium enterprises – 47.9% of the value, and microenterprises - only 31.1%. A good symptom for Polish enterprises is the fact that there can be observed upward trends in the field of the size and the share of value added, compared to the other EU countries.

In the area of Poland, there operate about 1.8 million enterprises, which places the country in the sixth position among all the EU countries. More enterprises operate in the following countries: Italy (3.8 million), France (2.6 million), Germany (2.2 million) and Spain (2.1 million). However, if the criterion of identification was the number of enterprises per 1000 citizens of the specific country, the ranking would be completely different. In the EU countries, the largest number of enterprises operate in Czech

[1] The chapter has been prepared on the basis of the following sources: Polska Agencja Rozwoju Przedsiębiorczości. (2014). *Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce w latach 2012-2013*.

Republic (96), Portugal (79), Slovakia (69), Italy (63), the smaller number – in Romania (20), Germany (26) and Great Britain (27). In Poland, this number amounts to 40 enterprises.

In Poland, about ¾ of companies operate in the sector of services and trade, 13% in construction and 10.3% in industrial processing. The sector of SME in Poland is more significantly dominated by microenterprises. On the other hand, the share of small enterprises is nearly half of the average in the EU. However, the structure of Polish enterprises gradually becomes similar to the EU structure. In the last years there has been noticeable a decrease in the number of share of micro-companies for the benefit of small and medium enterprises.

The above analysis allows for the formulation of the conclusion that, in Poland, micro and small enterprises are significantly less effective in generating value added. Therefore, it can be assumed that their development potential is at a lower level than the potential of an average equivalent company in the EU countries. The existing gap can be bridged by projecting appropriate instruments supporting innovativeness of Polish enterprises, particularly micro, small and medium ones. Such instruments are described in the subsequent chapter of the paper.

Instruments of innovativeness in Polish economy[2]

Polish enterprises do not belong to the most innovative ones in the group of EU countries. This deprives them one of the strengths in the fight against international competition since innovative potential is recognized as one of the most important competitive advantages of the enterprise. An increase in competitive potential is in the interest of not only Polish enterprises themselves but also in the interest of Polish government administration. The enterprise development amounts to higher budget revenues and this, in turn, allows for better satisfaction of social needs of the population and, generally, the growth in wealth of the whole country. Polish government administration assumed that appropriate support instruments may accelerate the process of bridging the gap between the level of innovativeness of Polish and foreign enterprises. To achieve this, they have developed and implemented the support system for innovative enterprises. It is addressed to the sector of small and medium enterprises and it consists of three groups of instruments: direct instruments, indirect instruments and the instruments supporting business environment.

Direct instruments

[2] The chapter has been prepared on the basis of and with the extensive use of the following source: Ministerstwo Gospodarki. (2009). *Instrumenty umiędzynarodowienia działalności przedsiębiorstw*.

Direct instruments amount to direct support for enterprises investing in innovative projects. They are characterized by really high diversity, scope and extent of impact. This group of instruments are characterized below.

Innovation vouchers is an instrument which aims at initiating contacts between enterprises and scientific institutions. This solution can be used by enterprises which have not outsourced research and development so far. The offer has been prepared by the Polish Ministry of Economy, the support institution is Polish Agency for Enterprise Development (PARP). The amount of funding amounts to PLN 15 000 (about EUR 3750), it is addressed to micro and small entrepreneurs and can be designed for the purchase of the service of the implementation or development of a product or technology by a scientific unit.

The loan for the realization of innovative investments is dedicated to the whole SME sector. Its objective is the improvement in the level of innovativeness of enterprises by the realization of innovative investments by these enterprises. The amount of the loan amounts to maximum 75% of eligible costs (maximum PLN 2 million – about EUR 0.5 million), which include the purchase for the implementation of research and development results, purchase of national and foreign licenses and purchase and assembly of equipment, construction, expansion or modernization of buildings, installations essential for the implementation of innovative solutions, purchase of consulting services in the field of investment planning and implementation of innovation or new technologies. The supporting institution is PARP.

Technological Credit – technological bonus is an instrument which aims at supporting investments in the field of implementation of new technologies by granting SME a technological credit. Its partial repayment is possible from the Technological Credit Fund. The amount of support for an individual entrepreneur amounts to maximum PLN 4 million (about EUR 1 million). Eligible costs include purchase, rent, lease of new and used fixed assets, expansion of the existing buildings, machinery and equipment, installation and start-up of machines and equipment, purchase or lease of intangible and legal assets. The supporting institution is Bank Gospodarstwa Krajowego and also commercial banks granting technological credits.

Support for R+D and implementation of its results is an instrument which aims at the improvement of the level of innovativeness of enterprises by using R+D results and supporting the implementation of these results. The total value of the whole project cannot exceed the amount of EUR 50 million. The support for R+D cannot exceed the amount of EUR 7.5 million for an individual entrepreneur per one project. The amount of support for the implementation of R+D results cannot exceed PLN 20 million (about EUR 5 million) for an individual project. The supporting institution is PARP.

Stimulation of R+D of enterprises and support in the field of industrial design. The support includes the development of R+D activity in enterprises, including the purchase of fixed assets and intangible and legal assets connected with conducting works in the field of R+D in enterprises. The support also includes the development of

industrial design or utility model and its implementation into production including purchase of training services in the field of methods of implementation of new design products, development of design and technological documentation, preparation of the final project, purchase of fixed assets or intangible and legal assets essential for the performance of the series and implementation of the model for serial production. The maximum amount of the support for the projects in the field of R+D for the investment part of the project amounts to PLN 1.4 million (about EUR 350000), and for projects in the field of industrial design for the investment part - PLN 21 million (about EUR 5.25 million). The supporting institution is PARP.

New investments of the high innovation potential are an instrument which aims at supporting production and service companies realizing new investments and acquiring innovative technological solutions. The supporting institution is PARP. The maximum amount of support amounts to PLN 2.4 million (about EUR 600 000). The support is intended for the investments of high innovation potential, in the field of purchase or implementation of new technological solutions in production and services, applied in the world for no longer than 3 years, however, the degree of spread of this technology in the world does not exceed 15%.

Support for investments in the production sector – the objective is the economic development and an increase in employment in the specific region by supporting the development of investment projects. The entrepreneurs planning investments in the priority sectors: automotive, electronics, aviation, biotechnology and also others, may apply for the support. In this case, the supporting institution is the Ministry of Economy. The enterprises running their activity in Special Economic Zones may receive the support to accelerate the development of the regions by attracting new investments and creating new workplaces. The entrepreneurs planning the investments amounting to at least EUR 100000 may apply for the support. The support consists in partial exemption from the income tax of the activity run in the zone. The amount of the support depends on the location of the zone - the highest amount refers to the areas which are the least economically developed. In this case, the supporting institutions are local tax offices. The support is provided for the enterprises planning investments of a great significance for the economy, i.e. the investments of large volume, high innovative potential and generating a significant number of workplaces. The support for the enterprise amounts to maximum 25% of eligible costs. The supporting institution is the Ministry of Economy.

Support for investments in the sector of modern services is an instrument which, in assumptions, is similar to the previous one, only its scope is different. In this case, it refers to services. The objective is to improve competitiveness and increase innovativeness of the economy by supporting service companies. The amount of support cannot exceed 15% of eligible costs in case of projects developed in the zones and 30% outside the zones. There are supported the investments such as: the center of services in the field of finance, accountancy, human resource management, administration, logistics,

banking and insurance, market research, support for information and communication technologies (ICT), research and development centers.

Intellectual property management – the objective of the instrument is improvement in effectiveness of the functioning of the innovation market by popularization of the application of intellectual property right. The beneficiaries are enterprises of the SME sector. The amount of support cannot exceed PLN 400000 (about EUR 100000). The support includes covering the costs of preparation of the application of a patent, utility model or industrial design, and also the costs connected with bringing the proceedings to annul the patent, model protection right. The support is provided by PARP.

Support for the activity in the field of electronic economy is an instrument which aims at providing services electronically or manufacturing a digital product essential for the provision of these services. The support may be provided for micro and small entrepreneurs running their business activity for no longer than one year. The support amounts to maximum 85% of eligible costs, it cannot exceed the amount of PLN 1 million (about EUR 250000).

Support for the implementation of electronic business - **B2B** – its objective is the development of technical, IT and organizational projects which lead to development of business processes in the electronic form. The maximum amount of support cannot exceed PLN 2 million (about EUR 0.5 million), and it is, among others, to cover the expenditure connected with the acquisition of intangible and legal assets, fixed assets, analyses, information activities, specialized training.

Indirect instruments

Indirect instruments in the present paper are understood as the institutions supporting entrepreneurs in their innovative activities. Below, there are characterized the most important ones operating in Poland.

Academic Incubators of Entrepreneurship are the units run by the university for the better use of its intellectual and technical potential. They offer the support for the business activity undertaken by university researchers and students, being simultaneously entrepreneurs. The objective is to support the future entrepreneur, from the emergence of the idea, through the market research to the moment of registration of the business activity.

Technological incubators refer to the unit isolated in terms of organization, budget and location, which provides help to business beginners from the SME sector in starting and running the company offering the product being the result of the implementation of a new technology.

Technology parks refer to a property complex with the appropriate infrastructure, created for the transfer of knowledge and technologies between scientific units and entrepreneurs. The entrepreneur is offered consultancy in the field of set-up and

development of enterprises, technology transfer and transformation of research results into technological innovation and also the possibility of using the property and technical infrastructure.

Industrial parks refer to a property complex with the infrastructure created after the restructured or liquidated enterprise. One of the parties is the local government unit which provides the opportunity for running a business activity in this area.

Clusters can be defined as spatial and sectoral concentration of economic entities (at least 10) running their business activity in the area of one or a few neighboring provinces, cooperating or competing in the same or related sectors, linked with the network of formal and informal relationships. The aim of clusters is to increase competitiveness and innovativeness by establishing systematic cooperation between companies.

Seed capital funds refer to the fund which includes shares or interests in companies being entrepreneurs in the early stage of development. The objective is to invest in the companies possessing an innovative project, which receive funding allowing for dynamic and sustainable development.

Loan funds refer to the fund which grants loans to entrepreneurs or entities setting up a business activity. The objective is to provide the external funding to entrepreneurs having difficulties in obtaining commercial loans.

Guarantee funds are the funds which are provided for entrepreneurs or entities setting up a business activity of guarantee. The objective is to enable the access to credits and loans for businesses.

Business angels are natural persons or groups of people who invest their own capital in high-risk ventures. The objective is to help enterprises with high growth potential and high innovation potential, being in the early stage of development to provide them with essential capital and substantive support.

Krajowy System Usług (KSU) for Small and Medium Enterprises (National Service System for SME) is a group of entities which provide entrepreneurs from the SME sector with the provision of appropriate consulting, training, information and financial services. They do not operate for profit. By the provision of the highest quality services, they support the development of entrepreneurship in the key areas.

Krajowa Sieć Innowacji (KSI) (National Information Network) is a group of entities operating for the benefit of innovativeness, providing pro-innovative consulting services. They support the implementation of technological processes, products or services and handling the process of technology transfer.

Enterprise Europe Network is the network partners providing services in the field of information, cooperation, innovation, technology and transfer of knowledge. Its objective is to offer complex services to support the development of innovation potential possessed by these enterprises.

Instruments supporting business environment institutions

The development of innovation potential of the enterprise can also be aided by means of support for different initiatives co-creating business environment. The most important ones are characterized in the following part of the paper.

Support for Academic Incubators of Entrepreneurship – the objective is to support creating and developing the already existing AIE, which create the conditions for development of entrepreneurship and provide an opportunity for creating attractive new workplaces for graduates, students and researchers of universities. Public and private universities may apply for the support. Eligible costs are associated with the set-up of the incubator, training, purchase of the office equipment and software.

Initiation of the innovative activity – the institutions supporting the emergence of new innovative companies, e.g. IPA, centers of technology transfer and innovation, science and technology parks may apply for the support. The objective is to increase the number of enterprises operating on the basis of innovative solutions. The support is based on donation for incubation and investment in a newly established innovative company (in the form of share acquisition).

Support for venture capital funds – the initiative was developed to increase access to the external sources of funding SMEs being in the early stage of development. Venture capital funds or the entities managing the funds may apply for the support of the National Capital Fund, that invests in equity and debt instruments of venture capital funds and refunds part of the costs borne by such a fund (costs of analyses, due diligence, market research etc.).

Financing the activity of the national contact points for the CIP Program and financial support for the activity of Polish consortia forming Enterprises Europe Network is another instrument. Its objective is more active participation of Polish institutions and enterprises for the benefit of competitiveness and innovation. This refers to help in project submission, provision of services in the field of information on the law, cooperation, transfer of technology and knowledge etc.

Support for business environment institutions providing pro-innovative services and their supra-regional networks is another initiative which aims at providing entrepreneurs with access to complex business services, which are essential from the point of view of running an innovation activity. The support may be obtained by business environment institutions, among others, for development and implementation of the service which is new to the applier, granting the development of the IT system.

Support for studio and conception activities within the preparation of investment areas for investment projects is an instrument which aims at supporting local government units in the field of preparation of attractive areas for investments. The maximum support amounts to 85% of eligible costs, not more than PLN 650000 (about EUR 162500). Eligible expenses include the costs of preparing documentation, analyses and consultancy and repair activities.

Creation of the system enabling the investment in SME – the beneficiaries of this system can be business environment institutions (networks of investors, entities providing consultancy services). The objective of the existence is the activation of the market of private investors by creating the conditions favorable for initiating collaboration of investors with entrepreneurs searching for the possibilities of funding own innovation projects. The support amounts to maximum 100% of eligible costs which, among others, include the preparation of entrepreneurs to acquiring the sources of financing.

Support for development of supra-regional cooperative relations – the initiative aimed at the support for joint ventures of groups of entities aiming at the preparation of the common innovative product or service and launching them onto the market. The legal person running a cooperative relations may apply for the support.

The support program for international cooperation of clusters in the field of research, technological development or innovation - Innovation Express – its objective is the development and strengthening of competitiveness of cluster structures in Poland by supporting international cooperation in the field of research, development and innovation with clusters of groups of SME in clusters. Cluster coordinators may apply for the support.

Conclusions

Innovation and, basically, innovativeness understood as the ability to create and implement innovation may constitute an important source of achieving competitive advantage for the enterprise. Moreover, at present it is assumed that innovation is the basis for sustainable economic growth and improvement in economic conditions of the society. In this light, it seems completely obvious that the appropriate State aid policy may contribute to an increase in innovativeness of the whole economy.

In the paper, there are characterized the most important initiatives, undertaken in Poland, for the benefit of an increase in innovativeness of Polish enterprises. They include the instruments addressed directly to enterprises, the institutions supporting innovation and initiatives which are to create favorable conditions and the environment for undertaking activities innovative in nature.

Summing up, Polish government administration creates specific instruments which directly support innovativeness, mostly in the financial form. It has also appointed many institutions which aim at supporting enterprises in innovation processes, as well as it has made an effort to create the business environment which is innovation-friendly. The fact whether these activities are sufficient will be proven in the near future.

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