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STATE FINANCIAL SUPPORT FOR SMALL BUSINESS INNOVATIVE DEVELOPMENT

The article studies the essence of small innovative entrepreneurship. Advantages and disadvantages of small enterprises participation in innovative projects are outlined. The instruments of state financial support for small innovative business are analyzed. The development trends in state stimulation for small innovative business in Ukraine are offered.

Keywords: state financial support; innovative small business; tax incentives; clusters; business incubators.

Олеся Ю. Апостолюк

ДЕРЖАВНА ФІНАНСОВА ПІДТРИМКА ІННОВАЦІЙНОГО РОЗВИТКУ МАЛОГО БІЗНЕСУ

У статті досліджено сутність малого інноваційного підприємництва. Виявлено переваги та недоліки участі малих підприємств в реалізації інноваційних проектів. Проаналізовано інструменти державної фінансової підтримки малого інноваційного бізнесу. Запропоновано напрями розвитку державного стимулювання інноваційної діяльності малих підприємств в Україні.

Ключові слова: державна фінансова підтримка; малий інноваційний бізнес; податкові пільги; кластери; бізнес-інкубатори.

Табл. 2. Літ. 22.

Олеся Ю. Апостолюк

ГОСУДАРСТВЕННАЯ ФИНАНСОВАЯ ПОДДЕРЖКА ИННОВАЦИОННОГО РАЗВИТИЯ МАЛОГО БИЗНЕСА

В статье исследована сущность малого инновационного предпринимательства. Выявлены преимущества и недостатки участия малых предприятий в реализации инновационных проектов. Проанализированы инструменты государственной финансовой поддержки малого инновационного бизнеса. Предложены направления развития государственного стимулирования инновационной деятельности малых предприятий в Украине.

Ключевые слова: государственная финансовая поддержка; малый инновационный бизнес; налоговые льготы; кластеры; бизнес-инкубаторы.

Problem setting. Most national economies (of advanced countries) are based on innovative models of development. Nowadays the financial support for innovative development appears to be the key economic problem for our government. This underlines the actuality of state financial support for enterprises that focus their activities on innovations. Small enterprises with high ability to react to the needs of innovative development take a special place in this process.

Recent research and publication analysis. The need to promote innovative vector in economic development is a recognized course in state policy. Renowned scientists as C. Freeman (2008), B. Lundvall (2010), J. Schumpeter (1939) were engaged in the research on theoretical and practical foundations of economy's innovation development.

J. Schumpeter (1939: 84), who developed the theory of economic cycles based on technological innovation, emphasized the importance of innovations for economic

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growth. The theory is based on the assumption that the first cycle is associated with the invention of the steam engine and innovations in the textile industry, the second cycle – with the development of railway transport and machine engineering, the third cycle – with the internal combustion engine, electric energy and innovations in chemical industry. C. Freeman (2008: 190) and B. Lundvall (2010: 320) consider the dependence of economic development from innovation through a national system of innovation, which they define as elements and relationships interacting in production, diffusion and use of new and economically useful knowledge and that a national system encompasses elements and relationships, either located within or rooted inside the borders of a nation state. These scientists also pointed out that the technology financing and the development of national systems of innovation should be the basis for state policy.

The directions of state participation in financing innovative activities have been investigated by domestic scientists such as O. Sobkevych et al. (2014), J. Petrovska (2013), A. Shaparenkov (2013). O. Sobkevych et al. (2014: 37) studied the financing of state information and consulting services in the framework of innovation management in government agencies that allows raising the level of public services and stimulating entrepreneurship. J. Petrovska (2013: 300) focuses on tax incentives for the conducting of R&D works. S. Shaparenkov (2013: 282) mentions the importance of innovative activity financing directly by the company and the need to find external sources of financing as well. However, the role of state financial support for small innovation business in the socioeconomic development has not been examined yet fully.

The term "innovation" is viewed very differently by scientists. In particular, from the functional point of view, it is a new way of creating things that can bring profit (Porter, 1990). From the static point of view innovation is considered like a product, the result of innovative process in the form of new technology being introduced to market. In our opinion, it is correctly to mention here the definition based on a combination of functional and commercial approaches by A. Shaparenkov (2013: 17), who stressed that innovation in a broad sense is understood as a continuous and active change in a specific system of internal and external environment, creating a positive effect from its existence in the long term.

The research objective is to determine the directions for the development of state support financing for small innovation business in Ukraine.

Key research findings. The use of innovative technologies brings enterprises' competitiveness on to a new level, both nationally and internationally (Lundvall, 2010: 315). In Eastern Europe, a sharp decline in financing research activities has led to the creation of alternative research and innovation organizations in the form of a small state, cooperative or private enterprises. At the transitional stage of economic development, this system allows introducing effectively scientific developments in production to stimulate entrepreneurship.

According to the Law of Ukraine "On innovation activity" (4.07.2002, # 40-IV) innovation is a newly created (applied) and (or) improved competitive technology, product or service as well as organizational and technical solution of industrial, administrative, commercial or other nature, which significantly improve the structure and the quality of production and (or) social sphere. According to article 325 of the

Commercial Code of Ukraine (16.01.2003, # 436-IV) innovative activity in the economy is an activity of economic relations participants based on the realization of investments for the implementation of long-term scientific and technological programs with a long payback period and manufacturing application of new scientific and technological achievements.

Small innovative business is an important component of the innovation sphere, which, in our opinion, should be understood as the creation and commercialization of goods and services as a result of scientific and technical developments in small business.

In Ukraine the share of enterprises engaged in innovative activities decreased from 13.6% in 2012–2013 to 12.1% in 2014. As a result the share of innovative products in the total volume of industrial production also decreased, from 3.3% in 2012–2013 to 2.5% in 2014. It is worth noting that neither positive, nor negative changes in the share of innovative enterprises did not lead to an increase in the share of innovation products in Ukraine. Thus, this index decreased from 5.9% to 2.5% during 2008–2014 (Introduction of innovation technologies at industrial enterprises: State Statistics Service, 2008–2014). So, the sector of innovative business requires more active state financial support.

Small high-tech innovative enterprises are the major implementers of innovative ideas. Problems in the development of such enterprises should be observed in financial, information and market aspects. Looking at these aspects, we can conclude that small business working with innovations has both advantages and disadvantages (Table 1).

Table 1. Advantages and disadvantages from small enterprises participation in the implementation of innovative projects, author's development

Advantages	Disadvantages
Financial aspect	
<ul style="list-style-type: none"> - possibility for collaboration with a variety of support institutions such as funds of support; participation in state programs of innovative development; - realization of innovative development programs in universities, cooperation between universities and business 	<ul style="list-style-type: none"> - lack of financial resources to implement innovative projects by an enterprise's on its own; - distrust to the project by potential investors; - high level of risk because of creating the project on the basis of theoretical calculations and null analogues
Information aspect	
<ul style="list-style-type: none"> - availability of highly qualified specialists in the sphere of business innovation; - formation of highly developed infrastructure 	<ul style="list-style-type: none"> - environment of constant information pressure
Market aspect	
<ul style="list-style-type: none"> - the ability to adapt quickly to market needs through small production volumes and maximum proximity to consumers; - unique product offer at the market; - the ability to cooperate actively with large enterprises 	<ul style="list-style-type: none"> - need to find a target market for goods/ services that have not been even produced yet; - weaknesses in competition with large enterprises

So, small enterprises are capable of early application of innovative technologies if they are provided with adequate financial resources for their implementation. At the same time, due to the problem with own financial resources insufficiency, such enterprises need an active state financial support.

Innovative enterprises support should take place in the conjunction with encouragement for implementation of truly scientific innovations. Foreign countries' positive experience confirms this (Table 2).

Table 2. Types of state financial support for small innovation business in different countries, author's compilation of sources (Pustovalov, 2013; National Institute for Strategic Studies, 2013: 20–25)

#	Type	Contents	Countries
1.	Direct financing	Loans that cover up to 50% of the expenses for new goods/services creating	France, USA
		State subsidies	all developed countries
		Interest-free loans	Sweden
		Interest-free loans of up to 50% of expenses for the introduction of innovations	Germany
2.	Funds	Funds for innovations implementation, taking into account possible risks	England, Germany, France, Switzerland, Netherlands, Russia
3.	Tax support	Reduced taxation for individual inventors	Austria, Germany, USA
		Tax exemption or tax credit, in particular, for inventions related to energy saving	Netherlands, Germany, Austria
4.	Cost-free services	Free office management for individual inventors, free services of patent agents	Netherlands, Germany
5.	Promoting market integration	Assistance in preparation for market	Germany

It is known that innovative process has the following logical structure: a new idea – an innovative technology – bringing it up to production – getting a new product – its commercialization. Program SBIR (Small Business Innovation Research) of the US Government is built under the same scheme (SBIR.gov). It combines fundamental research, small high-tech companies and venture capital. This program allows small business participate in federal research that have potential for commercialization. In addition to financial support, participation in government studies has other benefits, particularly, in terms of copyright. For example, intellectual property rights, with the participation in these programs, are fully owned by grant recipients – small businesses – the executors of innovative ideas. Consequently, SBIR program supports small business, scientific research and innovation through investments from federal research funds, contributes to the creation of strong competitive national economy.

Each of the US government departments is responsible for promoting its own typical spheres of business under SBIR and STTR programs (Small Business Technology Transfer). Under the US Department of Energy, there are small business projects that address clean energy issues, fundamental energy research and nuclear safety (US Department of Energy: Office of Science). The examples of these projects is especially useful for Ukraine, where due to the rise in price for energy resources, there is an acute problem of power production.

In this direction, the state support policy is being conducted by the Ministry of Agrarian Policy and Food of Ukraine and the State Agency on Energy Efficiency and Energy Saving of Ukraine with the assistance of the United Nations Industrial Development Organization (UNIDO) and the Global Environment Facility (GEF). Their joint project "Improving energy efficiency and promoting renewable energy in the agro-food and other small and medium-sized enterprises in Ukraine» was implemented in 2009 and will last until May 2016. The total project cost is 5768400 USD. The expected results are the reduction of energy consumption overall and the use of energy-efficient technologies by small and medium-sized enterprises in Ukraine thus increasing their competitiveness:

- the expected amount of energy savings – 20 GW per year;
- the amount of energy that will be generated from renewable sources – 30 GW per year;
- the volume of investments in renewable energy technologies – 44 mln USD till the end of 2015 (UNIDO: 2014).

The contradiction in the situation with Ukrainian innovative economy is the following: the significant base for fundamental research is combined with low level of actual innovative activity. This is confirmed by the Global Innovation Index data where Ukraine took the 63rd place with 36.3 points at the end of 2014. This index is significantly lower than for European countries with the average of 47.2 points (Dutta et al., 2014).

In Ukraine financial support for innovative entrepreneurship is provided through financing scientific and technical developments, state target programs and government contracts, expenses on infrastructure of relevant ministries, government agencies and committees. For example, in 2014 the Ministry of Education and Science of Ukraine and the State Agency for Science, Innovation and Informatization spent 501 mln UAH on research and technological development (Report on cost sharing indicators of the State Budget of Ukraine for 2014: State Treasury Service of Ukraine). Unfortunately, in Ukraine commercialization of state scientific research does not exist, since there is no mechanism for financing the implementation of national research in the entrepreneurship sector.

According to the Cabinet of Ministers' regulation as of December 12, 2011 # 1396 direct financial support for innovative business in Ukraine is provided by the "Fund of Support for Small Innovation Business" that is a state non-bank financial institution. Its activities are financed by the state budget, domestic and foreign investments, voluntary contributions and income from its own or joint economic activity. The authorized capital of the Fund is 35 mln UAH.

The Charter of this institution asserts that the following types of financial support may be provided under the mediation of the Fund: total interest-free loans; partial (50%) interest-free loans; full or partial compensation of commercial banks' percent for innovative projects; state guarantees to commercial banks; property insurance for investment projects. Also there is an opportunity to provide small innovation enterprises with irrecoverable targeted subsidies, subsidies for purchase and implementation of new technologies, including energy-saving and clean technology.

Tax incentive is one more direction of financial stimulation for innovation activity. High rates of tax incentives for research are observed in France, Spain, Portugal,

Czech Republic, India (Petrovskay, 2013: 299). The share of tax expenditure that effectuates the greatest load on the subject of innovation varies with the life cycle of an enterprise. At the initial stage of enterprise's innovative activity tax incentives should be applied to charges on payroll bill. At later stages of activity tax incentives should be associated with value added tax and income tax.

However, in Ukraine, despite the recognition of the need for preferential taxation for small innovative businesses decisive actions in this direction have not been taken. Small innovative business can only use the simplified tax system with a single tax payment provided they have a small number of employees and low turnover. In our opinion it is worth establishing a minimum rate of single tax, for small innovative enterprises regardless their annual income.

The EU countries do not practice direct financial support, but put into practice the policy of creating favorable conditions for innovative activity. This refers to support for business incubators, technological parks, clusters and other similar entities with developed infrastructure. Successful functioning of nearly 200 "industrial districts" of different specialization in Italy is a striking example of this kind of policy. Thus, the cluster approach allows small businesses consolidate resources and competences unavailable for them in their individual activity and to develop joint innovative projects at all stages – from a scientific idea to its realization and commercialization of a finished product.

The orientation on traditional industries such as agriculture, metallurgy, light industry, construction is the peculiarity of Ukrainian clusters. For example, a building cluster in the Khmelnytsky region, which unites specialized enterprises, design, trade and law firms can be mentioned here (Schutska, 2010: 353). The creation of this cluster has contributed to advanced technologies implementation in the construction sphere, a mixture of "Cerezite" which is made from local raw materials at lower price than imported analogues was created and released in this area.

Clusters' development in Ukraine is slowed down by the complexity of financing and planning due to currently unstable economic situation, the lack of awareness among business leaders and outdated management approaches, leading to distrust to cluster model as such. At the same time clustering allows small businesses jointly implement major investment and innovation projects of national importance.

Also it is worth noting that worldwide clusters are formed to promote not traditional but innovative high-tech activities such as engineering, biopharmaceuticals and electronics. Ukraine should focus its cluster policy on financing the activities oriented on highly-developed non-primary products.

For the introduction of innovation clusters on this basis it is necessary to increase direct public financing of technology parks, industrial parks and business incubators, which today are mainly self-financed in Ukraine.

State Agency for Investment and National Projects designed the "Technopolis" project for creating the infrastructure for innovative high-tech industry. The plan provides funding for the creation of 5 infrastructure facilities, the expected volume of investments is 10.3–12.6 bln UAH, of which at least 20% is government support. The expected term for project realization is 7–15 years (National Institute for Strategic Studies, 2013: 17–21).

The lack of relationship between the state, science and business sector is the essential problem of supporting innovations in Ukraine. The analytical data of the European Commission research agency shows that 88.5% of government institutions of the EU-27 have introduced new or enhanced information services for business (Sobkevich et al., 2014: 90). In this direction Ukraine finances the creation of an electronic information system "Electronic Government", which aims to improve the relationship between government and business, to expand access of business structures to various sources of funding for keeping them up to date on existing investment and innovation projects through information technologies, to avoid bureaucratic procedures and to ensure transparency in government activities. In 2013 the government spent 35 mln UAH from the State Budget of Ukraine in this direction (Report on cost sharing indicators of the State Budget of Ukraine for 2014: State Treasury Service of Ukraine) and according to the Cabinet of Ministers' regulation (1.10.2014, # 492) the State Agency for e-governance was created. Also there is a trial software called "Single window of electronic reports submission» for submission of tax reports, digital signatures and documents encryption. All these measures are carried out within the National Program of Informatization of Ukraine (4.02.1998, # 74/98-BP).

The term "small innovative business" should be understood as the process of creation and commercialization of goods and services in the small business sector as a result of scientific and technical developments. Basing on the conducted research it is worth noting that in Ukraine development of small innovation businesses have the following problems: lack of motivation for entrepreneurs to create this type of business; low level of competition in this segment; lack of managerial experience in large innovative projects; unfavorable general economic situation in the country; low level of innovations profitability; lack of effective financial mechanisms.

Insufficient state financial support for small innovative business, far behind those in developed countries, is a significant reason for this situation. Financial support for small innovative business in Ukraine should be developed in two directions. On the one hand, the state should continue modernize the system of administrative management on the innovative basis. On the other hand, financial support for small innovation enterprises should be concentrated on the priority areas, in particular, on the energy sector.

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