THE IMPORTANCE OF INNOVATION FOR SMES AS A PREREQUISITE FOR THE SUSTAINABLE DEVELOPMENT OF THE MOLDOVAN ECONOMY[1]

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Abstract

Following its independence, the Republic of Moldova faced a range of political, economic and social issues and had to overcome them relying mainly on its own resource potential. The economy reformed in the context of an acute social and economic crisis and radical transformation of the economic system. The lack of experience in countering external shocks, and economic and social crises, in conducting systemic reforms, coupled with the instability in domestic politics and the territorial disintegration of the country. The transition from centralized and planned economy to the market economy focused on the main directions: the price liberalization, development of the domestic market, privatization, and introduction of the national currency were dynamic. A new banking system was created; the conditions and rules of economic activities were changed. However, the measures were taken and reform methods were not always corrected in a timely manner, the reforms were often hampered, and Governments were often changed for unjustified reasons. The paper emphasizes the importance of the SMEs sector for the national economy and the role of innovation in SMEs development, the role of innovation incubators and scientific-technological parks as an important part in the implementation of innovations as a prerequisite for the sustainable development of the Moldovan economy.

Keywords: *centralized, planned economy, liberalization, SMEs*

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INTRODUCTION

The role of SMEs in addressing socio-economic issues in many countries of the world has increased visibly in recent years. SMEs development offers a lot of opportunities to create job places, thus contributing to the decrease of the unemployment rate; companies produce goods and services, create revenue in the state budget, generate innovations and make sure economic growth and the welfare level of citizens. According to the National Bureau of Statistics (NBS), we find out that 51626 SMEs employing 313.5 thousand employees were recorded in the Republic of Moldova in 2016, which represents 61.2% of the number of employees employed in enterprises, with 32.13 thousand employees more compared to 2015. In 2016, the SMEs sector generated sales revenues in the amount of 124.94 billion MDL or 41.5% of the total sales revenues registered in 2016 by the Moldovan enterprises. Profit before taxation in SMEs amounted to 5878.5 million MDL (39.1% of the total amount of profit from the national economy).

The SMEs share in GDP represents an important indicator, which allows evaluating the quantitative and qualitative elements of the contribution of SMEs in the economic development of the country. This indicator (from 2007 to 2010, including for 2012 and 2016) characterized by a downward trend: only in 2011, 2013, 2014 and 2015, this indicator has grown.

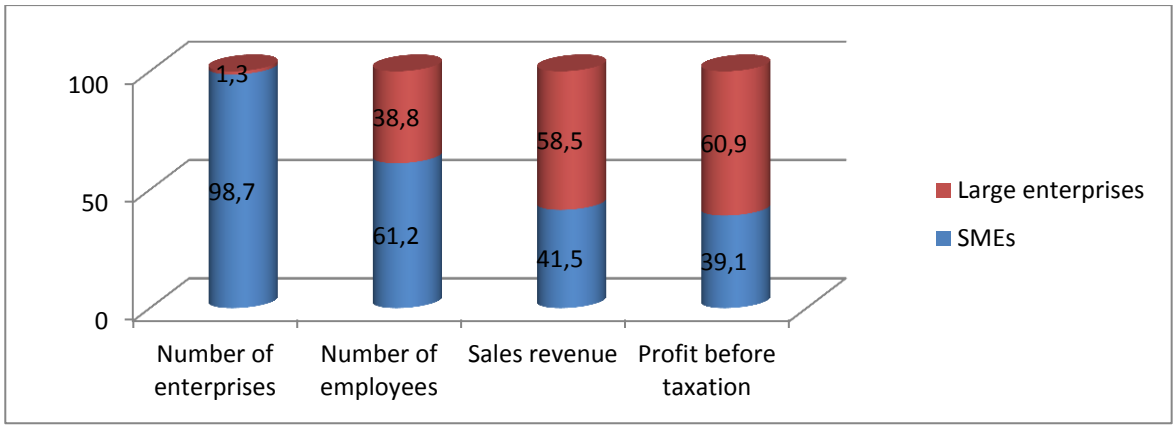

Figure 1. Share of the main indicators of SMEs in the national economy of the Republic of Moldova, 2016, %

Source: according to the National Bureau of Statistics data

It is not surprising that SMEs placed in the center of public and scientific concerns, one of the rationales is to stimulate their development. SMEs development is conditioned by a number of factors: human resources, financial resources, investment attraction, business cooperation, and state policy in the field of SMEs development, the business environment in the country/region, innovations.

Innovation is considered to be one of the imperative factors for the development of the SMEs sector. It contributes to increasing the competitiveness of the business and consequently has a favorable impact on rising growth rates, market expansion, export development, attracting investments, increasing sales and implicitly profit; develop the creative potential of workers. Under the conditions of fierce competition, innovation is no longer a choice, but rather be-

comes an absolute necessity and an important prerequisite for the survival of any enterprise. Innovation is one of the key assets for the success of the company, both on the national and international levels, being considered as one of the main driving forces of the competitiveness and economic and social development of organizations and, in particular, of SMEs.

To a large extent, the advantages of small companies, with reference to the innovative sphere, are manifested by the following:

- more favorable conditions for creativity that bear an individual character are created in small companies;
- the decision to innovate is taken by a small number of people, and the inventor, owner, and manager is usually the same person, which eliminates, to a large extent, many problems in corporate governance;
- new information technologies create favorable functioning conditions for small companies, previously possible only in large enterprises;
- small companies can have an innovative advantage because of the differences in management structures (Rothwell, 1989);
- Bureaucracy level is lower than in large companies (Scherer, 1991), and (Link and Bozeman, 1991).

LITERATURE RIEVIEW

The role of innovation in SMEs development in the European Union: strategies, action plans, programs.

In the European Union (EU), special attention is paid to the role of innovation for the development of SMEs, as innovation is at the heart of economic growth, being its catalyst, and at the same time becoming a factor of competitiveness. Therefore, innovation occupies a distinct space in the main European policy documents, which aim at supporting entrepreneurship, thus relying on different priorities, objectives or actions. For example, the *SMALL BUSINESS ACT FOR EUROPE* represents the main SMEs framework document, which reflects the current trends of the EU member states in supporting SMEs, containing a set of 10 principles to guide the design and implementation of policies both at the level of the European Union and at the level of the member states. Two of these principles address directly entrepreneurship, SMEs, and innovation (http://eur-lex.europa.eu/legal-content/RO/TXT/?uri=celex:52008DC0394):

• 1st principle - create an environment where entrepreneurs and family businesses can thrive and entrepreneurship is rewarded - encourages member states to pay particular attention to future entrepreneurs, especially by encouraging entrepreneurship and talent, mainly among young people and women and simplifying conditions of companies' transfer.

• 8th principle - *promote the upgrading of skills in SMEs and all forms of innovation* - encourages SMEs' investment in research and their participation in research and development support programs, transnational research, clustering and active management of the intellectual property by SMEs.

Another strategic document of the European Union is the *EUROPE 2020 STRATEGY*, which aims to create favorable conditions for smart, sustainable and inclusive economic growth. One of the objectives set out in this strategy is the *smart growth*: *the development of knowledge*

and innovation-based economy that involves strengthening knowledge and innovation as drivers of future economic growth. The European Union encourages member states to improve the quality of education systems, strengthen research performance, promote innovation and knowledge transfer, make full use of information and communication technologies and ensure that innovative ideas are translated into new products and services that generate growth, quality jobs and that helps to address the challenges faced by European society and the world. But in order to succeed, all these must be correlated with the entrepreneurial spirit, finance and with a focus on user needs and market opportunities.

"Entrepreneurship 2020" ACTION PLAN is also of particular importance for developing entrepreneurial potential and stimulating entrepreneurship and innovation culture. It is based on 3 pillars, targeting entrepreneurial education at all levels; simplified and predictable regulatory framework; access to finance geared to innovation and competitiveness, respectively. The main actions for SMEs include: *strengthening the knowledge base of the key market trends and innovative business models; adopting the necessary measures to support the marketing of innovation, research and development projects, taking into account the particular challenges faced by the newly established companies* (http://eur-lex.europa.eu/legalcontent/ro/TXT/?uri=CELEX%3A52012DC0795). Transposition at the national level of all the EU's concerns about entrepreneurship and innovation has the main effect the structuring of public policies from the perspective of an ecosystem approach.

A European Union document emphasizing the promotion of innovation as a central element in strengthening the competitiveness of enterprises, especially in the SMEs sector, is the *ACTION PLAN FOR PROMOTING INNOVATIONS BASED ON DESIGN*. Through this Action Plan, the European Union encourages member states to use design as an essential element of SMEs' innovation and development strategies under today's global market, noting that this is not only a formal way to increase the attractiveness of products and services, but also a way to use new and traditional materials, new tools for production and processes, and an innovative approach to better understanding customer needs. Design redefines ideas such as changing the shape of a product, rearranging a site's functionality to make it easier to use, refining a production line for resource efficiency, or streamlining processes within a company in order to improve performance.

With a budget of nearly 80 billion EUR, *"HORIZON 2020"* is the European Union's framework program for research and innovation, which runs during the years 2014-2020. This is the financial instrument for implementing the "Innovation Union" - one of Europe 2020 Strategy's flagship initiatives for ensuring the global competitiveness of the European area and is the largest research and innovation program ever undertaken by the European Union. The program proposes a unique funding model for all types of participating organizations and introduces a specific tool for SMEs that aims that at least 20% of the program budget is directed to them. The SMEs tool supports small and medium-sized enterprises at high risk and with increased potential to develop and market new products, services and business models that could stimulate the economic growth.

There are also a number of other European programs that aim to support SMEs in research and innovation and aim to provide direct support and create a favorable growth environment for innovative SMEs:

COSME is The Program for Competitiveness of Enterprises and Small and Medium-sized Enterprises aims to strengthen the competitiveness and sustainability of European enterprises, as well as encourages entrepreneurial culture and promotes the establishment and development of SMEs. The overall objective will be achieved by meeting the four specific objectives:

- Improving SMEs' access to finance through equity investments or loans mobilization;
- Improving access to markets in particular in the intra-community area, but also globally;
- Improving the framework conditions for the competitiveness and sustainability of European enterprises, in particular, of SMEs, including the ones from the tourism sector;
- Promoting entrepreneurship and entrepreneurial culture.

EUREKA is an intergovernmental initiative and aims to increase the productivity and competitiveness of European industry and economy in the world market through close cooperation between industrial enterprises, universities and research institutions on advanced technologies.

EUROSTARS is an European SMEs Finance Program developed by the Eureka Initiative and the European Commission which provides a financial framework specifically designed for SMEs that carry out research and development activities, in order to demonstrate the entrepreneurial capabilities of SMEs, the potential for their development, the potential for immediate interaction with the market, the ability of SMEs to lead consortia and international projects.

STARTUP EUROPE is a European Commission initiative designed to connect start-ups, investors, accelerators, entrepreneurs, corporate networks, universities, and media through a series of networks. The initiative aims to offer many entrepreneurs in Europe the opportunity to open up businesses more easily and expand their activity in European Union member states in order to become world-class elite enterprises.

DESIGN FOR ENTERPRISES program is a range of courses for the adoption of innovative design concepts and techniques addressed to SMEs and business intermediaries that support SMEs.

The EUWIN initiative aims to promote the implementation of innovation at the workplace in European enterprises, especially in SMEs, and raise awareness among policy makers at all levels on the benefits of these innovations. Companies that are aware that staff is the most valuable resource, encourage employees' creativity, provide them with development opportunities and apply participatory management can more easily cope with the increasingly competitive business environment. Every idea, no matter how insignificant it may seem, can place the enterprise one step ahead of its competitors.

Since 2014, Moldova has been eligible for the activities of the programs: HORIZON 2020 and COSME.

Overview of the legislative framework and policy documents supporting innovation in SMEs.

A number of strategic documents, programs, concepts, and normative-legal acts have been adopted in the Republic of Moldova in recent years, aimed at stimulating the development,and implementation of innovations and support for SMEs. However, in the Republic of Moldova, the activity of supporting SMEs and the innovation process is carried out separately and there are no normative acts, which are especially focused on the integration of these processes. However, legislative acts and policy documents addressing innovation and SMEs include together with the main areas concerned, to a greater or lesser extent, some directions, objectives,and actions that are directly geared to supporting the innovation activity of SMEs. Among the main legislative acts and strategic documents that address these areas, we mention:

- The Code on Science and Innovation of the Republic of Moldova, No. 259 from 15.07.2004
- The Law on Science and Technology Parks and Innovation Incubators from 21.06.2007
- Law on SMEs Support from 21.07.2016[2]
- Innovation Strategy of the Republic of Moldova for the period 2013-2020 "Innovations for Competitiveness"
- SMEs Sector Development Strategy for 2012-2020
- The National Intellectual Property Strategy until 2020, approved by the Government Decision no.880 from November 22, 2012
- Program of Activity of the Government of the Republic of Moldova, 2016-2018
- Roadmap for improving the competitiveness of the Republic of Moldova
- National Action Plan for the implementation of the Moldova-EU Association Agreement during 2017-2019.
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Key actors in developing innovations. Generally speaking, innovation means converting new knowledge into economic and social benefits as a result of complex interactions between many actors within a system, called the innovation system. The innovation system is a complex set of innovative enterprises, objects of the innovation infrastructure, institutions and mechanisms (organizations) that provide favorable conditions for the development, implementation, and dissemination of innovations. Each of the actors involved in the innovation process usually has different roles, but the objective is a common one - producing a new or significantly improved product/service and its promotion on the market. Thus, the key actors of the innovation system, which interrelate in the process of innovation activity, can be divided into three different categories, which, in graphics mode, could be represented as follows:

[2] The new SMEs law provides for a number of changes, including the new format of the law provides for the first time a new article on encouraging innovation and the internationalization of small and medium-sized enterprises.

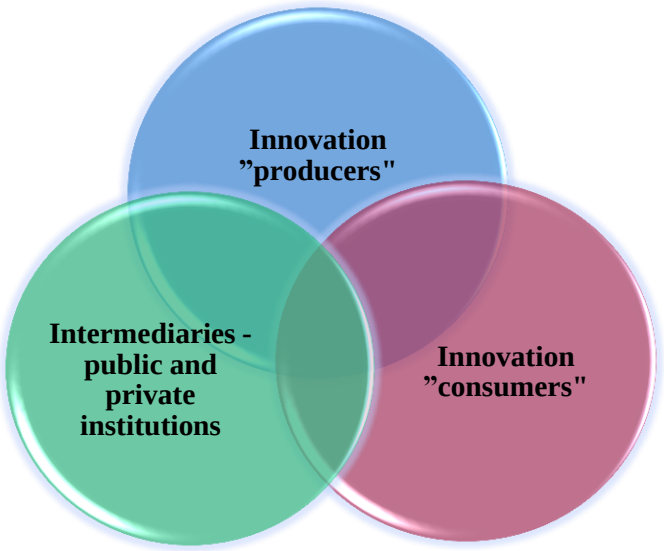

Figure 2. Key actors in developing innovations

Source: developed by author

Innovation "producers" (scientific organizations (scientific research institutions, universities), enterprises with scientific activity) are those entities that contribute to the creation of knowledge, science-based ideas, which *form the supply for innovation*.

Innovation "consumers" (enterprises, forms of cooperation (including clusters), business associations, etc.) are those entities that help capitalize the research results, implement new innovations and technologies, including through the technology transfer, in order to produce new or significantly improved competitive products, as well as to use the progressive processes, services and technologies, or the actors that *form the demand for innovation*.

Intermediaries - public and private institutions (AITT, AGEPI, scientific-technological parks, innovation incubators, financial institutions, development funds and agencies, etc.) contribute to the good work of innovation activity, improving the links between manufacturers and consumers of innovations through physical proximity and through an efficient management of the entire innovation cycle in order to achieve the objectives by the optimal and efficient use of all existing resources (material, human, financial, etc.) and facilitating the common access to facilities and expertise. In other words, intermediaries *ensure the interaction between supply and demand for innovations*.

At the same time, it is important to note that the state has the main role of an actor in the development of innovations. It can have a double or even triple role: it is both the source of supply and the source of demand. Namely, the state is the first interested in the domestic products/services to be competitive, i.e. the state has the most possibilities to stimulate the development of the innovations, both financially and by creating the favorable environment for the successful development of the innovation activity.

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State functions are to develop and promote clear policies, viable mechanisms, and tools that encourage the introduction of innovation in the economy, to highlight the links and correlations between the actors in the innovation activity, to establish their functions and responsibilities, to monitor the whole process of innovation.

Innovative infrastructure *is an important component in implementing innovations*. The state stimulates and supports the effort to innovate and absorb innovation in the economy and society, at the level of economic agents, by creating a favorable environment for the development of the entities from the innovation infrastructure.

Innovative infrastructure represents the set of resources and tools available to SMEs that intend to carry out innovation and technology transfer projects, capitalize the research and technological development results. Innovative infrastructure is an important element of the National Innovation System, which provides innovative SMEs with a whole range of incentives and benefits to help them achieve higher value and productivity, faster growth, to overcome the problems they face, gaining access to adequate innovation assets at every stage of the business development process - start-up, expansion, production, and marketing. Innovative infrastructure as a factor for increasing the efficiency of innovation activity facilitates the effective connection of people, ideas, resources and, capital, greatly improving the results and reducing the total spending to obtain them. Although, in general, the diversity of the innovation infrastructure typology is high, the largest share belongs to innovation incubators and scientific-technological parks in the Republic of Moldova.

Innovation incubators are entities from the innovative small and medium enterprises infrastructure support network with up to 3 years of activity or potential innovative entrepreneurs that ensure the increase of the business survival rates. They are designed to mitigate the impact of problems faced by start-up entrepreneurs or potential entrepreneurs on the stages of establishment and development of their businesses, based on the development and/or implementation of innovation [6].

In the Republic of Moldova, there are business incubators and innovation incubators. The distinction between business incubators and innovation incubators is that business incubators, as defined by the European Commission, are seen as a space where new companies are concentrated, with the aim of improving their survival and growth rate by ensuring common facilities (fax, IT equipment, etc.) as well as the necessary managerial support. The focus is on local development and job creation. In the case of innovation incubators, the focus is on the development and implementation of innovations, technological transfer.

Currently, there are 8 innovation incubators in the Republic of Moldova. These are academic and university incubators. Although these structures have been created and offer a certain range of incubation services, they do not meet the expectations of the main actors involved in the innovation activity, thus having a minimal impact on the development of the SMEs sector.

Academic incubators, the creation of which initiated in 2007, during their work, have succeeded in supporting the establishment and development of innovative businesses, some of which being launched on the market, are more or less

efficient so far, but incubators created near universities, remain largely inactive, some of which have failed so far to attract residents either by virtue of their specialization or by the lack of efficient management and specialists in the field of innovation.

The main problems, which do not allow the efficient development of these entities, however, related to the low attractiveness of these business support mechanisms. This is evidenced by the analysis of the situation in terms of the evolution of the number of residents within the first innovation incubator - "Innovator", where we can see that the number of residents evolved from two in 2008 to seven in 2010 and from 2010 there is a drastic reduction of them, from seven to three residents in 2013; in 2014 this incubator hosted no resident, and in the years 2015 and 2016 only one resident activated within it. At the same time, the large fluctuation of the incubator's residents shows that many of the incubated enterprises have not achieved their growth targets, creating new jobs and launching innovations. Often the cessation of the business occurred shortly after the expiry of the resident status or even during the incubation period. This also points to problems with the selection of incubated enterprises, but also the quality of services offered to them.

Scientific-technological parks are also entities in the infrastructure network supporting innovative SMEs with more than three years of activity. These structures, in addition to providing common facilities, have as objectives the investment attraction, creation of competitive industrial sectors based on advanced and innovative technologies, development of activities in accordance with the development opportunities specific to the area in which they are located. In addition, scientific-technological parks provide innovative production facilities and equipment to SMEs, capitalize the legal facilities for the benefit of their residents, interfere in relations with central and local public administration authorities to solve problems of innovation activity of resident enterprises, contribute to the orientation of organizations activity in the sphere of science and innovation to the needs of the internal and external market, assist the residents in promoting the obtained results at the events, exhibitions, national and international fairs, etc. (Guvernul Republicii Moldova, 2007).

Nowadays, there are 3 scientific-technological parks in the Republic of Moldova, officially: one with universal specialization, one is specialized in organic farming and one in nanotechnologies. According to the activity report of the ASM from 2016, only the residents of the scientific-technological park with universal specialization carried out innovation activities in 2016, creating jobs, attracting investments and earning revenues from the marketed innovation products. The nanotechnology park registered the value of 0 (zero) for all these indicators, including the number of residents, and the park specialized in organic farming, with a more or less efficient past activity, without a manager, has not been working for a few years in a row. This demonstrates that their performance is generally weak and the problems they face in their activity, being the same as those of innovation incubators; once again confirm that the attractiveness of these support instruments is low, and the activity - ineffective.

At the same time, the problems of the infrastructure innovation activity are conditioned by a number of factors. Among them, the insufficiency of innovation professionals represents an important challenge for innovation infrastructure entities and not only. As a result, the entire innovation potential of the country cannot be identified and capitalized optimally, and the offer of innovation and the technological transfer does not come from the local research activity, but more often, there is observed a tendency to apply foreign innovations and technologies. And as a result of efforts to attract residents, the innovation infrastructure has supported the establishment and hosting of enterprises rather than the whole range of relevant services. However, the most important negative factor is the legislative one - the imperfection of legislation, the annulment of the tax and customs facilities promised to the residents initially through the Law on Science and Technology Parks and Innovation Incubators (*These were canceled in 2012, but until then no resident benefited from them*!).

Thus, nowadays in the Republic of Moldova, there are practically no real mechanisms and tools for supporting the projects realized by the residents of the innovation incubators and the scientific-technological parks. The imperfection of legislation creates confusion, and innovation infrastructure residents lack incentives to carry out innovative projects within these structures. This has led to discouraging entrepreneurs from engaging in innovation activities, and the mentioned facilities have probably been decisive in attracting residents.

The implementation of innovation and technology transfer projects. Technology transfer projects are currently the main method of state support for the implementation of scientific results and innovations within enterprises. For the implementation of the projects, up to 50% of the total cost of the project financed from the state budget, while the remaining amount will be allocated by the economic agent - the project coordinator or the third party - the project sponsor.

Analysis of the dynamics of the technology transfer projects indicates a relatively small number of projects implemented annually. In the period 2005-2016, 291 technology transfer projects were financed in various fields of economic activity; cumulatively, the amount of financing from the state budget accounted for 78.17 million MDL. As a result of the implementation of the financed projects, during the analyzed period, 2005-2016, the volume of the marketed innovative production amounted to 299.5 mil MDL. Thus, for each leu invested from public funds in technology transfer projects, almost 3.8 MDL of product sales were obtained.

We notice different trends in terms of co-financing of projects. In recent years, the Agency for Innovation and Technology Transfer has managed to attract more funds from the private sector. Thus, in 2014, the co-financing value of projects from other sources reached a maximum share in the analyzed period. Financed technology transfer projects refer to the following main strategic directions: innovative materials, technologies and products; energy efficiency and the use of renewable energy sources; health and biomedicine; biotechnology.

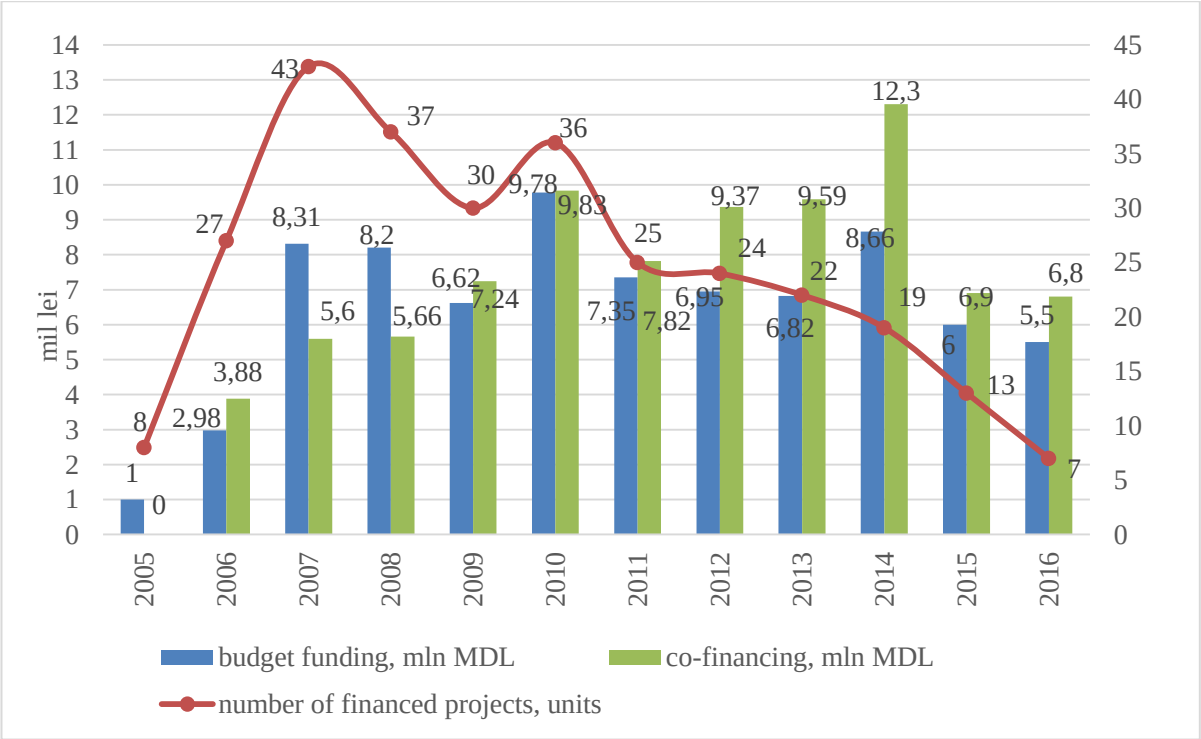

Figure 3. 2005-2016 Dynamics of technology transfer projects funding for 2005-2016

Source: developed by author based on data (Academia de Ştiinţe a Moldovei, (2016)

The main barriers restrain SMEs' access to innovation.

Within the National Institute of Economic Research (NIER), a number of interviews and questionnaires with entrepreneurs have been conducted over several years with the authors' participation, in order to identify the main constraints faced by the SMEs sector, including in the development and implementation of innovation projects. Among the main barriers that limit the SMEs' access to innovation, respondents have mentioned the following:

- Lack of financial resources represents the biggest obstacle for SMEs wanting to innovate. The complicated process of accessing a bank loan strengthens this state of affairs. It is very difficult for SMEs to reach grants for the implementation and development of innovation, and bank loans issued at very high-interest rates.
- The difficulty of acquiring new equipment and technologies is also related to the insufficiency of financial resources. According to the entrepreneurs, the cost of the equipment is high, and the acquisition of new technologies requires other financial resources, which they do not have.
- Lack of qualified staff, such as engineers, technologists, programmers, etc. represent, according to the respondents, a serious obstacle in the development and implementation of innovations. First of all, the entrepreneurs themselves show little innovative and research potential. There is also a shortage of skilled workers who would be able to work on modern machines by using new technologies. Currently, many SMEs continue to use outdated

equipment and technologies, which contribute negatively to the innovation process.

- Insufficient awareness of the advantages of cooperation by entrepreneurs and researchers, who are the main subjects of the process of developing and implementing innovations. Entrepreneurs do not fully understand the importance of implementing innovations, based on research results, and researchers
- The need to their market results. .
- Difficulty in finding the necessary partner occurred at entrepreneurs and researchers who are interested in cooperation.

It is important, however, to note that the insufficient innovation culture or even in a broad sense, the entrepreneurial culture, has an important role together with the barriers faced by entrepreneurs in the implementation and development of innovations. Both in the opinion of employees of public institutions and of entrepreneurs, there is little awareness of the importance of the business environment and the contribution of innovation to increasing competitiveness. A more optimistic opinion is expressed by the representatives of the agencies, directly involved in the technologic transfer activity, considering that the number of such enterprises is growing. However, entrepreneurs that operate in sectors such as ICT are more aware of the importance of innovation.

Conclusions and proposals

Given the strategic importance of the SMEs sector for economic growth and creation of job places and the role of innovation in the development of SMEs, it is clear that these two elements are indispensable engines for the future economic growth. Based on the experience of the Republic of Moldova it can be noticed that policy innovation is implemented with a minimal impact on the development of the SMEs sector at present in the country. Obviously, the state plays the main role in the development of entrepreneurship and innovations. Effective development of these sectors, but also the growth of interest in innovation activity depends on effective state decisions. In order to foster the innovative spirit of SMEs and increase their competitiveness and the economy as a whole, they need to help from adequate and efficient public policies, intelligent regulation, in line with the European Union's development provisions.

Based on this, the main proposals for improving the development of the innovation activity are the following:

In relation to improving policy documents, targeting SMEs and innovation

The review and improvement of the existing innovation framework are extremely necessary. Foreign experience shows that an effective legislative framework is one of the conditions for the successful development of innovation activity. In this respect it is necessary: (a) To revise and approve the Law on Scientific-technological Parks and Innovation Incubators in a new edition and analyze the possibilities for granting incentives (tax, credit, customs, etc.) for the residents of science and technology parks and innovation incubators; (b) Elaboration of other laws and normative acts, of new mechanisms, which would contribute to the development of innovations; stimulating innovation activity in SMEs (in terms of the risk capital, innovation voucher, granting preferential conditions for innovation activities of SMEs, facilitating the access of innovators to financial resources, stimulating in-

novation activity through public procurement, and other incentives).

In relation to improving the relations between the academic and the business environment

The result of the innovation activities depend on the establishment and maintenance of a broad partnership for innovation. This partnership requires a coordinated, integrated, predictable and credible view over its evolution correlated with the mobilization of all (public and private) financial efforts. It needs clear and stable rules, international excellence benchmarks that encourage collaboration and competition in the innovation environment. In this context, it is necessary:

- To develop a platform of orientation and transaction for the innovation supply and demand that would promote the need to carry out any kind of innovation in SMEs (including marketing, organizational, improvement of design and packaging of products, etc.), but also the need to carry out scientific achievements of the local scholars; it would help to stimulate the cooperation between researchers and entrepreneurs; the platform would also facilitate the creation of cooperation relations between scholars and innovative enterprises in the country and abroad for integration into the global innovation circuit;
- To develop a mechanism for identifying the needs of the national economy in innovations and establishing the priority sectors and directions in which the demand for innovations is higher and, respectively, the reorientation of the scientific researches in these directions.

In relation to improving the development of innovation and innovative SMEs supporting infrastructure

Innovation infrastructure represents an answer to the problems of the development of innovative small and medium-sized enterprises. A valuable use of the innovative potential of SMEs should be done in close partnership with public authorities and other innovation actors, involving business chambers, business associations, regional development agencies, professional associations, etc. In this respect it is necessary: (a) To support the creation and development of a network of private investors interested in investing in innovation projects or a public-private fund that would support innovative SMEs resident in the innovation infrastructure in the implementation of innovation and technology transfer projects; (b) With regard to existing innovation incubators and scientific-technological parks, it is necessary to thoroughly assess the performance of these structures, identify the problems, the specific barriers to the activity of each individual entity, and where these barriers cannot be overcome - reorganize them, so that they do not only figure out as a number within the innovation infrastructure. At the same time, it is necessary to stimulate the work of the functional ones, or at least, the ones with the prospect of growth and also to consider the possibility of creating new entities supporting innovative SMEs such as clusters, technology transfer offices, accelerators, excellence, and design centers, etc.

In relation to improving the development of innovative SMEs

Competitiveness based on innovation must become a priority for domestic SMEs. This implies

that, beyond the legal framework that encourages them, entrepreneurs also need knowledge in the field of innovation, need to develop their capacity to absorb latest technologies, to adapt these technologies to the needs of the markets they serve, and to develop, in turn, technologies or services that enable them to make progress. At the same time, the very limited trading capacity of research and innovation results and the very low level of entrepreneurship based on innovation require the development of new business models based on innovation and technology transfer that would help to keep the continuous flow of innovation in the economy. For this purpose it is necessary: (a) To develop and implement mechanisms and tools to support the creation of innovative enterprises (start-ups) and support staff from the field of research or universities for the development of innovative SMEs (spin-offs) that would help increase the marketing capacity of knowledge with an emphasis on sectors with creative potential; (b) To facilitate the participation of innovative SMEs in international projects and programs and informing them, as well as the entire society, about the existing opportunities.

BIBLIOGRAPHY:

Academia de Ştiinţe a Moldovei, (2016). *Raport privind activitatea Consiliului Suprem pentru Ştiinţă şi Dezvoltare Tehnologică şi rezultatele ştiinţifice principale obţinute în sfera ştiinţei şi inovării în anul 2015*. Responsabili: Aurelia Hanganu. – Chişinău: Biblioteca Ştiinţifică Centrală ”A.Lupan”. ISBN 978-9975-3044-6-7

Comunicarea Comisiei către Consiliu, Parlamentul European, Comitetul Economic şi Social European şi Comitetul Regiunilor, *„Gândiţi mai întâi la scară mică”: Prioritate pentru IMM-uri un „Small Business Act” pentru Europa*. Disponibil: http://eur-lex.europa.eu/legal-content/RO/TXT/?uri=celex:52008DC0394

Comunicare a Comisiei către Parlamentul European, Consiliu, Comitetul Economic și Social European și Comitetul Regiunilor. Planul de Acțiune Antreprenoriat 2020. Disponibil:http://eur-lex.europa.eu/legalcontent/ro/TXT/?uri=CELEX%3A52012DC0795

Guvernul Republicii Moldova, (2007). *Lege Nr. 138 din 21.07.2007 cu privire la parcurile ştiinţifico-tehnologice şi incubatoarele de inovare*. Publicat: 27.07.2007 în Monitorul Oficial Nr. 107-11 art Nr: 476

Link, A. and Bozeman, B., (1991). Innovative behaviour in small-sized firms. *Small Business Economics*, 3(3), 179-184

Rothwell, R., (1989). Small Firms, Innovation and Industrial Change, *Small Business Economics*,(1), 51–64

Scherer, F, (1991). *Changing perspectives on the firm size problem*. In Innovation and Technoogical Change: An International Comparison, edited by Z.J. Acs and D.B.Audretsch.Ann Arbor, MI: University of Michigan Press, pp.24-38