

**M.S. Iskakova<sup>1</sup>, D.Z. Akhunova<sup>2</sup>**

<sup>1</sup>Kazakh Humanitarian Law Innovation University, Semey, Kazakhstan,

<sup>2</sup>Shakarim University, Semey, East Kazakhstan Region, Kazakhstan.

E-mail: [mis0508@mail.ru](mailto:mis0508@mail.ru), [di727272@mail.ru](mailto:di727272@mail.ru)

## **BASES OF STATE SUPPORT OF INNOVATIVE ENTREPRENEURSHIP**

**Abstract.** The problem, according to the authors, is that the development of a small innovative business is not facilitated by the complex and inadequate state system of regulation and support that is in need of entrepreneurs.

The aim of the article is to study the operating conditions of small enterprises - participants of innovation clusters and the rationale for measures to improve government support aimed at realizing the innovative potential of small businesses.

The methodological basis of the study is a systematic approach, methods of structural, subject, functional, statistical analysis, expert assessment method.

The main directions of increasing the efficiency of state support of small innovative enterprises include: optimization of the regulatory framework, improving the evaluation of the activities of state programs and development institutions, providing patent support and protection of copyright, improving models of financing innovative activities. State support should be implemented taking into account the needs of a small innovative enterprise at the stages of the life cycle.

**Keywords.** innovative enterprises; innovation cluster; governmental support; stages of the innovation business life cycle.

**Introduction.** The practice of economically developed countries indicates that the steady growth of the economy in the context of global economic competition is due to the high level of introduction of new technologies and developments into production. According to various estimates, from 70 to 100% of production growth in these countries today is achieved through the use of innovation. In this regard, we have studied the experience of state support of innovative activities abroad.

In economically developed countries, the state stimulates the development of innovation by creating the necessary economic, financial, organizational and regulatory conditions. Economic conditions include:

the allocation of direct public investment for the implementation of innovative programs and projects that are potentially important for the state, but not attractive to private investors;

the implementation of budgetary policies that provide financing for innovation;

Financial conditions include:

foreign economic support, including the provision of customs privileges for innovation projects included in state innovation programs.

development of foreign economic relations in the innovation sphere;

suppression of unfair competition;

revitalization of entrepreneurship;

development of high-tech products leasing;

promoting the modernization of technology;

providing various types of financial support, tax and customs benefits to domestic enterprises that are mastering and disseminating innovations;

ensuring effective employment in the innovation sphere;

implementation of tax and pricing policies that contribute to the growth of supply in the innovation market;

creating a favorable investment climate in the innovation sphere;  
the provision of subsidies, soft loans, guarantees to domestic and foreign investors involved in innovation.

Organizational conditions include:

the formation and implementation of state, industry and regional innovation programs;

development of an innovation structure;

assistance in training, retraining and advanced training of personnel engaged in innovative activities;

information support of innovative activities (ensuring free access to information on the priorities of the state innovation policy, to materials on ongoing and completed innovation projects and programs, completed scientific and technical research, which may become the basis for innovation, etc.);

assistance to integration processes, expansion of interaction of regions in the innovation sphere, development of international cooperation in this field;

promotion of domestic innovative products in world markets;

protection of interests of domestic subjects of innovative activity in international organizations.

Regulatory legal conditions include:

the establishment of the legal framework for the relationship of subjects of innovation;

guaranteeing the protection of the rights and interests of subjects of innovative activity, including intellectual property rights.

In order to regulate innovation processes, the state provides both direct support for innovation and indirect support.

Direct state regulation of innovation is carried out on the basis of the selection of priority areas for the development of science and technology and the definition of a list of “critical technologies”, targeted financing of projects from the state budget and co-financing of projects and programs implemented by non-state structures, the formation of innovation infrastructure, etc.

Indirect measures to stimulate innovation include the use of fiscal methods (preferential taxation, accelerated depreciation, regulation of individual markets, industries), legal regulation in the field of creation, transfer and protection of intellectual property, as well as the creation of favorable conditions for the activities of structures involved in the commercialization of scientific knowledge.

**Main part.** As world experience shows, the creation of favorable conditions for the development of innovation is a task, primarily of state regulatory bodies. Without a focused state innovation policy, it is impossible to ensure the sustainable development of the domestic economy. The role of the state is, first of all, to activate innovative processes in all areas of the country's economy.

**R&D and innovation financing.** As world experience shows, the development of innovation is directly related to the state of fundamental and applied science and the commercial demand for scientific and technological developments.

One of the indicators characterizing the attitude of the state towards scientific and technological progress is the amount of funding for science. So, in 2000, government spending on research and development amounted to: in the United States 246.2 billion dollars (2.9% of GDP), in Japan 94.2 billion dollars (3.0% of GDP), in Germany 45.8 billion dollars (2.35% of GDP), in France 28.0 billion dollars (2.25% of GDP), in Sweden 7.6 billion dollars (4.0% of GDP). It should be noted that the European Union recommends that all its members bring the level of investment in science to 2.5% of GDP. For comparison, in Russia this indicator in 2000 amounted to 2.2 billion dollars (1.09% of GDP), in Kazakhstan - 13.7 million dollars (0.08% of GDP). When calculated per capita, these costs amounted to 858 in the USA and Sweden, 747 in Japan, 536 in Germany, 480 in France, 64 in Russia, and 0.9 US dollars in Kazakhstan.

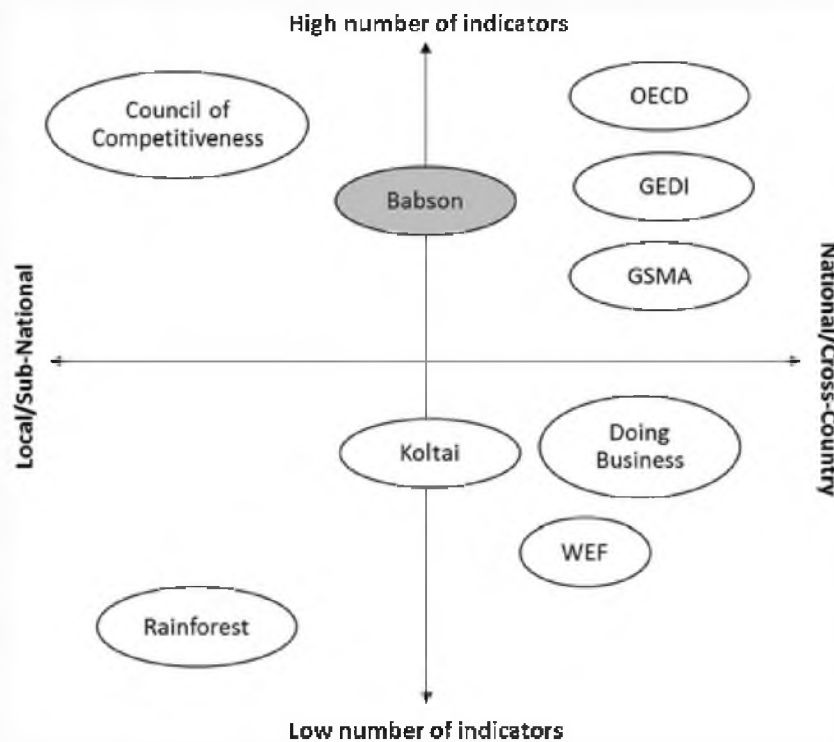
The methodology for choosing the priorities of innovative development and the methods of financing R&D and innovation in different countries are implemented differently, because they must comply with the strategic directions of state policy, which is constantly being adjusted with changes in both external and internal conditions of economic development.

Support for scientific and technological activities with an innovative focus by EU countries is carried out in accordance with the principles common to all market economy countries. The principle of complementarity (complementarity) in the provision of financial assistance is that priority is given to work aimed at filling the gaps in the technological development of the country. The principle of supporting pre-

competitive research and development is that the state subsidizes only the creation of a publicly available scientific and technical product, without violating the existing market relations between their firms.

Relevant support measures are carried out by various state bodies with the involvement of various agencies, credit and investment institutions. In France, support for innovation is concentrated in the areas of small and medium enterprises. Financial, organizational and informational support for innovative projects designed for industrial implementation is provided by the state agency, the founders of which are three ministries (industry, national education, science and technology, small and medium enterprises).

Whereas some studies / approaches are focused on the macro level, describing factors influencing the level of entrepreneurship on a national level, others are dealing with the micro level, focusing on interpersonal relationships and communities in smaller geographic areas (eg, cities or organizations). The Aspen Network of Development Entrepreneurs summarized the research that has been conducted in this new field of study so far and identified several studies developing an entrepreneurship ecosystem's assessment framework. In Figure 1, the different approaches are compared according to the geographic unit of analysis and the complexity of the model (number of indicators).



Entrepreneurship ecosystem assessment frameworks. Source: The Aspen Network of Development Entrepreneurs

Some of the models list an extensive list of indicators (OECD: 57 indicators, Asset mapping roadmap: 157 indicators), while others are more conceptual and allow more flexibility in assessing entrepreneurial ecosystems

Daniel Isenberg, leading the Babson Entrepreneurship Ecosystem Project, defines an entrepreneurship ecosystem as 'n a set of networked institutions [...] with the objective of aiding the entrepreneur to go through all the stages of the process of new venture development. It can be understood as a service network, where the entrepreneur is the focus of action and the measure of success.

In the UK, budgetary funding for R&D is carried out through various channels – departments (ministries), each of which has in its budget funds for science, various specialized agencies (for example, space) and other organizations. Funding organizations are also seven research councils on the most important areas of science and technology. The councils have their own budgets and distribute funds between research institutions on a competitive basis, mainly in the form of grants.

State policy in this country is implemented through program-targeted financing of specific projects. The LINK program system is the main mechanism of state support for innovative cooperation between

industry and the research sphere. LINK's goal is to increase the competitiveness of the English industry and the quality of life of the population by supporting, within the framework of managed programs, precompetitive scientific and technical developments and stimulating investments by industrial enterprises in the continuation of work aimed at obtaining commercial products, efficient processes, and a high level of services. Within the framework of each program, joint research and development activities aimed at creating pre-competitive scientific and technical products designed for further development into a market product are supported. Industrial enterprises that are willing to invest in the commercialization of the results of work subsidized under LINK may receive additional support through relevant programs. LINK projects are funded on a shared basis. Up to 50% of funds are invested by government departments and scientific councils. Due to the intersectoral nature of most projects, usually several departments and scientific councils come together to finance a particular program. The remainder of the funds is provided by industry partners. Scientific institutions are paid all expenses.

In Germany, direct financial support for projects from the federal budget is carried out as part of targeted programs of the Federal Ministry of Education, Science, Research and Technology (BMBF). Support is being given to research and development of increased importance for the country as a whole, with the aim of raising the world level of domestic science and technology in selected areas. Preference is given to long-term research and development associated with significant risk, requiring serious costs, in the financing of which private capital also participates. This includes, in particular, cross-industry developments in the field of critical technologies.

The basic principles of program-targeted financing of research and development: -the content of the program must be precisely defined;

financial support is provided once;

The result should be open.

In the Netherlands, measures of state support to enterprises in the implementation of innovative projects are carried out by the Ministry of Economics through its agency SENTER. Amounts equivalent to \$ 400 million go through SENTER during the year. These funds are used to finance research and development within the framework of state programs in the field of energy supply and environmental protection, projects aimed at export development, as well as individual projects carried out by small and medium-sized industrial enterprises.

Of great interest to Kazakhstan are the principles that guide EU government bodies in carrying out specific activities to support innovation processes and the mechanisms used to implement them. First of all, this is due to the fact that the main task of the state in the field of innovation is to bridge the gap between the scientific, technical (knowledge provider) and industrial (user) spheres.

Also, Kazakhstan is also interested in the system of financing science established in the USA and Japan. In these countries, in contrast to European ones, only those works that are fundamental for the development of many industries are priority financed. This approach allows you to get away from spraying funds, concentrate on key areas and achieve significant results in a relatively short time. The fact that investment in the scientific and technological process as a whole increases the efficiency of the economy is convincingly shown by a comparison of the pace of development of Latin America and Southeast Asia. In Latin America, science costs typically account for less than 1% of GDP. And as a consequence of this is stagnation of production. At the same time, as a result of the state policy of stimulating R&D, some Southeast Asian countries got the opportunity to channel up to 2% of GDP to science, at some point, even surpassing the USA and Germany in this indicator. As a result, Malaysia has occupied its niche in the microprocessor market, Singapore in the software and biotechnology market, and South Korea in consumer electronics.

**Conclusion.** In addition, the practice of stimulating R&D with government guarantees by providing long-term loans for promising areas of research is widely used abroad. In the USA, in official government documents, investments in the scientific and technological sphere are even referred to as “investments in the future”, and the field of R&D is considered as one of the most effective mechanisms for the implementation of strategic national goals.

Indirect economic measures of state regulation of innovations include a protectionism policy in the form of trade and currency regulation aimed at protecting and implementing innovations within the country. So, in 1987, under pressure from the US Electronic Industry Association, the Reagan

administration imposed a 100% tax on certain types of Japanese electronics imported into the US market, which was caused by an excess of 16% in the import of electronic products from Japan over American exports of related products.

France uses methods that encourage the export of innovation. The risky costs of firms establishing branches abroad over a period of six years can lead to a reduction in taxation. Thus, foreign experience indicates a variety of support measures and state regulation of innovation activities in order to achieve national interests.

**М.С. Искакова<sup>1</sup>, Д.З. Ахунова<sup>2</sup>**

<sup>1</sup>Қазақ гуманитарлық заң инновациялық университеті, Семей, Қазақстан;

<sup>2</sup>Шәкәрім университеті, Семей, Қазақстан

### **ИННОВАЦИЯЛЫҚ КӘСІПКЕРЛІКТІ МЕМЛЕКЕТТІК ҚОЛДАУ НЕГІЗДЕРІ**

**Аннотация.** Авторлардың пікірінше, шағын инновациялық бизнестің дамуына кәсіпкерлерге қажетті күрделі және жеткіліксіз мемлекеттік реттеу мен қолдау жүйесі ықпал етпейді.

Мақаланың мақсаты – инновациялық кластерлердің қатысушылары – шағын кәсіпорындардың жұмыс жағдайын және шағын бизнестің инновациялық әлеуетін іске асыруға бағытталған мемлекеттік қолдауды жақсарту жөніндегі шараларды зерделеу.

Зерттеудің әдіснамалық негізі – жүйелі тәсіл, құрылымдық, тақырыптық, функционалдық, статистикалық талдау әдістері, сараптамалық бағалау әдісі.

Шағын инновациялық кәсіпорындарды мемлекеттік қолдаудың тиімділігін арттырудың негізгі бағыттары: нормативтік-құқықтық базаны оңтайландыру, мемлекеттік бағдарламалар мен даму институттарының қызметін бағалауды жақсарту, патенттік қолдау мен авторлық құқықты қорғау, инновациялық қызметті қаржыландыру модельдерін жетілдіру. Мемлекеттік қолдау өмірлік цикл кезеңдерінде шағын инновациялық кәсіпорынның қажеттіліктерін ескере отырып жүзеге асырылуы керек.

Сайып келгенде, экономиканы түрлендірудің барлық шаралары бізге жалпы қосылған құнның жоғары деңгейі бар жоғары технологиялық өнімдер шығаруға, ғылыми зерттеулерді қолдауға және ғылыми эзирлемелер мен технологиялар трансфертін тиімді жүзеге асыруға мүмкіндік беретін тұрақты жүйе құрып, дамытуы қажет.

Қазақстандық кәсіпорындардың инновациялық белсенділігін басқа елдермен бірлескен жоғары технологиялық жобаларға қатысу арқылы арттыруға болады. Ғылыми-зерттеу тапсырыстарында жеке капиталдың үлесі аз елдерде және жаңа технологияларға, оның ішінде Қазақстанда да ғылымды, инновацияларды дамытуға және ілгерілетуге көп шығын жұмсайтын мемлекет болып саналады.

Шағын инновациялық бизнеске инвестициялау үдерісіне жеке капиталды тарту саясаты аясында мемлекет технопарктер туралы заң қабылдау және стратегиялық маңызды ғылыми және технологиялық салаларда венчурлік тәуекелдерді сақтандыруға мемлекеттің қатысуы арқылы бизнес-періштелік қаржыландыру жүйесін дамытуы керек; ірі бизнесті алғашқы инновациялық шағын компанияларға инвестициялау үдерісіне тартуға бағытталған шараларды іске асыру; экономиканың осы секторына капиталды аударуды жеңілдететін нормативтік, құқықтық, салықтық және имидждік артықшылықтар түрінде қолайлы жағдайлар жасау арқылы бизнес-инвестициялық сектордың дамуын ынталандыру; венчурлік қаржыландыру бойынша мемлекеттік қолдау шараларын ұсыну және ғылыми-техникалық саладағы инвестицияларды басқару мәселелерін шешу үшін барлық деңгейдегі менеджерлерді оқытуға көмек көрсету.

**Түйін сөздер:** инновациялық кәсіпорындар, инновациялық кластер, мемлекеттік қолдау, инновациялық бизнес өмірінің кезеңдері

**М.С. Искакова<sup>1</sup>, Д.З. Ахунова<sup>2</sup>**

<sup>1</sup>Казахский гуманитарно-юридический инновационный университет, Семей, Казахстан;

<sup>2</sup>Университет имени Шакарима, Семей, Казахстан

### **ОСНОВЫ ГОСУДАРСТВЕННОЙ ПОДДЕРЖКИ ИННОВАЦИОННОГО ПРЕДПРИНИМАТЕЛЬСТВА**

**Аннотация.** Проблема, по мнению авторов, заключается в том, что развитию малого инновационного бизнеса не способствует сложная и неадекватная потребностям предпринимателей государственная система регулирования и поддержки.

Целью статьи является исследование условий функционирования малых предприятий – участников инновационных кластеров и обоснование мер по совершенствованию государственной поддержки, направленной на реализацию инновационного потенциала малого предпринимательства.

Методологическую основу исследования составляют системный подход, методы структурного, предметного, функционального, статистического анализа, метод экспертных оценок.

К основным направлениям повышения эффективности государственной поддержки малых инновационных предприятий отнесены: оптимизация нормативно-правовой базы, совершенствование оценки деятельности государственных программ и институтов развития, обеспечение патентной поддержки и защиты права авторства, совершенствование моделей финансирования инновационной деятельности. Государственная поддержка должна реализовываться с учетом потребностей малого инновационного предприятия на стадиях жизненного цикла.

В конечном счете, все мероприятия по трансформации экономики должны привести к созданию и развитию стабильной системы, которая позволяет выпускать высокотехнологичную продукцию с высоким уровнем валовой добавленной стоимости, поддерживать научные исследования, способствует эффективному внедрению научных разработок, трансферу технологий.

Повышение инновационной активности казахстанских предприятий возможно за счет участия в совместных наукоемких проектах с другими странами. В странах же с низкой долей участия частного капитала в заказах на НИОКР и незначительном спросе на новые технологии, в том числе в Казахстане, именно государство осуществляет большую часть расходов по развитию науки, разработке и продвижению инноваций.

В рамках политики вовлечения частного капитала в процесс инвестирования малого инновационного бизнеса государству следует развивать систему венчурного и бизнес-ангельского финансирования за счет принятия закона о технопарках, участия государства в страховании венчурных рисков в стратегически важных научных и технологических направлениях; реализации мер, направленных на вовлечение крупного бизнеса в процесс инвестирования в малые инновационные компании ранних стадий; стимулирования развития сектора бизнес-ангельского инвестирования за счет создания благоприятных условий в виде наличия нормативных, правовых, налоговых и имиджевых преимуществ, способствующих перемещению капитала в этот сектор экономики; обеспечения государственных мер поддержки венчурного финансирования и помощи в подготовке менеджеров всех уровней для решения задач управления инвестициями в научно-технической сфере.

**Ключевые слова:** инновационные предприятия; инновационный кластер; государственная поддержка; стадии жизненного цикла инновационного бизнеса.

#### **Information about authors:**

Iskakova Maral Serikovna, Master of Economics, doctoral student, Department of "Business and Management", Kazakh Humanitarian Law Innovation University, Republic of Kazakhstan, Semey, st. Auezov 37-83, <https://orcid.org/0000-0002-3280-8296>;

Akhunova Dinara Ziyatovna, Master of Economics, Senior Lecturer, Department of "Finance and Accounting", Shakarim University, Republic of Kazakhstan, East Kazakhstan Region, Semey city, ul. Shugaev, 159a, Republic of Kazakhstan, Semey, st. Bogembay batyr 36 sq. 67, <https://orcid.org/0000-0002-8054-7828>

#### **REFERENCES**

- [1] On amendments to some legislative acts of the Republic of Kazakhstan on the expansion of the academic and managerial independence of higher education institutions: Law of the Republic of Kazakhstan dated July 4, 2018 No. 171-VI. [Electronic resource]. Access mode: [https://online.zakon.kz/document/?doc\\_id=39633866#pos=1](https://online.zakon.kz/document/?doc_id=39633866#pos=1).
- [2] Лухманова Г. К., Габдуллина Р. Ж., Сыздыкбаева Н. Б. Государственная поддержка инновационного предпринимательства в Республике Казахстан // Молодой ученый. 2016. №7. С. 892-895.
- [3] Sayabaev K.M., Zhansagimova A.E. Finance, franchise and their impact on tourism. Journal of internet banking and commerce. (<http://www.icommercecentral.com>), december 2016, vol. 21, no. 3
- [4] Sanalieva L.K., Kengzhegalieva G.B., Idelbayeva A.S., Niyazbekova Sh.U. Investigation of modern economic mechanisms for construction of the intellectual potential of the country as a moving factor of innovative economic development. BULLETIN OF NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN ISSN 1991-3494, Volume 5, Number 375 (2018), 144–148, <https://doi.org/10.32014/2018.2518-1467.19>