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B.B. Korgan¹, R.K. Sabirova^{2, 3}, E.M. Adietova³¹Pavlodar State University named after S.Toraigyrov,^{2,3}Atyrau State University named after Kh. Dosmukhamedovb.korgan@asu.edu.kz, sabirovarysty@mail.ru, adiet_elm79@mail.ru**INNOVATIVE ECONOMY OF KAZAKHSTAN**

Abstract. The dynamic development of the innovation sphere is one of the main components of the innovation economy. Such a high-tech economy implies the existence of an effective innovation system and the creation of institutions to support the innovation process. The key to the formation of a new type of economy in Kazakhstan is large-scale investment in new technologies and the creation of conditions for the constant reproduction of knowledge and their realization in new high-tech products and services. Information communication technologies, which are the basis of the new infrastructure of the country, play a large role in the development of the economy. They must develop at a faster pace than the level of economic development. Innovative activity of Kazakhstan enterprises is noticeable in industries producing products with a low degree of processing. Innovative activity in industries dominated by domestic producers attracts attention.

Keywords: innovative economy, dynamic development, innovative activity, industrial and innovative development, competitiveness.

INTRODUCTION

Since the adoption of the Strategy-2030 in 1997, the country has entered the top five most dynamically developing countries in the world. Over the past decade, the income of Kazakhstan has increased 16 times. The country attracted more than \$ 160 billion in foreign investment. Of course, these results cannot but influence inspiring on the adoption by the authorities of an ambitious program for the socio-economic development of the country.

At the same time, it is also easy to see that economic growth in Kazakhstan was not qualitative growth, there were no significant qualitative changes in the economy. Largely, it was determined by the growth of world energy prices, which increased the GDP index, and this is clearly demonstrated by the data presented in the table below. In other words, the dynamics of the country's economic indicators depend on the external market conditions, on the prices of hydrocarbons and other natural resources supplied by domestic producers to the world market.

The State Program of Forced Industrial-Innovative Development, designed for two five-year plans (2010-2014 and 2015-2019), provides for changing the face of the country's economy and making it independent from fluctuations in world prices for raw materials. In order to overcome dependence on the foreign market, a serious restructuring of the national economy is planned in the direction of innovative development. To accomplish such a large-scale task, the innovative potential of the country must be increased, but today it is not large. According to the Boston Consulting Group, together with the National Association of Manufacturers and the Institute of Production on the Global Innovation Index indicator, which generally shows the level of innovation in the country, Kazakhstan ranked only 60th among 110 countries. To rank the countries, the study examined both innovation costs and innovation returns.

Indeed, the share of innovative enterprises in the country remains low - the level of innovative activity of enterprises is 5.7%; the share of innovative products in the national economy - 0.86%; domestic expenditure on research and development - 0.16% of GDP. Moreover, if we take the ratio between the volumes of innovative products and the costs of innovation, then this proportion looks rather low.

The attention and quality of innovation draws attention to itself, there is practically no fundamentally new products, i.e. new, not only for the enterprises themselves, but also for the world market.

MAIN PART

The Kazakhstan model of market economy is based on private property, free competition and the principles of openness, but at the same time, the state plays a dominant role in reforming the economy. However, as practice shows, government agencies failed to form an effective mechanism for transforming ideas, high technologies, and innovations into a market product. Purposeful training of managers capable of engaging in innovative activities both as part of a scientific research institute and in production has not been implemented. As a result, they fail to make a radical change in overcoming the raw material trajectory of the development of the country's economy, the industrial structure dominated by raw materials continues to be the leading one. He is credited with creating the so-called commodity elite in Kazakhstan, but by definition it could not become the subject of an innovative type of development. Innovative activity is an important component of the innovative development potential of any economic system. In a market economy, product innovation is a commodity and must have a commercial effect for all participants in the technology business. When creating such a product requires a variety of resources, including investment.

In accordance with the Industrial Innovative Development Strategy of Kazakhstan, it was planned to increase the value added value in high-tech and high-tech industries from 2 billion tenge in 2000 to 126.6 billion tenge by 2016 (more than 60 times).

Among the indicators of the result of innovation activity in Kazakhstan are the innovative activity of enterprises, the volume of innovative products, the number of acquired and transferred new technologies. Analysis of the innovation activity of Kazakhstan industry in 2015–2016 showed that in 2016 the number of enterprises with completed innovations increased 3 times compared to 2015, and the level of innovation activity almost doubled.

The results of the research on the innovative activity of enterprises by types of ownership showed that the largest share in the total structure of innovatively active enterprises belongs to the private sector. In 2016, innovation-active enterprises in the private sector were 361 out of 9938. The second position is occupied by innovation-active enterprises in the public sector.

An important factor in the efficiency of the use of new technologies and technology by industrial enterprises is the promotion of an innovative product to technological innovation markets. In Kazakhstan for 2007–2016 exports of innovative products increased 2.3 times, i.e. from 65,020.3 million tenge in 2007 to 152,500.6 million tenge in 2016. The export of innovative services also tends to grow. During the analyzed period, this indicator increased 1.7 times, i.e. from 4380.9 million tenge in 2010 to 7518.0 million tenge in 2016 (figure 1).

Table 1 - Innovative activity of enterprises by type of ownership for 2011–2016 yy.

№		2011	2012	2013	2014	2015	2016
1	Private property	80,5	75,1	77,5	81,4	88,5	80,7
2	State property	14,1	20,1	18,4	14,1	7	12
3	Foreign property	4,7	4,8	3,9	4,5	4,5	7,3

If we consider the structure of exports of innovative products for 2011-2016, then the share of exports of innovative products accounts for an average of 53.0%. A sharp increase in the export of innovative services was observed in 2016, which compared with 2015 increased by 14.9%. The distribution of the volume of innovative products by types of economic activity of industrial enterprises indicates that the largest volume of innovative products falls on the processing industry, which in 2016 amounted to 12,7174.0 million tenge, or 83.4%. Compared to 2011, this indicator increased by KZT 4,832.2 million, i.e. by 19.5% (table 2)

Table 2 - The structure of innovative products for 2011–2016

№	Name	Percentage of
1	Food production, including drinks and tobacco	60
2	Engineering	43
3	Metallurgical industry and production of finished metal products	33
4	Chemical industry	31
5	Production and distribution of electricity, gas and water	17
6	Extraction of fuel and energy minerals	16
7	Mining industry	16
8	Production of coke, oil products	13
9	Manufacture of other non-metallic and mineral products	9
10	Textile and clothing industry	7
11	Pulp and paper industry	5
12	Production of building structures and aluminum products	5
13	Manufacture of rubber and plastic products	4
14	Other industries	3

In the mining industry, the volume of innovative products in 2016 amounted to 25,166.1 million tenge, or 16.6%. Compared to 2013, this figure is more by 7,275.3 million tenge, or 28.9%.

In 2016, out of 506 units. used industries and technology on industry accounted for 257 units, or 50.7% of the total number of innovations.

Consider the main indicators characterizing the level of costs for technological innovations in the industry of Kazakhstan for 2011–2016. A positive factor is that during the analyzed period, the total technological costs increased almost 3 times, i.e. from 26,933.1 million tenge in 2016 to 83,523.4 million tenge (table 3).

Table 3 - The cost of technological innovation

Indicators	2011	2012	2013	2014	2015	2016	Change 2011 to 2016
Total costs, mln.	2933,1	35360,3	67088,9	79985,9	83523,4	113460,1	4,2, times
Including							
Republican budget	430,2	1905,9	5381,8	6178,4	4359,7	5613,2	13 times
Local budget	31,3	10,3	106,1,2	232,1	184,5	36,9	1,2
Own funds of the enterprise	26225,3	32058,3	4393,9	68407,3	70576,3	96860	3,7
Foreign investment	246,3	1385,8	14994,7	2762,7	8379,7	9413,6	38,2
Development Institutions	-	-	2669,4	16,3	23,2	1536,3	

Modernization of economic development is the basis of the success and prosperity of the developed and new industrial countries of the world. The levels of economic development of countries are essentially determined by the level of the redistribution of substances based on the use of knowledge and the ability to produce new products with competitive demand in the market (Table 4).

Table 4 - The ratio of technological conversion and levels of economic development

Level of economic development	The level of technological development	Main product
Pre-industrial and industrial economy	the first	Receipt of raw materials (oil, ore, wood, agricultural products)
	second	Primary processing of raw materials (production of metals, plastics, paper, food)
	third	Production machines, equipment, building constructions
	Fourth	Fine technology, computers, video
	Fifth	Molecular assembly, super-complex schemes, biotechnology
	sixth	Nanotechnology, atomic assembly, nanoelectronics

The level of development of a specific reproductive system (national economy) is determined by the stage of evolution of the national producer and its components (primarily the division of labor and exchange) and is clearly manifested in the innovative characteristics of industry-specific industrial specialization.

The most important factor in the formation of an innovative economy is human capital. An innovative economy cannot exist without widely developed science and education. This is connected not only with the ability to generate innovations, but also to adapt borrowed knowledge and technologies, which is reflected in the structural parameters of the economy: employment, the system of personnel in these sectors.

Among the sectors that constitute the core of the innovation economy, science occupies a special place. One of the most frequently used is the indicator of the number of scientific workers per 1 million population. Here, Kazakhstan has a level comparable to such countries as China and Malta, and significantly lags behind the leading states of the world and several CIS countries.

Creating the institutional foundations of an innovative economy is the most important condition for a new quality of growth and for improving the country's competitiveness in the post-crisis period. Experience shows that differences in the level of well-being between countries in their competitiveness are largely due to the flexibility and variability of institutions characteristic of their culture and the gap between institutions, formal and informal, legal norms and social practices: the smaller the gap in formal and informal institutions. As a result, these institutions and the practice of their functioning form positive motivations for entrepreneurial activity and innovation.

If from this position we evaluate the institutional environment in Kazakhstan, then it can be characterized as unstable or unfavorable.

Innovation activity, being associated with a certain risk, as well as speculative activity, is fundamentally different from it. Innovation activity involves the creation of a new value, a new good, and a speculative one - the extraction of benefits only on the basis of the redistribution of resources.

The current global crisis forces us to consider in a new way the possibilities of forming an innovative economy. Innovations themselves are a source of instability and open up new opportunities for growth and renewal. Two main features of the current crisis should be highlighted: firstly, the crisis of the global economy, secondly, this is the first crisis of the innovation economy. Thus, financial innovation and an excess of derivative financial instruments are cited as one of the causes of the current global crisis. This confirms the well-known theoretical conclusions that not all innovations are positive, but their uncritical perception has negative consequences on a global scale.

The experience of successful countries shows that it is private business that is able to take on innovative risks; therefore full support of the entrepreneurial class is the key to a transition to an innovative type of development.

The key to the formation of a new type of economy in Kazakhstan is large-scale investment in new technologies and the creation of conditions for the constant reproduction of knowledge and their realization in new high-tech products and services. Information communication technologies, which are the basis of the new infrastructure of the country, play a large role in the development of the economy. They must develop at a faster pace than the level of economic development. Innovative activity of Kazakhstan enterprises is noticeable in industries producing products with a low degree of processing. Innovative activity in industries dominated by domestic producers attracts attention. This applies to the food industry, the production of coke and petroleum products. So, in agricultural regions, food suppliers, the largest percentage of innovative products in the total volume of industrial enterprises is noted. Enterprises of mechanical engineering and metalworking, light industry are forced to compete with the whole world.

The production of competitive and export-oriented goods, works and services in the manufacturing industry and the service sector is the main subject of the state industrial innovation policy. According to the provisions of the Strategy, in all sectors of the economy of Kazakhstan there should be a transition to advanced international standards. The most important issue that Kazakhstan faces today is the provision of innovative projects with financial resources. Statistical data on the amount of expenditures on technological innovations of enterprises by sources of financing indicate the undoubted fact that the source

of financing of innovations is predominant at the expense of enterprises' own funds. Such a desire of these organizations to maintain their own scientific and technological potential is undoubtedly important.

Thus, the raw material elite of Kazakhstan could not become a creator of innovative projects, confirming its lack of objective needs and incentives to link its future with technological modernization. Growth in the manufacturing industry was not able to provide for overcoming the raw material orientation of the national economy. Hopes for the success of state corporations also did not materialize, moreover, they led to the establishment of a monopoly in the domestic market, which naturally does not contribute to the intensification of innovation activity in the country

Over the past decades, many documents have been developed and adopted that reinforce the innovative path of development. Special structures have been created in the republic that finances innovative projects at the expense of state budget funds. The first steps were taken on active state support of the venture business. The created national innovation fund in its tasks on the institutional support of the innovation process includes the creation of venture funds. In order to expand the activities of small innovative enterprises in Kazakhstan, such forms as technology parks are used. In general, the Kazakh economy is moving towards a new economy. Problems of effective use of scientific and technical potential have a strategic scope. Innovation processes in Kazakhstan are not so much market mechanisms as targeted state policy; It is the state that can have a decisive influence on the formation of a national system of institutions that is adequate to the requirements of creating a new economy.

At the present stage it is necessary to develop energy-ecological problems. In solving these problems, one of the key places belongs to Russia and Kazakhstan, with significant reserves of energy resources, intellectual and technological background for the development of energy-saving technologies, owning the methodology of global integral macro-forecasting. At the present stage of innovation development, strategic goals should be based on a qualitatively higher level of use and development of the fuel and energy potential, taking into account natural and environmental factors.

In Kazakhstan, much attention is paid to maintaining financial stability and the excessive development of the financial sector, and in Asian countries, in addition, they carried out unprecedented industrial modernization. In this regard, the main vector of the Strategy "Kazakhstan-2050" is set correctly, an innovative economy cannot be built based on the previous economic policy. The ambitious tasks facing Kazakhstan require the development of an attractive development model, their ideology, the formation of their own orientation and bringing them to every resident of the country.

The formation of innovation policy means not only a significant increase in the efficiency of the use of natural resources and production capital, but also the transformation of intelligence and human creative potential into a leading factor in economic growth and national competitiveness. Today it has become quite obvious that the main problem of the transition to the innovative type of development is the people themselves and the nature of their activities. To change the situation, it is necessary to change the stereotype of people's behavior, their mentality and personal qualities as the main characteristics of modern production. The most important demographic resource, i.e. human capital is its quantity and quality. Despite the improvement of a number of demographic indicators and the standard of living of people, it is very important to overcome the existing barriers to the transition to innovative development: poverty, income gap, low social security, in particular, housing affordability, poor health care, and the inability to provide quality education to children. It is generally recognized that both social infrastructure and developed democratic institutions are integral parts of the innovative type of development.

CONCLUSION

Innovation is the main factor in improving the competitiveness of the economy of Kazakhstan. The main thing is the creation of a socially oriented economy in Kazakhstan. To determine the crisis, it is necessary to strengthen the role of the state in all strategic important areas and sectors of activity that ensure the economic security of the country, including the scientific and technical field. Now we need active budget stimulation. Also of particular importance is the involvement of domestic agricultural formations, processing enterprises, including small businesses. Our country needs to reach a new level of economic development. The formation of the macroeconomic policy of our state should be based on the current challenges of globalization and financial instability, increasing competition in world markets, the increasing role of science and innovation, and human development. Consecrated in this book, the Concept

of a socially oriented economy, which is based on the ideas of the Economic Manifesto, affecting the problems of improving the welfare of the people should be a key lever of the model of national development. For the good of the people of Kazakhstan, it is necessary to focus not on the ideals of individual and mass consumption, but on the preservation of family traditions and national peculiarities of social relations. This is the main key to building a civil legal society in the Republic of Kazakhstan.

Today, Kazakhstan needs to look for new directions of economic development. To increase the country's competitiveness in the global market, it is necessary to actively develop high-tech industries and build an effective national innovation system. Without this, an innovative economy is simply impossible.

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Б.Б. Корган¹, Р.К. Сабирова², Э.М. Адиева³

Павлодарский государственный университет имени С.Торайгырова, Атырауский университет
Статья, назначенная в честь Х. Досмухамедова, Атырау, Казахстан.

ИННОВАЦИОННАЯ ЭКОНОМИКА КАЗАХСТАНА

Аннотация. Динамичное развитие инновационной сферы – одно из главных составляемых инновационной экономики. Такая высокотехнологичная экономика предполагает наличие эффективной инновационной системы и создание институтов поддержки инновационного процесса. Ключом к формированию экономики нового типа в Казахстане являются масштабные инвестиции в новые технологии и создание условий для постоянного воспроизводства знаний и воплощения их в новые высокотехнологичные продукты и услуги. Большую роль в развитии экономики играют информационные коммуникационные технологии, являющиеся основой новой инфраструктуры страны. Они должны развиваться опережающими темпами по сравнению с уровнем развития экономики. Инновационная активность казахстанских предприятий заметна в отраслях, производящих продукцию с низкой степенью переработки. Обращает на себя внимание инновационная активность в отраслях, где доминирует отечественный производитель.

Ключевые слова: инновационная экономика, динамичное развитие, инновационная активность, индустриально-инновационное развитие, конкурентоспособность.

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Б. Б. Қорған, Р. К. Сабирова, Э.М. Адиева

С.Торайғыров атындағы Павлодар мемлекеттік университеті,
Х.Алтын атындағы Атырау мемлекеттік университеті Досмұхамедов, Атырау, Қазақстан.

ҚАЗАҚСТАННЫҢ ИННОВАЦИЯЛЫҚ ЭКОНОМИКАСЫ

Аннотация. Инновациялық саланың динамикалық дамуы инновациялық экономиканың негізгі компоненттерінің бірі болып табылады. Мұндай жоғары технологиялық экономика тиімді инновациялық жүйенің болуын және инновациялық процесті қолдау үшін институттарды құруды білдіреді. Қазақстан экономикасының жаңа түрін қалыптастырудың кілті - бұл жаңа технологияларға ауқымды инвестиция салу және жаңа жоғары технологиялық өнімдер мен қызметтерді үнемі жаңғырту және оларды іске асыру үшін жағдай жасау. Елдің жаңа инфрақұрылымының негізі болып табылатын ақпараттық коммуникациялық технологиялар экономика дамуында үлкен рөл атқарады. Олар экономикалық даму деңгейіне қарағанда тезірек даму керек. Қазақстандық кәсіпорындардың инновациялық белсенділігі өңдеудің төмен деңгейі бар өнімдер шығаратын салаларда байқалады. Отандық тауар өндірушілер басым салалардағы инновациялық қызмет назар аударады.

Түйін сөздер: инновациялық экономика, қарқынды даму, инновациялық қызмет, индустриялық-инновациялық даму, бәсекеге қабілеттілік.

Information about authors:

Korgan B.B. - Pavlodar State University named after S.Toraigrov¹, b.korgan@asu.edu.kz, <https://orcid.org/0000-0001-7545-5075>;

Sabirova Rysty Kuandikovna-Candidate of Economic Sciences, Associate Professor Department of Economics, Atyrau State University named after Kh. Dosmukhamedov, Atyrau, Kazakhstan;

Adiyetova Elmira Mizamgalievna - Candidate of Economic Sciences, acting. Associate Professor, Atyrau State University named after Kh. Dosmukhamedov, Atyrau, Kazakhstan, <https://orcid.org/0000-0002-2400-6357>

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