

TIES 2020**International conference «Trends and innovations in economic studies»****INVESTMENT AND INNOVATION ACTIVITY OF INDUSTRIAL
ENTERPRISES OF THE REPUBLIC OF CRIMEA**

Janneta A. Bogdanova (a)*, Elena A. Bogomolova (b), Tatiana I. Egorchenko (c)

*Corresponding author

- (a) V.I. Vernadsky Crimean Federal University, Institute of economics and management, 19, Sevastopolskaya str., Simferopol, 295015, Russia, janneta_bogd@mail.ru
- (b) V.I. Vernadsky Crimean Federal University, Institute of economics and management, 19, Sevastopolskaya str., Simferopol, 295015, Russia, e-grozdeva@mail.ru
- (c) V.I. Vernadsky Crimean Federal University, Institute of economics and management, 19, Sevastopolskaya str., Simferopol, 295015, Russia, egortatyana@mail.ru

Abstract

The article is devoted to the analysis of investment and innovation activity of industrial enterprises of the Republic of Crimea for 2017–2018. Based on statistical indicators, the main problems in the field of innovative development of enterprises are identified. It was noted that in general, in 2018 compared to 2017, the industrial enterprises of the Republic of Crimea continued to increase production. The positive dynamics is due to the growth in natural gas production, which last year exceeded 1 billion cubic meters. A positive factor is the growth of investment in mining, light industry and the production and distribution of electricity, gas and water supply; water disposal, organization of waste collection and disposal, pollution elimination activities. A negative factor is the reduction in investment in oil production. The highest innovation activity was noted at manufacturing enterprises: 18 enterprises or 81.1 % of the total number are actively implementing innovations. Of these, 9 (or 40 %) are engineering enterprises, 6 (or 23.3 %) are enterprises producing food, beverages and tobacco products, 5 (or 16.7 %) are enterprises of the chemical and petrochemical industries, 4 (or 16.7 %) are production of vehicles. Mining enterprises were the least innovative. Innovations were introduced at 2 (or 5.4 % of the number of innovatively active) enterprises for the extraction of fuel and energy minerals. The main provisions and conclusions of the article can be used and subsequently disclosed in scientific activities when considering the analysis of investment and innovation activity of the regions.

2357-1330 © 2020 Published by European Publisher.

Keywords: Investment, innovation, industry, industrial production index.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

One of the main factors of economic growth of any country in modern conditions is the implementation of the investment and innovation model for the development of the national economy. In developed countries, the bulk of the increase in national income is currently due to the introduction of research and development results into production.

In modern conditions of development of market relations and increased competition, innovative development, which involves the use of technology and the creation of fundamentally new products, is becoming increasingly important for the development of the country and the successful financial and economic activities of enterprises. Innovations is a necessary component of the process of ensuring successful, long-term and sustainable functioning of the enterprise, one of the fundamental components of an effective strategy and important tools to ensure competitive advantages.

2. Problem Statement

The modern institutional composition of the domestic industrial complex does not correspond to global trends in competition, globalization, and strengthening the post-industrial vector of the development of society. It almost lacks powerful national and multinational companies, industrial and financial groups, technopolises that are able to develop new designs and produce competitive high-tech products.

The innovative development of enterprises is one of the basic needs of the national economy. It is well known that the main goal of entrepreneurial activity is to maximize profits as the main indicator of the activity of enterprises.

The innovative activity of the enterprise plays almost one of the main roles in this.

The activities of an enterprise reveal innovations by transforming and reforming production while using inventions or various opportunities for the production of new or old (but in a new way) goods, opening new sources of raw materials, markets, modernizing production, etc., that is, implementing new combinations of production factors.

3. Research Questions

The subject of this article is the indicators that make up the system of investment and innovation activity of industrial enterprises.

4. Purpose of the Study

The purpose of this study is to study the investment and innovation activities of industrial enterprises of the Crimea for 2017–2018.

5. Research Methods

The methodological basis of the study was general scientific methods: analysis, synthesis, induction, deduction, classification, abstracting, generalization, etc. Based on statistical indicators, the main problems in the field of innovative development of enterprises are identified.

6. Findings

Sustainability of the economic development of a modern enterprise and increasing its competitiveness is ensured by the implementation of the achievements of science and technology. The innovative activity of the enterprise reflects its real capabilities in the implementation of innovative activities and characterizes the degree of intensity of the implementation of various innovative projects by the enterprise (Timoshina, 2016).

The development of the theory and practice of organizing, managing, financing, evaluating the economic efficiency of innovative activities of enterprises was studied by such domestic and foreign scientists as Petrukhnina E.V., Midekhin S.V., Prigozhin A.I., Samuelson Paul (Milekhin, 2009; Mirsiyapova, 2017; Petrukhnina, 2016; Prigozhin, 2011; Samuelson & Nordhaus, 2006).

A number of researchers use the concept of an innovative economy, in other words, an economy which growth points are not completely the traditional combination of production factors, but the innovation phenomenon, which implies a relatively new, unconventional combination of these production factors. It was an unconventional combination of production factors that laid the foundation for his theory of innovative growth by J. Schumpeter, who for the first time substantiated the possibility and necessity of new combinations of production factors, as well as technological processes, characterized the concept of “innovation” in a broad quality definition related to the object as “introducing new combinations” (Shaimieva, 2011).

The development of the theory of combinatorics as a source of technological innovation is the subject of research of a number of foreign authors. They pay great attention to designing trajectories and modes of innovative development at the firm level, the main place among which is given to specialists by the chain “Klein-Rosenberg model”, the main advantage of which is the recognition of the multiplicity of possible sources of technological innovation (Gylfason, 2004).

As Ivanter and Komkov (2007) notes, it is the influence of technological innovation that is the basic factor in the innovative activity of industrial enterprises, thereby ensuring the necessary level of national technological security of the country.

However, in economic science there is still no clear idea of innovations, objects, methodological approaches to studying the analysis of innovations as an independent area of research have not been formed and systematized.

Industry is the most important branch of the national economy, which has a decisive influence on the level of development of the productive forces of society.

Industrial companies are characterized by a relatively high level of innovation activity and show a tendency to use not only the internal capabilities of their departmental science, but also external opportunities that would be consistent with their commercial strategy (Polterovich, 2010).

On the whole, in terms of the level of intensity of investments in technological innovations (the share of costs for technological innovations in the total volume of sales of industrial products), Russia lags behind the leading European countries. For comparison, in Sweden it reaches 5.5 %, in Germany it is 4.7 %, while in Russia it is only 1.9 %, ahead of only Bulgaria, Iceland, Lithuania, Greece and Turkey (0.4–1.3 %) (Gokhberg, 2011).

According to Gokhberg (2006), the active introduction of technological innovations both in leading vertically integrated oil companies and the small oil business, can increase the level of innovation activity in the oil and gas industry by 5 times.

After the entry of Crimea into the Russian Federation, the level of investment attractiveness on the part of business has become completely different. Today, the Republic of Crimea is a territory of unique opportunities for doing business and effective work of investor capital (Blank, 2016).

The innovative scenario of the long-term development of the Republic of Crimea, which should be considered a priority, is characterized by the fact that the Council of Ministers of the Republic of Crimea is interested in attracting investment projects to the region aimed at the commercialization of scientific developments, the production of high-tech products, and a high degree of processing of raw materials.

In the sectors of the national economy of Crimea, industry is one of the most important. According to official statistics, by the end of 2017, there were 4765 industrial enterprises in the republic. Of these, 4327 or 94.85 % of them have the status of legal entities. At the end of 2018, this indicator amounted to 4562 enterprises.

The structure of industrial enterprises by type of economic activity is dominated by manufacturing (Table 1).

Table 01. The structure of industrial enterprises of the Crimea in 2017 - 2018

Indicator	2017	2018	Deviation	Specific weight	
				2017	2018
Total	4561.7	4214.7	-347	-	-
extraction of natural resources	17.6	17.2	-0.4	0.38	0.41
processing enterprises	331.6	309.8	-21.8	7.27	7.35
providing electric energy, gas and steam; air conditioning	23.9	22.5	-1.4	0.52	0.53
water supply; water disposal, organization of waste collection and disposal, pollution elimination activities	28.2	26.1	-2.1	0.62	0.62

The data of Table 1 is graphically presented in Figure 1.

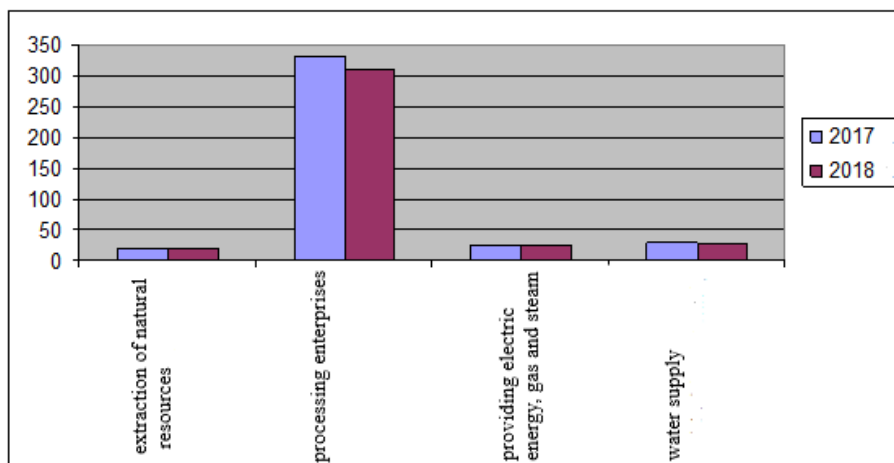


Figure 01. Structure of industrial enterprises of the Crimea in 2017–2018

One of the fundamental indices included in the macroeconomic indicator of any country is the industrial production index.

Industrial production index is a relative indicator of the dynamics of industrial production, showing its rise or decline. The industrial production index is defined as the ratio of the current volume of production (in monetary terms) to the volume of industrial production in the previous period. The methodology for calculating the index is based on the use of data on the dynamics of production of types of products for a fixed set of representative goods—the most important types of industrial products (about 1000 items) (Mayorova, 2013).

The industrial production index calculated in relation to the previous year in the Republic of Crimea is presented in Table 2. For instance, in 2018 it amounted to 101.0 %, against 101.1 % in 2017.

An acceleration in the growth rate of production volumes was detected in the manufacturing sector, i.e. 100.2 % in 2018 compared to 100.1 % in 2017. A decrease in the growth rate of production volumes was observed in the production and distribution of electricity, gas and water.

Table 02. Index of industrial production of the Republic of Crimea in 2017–2018

Indicator	2017	2018
Industrial Production Index	101.1	101.0
Extraction of natural resources	102.5	102.0
Processing enterprises	100.1	100.2
Production and distribution of electricity, gas and water	101.5	100.1

Investments are a key element in financing innovation, the dynamic development of an enterprise dwelling in constant transformation. The presence of investments and their competent use allows ensuring the competitiveness and formation of future profitability of the enterprise (Table 03).

Table 03. Investments in fixed assets of industrial enterprises of the Republic of Crimea in 2017–2018

Indicator	2017		2018		Rel. deviation
	bln RUB	%	bln RUB	%	
Investments in fixed assets – total	12025.6	100.0	13618.0	100.0	113.24 %
of which by type of economic activity:					
extraction of natural resources	3025.5	25.1	3079.6	22.6	101.79 %
including					

coal mining	114.3	1.0	142.0	1.0	124.23 %
extraction of crude oil and natural gas	1872.6	15.6	1784.8	13.1	95.31 %
metal ore mining	178.9	1.5	255.4	1.9	142.76 %
processing enterprises	1921.2	16.0	2212.2	16.3	115.15 %
including:					
food production	180.7	1.5	210.1	1.5	116.27 %
coke and petrochemical production	381.2	3.2	393.4	2.9	103.20 %
production of chemicals	396.1	3.3	461.6	3.4	116.54 %
provision of electric energy, gas and steam; air conditioning	820.0	6.8	960.7	7.0	117.16 %
water supply; water disposal, organization of waste collection and disposal, pollution elimination activities	120.0	1.0	137.9	0.9	114.92 %

Over the analyzed period, in the Republic of Crimea, an increase in the volume of investment by 13.24 % was revealed.

Investments in fixed assets of industry in 2018 amounted to 13,618 billion rubles, which is 1592.4 billion rubles more than in 2017; the growth rate was 13.24 %. Moreover, the most significant result of the implementation of investment processes took place in the mining industry, where the volume of investments in fixed assets in 2018 amounted to 3079.6 billion rubles, or 22.6 % of all investments in industry.

The oil production enterprises showed the least activity in this aspect, having reduced the volume of investments: investments in 2017 amounted to 1872.6 billion rubles, and in 2018 they were 1784.8 billion rubles.

Investments in the manufacturing industry in 2018 increased compared to 2017: in 2017 they amounted to 1921.2 billion rubles, and in 2018 amounted to 2212.2 billion rubles. Their growth rate was 15.15 %. And investments in the production of coke, oil products and nuclear materials were practically absent, amounting to 3.2 % of the level of 2017, i.e. in 2017, they amounted to 381.2 billion rubles, and in 2018, only 393.4 billion rubles. At the enterprises for the production and distribution of electricity and gas, investment growth amounted to 17.16 %, and enterprises for water supply; water disposal, organization of waste collection and disposal, pollution elimination activities reached 14.92 %.

In order to quickly improve their activities, be able to master global markets, reduce the risks of loss of competitiveness associated with globalization, incredibly high rates of innovation, a significant reduction in the product life cycle, application of knowledge and increasing the intellectual potential of workers are needed. Using innovations, enterprises achieve competitive advantages, while some develop new methods for achieving competitiveness, while others find better ways to compete using the old methods (Mirsiyapova, 2017).

In 2018, 24 enterprises were innovatively active in the Republic of Crimea, which is 6 enterprises or 19 % more than in 2018.

The highest innovation activity was noted at manufacturing enterprises: 18 enterprises or 81.1 % of the total number of innovation actives. Of these, 9 (or 40 %) are engineering enterprises, 6 (or 23.3 %) are enterprises producing food, beverages and tobacco products, 5 (or 16.7 %) are enterprises of the chemical and petrochemical industries, 4 (or 16.7 %) produce vehicles.

Mining enterprises were the least innovative. Innovations were introduced at 2 (or 5.4 % of the

number of innovatively active) enterprises for the extraction of fuel and energy minerals.

In the production and distribution of electricity, gas and water, 5 enterprises were innovatively active, which amounted to 13.5 % of all enterprises.

The total amount of innovative costs in industry in 2010 amounted to 146.7 million UAH. Most of the costs were attributed to other directions (107.8 million UAH or 73.5 % of the total cost) and the purchase of machinery, equipment, plants, other fixed assets and capital costs associated with the introduction of innovations amounted to 21.9 million UAH, or 14.9 % of the total cost. The least expenses were for the acquisition of new technologies (4.3 million UAH, 2.9 %) and research and development (12.7 million UAH, 8.7 %).

7. Conclusion

Summing up, it should be noted that in general, in 2018 compared with 2017, the industrial enterprises of the Republic of Crimea continued to increase production. According to the Main Department of Statistics in the Republic of Kazakhstan, for the first time since 2007, the decline in the extractive industry of Crimea was overcome: at the end of 2018, production growth amounted to 1.2 %. The positive dynamics is due to the growth in natural gas production, which last year exceeded 1 billion cubic meters.

A positive factor is the growth of investment in mining, light industry and the production and distribution of electricity, gas and water supply; water disposal, organization of waste collection and disposal, pollution elimination activities, as well as the growth of innovative activity in manufacturing enterprises. A negative factor is the reduction in investment in oil production.

References

- Blank, I. A. (2016). *Investment management*. Kiev: Nika Center.
- Gokhberg, L. (2006). Innovation processes: trends and problems. *Economist*, 2, 50–59.
- Gokhberg, L. M. (2011). *Russian innovation index*. Moscow: National Res. Univer. Higher School of Econ.
- Gylfason, T. (2004). *Natural Resources and Economic Growth: From Dependence to Diversification*. London: CEPR Discussion Paper 4804.
- Ivanter, V. V., & Komkov, N. I. (2007). Innovation-technological development of the Russian economy: Prospects and conditions. *Studies on Russian Economic Development*, 18(3), 239-249.
- Mayorova, T. V. (2013). *Investment activities*. Kiev: TsUL.
- Milekhin, C. B. (2009). Development of a system for evaluating the effectiveness of an innovative project in a rapidly changing market for high-tech goods and services. *Innovative*, 4, 107–110.
- Mirsiyapova, A. R. (2017). Organizational mechanism for managing innovative processes in the Republic of Crimea. *Young scientist*; 6. Retrieved from: <https://moluch.ru/archive/140/39482/>
- Petrukhina, E. V. (2016). The main factors of innovative development of regions. *Scientific reports of Belgorod State University Series Economy Computer Science*, 7, 22.
- Polterovich, V. M. (2010). *Strategy for the modernization of the Russian economy*. St. Petersburg: Aletya.
- Prigozhin, A. I. (2011). *Innovations: incentives and obstacles*. Moscow: Politizdat.
- Samuelson, P., & Nordhaus, W. (2006). *Economics, 18rd ed*. Moscow: Williame.
- Shaimieva, E. Sh. (2011). *Innovation for the implementation of technological modernization of the regions*. Kazan: Publication House “Poznaniye” of the Institution of Economy, Management and Law.
- Timoshina, K. V. (2016). Analysis of approaches to determining the innovative activity of an enterprise. *Young scientist*, 25, 407–410. Retrieved from: <https://moluch.ru/archive/129/35616/>