

Alla Rusnak, ScD in Economics

Kherson Branch of the Admiral Makarov National University of Shipbuilding, Ukraine

Svitlana Prokhorchuk, PhD in Economics

Private Higher Educational Institution «International University of Business and Law», Ukraine

Alla Karnaushenko, PhD in Economics

State Higher Educational Institution «Kherson State Agrarian University», Ukraine

ANALYSIS AND EVALUATION OF INNOVATION ACTIVITY OF THE REGIONS OF UKRAINE

The article presents the results of the analysis of innovation activity in the regions of Ukraine. The aspects of innovation activity are analyzed, factors of motivational insufficiency to innovations in the regions are determined. The deterrent factors of development of innovation activity in the regions are determined: lack of own financial resources and inadequate state financial assistance; great value of innovation; lack of necessary and understandable information about innovation; insufficient connection between institutions of higher education, science and business; low innovation activity of enterprises; fragmentation of the structural elements of innovation infrastructure in some regions. Leaders and outsiders among the regions in this activity are identified. The evaluation, which reflects the main problems in the development of innovation activity of business entities, is identified and the vector of its transformation is determined.

Key words: innovations, innovation practice, innovation activity, volume of innovative goods and services, state financing of innovations, technological innovations.

Target setting. In recent years, a model of economic growth based on innovative development is growing more urgent in Ukraine. This is the main task of local and regional governments, a decision of which will ensure the development of industrial and intellectual areas in their territories, i.e. those areas in which a growth of gross regional product is possible today. At the same time, elements of innovation infrastructure are already formed in all regions. However, there were no significant changes. The influence of innovation practice on the development of the economy is not sufficiently significant. Defining characteristics are the low intensity of expenditure on innovation, as well as a small return on these expenditures – their growth does not increase the role of innovative goods and services in total volume of sales. The activities of many enterprises are not a part of the functioning of the world market, and its innovation practice is characterized by the acquisition of technologies rather than research and development. Therefore, it is important to identify the main problems that arise in the regions of Ukraine in the implementation of innovation practice, and more importantly, it is the definition of the main vector of its revitalization.

Purpose statement. The purpose of the research is to analyze and evaluate the innovation activity of the regions of Ukraine in order to identify the main problems that arise in them when implementing innovation practice and defining the main vector of its revitalization.

The statement of basic materials. Innovation practice has recently become almost an obligatory element in the functioning of the economy of business entities in Ukraine. Showings of the formation process of modern innovation practice indicate that lately it has not been possible to increase drastically the performance efficiency of the regions at all levels of economic activity, to increase innovation activity, and also to create a competitive environment that would stimulate the use of innovations. As a result, the low demand for innovations became the main problem in the Ukrainian economy today.

Owing to the convenient geographical location and availability of all the necessary base of scientific, technical, financial, intellectual and material resources that provide the opportunity for the emergence and development of innovation, the creation of the latest technologies, products and services, the introduction of nanoscience and biotechnology, which will significantly change the principles of creating high-tech products in industry, agroindustrial complex and public health service, is extremely relevant.

In Ukraine, there are both regions that dynamically create and implement innovations, and territories that participate inertly in the innovation process. The dynamics of the number of industrial enterprises engaged in innovation practice in the regions of Ukraine is given in Table 1.

Table 1

**Dynamics of the number of industrial enterprises engaged in innovation practice
in the regions of Ukraine, entities***

	Years						Growth rate 2017 to 2012, %
	2012	2013	2014	2015	2016	2017	
Ukraine	1758	1715	1609	824	834	759	43.2
Autonomous Republic of Crimea	54	56	-	-	-	-	-
Regions							
Vinnitsia	50	55	46	25	24	24	48.0
Volyn	29	23	30	12	11	17	58.6
Dnipropetrovsk	78	84	109	63	65	51	65.4
Donetsk	91	85	45	28	26	22	24.2
Zhytomyr	54	57	48	28	34	23	42.6
Zakarpattia	18	15	16	14	15	12	66.7
Zaporizhia	115	115	108	49	47	42	36.5
Ivano-Frankivsk	89	87	99	27	27	28	31.5
Kyiv	44	68	66	44	48	37	84.1
Kirovohrad	46	46	49	25	17	24	52.2
Luhansk	64	61	16	9	9	7	10.9
Lviv	101	116	129	64	64	48	47.5
Mykolaiv	114	81	67	29	21	25	21.9
Odesa	83	69	67	36	40	36	43.4
Poltava	29	33	33	30	25	27	93.1
Rivne	36	39	45	13	23	8	22.2
Sumy	41	32	46	23	21	24	58.5
Ternopil	50	36	36	16	24	25	50.0
Kharkiv	168	182	191	117	110	111	66.1
Kherson	53	48	54	19	19	15	28.3
Khmelnyskyi	78	58	38	18	18	8	10,3
Cherkasy	50	47	37	25	24	32	64.0
Chernivtsi	37	30	34	9	11	8	21.6
Chernihiv	43	45	32	15	16	10	23.3
Kyiv city	130	142	168	86	95	95	73.1
Sevastopol city	13	11	-	-	-	-	-

* Calculated according to the data ^{1, 2, 3, 4, 5}

¹ Ukrstat.gov.ua (2014). *Наукова та інноваційна діяльність в Україні у 2013 році: статистичний збірник*. Київ: Державна служба статистики України, 314. <<http://www.ukrstat.gov.ua>> (2018, November, 21).

² Ukrstat.gov.ua (2015). *Наукова та інноваційна діяльність в Україні у 2014 році: статистичний збірник*. Київ: Державна служба статистики України, 256. <<http://www.ukrstat.gov.ua>> (2018, November, 21).

³ Ukrstat.gov.ua (2016). *Наукова та інноваційна діяльність в Україні у 2015 році: статистичний збірник*. Київ: Державна служба статистики України, 258. <<http://www.ukrstat.gov.ua>> (2018, November, 22).

⁴ Ukrstat.gov.ua (2017). *Наукова та інноваційна діяльність в Україні у 2016 році: статистичний збірник*. Київ: Державна служба статистики України, 140. <<http://www.ukrstat.gov.ua>> (2018, November, 22).

⁵ Ukrstat.gov.ua (2018). *Наукова та інноваційна діяльність в Україні у 2017 році: статистичний збірник*. Київ: Державна служба статистики України, 180. <<http://www.ukrstat.gov.ua>> (2018, November, 22).

In 2017, 759 enterprises were engaged in innovation works in industry. There was a reduction in the number of industrial enterprises that carried out innovation works (by 9% as compared to 2016 up to 16.2% of all industrial enterprises), which arose as a result of the significant reduction of innovation-active enterprises in:

- medium-high-tech producing sector (by 18% as compared to 2015), in particular by types: «Production of chemicals and chemical products» – 44 to 42 entities; «Production of electrical equipment» – 48 to 39 entities; «Production of motor vehicles, trailers and semitrailers» – 26 to 18 entities;
- medium-low-tech producing sector (by 7% as compared to 2015), in particular by types: «Production of rubber and plastic products» – 29 to 20 entities and «Production of other non-metallic mineral products» – 39 to 36 entities.

In the high-tech producing sector, there has been a certain increase in the number of innovative enterprises (from 88 in 2015 to 90 in 2017). The largest number of innovative-active enterprises is concentrated, as in 2015, in the low-tech sector – 350 entities (Fig. 1)¹.

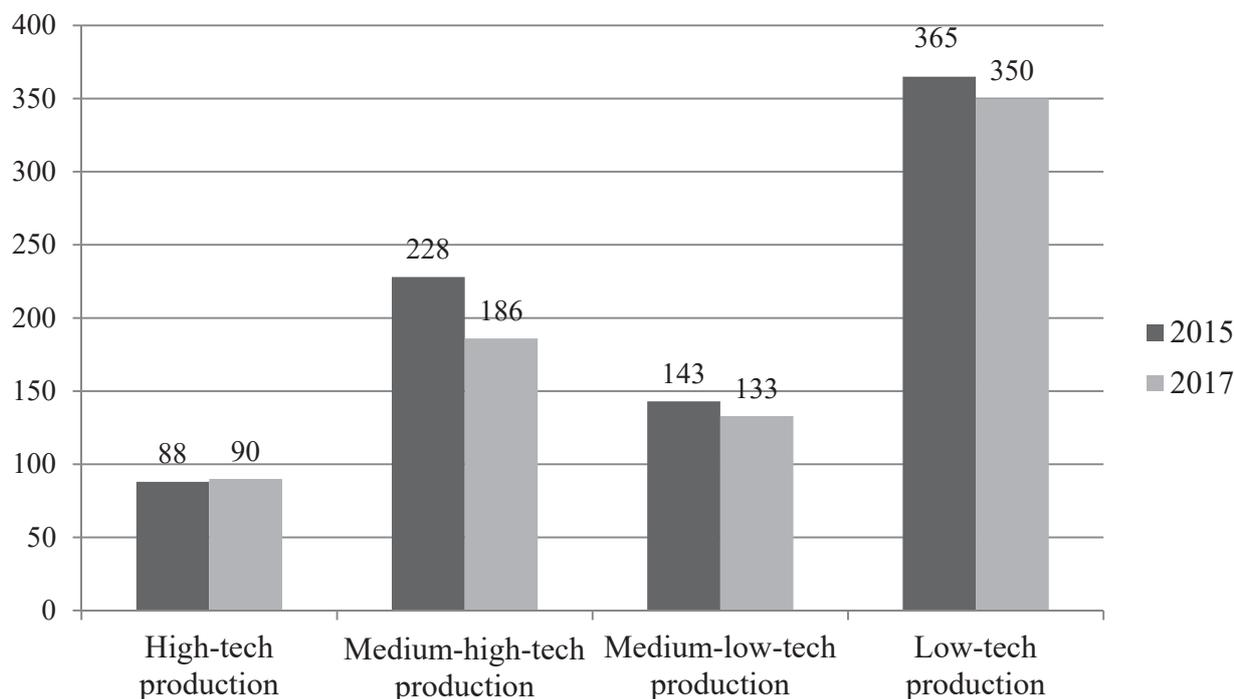


Fig.1. Number of enterprises engaged in innovation practice in 2015-2017, according to technological sectors, entities

As compared to 2015, the number of innovatively active high-tech enterprises increased by 1.2 percentage point in 2017 due to the increase of enterprises in the field of production of basic pharmaceutical products and pharmaceuticals (6 entities) (Fig. 2).

The largest decrease in the number of enterprises engaged in innovation practice in 2017 as compared to 2012 (more than by 2 times) was in 12 regions of Ukraine: Khmelnytskyi (by 89.7%), Chernivtsi (by 78.4%), Mykolaiv (by 78.1%), Chernihiv (by 76.7%), Donetsk (by 75.8%), Kherson (by 71.6%), Zaporizhia and Ivano-Frankivsk (by 63.7%), Zhytomyr (by 57.4%), Odesa (by 56.6%), Lviv (by 52.5%) and Vinnytsa (by 52.0%) (Table 1).

One of the important indicators, the value of which indicates the involvement of the region in innovation processes, is the share of enterprises that carried out innovation practice in their total number (Table 2).

¹ Mon.gov.ua (2018). *Стан інноваційної діяльності та діяльності у сфері трансферу технологій в Україні у 2017 році: аналітична довідка*. Київ: УкрІНТЕІ, 98. <<https://mon.gov.ua/storage/app/media/.../stan-id-2017-f.pdf>> (2018, December, 15).

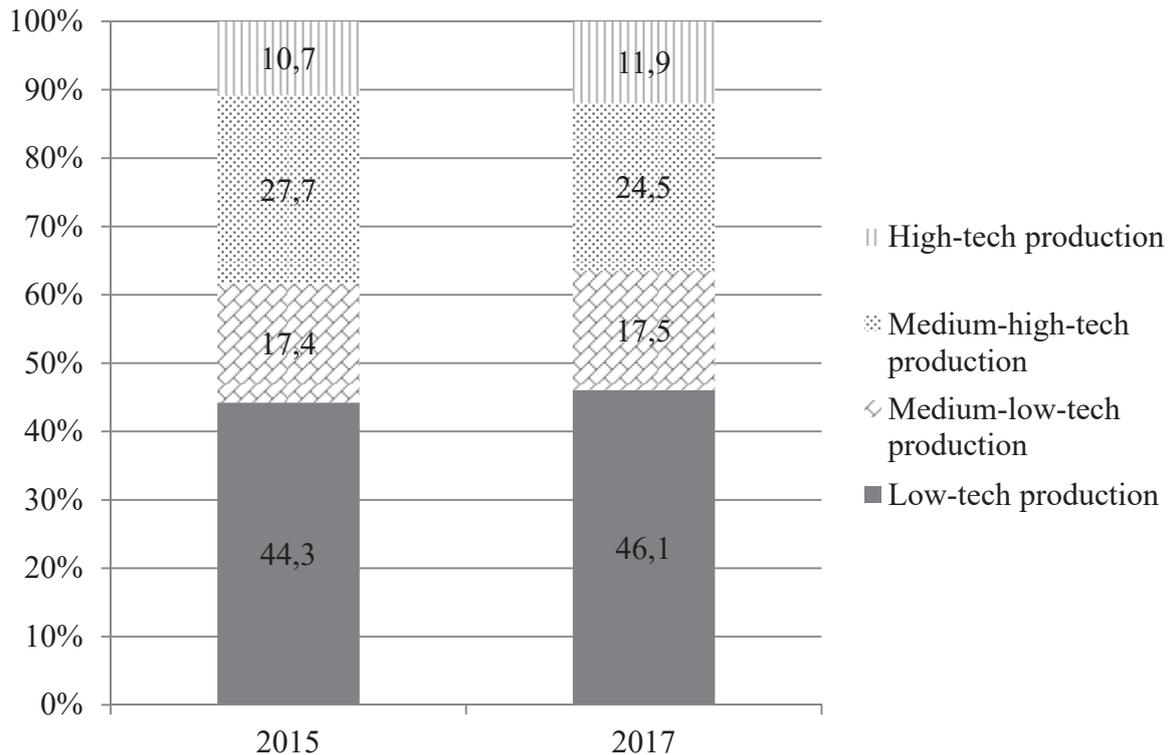


Fig. 2. Structure of innovatively active enterprises in the context of technological sectors of industry in 2015 and 2017, %

The analysis of the relative share of enterprises that introduced innovation practice in Ukraine shows that according to this indicator in 2017, the leaders are Kharkiv region (28.1%), Ternopil region (27.5%), Mykolaiv region (26.9%), Cherkasy region (24.4%), Kirovohrad region (22.6%), Kyiv city (20.7%), Sumy region (20.5%) and Zaporizhia region (19.1%). In other regions, this indicator is lower than the average in Ukraine, and in Khmelnytskyi region and Rivne region the share of enterprises engaged in innovation practice is almost three times lower than the average level in Ukraine.

Among the regions, the share of innovatively active enterprises was above the average in Ukraine in Kharkiv region, Dnipropetrovsk region, Zaporizhia region, Kyiv region, Odesa region, Ternopil region, Mykolaiv region, Cherkasy region, Kirovohrad region, Ivano-Frankivsk region, Sumy region and Kyiv city.

The number and share of industrial enterprises by regions of Ukraine is given in Table 3 (calculated according to the data of the State Statistics Service of Ukraine).

If we will consider the regions of Ukraine by types of innovations, in most regions the enterprises introduced innovative types of products.

Reducing the number of innovative enterprises is a consequence of a number of problems that have accumulated in the Ukrainian economy and in the field of research and development in particular:

- external and internal imbalances of economic development;
- imperfection of the legislative framework in terms of stimulating innovation activity;
- lack of appropriate innovation infrastructure and mechanisms for the commercialization of scientific and technical developments;
- inconsistency and ineffectiveness of innovation policy;
- insufficient level and unstable financing of innovation practice.

An important factor ensuring innovation development is the intensity of expenses for technological innovations (Table 4 – calculated according to the data of the State Statistics Service of Ukraine).

Table 2

**Relative share of industrial enterprises that carried out innovation practice
in the regions of Ukraine in 2012-2017, % ***

	Years						Deviation (+,-) in 2017 from 2016
	2012	2013	2014	2015	2016	2017	
Ukraine	17.4	16.8	16.1	17.3	18.9	16.2	-2.7
Autonomous Republic of Crimea	16.7	17.0	-	-	-	-	-
Regions	-	-	-	-	-	-	-
Vinnitsia	18.0	19.4	14.2	14.7	15.4	15.4	0
Volyn	12.9	10.5	10.8	11.5	10.2	16.0	5.8
Dnipropetrovsk	10.7	11.9	13.4	13.0	14.7	11.0	-3.7
Donetsk	11.8	10.5	14.6	11.7	13.8	11.5	-2.3
Zhytomyr	16.5	17.5	12.5	15.5	20.6	13.9	-6.7
Zakarpattia	8.5	6.9	6.0	10.1	11.2	9.0	-2.2
Zaporizhia	29.8	28.8	22.9	20.9	22.1	19.1	-3
Ivano-Frankivsk	20.5	21.4	22.8	21.6	21.1	21.7	0.6
Kyiv	9.0	13.5	11.6	13.3	16.6	11.0	-5.6
Kirovohrad	17.4	18.3	17.3	24.8	17.9	22.6	4.7
Luhansk	13.0	11.2	12.2	11.3	13.2	10.0	-3.2
Lviv	13.4	16.6	16.4	19.3	20.6	15.2	-5.4
Mykolaiv	29.8	24.9	19.9	31.2	23.1	26.9	3.8
Odesa	22.3	17.6	16.8	19.4	20.9	15.7	-5.2
Poltava	8.3	8.1	8.0	16.2	14.0	10.4	-3.6
Rivne	14.6	14.9	14.9	10.6	17.0	5.9	-11.1
Sumy	18.6	14.0	17.6	19.8	17.8	20.5	2.7
Ternopil	22.3	17.1	14.9	17.4	26.1	27.5	1.4
Kharkiv	22.1	23.2	22.4	28.6	30.5	28.1	-2.4
Kherson	26.1	23.6	24.2	20.7	19.8	15.5	-4.3
Khmelnyskyi	22.5	18.2	11.0	12.3	12.8	5.7	-7.1
Cherkasy	16.1	15.0	10.6	17.2	16.1	24.4	8.3
Chernivtsi	18.4	16.5	15.6	17.0	20.4	14.5	-5.9
Chernihiv	20.4	20.7	13.1	13.3	15.2	9.6	-5.6
Kyiv city	26.1	25.6	21.7	17.3	23.1	20.7	-2.4
Sevastopol city	16.9	11.3	-	-	-	-	-

* Calculated according to the data ^{1, 2, 3, 4, 5}

¹ Ukrstat.gov.ua (2014). *Наукова та інноваційна діяльність в Україні у 2013 році: статистичний збірник*. Київ: Державна служба статистики України, 314. <<http://www.ukrstat.gov.ua>> (2018, November, 21).

² Ukrstat.gov.ua (2015). *Наукова та інноваційна діяльність в Україні у 2014 році: статистичний збірник*. Київ: Державна служба статистики України, 256. <<http://www.ukrstat.gov.ua>> (2018, November, 21).

³ Ukrstat.gov.ua (2016). *Наукова та інноваційна діяльність в Україні у 2015 році: статистичний збірник*. Київ: Державна служба статистики України, 258. <<http://www.ukrstat.gov.ua>> (2018, November, 22).

⁴ Ukrstat.gov.ua (2017). *Наукова та інноваційна діяльність в Україні у 2016 році: статистичний збірник*. Київ: Державна служба статистики України, 140. <<http://www.ukrstat.gov.ua>> (2018, November, 22).

⁵ Ukrstat.gov.ua (2018). *Наукова та інноваційна діяльність в Україні у 2017 році: статистичний збірник*. Київ: Державна служба статистики України, 180. <<http://www.ukrstat.gov.ua>> (2018, November, 22).

Table 3

Number of industrial enterprises by regions of Ukraine in 2017

	Number/share of industrial enterprises								
	Total	which carried out innovation practice		which introduced innovations		which sold innovative products		which sold innovative products outside Ukraine	
		entities	share of total number, %	entities	share of total number, %	entities	share of total number, %	entities	share of total number, %
Ukraine	.	759	100.0	672	100.0	450	100.0	179	100.0
Autonomous Republic of Crimea	-	-	-	-	-	-	-	-	-
Regions									0.0
Vynnytsia	156	24	3.2	15	2.2	14	3.1	6	3.4
Volyn	106	17	2.2	16	2.4	12	2.7	5	2.8
Dnipropetrovsk	465	51	6.7	46	6.8	18	4.0	10	5.6
Donetsk	192	22	2.9	22	3.3	13	2.9	6	3.4
Zhytomyr	166	23	3.0	23	3.4	20	4.4	8	4.5
Zakarpattia	133	12	1.6	12	1.8	9	2.0	6	3.4
Zaporizhia	220	42	5.5	37	5.5	31	6.9	17	9.5
Ivano-Frankivsk	129	28	3.7	23	3.4	14	3.1	9	5.0
Kyiv	335	37	4.9	37	5.5	22	4.9	8	4.5
Kirovohrad	106	24	3.2	15	2.2	13	2.9	5	2.8
Luhansk	70	7	0.9	5	0.7	3	0.7	-	-
Lviv	315	48	6.3	47	7.0	24	5.3	11	6.1
Mykolaiv	93	25	3.3	16	2.4	12	2.7	4	2.2
Odesa	229	36	4.7	35	5.2	17	3.8	5	2.8
Poltava	259	27	3.6	23	3.4	19	4.2	7	3.9
Rivne	135	8	1.1	7	1.0	3	0.7	-	-
Sumy	117	24	3.2	18	2.7	17	3.8	10	5.6
Ternopil	91	25	3.3	25	3.7	9	2.0	2	1.1
Kharkiv	395	111	14.6	105	15.6	77	17.1	29	16.2
Kherson	97	15	2.0	15	2.2	10	2.2	4	2.2
Khmelnyskyi	141	8	1.1	8	1.2	4	0.9	1	0.6
Cherkasy	131	32	4.2	31	4.6	23	5.1	12	6.7
Chernivtsi	55	8	1.1	8	1.2	7	1.6	1	0.6
Chernihiv	104	10	1.3	10	1.5	7	1.6	2	1.1
Kyiv city	459	95	12.5	73	10.9	52	11.6	11	6.1

Table 4

**Dynamics and structure of expenses for innovations by regions
of Ukraine, million UAH**

	Years						Relative share of expenses, % (2017)
	2012	2013	2014	2015	2016	2017	
Ukraine	11,480.6	9,562.6	7,695.9	13,813.7	23,229.5	9,117.5	100.0
Autonomous Republic of Crimea	1808,6	526,0	-	-	-	-	-
Regions							
Vinnitsia	419.3	694.9	796.5	575.3	723.2	100.4	1.1
Volyn	104.6	196.3	192.5	65.3	147.4	162.1	1.8
Dnipropetrovsk	1,120.0	1,057.8	825.2	7,568.9	14,264.7	1,127.3	12.4
Donetsk	1,447.6	930.7	516.1	827.7	610.9	725.3	8.0
Zhytomyr	72.5	73.1	60.6	32.6	143.9	10.4	0.1
Zakarpattia	32.8	25.0	16.6	22.5	59.7	26.2	0.3
Zaporizhia	243.0	298.7	339.9	321.1	485.8	1,393.4	15.3
Ivano-Frankivsk	203.8	488.6	95.8	92.2	80.5	134.2	1.5
Kyiv	182.5	104.4	122.1	144.8	598.9	289.7	3.2
Kirovohrad	339.0	114.7	93.0	127.7	262.3	504.2	5.5
Luhansk	328.2	372.5	35.1	24.3	43.5	20.2	0.2
Lviv	280.6	257.1	219.8	277.8	429.3	310.0	3,4
Mykolaiv	362.2	716.4	606.8	291.6	631.9	324.9	3.6
Odesa	1,497.4	91.0	323.9	49.7	253.7	150.1	1.6
Poltava	126.2	212.2	348.5	128.5	213.3	68.2	0.7
Rivne	47.9	21.1	11.4	6.9	40.4	7.3	0.1
Sumy	250.0	281.8	587.7	162.3	340.0	598.5	6.6
Ternopil	84.9	24.2	57.4	14.6	85.9	109.7	1.2
Kharkiv	738.2	642.3	711.1	667.0	1,146.5	890.9	9.8
Kherson	154.6	161.4	90.5	70.1	75.0	56.1	0.6
Khmelnyskyi	225.2	113.1	133.1	66.7	48.0	24.6	0.3
Cherkasy	92.9	28.6	30.4	53.5	44.9	124.7	1.4
Chernivtsi	51.7	51.3	68.8	18.8	19.0	26.1	0.3
Chernihiv	39.5	134.1	106.4	35.0	65.4	71.7	0.8
Kyiv city	1,211.0	1,921.4	1,306.8	2,169.0	2,415.5	1,861.2	20.4
Sevastopol city	16.5	23.8	-	-	-	-	-

According to the data of Table 4, there is no steady dynamics of the volume of expenses for technological innovations in almost all regions of Ukraine. In 2017, the enterprises spent UAH 9,117.54 million on innovations, including the purchase of machines, equipment and software – UAH 5,898.84 million, for internal and external research and development – UAH 228.48 million, for the purchase of other external knowledge (purchase of new technologies) – UAH 21.83 million, and for other works related to the creation and implementation of innovations (other expenses) – UAH 1,027.11 million¹.

In the total amount of expenses for innovation activity, the largest relative share is spent in Kyiv city (20.4%), Zaporizhia region (15.3%), Dnipropetrovsk region (12.4%) and Kharkiv region (9.8%).

Sustainable innovative development over the last three years in terms of technological innovations was typical for organizations in the Kharkiv region. This circumstance was facilitated by large investment projects aimed at a deep modernization of existing large-scale production enterprises in the region and expansion of production facilities for manufacturing products of high technological readiness.

The contributing factor of the growth of the level of innovation activity in terms of implementation of technological innovations in the Zaporizhia region was the use of the mechanism of public-private partnership for the development of industrial sites and industrial parks.

In Ukraine, the leader of innovation development is Kyiv city, due to the maximum concentration of financial and intellectual potential, which greatly affects the level of knowledge-intensive production, the rate of the economy renewal and the spread of innovations.

In the course of the research, it was found that the main factors of regional differences in terms of innovation activity are the concentration of financial, intellectual, information and communication, organizational resources in the advanced regions, first of all, in Kyiv city, Kharkiv region, Dnipropetrovsk region and Zaporizhia region.

In 2018, according to the results of the World Bank study, Ukraine was ranked 71st among the 190 countries in the ranking of ease of doing business. Ukraine has shown the greatest growth in the nominations for «international trade» and «fulfillment of contractual obligations»². Although it is 5 positions higher as compared to the Doing Business-18 rating, it is a fairly low ranking. Therefore, under the current conditions one has to work on his own well-being, and not to refer to the external environment or the circumstances. Under the current situation, the business forces should be aimed at revitalization of entrepreneurial, innovation practice, and the authorities of the regions should help them, but not replace them. The best answer to any internal problems is to give freedom for economic development and entrepreneurial initiatives. At the same time, the more the population is independent and active in the arrangement of its life, so it becomes more independent both economically and politically, and this leads to an increase in the potential of both its region and the country as a whole. In view of such a generation of forces in society, innovation development should be based on the partnership of regional authorities, entrepreneurs and the population.

It is necessary to take into account an important rule: first of all, it is necessary to create conditions for the functioning of the competitive environment by increasing the influence of Ukrainian producers, including small and medium-sized businesses, and then, under the conditions of a civilized competitive environment, to introduce innovations in the production and creation of innovative goods and services to gain profitable market benefits. To date, the main problem is the lack of motivation for an entrepreneur to practice innovations. The most important factors of the motivation «insufficiency» for innovation practice in the regions are as follows:

- lack of entrepreneurial spirit and understanding of the business philosophy (including such human qualities as independence, activity, creativity, compulsoriness, etc.;
- inadequacy of the target orientation of management;
- lack of innovation literacy and culture, etc.

¹ Mon.gov.ua (2018). *Стан інноваційної діяльності та діяльності у сфері трансферу технологій в Україні у 2017 році: аналітична довідка*. Київ: УкрІНТЕІ, 98. <<https://mon.gov.ua/storage/app/media/.../stan-id-2017-f.pdf>> (2018, December, 15).

² Politeka.net (2018). *Україна зайняла 71 місце серед 190 країн світу в рейтингу легкості ведення бізнесу*. <<https://politeka.net/ua/news/economics/780981-ukraina-zanjala-71-mesto-sredi-190-stran-mira-v-rejtinge-legkosti-vedenija-biznesa/>> (2019, January, 05).

In addition, the restraining factors of the development of innovation practice in the regions include the following:

- lack of own financial resources and inadequate state financial assistance;
- high value of innovation;
- lack of necessary and understandable information about innovation;
- insufficient connection between institutions of higher education, science and big business;
- low innovation activity of enterprises;
- fragmentation of structural elements of innovation infrastructure in some regions.

This is due to the fact that creation and introducing innovations is a very expensive process, so only successful companies can engage in innovation practice. However, it should be remembered that economic indicators of the enterprises that participate in these processes are much higher than of those that are not innovation-active.

Of course, introducing innovation practice for any enterprise is a high risk, high monetary expenses and uncertainty about the expected result. To the end that the enterprises really work and produce an innovative product, first you need to study the market, identify potential customers, create favorable conditions under which the use of produced innovations will be profitable, and even indispensable to life. Such a situation for enterprises that carry out innovation practice is very difficult; therefore, we cannot do without state support.

Let's systematize the tools of innovation policy by the subsystems of the national innovation system¹:

1. Regulatory instruments aimed at creating a favorable legal environment and framework conditions for the implementation of innovation practice involving the system legislation in the field of innovation, development of strategies and programs for innovation development, legal principles of protection of intellectual property rights, activities of small and medium-scale enterprises, investment activities, international trade in new technologies, taxation.

2. Financial instruments for stimulating innovation.

3. Staff assistance tools aimed at training personnel for the innovation sphere, harmonization of educational and innovation policy, formation of innovation culture.

4. Infrastructure tools are aimed at ensuring interaction between the participants in innovation practice.

5. Tools for social interaction in the field of innovation.

For the regions of Ukraine, the instruments of state support that are capable of revitalizing innovation activities are as follows:

– stimulating demand for innovative products. An important role here will be played by various development programs;

– increasing the efficiency of the knowledge generation sector. Here it is necessary to attract more leading research institutions of higher education to participate in promising unions and associations for joint research on the issues of innovative development of the region;

– increase of professional staffing potential. Such tools as «mentoring» institutes for beginners, various educational programs for training managers for innovation activities of various types etc. will be important in this direction.

With the revitalization of innovation practice, measures should be taken to improve the innovation infrastructure, without which everything else is impossible. Efficient infrastructure support for innovation practice in each region will allow organizations to compensate for the lack of many components necessary for successful work, as well as to establish interaction between all elements and management authorities that will lead to holistic interaction throughout the system.

Conclusions. When assessing the innovation activity in the regions of Ukraine, the following conclusion can be drawn. Innovation processes in the regions are carried out very slowly due to problems of economic, political, administrative, financial and other nature. To solve a whole lot of problems, government support is needed. The main vector of this direction should be the support of regions that intensively invest capital in the formation and development of their innovative subsystems.

¹ Єрмакова, О.А. (2016). Інструменти державної інноваційної політики України в контексті впровадження європейського досвіду. *Механізм регулювання економіки*, 1, 85-96. <http://mer.fem.sumdu.edu.ua/content/articles/issue_28/OLGA_A_IERMAKOVAInstruments_of_the_State_Innovation_Policy_of_Ukraine_in_the_Context_of_Implementation_of_the_European_Ex.pdf> (2019, January, 04).

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