

N.I. Chukhrai, S.I. Matviy
Lviv Polytechnic National University,
Management of Organizations Department

FEATURES OF THE INNOVATION INVESTMENT SUPPORT IN UKRAINE

©Chuhrai N.I., Matviy S.I., 2014

The main trends of investment support for innovative activities in Ukraine are analyzed and generalized. The innovative activities of enterprises are studied. The major problems of implementing an innovative model of economic development are identified. The ways to accelerate investment activity in Ukraine are offered and substantiated. The dynamics of the investment attractiveness index and the factors influencing the investment climate in the country are also analyzed.

Key words: innovation, innovative activity, investment, investment attractiveness, investment provision.

Н.І. Чухрай, С.І. Матвій
Національний університет “Львівська політехніка”,
кафедра менеджменту організацій

ОСОБЛИВОСТІ ІНВЕСТИЦІЙНОГО ЗАБЕЗПЕЧЕННЯ ІННОВАЦІЙНОЇ ДІЯЛЬНОСТІ В УКРАЇНІ

© Чухрай Н.І., Матвій С.І., 2014

Проаналізовано й узагальнено основні тенденції інвестиційного забезпечення інноваційної діяльності в Україні. Досліджено інноваційну активність підприємств, з'ясовано основні проблеми щодо впровадження інноваційної моделі розвитку економіки, обґрунтовано та запропоновано шляхи активізації інвестування діяльності в Україні, також проаналізовано динаміку індексу інвестиційної привабливості, фактори впливу на інвестиційний клімат у країні.

Ключові слова: інноваційна діяльність, інновації, інвестиції, інвестиційна привабливість, інвестиційне забезпечення, джерела фінансування.

Problem statement

At present efficient and stable development of the economy of the country depends largely on increasing innovation activity of local enterprises, in particular the extent of implementation of the latest techniques and technologies. Innovation activities of enterprises is a way of adaptation that enables to reconcile dynamically internal and external development opportunities generated by international market environment. In turn, enhancing innovation allows the company to improve product competitiveness with the help of technological progress and to enable the output of manufactured products to the international market. But at the same time entities faced with such serious obstacles as a permanent shortage of investment resources for innovation.

Analysis of recent research and publications

The question of survey of innovation activity in Ukraine, as well as mechanisms to ensure its investment have been reflected in scientific studies of V.Dyba, V. Verba, A. Hrechan, A. Nickiforova, S. Ilyashenko, M. Kondratiev, O. Prihozhyna, R. Hryhorovska, etc. In particular, R.Hryhorovska, in her research substantiates the idea that with the current condition of the economy, most investors should be innovation-oriented and only in this case the national economic system in the future will be able to take

their rightful place in the world. It is estimated that in developed countries about 60 – 75 % of investment is innovation-oriented, ie. those that are effective solutions to implement and commercialize innovations and in Ukraine, these figures are at the level of 10–15 % [1].

According to S.Ilyashenko, there is a contradiction in the field of innovation in Ukraine, which on the one hand has a sufficiently high innovative potential, and on the other hand, economic structure and mechanism of management are unable to exploit this potential. The real obstacle to the development of the national innovation economy is the problem of stimulating business, low levels of entrepreneurial activity of subjects of national economy, especially in complex, knowledge-intensive types of businesses [2].

Objectives

The aim of the article is to study the characteristics of the investment support innovation in Ukraine nowadays, including innovative sources of financing for business and the mechanisms and ways of its revival.

Materials

Investment company providing innovation can be seen as the process of implementing measures to create a set of organizational and economic conditions for the implementation of innovation and investment, development and use investment resources and evaluation of investment security in order to justify the feasibility of a particular decision on innovation [3].

Examining data on innovation activity of domestic enterprises (table 1) we can say:

– during recent years the share of enterprises involved in innovation activity increased from 14.2 % to 17.4 % (an increase was 22.5 %), but the total cost of innovation has not changed. If we compare 2007 and 2012 years, the increase was 5.8 %. In general, the lowest cost was observed in 2009 – 7949.9 million hryvnas and the highest – 14333.9 million hryvnas in 2011;

– in terms of innovation activity: costs were increased, they increased costs for both internal and external research and development (growth 21.27 %); for acquisition of machinery equipment and software (increased on 7.77 %), but they were higher in 2011 in comparison with 2010 year more than 2 times; the cost were reduced on acquisition of other external knowledge, except development (an increase is 85.69 %).

Table 1

Innovation activity 2007–2012, mln. hryvnas

Years	Proportion of enterprises involved in innovation, %	Total cost	Including areas									
			Research and development		Including		Acquisition of other external knowledge		Acquisition of machinery, equipment and software		Other expenses	
			Share of total cost, %	Internal NDR	External NDR	Share of total cost, %	Share of total cost, %	Share of total cost, %	Share of total cost, %			
2007	14,2	10850,9	986,5	9,09	793,6	192,9	328,4	3,03	7471,1	68,85	2064,9	19,03
2008	13	11994,2	1243,6	10,37	958,8	284,8	421,8	3,52	7664,8	63,9	2664	22,21
2009	12,8	7949,9	846,7	10,64	633,3	213,4	115,9	1,46	4974,7	62,58	2012,6	25,32
2010	13,8	8045,5	996,4	12,38	818,5	177,9	141,6	1,76	5051,7	62,79	1855,8	23,07
2011	16,2	14333,9	1079,9	7,53	833,3	246,6	324,7	2,27	10489,1	73,18	2440,2	17,02
2012	17,4	11480,6	1196,3	10,42	965,2	231,1	47	0,41	8051,8	70,13	2185,5	19,04

Source: calculated on the basis of [4]

Regarding the sources of innovation financing the table shows that during the 2007–2012, the predominant financing for its own account enterprises (7335.9 million hryvnas in 2012, that is 63.9 % of the total cost). Expenses from the state budget increased by 75.1 million hryvnas comparing with 2011, but their share in the overall distribution still remains very low and amounts to 1.95 %. Over this period funding of foreign investors increased more than 3 times (in 2012, 994.8 million hryvnas – 8.67 % of the total costs). Other sources in 2012 – up to 25.48 % of the total cost.

Sources of funding for innovation in Ukraine 2007 – 2012

Years	Total cost, mln. hrn.	Including funds							
		own funds		State budget		foreign investors		other sources	
		mln. hrn.	%	mln. hrn.	%	mln. hrn.	%	mln. hrn.	%
2007	10850,9	7999,6	73,72	144,8	1,33	321,8	2,97	2384,7	21,98
2008	11994,2	7264	60,56	336,9	2,81	115,4	0,96	4277,9	35,67
2009	7949,9	5169,4	65,02	127	1,6	1512,9	19,03	1140,6	14,35
2010	8045,5	4775,2	59,35	87	1,08	2411,4	29,97	771,9	9,6
2011	14333,9	7585,6	52,92	149,2	1,04	56,9	0,4	6542,2	45,64
2012	11480,6	7335,9	63,9	224,3	1,95	994,8	8,67	2925,6	25,48

Source: calculated on the basis of [4]

Thus, although the share of firms involved in innovation and their expenses on innovation activity increases – these processes are spontaneous, without clear trend can be traced to growth. Another important issue is inadequate level of funding from the state budget, economic incentives for science-technical and innovation activities of the country.

Innovation processes in Ukraine are characterized by insufficient investment, significant difference between investments and investment needs, disabilities innovation funding from various sources. The reason of it – imperfect legal framework, high tax pressure, under developed stock market and financial-credit system, inefficient use of depreciation and retained earnings [3].

And the main reason for the low activity of enterprises for investment innovation activities is lack of motivation implement long-term investment, because investors prefer low risk and short-term investments. The main problems to implement an innovative model of economic development in Ukraine are:

- the condition of industrial base of most sectors of the economy is not satisfactory, because of critical rate of physical and moral depreciation of fixed assets;
- there is no effective legal mechanisms for protecting intellectual property rights to keep records of objects of intellectual property and intangible assets in a right way;
- national enterprises in their innovation development in most cases have to rely on their own financial resources, as public and private financial institutions in Ukraine weakly focused on innovation investment.

However, a key factor activation of innovation activity in Ukraine today is – its investment software that is heavily dependent on investment attractiveness. It should be noted that the change of government sharply increased investment attractiveness of Ukraine. Thus, according to the analysis of the European Business Association (EBA), after a minimum in the history of the study of index investment attractiveness of Ukraine in the fourth quarter 2013 y., (when it fell to 1.81 out of possible 5), during the first quarter of 2014 index increased to 2.72 - maximum after 2011. These structural reforms in Ukraine can contribute to economic growth, because “... it will be a signal to investors about the authorities efforts to create a favourable business climate”, – said Vice President of the World Bank Europe and Central Asia, Laura Tak [5]. However, to direct these investments to exactly these innovations it is necessary to ensure the legal protection of the results of innovations, simplification of administrative procedures, clear regulation of innovations and technology commercialization.

The research of the investment policy can be characterized by the dynamics of a number of indicators. The most indicative index is the index of investment attractiveness of Ukraine, which is determined by the European Business Association [6] and is based on regular monitoring of the top officials of member companies of the association as for business climate. This process started in the third quarter in 2008 (first wave). Thus, in the first quarter of 2014, the twenty-third wave of the survey was held.

Analyzing the dynamics of index of attractiveness of Ukraine 2008–2014 years (figure 1) we can conclude that the highest rate was achieved in the second quarter of 2011 (wave 12) and was 3.39 for the

5–point scale, but in the third quarter of this year we can state a significant drop to the level of 2.56. During 2012–2013 there was not material change and the index is on a steady but relatively low place and it averages about 2.11. In the fourth quarter of 2013 (22 wave) index of investment attractiveness of Ukraine reaches its minimum in the history of study, because of the complex and instable political situation – it is 1.81. And according to the results of the first quarter of 2014 (23 wave) the index increased to 2.72.

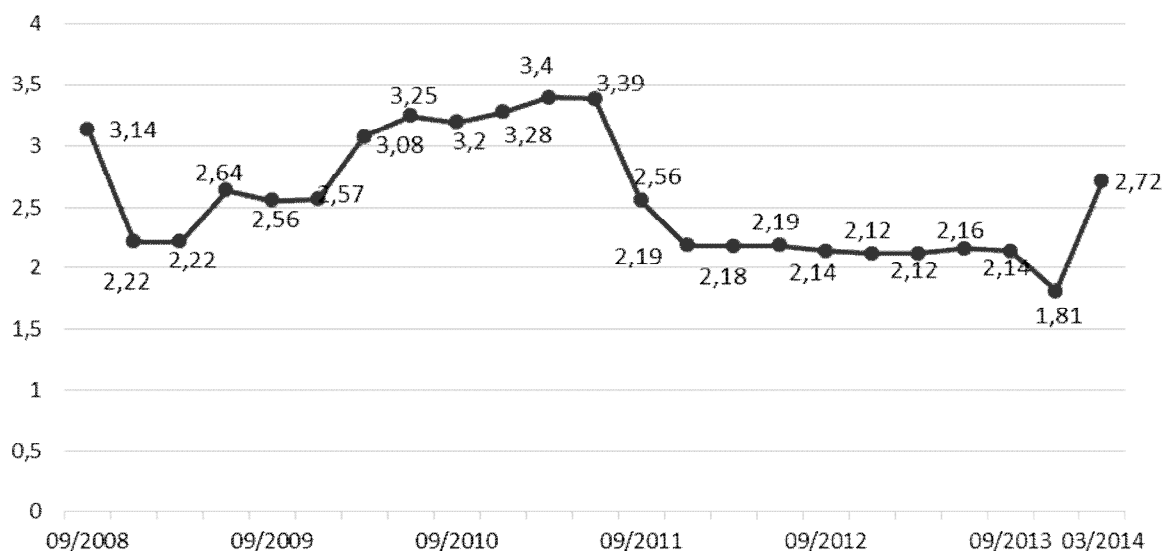


Fig. 1. The dynamics of index of investment attractiveness of Ukraine according to European Business Association
Source: [6]

Following the World Bank “Doing Business 2013” (Doing Business 2013) Ukraine not only improved its position by 15 points (up to 137 places from 185 countries), but also joined the list of 23 countries – the greatest reformers of business conditions in 2011 -2012 years, that evaluates this rating (table 3) [7].

Ukraine also joined the list of countries leading the growth in the CIS rankings with Armenia (18 positions to 32 seats), and 9 positions reduced its backlog of Russia, which took place in the 112 Doing Business 2013.

Table 3

Rating of the World Bank "Doing Business" in Ukraine, 2012–2013

Name of components (subindexes) of index	Index values for years		Absolute change of index, 2013 to 2012	Tendency ↑;↓;=
	2012	2013		
Initiation of business	116	50	66	↑
Registration of property	168	149	19	↑
Paying taxes	183	165	18	↑
Connection to the electricity network	170	166	4	↑
Obligations under contract	44	423	2	↑
Bankruptcy	158	157	1	↑
Getting credits	23	23	0	=
Permitting system in construction	182	183	-1	↓
Foreign trade	144	145	-1	↓
Protection of investors rights	114	117	-3	↓

Source: [7]

As the table shows, the trend growth of the components of index “Doing Business 2013” as the start of the business (from 116 to 50 place), registering property (168 place in 2012 and 149 place in 2013), paying taxes (improved positions up to 165 place). The slight deterioration occurred in obtaining building permits, foreign trade, legal protection of investors.

National ranking has been held with the aim to determine the conditions and factors which deter investment activity (figure 2) and it helped local businesses get an answer to the question which factors affect the investment climate in Ukraine. 28.58 % of respondents attributed “corruption of power” to negative factors, while 25.1 % considers the impact factor positive. This suggests that the overall level of innovation culture business is not high because they formed the habit of “problem solution” by corruption deals and kickbacks, including representatives of the authorities.

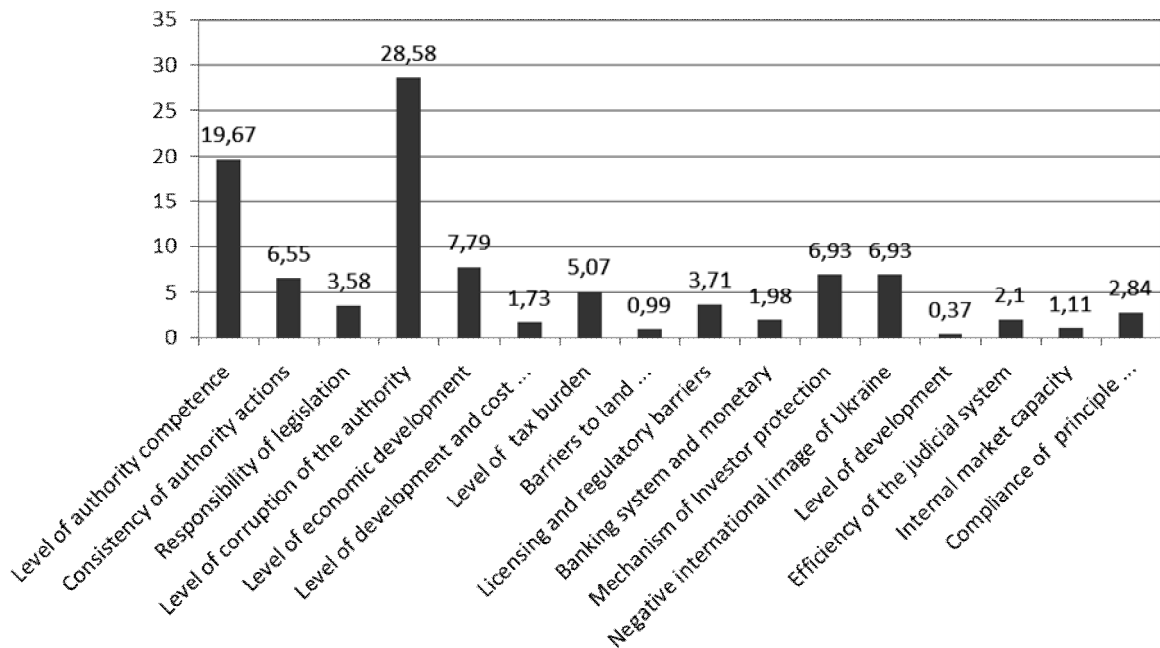


Fig. 2. Distribution of respondents answers to assess the factors negative impact on the investment climate of Ukraine, %

Source: [8, p. 177]

Among the negative factors that are mentioned it is also included “the competence of authorities” – 19.67 %, “level of economic development” – 7,79 %, “way of investors protection” and “negative international image of Ukraine” – 6, 93 %. Overall investment climate as negative: 52 % respondents gave “very bad”, 15.2 % – “bad”. All this points to the pessimism of the most entrepreneurs in the evaluation of investment and innovation policy of the country.

Therefore, the urgent task of the country is to create a support, which is effective and adequate to the modern system and to investors who invest into innovation development. Such support should enable to implement profitably high-performance innovation, at least in the priority sectors of the economy.

In order to increase interest in investing activities it is useful to apply innovative mechanisms and instruments of government regulation, including model-based public-private partnership in the investment sphere, adapted and implemented in the EU. These mechanisms include first of all using mainly fiscal measures:

1) direct government funding of innovative projects in specific well-defined priority sectors of the economy that “... aimed primarily at supporting high-tech exports and stimulate domestic demand for innovative products of domestic production ...” [9];

2) indirect public funding of promising activities (improvement of mechanism of granting tax exemptions, reduced tax burden for investors, etc.), including:

- in the field of engineering, including the production of medical equipment, the potential is measured almost 5 billion, but nowadays these opportunities are not used even 10 %;
- development of the agricultural sector, which would be able to bring the position of Ukraine in the world's leading supplier of agricultural products, food products in international markets;
- establishment of waste treatment facilities (domestic industrial waste formed by the extraction and processing of minerals and production of electricity and heat);
- development of new technologies, development of high-tech transport system, space industry, aircraft and shipbuilding, armament and military equipment (for example, rocket and space industry forms the image of Ukraine on the global arena as a technologically advanced country, which has in its arsenal intellectual potential in its arsenal, not available for many countries. Ukraine is a member of world space club and work together with leading companies creating rocket and space systems competitive in the global market. Carrying out the development of this area Ukraine could be financed by the amount of 50–70 million dollars a year);
- saving energy (Ukraine has great potential for improvements through the use of alternative and renewable energy, the economic basis of which is estimated around 100 million tons, both in terms of high energy consumption economy and high energy prices on the world market);
- widely used technology of cleaner production and environmental protection;
- logistics infrastructure (based on [2], using of scientific methods can reduce logistics costs by 20 %, inventory – by 30–70 %, shorten the delivery time of goods by 20–50 %).

In addition to fiscal and administrative methods of fostering innovation it is important to enhance market leverage on the process of innovation. To do this:

- 1) to improve the regulatory and market mechanisms (bringing national legislation into level with EU laws and standards and signing the Association Agreement between Ukraine and the EU, and creating comprehensive promotion of domestic products to foreign markets);
- 2) to encourage the development of a competitive environment and market transparency by encouraging the development of small and medium entrepreneurship and innovation;
- 3) to create attractive innovative environment in Ukraine and develop the infrastructure of national innovation system (parks, technopolises, business incubators, “business angels”, industrial parks, innovation centers);
- 4) to improve the national system of certification and use of patent protection.

Conclusions

The first positive factor for the economy of Ukraine is an increasing tendency toward domestic enterprises involved in innovation activities, and, thus, this caused increasing innovation activity and the amount of cost on it.

The main problems of formation of an innovative model of economic development of Ukraine are: poor conditions of industrial base sectors of the economy; lack of legal mechanisms for protecting intellectual property, investment improper maintenance.

The main tools of innovation activity in Ukraine can be defined: fiscal measures, including direct government funding of innovative projects and indirect public funding of promising sectors; impact of market factors, such as: appropriate market mechanisms, development of the competitive environment, small, medium businesses and innovative entrepreneurship, innovation and attractive investment environment, formation of innovation infrastructure.

Perspectives for further research

Recent studies have revealed features of the investment and provision of innovative activity in Ukraine and all this will enable work to offer the following ways of creating an effective mechanism to improve financial support of innovation management subjects.

1. Григоровська Р.В. *Проблемні аспекти інноваційної діяльності в Україні як гальмуючий чинник економічного розвитку [Електронний ресурс].* – Режим доступу: http://mev-hnu.com/load/studentska_naukovo_praktichna_konferencija_2013/2_innovacijno_investicijnij_rozvitok_ukrajini_ta_jiji_integracija_u_svito_vij_ekonomichnij_prostir/problemni_aspekti_innovacijnoji_dijalnosti_v_ukrajini_jak_galmutujuchij_chinnik_ekonomichnogo_rozvitku/44-1-0-287/. 2. *Маркетинг. Менеджмент. Інновації: монографія / за ред. д.е.н., професора С.М. Ілляшенка.* – Суми: ТОВ “ТД Папірус”, 2010. – 624 с. 3. Борода Д.Р. *Інвестиційне забезпечення інноваційної діяльності сучасного підприємства [Електронний ресурс].* – Режим доступу: http://www.rusnauka.com/15_NPN_2013/Economics/2_138491.doc.htm/. 4. *Державна служба статистики України [Електронний ресурс].* – Режим доступу: <http://ukrstat.gov.ua>. 5. *Інвест-газета [Електронний ресурс].* – Режим доступу: <http://privatbank.ua/ua/news>. 6. *Індекс інвестиційної привабливості // Європейська Бізнес-Асоціація: BringingBusinessesTogether [Електронний ресурс].* – Режим доступу: <http://www.eba.com.ua/uk/about-eba/indices/investment-attractiveness-index>. 7. *Місце України за рейтингом “Ведення бізнесу 2013” [Електронний ресурс].* – Режим доступу: <http://bg-law.com.ua/pres-oglyad/23-msce-ukrajini-za-reytingom-vedennya-bznesu-2013.html>. 8. *Інноваційний розвиток туризму: монографія / Г.І. Михайліченко.* – К.: Київський національний торг.-екон. ун-т, 2012. – 608 с. 9. *Інвестиційне забезпечення інноваційного й технологічного розвитку промислових підприємств [Електронний ресурс].* – Режим доступу: <http://www.spkneu.org/wp-content/uploads/2013/08/2.6-zaharin-147-159.pdf/>.