Yu. H. Bondarenko, Z.R. Bahrii Lviv Polytechnic National University Management of Organizations Department

INNOVATIVE INVESTMENT TYPE OF ECONOMICS AS A CONDITION FOR ITS EFFECTIVE FUNCTIONING

ã Bondarenko Yu.H., Bahrii Z.R., 2014

The necessity of the national economy transition to the innovative way of development is substantiated. The main characteristics of such a transition are presented. The experience of foreign countries and the advantages from introduction of innovations at an enterprise are generalized. The interrelation and interaction of investments and innovations are determined. The importance and place of investments in the innovative-type state are proven.

Key words: innovative type of development, innovative economy, innovative activity, investments, investment activity, competitive activity.

Ю.Г. Бондаренко, З.Р. Багрій

Національний університет "Львівська політехніка" кафедра менеджменту організацій

ІННОВАЦІЙНО-ІНВЕСТИЦІЙНИЙ ТИП РОЗВИТКУ ЕКОНОМІКИ ЯК УМОВА ЇЇ ЕФЕКТИВНОГО ФУНКЦІОНУВАННЯ

ã Бондаренко Ю.Г., Багрій З.Р., 2014

Обгрунтовано необхідність переходу національної економіки на інноваційний шлях розвитку, наведено його основні характеристики, узагальнено досвід іноземних держав та переваги упровадження інновацій на підприємстві. Визначено взаємозв'язок і взаємодію інвестицій та інновацій. Доведено вагомість і місце інвестицій у інноваційному типу розвитку держави.

Ключові слова: інноваційний тип розвитку, інноваційна економіка, інноваційна діяльність, інвестиції, інвестиційна діяльність, конкурентна боротьба.

Problem statement

Swift changes in a society, globalization, scientific and technical progresses require the adequate reacting both from the side of the domestic economic system and from the enterprise. In competitive activity between the states, regions, industries, win the companies, who have managed to adjust the strategy of development to the features of external environments in time, managing to attract investments for its realization and as a result attained successes in commercialization of innovations. For this reason innovative investment as a development of the system is an actual question of the present.

Analysis of recent research and publications

Problems relating to the innovative type of economic development, come into notice of many scientists, in particular: Petrovicha J.M., Illyashenko S.M., Golub Yu.Yu., Utkina G.A, Shostak l.V., Marchenko O.I. In labours of Antonyuk L.L., Poruchnyk A.M., Savchuk V.S. – probe the role of innovative factor in the increase of competitiveness of national economy and intercommunication between innovative development and economical growth of different countries in the conditions of globalization. Such authors as Grineva v.m., Koyuda v.o., Stechenko d.m. Umanciv Yu.m. were able to lead to intercommunication and interdependence of investments with innovations.

Objectives

To justify the need to move Ukrainian economy to the innovative way of development. Aiming at the importance to analyse positive experience of the foreign countries and probe present achievements of national economy in the area of innovative activity. To define interdependence of innovations from investments and expose their influence in modern terms on strategic basis of the permanent economy growth.

Materials

Critical Global changes that take place in today's social development promote and cause creation of new model of economical development that has fundamentally new goals, purpose, priorities that are directed to satisfy necessities of people. The new model of economic growth influences on all activity to which becomes a tangent, beginning from an individual, concluding with the country.

As with the new model happens rethinking of value of human factor, the role of creative people as workers grows. Changes touch areas of production which become more orientated to the necessities of separate individuals; and thus, requirements to quality of commodities and services are growing.

Direct advantages that country will receive after incorporating such model would be high rates in growth of quantity of enterprises (creation of small and middle enterprises), which will provide stable economic development of the country.

Such model is a model of innovative direction of development. Transition to the innovative type of development is objectively predefined by the row of circumstances. First, the world market of commodities and services is filled. The place can be taken only by forming the own niche of market for a new commodity. Secondly, competitive ability of the innovative product or favour, technology of production – are important components of the economic system and economic stability in the conditions of uncertain market environment.

Thirdly, the innovative type of development best matches the rise of the increasing world tendency of individualization of necessities and, consequently, consumer qualities of commodity [1, p. 95]. The innovative type of development characterized by the number of features:

production and export of high-tech products;

wide use of modern information technologies;

growing role of intellectual capital;

development of venture enterprise;

internal and external factors which provide innovative activity (legislatively normative base, developed innovative management, motivational mechanism, availability of innovative resources).

The share of new knowledge, that are implemented in commodities, technologies, education, in the developed countries makes from 70 to 85 % of GDP increase. Therefore the Countries, which provide favourable terms for innovative activity, related to development, introduction and use of novelties, win in a global economic competition [2, p. 3]. Todays Leaders in the area of innovative activity are such countries of EU as Sweden, Germany, Denmark and Finland for today.

Finland is a country where high-tech won, and a national innovative model is acknowledged to be one of the most effective in the world. For two decades Finnish economy was reoriented from the production of sources of raw materials to a high-tech production. The increase of investments in scientific research activity was a decisive factor in the rapid change of the Finnish economy at the end of 70th. Even in a period of the general economic downturn at the beginning of 90th, the volume of financing of science also continued to grow, though with slower rates [3, p. 399].

In the last few years Finland is in the first ten countries with the best level of competitiveness of economy. Finland occupies 3rd place from 148 countries of the world – rating of "Global Competitiveness Report" for 2013–2014. Rating developers took into account the general state of economy, concentration of high-tech productions, and also volume of investments, in NDDKR (scientific research and experimental design) and education [4].

German's economy is another example of successful innovative type of development of the country. Promoting innovation and technological development through forming of an effective system of the Government support of the scientific and innovative activity and by encouragement of non-state investments belongs to the priorities of the economic policy of Germany.

Thus, Germany is oriented on implementation of goals of Lisabon Summit of EU in relation to providing the growth of National and European economies due to the observance of high innovative dynamics and output on the level of front-rank world technologies [3, p. 383].

Strategy of development in Germany in the high-tech field determines 17 priority areas of innovative and technological development which correspond to prominent national interests and carry considerable scientific and economic potential.

In particular, referring to NDDKR in the areas of energy (above all things energy-savings, renewable types of energy), protection of the environment, health protection, increase of mobility (auto-, shipbuilding and aircraft construction), safety, bio- and nano-technology, newest materials for a production and others like that. In general, for the implementation of the Strategy the government spent well over € 15 billion [3].

According to German experts innovative way of development of the economy will successfully meet the challenges that globalization brings and retain its leading position in the world in economic, scientific, technological and social areas.

As for Ukraine, our country has possibilities of transitioning to the innovative model of economic development, though a domestic economy runs into considerable difficulties and substantially falls behind from the developed economies of countries-leaders. Therefore, in order to provide an innovative model of economic development, the state legislatively allocated strategic directions of innovative activity in the years 2011–2021 [5]:

- 1) mastering new technologies of energy transportation, introduction of energy-effective, material-effective technologies, mastering of alternative energy sources;
- 2) mastering of new technologies of highly technological development of a transport system, space industries, air- and shipbuilding, armament and military technique;
- 3) mastering of new technologies for production of materials, their treatment and consolidation, creation of industry of nanomaterial and nanotechnology;
 - 4) echnological update and development of agroindustrial complex;
- 5) introduction of new technologies and equipment for high-quality medical service, treatment, pharmaceutics;
 - 6) widespread use of cleaner production technologies and environmental protection;
 - 7) development of modern information, of communication technologies.

The above-mentioned priority directions are directed on providing an economic security of the country, creation of highly technological competitive and environmentally friendly products, Increase export potential with the effective use of national and international scientific and technological achievements.

Since the information society is happening against a background of global environmental problems caused by human activities on the environment, then we believe the introduction of energy-efficient, resource-saving technologies, the development of alternative energy sources and the widespread use of cleaner production technologies serve not just as a priority, but as a required direction of innovative Development

In table. 1 and fig. 1 shows the proportion of firms that introduced innovations in Ukraine during 2009–2013 and the number of produced innovative products and new processes introduced during this period.

Table 1

Introduction of innovations to the industrial enterprises of Ukraine [5]

Years	Specific proportion of enterprises which inculcated innovations, %	Implementation of new processes	low-waste, resource-saving	The production of innovative products, names	from them new types of technique
2009	10,7	1893	753	2685	641
2010	11,5	2043	479	2408	663
2011	12,8	2510	517	3238	897
2012	13,6	2188	554	3403	942
2013	13,6	1576	502	3138	809

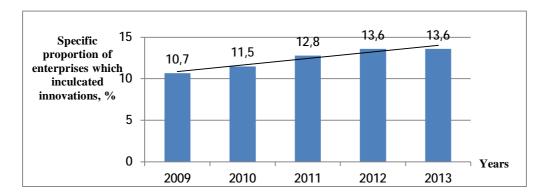


Fig. 1. Dynamics of specific of the share of enterprises which inculcated innovations during 2009–2013

Proportion of firms that introduced innovations during 2009–2013 years has tended to increase in 2013. was 13,6 %.; number of of new technological processes in 2013 were 1,576 units, including low-and resource – 502; number embedded in the production of innovative products is 3138 items, including 809 – new types of equipment, ie machinery, equipment, apparatus, instruments.

Therefore, almost every fourth enterprise realized products which was new in the market. The volume of such products made 12,4 milliards of Uah, more than the half of which (53,0 %) 102 enterprises put on an export.

Thus, the choice of country innovation development model will radically change the economic structure of the country. Help implement the restructuring and become competitive in the global market. However, if the state chooses a new direction of development – not innovative (high-tech), and low-tech, it will not be able to compete with countries that prefer social and economic development, as opposed to the country, which can only offer cheap labor, the use of their climate-environmental conditions, etc.

Such model of development needs neither investments nor innovations, in particular in human resources. Also, be aware that innovation negate the laws of decline of production factors and solve the problem of limited resources. Marks asserted, that economy with the purpose of the production investing used as a result of competition race for advantages, which enables introduction of new technique in a production and providing of most income [7, p. 228].

Consequently, investment and innovation – the two inseparably linked areas of economic activity. Therefore, considering the category of investment – a resource, including human intelligence, which is investing in any kind of economic or other activity expected income, and achieve economic or social impact, taking into account the risk factors and the payback period.

Basic principle: holdings, renouncing something today (assets, intellect, labour), to get infinitely more tomorrow. In turn, innovations – are mainly ideas, which will create suggestions, innovations which are primarily the result of human creativity. Creativity which is not able to be subjected to prognosis or planning "from above". For innovations, however necessary freedom of enterprise, which failing in Ukraine [8].

Therefore, when there is no investments – innovations are impossible, accordingly, innovation is the criteria for efficiency of investments. Inculcating innovations we provide the increase of efficiency of economy as a whole, and enterprises in particular. As witness whereof in a table 2 and on fig. 2 sourcings innovative activity are given in Ukraine which evidently represents dependence between the low level of innovations in enterprises and lack of money for their implementing.

Source of funding for innovative activity in 2009–2013 ¹

Table 2

Years Lump sum of charges	Including the funds								
	Personal money	Structure %	The state budget	structure %	Foreign investors	Structure,	Other sources	Structure, %	
2009	7949,9	5169,4	65,0	127	1,60	1512,9	19,0	1140,6	22,1
2010	8045,5	4775,2	59,4	87	1,08	2411,4	30,0	771,9	16,2

	Lump	Including the funds							
Years sum	sum of charges	Personal money	Structure %	The state budget	structure %	Foreign investors	Structure,	Other sources	Structure,
2011	14333,9	7585,6	52,9	149,2	1,04	56,9	0,4	6542,2	86,2
2012	11480,6	7335,9	63,9	224,3	1,95	994,8	8,7	2925,6	39,9
2013	9562,6	6973,4	72,9	24,7	0,3	1253,2	13,1	1311,3	18,8

¹ Information given in million. grn.

Structure of sourcings innovative activity, %

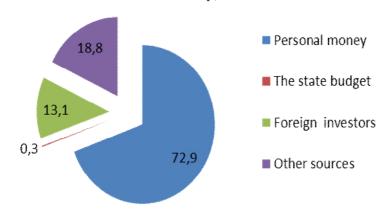


Fig.2. Structure of sourcings innovative activity in 2013

Thus, a lion's share in financing of innovative activity belongs to the enterprise's own fund, and in 2013 arrives at a mark in 72,9 %. A money of foreign investors and money from other sources are 13,1 % and 18,8 % accordingly. Wretched is support of the state -0.3 % in the structure of charges on innovative activity.

In contrast to Ukraine European countries allocate significant resources to support innovation, in particular SMEs, which are the driving force behind the increase in innovation and fertile ground for business ideas. Creativity, dynamism and flexibility inherent in small firms and help them get into new industries.

Innovation – it always changes which affect all sub-systems company as technical and technological as well as financial, economic, organizational and management. An essential feature of such innovative change is a risk. On the basis of risk built a mechanism that provides innovative financing resources - venture capital.

Investments of venture funds are a basic source of funding of new enterprises, especially in the market of high-tech. Almost all known computer firms were created with bringing in of venture capital. Those funds act part catalyst in investment processes and instrumental in the increase of investments in the highly technological sectors of economy. Therefore development of venture business influences the dynamic of all economic complex, revitalizing the economy of the country [2, 4].

In general, transition of the business entity in an innovative way of development allows it to [9, p. 49]:

- adapt oneself to the changes of terms of management;
- promote quality of products and to better satisfy the queries of users;
- apply strategies of pioneer marketing and pricing strategies "skimming";
- strengthen market and competition positions, create terms for a survival and development;
- maintain high efficiency of production and marketing;
- fix the financial state;
- strengthen the image of products and commodity producer;
- fix partnerships (with users, suppliers, mediators, financial institutions and others like that);
- perfect the organizational structure of enterprise;
- promote the level of qualification of personnel and their experience;
- promote the productivity of activity.

That type of innovation at the firm level should be considered from the standpoint of a particular company and humans in particular. In this case, the mechanism of management of innovation processes is the system of innovation management. The managers of higher link, which form strategy of development of organization, must expressly realize a necessity and obvious advantages from introduction of innovations.

Conclusions

Therefore, orientation on an innovation is not simply correct way which can choose enterprise and country in general, but also objective requirement. The experience of other countries, only confirms that the innovative type of development in conjunction with a properly chosen investment policy will be the foundation, which can ensure the efficient functioning of the Ukrainian economy, its sustainability and allow to take a decent position at the international level.

Thus, innovations are important, by a factor and reason which induces and determines the necessary volume of investments for development of enterprise in particular and the states on the whole.

Prospects for further research

Aspiration of Ukraine to join in with European community requires realization of innovative activity from domestic enterprises, as it will allow them to survive in the conditions of sharp competitive activity.

Therefore subsequent researches must be devoted to the question of innovative development and investment providing of functioning of economy of Ukraine in the conditions of eurointegration.

1. Петрович Й.М. Управління діяльністю організаційно-виробничих систем: навч. посіб. / Й.М.Петрович. — К.: Знання, 2013. — 510 с. 2. Антонюк Л.Л. Інновації: теорія, механізм розробки та комерціалізації: монографія / відпов. ред. Л. Чуприна; Антонюк Л.Л., Поручник А.М., Савчук В.С. — К.: КНЕУ, 2003. — 394 с. 3. Інноваційна політика зарубіжних країн: концепції, стратегії, пріоритети [Електронний ресурс]. — Режим доступу : http://kno.rada.gov.ua/komosviti/doccatalog/document? id=48725. — Назва з екрана. 4. The Global Competitiveness Report 2013 — 2014 [Електронний ресурс]. — Режим доступу: http://www.weforum.org/reports/global-competitiveness-report-2013-2014. — Назва з екрана. 5. Про пріоритетні напрями інноваційної діяльності в Україні [Електронний ресурс]: Закон України [прийнято Верховною Радою 8 вересень 2011 р. № 3715–VI]. — Режим доступу: http://zakon4.rada.gov.ua/laws/show/3715-17. 6. Сайт Держкомстату [Електронний ресурс]. — Режим доступу: http://www.ukrstat.gov.ua/7. Гриньова В.М. Інвестування: навч. посіб. / під заг. ред. д.е.н., проф. Гриньова В.М. — Х.: ВД "Інжек", 2003. — 320 с. 8. М. Заблоцький Про інновації // Українська правда: блоги [Електронний ресурс]. — Режим доступу http://blogs.pravda.com.ua/authors/ zablodsky/52701c58ac7c3/ 9. Ілляшенко С.М. Інноваційний менеджмент: підручник / Ілляшенко С.М. — Суми: ВТД —Університетська книга, 2010. — 334 с.