



PhD student Ruslan Navrotskyi

Public Administration, Documentation and Information Activity Department, National University of Water Management and Nature Resources Use (Rivne, Ukraine)

THE WAYS OF IMPROVING OF FINANCIAL SUPPORT FOR INNOVATION ENVIRONMENTALLY ORIENTED ENTERPRISES

MOŻLIWOŚCI WSPARCIA FINANSOWEGO DLA ROZWOJU INNOWACJI W PRZEDSIĘBIORSTWACH ZORIENTOWANYCH EKOLOGICZNIE

ПУТИ СОВЕРШЕНСТВОВАНИЯ ФИНАНСОВОГО ОБЕСПЕЧЕНИЯ ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ ЭКОЛОГИЧЕСКИ ОРИЕНТИРОВАННОЙ КОМПАНИИ

Abstracts

The article deals with the problems of the financial environmentally oriented activities. In the article the structure of capital investments of Rivne region of environmental protection has been investigated. The features of financing environmentally oriented companies have been learned. Much attention is paid to the activities of venture capital funds and collective investment.

Key words: *innovation, financing eco-oriented enterprises, capital investments, venture capital, joint investment institutions*

Streszczenie

W artykule opisano problematykę finansowego wsparcia innowacyjnych rozwiązań implementowanych w przedsiębiorstwach zorientowanych ekologicznie. Poza tym przedstawiono strukturę inwestycji kapitałowych realizowanych w regionie Równem w zakresie ochrony środowiska. Opisano cechy finansowania przedsiębiorstw zorientowanych ekologicznie. Wiele uwagi poświęcono na wyjaśnienie działalności funduszy venture capital oraz funduszy inwestycyjnych zbiorowego inwestowania.

Słowa kluczowe: *innowacje, finansowanie eko-zorientowanych przedsiębiorstw, inwestycje kapitałowe, kapitał podwyższonego ryzyka, instytucje wspólnego inwestowania.*

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Аннотация

Статья посвящена проблемам финансового обеспечения экологически ориентированной деятельности. В статье приводится структура капитальных инвестиций Ровенской области на охрану окружающей природной среды. Выявлены особенности финансирования экологически ориентированных предприятий. Значительное внимание уделено деятельности венчурных фондов и институтам совместного инвестирования.

Ключевые слова: *инновационная деятельность, финансирование экологически ориентированных предприятий, капитальные инвестиции, венчурный капитал, институты совместного инвестирования*

Introduction. Limited sources of financing and the inability of the state to provide adequate support for business activities, this sector is forced to finance innovative processes at its own expense. As for innovations in environmentally oriented projects, state policy should stimulate the development of environmental activities, as the business sector is more interested in making a profit than promoting environmental management. The state should develop mechanisms to support financial security, the legislative framework, in order to participate in the work of enterprises in the environmental direction. The absence of these mechanisms indicates that the role of public authorities and self-governing authorities is minimal. The low degree of public fund rising obliges the company to attract a variety of funding sources. The majority of existing economic entities need to modernize production, increase productivity and resource efficiency.

State participation in the process of financing environmentally oriented projects should be based on the development of new activities aimed at reducing emissions and discharges, ensuring the development of quality standards for ecological advancement, introducing new environmentally-oriented productions, targeting budget funds for the development of environmental projects, promoting effective credit policy, create favourable conditions,

providing guarantees for commercial banks that will finance priority sectors of innovation, development of environmental investment, promotion of environmentally oriented structures aimed at raising environmental awareness among the population.

The most problems in the process of implementing innovative projects arise during commercialization of innovative solutions. The commercialization of innovations is a complex and demanding process. It involves additional financial expenses for product support in the process of its development, testing of the market entry, promotion of products. The process of commercialization of an innovative project of an environmentally-oriented enterprise is the most risky, therefore, at these stages, the financial stability of the enterprise is necessary.

Considering the financial support it can be argued that a quite complicated situation has arisen. So, in 2015 17.6 million dollars was allocated for the protection of the environment, of which the largest share \$ 15.6 million was directed to current expenses of directly related to equipment maintenance. \$ 1.9 million spent on capital investments and construction of environmental protection facilities. \$ 0.4 million. was allocated from them for major repairs. At the same time, the share of capital investments for environmental protection from the budget was \$ 0.14

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million. And \$ 0.08 million of current environmental protection is given in Table expenditure was financed. The structure of Rivne region's capital investments for

Table 1. Structure of Rivne region's capital investments for environmental protection in total investment during 2010-2015 in millions of US dollars

Data	Year						Absolute deviation 2015 - 2010, million dollars.	Relative deviation 2015 - 2010, %
	2010	2011	2012	2013	2014	2015		
Capital investments for environmental protection	27,6	31,5	37,2	39,5	24,8	17,6	-10	-36,2
Capital investments	245,2	414,9	359,2	359,2	236,3	198,8	-46,4	-18,9
Quota of environmental protection expenditure	11,2	7,6	10,4	11,0	10,5	8,8	-2,4	-21,4

Compiled by the author based on the source [1]

Considering the distribution of capital investments in the period 2010-2015 it can be seen a decrease in the dynamics of capital investment for environmental protection (Figure 1). During the study period, the share of environmental expenditures in the total number of investments ranged from 11.2% in 2010 to 8.8% in 2015.

In the foregoing comparisons, it is possible to highlight some features of financing environmentally oriented enterprises, namely: a significant limitation of financing environmentally oriented projects at the expense of state and local budgets; significant concentration of funds on current expenditures and restrictions on the

financing of capital investments; lack of incentive mechanisms for the development of innovative activities aimed at environmentally oriented nature management.

As a result of the limited financial resources, it is necessary to develop effective extrabudgetary financial support. A promising direction to stimulate the development of environmentally oriented enterprises can be venture capital financing, which is still not sufficiently developed in the Ukrainian market. For example, venture investments in the US amounted to \$ 27 billion, China \$ 1.2 million, Japan \$ 1 billion and Ukraine \$ 0.02 million.

Picture 1. Dynamics of Rivne region's capital investments for environmental protection in the total volume of investments during 2010-2015, in millions of US dollars



Compiled by the author based on the source [1]

According to the World Bank, the level of venture financing per capita was 26.2 US dollars in Ukraine in 2010 (in the US - 1148.1 dollars, in Japan - 1023.3 dollars, Germany - 807.9 dollars, in the United Kingdom - 580.5 dollars, France - 693.1 dollars, Italy - 309.7 dollars, Russia - 128.4 dollars, the Czech Republic - 344.4 dollars, Poland - 83.9 dollars). In 2010, the share of venture financing of innovative projects by the banking sector in the United States was 63.7%, in Germany - 66.8%, in Japan - almost 75% [2].

As a result of the state's assistance in the development of venture financing in Ukraine, opportunities are being created to attract private capital to risky projects of environmental protection; renewal of outdated resource-intensive production assets with new energy conservation equipment.

The definition of venture capital is given by the European (EVCA), the British (BVCA) and the National (NVCA) venture capital associations, as the venture business began and developed here. According to the European Private Equity and Venture Capital Association [3], venture capital is a type of private equity of professional market participants, invested jointly with business funds to finance initial stages or at the development stage [4].

In Ukraine venture capital financing of enterprises started in 1998 at the suggestion of the European Venture Capital Association, the venture investment section of the Ukrainian Association of Investment Business (UAIB) was opened. The legal basis was laid for the existence of venture capital in 2001 with the introduction of the Law of Ukraine "On the institu-

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tions of joint investment (Co-Op Share and Corporate Funds)", then it lost its force and the Law "On Joint Investment Institutions" came into force in 2012 [5, 6]. This law is aimed to establish effective financing of investment funds, describes the features of participation by developing already existing objects.

Ukrainian Venture Capital and Private Equity Association was established in 2014 with the purpose of popularizing information on possible ways of investing in Ukraine and promoting of investors. The main tasks of the organization are [7]:

- attraction of foreign investors to Ukraine;
- promotion of investment opportunities in Ukraine at international conferences and meetings;
- organization of tours for foreign investors in Ukraine and for Ukrainian investors abroad;
- conducting market research based on the collection and analysis of information on the state of the private and venture capital sector in Ukraine;
- providing up-to-date information on the Ukrainian investment market to international associations, research institutes, investors
- dissemination of information and research by the European Private Capital Association;
- collection and dissemination of the most relevant information of the world investment market;
- international support (from EBAN, EVCA)
- protection of private investors' rights.

During 2 years, 41 organizations joined the UVCA (36% more new members in 2016 than it was in 2015) - leaders of the Ukrainian and international investment industry, including venture capital funds from the Silicon Valley. \$ 132 million of

venture and private investments were invested in Ukrainian companies with the assistance of the venture and private capital association in 2015 [7].

Venture funds in Ukraine in comparison with other types of joint investment institutions are the most risky for investors, which is explained by the absence of strict legislative requirements for the composition and structure of assets of these funds and transactions with them, which are typical for other joint investment institutions. Venture funds are subject to the most regulatory requirements from the legislation, which makes it a flexible tool for implementing investment programs [8].

Ukrainian venture capital is not aimed at the implementation of innovative risky projects. It is characterized by the implementation of medium-risk investment projects using transactions involving financial assets and real estate. The most common sectors are construction, agriculture and trade. A common form of venture capital investment in Ukraine is granting loans for investment from investing in specially issued for the project bonds to direct investment lending through venture funds [9].

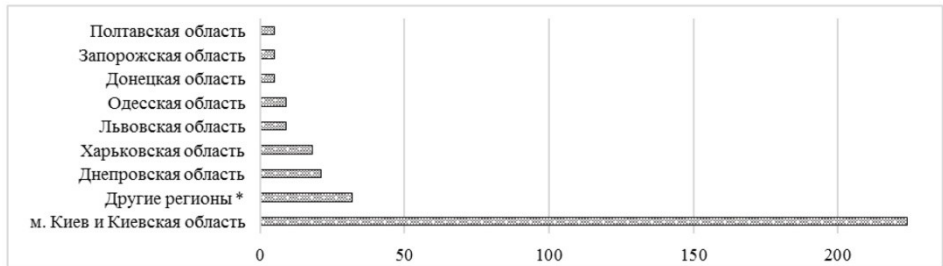
The development of Ukrainian venture funds differs significantly from the funds in the advanced countries of Europe. In our country, this is a specific Collective Investment Institution (CII), its rules of formation, existence and closure are included in the general rules of the activities of the CII and asset management companies [10]. The peculiarities of functioning in Ukraine are their accumulations practically on the territory of Kiev and the Kiev region, which is explained by the developed production infrastructure and the largest concentration of small and large enterprises (Figure 2).

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Figure 2. Distribution of asset management companies in the regions of Ukraine in 2015.



Compiled by the author based on the source [5]

The largest number of venture investments is concentrated within these territories. The limited development of venture investment in other areas is due to a limited number of promising enterprises with a rapid pace of development.

Experts estimate that in terms of registration of patents for invention, one dollar of venture capital investment in research and development (R & D) is almost 10 times more effective than a dollar invested by a large company. Venture capital investments represent less than 3% of corporate R & D expenditures, but lead to the commission of 15% of all innovations in the industry. [11] The total number of registered asset management companies

and collective investment institutions operating in Ukraine is shown in Figure 3.

For the period 2010-2015, the number of asset management companies ranged from 339 to 313 units and the number of registered collective investment institutions has continuously been increasing during the period under study and amounted 5 units in 2015. Considering the regional distribution of the number of asset management companies, it can be argued that the largest number of them are concentrated on the territory of Kiev and Kiev region, 224 units or 71.4%, and on Dnipro region 21 units or 6.7%, Kharkov region - 18 units or 5.7%, Lviv regions - 9 units or 2.8%.

Figure 3. The total number of registered asset management companies and institutions of joint investment in Ukraine during 2010-2015.

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Venture capitalists of the United States believe that today a promising innovative project is the production of alternative fuels, because oil reserves are limited. In 2011 venture capital investments amounted \$ 3 billion only in one American company Siluria Technologies, which is engaged in the development of biofuels. Until 2015 it is expected their gradual increase more than 4 times [12]. The development of alternative fuels on the territory of Ukraine is practically not carried out. Every year the problem of energy supply is becoming increasingly acute due to the high cost of energy sources. With the rise in energy prices, significant funds from enterprises are used to pay for the resources. Alternative fuels can become a promising trend for stimulating venture capital investment. They include: windpower; sunlight energy; biogas production from municipal solid waste; biogas production; biogas production from the organic waste of the agricultural plant.

An effective system of tax incentives is needed to raise funds for conducting venture activity in Ukraine. For example, an investment tax credit exists in the UK and Ireland. If the innovative project is unprofitable, an income tax exempt is proposed in case of failed investment, as well as

exemption from capital gains taxation. France provides for exemption from income tax for up to 10 years [13].

Features of venture capital financing:

- the extended funds shall be secured with neither real estate nor personal property.
- the only guarantee is the shares issued by the enterprise;
- long-term investments with a high risk level;
- venture capital investments are invested in enterprises with rapid development rates;
- stimulating the development of small and medium-sized enterprises
- development of environmentally oriented enterprises, whose activities are associated with a high degree of risk;
- investors can put forward certain demands for venture capital financing, namely the provision of funds in limited quantities for a certain period.

Taking into account the developmental characteristics of the business sector in the Rivne region, the main advantages of financing venture capital can be:

- attracting private capital to the development of the enterprise, which significantly exceeds public funding;

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- establishing a favourable investment environment to attract foreign investors through the development of small and medium-sized enterprises;
 - development of domestic enterprises, whose products are distributed on the domestic market;
 - taking into account the considerable potential of agricultural lands, it is advisable to create the conditions for the financing of venture capital development of agricultural production, which in the future could become a platform for the development of other activities.
- ates barriers to its involvement in environmentally oriented projects.
2. A significant limitation of financing innovative activity remains the main problem of development of effective nature management. Lack of funding and limited resources of the enterprise for investing in environmentally oriented projects;
 3. Significant cost of attracting loans to finance innovation in the enterprise. The state does not provide guarantees to credit institutions for financing innovative sectors of the economy;
 4. Concentration of companies on venture capital management in the same area and a limited number of them in the regions of Ukraine. It is a small amount of the developed enterprises that are willing to invest in venture projects.
 5. Venture capital funds raise money in low-risk projects. Innovative environmentally oriented activities refer to the projects with a high degree of risk.
 6. There are significant development prospects in Ukraine, such as significant reserves of raw materials and resources and geographical location despite a relatively new market for venture capital.

Conclusions.

The study reached the following conclusions:

1. Absence of financial mechanisms for attracting investments from external sources. Weak national policy of infrastructure development. The lack of experience in venture capital management cre-

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