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## VENTURE BUSINESS, ITS TYPES AND PROBLEMS OF DEVELOPMENT IN UKRAINE

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**Introduction and aim of the research:** The need to create an effective system of innovation development of venture business makes it especially important issues of theory and methodology, with taking into account the peculiarities of this sphere and the specifics of the services provided. Scientific support of solutions to these problems will contribute the creation of a well-functioning venture business, which primarily depends on its successful development and increasing demands from consumers, creating successful business project.

Research hypothesis. It is expected that the use of innovations in the venture business will create an effective quality management systems that are adapted to further development of the venture industry and suggested ways to improve venture business in Ukraine.

**The aim** of this research is to develop the method of realization of the process of selection of companies-applicants of venture projects.

**Methodology:** systematic analysis has been used to support the strategic system of balanced indicators for calculating the

effectiveness of a venture project to build the model of the feasibility of innovative behavior of business.

Results: proposed ways of improving of venture business is revealed; the basic content of this concept is revealed; defined the main functions of such a business, as well as the role in modern conditions; the necessity and expediency of venture activities in Europe and Ukraine in particular has been proved; the role of the state in support of venture enterprises is determined; risks are identified in the course of venture investment; proposed the method of realization of the process of selection of companies-applicants of venture projects.

Conclusions: proposed approach to the use of a system of the activity of venture business in Ukraine is researched as well as the influence of the activity of European venture enterprises on the Ukrainian economy; made own forecasts for further development of the venture industry and suggested ways to improve venture business in Ukraine.

**Keywords:** innovations, business, venture business, venture investors, business angels, venture management companies.

**Problem statement.** In modern conditions, entrepreneurs, who are directly the initiators of new projects, large industrial companies, and the state are clearly aware that refusing to invest in the development of innovations would mean much financial loss in practice. Therefore, they are on the path to creating economic mechanisms that, on the one hand, would contribute to the introduction of the latest developments in STP, and, on the other hand, would help in minimizing the financial risk of individual investors. One of such mechanisms is risk (venture) financing of innovations. The venture mechanism has played an important role in implementing many of the major innovations in various fields of activity.

The current level of development in the theory of entrepreneurship is very limited, does not cover the visible set of factors affecting the most important indicators of entrepreneurial activity – profit and efficiency. In connection with this, both from the scientific and theoretical as well as from the practical point of view, there is a need for research that develops the theory and practice of venture business, which are modern and actual, which determined the choice of the topic of this study.

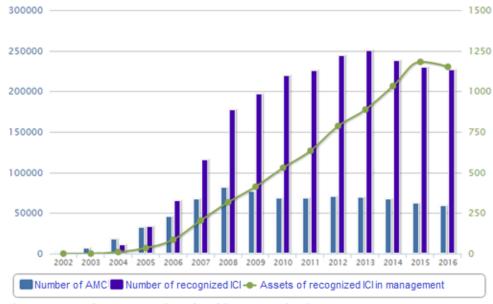
An analysis of recent publications and an unresolved part of the problem. The analysis of theoretical foundations and practical experience of entrepreneurship in the field of venture business shows that solving problems in the venture sector is impossible without developing new theoretical positions, tools and methodological support for the assessment and analysis of the efficiency of the functioning of venture capital business, state support for entrepreneurship through venture capital with taking into account foreign and national experience. These and similar questions are actual and have not yet received a sufficiently complete and systematic reflection in the scientific literature, which has led to a tendency to increase demand for their solution. The scientific aspects of the research were formed on the basis of study, critical analysis, rethinking of theoretical and methodological, methodological and practical developments related to the activity of venture business and reflected in the works of scientists and practitioners such as G. Hamilton, D. Gladstone, O. Gothsman, M Justman, E. J. Dolan, P. Drucker, C. Cumbell, A. Marshall, M. Maul, J. C. Pearce, M. Porter, B. Santo, J. Singer, P. Sliufer, W. Stevens, S. Tanaka, B. Tvisse, I. Schumpeter, W. Engler, etc. Recognizing the importance of research in the area under consideration, we note that scientific works devoted to the complex and varied problems of theory, practice, evaluation and analysis of the efficiency of venture business activity, proposals and recommendations for its improvement obviously not enough.

Goals. To reveal the essence of venture business, to determine its place in the national innovation infrastructure of the country, to consider the current situation and the main obstacles for the establishment of venture capital business in Ukraine, as well as the main advantages gained by the participants of the economic process from the development of the mechanism of venture financing, to analyze the prospects for the development of venture business in terms of analyzing contemporary macroeconomic circumstances, outline the mechanism for supporting venture business in Ukraine.

**Research results.** Risk (venture) business is a peculiar form of small and medium innovation entrepreneurship. In the market economy, it is represented mainly by private investment companies, whose activities are supported by public funds. Retrieving funds from various financial institutions for the creation

of risky enterprises, venture business is engaged in approbation, updating and bringing to the industrial realization the "risk" innovations.

Venture business plays an important role in innovation, promoting, on the one hand, the implementation of the latest achievements of the STP, and, on the other hand, minimizing the financial risks of individual investors. A positive example of using this type of long-term investment is accumulated by the United States and European countries. Thus, over the past 30 years, hundreds of thousands of new jobs have been created in the United States through the efforts of venture capital and billions of dollars have been earned. In the venture business of Europe over the past decade, accumulated long-term capital worth of 102.8 billion euros. In the 20 countries of Western Europe there are now 500 venture funds. It is the venture business that allowed developed countries, including Ukraine, during the last quarter of the last century to qualitatively change the structure of productive forces and significantly affect industrial relations (Fig. 1).



Source: http://www.uaib.com.ua/analituaib/publ\_ici\_quart.html.

Fig. 1. Assets of recognized institutions of cooperative investment (ICI)

Among the objects of venture financing the leading is taken by high-tech companies, but the structure of investment is constantly changing. At present, the bulk of venture capital is directed to sectors such as software, biotechnologies, telecommunications, medical care, retail, computers and peripherals tools, Internet technologies, semi-finished products, energy, healthcare, financial services, electronics, business services (Fig. 2).

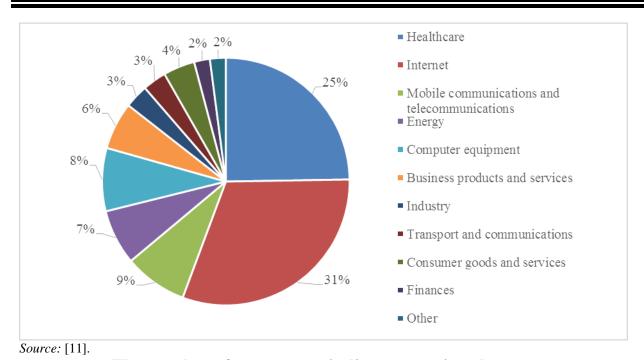


Fig. 2. The number of venture capitalist transactions by sectors

Venture companies are very flexible and efficient, their active activity ensures increased competitiveness of manufactured products, rapid and successful introduction of new technologies, re-equipment and reconstruction of production on a modern scientific and technical basis, and increase of employment of the population. Their significance lies in the fact that they:

- lead to the creation of new viable business units that affect the entire traditional structure of scientific research, and cause structural changes in the social production of countries;
  - increase employment of highly skilled specialists;
- encourage large corporations to improve the principles of governance and organizational structures;
- show that targeting long-term goals requires the creation of a special credit and financial system in the form of "risk" capital.

Venture business is represented by three types of companies:

- independent small venture companies specializing in research, development and production of new products;
  - venture firms that are affiliated with large firms;
- joint ventures that combine small science-intensive firms and large companies (within the framework of such an association, a small firm usually develops a new product, and a large company finances research, provides research equipment for it, provides sales channels, organizes a service and aftersales customer service).

For the creation of a venture company the following conditions are required: the idea of innovation (new production, technology, services); Public

demand for this innovative idea; An entrepreneur capable of realizing this idea by creating a new firm; "Risk" capital to finance this company.

The venture company undergoes several stages during its development (Fig. 3).

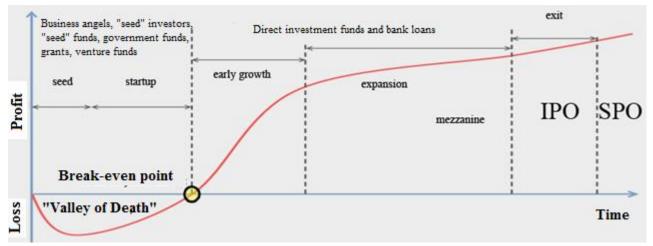


Fig. 3. Stages of innovation company development

- Fig. 3 shows the main stages of the creation and development of an innovative venture company:
- At the "seed" stage, a project or an innovative business idea is allocated, a company is created, a team is selected, a concept is being developed, R&D is carried out;
- At the stage of launch, prototypes are created and tested, production is being arranged, marketing activities are carried out, and market entry is prepared;
- At the early stage of growth, commercial realization is launched; here it is natural: the break-even point and the beginning of profit growth;
- At the stage of expansion, a steady market presence takes place, and significant financial investments are required for further development;
- In an exit or a steady stage of capital investment are beginning to bring high stable profits, the company holds a strong position on the market.

At the first stage, when selecting the best innovative idea, on the basis of which a "risky" high-tech project will be created, the company's management must take into account the following points:

Firstly, the objectives of this innovation project should not coincide with the traditional sphere of interests of the "parent" company, since the goal of the internal venture is to find new ideas, technologies, objects, inventions;

And secondly, when selecting ideas to be implemented within national ventures, experts should make sure that there is the necessary commercial potential for innovation.

The system of information support for the search process of venture capital projects and potential investors is a collection of elements and processes for selecting, storing and systematizing information about potential venture capital investors and projects, as well as informational and methodological organization of interaction between entrepreneurs and venture capital investors (Fig. 4).

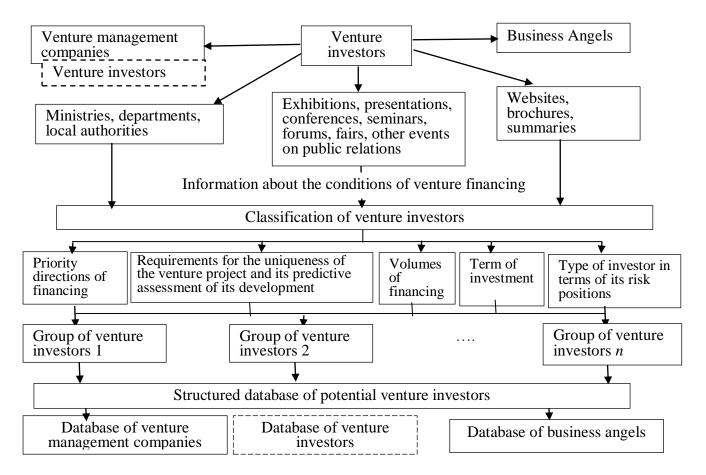


Fig. 4. Methodology for implementing the selection process for venture capital companies

The initial stage of the methodology is the analysis by the venture investor of the basic characteristics of the projects proposed for financing. These are: the focus of the venture project; The purpose of the venture project; Justification of the need to achieve the goal of the venture project; Term of venture project realization; The schedule for the implementation of the project; The main technical characteristics of the venture project; Justification of the budget of the venture project.

In the process of analyzing the main characteristics of a venture project, its financial elements are identified. They serve as the basis for drawing up the starting balance of the venture project. Thus, the result of the first stage for developing a methodology for assessing the effectiveness of a venture project is to compile the initial balance sheet of a venture project.

The second stage of the methodology for assessing the effectiveness of the venture project is the calculation of the economic efficiency of the venture project. This stage is reduced to the calculation of the following forecast indicators: annual revenue from the venture project in terms of periods; Annual total costs (cost price) in the context of periods. The calculation of these indicators should have an informative basis. The corresponding base will be formed by a venture investor by forecasting all possible indicators, the magnitude and dynamics of which will affect the amount of annual revenue and annual aggregate costs in terms of periods.

The third stage is the preparation of the forecasted profit-loss statement of the venture project. The calculated indicators determined by the venture investor in the second stage are the basis for drawing up such a report. The result of drawing up the profit and loss statement of the venture project is to determine the net cash flow from its realization. To visualize the information on the dynamics of the value of net profit, a graph of the dynamics of the profit / loss of the venture project is prepared.

At the fourth stage of the methodology for assessing the effectiveness of a venture project, an integral investment indicator is calculated. The basis for their calculation are the net cash flows (net profit) calculated for the third stage for the periods, terms of these periods and the size of the venture investments, the terms of their investment. This stage is reduced to a simple criterion evaluation of venture projects. Analysis of various sources [3–6] suggests the following group of integrated investment indicators (see Table 1).

In addition to calculating integral investment indicators of the venture project efficiency, it is necessary to draw up a payback schedule, based on the difference between the discounted amounts of incomes and expenses (investments) for the periods from the implementation of the venture project. The venture project is selected for investment, the integral indicators of which correspond to the optimal values and exceed the indicators of another (or group) venture project. Graphically, the proposed methodology for assessing the effectiveness of a venture project and choosing the most effective is shown in Fig. 5.

This methodology can be used both separately from the methodology for selecting companies that are recipients of venture investments, and jointly. The joint use of the two methods is recommended for particularly risky venture investors.

Table 1
Group of integrated investment indicators for calculating the effectiveness of a venture project

Indicators	Designation	Formula for calculation	Elements of the formula
Indicators based on discount estimates			
Net present value	NPV  angle 0	$\sum_{k=1}^{n} \frac{P_{k}}{(1+r)^{k}} - \sum_{k=1}^{m} \frac{IC_{k}}{(1+r)^{k}}$	$P_k$ – income (cash flow) in the $k$ -th
Index return on investment	PI\0	$\frac{\sum\limits_{k=I}^{n}\frac{P_{k}}{\left(l+r\right)^{k}}}{\sum\limits_{k=I}^{m}\frac{IC_{k}}{\left(l+r\right)^{k}}}$	period; $IC_k$ – investment in the $k$ - th period; $k$ - period of discounting; $r$ – discount rate; $n$ –
Internal rate of return	$IRR \rangle r$	$\sum_{k=1}^{m} \frac{IC_{k}}{(1 + IRR)^{k}} - \sum_{k=1}^{n} \frac{P_{k}}{(1 + IRR)^{k}} = 0$	number of periods of estimated cash flows; $m$ – number of
Discounted payback period	$DPP \rightarrow min$	$\sum_{k=1}^{n} \frac{P_k}{\left(I+r\right)^k} \ge IC$	investment periods.
The coefficient of investment efficiency, taking into account the time components of cash flows	$ARR_o  angle 0$	$\frac{PN_o}{1/2 \times \left(IC_o + RV\right)}$	$PN_o$ – average annual profit; $IC_o$ – discounted value of investments; $RV$ – residual or liquidation value of the project.
Indicators based on accounting estimates			
Payback period of investments	$PP \rightarrow min$	$\sum_{k=1}^{n} P_k \ge IC$	PN – average annual profit
Coefficient of investment efficiency	ARR	$\frac{PN}{1/2\times (IC+RV)}$	

Conclusions and suggestions. The study of advanced foreign experience of institutional provision of venture financing of innovative development of domestic industry allowed to offer possible directions for its development and improvement: attracting large foreign and domestic companies to the development of innovative technologies; Ensuring the close interaction of all the links of the innovation chain; The development of a system of expertise and services based on the use of the proposed methodology for assessing the effectiveness of a venture project and justifying the choice of the most effective.

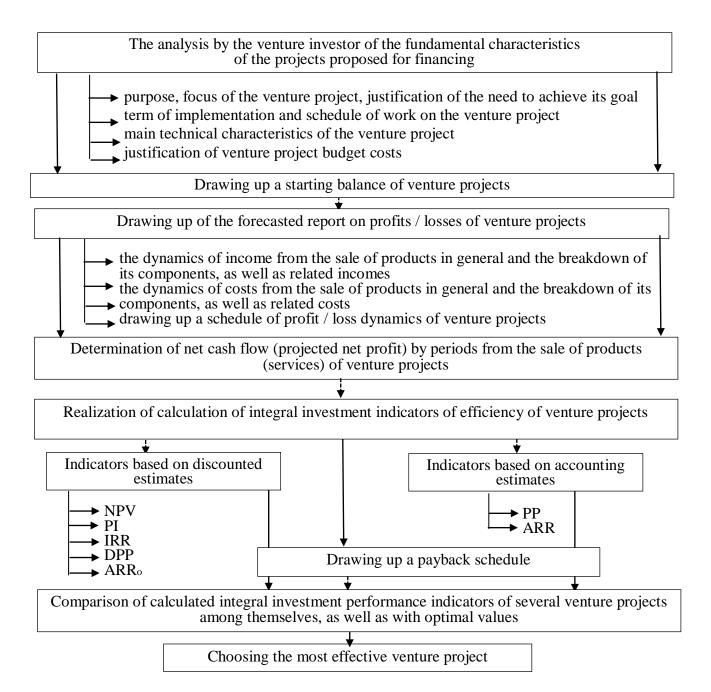


Fig. 5. Methodology for evaluating the effectiveness of a venture project and selecting the most effective

Government support for venture financing of innovation projects in Ukraine may include: legislative and regulatory regulation of scientific and technological, innovation and venture activities. Solving legal problems of intellectual property, benefits system and labor motivation.

Creation and support of economic conditions and incentives for the development of venture business on the system of state procurement, improvement of planning of scientific and technical development, effective financial and credit levers.

Organizational and managerial conditions of the venture industry in the management of state property. Conditions for attracting private venture capital into the development of innovative entrepreneurship. Formation and development of institutional and sectoral venture infrastructure on the basis of public-private partnership. The above measures should be carried out in accordance with the strategy of the state policy in the field of venture business, which should be part of a single concept of development of innovation and investment activity in Ukraine.

## References

## Література

- Pro instytuty spilnoho investuvannia: Zakon 1. Ukrainy [About the institutes of joint investment: Law тування: Закон України від 05.07. of Ukraine dated 05.07.2012 № 5080-VI] (as 2012 № 5080-VI (із змін.; редакція amended, dated 09.12.2015). zakon.rada.gov.ua. Retrieved from: http://zakon0.rada.gov.ua/laws/show/ 5080-17/print1466002638394908 [in Ukrainian].
- opyt 2. 2. Sabirov, M.R. (n.d.). Zarubezhnyi venchurnogo investirovaniia internatcionalizatciia [Foreign experience of venture ero investment and its internationalization]. www.tisbi.ru, from: http://www.tisbi.ru/assets/Site/ Science/Documents/422-Sabirov.pdf [in Russian].
- Shatyrko, D.V. (2014). Zarubizhnyi dosvid 3. rehuliuvannia venchurnoho investuvannia [Foreign досвід experience in regulation of venture investments]. Retrieved from: 2014\_4\_12.pdf [in Ukrainian].
- Poruchnyk, A.M., Antonyuk, L.L. (2000). 4. Venchurnyy kapital: zarubizhnyy dosvid ta problemy капітал: stanovlennya v Ukrayini: Monohrafiya [Venture проблеми становлення в Україні: Capital: Foreign Experience and Problems Formation in Ukraine: Monograph]. Kyiv: KNEU, Л.Л. Антонюк. – К.: КНЕУ, 2000. – 2000. 172 s. [in Ukrainian].
- (2006). 5. 5. Hledstoun, D., Hledstoun, L. Investirovanie venchurnogo kapitala: Podrobnoe венчурного posobie po investirovaniiu v chastnye kompanii dlia пособие polucheniia maksimalnoi pribyli [Venture capital частные компании для получения investment: A detailed guide to investing in private максимальной

- Про інститути спільного інвес-09.12.2015): від [Електронний Режим pecypc]. доступу: http://zakon0.rada.gov.ua/laws/show/50 80-17/print1466002638394908.
- Зарубежный Сабиров M.P. едо опыт венчурного инвестирования и интернационализация: [Электронный pecypc] M.P. Сабиров. Режим доступа: http://www.tisbi.ru/assets/Site/Science/ Documents/422-Sabirov.pdf.
- Шатирко Зарубіжний Д.В. регулювання венчурного capital інвестування: [Електронний ресурс] / www.ecfor Д. В. Шатирко. – Режим доступу: www.ecfor 2014 4 12.pdf.
  - Поручник A.M., Венчурний зарубіжний of Монографія А.М. Поручник, 172 c.
    - Глэдстоун Д. Инвестирование капитала: ПО инвестированию прибыли

- companies to maximize profits]. Moscow: Balans Д. Глэдстоун, Л. Глэдстоун. М.: Byznes Buks, S. 8 [in Russian].
- Kuzmin, O.Ye., Lytvyn, I.V. (2005). Sutnist ta 6. rozvytok venchurnoho pidpryiemnytstva [The essence виток венчурного підприємництва / and development of venture business]. Visnyk О.Є. Кузьмін, І.В. Литвин // Вісник Natsionalnoho universytetu "Lvivska politekhnika". – Національного університету "Львів-2005. – # 527: Menedzhment ta pidpryyemnytstvo v ська політехніка". – 2005. – № 527: Ukrayini: etapy stanovlennya ta rozvytku, S. 92–98 [in Ukrainian].
- 7. Vasylieva, T.A. (2008). Osnovni indykatory 7. The main індикатори rvnku innovatsiinoho investuvannia indicators of the market of innovative investment]. Ekonomika rozvytku. Kharkiv: KhNEU, S. 22–26 [in Економіка Ukrainian1.
- Krasovska, O., Hryha, V. (2007). Venchurnyi 8. 8. kapital: oshibki v traktovanii i sostoianii del v Ukraine капитал: ошибки в трактовании и [Venture capital: mistakes in the interpretation and state of affairs in Ukraine]. Ekonomist, # 9, S. 75–77 O. Красовська, B. Грига // Економіст. [in Russian].
- Pro venchurnu diialnist v innovatsiinii sferi: 9. 9. Proekt zakonu Ukrainy [On Venture Capital in the інноваційній сфері: Проект закону Innovation Sector: Draft Law of Ukraine]. gska2.rada.gov.ua. Retrieved http://gska2.rada.gov.ua/pls/zweb n/webproc34?id=& pf3511=30849&pf35401 =112286 (in Ukrainian).
- Vasylieva, T.A. (2008). Vzaiemodiia derzhavy i 10. Васильєва formuvanni natsionalnoi bankiv venchurnykh fondiv v Ukraini [Interaction of the state національної and banks in the formation of the national network of фондів в Україні / Т.А. Васильєва // venture funds in Ukraine]. Aktualni problemy Актуальні проблеми економіки ekonomiky – Actual Problems of Economics, 4(82), Actual Problems of Economics. – 2008. S. 204–212 [in Ukrainian].
- Seredovyshche isnuvannia venchurnoho kapitalu 11. [The environment of the existence of venture capital]. Ного капіталу: [Електронний ресурс]. www.altassets.net. Retrieved from: http://www. altassets.net/private-equity-knowledge-bank/countryfocus/article/nz3293.html [in Ukrainian].

- Баланс Бизнес Букс, 2006. C. 8.
- Кузьмін О.Є. Сутність та розproblemy Менеджмент та підприємництво в етапи становлення Україні: проблеми розвитку. – С. 92–98.
  - Васильєва T.A. Основні інноваційного ринку інвестування / Т.А. Васильєва // розвитку. Харків: ХНЕУ, 2008. – С. 22–26.
  - Венчурный Красовська O. состоянии В Украине дел - 2007. - № 9. - C. 75-77.
  - Про венчурну діяльність України: [Електронний ресурс]. – Реfrom: жим доступу: http://gska2.rada.gov.ua/ pls/zweb n/webproc34?id=&pf3511=3 0849&pf35401=112286.
  - T.A. Взаємодія merezhi держави i банків при формуванні мережі венчурних - № 4(82). - C. 204–212.
    - Середовище існування венчур-Режим доступу: http://www. altassets.net/private-equity-knowledgebank/country-focus/article/nz3293.html.