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VENTURE FINANCING OF SMALL INNOVATIVE ENTREPRENEURSHIP

Abstract. Small innovative enterprises (SIE) being a peculiar platform for commercialization of scientific developments and adoption of innovative activity results are the base for knowledge-based economy development. An important condition for SIE operation activation is venture financing mechanisms. This article describes the essence of venture financing, substantiates the reasonability of this instrument application for financing of innovative activity of small enterprises.

Keywords: venture financing, venture capital, investments, risk, small innovative enterprises.

Introduction.

Small innovative enterprises are traditionally main facilities for venture investments due to its peculiar activity. In contrast to large companies, at initial stage, small innovative enterprises do not possess financial resources to implement its innovative projects. Commercial loans are impeded by such factors as high risks and non-coverage of loans.

An attempt to solve these problems in foreign countries led to adoption of fundamentally new financing mechanism – venture. Venture capital is mainly used for financing of activity of fast growing companies having an important role in ensuring of industry competitiveness in whole. That is why the countries having the developed market of venture financing (USA, Japan, Germany, Great Britain, and Netherlands) are the largest exporters of high technology products.

There are many definitions for "venture capital". The National Venture Capital Association of the USA provides the following definition: "venture capital is financial capital provided by professionals to early-stage, rapidly growing companies with potential to become companies contributing significantly into economy" [1]. At the same time, the west-European theory does not consider venture capital as individual industry, but relates it to direct private capital and associates it with management buyout scheme or company buyout with borrowed assets [2]. If American venture investors aim to contribute funds into prospective breakthrough projects, their European colleagues finance the projects of more traditional branches. In the post-Soviet countries' practice all direct private investments were related to venture capital. However, with time the situation has changed, and contributions invested into companies at its early development stage only have been related to venture capital.

The literature review [3-8] showed that there is no united definition for venture capital yet. In general, venture financing can be characterized as a special form of capital investment into facilities of innovative activity with high risk level with an eye to swift high incomes. However, in fact, as noted by Semenov A.S. and Kashirin A.I. "... these are fundamentally new economic relations in which the crucial role belongs to investors participation in projects management and business doing experience transfer" [9].

Large amount of definitions for "venture capital" are deduced to its functional task – "raising" of innovative business at its early stage of growing by providing investments for a long period in return for a share in this business [10]. Yoda Ye.V. states that the following components are necessary for existing of venture capital as an economic category: risk environment; high revenue rate; venture investment process [11].

Thus, risk investments into prospective high-yield facilities are inherent to venture financing. It is

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necessary to note that the venture financing nature is dual: on the one hand, it is the risk of loss and opportunity of benefit, on another hand – intention not to lose, but increment the capital. Thus, venture financing is a mechanism of investment into innovative entrepreneurship distinct by high risk level and supposing extraction of high profit.

Venture capital companies are not the creditors only, but also owners as, typically, a part of funds is invested into the stock capital by purchasing of unlisted shares of high-risk companies at early stage of its growth with aim to receive a high level of investment income [7]. An investor provides the required means to a company by its investment into the authorized capital and (or) by allocating a tied loan. In return he receives the agreed share (not necessarily the controlling interest) in the authorized capital until he sells it and gets a due profit. For risk capital, in contrast to loan, company safeguards are not significant. It is more important to have an attractive and real business plan and management able to turn it into reality. Long-term investments are not only in the form of money, but in rendering of concrete aid to small and medium companies favoring its transformation into large companies.

The experience of foreign countries shows that an establishing enterprise will be successful only if the prospects for its market value growth are substantiated definitely at the start stage. Market value grows on the background of cost increase of intangible assets (intellectual property). The main goal of venture capitalists will be reached at transiting to industrial development of innovative products. At this stage, a venture capitalist exits from an enterprise, its capital is replaced with investment, and after that an investment cycle starts supposing application of the created innovative product [12]. Thus, a venture capitalist is presented in a company until the innovative cycle finishes. However, there is a nuance: at the beginning of process an innovative project is not an individual venture structure, and attraction of venture capital becomes impossible. Financing is provided either at the expense of developers, or informal venture investors.

Figure 1 shows the investments risk level alteration and opportunity of high income depending on an enterprise development stage.

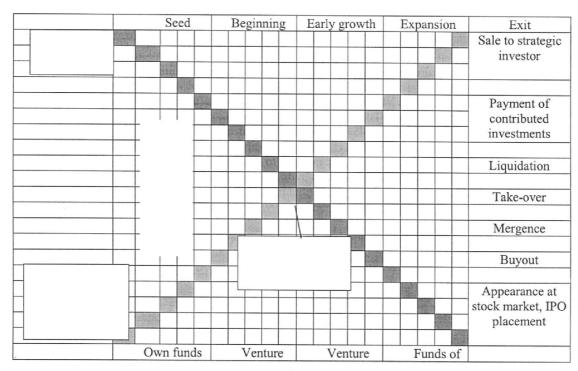


Figure 1 – The level of risk and investment profitability depending on stages of enterprise growth Note – compiled by authors

A company exit from venture structure is the stage of company growth when the shares are sold to a strategic investor or initial public offering (IPO) in the stock market.

At the beginning of the innovative cycle the risk of investments is extremely high, and the level of possible high income is very small. However, as shown in Figure 1, its levels will be equal at the end of

initial stage and at the beginning of early growth stage this moments can be conditionally named as breakeven point. "Valley of death" mentioned in the beginning of this paper finishes at this break-even point, as enterprises that reach this point are considered as successful.

Venture capitalists are very serious about the projects selection process, and, as rule, it consists of two stages:

- 1. Initial stage. Venture investor reviews a resume of investment proposal; usually its volume is from five to seven pages. At this stage the projects are screened;
- 2. Detailed analysis thorough comprehensive analysis of a business plan, usually its volume is to be about 30 pages. At this stage a Project is either approved or declined. Thus, accurate business plan is very important for investor attraction.

As for financing sources, at the seed stage of an enterprise growth these are informal venture investments, own funds and angel investors funds. Very often financing is continued until an enterprise is established. An example is financing of works on creating of a prototype of innovative product and its patent protection, analysis of sales market or rendering of services, legislative provision of profitable franchising contracts and sale and purchase agreements, as well as on drawing of entrepreneurship activity plan, selection of managers and company establishing until the moment when it is possible to pass to the initial stage of growth.

Illustrative is the example of Google Inc. Company: two students from Stanford University have developed an idea and main algorithms of Google search service. Long time none of venture investors believed in their Project. In 1998 without any documents and company foundation they received funding in the amount of 100 thousand dollars from angel investor Bechtolsheim A. [13]. Next month they registered the Company and opened bank account, purchased necessary equipment, improved operation principles of the search service and attracted 25 million dollars from two venture funds. The pay-back period was 2 years. In 2001 they received their first revenue – 7 million US dollars, in 2005 it was 6 billion US dollars, in 2013 – 15.7 billion dollars [14]. This example is one of the successful investments in the history of venture funding development.

At the initial stage of an enterprise growth the products are planned, management staff is selected, the results of marketing research are received. Risk in this case is high, and investments hardly will be repaid in the nearest 5-10 years at least. Here, the main investors are venture funds.

Funding of the early stage is aimed at rendering of assistance to small enterprises possessing large potential growth. As rule, some of them are able to attract means of direct investment funds and commercial banks. Those that are not able to finance the growth by loan due to inability to guarantee its repay are funded by venture capitalists. Considering high degree of investment results predictability, the risk of investments in this case is a little lower than for investments at initial stage of growth, however it is still significant. Most often the companies that exist less than three years with no revenue are financed this way.

Funding of the later stage stipulates allocation of means for enterprises with existing industry, possessing large potential for expansion, for instance, due to start-up of a new production line or creation of distributive network at new territories. Such investments are much less risky than for previous cases, and payback period is much shorter (about 2-5 years). Here, bank loans and direct investments can be attracted. It is a rare case when venture capital is applied as an alternative to classic crediting. In this case funding of a definite operation is implemented as one-time act. Very often at the stage of expansion the enterprises issue securities.

At the height of activity the enterprise exits from venture structure by selling to a strategic investor, IPO placement. The enterprise establishers can also pay the invested funds to venture investors upon agreement of the sides. Here, it is worth to note that imperfection of venture financing in Kazakhstan is due to lack of definite organizational and legislative mechanisms of companies exit from venture structures.

The convincing world experience shows that venture investments are mainly directed on funding of SIE as namely this kind of enterprises show high income rate at very high risk. Rogova Ye.M. and Fiyaksel E.A. have analyzed the distribution of venture means among large and small enterprises of Europe that showed that about 70% of venture financed facilities have 20 – 90 employees, 20% - 100 to 199 employees, other 10% of venture means were concentrated in middle-sized and large enterprises [15]. What is the reason of these preferences? Possibly, this is stipulated by that peculiar activity of SIE that is

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shown in income generation from investments by exit from financed companies. This procedure is realized by selling of venture investor shares a) at the stock market if a company came into the stock market via IPO; b) to another investor; c) to a large company for take-over; d) to management of a financing company. In the first case, large companies only have prospects to enter the market, but those do not need direct financing as other financing sources are available for them. Thus, venture investors prefer to invest funds into small innovative business that can rise due to high demand for innovative products.

However, there are some limitations for venture financing of SIE, namely:

- 1. Venture financing is featured by high risk level due to lack of any guarantees of startup company successful growth. According to some estimation, only 300 of 3 thousand prospect entrepreneurship ideas reach the investors, and only one of them is commercially successful [16, P.74]. And the most successful makes the investors up to 2000% of a profit. In the USA, in 2006, the average profitability of venture investments was 20.8% per annum, while the profitability of direct investments for the same period was 11.4% per annum. In EU the profitability of venture funds ranges from 13% to 25% [17]. In neighboring Russia, venture funds are not engaged in projects which profitability is less than 30% [12]. The requirement for high profitability is the main criterion in the process of projects selection.
- 2. Due to high profitability requirements, the SIE, at the initial stage of growth, experience investment limitations from venture capitalist. As far as it transits to another stage of growth, venture investments volumes can change proportionally. This tendency is typical for venture funds of developing markets.
 - 3. Venture investors, usually, are not interested in projects having small volumes of investments.
- 4. Unwillingness of SIE founders to engage venture investors in company affairs due to fear to lose its idea, business. Venture capitalists readily participate in a company management, act as a guarantor in solving of complicated tasks, and render other organizational and counseling assistance. This is stipulated by its interest in successful implementation of project ideas and making of large profit. However, this fact deters many entrepreneurs and they reject venture financing.

The largest venture markets are the USA and Europe that have 88% of the total volume of venture capital and 87% of total amount of bargains (according to preliminary data for 2013) [18]. Prospective are also markets of Israel, India and China. Other regions (Middle East, except Israel, South America, Africa and other) are considered as relatively unattractive for venture capital. The dynamics of venture investments distribution among the regions is shown in Figure 2.

Thus, venture industry grows in the developed and rapidly developing countries. It is known that venture capital was a locomotive for Silicon Valley companies' growth. As of January 1, 2013 total volume of venture investments in the Silicon Valley from 2000 was 62.2 billion dollars [18]. Over the past few decades venture financing favored the creation of hundreds of thousands work positions, development of computer industry and biotechnologies, and growth of such giants as Google, Facebook, Intel, Skype. European countries, China, Israel and other countries followed the example. In 1990's, the volume of long-term venture financing accounted for 100 billion euro. West Europe only possesses about five hundred venture investment funds.

In the world, venture capital is concentrated in four main activity fields: information technologies, health care services, consumer sector, financial and business services.

Starting from 2000, the information technologies field is a leading sphere for venture investments in all existing venture markets except India where it takes second rank. It should be noted that the largest relative weight of venture transactions belongs to software solutions. Currently, this field is developed actively in the markets of China and Russia [19]. At the present time, Kazakhstan shows the tendency for increase of start-up amount in the field of information technologies. By the estimations of American experts those will be able to ensure profitability in the amount of 30% in the nearest time. At the same time, in the USA this indicator is 20% in average [20]. Despite insufficient development the information technologies market in Kazakhstan is quite prospective as demand for IT-projects exceeds supply significantly. In addition, Kazakhstan market is less particular as compared to the developed markets.

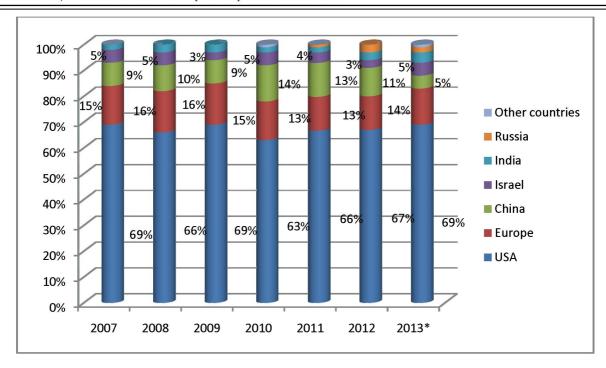


Figure 2 – Distribution of investment volume among the largest venture capital markets in 2007-2013*.

Note – Compiled by authors basing on [18].

*preliminary data

Another significant issue is low exit cost from the venture structure. Thus, venture investors of Kazakhstan should use the Eurasian Economic Union zone, in particular, Russia and Belorussia as prospective sale markets. By different forecasts, in Russia, the exit cost from the venture structure in this field will reach 30-50 million dollars in the nearest two years [20]. Despite toughening competitive struggle between venture funds in the field of information technologies in Russia, the national venture businessmen have strong opportunities to sell their companies namely in Russia.

Summarizing all mentioned above, it can be stated that venture capital is the most important instrument for financing of SIE activity as those are not able to get bank loans and other direct investments due to high risks and non-coverage of loans. Dual nature of venture capital functioning is featured by high risk level and supposes getting of high profits on the one hand, and by peculiar mechanism of financing on another hand. The mechanism of SIE venture financing itself supposes availability of venture capital during the period of innovative activity, and when it expires a venture capitalist exits from the structure by selling of the whole company or its share to a strategic investor, or by merging and takeover, or buys out himself, or places the shares in the stock market. Independently of the selected way of exit from the venture structure, the innovative cycle at the enterprise is finished and investment cycle is started.

There is also another feature of venture financing. As rule, at the beginning of the innovative activity, an innovative business-idea or project is formed along with a key management team. And to move forward from the starting point some funds are necessary. At this pre-starting stage receive of financial means from venture funds is impossible as the enterprise is not registered and its profitability is unclear for formal venture capitalists. In such cases the founders of future enterprise can invest their own funds, or attract informal venture capitalists – business angels as investors. Usually, financial means allocated by angel investors are not large, but enough to move to the next level of growth – starting stage when it becomes possible to attract financial means of venture funds. Also, depending on the development stage of SIE, the volumes of venture financing can increase proportionally. This tendency is peculiar especially for venture funds of developing markets. For developing countries, including Kazakhstan, there are also two main problems interfering venture business development, these are imperfection of innovative infrastructure and mentality features. The latter problem shows that national entrepreneurs do not want venture investor representatives to enter the company so that investors are not engaged in operational

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affairs of the company. Venture capitalists in their turn are interested in business profitability and considering high risks they always want to favor the company growth and ready to render organizational assistance regarding company management.

The largest venture markets are the USA and Europe. The markets of China, Israel and India are considered as prospective. Recently, venture industry has been developing actively in Russia, especially in the field of information technologies. Despite abundance of venture funds in Russia, its projects profitability demands are overstated – not less than 30%. In Kazakhstan, there are no definite demands; however, these indicators are quite reachable in the nearest future.

The main current problem of venture business is the issue of company exit from venture structures. We propose the national venture business to look for "exit" opportunities in EAEU zone. This will allow venture investors to sell their companies at a higher price and accelerate the venture investment process that will result in financing of other innovative projects in Kazakhstan.

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ШАҒЫН ИННОВАЦИЯЛЫК КӘСІПКЕРЛІКТІ ВЕНЧУРЛЫК КАРЖЫЛАНЛЫРУ

Аннотация. Шағын инновациялық кәсіпорындар ғылыми әзірлемелерді коммерциаландыру және инновациялық қызмет нәтижелерін ендірудің ерекше сатысы бола отырып, ғылыми сыйымды экономиканы дамытудың негізі болып табылады. Шағын инновациялық кәсіпорындардың қызметін белсендірудің маңызды шарты қаржыландырудың венчурлық тетіктерінің болуы саналады. Берілген жұмыста венчурлық қаржыландырудың мәні ашылып, бұл құралды шағын кәсіпорындардың қызметін белсендендіруде қолданудың мақсаттылығы негізделеді.

Тірек сөздер: венчурлық қаржыландыру, венчурлық капитал, инвестициялар, тәуекел, шағын инновациялық кәсіпорындар.

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ВЕНЧУРНОЕ ФИНАНСИРОВАНИЕ МАЛОГО ИННОВАЦИОННОГО ПРЕДПРИНИМАТЕЛЬСТВА

Аннотация: Малые инновационные предприятия (МИП), являясь своебразной платформой для коммерциализации научных разработок и внедрения результатов инновационной деятельности, представ-ляют собой основу для развития наукоемкой экономики. Важным условием активизации деятельности МИП является существование венчурных механизмов финансирования. В данной работе раскрывается сущность венчурного финансирования, обосновывается целесообразность применения этого инструмента для финан-сирования инновационной деятельности малых предприятий.

Ключевые слова: венчурное финансирование, венчурный капитал, инвестиции, риск, малые инновационные предприятия.