

The Parity of Crowdfunding and Venture Transactions Market of Selected Countries

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Abstract. *Subject.* This article is devoted to the relationship between the new tool for promoting innovation-oriented projects — crowdfunding, which is a promising direction for financing high-risk innovative projects, and the venture capital market in individual countries of the world, which is caused by the relevance and controversy of scientific views in solving emerging problems in the development prospects. this phenomenon in the modern economy. Crowdfunding as a way of attracting capital-generating investments is a new phenomenon, which is practically unexplored in Russian science, which makes the topic of research particularly relevant. *Intention.* Analysis of the categorical approach of crowdfunding, identifying its strengths and weaknesses, determining the prospects for the development of the domestic crowdfunding market, taking into account foreign experience. *Methodology.* Used comparative analysis, scientific knowledge and methods based on logical reasoning. *Results.* A study of the types and forms of crowdfunding and the foreign legal aspects of its regulation highlighted the advantages weaknesses and the role of crowdfunding as a source of alternative financing for innovation. Analysis of European statistics allowed make a conclusion about the increased importance of alternative financial sources and, in particular, equity investments. In Russia, equity investing for now has not found wide application. Further development of equity investments is related to the organization secure payment systems, providing a regulatory framework and information support for alternative sources of funding. *Findings.* The study may be helpful in terms of how expanding the possibilities of financing innovation, and consider equity investments as a factor in macroeconomic growth.

1. Introduction

The relevance of the study of the use of crowdfunding, which is an alternative mechanism for financing innovative projects in crisis conditions, is possible by isolating the main macroeconomic characteristics of its deployment, the risks of implementation by developing the economy, and stimulating the economy as a guideline of the country of application.

The relative immaturity of the phenomenon of crowdfunding as a phenomenon with the direct dependence of its further development on regulatory and public policy, as well as acting as a separate and independent instrument, having a number of similar features with more conventional sources of funding and all prospects for becoming an international phenomenon, predetermines the work on the establishment of regulatory standards of national legislations, which should be carried out harmoniously, with the participation of the large number of countries and individual regions. The most inter-

ested may be countries experiencing a shortage of sowing and venture capital investments, which include Russia.

Moreover, since most of the funds raised through crowdfinancing are directed to the development of innovative and venture projects (besides crowdfinancing in real estate and rare cases of investing in more traditional business areas), crowdfinancing can and should be considered as a source of venture financing. The rapid dynamics of its development removes the questions that existed for several years ago about the temporality of this phenomenon, but its volumes are still relatively small.

The object of this research is the tools of state measures aimed at stimulating the economy in the field of financial technologies of the crowdinvestment system. The subject of the study is manifested in the compilation of various risks of introducing crowd-investing systems for financing projects. Thus, the question arises about the relationship between crowdfinancing and venture capital deals: what is the dynamics of both markets, is there a correlation, what percentage is crowdfinancing from all venture capital deals at different stages of its development? Answers to these questions will suggest which scenario will further develop crowdfinancing.

The purpose of this study is to justify the use of crowdfinancing as an alternative funding mechanism for the venture capital market in the world and individual countries.

2. Methods and materials of research

As part of the study, we reviewed the period of the most active development of crowdfinancing from 2015 to 2017. This study involves materials and research publications of foreign and domestic authors who have shown a high degree of interest in crowdfinancing. The theoretical and methodological basis of the work presented here were the works of domestic and foreign scientists, who noted a number of common features of syndicating business investment investments of a crowdfinancing, the publication of periodicals, the output of scientific and practical conferences. Over the past few years, crowdfinancing has been under the scrutiny of researchers looking at this very original phenomenon from different angles. This originality, which often causes misunderstanding on the part of representatives of traditional business areas, is consistent, however, with the increasingly developing network structure of the world economy. As initial data, data from volumes of venture transactions were used (in some cases, data on angel and seed investments were separately cited), and data on the volume of crowdfinancing in the world, the USA, England, Germany, Italy and Russia.

3. Discussion and results

Before turning to the analysis of global tendencies, we will look at some of the distinctive features of crowdfinancing and the market for venture transactions (see **Ошибка! Источник ссылки не найден.**Fig. 1), which are manifested in the presence of specialized portals caused by associations of business angel portals with similar functionality but differing in lower standardization and automation due to the specificity of smart money along with smaller the volume of investments, the mass of investors, the lack of direct influence on the activities of the invested company, the optional nature of geographical proximity, and the fact that the average equity investor is less financially secure than the average business angel [9]

The difference is also manifested in investor behavior, and the advantages are directly out of the disadvantages: crowdfinancers are a “crowd phenomenon”, which, on the one hand, can lead to errors associated with “herd behavior” and “group thinking” known in sociology, and on the other hand, the mass character of investors contributes to the balancing of individual and subjective preferences characteristic of business angels, which compensate for these preferences with a high level of professional expertise. Also interesting is the following fact: business angels bear the risk of reputational damage, which cannot be said of crowdfinancers, which adversely shifts the selection of projects towards only those that can reveal information about their activities to an unlimited range of potential crowdfinancers [17]. Creating crowdfinancing sites and placing Russian innovation projects on them can not only help mobilize domestic resources of previously inactive Russian investors, but also attract foreign funding from foreign investors.

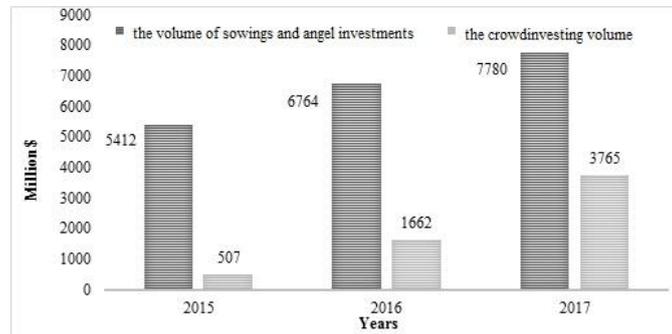


Figure 1. World dynamics of crowdfunding and venture investments.

Figure 1 shows the global dynamics of crowdfunding in comparison with the dynamics of sowing and angel investments. If the growth of the latter is relatively stable (25 and 15% growth in 2016 and 2017, respectively), then crowdfunding shows a threefold and twofold increase in volumes (exact, extended data are presented in Table 1) [12].

Table 1. Value of the venture capital market and crowdfunding in the world.

Indicators	2015	2016	2017
Volume of all venture capital investments, \$ million [14]	74750	124200	162150
Sowing and angel investments, \$ million [7]	5411,9	6764,3	7779,8
The amount of equity investing, \$ million [1]	507	1662	3765
Growth rate of all venture capital investments	113%	169%	128%
The growth rate of sowing and angel investments	112%	144%	132%
Crowdfunding growth rate	299%	344%	238%
The ratio of crowdfunding and all venture capital investments	0,057	0,113	0,183
Ratio of crowdfunding and seed and angel investments	0,754	0,1978	0,3896

In modern conditions, crowdfunding is not yet taken into account when calculating the volume of venture capital investments, therefore the value is the ratio, not the share of crowdfunding. Despite the 2016 Forbes statement [3] that the crowdfunding market is close to surpassing the venture capital market in terms of volumes, crowdfunding is still lagging behind and less than two percent of the latter. At the same time, he rapidly agrees on the volume of seed and angel investments, the growth rate of which is lower than the market. The question arises, does the process of replacing angelic and field investments with crowdfunding take place? This hypothesis is favored by the earlier conclusion on the feasibility of the synthesis of crowdfunding and the syndicate of business angels [8]. Some business angels in Europe and the USA are already using an approach in which part of a startup's stock is bought directly, and a part using crowd-investing platforms. However, it was emphasized above that crowdfunding in its current form cannot fully replace angelic and seed investments.

Despite the fact that the considered time period is relatively small, the unidirectional growth rates of crowdfunding, angel and seed investments and all venture capital investments are obvious, which in turn confirms the involvement of crowdfunding in the venture capital industry. It is curious how this trend will change in 2019, which, on the one hand, is marked by a sharp drop in the number of transactions during the sowing round [20], on the other hand, by a growing interest in crowdfunding, which should lead to an increase in its volumes. It is possible that accurate data on the volume of

crowdfunding will be able to confirm or refute (prove irrelevance) the above-described substitution effect.

Let us turn to the US venture capital market and see if there are significant differences in trends (see Tab.2, Fig.2) [2].

Table 2. Venture market and crowdfunding in the USA.

Indicators	2015	2016	2017
Volume of all venture capital investments, \$ million [14]	51750	79350	90850
Sowing and angel investments, \$ million [7]	3450	4271	4436
The amount of equity investing, \$ million [1]	91	285	620
Growth rate of all venture capital investments	131%	161%	122%
The growth rate of sowing and angel investments	108%	132%	101%
Crowdfunding growth rate	299%	323%	224%
The ratio of crowdfunding and all venture capital investments	0,027	0,048	0,085
Ratio of crowdfunding and seed and angel investments	0,312	0,857	0,1629

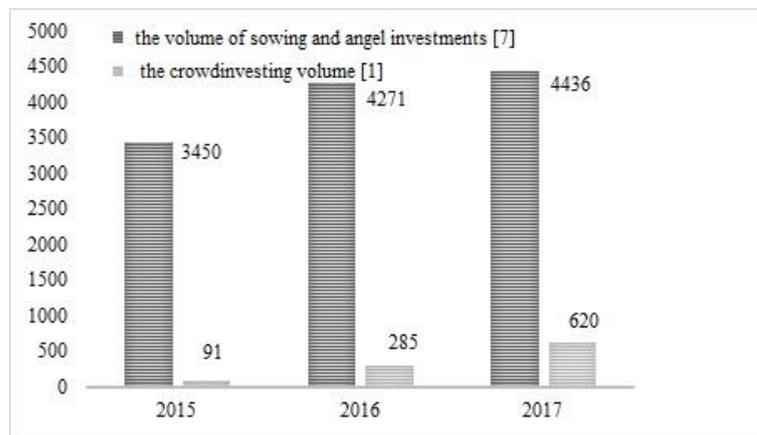


Figure 2. Dynamics of crowdfunding and venture investments in the USA.

The United States has been and remains a place of concentration of venture capital: more than half of the world's venture capital is located here [18]. It is logical that this country is also a leader in crowdfunding in absolute terms. However, in relative terms, the United States is significantly inferior to the world trend: the volume of crowdfunding did not even reach the percentage of all venture capital investments and barely surpassed 15% of seed investments. At the same time, the growth rates of the industry practically do not differ from the world ones.

How can this gap be explained in relative terms? First, it can be assumed that high competition has played its part. The first crowdfunding platforms began to appear from 2014, however, they have been actively talking about this phenomenon only in recent years. So why should an investor at the dawn of crowdfunding resort to a little-known, risky instrument, when there are enough other, more familiar financial instruments around with varying degrees of riskiness? Similarly, startups are not willing to spend resources on a crowdfunding campaign, at a time when you can attract the attention of funds, business angels or use other types of crowdfunding [17].

The second possible reason lies in the legislative regulation. The so-called JOBS-act, which essentially legalized crowdfunding, entered into force only in 2014. But up to the latest edition, published

in 2017 [21], only certified investors could invest with this tool, confirming your level of income. Thus, crowdfunding in the United States became truly massive, as it should be, only in 2017.

Mitigation of the legislation and the wide publicity that crowdfunding received undoubtedly became the drivers for the development of crowdfunding in 2016-2017, but at the moment it is difficult to say whether a sharp surge in activity will occur or the growth rate will remain [15].

Now move from the New World again in the Old.

The three leading countries in terms of both venture capital investments and crowdfunding are the United Kingdom, Germany and Italy (see tab. 3, figure 5, figure 6) [4].

Table 3. Venture market and crowdfunding in the Europe in 2017.

Indicators	United Kingdom	Germany	Italy
Volume of venture capital investments, \$ million [14]	6900	4140	1840
The volume of equity investing, \$ million. [10, 13]	414,92	29,60	93,67
Growth rate of venture capital investments	138%	130%	153%
Crowdfunding growth rate	317%	82%	407%
The ratio of crowdfunding and all venture capital investments	0,691	0,083	0,586

The United Kingdom of Great Britain and Northern Ireland shows the greatest interest in alternative sources of financing business [10]. First of all, this concerns P2P lending, however, crowdfunding is also developing very actively. Thus, the volume of crowdfunding in the United Kingdom is only 2 times lower than that of the USA, while the volume of all venture capital investments is less than 10 times less. According to some data about sowing investments in Foggy Albion [11], crowdfunding even surpasses them. Thus, crowdfunding is fairly closely studied in the British venture capital ecosystem.

It is important to note that after Brexit` many English venture capitalists, including crowdfunding platforms, decided to open branches or move to continental Europe, first of all to the Netherlands to minimize risks (fourth place in terms of crowdfunding in Europe). It is obvious that a withdrawal from the European Union will entail a number of difficultly forecasted economic consequences. But on the state of crowdfunding, and indeed the entire venture capital environment, this decision is likely to continue its negative impact.

It is extremely strange to see such low rates of crowdfunding, moreover, negative dynamics in Germany [16]. While Berlin is rapidly crowding London as the venture capital of Europe, and the German scientific community is replete with publications on crowdfunding, it is logical to assume that this phenomenon should evolve at a pace close to the world.

Nevertheless, the low indicators of the industry can still be explained by a number of factors, such as: the peculiarities of the German mentality; distrust of the new financial instrument; centralization of venture capital and venture capital activity in the capital; low entrepreneurial activity throughout Germany [16]. However, the prerequisites for the negative dynamics in 2017 could not be found. It should be noted that analysts have proposed alternative data. Thus, according to reports from the Fur Grunder [5] and crowdfunding.de [6] portals, crowdfunding in Germany amounts to 37.3 million and 48.9 million euros, respectively, and according to forecasts of the latter, in 2017 it will reach 64.4 million euros. These numbers seem more logical, however, the growth rate of crowdfunding in Germany is still inferior to world values.

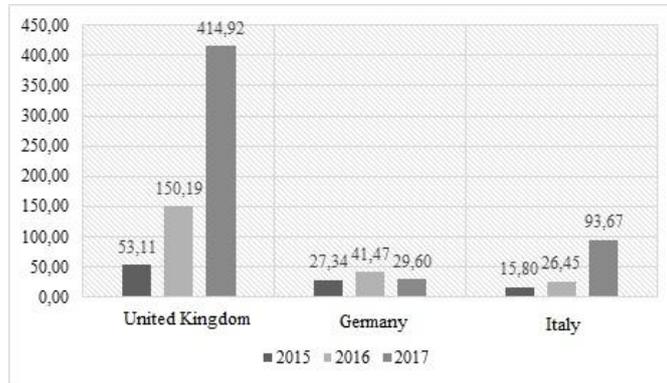


Figure 3. Dynamics of crowdfunding in selected European countries.

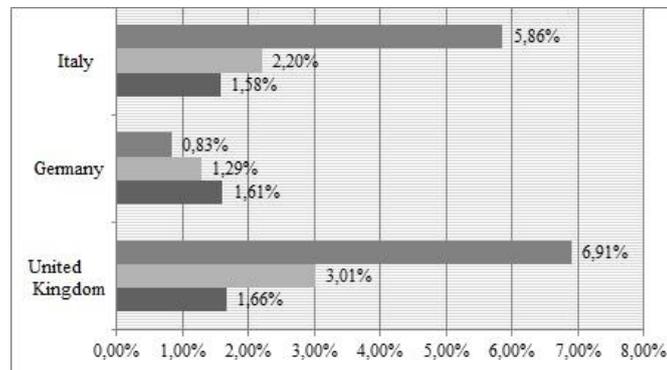


Figure 4. The ratio of crowdfunding and venture investments in Europe.

The Italian venture capital market is much smaller than the British and even German. Nevertheless, the volume of crowdfunding in Italy in 2015 exceeded the similar indicator in Germany for all available data. The ratio of crowdfunding and venture capital is close to the values of Britain. One of the reasons for success, in particular the rapid growth in 2017, may be the proximity of the British neighbors and the adaptation of their successful practices [19]. The results achieved also suggest that crowdfunding will be strengthened in the Italian venture capital ecosystem.

4. Findings

Crowdfunding continues to be a promising and yet insufficiently explored instrument for financing innovative projects that attract the attention of research teams from different countries and view the phenomenon from different angles. Among the most popular and relevant areas of research it is possible to distinguish the following:

1. Finding opportunities and prospects for embedding crowdfunding in the existing financial and innovation system, including through synthesis with cooperative, banking, business angel structures and venture funds;
2. The ratio of crowdfunding and syndication of angel business capital. Search for "points of development" and synergies of these institutions of financing, finding contradictions and mutual barriers;
3. Study of the behavior of crowdfunders (including factors of investment decision making, altruistic and egoistic motivation), its relationship to the behavior of classical investors working in the stock market, as well as the behavior of business angels;
4. Determining the presence or absence of the replacement effect of angelic and seed investment with crowdfunding, as well as the extent and influence of this phenomenon
5. Continued observation of the dynamics of crowdfunding and its relationship with the venture capital market;
6. Study of the effectiveness and success factors of crowdfunding campaigns;

7. Search for relevant organizational forms for crowdfunding platforms;
8. Finding the optimal regulatory framework for crowdfunding;
9. Study of the role of crowdfunding in building the network way of the modern economy;
10. Comparative studies of crowdfunding and other varieties of crowdfunding, crowdfunding platforms of various forms of organization of activities and platforms from different countries.

5. Conclusion

Comparative analysis of crowdfunding and the venture capital market, along with savings and loan cooperatives, shows how there are a number of differences (crowdfunding is characterized by mass investors, microinvestments, standard contracts, availability of automated platforms, and the fact that investors are not obligatory: investors are professional, they are close to invested projects, as well as participation in management), and about the great prospects for the synthesis of these institutions, which can facilitate the mutual leveling of existing shortcomings. At the same time, at this stage, crowdfunding is not so much an alternative to the usual venture institute, as an addition to them, creating synergy by simplifying the procedure for investing and raising funds at an early stage of business development.

At the same time, the volume of crowd-investment is growing rapidly even in markets with weak or negative dynamics of the venture capital market. Thus, we expect further development of crowdfunding while maintaining growth rates; however, the absence of similar legal rules governing this phenomenon and different approaches of platforms to interacting with other market participants, suggest that crowdfunding will undergo a number of changes.

6. Acknowledgment

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