Financial Technologies in Project Financing of Housing Construction

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Abstract. The share participation of citizens’ financial funds in the construction of apartment buildings substantially ceases. In conditions of a gradual transition to project financing of housing construction, developers and banks face with the problem of the deficit of resources to finance all new buildings and the completion of projects. The project financing mechanism remains incompletely developed; only the basic principles of the project financing mechanism work are indicated. There is no regulatory legal framework, so it is difficult to evaluate these initiatives. The Russian banking system is not ready to fully provide loans at the request of housing developers, because it does not have sufficient financial resources. Banking products using escrow accounts are in the formation stage, which is of interest in considering other forms of financing of construction objects, in particular, using the crowdfunding technology, the possibilities and advantages of which are discussed in a scientific article. The technology of crowdfunding can be used by commercial banks by creating an Internet site for attracting public funds to implement a targeted project online. Previously, the bank’s task is to assess the reality, effectiveness and timing of the project in order to reduce risks. In the future, the bank collects online funds and their investment in the project.

1. Introduction
In Russia, the transition to project financing of housing construction carries out in stages, which will carry out by banks, which provides for the termination of the mechanism of equity participation of citizens in the construction of apartment buildings. This means that in the future developers will not be able to attract public funds to financing the construction of housing. The similar practice operates in many foreign countries and suggests the financing of new buildings due to the bank lending. In the model of project financing, the role of banks increases, which take on part of the risks associated with the implementation of development projects, and it is supposed to use an escrow account for funding a credit line.

An escrow accounts will open by authorized commercial banks in the name of an individual home buyer in order to deposit his funds for the period until the residential property is put into operation. The developer gets the opportunity to use the funds of buyers from the escrow account only after the completion of the project. In the process of building multistory residential buildings, the developer is financed by a bank loan or its own funds. The share of own funds of developers in the structure of sources of financing construction is small and amounts to about 10%. The main share of financing, namely 90% of the estimated project cost, will be accounted for by a bank loan.

A serious problem for investor banks is the search for credit resources sufficient to finance construction projects over a long period. The Russian banking system does not have sufficient resources
to full measure to lend to housing developers, which evidences the urgency of the problem. The volume of credit financing of banks in this case will increase significantly, which will require banks to ramp up their resource base. Today, banks are limited by sources of financing, therefore, they can’t provide request property developers in full for targeted housing financing credit resources.

The solution to this problem is to attract money market resources for subsequent lending to construction projects using crowdfunding technology.

2. Theory
The global practice of financing projects relies on the idea of consolidating capital and attracting additional funds from other private investors, business angels or funds, which allows you to quickly accumulate resources.

Crowdfunding – the collective project financing mechanism. In contrast to traditional market mechanisms, public funding allows you to create a payback project without spending additional funds on advertising, marketing research, market analysis [1].

Crowdfunding allows you to organize a fundraising for the implementation of the target project by attracting public funds online on a specially created Internet site.

In 2017, the Crowd instruments worth 11.2 billion rubles passed through the Russian Federation, which is almost two times more than in 2016 (6.2 billion rubles) and 7.5 times more than in 2015 year (1.5 billion rubles). According to the Bank of Russia, the volume of transactions in the crowdfunding market in five years will increase to 1 trillion rubles per year [5].

There are four basic types of crowdfunding:
- donation: the sponsor finances the funds without intending to receive the award;
- search by request: the sponsor invests funds, enters into a contract, guarantees advantages in availability after the sale of a product or service;
- debt financing: issuance of funds at a certain percentage;
- shares: the sponsor becomes the owner of the funds of the company, receiving a share of the profits of the business [2].

In the model of project financing of housing construction with the use of crowdfunding technology, crowdlending is the most preferable as one of its forms, which involves the organization of the crowdlending Internet platform by a commercial bank.

Crowdlending or debt financing is a service of mutual lending of three types: P2P (peer-to-peer) - equal to equal, i.e. lending by one individual to another person; P2B (peer-to-business) - lending to a legal entity by an individual; B2B (business-to-business) - the issuance of loans to a legal entity or an individual entrepreneur by a legal entity or an individual entrepreneur [3].

Consequently, crowdlending is the lending by individuals or legal entities of other individuals or legal entities through the use of Internet platforms.

Crowdlending clearly regulates the relationship between investors and borrowers, and the Internet platform, in this situation, also acts as an intermediary between them and the guarantor of the transaction at the same time.

Crowdlending is characterized by such distinctive features as:
- the most prompt and simple receipt of funds by the borrower if the project or business of the borrower meets all the conditions of the investor;
- a huge number of industries got the opportunity to attract financial resources with the advent of crowdlending, especially those borrowers who, based on the specifics of their business, could not count on a bank loan [4].

Commercial banks that use crowding have wide opportunities for the economic assessment of a potential borrower and the effectiveness of an investment project, its compliance with the requirements both at the project review stage and during the entire loan period, which reduces the risks for lenders.
3. Results
The procedure for financing a project using crowdlending technology can be divided into a number of stages.

At the preparatory stage, the developer presents the project to the bank and sends an application for getting a loan. The bank evaluates the effectiveness of the project and, with a positive conclusion, implements its lending. The project is registered on the bank’s internet site, the project evaluation, checking the feasibility of construction costs. All data on the project are published (the data on the developer, the project description, the amount required for collection, the project implementation period). Consequently, at the stage of lending a project, the bank creates a crowdlending platform, that is, an Internet platform for collecting and attracting resources of site users who act as lenders. For users (lenders) this is an alternative to a deposit, for a bank it is instant money raised for the implementation of a construction project.

At the stage of accumulating funds, applications are collected from potential lenders. The applications indicate the amount of funds provided. It is important that the lending term corresponds to the stated project implementation term (see Fig. 1).

During the project implementation stage, individuals purchasing parts of a residential object (apartment), accumulate funds on a special escrow account, the use of funds from which will be possible only after the commissioning of the object.

The final stage includes the return to creditors of borrowed funds and interest on them for the period of use (equal to the project implementation period). The bank, as the organizer of the platform, receives a commission for deal support and implementation of the project execution control and targeted expenditure of funds. Settlement with the bank and creditors is carried out at the expense of the funds, accumulated on the escrow account by the buyers of the residential object (see Fig. 2).
In the implementation of the model of project financing of housing construction on the basis of crowdlending technology, it is necessary the participation of the state as a regulator of relations and the formation of the institutional conditions of the proposed mechanism. The functions of state regulation should be concentrated in the following areas:

1) Formation of the legal and regulatory framework for regulating the activities of commercial banks as a crowdlending platform. Currently, with the participation of the Bank of Russia and the Ministry of Economic Development, a draft Federal Law «On Alternative Methods of Attracting Investments (Crowdfunding)» is under consideration in a dialogue with market participants, designed to simultaneously create favorable conditions for the long – term development of crowdfunding, to stimulate the development of the small business segment and strengthen the protection of the rights of lenders and retail investors [6];

2) Control of the interest rate on borrowed funds of creditors and commission to banks. The interest rate for attracting resources should be set in the range of the level of the key interest rate of the Bank of Russia to the weighted average rate of long-term lending to legal entities. For example, as of 01/04/2019, in the range from 7.75% to 10.83% [7], which is very attractive to lenders, providing them with a higher yield than alternative long-term deposits, and developers of the construction project.

4. Conclusion
The advantages of this financing model are:
- reducing the cost of financing a long-term project;
- providing developers with credit financing in full of the estimated cost of the project;
- assessment of the creditworthiness of the borrower with the involvement of banking technologies, which helps to reduce the risk of non-repayment of borrowed funds and interest due.

Thus, the use of crowdfunding technology in project financing of housing construction will provide developers with resources. This eliminates the need to invest their own funds. The financing model allows the authorized bank to control the stages of construction and the targeted expenditure of funds corresponding to each of its stages. The combination of a standard model of project financing with crowdfunding technology using the bank’s internet platform to attract online resources can be oriented towards financing large construction projects.

5. References
[1] Guseva D E, Malykhin N N Crowdfunding: essence, advantages and risks Journal Modern science: Actual problems of theory and practice https://vestnik-nko.ru/kraudfanding-sushhnost-preimushhestva-i-riski/
[2] Suvorov N C 2016 Guard financing as an alternative source of financial support for small businesses Journal Bulletin of Voronezh state University of engineering technologies 3(69) 401-403
[3] Kurmanova L R, Sadykova A I 2018 Project financing of the residential real estate market: problems of development Journal Economics and management: scientific and practical journal 4(142) 100-103 https://elibrary.ru/item.asp?id=35359956
[4] The volume of the crowdfunding market in 2017 has doubled Official website of the Central Bank of Russia https://www.cbr.ru/Press/event/?id=1902
[5] The main directions of development of financial technologies for the period 2018-2020 Official website of the Central Bank of Russia http://www.cbr.ru
[6] Problems and prospects of project financing of the construction complex of Russia https://ardexpert.ru/article/10762
[7] Project financing in the field of housing construction can be earned as early as July 1 2018 http://www.garant.ru/news/1170538/#ixzz5G80AQmjW