

Introduction of Mechanisms and Instruments of Foreign Systems of Housing Market Financing in Russian Practice

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Abstract:

The article highlights the need to improve the financing systemof the Russian housing market taking into account foreign experience. The author points out the existence of effective tools and mechanisms of financing of the housing market in foreign practice, which can be adapted in Russian conditions. The study presents a modernized financing system of the housing market, which is made upconsidering the implementation of the principle of consistency, where each element is interconnected with others, which allows you to get the best results from its implementation. The article stresses the need to use a crowdfunding platform in Russia, which will allow to unite market participants and accelerate the process of implementation of housing transactions. In addition, it seems appropriate to introduce a funded system that will allow to form the required payment on the mortgage. In this system, maternity fund can be used, which will increase the profitability of operations and accelerate the accumulation process. Taking into account the growing share of the elderly population, the author proposes to develop reverse mortgage mechanisms, which are presented in several options. To improve the effectiveness of the financing system of the housing market, it is proposed to introduce several additional entities, namely, the guarantee Fund and the organization carrying out state insurance of mortgage loan.

Keywords: housing market financing system, financing mechanisms and instruments, mortgage loan, reverse mortgage, maternity fund, crowdfunding, savings system, guarantee Fund, state insurance.

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1. Introduction

The financing system of the Russian housing market requires changes, especially in view of the implementation of the national project "Housing and the urban environment" introduced on the 1st of October in 2018. The document specifies the need to provide the maximum number of citizens with affordable housing, the volume of construction should reach 120 million square



metersby 2024. The existing mechanisms and tools do not allow to achieve the indicators specified in the national project. Effectively functioning markets of several foreign countries testify to building effective financing systemsof the marketsin them. It seems possible to analyze the possibilities of introducing certain foreign mechanisms and instruments of financing of the housing market in Russian practice.

The aim of the study is to develop financing mechanisms for the Russian housing market, considering the possibilities of using foreign experience.

To achieve this goal, it is necessary:

- to determine the list of tools and mechanisms from foreign experience that can be implemented in Russian practice;
- to present variants of introduction of foreign experience in the Russian practice;
- develop financing mechanisms for the Russian housing market, considering the experience of foreign countries.

The hypothesis of the study is that an effectively functioning Russian housing market cannot continue to implement only previously developed mechanisms and instruments of market financing. A necessary condition is the use of successful foreign practices, which will maximize the achievement of the indicators specified in the national project "Housing and urban environment".

A number of researchers are engaged in research of housing markets and their financing. Some of them have made attempts to offer variants of adaptation in the Russian system of foreign experience.

2. Literature review

Boyd T. (Boyd, 2014) analyzes the development of real estate markets, forms the results of this

study, considering the opinion of a group of practitioners-analysts. The author says that marketsdevelop asymmetrically, so it is quite difficult to predict their development. Boyd T. also notes the impact of digitalization of the economy on real estate markets, identifies other factors that can affect any housing market.

Canepa A. & Khaled F. (Canepa, Khaled, 2018) analyze housing markets in terms of affordability of their facilities to the public, as well as the impact of credit risk on this. The authors trace the relationship between credit risk and housing affordability for the population.

Ermilova M., Laptev S. & Ushakov D. (Ermilova, Laptev, Ushakov, 2018) reveal how significant the role of the state in the Russian housing market, in which financing mechanisms the state participates, how significant this participation is.

Kotosteleva T. (Kotosteleva, 2017) analyzes mortgage lending as one of the main instruments of financing housing markets in Russia, India and China. The author defines perspective directions of development, on the basis of the comparative analysis of indicators of housing and mortgage markets. It is determined what may be relevant for Russia.

McCord M., McGreal S., Berry J., Haran M., Davis P. (McCord, McGreal, Berry, Haran, Davis, 2011) have analyzed housing affordability and mortgage financing mechanisms of the market. The authors have found that liquidity constraints in the financial sector are hampering the recovery in the residential real estate market, leading to increased concerns about the affordability of buying properties in this market. However, a mortgage loan is still one of the main tools that allows people to buy housing in different countries.

Murzin A. (Murzin, 2013) gives a quite extensive analysis of the housing market, its assessment, development. The author presents a certain list of



indicators by which the market is economically evaluated.

Park K. (Park, 2016) shows in his studythe attractiveness of insured mortgages compared to uninsured loans. The author says that insured loans areoften repaid earlier, which is also quite a positive trend for the market.

Reed R. &Wu H. (Reed, Wu, 2010) analyze the cyclical nature of the housing market, especially in relation to regional and local markets. The authors study how the stages of the cycles affect the affordability of housing, the instruments of financing its acquisition. The study says that a certain stage can lead to a decrease in the availability of residential real estate. The authors point out that the knowledge of the cyclical nature of the market allows its consumers at the most attractive time for them to enter the market and Finance it.

Scharfstein D., Sunderam A. (Scharfstein, Sunderam, 2016) pay attention to mortgage lending in their work as one of the main types of financing of the housing market. The authors consider the development of mortgage securities, the effectiveness of refinancing loans. Housing investment has been studied as a component of GDP and in conjunction with monetary policy. Loosening monetary policy could lower mortgage rates, allowing households to refinance their mortgages at lower rates and reduce their repayments. However, the reduction of interest rates should be approached carefully, so as not to entail an increase in overdue loans.

Shim I., Bogdanova B., Shek J., Subelyte A. (shim, Bogdanova, Shek, Subelyte, 2013) have formed a database on housing markets in different countries, considering the tools and mechanisms of their financing, which allows other researchers to use these data in the analysis of a particular housing market.

Zhu B., Betzinger M., Sebastian S. (Zhu, Betzinger, Sebastian, 2017) as well as other authors analyze mortgage lending and mortgage securities as one of the main instruments of financing the housing market. The authors link the change in interest rates with housing prices, study how refinancing is developing in European countries.

3. Modernization of the Russian housing market financing system

Foreign practice of financing housing markets shows its effectiveness. Housing in many European, Asian countries and the United States is a more affordable asset for the population than in Russia.

The Russian financing systemof the housing market is not so effective. Individual elements are implemented separately, which is one of the main problems of the functioning and financing of the housing market. Compliance with the principle of consistency should ensure maximum achievement of the indicators specified in the national project "Housing and urban environment" in terms of mortgage loan.

This study is intended to reflect the mechanisms needed to address the housing problem of young families. It is this category that stands out as one of the main ones, which is targeted by measures to provide opportunities for preferential lending, the formation of the most loyal programs, considering the subsidization of loans and interest rates on them.

In successful Asian practices, due to the increasing proportion of the elderly population, special attention is also paid to young families, programs to increase the birth rate, providing affordable housing for families with three or more children.

Another essential element of the modernized system should be a component that will ensure the



formation of an electronic mortgage market. The need for such a site is also spelled out in the national project "Housing and urban environment". In some foreign countries, real estate transactions are already carried out on such sites.

Let's consider the process of functioning of the modernized financing system of the Russian housing market presented by the author (Picture1).

Thus, the basis of the improved system should be the provision of electronic interaction between market participants, which is prescribed, among other things, in the national project. However, it does not specify what resources can be used to implement this process.

Based on the analysis of foreign experience, it is proposed to introduce a crowdfunding platform into the Russian experience. This platform will unite the majority of participants in the financing system, accelerate the implementation of operations, reduce the number of possible risks, reduce the cost of servicing of the housing market and mortgages.

It is supposed to include the possibility of the formation within it of a funded systemin the framework of this platform, which will ensure the implementation of mechanisms according to the principle of the "building savings" (European experience) for the formation of the initial payment on a mortgage.

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As for universal banks, it is certainly not possible to completely remove mortgage loans from their list of services soon. However, it is advisable to reduce the number of banks implementing such loan. The main volume of mortgages should be transferred to mortgage banks and provide such opportunities to the largest backbone banks (for example, Sberbank, VTB, etc.). Universal and mortgage banks can work under partner programs, which will maximize the results that need to be achieved in the framework of the national project "Housing and urban environment" in terms of the direction of mortgage loans.

The next chain of interaction that will be considered is the borrower and the Pension Fund and their relationship with other entities.

In this case, we are talking about providing a young family with a second, third, etc. child with maternity fund. Registration of all documentation is made through the Pension Fund of the Russian Federation, where parents determine how the funds of this capital will be used. Particularly, one option is to improve housing conditions.

Another subject in the financing system of the housing market – is the insurance company. Currently, they operate as private companies, the

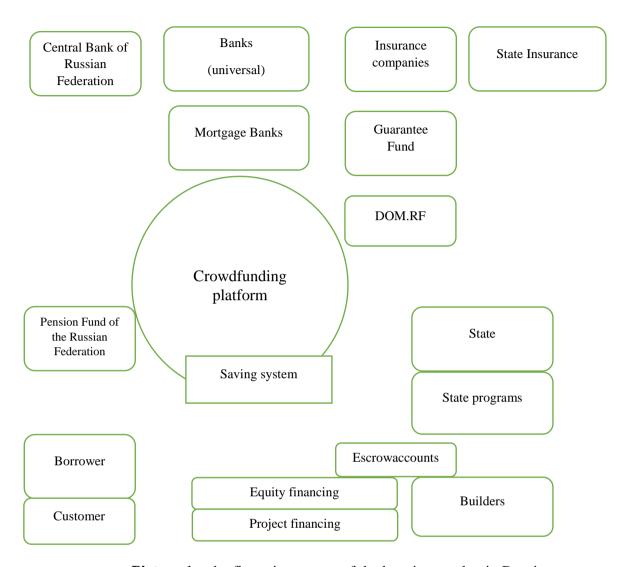
regulatory and controlling body of their activities is the Central Bank of the Russian Federation. It should be said that the introduction as a prerequisite the need for comprehensive insurance when obtaining a mortgage, significantly increases its cost. In case of refusal of insurance, the client will receive less affordable conditions, which are mainly expressed in an increase in the interest rate.

In foreign practice, insurance is not mandatoryin most countries. In the future, Russia will hardly have to talk about the rejection of this type of insurance, which is primarily associated with high risks of lending and banks are unlikely to agree to increase their level for themselves. However, in foreign practice, a system of state insurance has been formed, when the state itself creates a structure that is designed to insure the risks of mortgage loans. The budget of these organizations at the launch stage is formed exclusively from state funds.

For Russian practice, due to the lack of an extensive financing systemof the housing market, which causes most of the problems in the market, such an entity can reduce the cost of lending.

Since Russia has already had such an institution of the mortgage market as DOM. RF (previously, the Agency for housing of mortgage loans), one of the options should be the opening of the state insurance organization at this Institute. This is relevant, due to the fact that the DOM.RF is completely state. Thus, the procedure of organization and control of such an insurance company will be simplified. It is expedient to provide in the state programs that insurance under the subsidized programs of mortgage crediting will be carried out by this organization.





Picture 1 – the financing system of the housing market in Russia

The next important subject for the Russian market is the guarantee Fund. The activities of such organizations have proven to be effective both in the United States and Europe, as well as in some Asian countries.

Nowadays the Russian housing market needs such a Fund. High risks, and impossibility of development of their maximum minimizationin view of historical, have predetermined the existence of structure which will be able to act as the guarantor on return of credits by the population. Existing credit restructuring funds and similar structures do not produce the same results as guarantee funds operating in foreign countries.

Initially, such a Fund may be included in the DOM.RF system as one of the structures. Binding to state programs will allow to start the mechanism of guarantee of credits and gradually to debug system. Since this study hasfocused on the need to ensure the availability of housing for young families (priority category), the pilot project can serve as the inclusion in the lending program of the Fund, as an entity that allows to strengthen the position of borrowers and protect creditors from the risks of non-repayment or other negative developments.

The Fund will exist at the expense of budget, as the initial capital, which will gradually increase due to the development of the organization. This



can be achieved by the fact that the Fund will be a guarantor for mortgage-backed securities formed from loan pools. They will be issued by a credit institution in order to diversify potential risks and distribute these risks among investors. The presence of a guarantor in the person of the state Fund will increase the attractiveness of such securities in the market.

In General, regarding the development of the mortgage securities market, it is not necessary to talk about significant results for the Russian practice. This market is not fully functioning and opportunities ensure to affordability for the population despite the statistics that the volume of such bonds is growing. Thus, banks reduce their own risks and protect themselves from a large volume of overdue loans, redistributing risks among investors who have purchased these securities. In foreign practice, mortgage bonds could be compared with Federal loan bonds, which are a low-risk instrument for preserving and slightly increasing own funds. In Russian practice, citizens generally do not consider such securities as an investment tool. Basically, the customers are legal entities.

For the current national project "Housing and urban environment" in the first place, the task is to ensure the availability of housing through the development of mortgage programs with the involvement state funding of implementation of measures to reduce interest rates. However, it is indicated that in 2019, amendments were made to the legislation of the Russian Federation in terms of establishing the rights of claim of a participant in shared construction and including the rights of claims secured by such a pledge in the mortgage coverage of bonds. As a result, some of the risks that mortgage securities and equity construction bear should be reduced due to this. In addition, more investors may be involved in the process of purchasing mortgage bonds. It has also been planned to ensure the issuance of bonds without registration by the Bank of Russia. Then such functions can be implemented by a network of mortgage banks. It would be appropriate to assign them as specialized agencies. Regulation and control of mortgage banks by the Bank of Russia over mortgage transactions (including those related to mortgage bonds) will be much more effective. The procedure for tracking the cash flows of a credit institution, identifying problem loans at the early stages, and determining the mechanisms for working with mortgage bonds will be simplified.

Let's consider the procedure of financing of the housing market from the point of view ofbuilders. The Funds received by construction companies from buyers

(borrowers), other investors are used to Finance the construction of housing.

Currently, there are two main forms of financing, which are reflected in the national project:

- equity financing;
- project financing.

Equity financing has long been used in the construction sector and is gradually improving the mechanism of its implementation. Certain amendments are being made to the legislation, which allow to reduce risks, firstly, for investors (buyers) of housing. The latest innovation is the opening of escrow accounts, which will further protect buyers from the chance of freezing the construction of the object or bankruptcy of the builder. It is assumed that while the builder will not bring to a certain stage the construction of the object, the funds from the accounts he will not be able to use.

The second form, which is just being introduced in Russia, is project financing. It should be noted that in foreign practice in Asian countries with successful experience in financing the housing market, this form of financing has long been successfully implemented.

The Russian Federation will continue to be one of the main subjects through which state programs are implemented. It is advisable to connect the



guarantee Fund and state insurance to its activities. Building chains of financial flows between them will help to ensure a systematic approach to the organization of housing market financing.

Dom. RF through universal and mortgage banks will implement its programs. It is advisable to ensure a gradual transition to cooperation only with mortgage banks and reduce the volume of loans issued through universal banks.

Next, we will consider what mechanisms can be implemented in the Russian practice of their foreign experience and how, within the framework of the modernized system of financing the housing market, they can be implemented.

4. Introduction of financing mechanisms of the Russian housing market considering foreign experience

As part of the development of the housing market financing system, it is advisable to provide conditions for the use of maternity capital in the savings system (according to the experience of the "building savings" system).

Maternity fund can become part of the contribution to the initial contribution formed within the savings system. The availability of these funds will allow you to get more income from the savings account, which is opened for a potential borrower. The family will be able to buy better quality housing and a larger quadrature, which also indicates the use of this capital in the savings system. The mortgage Bank will be able to reduce the amount of funds raised from the Bank of Russia, as it will have temporary access to savings accounts.

The introduction of mechanisms on the principle of "building savings" systems, including, taking into account the scheme of attracting maternity fund, it is advisable to include in measures for the development of housing and mortgage markets within the framework of the national project "Housing and the urban environment".

The procedure of accumulation is more familiar than lending for the Russian population, which is mainly due to established traditions. In this regard, the accumulation system can be widely used.

In the list of products of mortgage banks, it is advisable to include reverse mortgages, which have become widespread in foreign countries. In Asia, as already mentioned, the number of older people is growing every year. In Russia, the share of the elderly population is also significant.

Reverse mortgages should be organized using crowdfunding, which will simplify and speed up the procedure of registration of the transaction.

Senior citizens (over 65 years) apply through the crowdfunding system for a reverse mortgage. There may be several options for the development of the situation.

In one case, citizens transfer their real estate for use by potential heirs, and themselves move into mortgage housing. Thus, the procedure for providing housing to the younger population is accelerated, which generally reduces the number of people in need.

According to the second option, the elderly population rents their own housing, moves into mortgage real estate. Rent payments together can form the basis for the heirs to buy out the home after the death of an elderly relative.

The main risk for banks in the implementation of transactions with reverse mortgages may be the fact that at the time of death of the borrower, the value of real estate may decrease. Relatives will have to cover the difference in cost. To do this, it is advisable to make certain adjustments to the mortgage agreement with the fixing of the collateral value of housing and the obligation of the credit institution in case of significant changes in the market to provide 90% debt coverage.

The implemented project financing is designed to solve issues with the construction of the required number of square meters specified in the national project. Equity construction is already fading into the background. More attention was paid to



escrow accounts and the transfer of all developers to these accounts.

Certain measures may be taken to improve the effectiveness of these mechanisms:

- at the regional level, identify the main, large, leading builders in the field;
- to complete the procedure of usage of project financing with the following in the national project. Industry leaders in the regions are transferred to project financing. This is important due to the fact that these construction companies are the largest by capital in the industry, carry out the construction of a greater share of housing in the region. The main direction of project financing is the implementation of financial support for the largest projects to be implemented. Some of the risks previously inherent in this activity are minimized. Builders will be able to access more funding. Public-private partnership will implemented within these mechanisms. Builders who have reasonable opportunities to participate in social programs can afford to build social housing. It is easier for the state to work with large companies, as the procedure of interaction is accelerated, control over budget funds is simplified.
- previously, there were proposals to abandon equity financing due to its high risk. However, instead of the refusal, the decision was made to introduce escrow accounts. Equity financing can be implemented by smaller developers who are not leaders in the regions. On the one hand, they have no real financial opportunities to get project financing based on its essence. On the other hand, escrow accounts are designed to protect the investor (buyer, borrower). Thus, in addition to the distribution of forms of financing among the participants, it will be possible to weed out the weakest of them. As a result, the best quality developers will remain on the market. Together, this will make the market more efficient and competitive.

To date, Russia has already matured the need to separate the forms of financing of developers by

their position in the market. The above will make the market stronger in terms of not only competitiveness in General, but also financial competitiveness. Clients and investors developers will be more protected, measures from the state which were earlier carried out by it at freezing of construction or bankruptcy construction companies (completion of construction at the expense of budgetary funds, etc.) won't be required.

Let's consider how the interaction between all actors of the housing market is built in the conditions of modernization of the housing market financing system and the use of certain mechanisms from foreign experience. It is essential that the principle of consistency can be implemented under certain conditions.

Let's imagine the integrity of the financing system, considering the fact that the subject will be a young family (there may be other categories of citizens).

So, the builder interacts with the market and with the borrower (buyer) and other market actors. We will introduce a condition that the purchase of housing will be made within the framework of the state program at the expense of mortgage funds. The developer will be a large company-the industry leader in the region. Thus, project financing will be available to him. In the case that would be considered another small developer – equity financing.

The borrowers are a young family with two children. In this case, they have the right to receive maternity capital, which means that these funds can be used to improve housing conditions.

Consider two mechanisms. The first is that the family receives a loan immediately, considering that the maternity capital is part of the down payment.

The second is that the funds are transferred to the savings account within the system according to the type of "building savings".



In the first case, the family transfers all documentation to the Pension Fund, approval, the funds are transferred to the mortgage Bank as a contribution on the mortgage loan. Acting within the framework of the state program, the family receives a loan under special conditions (reduced interest rate) through a mortgage Bank. Insurance will be carried out through the state insurance organization, which may be one of the divisions of the DOM.RF. At the same time, under the terms of the state program, to improve the efficiency of the implemented mechanism, a guarantee Fund is included in the system, which allows reducing risks for creditors. All operations including interaction with the Pension Fund and other state organizations are carried out through the crowdfunding system. This makes it possible to implement the point specified in the national project "Housing and urban environment" on the creation of an electronic mortgage market. All documentation and all operations can be carried out without the direct personal involvement of the borrower. The second option differs in the period of its implementation, which is extended due to the period of collection of funds on the savings account. Then the funds are transferred to the mortgage account and are the down payment on the mortgage loan. All other actions related to the availability of the guarantee Fund, state insurance remain the same.

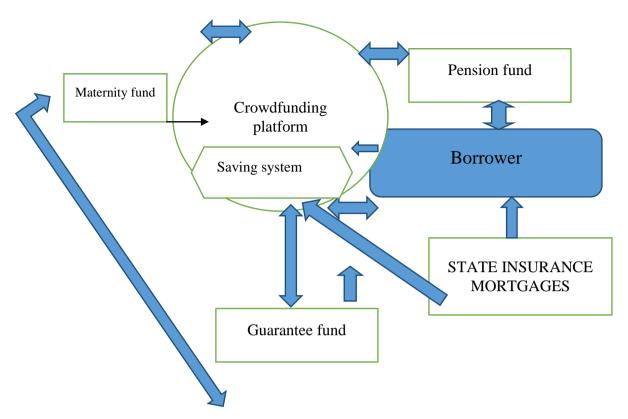
Let's consider the mechanism of interaction between the Bank and the client when using crowdfunding in the Russian practice, as well as considering the inclusion of the guarantee Fund and state mortgage insurance in the mechanism. The accumulation process through this platform will be disclosed (picture 2).

1. The mortgage Bank creates a crowdfunding platform through which it will interact with the

borrower and through which an accumulative system can be created for the formation of a down payment on a mortgage.

- 2. The borrower through the platform can download all the documents for consideration by the Bank, as well as issue the opportunity to collect funds in the savings system for the formation of the initial payment on the loan and further registration of documentation on the mortgage loan. The pension Fund also interacts with this platform.
- 3. When making a mortgage loan, the borrower can apply for the guarantee Fund to obtain a guarantee from it, which increases his chances of obtaining approval for the loan.
- 4. The guarantee Fund prepares the documentation and sends it to the Bank. There may be an opportunity for the Fund to work with the platform. It will speed up the transaction process.
- The state insurance of the mortgage credit at approval of its issue can be carried out through specially created state organization which main purpose of activity will be service of such types of credits. This is important because the volume of mortgage loans in Russia is growing every year. The state structure can allow within the framework of the implementation of the national project to reduce the amount of the borrower's costs for the loan and thus serve as a catalyst for reducing the risks of non-payment of the loan. Documents related to insurance can be transferred to the Bank directly by the organization, or through the platform. There is no need to complicate the procedure and transfer the documentation through the borrower-this increases the time spent on the operation.





Picture 2 – the financing system of the housing market when you use a crowdfunding platform and saving system

- 6. The borrower sends the documentation for the loan to the Bankthrough the crowdfunding platform. Upon receipt of approval, all transactions are conducted through the platform, including connecting other entities that are necessary for the transaction.
- 7. The borrower may initially become a member of the accumulative system, which will also be implemented through this platform.
- borrower submits a request to participate in the accumulation system. Its essence lies in the fact that the client can accumulate funds gradually on the account opened with the use of crowdfunding and when a certain amount (from 20-50% of the cost of housing) is reached, the borrower through the system issues a mortgage loan. The advantage is the possibility of receiving interest payments on the savings account, which will be lower than on standard deposits, but will speed up the accumulation process.

- funds are transferred to the mortgage account from the savings account and the mortgage is provided.
- loan service through crowdfunding platform.
- 8. Completion of the loan service can be carried out through the platform. However, obtaining a mortgage usually involves the need to visit the Bank. For this purpose, it is expedient to enter procedure of transfer of documentation from Bank to Rosreestr for removal of encumbrance. All other documentation can be issued by the client using an electronic signature.

This mechanism shows how all the subjects of the system are interconnected, which allows to implement the principle of consistency. All actions can be carried out through a single database, presented in the form of a crowdfunding platform.

Thus, a systematic approach to the organization of housing market financing shows an increase in the efficiency of this financing, advantages for market participants. Elimination of fragmentation between actions of separate subjects builds the mechanism of movement of monetary resources



between them, accelerates procedure of their movement on accounts of the Builder. Together, this may allow to faster achievement of the indicators specified in the national project to increase the volume of construction and affordability of housing for the population.

5. Conclusion

The following conclusions have been made in the study:

- 1. The financing system of the housing market requires modernization in order to achieve the indicators specified in the national project "Housing and urban environment".
- 2. It is necessary to ensure the implementation of the principle of consistency, which will improve the efficiency of market financing.
- 3. It is expedient to use a crowdfunding platform to form an electronic platform of the mortgage market.
- 4. It is necessary to introduce and develop successful foreign practices: reverse mortgage, accumulative system, crowdfunding, project financing.
- 5. It is necessary to determine the forms of financing of developers depending on the volume of their activities. For large construction companies project financing, for smaller companies equity financing with escrow accounts.

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