Project financing as a tool to enhance the role of commercial banks in the construction industry

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Abstract. For implementing any construction project, considerable financial resources are required. The world practice of construction sector investment can be described as follows: two-thirds of resources go through the bank project financing system; one-third of resources are own funds of companies. In the Russian Federation, either the population invests in construction, participating in equity construction projects or building individual houses or the budget and state corporations fund construction projects. Businesses also invest in construction projects. Sources of finance for Russian construction activities are not diverse. The availability of many sources is declining during the past few years. The process of construction sector financing is not systemic; it develops spontaneously without taking into account the strategic objectives of the national development. In such conditions, project financing becomes a very promising form of lending. The popularity of project financing as a method of long-term financing of capital-intensive industries is determined by the processes of partial abolition of state control over enterprises serving the infrastructure (housing and communal services, transport, communications), and privatization of the public sector. The article determines the importance of project financing as a tool to enhance the role of commercial banks in the construction industry in modern economic conditions. The current trends of development of project financing in the Russian construction sector are analyzed. The most significant problems of development of the construction sector in the Russian regions are identified. The trends in the development of the construction sector are identified taking into account the latest economic trends.

1. Introduction

The project financing tool was created as a result of the inefficiency of other methods of investment project financing. This was also facilitated by the intensive development of the global financial market and its investment segment and internationalization of investment projects. Escrow accounts protect shareholders from unscrupulous or insolvent developers. Project financing tightens the rules for developers and becomes a filter that will help companies with a dubious reputation that are unable to prove their financial solvency to leave the market. For strong and experienced developers, the new rules are a blessing [1].
Reforms of the housing construction sector are an important direction in the development of the construction industry of the Russian Federation. Deceived shareholders are common in domestic practice [2, 3]. The authorities aim to transform the shared construction sector in Russia. The main mechanism for solving this problem is the use of project financing, within which the source of servicing debt obligations is cash flows generated by the project. The specificity of this type of investment is that costs and revenues are assessed taking into account the distribution of risks between the project participants. Developers who use escrow accounts can receive bank loans. The current procedure for the project financing implementation is presented in the diagram below.

2. Stages of project financing in the housing construction sector

All developers who build residential complexes at the expense of shareholders have had to apply the escrow account mechanism since July 1, 2019. This involves the transfer of funds for future apartments to the bank rather than to the construction company. The financial institution must “freeze” funds during the process of construction [4, 5]. The developer builds an object using own funds or borrowed money. The construction company receives funds from “shareholders” after the object has been commissioned. If the developer built more than 30% of the object and sold more than 10% of the apartments until July 1, 2019, there is no need to apply the system of escrow accounts (figure 1).

![Diagram of stages of project financing](image)

**Figure 1.** Stages of project financing in the housing construction sector (compiled by the authors).

Let us consider the current trends characterizing the development of project financing in the Russian Federation. By August 2020, Russian banks allocated 1.4 trillion rubles to the construction companies as part of project financing. In the first half of 2020, the share of banking support for the construction industry grew from 1,064 contracts and 943 billion rubles in March up to 1,560 agreements (+ 52.1%) and 1,434 billion rubles. (+ 46.6%) in August. Depending on the federal district, the average loan rate for developers ranged from 3.75% (Volga Federal District) to 5.7% (Far Eastern Federal District).

The main reason for the growth of bank lending is budget subsidies for project financing at a preferential rate of 5.5% per annum. Measures to support the construction companies taken in the first half of 2020 were as follows: abolition of penalties for violating construction deadlines until January 1, 2021; buying out of apartments that have not been sold by developers; 6.5% preferential mortgage for the purchase of new apartments until November 1, 2020.

2. Commercial banks in the construction industry

The project financing had a positive effect on the construction market, since it allowed developers to receive stable profit and become independent on sales volumes during the pandemic. The smooth operation of construction companies combined with measures aimed to stimulate a consumer demand allowed the construction industry to survive and organize a real sale in the new construction market.
The largest number of bank lending agreements was recorded in Moscow and Moscow region. Krasnodar Territory, Novosibirsk Region, the Republic of Tatarstan and Tyumen Region rank second, third, fourth and fifth. The minimum number of contracts was recorded in Tomsk region (two contracts) and the Komi Republic (one contract).

The highest rates of project financing were observed in the banks of Amur and Tula regions, where an increase was 300% and 267% to the level of March. In Moscow and Moscow Region, an increase was 36-39%. The slowest growth in the number of contracts was in Kurgan region - by 13%. The only region where the number of contracts decreased was Kirov region. The reduction from 25 contracts in March to 24 contracts in August resulted in a 4% decline.

As a result of the growing project financing system, the number of escrow accounts has increased in 2020. An increase in accounts amounted to 136.6% - up to 148.4 thousand, and an increase in the share of disclosed accounts (those for which the bank transferred money to the developer) was 158.1% (up to 11.4 thousand accounts) (figure 2).

![Figure 2](image_url). The dynamics of escrow accounts and "disclosed" escrow accounts in the construction sector, thousand accounts [6].

By August, the amount of escrow accounts amounted to 500.7 billion rubles, and the amount of "disclosed" accounts was 24.2 billion rubles.

The balances in escrow accounts doubled over the period under review. Buyers of new apartments transferred 286.8 billion rubles to the banks from March to August 2020, which increased balances by 134%. Over the same period, the banks transferred 14.3 billion rubles to the developers which is 143.5% than before March 2020.

By the number of escrow accounts, Moscow (27.7 thousand) and Moscow region (11.8 thousand) ranked first in August, 2020. Other top regions were Tyumen region (7.5 thousand accounts), Krasnodar Territory (6.7 thousand) and Rostov region (6.2 thousand).

The fastest growing number of escrow accounts was observed in Tomsk and Kostroma regions - 135 and 70 times, respectively. This is a "low base" effect. In March, there were one-two escrow accounts in each of these regions, while in August there were 135-140 accounts.

The top regions where the rates of growth in the number of escrow accounts was high are Kemerovo, Tula and Arkhangelsk regions. The slowest growth in the number of escrow accounts was observed in Belgorod region (1.4 times), Kirov region (1.8 times) and Moscow (1.9 times).

Let us analyze the trends in the construction sector of Irkutsk region in general and in the field of project financing, in particular (figure 3).
Over the past three years, the housing construction market of Irkutsk Region has been steadily developing: 974 thousand square meters were commissioned in 2017, 982 thousand - in 2018 and 977 thousand - in 2019.

Since 2018, the share of individual housing construction (IHS) has increased in Irkutsk housing construction market. In 2017, 323 thousand sq. m. were commissioned; in 2018, 588 thousand sq. m. were commissioned, and in 2019, 586 thousand sq. m. were commissioned. In 2019, the population built 60% of the total housing in the region. According to experts, many citizens took advantage of the "dacha amnesty" and registered dachas as their property. In this regard, in 2020, there may be a decrease in the share of individual houses commissioned. The above figures indicate that the volume of construction of apartment buildings in Irkutsk region remains low. Of 1206 thousand sq. m., which are planned to be commissioned in 2020, 603 thousand sq. m. are apartment buildings and 602 thousand square meters. m. are individual houses.

At the end of 2019, only 7 houses were built under the project financing scheme. In 2020, the situation has improved slightly (table 1).

Table 1. The dynamics of the use of escrow accounts in the construction sector of Irkutsk region for 2020 [5].

| Irkutsk region | Number of loan agreements | Amount of loan agreements, RUB millions. | Number of escrow accounts, including "disclosed" escrow accounts | Balances in escrow accounts, including disclosed escrow accounts, RUB mln. | Number of "disclosed" escrow accounts | Amount of funds transferred from "disclosed" escrow accounts, RUB mln. |
|----------------|--------------------------|----------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------|
| 01.01.20       | 9                        | 4 062.4                                | 396                                                           | 1 044.0                                                         | 0                                 | 0.0                                                            |
| 03.02.20       | 9                        | 4 062.4                                | 437                                                           | 1 136.6                                                         | 98                                | 282.1                                                          |
| 02.03.20       | 11                       | 4 565.9                                | 498                                                           | 1 297.7                                                         | 98                                | 282.1                                                          |
| 01.04.20       | 15                       | 7 652.8                                | 591                                                           | 1 479.1                                                         | 98                                | 282.1                                                          |
| 01.05.20       | 15                       | 7 373.3                                | 702                                                           | 1 819.3                                                         | 98                                | 282.1                                                          |
| 01.06.20       | 16                       | 7 951.1                                | 846                                                           | 2 143.5                                                         | 98                                | 282.1                                                          |
| 01.07.20       | 17                       | 8 287.9                                | 1 015                                                          | 2 694.2                                                         | 345                               | 1 044.5                                                        |
| 01.08.20       | 16                       | 7 283.8                                | 1 211                                                          | 3 147.1                                                         | 345                               | 1 044.5                                                        |
One of the problems of the construction sector is insufficient incentives to increase the volume of multi-storey housing construction. For example, the purchase price of apartments for migrants from dilapidated houses is lower than the market average (47 and 62 thousand rubles, respectively). This is due to the lack of large infrastructure projects allowing the development of the construction sector in the region [7].

One more factor influencing the construction sector is the period of environmental impact assessment of new construction projects. The entire cycle may take up to two years, which is too long for increasing the pace of construction. The cancellation of this procedure can reduce costs, investment cycles and interest costs.

Another trend that is characteristic of the regional construction market is the lack of offers in the segment of affordable housing, especially in large cities [8, 9]. This is due to the lack of free land plots and the need to perform the resettlement procedure. Therefore, social houses are built in the suburbs.

The problems of the regional construction market are the lack of heat energy, high costs of building materials and technological connection. All these factors have a significant impact on the volume of construction and housing costs [10, 11].

3. Conclusion

Certain difficulties may affect the construction industry in two-three years, when the backlog created by developers will end. One of the reasons for the potential crisis is the uneven transition to the project financing system. Despite its visible advantages (e.g., no seasonal cash gaps), there are disadvantages caused by different competitive conditions for construction businesses and differences in the cost of a square meter caused by an increase in interest costs [12, 13].

As possible solutions to some of the above problems, prefabricated reinforced concrete can be used instead of monolithic construction. It can reduce the cost per square meter by about 20%, and the construction period of objects can be reduced twice. This approach will require the revival of house-building factories.

In addition, the region is unlikely to stay away from the global trend of using 3-D printers in the construction industry. Experts believe that over the next 10 years, 3-D construction can become massive in the field of low-rise construction, and within 20 years it will be be used in the construction of multi-storey buildings.

Thus, the skepticism with which representatives of the construction market reacted to the innovations, believing that they would negatively affect the industry, dissipated, and project financing is considered to be a convenient scheme that fits into the business models of most construction companies.

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