The lending efficiency in the construction industry

O A Krasovskaya¹ and V E Vyaznikov¹

¹Irkutsk National Research Technical University, 664074, 83 Lermontov str., Irkutsk, Russia

E-mail: chigir-1981@mail.ru

Abstract. The article discusses the possibility of providing bank loans to construction companies that build residential complexes. A new form of lending developed by the Government of the Russian Federation is analyzed. A new form of lending is aimed at improving the situation in the construction industry. The statistics on housing commissioning provided by the Bank of Russia is analyzed. The goal of the monetary policy of the Bank of Russia is to improve the situation in the development of housing construction. A diagram of escrow accounts used by companies is presented. It reflects the interaction of all participants. An analysis of data on housing commissioning over the past two years is carried out and housing commissioning problems are identified. An annual increase in borrowed resources is determined. It reflects the lending activity of construction companies. Conclusions on the use of escrow agreements as a new financing model are drawn.

The construction of a residential complex is a key infrastructure in the Russian Federation. The construction of residential complexes occupies a leading position in the construction industry and affects the economy of the country. Lending is one of the forms of investment in the construction industry.

There are two types of housing construction loans: home construction loans and mortgage loans. One of the conditions of the loan agreement is a period of loan (long-term and short-term). A loan transaction is carried out with the participation of a lender, a borrower and a legal entity (a developer-investor, a general contractor). In turn, the general contractor plays an important role in the construction of residential complexes and performs construction and installation works.

The goal of the monetary policy of the Bank of Russia is to develop the housing construction industry together with the government of the Russian Federation. [1]

An analysis of statistical data for 2019 provided by the Bank of Russia showed improvements in the construction of residential complexes due to the implementation of a new financing model (escrow accounts).

Figure 1 shows the scheme of using an escrow account for legal entities.
Transferring funds to an escrow account
Informing about the account and fulfillment of the condition

Figure 1. Application of an escrow account for companies.

Figure 1 shows the scheme of using an escrow account for legal entities that build residential complexes. An escrow account is an agreement on shared construction involving the following parties: an shareholder (a legal entity), a bank, a developer (an individual). The shareholder's funds are transferred to an escrow account opened in the bank; the account is not available for the developer until the object is put into operation. A shareholder, who concludes a contract, receives a guarantee: if the developer fails to fulfill the terms of the contract, the money is returned to the shareholder. [19] The developer starts the construction process at the expense of project loans from the bank, without using the funds of the shareholder. [1] During the construction of the residential complex, the shareholder's money is kept in a bank account. After the residential complex is put into operation, the developer receives the funds of the shareholder. [2]

The efficiency of escrow accounts is due to the fact that the shared construction agreement increases the percentage of transaction completion by three parties. In this case, the developer is exempted from fulfillment of obligations to provide security for the fulfillment of his obligations under the equity participation agreement. [3] A shareholder, concluding an escrow transaction, obtains an apartment at a fixed cost, or receives a refund.

In accordance with the equity participation agreement, money in escrow accounts is subject to the Russian law on insurance of deposits of individuals. In accordance with Article 12.1 of Federal Law-1771, the account is insured only for the period of registration of the equity participation agreement for an amount not exceeding 10.0 million rubles. [17]

Escrow accounts are free liabilities that allow banks to provide loans to the construction companies. This transition to a new financing model had an impact on the lending policy and the financial position of construction companies. Housing prices and offers have changed, which increased the volume of housing commissioning in 2019. [9] Thus, in 2019, the volume of houses commissioned increased (Figure 2).
Figure 2. Commissioning of houses.

Figure 2 shows that the low indicator of housing commissioning is observed in the second quarter of 2018, while the indicator increased significantly in the second quarter of 2019, there was a sharp decrease in the third quarter of 2019. [13]

In 2018, we see an increase in the volume of housing commissioning. At the same time, in 2019 there was a sharp decrease in this indicator. The highest volume of housing commissioning is observed in the second quarter of 2019. [4]

The growth dynamics was due to the rules for shared construction. The transition to a new financing model increased the volume of construction. [5] There was a slowdown in the growth of the housing construction volume by the end of 2019. [18]

The above statistical data show that in 2019 escrow accounts changed the volume of funds borrowed by construction companies (see Figure 3).
Figure 3 shows an annual increase in funds borrowed by construction companies since 2015. There have been significant changes in the annual increase in borrowed funds. A sharp increase in borrowed funds, loans and bonds can be observed. [9] Construction companies whose lending activity is weak attract money through corporate financing tools. Banks provide loans to the construction industry, while investing in bonds of non-bank financial institutions. Lending growth rates remained low, but by the end of 2019 the loan portfolio contraction stopped. In the second half of 2019, the volume of new long-term ruble loans provided by banks to Russian construction companies exceeded the indicator of 2018 by more than 20%.[13]

In turn, construction companies increased loan delinquencies. Let us analyze the indicators of loan delinquencies shown in Figure 4.

![Overdue corporate loans](image)

**Figure 4.** Overdue corporate loans (% of the loan portfolio).

Figure 4 shows that since 2017, there has been a sharp increase in bank loans provided to construction companies. A slight decline in interest rates in 2019 is due to the new financial program of escrow accounts. [16] In 2020, the difficult economic situation affected construction companies. According to the statistics provided by the Central Bank of Russia for 2020, the ratio of loan delinquencies to the loan portfolio amounted to 22%.[13]

In 2019, credit conditions for construction companies changed significantly. The bank as an intermediary provides more favorable and convenient conditions for shareholders and developers. Banks provide construction companies with loans for building residential complexes. [7] Escrow accounts are opened in the bank that finances the housing construction project. Therefore, escrow funds are a source of cheap funding of developers. Successful sale of apartments during the construction phase can reduce loan interests [11].

Figure 5 shows changes in the rate of bank loans provided to the construction industry.
Figure 5. Banks loans provided to companies that build residential complexes.

Figure 5 shows that since 2015, there has been an increase in the number of bank loans provided to the construction industry. [20] Due to the new lending conditions and three-party shared construction agreements, there has been an increase in the volume of housing commissioning.

Despite the fact that the new financing program has positive results and shows a good percentage, most construction companies continue to work under the old financing scheme.[8] The new escrow contract program begins to enter the market as shown in Figure 6.

Figure 6. The structure of housing construction funds as of January 2020.

Figure 6 shows that the percentage of houses built under the old financing scheme is 63.6% which is much higher than the share of houses built under the new financing scheme using escrow accounts. The new scheme accounted for 24.6% of funds. However, despite such a difference, for 2020-2021, it is
planned to commission the main part of residential complexes built under the old scheme, thereby increasing the percentage of housing commissioning under the new financing scheme. [9]

Taking into account the planned volumes of construction of residential complexes, it will be necessary to finance projects, while the share of project financing for housing construction in the portfolio of bank loans will increase. [10] In early 2020, the new scheme was implemented actively. According to the data provided by the Bank of Russia, over 18 thousand new escrow accounts were opened. The total amount of money in these accounts was about 69 billion rubles, which is almost 65% more compared to the beginning of the year. More than 155 contracts worth 140 billion rubles were concluded with construction companies. [14]

The new scheme is actively applied in the construction market. It protects shareholders and increases the financial stability of the construction industry. [15] This financial stability is due to a decrease in prices at the first stages of construction, a decrease in the risks of violation of the terms of payment, and an increase in borrowed funds for the developer. As a result, the risks of developers can decrease, thereby helping to reduce the cost of developers’ funds, as well as attracting investors who will be ready to finance construction.

According to the results obtained by the end of 2019, after the adaptation of developers and banks, for the banks of the Russian Federation that provide loans to construction companies, the new form of financing is risky. In 2020, the scheme of bank financing using escrow accounts continues to be implemented. This type of lending contributes to a further increase in the financial stability in the construction of residential complexes. Having reviewed and analyzed the construction of residential complexes in the construction industry under the new financing program with escrow agreements, we can say that the program is quite effective. Thanks to such agreements, the shareholder is protected from fraudulent actions of developers. In turn, the developers can obtain loans at a reduced loan rate. In this case, the bank acts as an intermediary that receives its interest.

References
[1] Andreeva E S and Nechaev A S The mechanism of an innovative development of the industrial enterprise World Applied Sciences Journal 27(13 A) pp 21-23
[2] Archipova A N 2018 Corruption in Healthcare System of Russia: Challenges and Effects RPTSS 2018 International Conference on Research Para-digms Transformation in Social Sciences pp 120-127
[3] Barykina Y 2019 Analysis of information support for innovation development, IOPConference Series: Materials Science and Engineering 667(1) 012012
[4] Barykina Y 2019 Risks of long-term leasing transactions for construction industry development IOP Conference Series: Materials Science and Engineering 667(1) 012011
[5] Basova A V, Nechaev A S 2017 Taxation as an instrument of stimulation of innovation-active business entities World Applied Sciences Journal 22(11) pp 1544-1549
[6] Bovkun A S and Troshina A O 2017 Classification of innovative activities in universities Advances in economics, business and management research (AEBMR). Proc. of the Int. Conf. pp 82–86
[7] Bovkun A S, Korodyuk I S and Arkhipkin O V 2018 Detection and analysis of model construction of innovative development in russian regions The Europ. Proc. of Soc. & Behavioural Sci. EpsBS pp 246–253
[8] Bovkun A, Korodyuk I 2019 Analysis of the development of small innovative enterprises in the construction industry IOP Conference Series: Materials Science and Engineering. New Technologies and Special-Purpose Development Priorities
[9] Elena Golovina, Valentina Turkova and Artem Vasichenko 2018 Legal aspects of legislative regulation of information security and information protection in data processing centers International Scientific Conference “Investment, Construction, Real Estate: New Technologies and Special-Purpose Development Priorities”
[10] Matveeva M Proceedings of Universities. Investment. Construction. Real estate 8 pp 31-41
[11] Nechaev A S and Antipina O V 2018 Technique of tax rates and customs duties updating as the tool of enterprises innovative activity stimulation *Modern Applied Science* 9(2) pp 88-96

[12] Nechaev A S, Zakharov S V, Barykina Y N, Vel'm M V and Kuznetsova O N 2017 Forming methodologies to improving the efficiency of innovative companies based on leasing tools *Journal of Sustainable Finance and Investment*

[13] Ketova V, Rusyak I G, Kasatkina E V, Saburova E A and Vavilova D D 2020 Organizing the cash flow management in the construction industry in the Russian Federation *IOP Conference Series: Materials Science and Engineering* 862(4) 042035

[14] Prokopyeva A V, Nechaev A S 2019 Key features of risks of company innovative activities, *Middle East Journal of Scientific Research* 17(2) pp 233-236

[15] Turkova V N and Archipova A N 2019 Development of digital economy in Irkutsk region *International Scientific Conference "Investments. Construction. Real Estate: New Technologies and Targeted Development Priorities-2019" (ICRE-2019)*

[16] Turkova V N and Archipova A N 2019 Innovative development of Irkutsk region. *International Scientific Conference "Investments. Construction. Real Estate: New Technologies and Targeted Development Priorities-2019"*

[17] Turkova V N, Archipova A N and Kitaev N N 2017 Improper work of Russian law-enforcement agencies as a determinant of corruption-related crimes committed by government officials *Proceedings of the International Conference on Trends of Technologies and Innovations in Economic and Social Studies* 38

[18] Turkova V N 2018 Corruption and its negative influence on economic, education and healthcare systems *RPTSS 2018 International Conference on Research Para-digms Transformation in Social Sciences* pp 120-127

[19] Zakharov S V, Bovkun A S and Vasiliev K O 2017 The functioning of small innovative enterprises created in partnership with state universities and natural persons *Quality Manag., Transp. and Inform. Security, Inform. Technol.* pp 32–33

[20] Skorobogatova Y A, Bovkun A S, Ivanov Yu M, Shilova O S 2020 The role and place of small innovative enterprises in the construction industry in the modern economy of single-industry towns *IOP Conference Series: Materials Science and Engineering*

[21] Housing construction 1 (2) Available at: http://www.cbr.ru/Content/Document/File/107445/analytic_note_20200403_ddkp.pdf