

# **KEY DEVELOPMENTS AND TRENDS IN PROJECT FINANCE MARKET**

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## **Abstract**

The article comprises a set of theoretical and methodological approaches to the study of the concept of "project financing", and identifies some trends of development of the real sector in the project financing market of the Russian Federation and some prospects for growth of the realized deals in the project financing market. It also presents an overview of advantages of project financing transactions and assumes the main risks usually involved in such transactions. This article focuses on the role of banks in project financing and reveals some obstacles interfering intensification of production investment. It is assumed that project financing as a type of banking service is an effective tool for engagement in the modern economy.

The work done in the course of the analysis allows to develop a software product for financial modeling of the project giving the opportunity to assess the effectiveness of investment and construction projects under risky conditions in the market of real estate.

**Keywords:** project financing, long-term investment projects, risks of project financing, financial resources, real sector of economics.

## **1. Introduction**

In the world practice project financing has been frequently used for decades to implement large-scale and capital-intensive projects. Russian companies integrating gradually into the world economic space face the need to implement the projects similar in its complexity and scale to the projects which are carried out by their competitors in the world markets. That is why project financing becomes potentially more and more popular and necessary in Russia and the very possibility of full application of project financing is essential for development of Russian companies and in the long run for our country's economic development.

Project financing as a tool for long-term investment projects is intended to provide financing for long-term investment in the real economy but due to economic policy pursued in Russia experiences a shortage of debt capital. Project financing growth with its own advantages will allow to make a significant quantum leap in Russia's transition to a new level.

The aim of the study is to summarize some theoretical and methodological positions concerning the formation of mechanism of project financing with participation of the commercial banks, as well as an analysis of the current state in the Russian market of project financing and some trends of its development.

## **2. General information**

The revenues generated exclusively in the framework of the project is

the multi-instrumental form of financing long-term investments allows to borrow funds in the amount of the company's total assets on condition of investing their own capital and aims to spread risks between the parties and at the same time the source of repayment of obligations.

In the economic environment there is a term «project financing» which implies a complex of tools for project financing, the term «project loans» is missing [1].

What they share is that the source of repayment of obligations are cash flows generated by the project out of touch with the current activity of the borrower, the assets of the project are the provision of such transactions.

The mandatory condition of providing a credit on the principals of project financing is investing their own funds by the initiators of the project in the amount of, as a rule, no less than 25-30% of the cost of the project.

Project financing offers a number of significant advantages for both the client (borrower) and the bank. The advantages can be summarized as follows:

- the possibility of development (expansion of existing business / diversification of activities); the opportunity to raise funds in the absence of an operating business generating sufficient cash flows sufficient to service the loan debt; separation of financial flows according to the current and project business, since the projects are usually implemented by a specially created project company; the ability to attract resources for longer periods in comparison with the standard commercial lending in order to replenish working capital; individual approach of the bank (i.e. the transaction structure and terms of financing depend on the characteristics of the particular project);
- fundraising ability without provision to cover 100% of loans; period

of benefits before starting the operational phase of the project and a flexible repayment schedule depending on the progress of the project; an opportunity to invest their own funds step by step and their usage as the collateral assets created / acquired in the course of the project; receiving comprehensive banking services including individual counseling during the period of preparation of investment proposals in the framework of financial advisory services. As far as the banks are concerned the important feature of project financing is often the possibility of its usage as a tool to attract, to retain and to have a long-term cooperation with the customers of strategic and priority industries [2].

In the course of the study we used the following instruments: Herfindahl-Hirschman index, regression analysis and real option method, which made it possible to assess the degree of restrictive practices in project financing, reveal the interdependence between the factors and assess the efficiency of the projects with due regard to their option characteristics.

### **3. Results**

At present Russian banking system does not have enough financial resources to support the real sector effectively and to meet the needs of all sectors of economy, including industry.

At the same time the problem lies in the fact that banks in the current situation do not implement the effective redistribution of the investment potential available to them.

The fact is that the ratio of the total net assets to GDP is much smaller as compared with the developed countries and it indicates that the role of banks is not high enough in Russian economy as compared with those of other countries.

As a result of growing disparities between the development of real and financial sectors of economy there is a crowding out effect in which bank credits tend to be crowded out from the real sector rather than attracted to it.

The current dependence of banks on the short-term money market with deterioration in the financial situation of enterprises and organizations of the real sector of the economy has led to accumulation of crisis potential. At the same time there formed a link between the crisis in the banking sector and in the real sector of economy. Deterioration in the financial position of the non-financial enterprises and the appropriate compression of funds in their bank accounts have led to a decrease in the resource base of the commercial banks and their investment in production [3].

The main obstacles interfering intensification of production investment are the following:

- high level of investment risks in the real sector of economy;
- short-term nature of the current base of resources of banks;
- the market of the effective investment projects is not formed.

Traditionally credit risks are increased in Russia due to a number of economic and legal characteristics. Firstly, it is the general state of Russian economy which despite some improvements is characterized by financial instability of some enterprises, unskilled management, etc. Secondly, the imperfection of the legal protection of the interests of the bank as a creditor and its rights to the property of clients is inherent in the current system of registration of mortgages. Under these circumstances there is a significant concentration of credit risks concerning the limited number of borrowers [4].

The next risk factor is a mismatch between the short-term liabilities and investment needs as a result of which investment lending threatens the bank's

liquidity. Calculating the ratio of borrowed funds to those placed by banks indicates that the most balanced from the standpoint of resource availability are the short-term investments. With increasing the time of duration of investments the gap between investment amount and the sources of their funding invested for more than 3 years increases in funds up to five times.

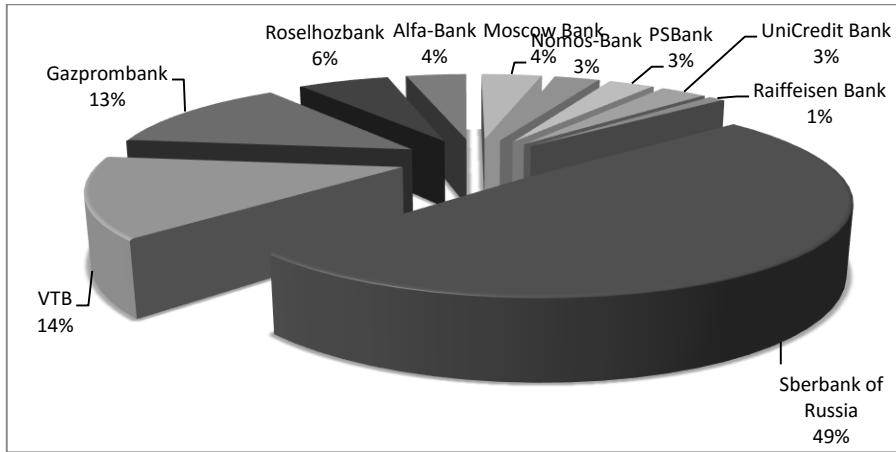
Many commercial banks are engaged to a greater or lesser extent in short-term lending but the provision of investment loans and financing of investment projects are the spheres of activity of the certain categories of banks and due to their particularity they are able to reduce investment risks. These categories of banks include: banks of the financial-industrial group, the corporate banks formed on a sectoral basis and servicing corresponding productions and banks participating in the projects of the international institutions (World Bank, EBRD and others.)

The fact is that the market of investment projects has not been formed. The projects proposed are characterized by poor drafting. Banks are forced to deal with all work packages conjugated with project financing [5].

Russian market of the long-term loans including project financing has a high degree of concentration.

The largest Federal banks with their sufficient long-term resource bases have the opportunity to place their funds in long-term assets but most of the other banks experience liquidity problems due to the fact that there is a gap in terms of investment and borrowing. These banks very often do not have access to the international markets for financing transactions of the project in its classical form. Maintaining the sufficient long-term liabilities and compliance in placing funds is the major factor in any credit institution and vice versa discrepancy is a deterrent factor in the development of project

financing by the medium-sized banks.



**Fig.1.** - Distribution of banks in terms of loans (FCPF, 2013) [6]

Figure 1 shows the shares of the largest banks providing long-term loans. The top three leading banks are: Sberbank of Russia, VTB, Gazprombank. Roselhobank, Alfa-Bank, Moscow Bank, Nomos-Bank, UniCredit Bank follow them and PSBank respectively closes the ten top.

In order to check the validity of this conclusion the mathematical calculation of Herfindahl-Hirschman Index was carried out and it allowed quantifying the degree of monopolization of the market of project financing. The index was calculated by the following formula:

$$HHI = S_1^2 + S_2^2 + \dots + S_n^2, \quad (1)$$

where:

- the market shares of credit institutions in the total volume of crediting of enterprises and organizations for more than 3 years in the country expressed as a percentage are defined as the ratio of the volume of loans issued to enterprises for more than 3 years to the total amount of allocated funds in the form of loans to enterprises and organizations by all credit

institutions in the country in general.

$n$  – is the conditional number of banks being the most significant participants of credit market of the legal entities according to rating posted on the Banks. Ru.

$I$  equals to 2818, indicating a highly concentrated market.

As for the situation on the market of 01/04/2014 we can observe the same level of market concentration, however, the degree of concentration is higher and it forecasts further strengthening of the degree of monopolization in the future due to occurrence of mergers and acquisitions.

The above analysis of the dependence between the volume of project financing and the factor variables allowed to calculate the regression equation which describes the dependence between the volume of project financing and the amount of funds, the placement of funds by banks, the volume of profit of the credit organizations. Foreign investments into the banking sector can be expressed as follows:

$$Y = 973,53 + 0,1281 * X_3 - 0,0347 * X_4 + 1,2522 * X_6 - 0,4841 * X_7 \quad (2)$$

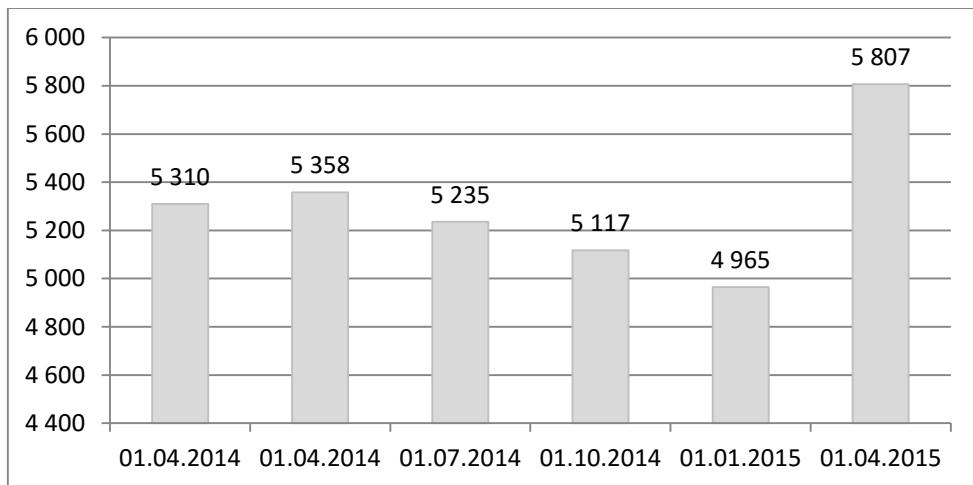
where:  $V$  – is the volume of project financing;  $X_3$  – are the funds borrowed from banks;  $X_4$  – funds invested by banks in rubles, in total;  $X_6$  – amount of current year profit of credit institutions;  $X_7$  – foreign investments in Russian banking sector.

In this example the amount of borrowed funds  $X_3$  has the greatest impact on the value of project financing and foreign investments in Russian banking sector  $X_7$  – the least.

**Table 1.** Predicted values of indicators (bln. rubles)

Reporting date	Volumes PF	Funds of banks	Banks' funds in rubles	The volume of the current year profit of credit organizations	Foreign investment in the Russian banking sector
01.04.2014 r.	5 358	36 261	10 282	375	771,5
01.07.2014 r.	5 235	37 455	17 739	375	806,0
01.10.2014 r.	5 117	38 649	25 051	375	840,5
01.01.2015 r.	4 965	39 843	33 350	375	875,0
01.04.2015 r.	5 807	41 037	13 031	375	909,5

If we substitute the forecast data into the regression equation presented above we have the following forecast data concerning the volume of project financing. The expected volumes of project financing are presented graphically in Figure 2.

**Fig. 2.** Dynamics of project financing in the forecast period, bln.rub [7].

#### 4. Conclusion

The need to intensify the participation of banks in the investment process follows from the interdependence of the successful development of banking system and economy as a whole. On the one hand, commercial banks are interested in a stable economic environment being a prerequisite for their

activities, on the other hand, sustainable economic development depends largely on the degree of reliability of the banking system and its effective functioning. At the same time the participation of credit institutions in the investment of different sectors of economy occurs only under favorable conditions because the interests of the individual bank as a commercial establishment are focused on profit maximization at an acceptable level of risk. Due to limited access of Russian banks to the overseas markets under conditions of high uncertainty, the increase in investments in national economy goes down, therefore the importance of drafting financial instruments to create an efficient mechanism for project financing, involving credit banks, is evident.

Thus taking into account the need to develop production sector and upcoming changes in investment policy of Russia we can assume with confidence that project financing as a type of banking service will be an effective tool for engagement in the modern economy.

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