

Investment Activities of Russian Railways

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Abstract—The concept of priority development of the infrastructure component of the economy assumes a significant increase in investments in new construction projects and an increase the capacity of the railway infrastructure of Russia. Macroeconomic efficiency of the investment program is the most important instrument for achieving the strategic goals of Russian Railways JSC in the conditions of the industry reform. The company consistently implements the tasks of optimizing the investment process by switching to the design principles for the formation and management of the implementation of the investment program of Russian Railways JSC. The investment program of the company is formed, first of all, taking into account the decision of the nation-wide tasks of ensuring economic security. This approach allows more flexible response to changes in the forecasts of the country's social and economic development as whole and at the most important freight-forming regions.

Keywords— *investment program, transport strategy, analysis and evaluation of investment activities*

I INTRODUCTION

The new version of the Transport Strategy of the Russian Federation [1] is aimed at the formation of a unified transport space of Russia on the basis of a balanced advance development of an effective transport infrastructure.

The strategy also provides accessibility and quality of transport services for residents in accordance with social standards, ensuring accessibility and quality of transport and logistics services in the field of freight transport, integration into the global transport space, the implementation of the transit potential of the country, improving the safety of the transport system.

Under the conditions of severe technological limitations and significant costs of the pre-project stage, an unambiguous correspondence between the public nature of the consumption of railway infrastructure services and the state (budget) sources of investment resources is practically unattainable. The purpose of the study was to assess the current practice of decision-making on the sources of financing of investment infrastructure projects of Russian Railways. In the process of the study were set and solved the following tasks:

- From the standpoint of investment theory identified the features of financing investment activity of JSC "Russian Railways";
- Identified the bottlenecks in the investment process, as the results of the process of analyzing its implementation;

- Proposed promising areas eliminate identified barrier areas of the investment process with the application of Kaizen methodology;

- Tested in the framework of the East-Siberian railway - branch of Russian Railways JSC proposed design solutions.

II MODELS AND METHODS

Since the efficiency of the transport system is estimated mainly through the financial result, the assessment of the economic security of the company as a result of the implementation of the investment program mainly uses the traditional method of assessing the financial aspects of the project.

However, the long-term nature of transport infrastructure development projects implies the development and modification of traditional methodological approaches that were based on the target setting of analysis of the railway's production and financial activities as a key element of the railway segment of the transport system and the regulation of traffic volume and key quality indicators.

III RESULTS

The evolution of "Russian Railways" JSC assumes, within the framework of the implementation of the base scenario, the completion in 2017-2025 of the level of investments to 5506 billion rubles. At the same time, the estimated share of depreciation should be 44.1% and amount to 2429 billion rubles; net profit - 14.6% and amount to 803 billion rubles. [2]

Thus, the level of the key indicator of economic security characterizing financial sustainability, namely the long-term debt ratio, which shows how much of the constant capital is financed, or the extent to which the enterprise depends on long-term borrowed funds in financing its assets, will increase. This coefficient characterizing the demand in such economic transactions, which ensure the attraction of long-term borrowed capital, should amount to 49.8% and its value is projected to grow by 30.2% relative to the 2016 state [3].

Taking into account the main concepts of the Transport Strategy of the Russian Federation [4], the investment program of JSC "Russian Railways" is formed on the basis of the following priorities:

- public importance: the investment program included priority objects that are effective not only for Russian Railways, but also a multiplier effect for the transport system and the economy of the country as a whole;

- technological requirement: the investment program takes into account the need of Russian Railways to update the retiring assets that ensure the technological stability of the company and the safety of the transport process;

- economic efficiency: projects with higher economic efficiency indicators are included in the investment program.

The structure of Russian Railways' investment sources for the period up to 2025 is planned taking into account the solution of these strategic tasks as follows (Figure 1).

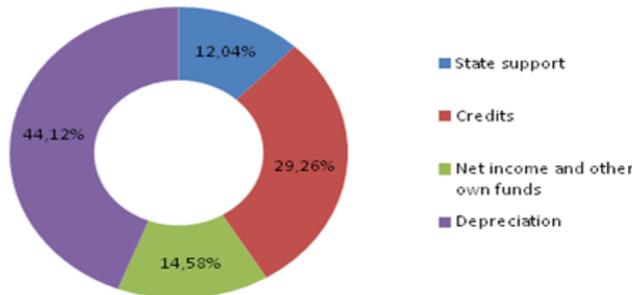


Fig 1. Sources of investments (base scenario) 2017-2025 (Source: Head of Corporate Finance Department, 2018)

According to the results of the analysis of investments identified barriers and omissions that lead to significant risks:

- financial risks of the company (deficit limit, detection of financial violations),

- image risks of the company (violations identified during inspections by the accounts chamber of the Russian Federation, the Prosecutor's Office of the Russian Federation),

In addition, the presence of significant risks leads to loss of profit of the company due to the failure of the timing of the implementation of objects.

Main issues of concern:

1. Insufficient perfection of technology of work and interaction of departments and employees;
2. Quality of the developed project documentation;
3. Nonconformities to the project of actually purchased equipment;
4. Omissions in organizational activities during construction;
5. Insufficient number of labor resources to implement the investment program.
6. A significant increase in the cost of construction due to the need to include additional works unaccounted for by the project documentation.

In order to eliminate the identified barriers and omissions, work was carried out based on Kaizen technology (principles of lean production) and techniques implemented within the

framework of the corporate quality management system, and consisting in building relationships between the participants of the investment process.

As part of building relationships with other participants (services, directorates) of the investment process in the region, the Directorate was guided by the same principles of quality management and conducted additional analyses to identify problem areas.

As a result of the analysis of the process of implementation of investment activity, the following barrier places were identified:

1. Absence of pre-design stage.
2. Failure to meet deadlines for IRD.
3. Tight design time.
4. Poor quality project.
5. A formal approach to the conduct of departmental amination.

The presence of the identified barrier areas allowed evaluating as a result the projects as not suitable for implementation due to significant omissions, the elimination of which requires:

1. Projected (or adjustment) of the project;
2. Additional financing;
3. Preens terms of input of object in operation;
4. As a result, there is financial, tax, image risks from untimely implementation of the project.

In order to address the identified barrier of the places Directorate was developed the regulation "On the interaction of participants of investment process at formation and realization of investment program of "RR" JSC at the site of the East Siberian railway, the customer functions which performs the East-Siberian Directorate for capital construction" approved by order of the chief of the road. Within the framework of the order, a permanent technical and technological Council, working groups and subgroups, as well as a responsibility matrix clearly distributing powers, duties and responsibilities between the participants of the investment process were also approved.

As a result of actions to reorganize internal activities of the Directorate and on building relationships with the participants of the investment process, was obtained a transparent and streamlined mechanism for the interaction of the customer divisions in the region, contractor and ensures implementation of the investment tasks with the proper quality and in a timely manner. [5]

After the formation of an adequate mechanism of interaction between the participants of the investment process, work began to minimize the risks of implementing the investment program. For this purpose the matrix of distribution of responsibility between departments (sectors) of management on minimization of risks, the exception of the revealed barrier places and omissions in organizational

activity at implementation of the investment program of Russian Railways JSC on the range of VRR was developed and approved. Thanks to the introduced matrix, the transparent mechanism of realization of object is built, from a stage of pre-design studies before its commissioning, and also multilevel control which allowed:

- improving the quality of the developed project documentation;
- eliminating non-compliance with the project actually purchased equipment;
- eliminating gaps in organizational activities during the construction;
- excluding a significant increase in the cost of construction due to the need to include additional work unaccounted for by the project documentation.

Following the implementation of the matrix, a quantitative analysis of reducing the risks of implementing the investment program was carried out.

IV DISCUSSION

During the formation of the investment program of «Russian Railways» the classical principle of coherence of sources of financing and the structure of the investment program is used.

Thus, the Company seeks to consolidate financing of the investment budget, directed to:

- Renewal of fixed assets at the level of depreciation;
- Commercially effective projects at the level of borrowed funds;
- Commercially inefficient projects at the level of state support.

Russian Railways has classified the entire portfolio of investment projects by the criterion of payback and commercial efficiency in two categories.

The first category includes projects whose payback is reached on the horizon of 10-15 years and which company is ready to finance through its own cash flow, as well as borrowed funds within the permissible level of debt load.

The second category includes projects whose payback period is 15-30 years. These projects cannot be financed by JSC Russian Railways itself or due to borrowed sources.

Thus, it can be considered that projects can be financed in accordance with the "informal hierarchy" of funding sources that has developed in business [6], which is represented in the sequence:

- Undistributed profits;
- If the retained earnings are insufficient, borrowed capital is used;
- If the borrowed capital is not enough, the share capital will be used.

Accepting the clause about the "informal hierarchy" as a working hypothesis, it can be assumed that among the four possible sources of financing, two of the approved areas of investment should be financed from their own sources, specifically by updating fixed assets at the level of depreciation. At the same time commercially effective projects at the level of borrowed funds are projected to be financed by loans and borrowings.

In accordance with the calculated value of the debt ratio, the percentage of assets that must be financed from debt funds should be 49.8%.

With this option of implementing the investment program, it is necessary to analyze the consequences of this method of forming the investment program in accordance with the objectives of the structural reforms implemented by JSC Russian Railways and not fully implemented by the first two stages of the structural reform, namely:

- completion of the process of establishing joint-stock companies on the basis of property, which in accordance with the established procedure is assigned to independent structural divisions of the open joint stock company "Russian Railways";
- increasing the investment attractiveness of the railway transport. [7]

Based on the analysis of the forecasted dynamics of net present value (NPV) and present value of growth prospects (PVGO), it is possible to evaluate the shares of JSC «Russian Railways» in case of their perspective emission in the forecast period. Estimating the ratio of NPV and PVGO, it is possible, as a result of assumptions about the preservation of the rates of changes in costs and revenues from transportation activities, to make a conclusion about investors' expectations about performance and investment in the future, namely:

- a negative indicator of the net present value assumes the need for investors to invest in the investment projects of JSC «Russian Railways», even in conditions of reinvestment of profit at a rate below market capitalization;
- the positive value of the present value of growth prospects characterizes the relationship between growth rates and the market capitalization rate; in the case obtained, the growth rate is less than market capitalization.

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According to the results of this work, it can be concluded that the measures implemented on the basis of the analysis and aimed at reducing the risks in the implementation of the investment program, increased the effectiveness of the investment program.

It seems necessary to further analyze the progress of the built-in mechanism in order to identify and further minimize risks. For this purpose, feedback on the implementation of measures, including from subordinate structures, as well as from higher organizations, is evaluated on a monthly basis. On the basis of the information received, corrective actions are made to perform the target task.

The further direction of work is the identification of internal reserves of the East Siberian Directorate for capital construction for further development and improvement of the implementation of the investment program.

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