Development features of integrated risk management system at construction enterprises

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Abstract: The construction industry is one of the leading sectors of the economy of any country today. The research is devoted to accounting and establishing the main patterns in the development of structural elements of risk management in the activities of the construction industry enterprises. Such concepts as risk, risk classification, informatization, the basic principles of developing a risk management system in the activities of enterprises, an investment project and an investment process are considered. The purpose of the article is to study the features and methods of improving the efficiency of construction enterprises based on the development of a risk management system. The object of the study of this article is the construction industry in Russia. The subject of the study is the specifics of the development of a risk management system at enterprises in the construction industry. The purpose of the research is to identify the features, patterns and methods of improving the efficiency of construction enterprises based on the development of a risk management system. The use of information modeling technology allows you to respond to all changes in the external environment, timely manage costs, including the timing of work, which allows you to adjust the progress of production processes in space quickly and time when any types of risks occur at all stages of the life cycle of the object.

Keywords: risk management, construction, real estate objects, life cycles of real estate objects, risk - management, information modeling technology.

1 Introduction

Construction is traditionally one of the leading economic sectors that play a fundamental role in the socio-economic development of any country in the world and set the prerequisites for ensuring social stability, including strategic economic sustainability. It is
the construction sphere that forms the conditions for the functioning of the entire market mechanism, which makes up the economic basis of the capitalist state, lays the foundations for solving complex social problems. However, in modern Russia, in the context of the macroeconomic crisis and geopolitical turbulence associated with a drop in real estate demand, a decrease in the solvency of the population, market volatility and an exacerbation of internal problems of organizational financial management, previously profitable investment and construction projects may increasingly become unprofitable, which inevitably leads to an increase in the number of bankrupt construction companies and the transition of the construction industry.

The issues of the effective functioning of the construction complex enterprises, the problems of economic regulation of their development and the determination of ways to increase their efficiency in conditions of risk are devoted to the research of many scientists, namely: Grabovoy P.G., Grabovoy K.P., Zagidullina G.M., Kamenetsky M.I., Lukmanova I.G., Khrustaleva B.B., Yaskova N.Y. and others. Many scientists are inclined to highlight the risks caused by the action of objective (external and unmanaged) and subjective environmental factors. Therefore, the validity and invariability of the first two principles of risk management can be considered a discussion issue due to the existence of objective risks accompanying the company's activities regardless of management decisions [1,2,3,4,5].

However the process of implementing and using a risk management system is complicated. Thus the main barriers that prevent the maximum effective use of risk management tools in the management of the enterprise include: insufficient development and effectiveness of the applied methods for identifying risks, incorrect assessments of threats and uncertainties; insufficient information support for risk management; poor quality of risk information low level of communication policy in the company, insufficiently adequate, up-to-date and complete exchange of information on risks between structural units; underdeveloped corporate culture of risk management, insufficient motivation of employees and management to a real one rather than declaration application of risk-oriented approach.

2 Materials and methods

The research allows you to classify existing methods of analysis and risk assessment into three mutually complementary groups: methods of qualitative, quantitative and combined analysis. The classification of risk analysis and assessment methods is summarized in Figure 1. [3, 4, 5].

The use of basic research methods based on the study of advanced and domestic experience in risk accounting in the activities of enterprises allows us to take into account these destructive prerequisites and features, which makes it possible to state that the situation in Russia remains tense, and the business prospects of enterprises in the construction industry are uncertain. Under the onslaught of destabilizing factors weakening the "immunity" of domestic enterprises in the construction industry to environmental turbulence, companies are turning to the search for new methods and means of management. One of these methods is risk management, the task of which can be recognized as maintaining the assets and profitability of the enterprise with the likely risk of significant losses.
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The purpose of risk management is to optimize the management system of the construction industry enterprises. Among the main tasks facing the risk management system are: identifying areas of increased risk; risk assessment; analysis of the acceptability of this level of risk for the organization; development of measures to prevent or reduce risk; in cases in which it is impossible to avoid the occurrence of a risk event, the development of measures to minimize or compensate for the damage caused.

3 Results

The main element in the risk management process is the classification of risks, on the basis of which the place of risk and its factors in the general risk system is determined. The main risk groups specific to the construction business are presented in Table 1. Two main groups of factors are distinguished - these are exogenous and endogenous. Exogenous ones include - general economic, sectoral, legal, political, social, environmental, geological, climatic. Endogenous factors include - technological, production, operational, marketing, organizational, innovative, financial, economic, social and labor, specific [5, 6, 7, 8].

The risk management system is based on a number of principles Thus, when making management decisions in this field of management, it is necessary to be guided by the principles: awareness of risk acceptance, comparability of the level of risks and the level of expected profitability, comparability of the probability of risk occurrence and the amount of associated losses for the enterprise, accounting for the time factor and the general strategy for the development of the enterprise.

The mindfulness principle implies that a manager who makes such decisions must have sufficient justification to carry out an action involving risk. At the same time, it should be considered that although risk avoidance is one of the permissible methods of risk management, it is impossible to completely eliminate risk situations from the functional activities of the organization. As financial risk is an objective phenomenon affecting many business operations of the enterprise.

The essence of the principle of comparability of the level of accepted risks with the level of prospective profitability is directly related to the principle of awareness. As the search for the optimal ratio of profit and risk is fundamental in financial management. Therefore, an enterprise can assume only those risks that are compensated by bonuses received as a result of the operation - in another case, the risk is unjustified [10,11].

The implementation of the risk-management system requires the conditions and readiness of management and executors to implement the program, which is greatly facilitated by the development of a corporate culture in the field of risk management. In order to understand the concepts, we highlight the "risk culture" as the main part in the formation of the internal environment of the enterprise, on the state of which risk management depends. At the company, business, or business level, personnel must be prepared to respond to risks and select the optimal risk-opportunity balance. In the process of forming positions and levels of the integrated risk management system, the conditions should be assessed taking into account the interests of each group of employees and by subdivisions.

When evaluating, it is important to have experienced personnel groups who, in terms of training, support the ideas of risk management, while management is carried out vertically and horizontally in order to implement a corporate risk management system and unlock the company's potential. For personnel, a detailed system of incentives and incentives is
important, on which the motivation of specialists to increase competencies for risk management depends. The system includes material assistance and financial compensation, intangible, socially oriented promotion and stimulation of career growth.

Making the system has a basis in the form of high-quality and complete information support that increases the efficiency of risk management at the enterprise. As experts point out, achieving minimization, neutralization and elimination of financial risks at the enterprise depends on the information base of risk management, which provides an inextricable, targeted process of selecting relevant informative indicators for assessment, identification, preparation of management decisions [10]. The initial requirements for the risk management information base include consistency, synchronization with the coordination structure of the risk management system; efficiency of information receipt; completeness and uniqueness of the received data; expansion of information receipt from verified sources.

Depending on the accuracy and regularity of the receipt of information, clarification is carried out on indicators from external and internal sources of information. In the era of digitalization, the formation of an information system for financial risk management depends on the introduction of automated information technologies for managing financial activities at the enterprise. The detail and quality of large amounts of up-to-date information contributes to the accuracy of risk assessment, for which it is important to actively use information modeling technology, which helps to process an unlimited amount of structured and unstructured data of various specifics [12,13]. The development of a risk management system based on information modeling technology becomes an urgent task of the enterprise functioning. However despite the noted advantages, a high degree of automation, information technology in the financial system also increases risks, reducing security, increasing openness and vulnerability in the IT sphere to the destructive impacts of competitors. конкурентов [14, 15].

4 Conclusion

Based on the research, it was established that the activities of the construction organization are associated with the main risks: industrial, organizational, investment, marketing, technological, innovative, industry, social and others. In order to respond to changes in the influence of external and internal environment factors in a timely manner, construction companies must create and organize a flexible and effective risk management system. Important factors of the low level of risk management implementation in Russia are the incorrect adaptation of the use of world risk management technologies without taking into account the specifics of the activities of domestic enterprises, the general low level of risk management culture, the lack of trained personnel in this area, declarativeness associated with a lack of real interest in the integration of risk management tools. It seems that national trends in increasing business risk in the construction industry will stimulate overcoming the existing problems of the risk management system in construction enterprises and its widespread implementation not only in large, but also in medium and small organizations. You can track the actual state of the object, control the expenditure of funds and the execution of budgets, as well as receive information for making management decisions in real time. Implementation in a single model, preparation and control of uniform work execution plans, preparation of integral and differential capital investment schedules, requirements of materials and equipment, labor resources, machines and mechanisms when changing individual parameters or introducing new conditions into the process under the influence of external or internal factors (changes in the design, delivery time of materials
and equipment) will allow you to quickly manage the work execution processes, as well as minimize and manage risks associated with the work execution time.

References


