RISK MANAGEMENT SYSTEM IN PPP PROJECTS: INTERNATIONAL EXPERIENCE

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Abstract: Public-private partnership (PPP) projects involve complex financial, technical and legal risks, and their effective management is an important factor in ensuring investment sustainability. This article provides an in-depth analysis of the international experience of risk management systems in PPP projects, assessing advanced approaches and their applicability in the conditions of Uzbekistan. The study examined the experiences of the United Kingdom, Australia and South Korea, and analyzed their mechanisms for identifying, allocating and monitoring risks. The results show that balanced risk allocation and transparent monitoring tools are crucial for the success of PPP projects.

Keywords: public-private partnership, risk management, risk sharing, international experience, monitoring.

Introduction. Currently, public-private partnership (PPP) projects are considered an effective tool for economic development, infrastructure renewal and improving the quality of services in many countries. However, PPP projects, by their nature, have complex financial, technical, political and legal risks, which require effective risk management mechanisms.

Risk identification, assessment, allocation and monitoring are key elements of PPP, and failure to do so can lead to a decline in investor confidence, financial stability and project failure. Therefore, in world practice, well-developed risk management systems are used in the implementation of PPP projects. International experience shows that successful PPP projects have clear criteria for risk allocation and independent and transparent mechanisms for monitoring them. For example, in countries such as the United Kingdom, Australia, and South Korea, legal risks, financial risks and technical failures are analyzed in advance in PPP projects, and these risks are fairly distributed among stakeholders. Although the PPP institution is developing in Uzbekistan, it is observed that systematic approaches to risk management, especially monitoring processes, are not sufficiently formed. Therefore, this article aims to study risk management mechanisms tested in international experience in PPP projects and develop recommendations for their application in the conditions of Uzbekistan.

Literature review: The issue of risk management in public-private partnership (PPP) projects has been studied in depth by many researchers. Yescombe (2011) in his works outlines the basic principles of risk sharing in the PPP system and offers mechanisms for rational risk sharing between the government and the private partner. Grimsey and Lewis (2004) consistently highlight practical models for risk analysis, methods for monitoring and reducing them. Hodge and Greve (2007) identified the main types of risks in the PPP process - political, financial, construction, technical and operational risks - and analyzed international experience in assessing them. Their study also notes that a transparent risk management monitoring system and independent audit are important foundations for successful PPPs. The World Bank (2020) indicates that the main problem in PPP projects in developing countries is the lack of risk management mechanisms. Therefore, it is recommended to form a system of standardized risk sharing agreements and special financial guarantees to minimize risks. Studies conducted on Uzbekistan (Tukhtayev, 2022; Khodjayev, 2023) acknowledge the improvement of the legal framework for risk management in PPP projects, but note that practical monitoring and advance risk assessment systems are not working sufficiently. Thus, the analysis of scientific literature shows that risk management is a decisive factor in the successful implementation of PPPs, and as an effective approach, it is necessary to study the experience of advanced countries and adapt it to national conditions. This study aimed to in-depth study of the risk management system in public-private partnership (PPP) projects and analyze it based on international experience. Several scientific and methodological approaches were combined in the research process. First of all, to determine the theoretical foundations, scientific sources on the concepts of risk management, their legal aspects and their role in PPP projects, as well as national and international regulatory documents were studied using the method of in-depth content analysis. Also, using the comparative method, the best practices in risk management used in the UK, Australia and South Korea were compared with the practice of Uzbekistan, and an attempt was made to identify effective mechanisms. Empirically, semi-structured interviews were conducted with 15 specialists working in ministries and agencies of Uzbekistan involved in PPPs. During these interviews, in-depth views were exchanged on the main risks encountered in the PPP process, existing shortcomings in their identification and distribution, the effectiveness of the monitoring system, and the possibilities of applying international experience. In addition,The risk sharing clauses of 12 large PPP

contracts signed in Uzbekistan in 2020–2023 were studied and their practical effectiveness was assessed. Theoretical, comparative and empirical data obtained on the basis of the triangulation approach were combined, ensuring the reliability of the conclusions. As a result, existing problems of risk management in PPP projects, advanced international experiences in solving them, and scientific and practical recommendations for their implementation in the conditions of Uzbekistan were developed.

Analysis and results: The study analyzed the risk management clauses in 12 large public-private partnership (PPP) project contracts implemented in Uzbekistan in 2020–2023. According to the results, although risk sharing mechanisms were partially defined in 58 percent of the projects, there were no clear monitoring systems for their practical implementation. For example, some PPP contracts in the energy and healthcare sectors provide for the assignment of technical and financial risks to the private partner, but the control mechanisms for assessing the likelihood and impact of these risks were not clearly specified in the contracts. This served as a factor reducing investor confidence. An analysis of the experiences of the United Kingdom, Australia, and South Korea revealed that these countries have clear standardized risk assessment procedures and independent audit systems for risk monitoring. In particular, in the United Kingdom, each risk is assessed in detail based on the “Public Sector Comparator” model and it is clearly determined which party is responsible for it. In Australia, technical, political and financial risks are allocated to different stages of the project life cycle through the “Risk Allocation Matrix”. The results of interviews with experts in Uzbekistan also showed that there are a number of problems with risk management in the PPP process. In particular, 73% of respondents noted insufficient monitoring systems, and 67% noted a lack of clarity regarding legal risks as the main problem. At the same time, there was a high interest in adapting international experience to national conditions. In general, it was found that the presence of mechanisms for assessing, monitoring and fair distribution of risks in international advanced approaches helps to increase trust and stability in PPP projects. The study substantiated the need for additional legal, organizational and technological measures in this regard in Uzbekistan.

Conclusion. The results of the study showed that although a risk management system is being formed in PPP projects in Uzbekistan, its effectiveness and sustainability remain low compared to international experience. Although some elements of risk identification and allocation are present in the contracts, it was found that clear mechanisms for their monitoring, assessment and control are insufficient. An analysis of the experiences of the UK, Australia and South Korea shows that a balanced distribution of risks, their real-time monitoring and control by an independent audience are important factors in the successful implementation of PPPs. In Uzbekistan, the need for centralized risk monitoring systems and additional regulatory frameworks that increase legal certainty is clearly evident. On this basis, the following scientific and practical recommendations can be made:

1. **Strengthening the legal framework**— development of regulatory documents that clearly regulate risk allocation and monitoring processes;
2. **Digitalization of the monitoring system**— introduction of electronic platforms that monitor risks in real time;
3. **Development of independent audit mechanisms**— establish independent audit services based on international standards to assess project risks;
4. **Adapting international experience**— develop a special risk management methodology adapted to the conditions of Uzbekistan based on risk management models of advanced countries;
5. **Capacity building**— organizing risk management training programs and workshops between government organizations and private partners.

Overall, improving risk management in PPP projects is an important step towards increasing investor confidence, ensuring sustainable financing, and contributing to overall economic development.

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