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Planning a Risk Management System for PPP projects to Increase the Competitiveness of Business Structures

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Abstract

This article addresses the critical need for effective public-private partnership (further - PPP) models amidst economic, social, and political challenges in Kazakhstan. The results of the study are aimed at improving the identification of risks for making informed decisions. It delves into scientific achievements relevant to assessing business activity and nurturing entrepreneurial culture. Employing comparative analysis, the research examines domestic PPP practices, drawing insights from statistical data. The findings emphasize PPP's role in ensuring national economic competitiveness, with legislative improvements positively impacting growth. The analysis of foreign practices critically examines the evolution of public-private partnership (PPP) development in Kazakhstan by juxtaposing it with the experiences of leading nations. The United Kingdom has demonstrated successful partnership models based on transparency, clear terms, and mutually beneficial relationships, serving as an example for Kazakhstan in enhancing collaboration between the public and private sectors. The SWOT analysis identifies inefficiencies, stressing the importance of transparent project teams and systematic risk management. Sectoral insights highlight a decline in private sector involvement, emphasizing the need for regulatory improvements and risk reduction in PPP implementations. The study emphasizes PPP's indispensable role in Kazakhstan's socio-economic development, advocating for continuous reforms and advanced risk management. The proposed PPP project management algorithm aims to foster efficiency, address challenges, and stimulate economic activity, paving the way for sustainable infrastructure development.

***Keywords**:* Economics, Public-Private Partnership, Business Structures, Private Sector, Project, Planning, Risk Management, Management Mechanism

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1. INTRODUCTION

Today, in light of new realities, Kazakhstan is experiencing certain economic, social and political difficulties, which greatly affects the development of structural and production relations in economic sectors. Global challenges in the context of new approaches to economic management determine the need to comprehend modern scientific achievements in the practice of public-private partnership (hereinafter - PPP) as economic entities in order to assess their business activity, which is the driving force behind the development of socio-economic processes, the creation of various organizational and business structures, forms of interaction in the public sector and private business, the formation of Kazakhstan's entrepreneurial culture.

Research in this area is due to the fact that the expansion of possible cooperation between a public institution and private business, the process of managing PPP projects causes various problems that are associated with risk sharing, attracting non-state financing, improving management efficiency and attracting new technologies.

The rationality of using limited resources in the production of goods and services and meeting the social needs of the population by PPP subjects is one of the important economic categories for conducting research within the framework of the new economy of Kazakhstan. This will take business in Kazakhstan to a new level, in the form of a reorientation of business processes in the private sector from short-term goals to the implementation of a long-term development and cooperation strategy, which increases business activity and cooperation of PPP business structures. Accordingly, with the growing need for infrastructure in Kazakhstan, it is necessary to expand opportunities for PPP, since the state budget cannot fully provide financing for social facilities. In particular, as the OECD data shows, the need to develop PPP in Kazakhstan is justified as follows.

Kazakhstan's infrastructure needs are growing as its economy and population grow. Analysis of statistical data for 2019 shows that with Kazakhstan's GDP growing by 4.3% per year, the country's infrastructure spending will average $292 billion (or 3.93% of GDP) until 2040, which, compared with the current level of spending, means an increase in the investment deficit amounted to $84 billion (1.11% of GDP). Although this gap tends to be observed in all sectors, it is more noticeable in cross-border infrastructure, energy and roads; it also affects the construction of new infrastructure, as well as the operation and maintenance of existing infrastructure. It is estimated that about 75% of the existing infrastructure requires replacement or reconstruction (OECD, 2019).

The results of a study by Kazakhstani experts indicate that in the implementation of PPP investment projects, risk assessment during planning is insufficient and is due to the fact that public-private partnership is used as a way to solve social infrastructure problems. This is a lack of quality life support facilities: healthcare and education organizations, telecommunications facilities, communications, gas supply, energy supply, heat supply, water supply and sanitation, housing and communal services. Today, meeting the social needs of the population accounts for more than 87% of PPP investment projects from the total number of projects being implemented in Kazakhstan.

PPP markets in the regional context of Kazakhstan are still at the stage of formation or development, therefore for promoting private sector investment in infrastructure and creating sustainable projects acceptable to all participants in this process, ongoing regulatory reforms and institutional strengthening are needed. Especially in terms of planning and risk management that arise during the implementation of investment projects. With the help of a clear construction of an algorithm for planning and managing PPP risks, it is possible to provide support in developing efficiency and solving various problems associated with infrastructure and PPPs, in developing sustainable infrastructure projects and in delivering efficient and efficient public services through

PPPs. Therefore, the scientific article also discusses investment issues climate change, formulate effective market rules and create strong legal and institutional framework for ensuring private sector participation in infrastructure development through PPP.

The purpose and hypothesis of the scientific article is to identify possible losses during the implementation of the PPP mechanism in the context of improving mechanisms for the effectiveness of risk management planning, as well as to develop proposals for stimulating the economic activity of PPP. The scientific significance of this article is justified by the fact that an algorithm has been proposed for planning a risk management system for PPP investment projects to achieve common goals and socio-economic benefits for all participants in the implementation of PPP.

2. LITERATURE REVIEW

The competitiveness of business structures and the institution of the state in the implementation of joint investment projects largely depends on the creation of PPP infrastructure, since its main role is aimed at meeting the social needs of society. The effectiveness of the implementation of PPP projects is ensured by the rational functioning of contractual mechanisms of interaction between private entrepreneurship and the state, aimed at eliminating and reducing the negative impact of risks for the successful implementation of the PPP project.

According to some scholars, the concept of PPP is interpreted as an agreement under which the private sector uses public assets and provides infrastructure services usually offered by the state (Schwartz et al., 2013). Therefore, each of the PPP participants carries out their subsequent distribution among the participants of the PPP project and plans the activities of each partner on risk management (Kondratieva, 2015). At the same time, the results of the study revealed the applicability of the risk matrix in the planning of the PPP project risk management system, which is a "living mechanism" and can be changed by agreement of the PPP project participants (Sokolov & Maslova, 2013). Thus, each of the project participants minimizes risks with a clear reflection of the planning system in PPP investment projects.

The use of the PPP project risk management planning system in foreign practice is one of the most optimal ways to build a partnership mechanism between the state and private business (Arekeeva, 2018; Special Report, 2018). A review of foreign literature allows the authors of the article to focus their research on planning a risk management system in the process of investing and creating infrastructure for the formation of an effective PPP institution and its infrastructure management, since the business community participates in "state" projects, creating large public infrastructure facilities (Shokhin & Oganisyan, 2020) by planning possible risks of state entrepreneurship activities. An effective way to prevent such a situation is to develop a risk matrix for a PPP project, which includes a list and description of all risks for this PPP project, an indication of the party taking the risk, and, in some cases, ways to prevent risks, actions to minimize them. Accordingly, due to the lack of experience in risk management in combination with the PPP regime, there is an urgent need to identify and early warning of risk factors throughout the process of implementing PPP projects (Shao et al., 2021). It should be emphasized that according to foreign scientists, twenty-nine key barriers were selected and classified into six groups of barriers (Kim & Le Touc, 2021). However, they are not sufficiently defined to determine the criteria for systematization of planning possible risks at all stages of the implementation of PPP projects.

The need to attract private resources to infrastructure using the PPP model is of particular importance in the current crisis period due to the depletion of public sources, as well as a reduction in foreign direct investment (Poor, 2022), despite the complex nature of the manifestation of risks in PPP investment projects. In fact, the experience of foreign countries in the use of PPP in

comparison with the experience of Kazakhstan can be very indicative on many issues, in particular on planning a risk management system taking into account the industry affiliation of PPP projects in a crisis, which is little studied in domestic science.

In the project planning system, the values of risks associated with contracts, political risks, capital repair risks, information risks and employee risks pose initial serious threats, but decrease with the transfer of the PPP project (Guo et al., 2023). At the same time, the planning of the risk management system should be taken into account by both the state institution and business structures in order to minimize them throughout the entire stage of the implementation of the PPP investment project. According to the authors of the article, most models of investment behavior of PPP participants proceed from the simple assumption that the investment decisions of PPP participants are based on a simple calculation of costs and benefits. The main critical success factors were proper risk assessment and their distribution among private parties, a realistic assessment of project estimates, risks and revenues, as well as the avoidance of ambiguous contract wording (Fathi & Shrestha, 2023). Firms invest today to the extent that their expected future benefits outweigh current costs, without taking into account the potential risks associated with changing circumstances over time. The involvement of the private sector is crucial for the introduction, allocation of financial risks and promotion of technological innovation (Taron et al., 2023).

The issues of risk management problems in domestic practice will be further focused on the study of methods for predicting possible risks of PPP projects in order to attract the attention of foreign investors for the conclusion of long-term contracts. With the introduction of the algorithm for planning structured risk management systems for PPP projects, the effectiveness of this process is to ensure the rational use of financial resources of participants in PPP projects and ensure its successful implementation.

3. METHODOLOGY

In the process of writing this scientific article on the analysis of the planning of the risk management system of PPP projects and the effectiveness of interaction between the two main subjects of the social goods market, methods of scientific knowledge and comparative analysis were used, which involve comparing domestic PPP practice with foreign experience in the development of PPP projects, characterizing the development of infrastructure and the impact of PPP projects on the socio-economic development of the country. In this regard, the only practical and large-scale method of studying the effectiveness of the PPP management system planning is the structuring of the PPP project management algorithm aimed at improving the qualitative measurement of unforeseen risks at all stages of the implementation of PPP investment projects in order to analyze the purposeful joint policy of business structures and the state in the field of PPP development and support.

The empirical base of the study consists of statistical data and indicators of the effectiveness of the development of PPP projects obtained from the official website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. This information, based on the SWOT analysis method, made it possible to identify and systematize the strengths and weaknesses, opportunities and threats to the effectiveness of the PPP mechanism in Kazakhstan and to build a mechanism of interaction between the two sectors of the PPP economy based on the planning method.

To reveal the content of the article, the scientific results and the work of domestic and foreign scientists on the planning of the risk management system of PPP projects were studied. In the process of conducting the review as a method of studying scientific literature, reports, publications of international organizations and relevant studies were used, which form the theoretical and

methodological basis for the study of issues of planning the risk management system of PPP projects in the context of ensuring the competitiveness of public and private entrepreneurship. When writing the article, various approaches to risk management of PPP projects were studied to improve methods for reducing unforeseen risk events in implementing PPP investment projects.

The article proposes an algorithm for planning a risk management system for PPP projects to establish trust between the institution of the state and business entities, taking into account the use of the classical general scientific methodology in the context of assessing possible risks using a specific goal, namely standard and unique methods of scientific analysis, such as induction and deduction, analysis and synthesis, a systematic approach, graphical method - visualization of the results. The analytical research methodology based on a systematic approach was applied when writing this article.

Statistical information obtained from official open sources of various entities interested in PPP projects was used as an information base for writing the article. An extensive database, in our opinion, will provide an excellent opportunity to assess the region's socio-economic development based on the planning and risk management of PPP investment projects and identify the main problems that negatively affect the development of PPP in general. For the accessibility of the presentation of the material, methods of graphic illustration are used, which allows us to understand in more detail the essence of the development of PPP at the present stage. The planning method determines the effectiveness of the implementation of PPP projects by taking into account the rational measurement of the risk management system, the content of which is determined by economic, legal, political, social, technical, industrial, and environmental conditions.

4. FINDINGS AND DISCUSSION

The impact of global changes on economic development once again confirms the importance of developing entrepreneurial structures, including the importance of the PPP mechanism in ensuring the competitiveness of the national economy and the development of a socially oriented market model.

Practice confirms the need for legal regulation of investment projects, primarily compliance with the principles of functioning of the financial mechanisms of PPP projects. Therefore, attention should be paid to improving the mechanism for the development of private investment and strengthening the role of public authorities in the implementation of PPP projects, which is confirmed by the results of analytical data. Thus, in the period from 2003 to 2016, 23 contracts totalling 61 billion tenge were concluded between the state and the private sector. In 2017, 160 contracts totalling 146 billion tenge were signed, and by 2020 the figures will increase several times: 800 contracts worth 1.8 trillion tenge were signed after the adoption of the Law “On Public-Private Partnership” in 2015, the situation in the sphere of interaction between the two market entities improved. Significantly improved (Shapovalova & Queen, 2019) the legislative framework for regulating the relationship of trust between participants in PPP investment projects and the planning of risk management systems is controlled by regulatory legal acts that contribute to improving the PPP development process.

Analysis of the practice of foreign countries shows that for the implementation of projects based on the PPP mechanism, the leading countries are distributed as follows: the share of Great Britain is 39%, France - 17%, Germany - 13%, Spain - 12% and the share of other countries is 20%. The undisputed leader is the United Kingdom, which was the first to use the partnership mechanism between business and the state (Abdumomunova, 2016). Among the priority measures for the development of PPP in the innovation sphere in the United States, the legal framework for the creation and transfer of technologies was highlighted (Nikolaev, 2021). It should be noted that the experience of PPP development in developed economies can be adapted

to Kazakhstan's PPP project development system. According to the authors of the study, new relations of cooperation between private business entities and the state in the context of the global economic crisis will allow the implementation of investment projects in terms of maintaining aggregate demand, which is more attractive for public procurement and foreign investment. At the same time, risks are increasing, so it is necessary to strengthen monitoring and planning of the possible risk management system within the framework of PPP projects in Kazakhstan (Figure 1).

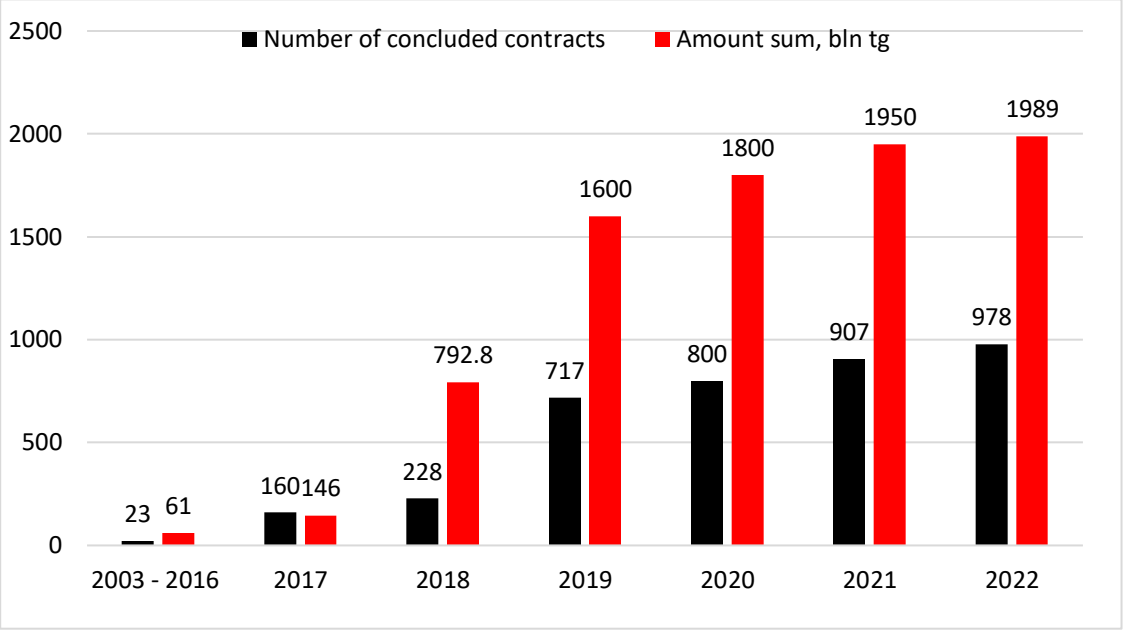

FIGURE 1. PPP investment projects

Note: compiled by authors

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Practice confirms that it is quite challenging to assess the economic and social impact of the implementation of PPP projects, and the effectiveness of the assessment is possible only at the

level of quantitative measurements since interest in the PPP institute depends on the capital intensity of the project. We should not forget that large projects require significant investments that domestic private business does not have. Foreign companies invest in most large projects (more than 87%) with competitive advantages over Kazakhstani business structures.

The results of the research showed that the strengthening of the role of PPP as a mechanism of interaction between the institution of the state and the private sector is due to the adoption of the law "On Public-Private Partnership" (2015), which replaced the Law "On Concessions" (1991). Legislative measures have created more flexible approaches to managing effective interaction between public and private partnerships. As a result, favorable conditions for the development of PPP are based on the removal of many restrictions, trust management, lease agreements, service contracts, the implementation of projects at the local level, the conclusion of project agreements on private initiative, which expanded the economic freedom of private business entities and improved the quality of products and services provided. The results of the implementation of the new Law had a positive impact on the development of cooperation between public and private structures, as evidenced by the statistics of the Kazakhstan PPP Center on concluded contracts in the period from 2003 to 2020 (Bednyakov, 2022).

However, the analysis of statistics for 2019 - 2020 shows that the growth rate of contracts (projects) has significantly decreased, the main reason is the COVID-2019. Therefore, this situation affects the implementation of projects and the emergence of risks at the global level. Analysis of data for the period from 2021 to 2022 shows that 34 PPP projects were implemented in the region at different stages. For 2023, there were an additional 22 projects, agreements were concluded. The total amount of state obligations paid from the local budget in accordance with the agreements is 3.5 billion tenge.

There are 5 projects in the healthcare sector. The contract period is from 2018 to 2024, with government obligations amounting to 1.8 billion tenge. There are 2 projects in the road sector. The contract period is from 2018 to 2022 (service maintenance of the Chapaevo-Zhangala-Saykhin highway, 0-337 km. East Kazakhstan region, installation and maintenance of 81 controlled and 162 stationary video cameras of the Suncar Smart City intelligent video surveillance system in the Baiterek region of East Kazakhstan region). State liabilities amount to 1.6 billion tenge. In the field of veterinary medicine, there is 1 project and the contract period is from 2021 to 2025 (services for maintenance and deworming, identification, sterilization, vaccination of stray dogs and cats in the city of Uralsk). State obligations amount to 80 million tenge.

In the field of education, 13 projects for 2020 - 2028 (trust management of school canteens with ongoing repairs and replacement of equipment in 44 secondary educational schools in the city of Uralsk and eight secondary educational schools in the city of Aksai, Burlinsky district of the West Kazakhstan region; re-equipment of a residential building for a kindergarten) Data projects are implemented without any payment of government obligations. In the healthcare sector, 1 project will be implemented from 2021 to 2023 (providing services to a radiation therapy center based on the State Enterprise at the Regional Oncology Dispensary in Uralsk). This project is being implemented without any payment of government obligations.

The economic effect of PPP projects is primarily determined by the number of implemented projects (including innovative ones) jointly by the state and private business. Accordingly, innovative PPP projects are particularly vulnerable in the context of global changes, as there are economic risks. Therefore, developing a risk management system to implement PPP projects is necessary.

The innovative and scientific component is not fully reflected in the development content and the implemented projects. It affects the economic and social effect. That is, there is a considerable

gap between the fundamental and applied part of research. Investing through public-private partnership mechanisms could help to reduce this gap (Database and others, 2018).

PPP mechanism of interaction between the two sectors of the economy has advantages compared to other forms of entrepreneurship (joint entrepreneurship), since the implementation of investment projects is protected and guaranteed by the state in the conditions of a pandemic. The data analysis on the research subject made it possible to identify and systematize the strengths and weaknesses, opportunities and threats to the effectiveness of the PPP mechanism in Kazakhstan using the SWOT analysis method (see Table 1).

TABLE 1. SWOT analysis of the effectiveness of the implementation of PPP projects

Strengths	**Weaknesses**
-Availability and distribution of risks between project participants; -Optimal way to solve socio-economic problems; - Reducing the current burden on the budget; - Provision of jobs; - Competitive pricing policy; - Improving management efficiency; -Guarantees for the implementation of innovative projects.	-Limited budgetary and human resources; -Weak PPP project planning system; -Imperfection of the PPP legislative framework (tax component); - Lack of experience in the field of PPP projects; -Weak development of the innovation sphere; -Unequal power relations of partnership members; -Lack of risk management mechanisms for PPP projects.
Opportunities	**Threats**
-Stable development and predictable profitability of projects; - Project risk insurance; - Tax benefits and preferences; -Attracting new technologies and innovations; -Adoption of systematic measures aimed at increasing the motivation of private entrepreneurs to participate in the innovation process; -Raising to the level of a legislative act only general and conceptual issues that give an unambiguous idea of the PPP model in the Republic of Kazakhstan.	-Bureaucratic and corrupt; -Financial risks, lack of proven mechanisms for financing services; -Insufficient knowledge of PPP mechanisms and the consulting services market on the part of government agencies; -Reduction in the number of contracts concluded due to the global crisis (COVID-2019 pandemic).
Note: compiled by authors	

The results of the SWOT analysis showed that the inefficiency of the implementation of PPP projects is affected by a number of shortcomings and the system itself needs to implement a stimulating fiscal policy aimed at increasing the number of private business entities, improving collateral conditions, creating favorable conditions and stable guarantees for participants in the implementation of investment projects. In addition, other reasons for inefficiency in the implementation of PPP investment projects were identified - poor-quality development of the project content. In this regard, it is necessary to create a project team from independent expert auditors to ensure the project's transparency. This allows a practical approach to project development, foresee and assess possible risks and manage them, and prevent corruption components in project management.

Project management mechanisms are significant in improving project implementation efficiency; the essence is to solve possible problems and identify risks based on a system-oriented approach to planning a PPP project risk management system. Analytical data on PPP projects

confirms that the existing infrastructure of investment projects has been modernized, within the framework of which special attention is paid to social facilities: education, healthcare, housing and utilities, energy.

In February 2021, there were 1.3 thousand projects in the country, including 275 projects at the tender stage, 864 projects at the implementation stage, 38 contracts were terminated (Shapovalova & Queen, 2019), while the most significant number of concluded PPP investment projects fall on the regions. In terms of regions, Turkestan region accounted for the most projects: 266. East Kazakhstan region (256 projects) and Zhambyl region (93). Consequently, the total volume of attracted and planned investments amounted to 1.1 trillion tenge. It is worth noting that Almaty region is the leader among the regions in terms of assets (289.5 billion tenge) (Database and others, 2018). The main subjects of the implementation of PPP projects by private business are small and medium-sized enterprises, while most of the operating companies with the participation of private business and the state work in the field of information and communications (115 enterprises, minus 5.7% per year). Joint ventures are also involved in professional, scientific and technical activities and the water supply sector.

According to the Kazakhstan Center for Public-Private Partnership, in January 2021, 672 enterprises with state participation were registered in the country - 2.5%, which is less than a year earlier. 86.3%, or 580 companies are operating enterprises, minus 1.4% for the year.

In February 2021, there were 1.3 thousand projects in Kazakhstan, including 275 projects at the tender stage, 864 projects are being implemented, 38 contracts have been terminated. In terms of regions, Turkestan region accounted for the most projects: 266, East Kazakhstan region (256 projects) and Zhambyl region (93). The total volume of attracted and planned investments amounted to 1.1 trillion tenge. It is worth noting that the Almaty region is the region's leader in terms of investments (Remington et al., 2017).

More detailed statistics on operating enterprises with the participation of the institute of the state are presented in Table 2.

TABLE 2. Small and medium-sized businesses in the implementation of PPP projects with the participation of state-owned enterprises

No.	Sphere of entrepreneurial activity	Number of enterprises (units)				Growth (2022 to 2019, %)
		2019	2020	2021	2022	
1	Information and communication	127	115	111	112	-11,8
2	Professional, technical and scientific activities	91	86	82	83	-9,6
3	Water supply, waste collection, treatment and disposal, pollution elimination activities	61	50	50	50	- 18,03
4	Education	39	38	33	28	-28,2
5	Financial and insurance activities	37	34	31	36	-2,7
6	Support and administrative services activities	33	33	30	34	2,9
7	Supply of electricity, gas, steam, hot water and air-conditioned	31	31	30	30	-3,3
8	Transportation and warehousing	32	31	31	31	-3,2
9	Construction	31	29	29	30	-3,3
10	Real estate transactions	36	25	25	27	-33,4
11	Public health and social services	29	22	22	23	- 26.3
12	Art, entertainment and recreation	17	22	22	22	29,5
13	Public administration and defense, compulsory social security	21	19	17	15	-19,0

14	Mining and quarrying	10	8	8	11	10.1
15	Manufacturing industry	13	8	7	8	-38,2
16	Agriculture, forestry and fisheries	14	6	6	7	-50
17	Wholesale and retail trade, car repair	12	6	5	8	-33,3
18	Provision of accommodation and catering services	2	1	1	1	-50
19	Provision of other services	27	19	17	18	-33,3
	Total	663	580	557	588	

Note: compiled by authors

The analysis of the table data shows that the most significant number of PPP projects falls in the sphere of entrepreneurship related to information and communication since it is directly related to the implementation of the State Program "Digital Kazakhstan" with the participation of all Ministries (there are 18 of them) of the Government of the Republic of Kazakhstan. However, the increase in 2021 has a downward trend and amounted to -11.8%.

In general, for all types of economic activity, the growth (2021 to 2019, %) of small and medium-sized enterprises has a negative value, which is explained by a decrease in the involvement of the private sector in the implementation of PPP projects and the general economic conditions in the country.

The sectoral structure of PPP projects is characterized by the supporting positions of the following sectors of the economy: education (378 contracts worth 77 million tenge were concluded), healthcare (143 contracts worth 55 million tenge) and energy and housing and communal services (56 contracts worth 377 million tenge). Recent projects are being implemented in the field of aerospace industry, environmental protection, telecommunications and solid waste management. This indicates that the innovative activity of the business sector of Kazakhstan testifies to the successful implementation of 864 PPP projects in 2022 year. On the other hand, there is a high degree of risk in the implementation of PPP projects.

On the part of the state, measures are being taken to improve the implementation of PPP projects, the Government is particularly interested in regulating efficiency and investment incentives, as well as improving risk management mechanisms and reducing their level in the content and implementation of PPP projects.

5. DISCUSSIONS

The study results confirm that the Kazakhstan model assigns excellent importance to line ministries and regions in the successful practice of public-private partnerships. They are given greater independence in implementing projects. It seems logical that the supervising ministries and local executive bodies can better identify the needs in their industry and region that could be met through PPP projects and have the right to independently determine organizations for developing and examining documentation for such projects.

A large amount of power inevitably carries corruption risks. Legislatively, such risks are prevented through the implementation of appropriate standards. Some of the latest amendments include, for example, the following measures:

– by choosing private partners exclusively on a competitive basis, exceptions to this rule occur only by decision of the government (direct negotiations) for unique objects;

– on a more precise definition of the types of public-private partnerships;

– on specifying the object of public-private partnership;

– to create a digital platform for collecting, processing, storing information in the field of public-private partnerships, holding competitions and monitoring project implementation, other innovations.

Thus, based on the experience of introducing the mechanism of public-private partnership in our country, we can conclude that the Kazakhstan methodological model of PPP in terms of risk management during investment. Investment projects should be based on the following approaches:

– a balance between the independence of sectoral government bodies and regions and the legislative reduction of corruption risks of such independence;

– progressive improvement of legislation and institutions of public-private partnership, including based on constant monitoring of the practice of implementing PPP and current international experience;

– increasing competence, expanding and practical cooperation with the expert community in the field of public-private partnership;

– development of main directions, implementation of methodological support, coordination and leadership in the field of public-private partnership by the central government body for state planning with the involvement of a specialized organization (Center for the Development of Public-Private Partnership).

It seems advisable to continue to adhere to these approaches, adding new options to this model, as reflected below. The effectiveness of the implementation of PPP projects is determined by the effectiveness of the planning of the risk management system, the content of which is determined by economic, legal, political, social, technical, industrial and environmental conditions. These conditions in the implementation of the project should be taken into account both by the institution of the state and by private business. Suppose these conditions are not assessed taking into account their significance in the PPP project. In that case, the probability of the degree of risk impact on the project implementation process increases. The goals of the state - obtaining social results and recognition of society as a whole, and the private sector, increasing social responsibility in order to obtain entrepreneurial profits, decreases. Therefore, to achieve mutual goals and socio-economic benefits for all participants, it is necessary to develop a mechanism for planning a risk management system for PPP investment projects (Figure 2).

The PPP project risk management system is procedure aims to reduce possible losses associated with its implementation. It is carried out by making management decisions, identifying, analyzing risks, developing planned measures to minimize the negative consequences of the occurrence of risk events. The basis for developing effective planning of a PPP project risk management system is the quality and volume of information used and the variability of project conditions. Data flows ensure the interaction of PPP subjects and is implemented by performing functions and powers throughout the entire life cycle of a PPP project. At the same time, there is a system for monitoring the implementation of PPP projects by the public partner represented by the state. This indicates the importance of the information resource during the implementation of the partnership project, the quality indicators of which depend on the concentration and distribution of information flows in the enterprise (Rubtsov et al., 2022)

In Kazakhstan, such attractive instruments as a direct agreement, payment for success, compensation for currency risks, already introduced into legislation, cannot be resolved only within the framework of the existing public-private partnership model. Therefore, the task of modernizing the current planning and risk management model comes to the fore when the main emphasis is on financial support instruments. International experience shows that funds have been created in some countries that provide financial support to PPP projects. The current model can be strengthened, among other things, by creating a Fund for Financing PPP Projects with financial and legal resources to provide comprehensive support to PPP market entities. The proposed

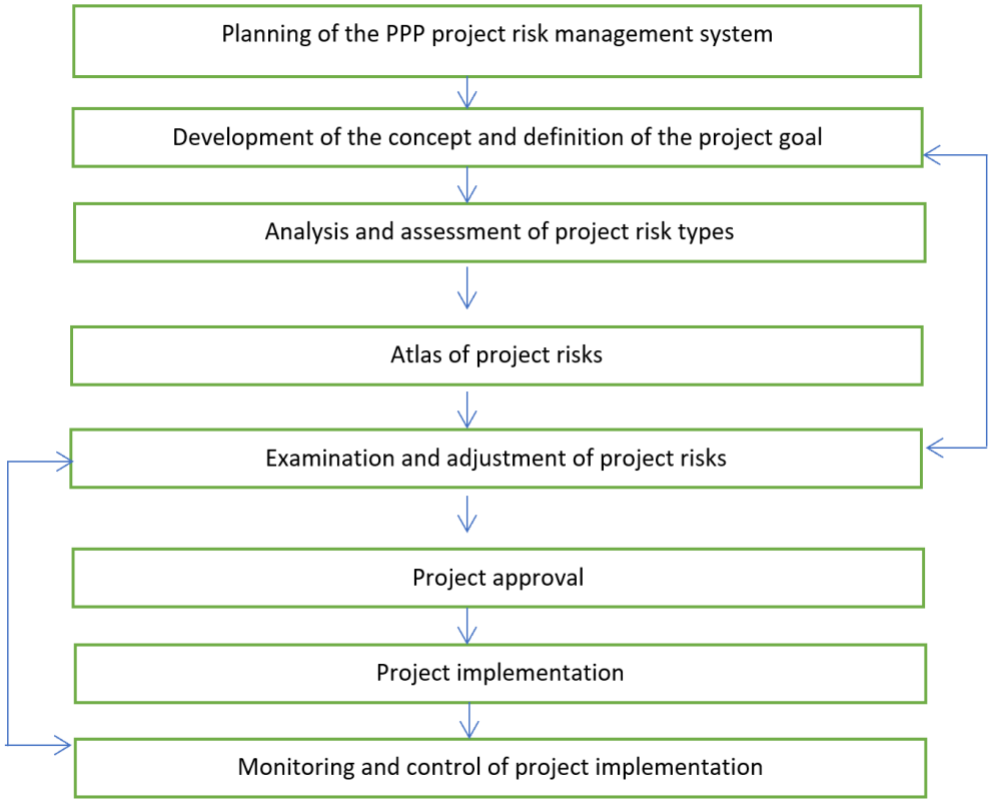

FIGURE 2. Planning of the PPP project risk management system

Note: compiled by authors

measures will raise the development of PPP to a new qualitative level and attract more investors to meet the urgent needs of the population. Each stage of planning a risk management system affects the duration, quality and scale of implementation, as well as the participants' expectations to obtain a social effect and entrepreneurial profit in the implementation of PPP projects.

The development of the project concept presupposes the feasibility of implementing and matching the purpose of the PPP project to the strategic priorities of developing the economy and private business structures. Possible risks are associated with the fact that in addition to analyzing the existing risks of the project that need to be adjusted, it is necessary to predict unforeseen types of risks, for example, related to innovations in the economy that can bring the project to a new level and improve its conditions. Consideration of each type of risk can be carried out in terms of the causes of this type of risk (Semenova, 2021).

At the stage of project implementation analysis, the scope of risk exposure and their consequences, acceptability, risk management methods, possible ways to reduce them are identified, the head (responsible person) is determined, and the project passport is approved. At the same time, it is crucial to assess the identified risks in order to determine the probabilities of their occurrence and consequences, the level of threats impeding the implementation of the project, based on the results of which a risk map is developed that describes the types, methods and methods of risk management.

One of the critical stages of planning a project risk management system is the monitoring and quality control of the implementation of PPP projects, which ensures, from the point of view of

microeconomics, the quality of the implementation of PPP projects, and from the point of view of macro processes, contributes to the development of the infrastructure of business structures and ensures the effective use of financial capital, human and production resources in the economy as a whole. As a result of monitoring, most private entrepreneurs realize the importance of proven areas of state support. The most important of them are financial and credit support, as well as support in the form of tax benefits for business entities involved in the implementation of PPP business projects. This topic becomes especially relevant during the crisis period when the implementation of projects is postponed, financing opportunities are reduced and the risks of bankruptcy of private partners increase. Thus, lockdowns and a slowdown in economic activity in all countries affected companies' financial stability in various industries, including infrastructure (Krasnopeeva & Morozkina, 2021). Therefore, it is necessary to use the best practices of effective PPP project management, where it is recommended to quantify unforeseen events (risks) and potential contingent financial resources associated with PPP projects, as well as transparently provide information about the cost of risks in PPP projects. In addition, the study's authors emphasize the importance of developing effective rules for all participants in the PPP market and reforming the financing system to consider all budget expenditures comprehensively. Therefore, when planning a risk management system for PPP projects, it is advisable to fully consider and study the process of phased implementation of PPP investment projects, taking into account the assessment of planned financial resources.

According to the degree of significance, a very high risk of PPP projects is associated with the lack of mechanisms for the return of investment costs of private business. For example, more than 90% of private business structures note that the unreturned costs can be directed to creating engineering and communication infrastructure, which is the main object of private investment today. Ensuring the return of these expenses will reduce the level of possible risks in the production infrastructure of private business entities.

6. CONCLUSIONS

From the above algorithm, it should be noted that within the framework of a PPP project, the planning of a risk management system begins with the anticipation of possible risk events, and in order to reduce the degree of risk for the application of the developed risk response system, that is, a risk management system for a specific PPP project. Suppose the risk system can be formed on the basis of some formalized list. In that case, the analysis of the degree of danger and the choice of methods for responding to or preventing risks in most cases is based on the experience of participants in the PPP project. At the same time, risk minimization work cannot be carried out exclusively when planning a PPP project. At the stage of its implementation in a constantly changing dynamic external environment, it is also necessary to continually implement measures to identify risks and develop ways to respond to possible risk events, analyze the risk management capabilities of each project partner, and assess the effectiveness of management measures risks. Competent risk planning will allow the project participants to see in advance the possible dangers of the project and prepare for their elimination.

In modern conditions, the implementation of PPP investment projects fully fits into the business structure in the implementation of strategic objectives, improving the welfare of society and ensuring the competitiveness of business structures in Kazakhstan. As long as the market does not solve social issues in the economy, new ways of developing economic relations are needed through the interaction and interconnection of the institution of the state and the private sector in order to effectively manage the production factors and create the infrastructure of the market of Kazakhstan in the context of global changes.

During the validity of the Law of the Republic of Kazakhstan dated October 31, 2015 "On Public-Private Partnership", 100 amendments were made. The document's largest number of amendments were made in 2017, 2021, 2022. Analysis of changes, additions and exceptions showed that the most significant changes were made in 2017, 2021 and 2022 (15, 22, 21, respectively), the largest number of additions was created in 2021.

The analysis showed that in the context of COVID-2019, education remains a priority for developing PPP projects. Still, at the same time, it is necessary to implement innovative projects involving financial and technological resources, which will contribute to the development of the PPP mechanism and the country's socio-economic growth. The peculiarity of the development of this form of interaction of market entities is predetermined by the implementation of PPP projects in conditions of economic instability, when the institution of the state acts as a guarantor for their performance in the social sphere, thereby creating conditions for the stable development of entrepreneurial structures.

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