

Assessment of the efficiency of public-private partnership in the service sector

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Abstract. Public-private partnership mechanism in the investment process the the service sector is becoming very attractive in developing countries. Therefore, public-private partnership is an important tool for ensuring the socio-economic development of the country and an important source of financial resources for investment projects that retain control of public authorities and cooperate with investors. The paper studies the methodology for evaluating the effectiveness of public-private partnership in the service sector, the forms and conditions of mutually beneficial relations between partners, the goals and objectives of the public-private partnership project, cooperation through public and private sector assets and management skills, and public-private partnership. Furthermore, the paper analyzes expected obstacles and limitations of the private partnership, the process of organizing cooperation projects, assessment of project effectiveness and the impact of economic risks on it, key indicators for determining the effectiveness of the investment project, integrated economic efficiency of the investment project, budget efficiency in public-private partnership.

1 Introduction

In the conditions of economic transformation, one of the important tasks of the service sector is the effective use of financial resources to solve the problems of ensuring economic growth in the future. Accordingly, one of the strategic goals is to effectively develop service enterprises based on increasing investment activity in the economy of our republic, expand the range of modern services in the field, and improve the quality and competitiveness of services.

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Implementation of investment activities in the Republic of Karakalpakstan is important for ensuring macroeconomic stability and effective use of resources.

The methodology of performance evaluation for partners in PPP is somewhat vague and has the same description, which is relevant for each of the parties. Therefore, the selection of the forms and conditions for the implementation of mutually beneficial relations of partners, and the implementation of the goals and tasks of a specific PPP project should be objective on the part of state bodies and the private sector.

The implementation of investment policy in the field should be aimed at increasing the efficiency of the use of financial resources allocated to enterprises in the production sector. Also, the main measures should be to promote the development of the institutional framework of investment mechanisms, the introduction of modern financing technologies for the highly effective use of budget resources and attracted financial resources.

2 Literature review

The features of the development of partnership relations between the state and business in the field of services, models of the effective implementation of the mechanism of public-private partnership in the world, contractual forms of public-private partnership, the field and directions of using public-private partnership in developed and developing countries. The factors affecting the expansion of the scale and forms of relations between the state and business in the economy are scientifically, theoretically and methodologically carried out.

J.K.Galbraith [20] considered in his research the partnership relations between the state and business, the formation of the system of economic relations between the state and the private sector, the economic nature and content of the "public-private partnership" category, the purpose and tasks, composition and models, the main directions of economic activity between state and private business entities, the formation of investment funds, and the conceptual bases of public-private partnership.

J. Pierre, J. G. Peters [10] studied directions for achieving the fastest growth of household income by encouraging private investments, conditions for the use of economic functions of the state for the formation of a competitive environment, problems related to ensuring the participation of the private sector in the management and financing of socially important strategic projects are highlighted.

3 Research Methodology

In the research process, in the conditions of the transformation of the economy, the scientific basis of the methodological approach to the development of public-private partnership in the service sector, the implementation of public-private partnership projects, the main directions of public-private partnership in the service sector, restrictions on the introduction of this mechanism, the systematic identification and classification of state risks formation of criteria, investment project effectiveness assessment indicators, integrated economic effect from investment project implementation, directions for increasing budget efficiency in the implementation of public-private partnership dialectical, systematic and scientific approach, comparative and comparative analysis and grouping methods were used to study economic systems.

4 Analysis

In the conditions of the transformation of the economy, the main idea of the market mechanism is the formation of a healthy competitive environment between different industries and enterprises. It is important to choose an efficient and convenient type of activity for economic entities. World experience shows that today it is becoming necessary to introduce flexible forms of operation, taking into account increasing the attractiveness of investments and the development of public-private partnership (PPP) as an important component of the modern model of competitive business in the market.

In the course of the development of the new Uzbekistan, the introduction of effective forms of economic activity, ensuring the compatibility of the elements of the state and market mechanism of economic regulation, is an important condition for ensuring sustainable development.

It is especially important to develop private sector enterprises that can quickly adapt to changes in the socio-economic system, produce a new assortment of products and services, meet consumer demands on time, and have a tendency to regular development. In this regard, the role and place of the service sector in the improvement of the standard of living of the population and economic growth in the country is incomparable.

In the territories of the Republic of Karakalpakstan, the tasks of increasing the well-being of the population and improving the quality of life, in particular, reducing poverty, are directly related to the creation of new and stable jobs at the expense of increasing the competitiveness of all branches and sectors of the economy and creating fundamental conditions for the development of entrepreneurship. At this point, the role of the service sector in creating new jobs in the republic is great. Because the service sector tends to develop rapidly, necessary conditions are created for the expansion of the division of labor and the development of human capital. This means that it is necessary to improve the methodology of development of innovation-investment activity in the field, increase of efficiency of public-private partnerships.

The main principles of public-private partnership according to the law are as follows [23]:

- equality of public partner and private partner before the law;
- transparency of rules and procedures in the implementation of public-private partnership;
- debate and impartiality in choosing a private partner;
- non-discrimination;
- prevent corruption.

The formation of relations during the implementation of economic and social development programs based on investment projects is an important condition for the realization of beneficial cooperation based on the establishment of mutual relations between the state and the private sector. It should be noted that this relationship has a responsible and specific character. Also, it is of particular importance to evaluate the effectiveness of the implementation of specific PPP projects in the service sector.

There are various forms of PPP implementation, which include: public-private enterprises; concession agreement (contracts); product distribution agreement (MTSh); contracts awarded by the government to the private sector; tenancy relations; important economic zones; projects where tax and customs benefits are granted to private investors in the use of land, infrastructure, etc.

Table 1 shows the dependence on the choice of PPP forms in terms of project implementation and allocation of financial resources between the public and private sectors.

According to Table 1, the listed forms are used continuously and private business participation is important in the implementation of PPP. The establishment of cooperative relations between local authorities and direct participants in the use of state property

implies the need for a clear division of functions in the construction of the state property management system.

During the implementation of PPP projects, investors need to pay attention to compliance with national legal norms, transparency of cooperation formalization procedure.

PPP, regardless of its form, has a number of possibilities and ensures the identification of advantages for each partner. For private business, these opportunities and advantages are stable and large-scale market capture, participation in the implementation of socially significant projects, improving the image of the enterprise, and the use and rational management of state facilities with the right of temporary ownership, money at the expense of making investments aimed at supporting important social projects. manifests itself in increasing its flows. As for the public sector, cooperation with representatives of the private sector based on the PPP mechanism appears in the transfer of its functions to the private sector, and it allows to ensure the protection of the interests of the society, as well as control and regulate their compliance. It is necessary to take into account the interests of the third party under this type of agreement, that is, the society will have quality and affordable services.

Table 1. Forms of implementation of the public-private partnership mechanism

Types	Operation and use	Capital investments	Commercial risk	Assets	Duration (years)
Open economic zone	Public-private partnership	Public-private partnership	Distributed	State	up to 20 years
Joint stock companies	Public-private partnership	Public-private partnership	Distributed	State	up to 3 years
MTSh	Private	Private	Private	State	25 years and more
Management agreement	Private	State	State	State	3-5 years
Service contract (outsourcing)	Public-private partnership	Public-private partnership	State	State	1-3 years
Lease agreement	Private	State	State	State	5 years and more
State contract	State	State	State	Private	1 year
Concession agreement	Private	Private	Private	State	20-30 years
Lease agreement	Private	Public-private	Distributed	State	5-20 years

The purpose of PPP is to meet the needs of society based on the implementation of socially significant projects within certain regions or segments of the economy. The tasks of PPP include the following: improving the efficiency of mutual relations between the state and the private sector; elimination of conflicts of interest between the public and private sectors; implementation of socially important projects; ensuring common interests; Pooling of resources of PPP entities and coordination of forces.

Cooperation between local authorities and the private sector should be developed based on established and implemented principles capable of achieving agreement between the subjects [3].

According to the experience of foreign countries, ensuring efficiency in the formation of cooperation by combining the assets and management skills of the public and private sectors is carried out based on following:

- the investment project cannot be realized only at the expense of financing and professional competences of state and local authorities;
- the quality or level of services provided by the private partner is higher than that provided by the local authorities themselves;
- the participation of a private partner allows to shorten the period of project implementation or service provision;
- private partners will have the opportunity to compete;
- there are no regulatory or legal barriers to engaging a private partner to implement a project or provide services in this area;
- performance results are easily measured and evaluated;
- costs for the implementation of works or projects enable the activation of innovative processes;
- positive experiences of cooperation between state and private business are formed.

If any condition is not met, then it is not recommended to use the PPP mechanism.

After determining the set of services for the formation of public authorities, the following issues will be considered:

1. What are the obstacles and limitations to these PPP projects?
2. What experience do the authorities have?
3. Is the private sector interested in these opportunities?
4. Is PPP the most convenient way to operate these services or facilities?

A consideration of the expected barriers and limitations of PPPs leads to the rejection of this type of partnership as a way of delivering particular services. However, even if the basic conditions for using the PPP mechanism are fulfilled, there are a number of issues that need to be resolved before establishing cooperation projects. The first of these is whether the advantages of PPP outweigh its potential disadvantages. Second, is the proposed PPP project beneficial for private enterprise?

If we answer these questions in a simple way, it can be assumed that private business should be reliable in making profits and reducing tax payments, and the state should be reliable in increasing taxes and effectively solving its specific tasks. However, in a real financial and economic system, the behavior of economic entities is subject to other laws. Private partners interested in a stable state of the economy and society are usually willing to pay for it in accordance with international and national standards. And the state is ready to reduce budget payments and fees in many cases through the legislative system. Because not only tax payments are important for the state, but also the general economic effect of project implementation. At the same time, the evaluation of the effectiveness of PPP projects is to achieve the best ratio of benefits and costs. Ensuring maximum efficiency is considered as an important condition for state support of the project.

Taking into account that the implementation of PPP projects in the conditions of transformation of the economy is carried out in a series of cooperation agreements, the evaluation of the effectiveness of the project and the impact of economic risks on it can be selected through the results of the analysis. Its essence is to measure the degree of influence of the deviation of one or another initial parameters of the project from the base value on the final project indicators.

The relative description of the sensitivity of the obtained indicators depending on the change of the initial indicators is the coefficient of elasticity. Determines by how much the performance criterion changes with a one percent change in parameters.

$$K_{el} = \frac{\Delta SJQ / SJQ}{\Delta O / O}, \quad (1)$$

here: K_{el} - coefficient of elasticity;

SJQ, O – base value of net present value and researched factor;

$DSJQ, DO$ – change in net present value and change in the studied factor.

The coefficient can be negative (an increase or decrease in investment leads to a decrease or increase in the net present value) or positive (a decrease or increase in the price per unit of output leads to a decrease or increase in the net present value). But when making calculations, the sign of the coefficient of elasticity can be omitted, that is, attention is paid to the absolute value of the coefficient.

Net Present Value (NPV, net discounted income, profit) is one of the main indicators for determining the efficiency of an investment project, and it refers to the difference between the income received from the project and the investment costs made for it within the discounted time unit.

How to determine NPV:

- determining the value of current costs (investments involved in the project);
- calculation of the present value of cash receipts from the project, in which the income of each reporting period is brought to the current date [18]:

$$PV = \sum_{t=0}^n PV_t = \sum_{t=0}^n \frac{CF_t}{(1+r)^t} \quad (2)$$

here,

CF – cash flows;

r – discount percentage rate;

Comparison of the present value of the investment (project costs) into the project (I_0) with the present value of income (PV). The difference between them is defined as net discounted income (profit) - NPV.

$$NPV = PV - I_0, \quad (3)$$

NPV represents profit or loss as a result of the investment of money by the investor in the investment project, compared to keeping the money in the bank. If the NPV value is greater than 0, then the investment will bring more income (profit) than keeping these funds in banks.

According to the characteristics of service enterprises, formula 3 is modified for projects where investment funds for the project need to be realized in several stages (periods).

$$NPV = \sum_{t=1}^n \frac{CF_t}{(1+r)^t} - \sum_{t=0}^n \frac{I_t}{(1+r)^t} \quad (4)$$

here,

CF – amount of cash flows;

I – the amount of investments in the project in the t-period;

r - discount rate;

n is the number of years.

The internal rate of return (IRR) determines the percentage of discounting in which the investment is equal to 0 ($NPV=0$) or the costs of the project are equal to its benefits (income).

$IRR=r$, where $NPV=f(r)=0$, formula (4) gives the following equation [21]:

$$NPV(IRR) = \sum_{t=1}^n \frac{CF_t}{(1+IRR)^t} - \sum_{t=0}^n \frac{I_t}{(1+IRR)^t} = 0 \quad (5)$$

here,

CF – amount of cash flows;

I – the amount of investment funds for the project in the t -period;

r – discount rate;

n is the number of years.

The total economic benefit from the implementation of the investment project is generally calculated based on the following formula [12]:

$$S = NPV + S_b + S_y, \quad (6)$$

where: S is the total economic benefit from the implementation of the investment project;

NPV - net discounted income of the investor;

S_b - the total budget efficiency defined as the sum of tax revenues to the republican and local budgets;

S_y is the indirect result of the implementation of certain investment projects as the sum of tax and tax-free revenues to budgets of all levels from the population and business entities involved in the project at the technological stages.

This model can be used for projects in the PPP system with the condition of making adjustments taking into account project risk and sensitivity to changes in the external and internal environment.

The state can choose the following directions to increase the budget efficiency of PPP:

1. Increasing budget efficiency by increasing payments to the budget: this is possible if in a certain area there are large-scale effective proposals for implementation within the framework of PPP and many requests from the private sector. In real life, such a situation rarely turns off.
2. The second way - the search for "optimal points" in PPP implies both the minimum required amount of payments to the budget and the maximum amount of investments involved in the implementation of cooperation projects. It is the "optimal points" that are the "growth points" of PPP.

Based on the principles of comprehensiveness and systematicity, it should be said that in addition to the general evaluation of the efficiency of PPP, each project of cooperation between the state and the business community should be individually evaluated.

So, for example, the experts of the Leontev Center proposed the following criteria for assessing the quality of PPP projects:

1. Ensuring compliance of the project with PPP criteria.
2. Social significance of the project.
3. Compliance and implementation of the project implementation.
4. Openness of partner selection procedure.
5. Proportionate distribution of benefits and risks between the public sector and private entrepreneurship (in relation to subsidies and investments).
6. Long-term project, its future reproduction (possibility of renewal or continuation).
7. Connection of the project with the strategic plan.

This process should be carried out separately, taking into account the important conditions and factors of their implementation. Also, it is necessary to evaluate the final effectiveness of the projects, taking into account the overall effectiveness of the state and business circles, which are aimed at solving systemic problems in the development of the state, entrepreneurship and society.

5 Conclusions

Currently, the main goal of the development of the service sector is the effective use of financial resources to ensure economic growth and solve the problems of forming a modern service system. Accordingly, the formation of relations during the implementation of economic and social development programs based on the introduction of investment projects in the field is an important condition for the realization of beneficial cooperation based on the establishment of mutual relations between the state and the private sector. It should be noted that this relationship has a responsible and specific character. Also, it is of particular importance to evaluate the effectiveness of the implementation of specific PPP projects in the service sector.

Although the assessment of the effectiveness of public-private partnership projects has a certain level of common approaches, this process must be carried out separately, taking into account the important conditions and factors of their implementation. The final effectiveness of investment projects should be evaluated taking into account the overall effectiveness of the state and business circles aimed at solving systemic problems in the development of the state, entrepreneurship and society.

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