

# Critical Success factors of public private partnership projects in Iran, Barriers to private sector investment in infrastructure projects

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## ABSTRACT:

Despite the expansion of public-private partnership in the world, the amount of private sector investment in Iran's infrastructure projects is Low. In this article, the success factors of public-private partnership, specific to Iran's business environment, have been identified and their priority has been analyzed from the point of view of different stakeholders. By nominal group method, 23 success criteria of Iran's public-private partnership were identified and practical solutions to overcome them were proposed. The results of this research show that the most important success factors of public-private partnership in Iran include the project's profit rate, the employer's experience in project management, how to share risks between the two parties to the contract, and the transparency of the tender. The analysis of the results of the evaluations carried out by the private sector and the public sector in this article shows that there is a big difference between the priorities of the two parties. From the point of view of private sector, the main obstacle to public private participation in Iran is the adherence of executive bodies to contractual obligations. From the point of view of the public sector, the main priority against the development of public-private partnership is ambiguity in the laws and powers of public sector decision-makers. Therefore, it is suggested that by passing special laws for public-private partnership, while providing legal incentives and exemptions for financial support of private investors, efforts should be made to increase transparency in the decision-making process of the public sector.

## KEYWORDS:

Project management, public private partnership, Project Finance, project success, construction contracts

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## 1. Introduction

Today, public-private partnership is the dominant method in the world for financing and implementing infrastructure projects [1]. By using the public-private partnership method, the government can transfer the task of financing and building its infrastructure to the private sector, and in this way, in addition to providing additional financial resources and increasing the quality of public services, the risks of implementation and it takes over the exploitation of the infrastructure. Therefore, governments have a great desire to attract the participation of private investors and there is a fierce competition between countries to attract investors [1]. Recently, government agencies have defined a large amount of investment projects to be handed over to the private sector, so that the main solution in drafting the public budget document to complete more than 55 billion dollars of half-finished projects is to attract private sector resources. It is expressed in the public and private partnership method. However, the report of the country's planning and budget organization (2017) shows that the performance of this method in Iran has not been very favorable and the government has not been able to attract an acceptable amount of private sector capital [2].

Even though identifying the necessary criteria for attracting investors in public-private partnership projects has been the subject of numerous researches in different countries [3], but the comparison of previous studies shows that the critical success criteria in different countries and based on economic conditions and the culture that governs it can be different. For example, Chun and Paramandavandhi (2015) by comparing the countries of Indonesia, China, Singapore, Taiwan, and England, have shown that the success factors of public private partnership are different among countries and depend on the technical and economic factors of each country [4].

Considering the lack of development of public-private partnership in the country and the small amount of private investment, the importance of identifying success factors in Iran is felt more [5]. But it is not possible to fully match the success factors identified in the world with the participation plans in Iran. Because the conditions of the projects in Iran, due to the different governance structure of the projects, the rapid changes in the macroeconomic indicators of the country, the shallow and short-term depth of the financial markets, the culture of private investors, etc. The key to success has been different. Therefore, it is logical that success factors should be determined specific to Iran's conditions and its characteristics

In this article, the success factors of public-private partnership projects have been identified from the point of view of different stakeholders in the Iranian environment and ranked according to their importance in achieving the goals of attracting private investors. So that finally, by evaluating and controlling these success factors, policy makers and project implementers can implement specific implementation strategies for the development of participation in the country. For this purpose, it has been tried to identify and introduce the success factors of public-private partnership in Iran by studying the researches related to success criteria in the world. The performance of these factors has been examined from the perspective of the private sector and the public sector, as well as from the perspective of the activists of different industries, and finally, the specific concerns and characteristics of each industry have been analyzed separately. Using the results of this research, policy makers and project implementers can provide the necessary conditions to attract investors and increase the amount of private sector investment in the country's infrastructure plan by focusing on the key factors of success and creating specific strategies to increase the chances of success of collaborative projects.

## 2. Methodology:

In order to determine the success factors, 36 different researches published from 2005 to 2023 have been reviewed on the topic of determining the success factors in public-private partnership projects, and the key factors suggested in these articles were counted. Based on this, 72 key factors for the success of public-private partnership projects were identified. In the next step, by comparing the results presented by different studies, it was found that different articles have presented different expressions to describe the same factors, which can mislead the decision maker. Therefore, the description of each success factor and the reason for mentioning that factor were taken as the success criteria of public-private partnership projects. The cases that had the same description and the authors reported with different expressions were integrated. Finally, 57 independent criteria as key success factors of public-private partnership from previous statistical researches.

To identify the key success factors in this research, the nominal group method was used using a semi-structured questionnaire. While the structured interview has a precise set of questions that does not allow for flexibility in the interview, the semi-structured interview is open in that it allows new ideas to emerge during the interview as a result of what the interviewee says. For this purpose, the success factors identified in other researches were provided to the team of experts to

supplement the information of the model with their knowledge and experience of tenders and public-private partnership negotiations, or to suggest new ideas if needed. give in this survey, experts were asked to review and select criteria based on the goal of this article, which is "success in attracting investors in public-private partnership tenders".

In this research, a group of construction industry experts who have experience and specific records of public-private partnership projects have participated. In order to collect experts' opinions, questionnaires produced from previous studies were distributed among 63 managers and executives of the country's infrastructure projects in the form of a training workshop during a specialized conference related to investment (in 2021) and in two rounds to the nominal group method was completed and modified. At the end of the workshop, 58 experts from 25 different companies or organizations in 11 fields participated in this research.

### 3. Results and Discussion

Table (1) shows the factors of success in Iran based on the priority and points obtained from the process described above:

**Table 1. Critical success factors of public private partnership according to Iran's environment**

No.	CSF	Importance	Availability
1	Optimal rate of return on investment	5	4
2	The history of the executive body in paying the claims of the private sector	5	4
3	Allocation of risks based on the ability of the parties	5	4
4	Competitive and flexible pricing system	4	4
5	Amount of financing commitment	4	4
6	Stable income and long-term demand	4	4
7	Ability to lobby and influence decisions	4	4
8	Independent arbitration authority	4	3
9	Transparency of the responsibilities of both parties in the project management process	4	3
10	Financial capacity of the private sector	4	3
11	Realistic financial and economic justification	4	3
12	Transparency of evaluation criteria	4	3

13	Knowledge and experience of the executive body of public-private partnership	4	3
14	Experience of the executive body in the management of construction projects	3	4
15	The possibility of cheap and long-term financing	3	4
16	Stable and predictable economic conditions	3	4
17	The ability to predict the competition in the tender	5	2
18	The existence of reliable technical feasibility	5	2
19	Commit to a timeline to reach an agreement	۰	2
20	Technical ability to build or operate the project	۰	2
21	Political stability and government support for the project	۲	5
22	Optimal rate of return on investment	۳	3
23	The history of the executive body in paying the claims of the private sector	۳	3

The analysis of the key success factors of identification from the viewpoints of the interests of the private sector (investors) and the public sector (investors) shows that the most important concern of investors and contractors active in Iran's infrastructure projects is the low rate of return on investment (investment profit) of the projects. It is infrastructure. Practically, this fact has caused the attractiveness of investing in infrastructure projects (against the high interest rates of other investment opportunities in the country's financial markets) for the private sector. After the financial attractiveness, the most important success factor is related to the criteria related to the investor (public sector). In fact, in both the public and private sectors, there is a serious doubt in the ability of government executive bodies or the public sector to manage a collaborative project. Key factors such as public employers' lack of familiarity with public-private partnership mechanisms and unilateral transfer of all risks to the private sector, lack of trust in the economic feasibility presented by the public sector, are all matters that are within the employers' authority and related to the culture of capital. It refers to the placement in the country

From the point of view of the private sector, the key factors of public-private partnership, the criteria that monitor the long-term financial sustainability of the project and risk management, have received a higher score. In fact, this shows that the private sector is more concerned about the adherence of the other party (the public sector) to its commitments in the long term than financial attractiveness. As it was clear in the interviews, this lack of trust in the public sector

(especially in fulfilling financial obligations and payments) is the most important concern of the private sector, which can even weaken the desire of investors to participate in a financially attractive project.

The second concern of the private sector has been the financial sustainability of the project in the long term, and as a result, the criteria related to "sustainable income" and "pricing system" have received high important scores. Due to the large changes in macroeconomic indicators in the country, it is not possible to predict long-term costs and ensure incomes, and this causes investors to evaluate this area of business as risky and have little desire to participate in long-term public-private partnership projects.

#### 4. Conclusion

In this article, the success factors of public-private partnership in Iran have been identified and the importance of these factors has been analyzed from the point of view of different stakeholders. The results of this research show that:

- The most important factor for the success of partnership projects in Iran is the profit rate of the investment project.
- The second critical factor in the success of public private partnership in Iran is the high risk of investing in government infrastructure projects.

Using the results of this research, the following strategies are suggested for the development of private sector investment in the infrastructure plan of the country:

- In order to encourage private sector investment in infrastructure, the government needs to increase the attractiveness of collaborative projects by direct investment, subsidizing public services, providing low-cost facilities or other financial incentives.
- The second proposed solution is to formulate a special law to improve the project governance system in the public sector. Improving project governance in the public sector means carrying out institutional reforms in order to improve the management of infrastructure projects and including improving the transparency of decisions, reducing government ownership by outsourcing the management of public services, flexibility in the methods of holding tenders, increasing the authority of managers and cooperation Monitoring devices
- The third proposed solution is to create independent institutions with the help of the financial market (including the banking system and the stock exchange organization) to control the economic validation of

projects and monitor the obligations of executive bodies in partnership projects, it is possible to promote private trust for investment in infrastructures.

- Overcoming this challenge of lack of trust in the private sector and the conflict between the beneficiaries of partnership contracts requires a clear dialogue with the private sector and reaching a framework for joint decision-making (for example, in the form of a chamber of commerce) to formulate effective rules and regulations.

#### 5. References

- [1] R. Osei-Kyei, A.P. Chan, Review of studies on the Critical Success Factors for Public-Private Partnership (PPP) projects from 1990 to 2013, *International journal of project management*, 33(6) (2015) 1335-1346.
- [2] I.P.a.b. organization, Development of cooperation between the public sector and the private and cooperative sectors By providing special financial resources to complete the projects, in, Iran Program and budget organization Press, Tehran, 2018, pp. 480.
- [3] M. Fathi, P.P. Shrestha, Identification of Critical Success and Risk Factors for Public-Private Partnership Highway Projects, *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 15(1) (2023) 04522051.
- [4] J.-S. Chou, D. Pramudawardhani, Cross-country comparisons of key drivers, critical success factors and risk allocation for public-private partnership projects, *International journal of project management*, 33(5) (2015) 1136-1150.
- [5] I.P.a.B. Organization, report on the performance of the assignment of projects within the framework of public-private partnership contracts (from the second half of 2014 to the first quarter of 2015), Deputy of Economic Affairs and Program and Budget Coordination, Tehran, 2016.