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Identifying Barriers to Private Sector Participation in Urban Construction Projects

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ABSTRACT: In developing countries, governments are unable to implement projects alone due to economic and social problems, resource and budget constraints, high risk in the construction industry, and other constraints. The use of private-sector partnerships in recent years by governments and urban managers has been one of the most effective ways to further develop cities. However, many developing countries, including Iran, have always faced challenges in attracting private sector participation in urban infrastructure investment. Therefore, the present study aims to evaluate the barriers that governments and urban managers may face in attracting private capital. A qualitative method was used to do this. In this study, a structured questionnaire was used to collect information. A total of 60 experts' opinions were obtained from public and private sectors to identify and evaluate the barriers to private sector participation in urban projects. The barriers identified in attracting private sector participation were divided into three general categories, namely technical and organizational barriers, financial and economic barriers, and political and legal barriers. The results of the questionnaire were analyzed by SPSS software. According to the results, technical and organizational barriers are of the utmost importance in attracting private sector participation. Financial and economic barriers and political and legal barriers, respectively, were assigned the next degree of importance in attracting private sector participation, according to expert opinions.

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1- Introduction

Global experience has shown that public-sector partnerships with the non-governmental sector can be highly effective in implementing and operating infrastructure projects, thus utilizing the capacity of the public sector in capital asset acquisition projects based on one of the public-private contractual approaches. According to the type of project, it has been prioritized in the Iranian government budgeting program in 2018 [1]. One of the barriers for governments to develop infrastructure, especially in developing countries, is the constraint on the financial resources required to implement investment projects. Alongside this, factors such as lack of sufficient expertise as well as the prolongation of the period of construction and implementation of projects by the government have made governments reluctant to utilize the financial and technical expertise of the private sector [2]. On the other hand, complete outsourcing of some projects to the private sector may not be appropriate in some ways, may not be practically feasible, or may not have the economic justification for the private sector at all. Such a situation would lead governments to adopt mixed techniques and models for implementing investment projects [3].

In this study, the required data were collected through library studies, interviews with experts, and careful examination of relevant documents. Then, a questionnaire was distributed among those who had experience in employer team or contractor participation, as well as those familiar with PPP contracts, to identify the barriers to public-private sector investment. After analyzing the identified barriers, we examined the effects of barriers to private sector participation and prioritized and ranked these barriers. In this research, urban construction projects were emphasized and focused on. Finally, according to the results, suggestions will be made to policymakers and planners of urban projects to attract private sector participation. Numerous problems in public-private partnership projects, as well as obstacles to public and private sectors in these projects to develop infrastructures, make it necessary to research this area.

2- Methodology

This article is a descriptive correlational study since this article identifies and evaluates strategies for attracting private sector participation in the implementation of urban construction projects. Also, since a wide range of private sector investors and public sector policymakers and planners can benefit from the research results, the present study is applied research. Initially, to review the theoretical literature and research background on the subject, research data and

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Table 1. Final Priority of Barriers

Rank	Group of Barriers	Mean Score
1	Financial and economic	42.26
2	Technical and organizational	38.25
3	Political and legal	35.51

Table 2. Prioritize barriers based on Friedman test results

Rank	Group of Barriers
1	Lack of knowledge of managing and controlling construction projects in private companies
2	Lack of attention by the contractor to implement methods to reduce costs
3	Lack of systematic interaction between the public and private sectors
4	Failure to apply new methods and tools in financing
5	Extreme political relativism in project assignment
6	Lack of legal and technical infrastructure for participation
7	Weaknesses of equipment and technology of the private sector in project implementation
8	Uncertainty about the cost of maintenance and operating costs due to inflation
9	Lack of competent managers in public policymaking
10	Lack of scientific knowledge of public sector staff in the implementation of development projects
11	There are many conflicts and disagreements among project beneficiaries
12	Communication failures between the private sector and organizations
13	Lack of liquidity in the private sector

information were collected through library studies and online databases. Based on a detailed study of the research literature, the initial questionnaire was developed to identify the barriers to private sector investment. Then, through three rounds of the Delphi method and semi-structured questionnaire distribution of final barriers to private equity investment were selected by experts. In addition, to familiarize managers with their thinking, to adapt their views to the subject literature, and to provide more practical suggestions at the end of the research, in addition to questionnaires, a structured interview was also conducted to collect information from managers. The statistical population of the research includes expert experts, corporate managers, project managers of client organizations and public-private partnerships, and active specialists involved in public-private partnerships in urban construction. Cochran's formula with the unknown population was used to estimate the sample size in the population. Finally, the results of the questionnaires were arranged in separate tables. Using the Kolmogorov-Smirnov test, the data were analyzed to determine whether they were parametric or nonparametric. After determining the type of statistical test, analyzes were performed and the results were extracted.

3- Results and Discussion

In line with previous research and the results of questionnaire distribution in Delphi rounds, various barriers to private sector participation in urban construction projects were identified. In fact, during the Delphi rounds identified barriers were monitored based on the research literature and several barriers were removed and some were added. The final questionnaire was then developed based on the identified barriers. The final questionnaire included 30 different barriers to attracting private sector participation, which was categorized into 3 groups. The financial and economic group consists of 10 different obstacles. Technical and organizational groups and political and legal groups also include 11 and 9 hurdles, respectively.

Table 1 shows the descriptive statistics of the three groups, which show the columns in the order of mean and standard deviation of the data (dispersion over the mean data). Table 5 shows that the mean of the group of technical and organizational barriers to private sector participation is more than 42; that is, people's opinion of that variable is high and very high. The average of the group of financial, economic, political, and legal barriers to attracting private

sector participation was 38.25 and 35.51, respectively.

According to the Friedman test, the main categories of barriers to private sector participation were prioritized for the implementation of urban construction projects. According to the Friedman test, technical and organizational barriers were most important in attracting private participation. Then there are the financial and economic barriers and the political and legal barriers, respectively. Table 2 shows the prioritized barriers based on Friedman's test results.

4- Conclusion

According to the results of the present study, one of the most important strategies for attracting private sector participation is to overcome obstacles such as weak management knowledge and control of construction projects in private companies and hire and train more efficient managers to increase planning and management knowledge in construction projects. Lack of attention by the contractor on implementation methods to reduce costs and use of traditional and inefficient methods, lack of systematic interaction between the public and private sectors, lack of new methods and tools in financing are identified as the most important barriers, but these barriers alone cannot be identified. Improve the private sector in urban construction projects. According to the results of the present study, variables such as strong political relativism in project outsourcing, lack of legal and technical infrastructure to attract participation, weakness of private sector equipment and technology in project implementation, private sector uncertainty of financial costs during the maintenance period and unstable inflation. Iran, lack of qualified executives in public policymaking, incorrect policies due to lack of scientific knowledge of staff and public sector executives in implementation of development projects, lack of skills of executives in control, large conflicts and disagreements among project stakeholders and as a result, communication failures between the private sector and organizations are also significant barriers to private sector investment in urban projects. Providing suitable contexts for removing the obstacles identified in this research is one of the appropriate strategies to attract more private sector participation in development projects.

References

[1] Turkan, A., Shahbazi, M. (2010). Investigating how the private sector can participate in the development of road transport infrastructure; issues and solutions. Winter 2010, Volume 19, Number 57 (Special Section on Economic Studies); 245-276.

[2] Bagheri, T. and Sarvari, H., (2017). Evaluation of Barriers to Private Sector Investment in Water and Wastewater Industry (Case Study of Isfahan Water and Wastewater Company). Second National Conference on Applied Research in Civil Engineering (Structural Engineering and Construction Management), Tehran, Sharif University of Technology. [In Persian].

[3] Caperchione, E., Demirag, I., Grossi, G. (2017). Public sector reforms and public private partnerships: Overview and research agenda. Accounting Forum 41 (2017) 1–7.

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