
The status and analysis of performance reviews of PPP projects

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Abstract

PPP mode is one of the important modes of infrastructure projects, and it is also an important pillar for the construction of new rural areas and urbanization. At present, the proportion of PPP projects operating in various regions of China is increasing day by day, which has made great contributions to China's urbanization, infrastructure and other construction. With the application of PPP mode and the requirements of national policies, it is of great importance to evaluate the performance of PPP projects throughout their life cycle. This paper analyzes the current situation of performance evaluation, and gives corresponding solutions to existing problems, so as to improve PPP project performance evaluation.

Keywords

PPP mode; Performance evaluation; Full life cycle.

1. Research background

1.1 The requirement of national policy

Since 2014, the development of PPP projects has been at a high ebb, not only helping the government to achieve rapid infrastructure development with limited government investment, but also improving the project management efficiency by introducing private capital and advanced technology management experience ^[1]. To a large extent, the application of PPP model has brought about the solution of problems concerning economic development and people's livelihood. Using the "government pays" return mechanism to realize the government bottom; The government and social capital cannot reach equal cooperative relations, and there is deviation in risk sharing. In order to standardize the PPP projects, the improvement of the national policy has been in constant, which relates to the PPP project performance evaluation policy is also not a few, such as financial [2014] No.76 in strengthen the public products or services to the project quality and price regulation, establish government, service users to participate in the comprehensive evaluation system, to the level of performance goals and operation management, fund use, quality of public service and public satisfaction of performance appraisal; Article 76 of finance [2017] proposed that a perfect operational performance appraisal mechanism should be established for national demonstration projects. The financial department [2017] No. 92 ^[2] listed seven red lines for the warehousing of PPP projects, and required the government to pay to be linked to the project performance assessment results. The proportion of the construction cost involved in the performance assessment shall not be less than 30%.

1.2 The project characteristics

Compared with traditional projects, PPP projects have more participants, difficult project data statistics, and lack of systematic support for performance monitoring and evaluation. PPP projects have a large amount of information, a large number of documents and easy loss of data. PPP projects have a long cycle, involve many industries and are highly professional. The profit-seeking nature of social capital inevitably leads to high total investment, unreasonable construction and operation and maintenance costs. Cost control is the key point. Based on the characteristics of PPP projects, the

performance evaluation of PPP projects is carried out to achieve timely control and management of project progress, cost and risk, and ensure the timely completion of the project in accordance with the contract.

2. Status analysis

PPP project performance evaluation, is to use the PPP pattern of project from the project objectives of project stakeholders, from the project input, process, result, effect, such as dimension, appearing in the process of project implementation of technical, economic, social and environmental factors such as comprehensive evaluation activities^[3].As for performance evaluation, there are the following aspects in the practical operation of PPP projects.

2.1 The evaluation system is old, mainly qualitative, with a large proportion of subjective factors

Wang chao et al. ^{[4]-[5]}, on the basis of a thorough study of domestic and foreign literatures, analyzed the performance targets of various stakeholders involved in PPP projects, identified 47 key success factors (CSF), and classified performance targets according to 6 stages in the implementation process.However, since PPP projects have a large number of types and specialties, they cannot be comprehensive, so nearly 80% of the performance indicators analyzed and used by experts and institutions at the present stage are qualitative indicators, which makes the evaluation process too subjective in the process of operation, and lacks a specific scale for the level of scale indicators and the level of projects.In addition, there is a lack of a specific, systematic and written law and regulations on performance evaluation in the national policy system, which makes the operational performance evaluation lack theoretical basis and policy support, which further leads to the current situation of non-standard performance evaluation.

2.2 Lack of feedback and discontinuity after evaluation

On the promotion of the government and social capital in the field of public service cooperation mode guidance notice in [2] points out that the "set up, the government and the public participation in the comprehensive evaluation system, set up in advance to set performance goals, and performance evaluation on the matter for performance tracking, afterwards the whole life cycle of performance management system", but the present stage of performance evaluation is given to set performance goals, and later stage performance evaluation, there is no continuity of late tracking evaluation and feedback, this creates in order to apply the results of the performance evaluation of the performance evaluation of the situation, did not achieve standard project, provides the multiple value data, etc.In fact, a good performance evaluation is the glue that binds the various stages together to further promote the integrity and relevance of the project. In the actual operation, the result of performance evaluation based on periodic summary data is that it meets the contract standard on the surface and achieves the initial performance target. However, in fact, the project company does not achieve the maximization of benefits and the maximization of marginal benefits, resulting in the waste of resources. This indicates the importance of data acquisition in the event of an accident and subsequent evaluation and feedback.

2.3 The evaluation time point is insufficient to cover the whole life cycle

The performance evaluation of PPP projects runs through the whole life cycle of PPP projects and comprehensively reflects the results and processes in the whole process of implementation ^[6]. However, there is a defect performance evaluation that emphasizes construction over operation in the process of practical operation. However, the PPP project of the usability payment method should pay for the construction usability and operation maintenance performance. However, most of the current usability payment methods completely cut off the usability. The project company only pays attention to the implementation process of the construction period, while the government pays more attention to the social benefits generated in the operation and maintenance stage.

3. Problem solving

3.1 Further standardization of national policies

So far, a lot of laws and regulations related to the PPP projects, such as the value guidance ", "guide" the PPP project contract, the government and social capital cooperation mode of operational guidelines (trial) notice (financial [2014] no. 113), involved in the performance evaluation of laws and regulations not concreteness, systematic focus and pain points in performance appraisal. Recently, article 92 is one of the relatively many regulations on performance evaluation, but only 30% of the hard indicators are proposed. Therefore, detailed PPP project performance evaluation rules and guidelines should be issued to standardize project process/improve project quality and create more demonstration projects. We will improve legal policies, clarify regulatory content, regulatory methods, regulatory standards and the focus and pain points of implementing PPP project performance evaluation, so as to achieve systematic reference and standardization of laws and regulations when implementing performance evaluation. Through the restriction of national policies, it is beneficial to improve the accuracy and applicability of PPP project performance evaluation results, and provide a basis for future PPP project implementation.

3.2 Update the performance evaluation index database and strengthen the quantitative evaluation

PPP projects involve a wide range of fields, each of which has its own technical specifications and industry standards, which provides a basis for setting red lines and setting performance evaluation indicators and indicators. Therefore, the government or the government entrusts a third party institution to update the performance evaluation database in a periodic manner. The qualitative indicators of each stage are dealt with quantitatively according to the technical specifications and industry standards, so as to ensure that the evaluation results of different experts do not differ greatly and improve the quality and efficiency of the evaluation.

3.3 Establish panel data model to ensure the performance evaluation covering the whole life cycle

According to the national PPP project database standards, national policies and project contracts, the key performance evaluation indicators are given according to different time points, and the three-level evaluation is formulated, as well as the relevant document attachments required for each stage, so as to achieve performance tracking and process supervision.

First of all, according to the 19 steps of the five stages of the whole life cycle of PPP project, based on BIM, real-time control is carried out in combination with the Internet of things and the Internet. At the same time, the data of key indicators needed are obtained according to regular and irregular spot check methods, and continuous performance tracking is conducted, so that the results of performance evaluation can be well documented and can be referenced.

Then, in the process of project implementation, after statistical analysis of data, real-time feedback is used to realize multiple functions of performance evaluation, so as to ensure that the evaluation time covers the whole life cycle.

4. Summarizes

PPP projects have been developing in China for more than a decade, but the standardized performance evaluation of PPP projects has not been formed yet. Based on the analysis of the status quo of PPP project performance evaluation, this paper proposes the optimization of key indicators and the evaluation process, so as to achieve seamless whole-life cycle performance evaluation. With PPP project as the carrier and performance management as the main line, we will improve the scientific and refined management level of PPP project financial budget management and stimulate social capital to continuously improve the quality of public goods and services and supply efficiency.

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