

Analysis on Opportunistic Behavior in PPP Project

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Abstract

PPP mode is a major institutional innovation, which embodies its inherent advantages in practice. However, due to the characteristics of numerous participants, long construction period, large investment scale, imperfect contracts and so on, in the process of promotion, participants are prone to opportunistic behavior, which affects the quality of PPP projects to a certain extent. Therefore, this paper analyzes the concrete manifestation of opportunistic behavior in PPP mode in its whole life cycle, analyzes the main reasons for opportunistic behavior, and puts forward the countermeasures on this basis.

Keywords

PPP Mode; Opportunistic Behavior; Project Management.

1. Introduction

Public-Private Partnership (PPP), refers to the project mode of cooperation between government and social capital in the field of public infrastructure and public services. This mode originated in Britain in 1980s, and then developed and expanded in some developed countries, and achieved good results in the field of infrastructure construction. Under the background of the modernization reform of national governance system and governance capacity, the Chinese government is increasingly favoring the PPP model for infrastructure construction and public service provision, which not only profoundly changes the investment structure of public projects in China, but also affects the local governance pattern.

The rapid development of PPP projects in China benefits from the partnership between government and social capital, which is based on the sharing of benefits and risks. However, because the project itself has the characteristics of long construction period, large investment scale, numerous participants and relatively complicated management, and the goal of government departments to maximize social benefits is contrary to the goal of social capital to maximize benefits, which leads to opportunistic behaviors such as irregular operation and inadequate supervision of PPP projects. Therefore, the study of opportunistic behavior in PPP projects has always been a hot issue in the field of engineering project management at home and abroad. Hinton[1] pointed out that in the construction industry, opportunism is one of the factors driving convenience immoral behavior, Mota[2] and others pointed out that in the course of project operation, it is easy to cut corners, reduce the number of equipment maintenance, etc., in order to achieve the purpose of cost saving, which will seriously affect the quality and safety of the project, the safety of people's lives and property, as well as social stability and economic development. Bao Qin [3] thinks that investors are more likely to take opportunistic behaviors during the operation period of PPP projects than during the construction period, because the forms of opportunistic behaviors during the operation period are more subtle. Sward [4] puts forward that the future benefits of project cooperation participants will affect whether partners take opportunistic behavior.

The literature has shown that there is the possibility of opportunistic behavior among participants in PPP projects. The existing literature mostly focuses on the mechanism of

opportunistic behavior between government and social capital in PPP projects by game theory [5-7], but there is little research on opportunistic behavior in different stages of PPP projects. In view of this, this paper divides the whole life cycle of PPP project into three stages, namely, project bidding stage, project construction stage and project operation stage, and explores the manifestation, formation mechanism and related governance mechanism of opportunistic behaviors of government and social capital in different stages of PPP project, with a view to providing relevant suggestions and measures for avoiding opportunistic behaviors in different stages of the project.

2. Manifestations of Opportunistic Behavior in PPP Projects

Opportunistic behavior refers to the behavior that one of the two partners takes non-contractual or illegal means for its own benefit, such as covering up, distorting, slacking off, false propaganda, etc., in order to pursue the maximization of its own interests. Previous studies have shown that PPP projects are prone to opportunistic behaviors in the concrete implementation process.

In the stage of project bidding, the government aims to select qualified social capital to participate in the project construction. However, because the government is at an information disadvantage in this process, that is, it lacks understanding of the information of social capital's construction ability, financial situation, management level and so on, and can't guarantee the reliability of the information provided by social capital, which eventually leads to opportunistic behavior of social capital in the bidding process. For example, in order to win the bid, the social capital deliberately lowered the bid price, and after winning the bid, it took advantage of the loopholes, gaps and ambiguities in the original contract terms to ask for renegotiation or revision, adjustment, explanation or supplement to achieve its goal. At the same time, under the influence of distorted view of political achievements, some local governments alienated the bidding process of PPP projects into political tools. For example, in order to achieve the goal of political interests, we can improve political performance by delaying debts, reducing budget deficits and smoothing expenditures, without considering the sustainable development of the project; In order to gain self-interest, some government officials collude with social capital in advance, and do not strictly examine the information such as the qualifications of social capital parties, thus laying hidden dangers for the construction and operation of PPP projects.

In the project construction stage, government departments can make use of the technology and management experience of social capital parties to save capital costs and provide more efficient services for the public. However, in the actual implementation process of PPP project, social capital, as the builder of the project, has obvious information and professional advantages. In order to achieve the expected goal, rent-seeking behavior may occur with third parties, thus threatening the achievement of the project performance goal and causing the phenomenon of "winner curse". Due to the low profit margin of government projects, social capital parties subcontract the projects to other parties through layer-by-layer subcontracting, or take advantage of the unmeasurable and unverifiable characteristics of performance to lower the project quality standards, so as to achieve the purpose of reducing costs. During the construction period of the project, the government trusted the social capital too much, relaxed the supervision of the social capital during the construction period, and lacked a transparent risk evaluation system and procedures. These opportunistic behaviors will seriously affect the operation and development of PPP projects.

In the operation stage of the project, the government, as the client of the project, pursues the maximization of social benefits, while the social capital, as the operation agent, pursues the maximization of its own interests. Because of the differences in pursuit goals and asymmetric information between the two parties, opportunistic behaviors are more likely to occur. For

example, in order to attract social capital to invest and build projects, some government departments relax the supervision of social capital during the operation period. Driven by interests, if local government departments fail to supervise or breed corruption, and rent-seeking behavior occurs with social capital, social capital will reduce the quality of products/services, thus saving the cost of operation and maintenance and improving the return on investment. For example, Tianjin Shuang Gang waste incineration power plant incident, Lanzhou Veolia water pollution incident and so on. In the initial operation period of the project, the social capital will weigh the benefits and costs brought by the project during its existence. Once the expected benefits are not achieved, the project will be terminated in advance to avoid corresponding responsibilities.

3. Analysis of Influencing Factors of Opportunistic Behavior in PPP Project

According to the forms of opportunistic behavior in different stages, combined with the theory of transaction cost economics, it can be determined that the main factors that lead to opportunistic behavior in PPP projects are as follows:

First, the legal system is not perfect. At present, most of the legal documents issued by our country for PPP mode are normative documents, and the efficiency level is relatively low, which causes problems such as gaps in existing laws, insufficient applicability, weak cohesion and so on in the specific operation process of PPP projects, and easily leads to the risk of opportunistic behavior due to lack of legal system constraints between the government and social capital parties in the process of cooperation.

Second, the supervision system is not perfect. In the process of PPP project implementation, the government's supervision has the characteristics of more investment in the early stage and less investment in the later stage. In the absence of matching resources and skills, it is difficult to effectively supervise the social capital's performance ability and performance, and it is even more difficult to fully and truly observe whether the social capital is self-disciplined or not and its efforts. This is also an important factor that social capital appears opportunistic behavior at all stages of the project, thus affecting the smooth implementation of PPP projects at all stages of the project. In addition, the lack of external supervision is also an important factor. Government supervision has the responsibility and obligation of enterprises, but in the process of implementation, there is a problem of insufficient motivation for government supervision.

Third, the inconsistent pursuit of interests. In PPP mode, government departments pursue the maximization of social benefits, while social capital pursues the maximization of self-interest, and the inconsistency of goals becomes the invisible driving force of opportunistic behavior in PPP projects. The contradiction between social capital's profit-seeking and government's public welfare has become an important reason for social capital's short-sighted behavior.

Fourth, information asymmetry encourages opportunistic behavior. Compared with the government, the social capital side is very clear about its own operation, but the government cannot fully grasp all the information of the social capital side; On the other hand, after signing the contract, the social capital is responsible for the design, construction and operation of the project, and the social capital knows the operation of the project better than the government. This has contributed to the possibility of social capital's concealment and deception. In the process of project practice, the lack of open and transparent procedures will easily lead to information asymmetry between the government and social capital, which will lead to the possibility of rent-seeking corruption.

4. Optimization Path of PPP Mode in China

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(1) Improve the legal system

PPP model legislation is the legal basis to regulate the behavior of government and social capital. Perfecting laws and regulations can reduce the uncertainty of policies and safeguard the legitimate rights and interests of stakeholders in PPP projects. At present, most of the laws and regulations related to PPP projects are policy documents, which have relatively low legal effect and are prone to conflict in actual operation. Therefore, we should strengthen the legislation of PPP mode at the national level, formulate unified rules, draw lessons from the development experience of other countries while summing up the experience of PPP development in China, formulate unified special laws for PPP projects, and restrict opportunistic behaviors from the legal level, so as to provide legal constraints for the development of PPP projects.

(2) Improve the supervision system

The improvement of PPP project supervision system includes: internal supervision by government and social capital, external supervision by independent third parties, public opinion supervision, etc. Under the condition of market economy, government supervision is to supervise and manage microeconomic entities through government control/regulation on the premise of achieving certain social goals, so as to standardize the behavior of economic entities and improve the resource efficiency of the market. For example, we should set up an all-round supervision mechanism before-during-after-the-event. In the bidding stage, we should use big data to establish the relevant information database of social capital, such as credit status, qualifications and other basic information, which will help us to choose the right social capital party and avoid opportunistic behaviors in bidding due to information asymmetry. However, the government also has the tendency of self-interest. It is not only the supervisor but also the project participant in the project, so it is easy to make use of his position to benefit himself. Therefore, it is necessary to establish independent third-party supervision to restrain the behavior of the government and social capital.

(3) Perfecting contract governance

The contract constructed by PPP mode integrates design, financing, construction, operation and maintenance, and comprehensively considers the cost and benefit of stakeholders, which makes the contract more complicated. However, in reality, the problems of PPP projects in each stage are unpredictable, and the contents of the contract do not cover all situations. Therefore, it is particularly important to establish a flexible contract mechanism.

(4) Formulate a reasonable incentive mechanism

Taylor, the "father of scientific management", pointed out that people are pursuing the maximization of their own interests, and employees' efforts can be encouraged from positive incentives and negative punishments. Positive incentives, for example, for eligible PPP projects, reducing the financial pressure of social capital through tax relief or death; Set up a dynamic incentive mechanism, encourage by implementing phased contracts in the process of project implementation, and adopt a dynamic supervision mechanism to supervise the project quality and progress from time to time, and reward the outstanding party. Negative incentives, for example, to impose a certain amount of punishment on illegal operations, to set the market entry threshold for serious cases, and to make key records and records. In addition, social capital can be protected by government subsidies, government guarantees and government recycling.

(5) Improve information disclosure.

The government should establish an information disclosure platform to facilitate the understanding and supervision of relevant information by all social parties. At the same time, it is necessary to mobilize the enthusiasm of the public to participate in supervision, and establish a supervision platform that is convenient for public complaints, such as setting up relevant platforms such as WeChat, Weibo, Tik Tok and WeChat official account, and setting up a report phone number. Establish a sound reputation incentive mechanism, and publicly commend the information of PPP projects that meet the standards, so as to provide advantages in the subsequent competition.

References

- [1] Hinton M. A, Hamilton R. T. Competitive tendering and individual behaviour in the construction industry: convenient immorality at work[J]. *Construction Management and Economics*, 2015, 33(11-12): 880-889.
- [2] Mota J, Moreira A C. The importance of non-financial determinants on public-private partnerships in Europe[J]. *International Journal of Project Management*, 2015, 33(7): 1563-1575.
- [3] Bao Qin. Study on the Evolutionary Game of Government Supervision during the Operation period of PPP Projects[D]. Southwest Jiaotong University, 2019.
- [4] Sward A R.S and Lunnan R. Trust and control in fixed duration alliances[J]. *Int. J. of Strategic Business Alliances*, 2011, 2(1/2): 41-68.
- [5] Zhou Yining, Liu Jicai. Study on Supervision Strategy of PPP Project Considering the Participation of Higher-Level Government[J/OL]. *Chinese Journal of Management Science*:1-16.
- [6] Wang Tianri, Guo jingyun, Wang Haitao, etal. Evolution Dynamics of Opportunistic Behavior of PPP Project Contractors Based on Moran Process[J]. *Technology Economics*, 2020, 39(08):168-173.
- [7] Chen Yan, Lyu Yunxiang, Xie Yunhui. Evolutionary Game Analysis of Risk Management Behaviors of PPP Projects Based on PT-MA Theory[J]. *Chinese Journal of Systems Science*, 2020, 28(04):65-70.