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## Risk Analysis of PPP Project contract

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### Abstract

At present, the PPP project is developing vigorously in our country. It has the characteristics of long project cycle and many stakeholders involved. PPP project contract is the tie of all stakeholders and one of the key factors to ensure the smooth implementation of PPP project. It is necessary to analyze the contract risk of PPP project. This paper introduces the main body, content and nature of the PPP project contract, analyzes the risk factors existing in the PPP project contract, and clarifies the way of risk sharing and risk prevention measures in order to safeguard the interests of all parties. Provide stakeholders with some advice to ensure the smooth implementation of the PPP project.

### Keywords

PPP project, contract risk, risk sharing, risk analysis.

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## 1. Introduction

With the rapid development of the economy, the domestic demand for infrastructure construction is growing day by day. The government can not meet the current needs by relying solely on the state finance. The government has introduced a new mode of private capital development to meet the current demand. Thus the PPP project has developed rapidly in China. PPP model is a project completed by the public and private sectors through contract, giving full play to their respective advantages to achieve more efficient cooperation, which can bring more benefits and security to stakeholders. Both the Ministry of Finance and the Development and Reform Commission believe that the PPP model is applicable to infrastructure and public service projects with a higher degree of marketization. Since PPP projects involve multiple interests, it is necessary for their stakeholders to work out reasonable contracts to share risks and distribute benefits, but neither the public sector nor the private sector has it. Mature experience and strong ability to judge the risk of PPP project in the whole life cycle, coupled with the asymmetry and incompleteness of project information, during the performance of the project contract, there may be many problems that may lead to different degrees of project disputes. We should strengthen the drafting, negotiation, performance and change of PPP contract. More importantly, the whole process management of rescission, transfer, termination and invalidation, which enables all parties to express their wishes correctly, distribute risks reasonably, perform their obligations properly and claim rights effectively through contract, is the basis of long-term friendly cooperation between the government and social capital, and also an important guarantee for the smooth implementation of PPP projects.

The PPP project contract is the premise of the cooperation of the stakeholders, but the content of the PPP project contract is very extensive and complex, so it needs to be managed in real time and in a dynamic way. It can effectively prevent the project contract risk and maintain the legitimate interests of the relevant parties. This paper introduces the nature and characteristics of PPP project contract and the participants of PPP project, analyzes the content of PPP project contract, discusses the possible risks in the whole project implementation process, and formulates the countermeasures

according to the results of the analysis. Provide some reference for the stakeholders involved in the PPP project.

## 2. PPP project

The current PPP model has developed extremely rapidly in China and has been favored by all parties. The PPP model is a partnership of risk sharing and benefit sharing formed by the government to attract social capital to participate in infrastructure construction through franchising. PPP is called the government-social capital cooperation model or franchise in China. The broad PPP refers to the long-term cooperative relationship between the government and enterprises to provide public goods or services. The narrow PPP refers to a series of public sectors based on project financing. The way the private sector works long-term to provide public or quasi-public goods or services<sup>[1]</sup>. The PPP project can bring a win-win situation for both parties. However, the PPP project has more investment, longer duration and more stakeholders. The risk of PPP projects is more complicated and changeable. The PPP project contract is a document signed by the government entity and social capital for the smooth implementation of the project. The government and social capital are based on contractual contracts and guarantee the legitimate interests of both parties through contractual provisions. The PPP project contract is the premise for stakeholders to ensure their respective interests. Through various regulations, it can effectively prevent the occurrence of risks, increase the execution efficiency of contracts and ensure the completion of projects.

## 3. PPP project contract

Because the PPP project involves many stakeholders, large span, long time and so on, when making the contract, as the stakeholder of the PPP project, it is necessary to consider all the conflicts of interest in the whole life cycle in the contract, to ensure that their own interests are not damaged, and to formulate a contract which is satisfactory to all parties. PPP project contract is the bond and cornerstone for all stakeholders to build trust. By establishing reasonable and scientific PPP project contract, we can not only determine the relevant issues of project implementation, but also ensure that their respective interests are not harmed. PPP project contract involves the subject of the project and its participants, cooperative relations, investment and financing plans, pre-project, project construction, operation and service, transfer, income and return, force majeure and legal changes, breach of contract, dispute settlement and other agreements, the content of which needs repeated discussions among all stakeholders. A consensus that will ultimately be neither impaired nor least damaging to their interests.

### 3.1 The subject of contract and its participants

The contract system mainly includes the PPP project contract, the agreement/contract for the tenderer to entrust the manager to manage the project, the social capital consortium agreement, the shareholder contract, and the company's articles of association. The article takes PPP project contract as the research object, and its contract subject and participants are: government subject and social capital subject, and clearly define their respective subject qualifications, rights definition and responsibility definition.

Government subject. The government mainly refers to the institutions or organizations that represent the public interest and are responsible for providing public goods or services to the society, including government agencies or government-authorized institutions. In the implementation of specific PPP projects, usually according to the division of powers of governments at all levels, The government agency of the corresponding level and function of the project is the participating organization of the project, responsible for the initiation and implementation of the PPP project, and the government agency itself or the organization authorized to meet the statutory conditions to sign the project contract in the name of the general government agency or the authorized institution. In the PPP model, the government is both a project participant and a project supervisor. When the contract is signed, the government needs to define its role and determine the responsibilities and obligations of the role.

Social capital subject. State Development and Reform Commission: the main body of social capital is "qualified state-owned enterprises, private enterprises, foreign-funded enterprises, mixed ownership enterprises or other investment and business entities"; the Ministry of Finance: social capital refers to "domestic and foreign enterprise legal persons who have established modern enterprise buildings". In general, social capital forms a consortium of project companies, which represent social capital. Each party in the consortium has the same rights and obligations and bears irrevocable joint and several liabilities. The project company is not a branch of social capital, but independent of social capital.

The project company. The main participants of the project company include the government and implementing agencies, social capital, financial institutions, professional operating enterprises and so on. The sponsors and investors are usually implemented in the form of setting up the project company, which is an important carrier of PPP mode operation. In the "PPP Project Contract Guidelines (Trial Implementation)" of the Ministry of Finance, it is proposed that the project company can be set up by social capital (either one enterprise or a consortium of enterprises), or by government and social capital.

### 3.2 Contract content

PPP project involves not only a large number of contracts, but also the amount of the contract is uncertain, and the stakeholders have a greater risk. In addition, PPP project has its own particularity, in different geographical locations, different time periods to sign the contract content and type are different, need to be arranged according to its characteristics can not drift with the current, need to clarify the tasks of each stage, formulate a reasonable contract to protect their legitimate rights and interests.

Partnership. The PPP project partnership includes cooperation content, franchise grant and franchise period, exclusive agreement and performance guarantee. Through the cooperation content to determine the scope of the project, the conditions provided by the government and the tasks undertaken by the project company, the granting of the franchise rights and the franchise period and exclusive agreement can safeguard the rights and interests of the social capital, and the performance guarantee can guarantee the smooth implementation of the project and Maintain the interests of stakeholders.

Construction and operation stage before transfer. At this stage, both parties should give full play to their respective advantages. Both project construction and transfer require reasonable provisions to protect the interests of stakeholders. During this period, the government should provide corresponding work support, such as: coordinating relevant departments and stakeholders to provide necessary Information and documents in compliance with relevant policies and regulations. The social capital party can ensure the smooth construction, operation and handover of the project through its own construction experience.

Default treatment and dispute resolution. Stakeholders may determine the liabilities for breach of contract and the mode of liabilities for breach of contract by stipulating in the contract, such as: if the project company fails to achieve the agreed progress of construction, the completion of the project, or the commencement of operation within the agreed time limit, and if the time limit exceeds a certain period, the government may ask the defaulting party to correct it within the specified time limit It also requires the breach party to pay breach of contract damages according to the provisions of this contract. When a dispute arises, it can be settled through consultation, adjustment, arbitration or litigation. If there is no dispute in the contract, it is necessary to continue to perform according to the contents of the contract. Except as stipulated by law or otherwise, neither party may stop the operation of the project or stop the operation expenses of the project on the ground of disputes. Services or other measures that affect the public interest.

### 3.3 PPP project contract process

The PPP project contract is not entirely equivalent to the franchise agreement, the private subject of the franchise agreement is the social capital subject (PPP project contractor), compared with PPP project contract is a broader concept, including the government subject and social capital subject signed before the project has been established. Letters of intent, memorandums and framework agreements are issued to clarify the intentions of both parties and to grant private entities the right to franchise<sup>[2]</sup>. Setting up a contract, fulfilling a contract and terminating a contract is the whole process of PPP project contract. The duration of PPP project contracts is generally up to more than ten years, during which the government policy, market environment change greatly, and there are many uncertain factors. Therefore, when establishing PPP project contracts, both parties need to discuss the details of the contract in detail, formulate a contract suitable for both parties, and reduce the risk in the implementation process; in the process of contract implementation, it may be possible. If there is any unexpected situation, it needs to be renegotiated and the rights, interests and responsibilities are divided according to the situation; termination of the contract means that the transfer of the project after the completion of the project can terminate the contract, or in a specific case can terminate the contract in advance to terminate the cooperative relationship.

### 3.4 The nature and characteristics of PPP project contract

PPP project contract is not only a simple contract, the nature of the project contract is decided by the franchise or government purchase, in which the return mechanism of the PPP project contract is regarded as administrative contract, the government purchase service is regarded as a civil contract, and the franchise operation is regarded as a franchise operation. It is considered a mixed contract with the joint purchase of government purchase. PPP project contracts are not all franchised businesses. At the present stage, PPP project contracts are regarded as mixed contracts.

The PPP project contract is the basis for ensuring the smooth implementation of the entire project. Since the contract period of the PPP project is long and the external environment is relatively large, its contract characteristics are diverse, mainly as follows: the government has strong leadership and needs for the project. The professional knowledge is more comprehensive, the number of contracts is large, the correlation between each contract is large, the planning and procedural nature of the contract management, the strictness of the contract subject, the uncertainty of the contract amount, the strictness of the contract subject, and the participants of the contract. More and more heterogeneous, the contract characteristics of PPP projects determine the PPP contract as a framework contract<sup>[3][4]</sup>. Through the characteristics of PPP project contracts, risk management can be provided to a certain extent, which provides a certain reference for managers to manage risks.

## 4. Measures to deal with the contract risk of PPP Project

PPP project contract risk management means that for the participants of the project, the risk bearer, the way of undertaking and the content of the commitment are determined through the contract, and the contract is signed in a specific way, which is more binding to the project participants. Risk prevention measures in disguise. Through the whole process risk management of drafting, negotiating, performing, changing, releasing, transferring, terminating, and insuring PPP project contracts, it can not only help social capital explain the claims and rationally allocate risks, but also ensure the smooth implementation of PPP projects. The contract risk of PPP project exists in this project cycle. Due to the long cycle of the project, there are certain problems in the risk division of certain clauses when the project contract is formulated. With the passage of time, the implementation of the project can be rationally divided. The stakeholders of these project terms determine the risk-taking approach and risk-taking content.

Reasonable risk sharing. Risk sharing means to allow a party with more control over the risk to assume the risk, the degree of risk and its return to match and assume the risk needs to be set an upper limit, when force majeure or risk beyond the expected scope of one party, it is necessary to participate in the risk shared<sup>[5]</sup>. Mohamed Chohra et al. (2011) mainly studied the risk allocation method of PPP

contract, and considered that the most effective risk allocation form of PPP contract is public and private sector participation in risk management and reasonable risk allocation at all stages of the project<sup>[6]</sup>. In the process of project implementation, with the change of external environment and government policy, the risk sharing of contract may be unreasonable for the project participants, resulting in unreasonable distribution of benefits. Therefore, it is necessary to negotiate again in the process of project implementation, so as to divide responsibilities and interests in detail.

Develop normative contracts and dynamic adjustment mechanisms.

Laicheng Wen and Wei Meng (2016) put forward the viewpoint of strictly examining and approving the contract, formulating the standard PPP project contract and setting up the contract adjustment mechanism by analyzing the contract management risk of PPP project<sup>[7]</sup>. The contract adjustment mechanism of PPP project is one of the key steps to ensure the smooth implementation of the project. The problem of contract risk appears gradually in the process of project implementation. It is necessary to set up a dynamic adjustment mechanism to solve the problems existing in the process of project construction, and to ask the project participants about benefit distribution and risk sharing in the process of project management. Disputes arising from the above-mentioned issues need to be re-established treaties or agreements to avoid contract disputes affecting the implementation of the project and to protect the interests of all parties.

Perfect laws and regulations. Since PPP project contract is a mixed contract, both civil contract and administrative contract, its management will inevitably be affected by double management. However, the Contract Law now in use can not cover PPP project contract, and it can not effectively restrain project participants from executing project contracts in terms of contract performance. Laws and regulations provide legal protection for PPP projects. It is necessary to clearly define the relevant definitions of PPP projects, and to differentiate the rights and obligations in the contracts in detail. Perfect laws and regulations can not only protect the interests of stakeholders, but also promote the smooth implementation of the project and reduce unnecessary disputes.

Strengthen professional talent control. Because the PPP project involves many participants when making the contract, the content of the contract is more complex, and it is easy to produce divergence, so it needs professional personnel to make and manage the PPP project contract. At present, the knowledge of PPP project managers is limited, and most of them do not really understand the PPP project. It is necessary to introduce and train comprehensive managers so that they can play a role in law, economy, construction, operation and contract management. More perfect PPP project contract, better protect the legitimate rights and interests of stakeholders.

## 5. Conclusion

The PPP project has the characteristics of large investment amount, large span, long time and many stakeholders involved. The content of the PPP project contract is very extensive and complicated, which increases the difficulty of risk management and requires detailed and dynamic contracts. Adjustment mechanism. The contract risk of PPP project exists in the whole life cycle of the whole project. Therefore, PPP project contract management plays an important role in the implementation process of PPP project. Contract management plays an important role in the early stage of project or project operation and handover. Formulating reasonable rules is convenient for providing reference for contradictions and disputes arising in the later implementation process. According to the main body of the PPP project contract and the contract content, the article analyzes the contract risk of the PPP project and formulates risk prevention measures to provide a certain degree of reference to the stakeholders. The disputes and problems arising from the implementation of the PPP project contract are still needed. Further discussion, for the PPP project, the contract risk management of the PPP project should be strengthened. The research of the article still has some shortcomings and can only provide a reference within a certain scope.

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