

A Comparative Analysis of Public-Private Partnership in China and the United States

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Abstract: Public-Private Partnership (PPP) is commonly translated as the “cooperation between the government and social capital” model. This model originated in the United Kingdom in 1979 and has been accepted and used by many countries, and the model has played a role in promoting economic development and improving the level of public services in China. In the United States, this model can reduce the financial pressure on the government and improve the efficiency of project construction and operation. China first introduced the PPP model in the 1980s, and developed rapidly after 2024. In China, bank loans are the major financing channel for PPP projects. This paper selects China and the United States as examples to analyze the PPP model, using SWOT analysis and case studies to analyze the advantages and disadvantages of PPP. This study identifies distinct advantages of the PPP model in both China and the United States, with China presenting a greater number of development opportunities. Additionally, it reveals similarities in the potential threats faced by both nations. The paper concludes with recommendations advocating for a collaborative effort between China and the United States, emphasizing the mutual benefits of shared learning and cooperation.

Keywords: PPP method, Comparison between China and the United States, Financing project, The impact of policies on PPP, SWOT method

1. Introduction

China's Public-Private Partnership (PPP) model started late, the development concept is not advanced, and the supporting environment is not perfect, which makes it difficult to promote it sustainably and effectively [1]. The supporting environment of China's PPP model needs to be improved [2], and the United States also has many shortcomings, but there are still some things worth learning. China possesses numerous advantages that warrant attention and learning from the United States. This paper undertakes a comparative examination of the strengths, weaknesses, opportunities, and threats (SWOT) of the PPP model in both China and the United States, with a focus on analyzing the complementarities between the two nations. Employing case analysis and comparative analysis methods, the study utilizes the SWOT framework to comprehensively synthesize the development of PPP models in each country. Furthermore, it delineates potential development trajectories and offers strategic recommendations.

2. The strength of the PPP model in China and the United States

2.1. The strength of the PPP model in China

The government possesses robust overall planning capabilities, enabling it to mobilize resources effectively for the advancement of large-scale PPP projects. A notable example is the Hong Kong-Zhuhai-Macau Bridge within the Guangdong-Hong Kong-Macau Greater Bay Area. This project, with a total investment exceeding 120 billion yuan [3], exemplifies the integration of resources from various stakeholders through the PPP model.

China has a vast and complete industrial chain, resulting in relatively low project construction costs. For example, domestic enterprises from equipment manufacturing to engineering construction are mature, and the costs are lower than in many countries.

The government has a high degree of credibility and stable policies, attracting domestic and foreign investors. For example, in the construction of Shanghai Yangshan Deep - water Port Phase IV automated terminal project, the stable policy environment attracted many international shipping enterprises to participate in the cooperation.

The domestic market is extensive, with a robust demand for infrastructure, thereby offering abundant application scenarios for PPP projects. Throughout the urbanization process, the construction of urban rail transit in numerous cities has extensively employed the PPP model, as exemplified by Beijing Subway Line 16.

2.2. The strength of the PPP model in the United States

It has accumulated a large amount of project practical experience and has obvious advantages in technological innovation and management.

With great international influence, it is conducive to carrying out cross - border PPP project cooperation.

It has a mature legal system and a sound supervision mechanism, ensuring the standardized operation of projects. Take the reconstruction project of the Chicago Elevated Expressway as an example. Strict legal supervision ensures the compliance and quality of the project.

The financial market is highly developed, with abundant financing channels, which can provide diversified financing plans for PPP projects. The construction of the new subway line in New York raised funds through various means such as issuing municipal bonds and introducing insurance funds.

3. The weaknesses of the PPP model in China and the United States

3.1. The weaknesses of the PPP model in China

A deficiency in professional talent within PPP projects in certain regions is adversely affecting the scientific decision-making and efficient management of these initiatives. In some third-tier and fourth-tier cities, the scarcity of skilled professionals has led to misjudgments during the early-stage evaluation and subsequent operational phases of projects.

There are some problems existing in the government supervision of PPP projects in China, such as the low legislative level and dispersion of existing government supervision legislation, the coexistence of multi-departmental government supervision and supervision deficiencies, and the imperfect construction of the government supervision team[4].

3.2. The weaknesses of the PPP model in the United States

The project approval process is complex, and the decision-making cycle is long, which may delay project progress.

Political factors have a great impact on projects. Changes in political party may affect the continuity of policies.

On average, in the domestic industries across the country, the annual salary of each full-time employee is 29,367 US dollars[5]. The labor cost is relatively high, resulting in weak cost competitiveness in some labor-intensive projects.

4. The opportunities of the PPP model in China and the United States

4.1. The opportunities of the PPP model in China

By establishing a risk-sharing model for Belt and Road PPP projects, the optimal risk strategy combination for these projects can be realized [6]. This development also facilitates the expansion of a broader international market for China.

The implementation of strategies such as new urbanization and rural revitalization has given rise to a large number of PPP project demands in infrastructure and public service fields.

The integration of scientific and technological innovation and the PPP model, such as in the field of smart city construction, has broad development space. During the planning and construction of Xiong an New Area, the PPP model is introduced and combined with technologies such as big data and the Internet of Things to create a smart new city.

4.2. The opportunities of the PPP model in the United States

Almost every city possesses varying degrees of practical experience in the repurposing of old buildings [7], and the urgency of infrastructure aging necessitates large-scale renovation and reconstruction, thereby presenting a market opportunity for PPP projects.

Carrying out international cooperation projects with other countries can achieve resource complementarity and mutual benefit. For example, in the cross-border energy pipeline project in cooperation with Canada, it promotes energy cooperation between the two sides.

The development of emerging industries such as new energy and environmental protection requires the introduction of social capital through the PPP model. In solar and wind power generation projects, the PPP model is used to promote the development of the new energy industry.

5. The threats of the PPP model in China and the United States

5.1. The threats of the PPP model in China

Fluctuations in the international economic situation may affect foreign capital investment and project financing costs. For example, during the global financial crisis, in order to implement the naturalization strategy and avoid relatively large intangible risks, some multinational companies have begun to withdraw their capital in China[8].

The intensification of industry competition may lead to excessive competition in some projects, driving down project revenues. In some popular PPP projects of urban commercial complexes, enterprises offer overly low bids to win the project, which affects the quality of project operation in the later stage.

5.2. The threats of the PPP model in the United States

The rise of trade protectionism affects the development of international cooperation PPP projects. The trade protection policies of the United States have hindered cooperation with other countries in PPP projects such as infrastructure construction.

Fluctuations in the financial market and the increase in financing costs may affect the capital balance of projects. Stock market turbulence and interest rate fluctuations make it more difficult to finance PPP projects and increase the cost of funds.

The public's increasing requirements for project acceptance and environmental protection may increase the difficulty of project promotion. In some PPP projects of large chemical industrial parks, due to public concerns about environmental protection, the project site selection and construction face resistance.

6. Outlook and Inspiration

With the growth of global infrastructure construction demands and the deepening of the concept of sustainable development, the PPP model will have a broader development space. Fuelled by technological innovation, the integration with advanced technologies such as big data and the Internet of Things is expected to deepen, with intelligent operation emerging as an inevitable trend. Additionally, in response to climate change, a proliferation of PPP projects in the green environmental protection sector is anticipated. International cooperation will also become closer, and cross - border PPP projects are expected to increase, promoting global infrastructure connectivity.

For China, it should accelerate the improvement of PPP - related laws and regulations, establish a unified and standardized institutional framework, and strengthen policy coherence. It is necessary to increase efforts in cultivating professional talents, establish a sound talent training system, and improve project decision - making and management levels. Additionally, China should rationally control local government debt, optimize the project revenue distribution mechanism, and reduce debt risks.

The United States, on the other hand, needs to simplify the project approval process, improve decision - making efficiency, and reduce administrative inefficiencies. It should strengthen the control of labor costs, explore innovative construction models, and enhance the cost competitiveness of projects. Moreover, it is essential to stabilize the policy environment and reduce the interference of political factors on projects.

Both China and the United States should strengthen international exchanges and cooperation, learn from each other's experiences, and jointly promote the healthy and sustainable development of the PPP model on a global scale, contributing to global infrastructure construction and economic development.

7. Conclusion

Through a SWOT analysis, it has been identified that China and the United States possess distinct strengths. China's primary strength lies in its competitive pricing, whereas the United States' main advantage is its extensive experience. The United States faces significant weaknesses in the form of high labor costs and an unstable political environment. Conversely, China's main weaknesses are the lack of experience and a shortage of skilled talent. Compared to the United States, China enjoys more development opportunities, particularly with the rapid growth of the PPP model. However, the development of China's PPP model is primarily threatened by price competition and the international economic climate. In the case of the United States, trade protectionism has stifled numerous development opportunities, leading to a situation where demand outstrips supply. In summary, both China and the United States should strengthen international exchanges and cooperation, learn from each other's experiences, and jointly promote the healthy and sustainable development of the PPP model on a global scale, contributing to global infrastructure construction and economic development.

However, this article only compares the PPP models of China and the United States, the scope is limited, and only lists the typical characteristics, and the comparison will be expanded in the future

to compare the development of PPP models in more countries under different situations, and summarize more experience from them.

References

- [1] Fan Bi, Guo Lian, Du Shuai & Sun Xinru. (2015). *Optimizing the Structure and Management of Local Government Debt by Using PPP Model: The Practice and Reference of PPP Model for Infrastructure Investment and Financing in the United States*. *Research of Development Finance*(04), 44-47. doi:10.16556/j.cnki.kfxjr.2015.04.006.
- [2] Xie Zhongyong. (2019). *Exploring the financing dilemma and countermeasures of PPP projects*. *Heilongjiang Transportation Science & Technology*(08), 186+189. doi:10.16402/j.cnki.issn1008-3383.2019.08.099.
- [3] Tang Liuwen, Nie Yuange & Guo Jingyi. (2018). *120 billion yuan! Where did the money come from to build the Hong Kong-Zhuhai-Macao Bridge?*. *Pearl River Water Transport* (20), 32-34. doi:10.14125/j.cnki.zjsy.2018.20.010.
- [4] Fan Liu. (2024). *Research on the Legal Mechanism of Government Supervision of PPP Projects in China* (Master's Thesis, Hunan Institute of Technology <https://link.cnki.net/doi/10.27906/d.cnki.gnghi.2024.000542>doi:10.27906/d.cnki.gnghi.2024.000542).
- [5] Huang Taiyan. (1997). *The Workings of the U.S. Labor Market*. *Journal of Chinese University of China* (02), 21-26+129.
- [6] Chang Yanan & Wang Songjiang. (2016). *Research on risk sharing of infrastructure PPP projects under the background of the Belt and Road Initiative*. *Scientific and Technological Progress and Countermeasures*(16), 102-105.]
- [7] Zhang Runxing. (2014). *A Preliminary Study on the Organic Renewal and Reuse of Existing Old Buildings in the United States*. *City* (01), 50-53.
- [8] Xu Lei. (2009). *Divestment of Multinational Corporations in China and Its Prevention under the Financial Crisis*. *Contemporary Finance & Economics* (12), 95-101.