

Research on the Application of PPP Mode in the Operation of Large-Scale Stadiums and Gymnasiums

Xiaolan Ge^{1, a}, Suqiong Feng^{2, *, b}

¹School of PhD candidate at Air Force Engineering, Xi'an, 710051, China;

²School of Sichuan Agricultural University, Chengdu, 611130, China.

^aFengtingting0828@163.com, ^b* 2476247436@qq.com

Abstract. the application of PPP mode in large-scale stadiums has great significance to improve the management level of large-scale stadiums and gymnasiums. At present, the practice of participating in stadiums investment and operation in PPP mode in our country is just beginning. Therefore, this article will take the two-core links of "benefit distribution" and "risk sharing" as the entry point, at the same time, it will focus on theory as main aspect and case study as auxiliary aspect. According to the practical experience of PPP mode in the operation of large stadiums and gymnasiums in the United States, the application of PPP mode in the operation and management of large-scale stadiums and gymnasiums in China is studied, and the application and practice of PPP mode in the management reform of large-scale stadiums and gymnasiums in China is further explored.

Keywords: PPP mode; benefit distribution; risk sharing.

1. Definition of PPP Mode and Other Related Concepts

1.1 The Definition of PPP Mode

PPP is a way of providing public goods, using private enterprises to design, invest, build, operate and maintain public infrastructure, and provide related services to meet public needs. This mode of delivery combines the characteristics of outsourcing and privatization. The PPP model is a "win-win" mode based on mutual cooperation and exchange between the public and private sectors. Although the parties involved do not maximize the benefits, the total benefits are the largest, and "the Pareto optimality" is achieved. This is in line with the public sector in the construction of large-scale stadiums and gymnasiums, the operation of the pursuit of social and economic benefits win-win objectives.

1.2 Application of PPP Mode in Large-scale Stadiums and Gymnasiums

The application of PPP mode in the operation of large scale stadiums and gymnasiums should emphasize three points: first of all, it emphasizes the attributes of the stadiums and gymnasiums, that is, apply the PPP mode to build or operate the large scale stadiums and gymnasiums; secondly, it emphasizes the process of "operation" of the stadiums and gymnasiums, that is, how to use the advantage resources of all parties involved in the stadiums and gymnasiums, activate the stadiums and gymnasiums, and realize the "Pareto effect"; finally it emphasizes the application of PPP mode in the course of stadiums and gymnasiums operation, that is, according to the core link of PPP mode operation, how to realize the optimal combination of "benefit sharing", "risk sharing" and "government supervision".

From the current management of the United States stadiums and gymnasiums, the main operating organizations of US stadiums and gymnasiums can be divided into three categories: government agencies, professional teams and professional private stadiums and gymnasium operation and management groups. In addition to government agencies, professional teams and private stadiums and gymnasium operation and management groups are private organizations. The case of this study is limited to the large-scale stadiums and gymnasiums operated and managed by American professional teams or private stadiums and gymnasiums operation and management groups under PPP mode. As shown in Fig. 1.

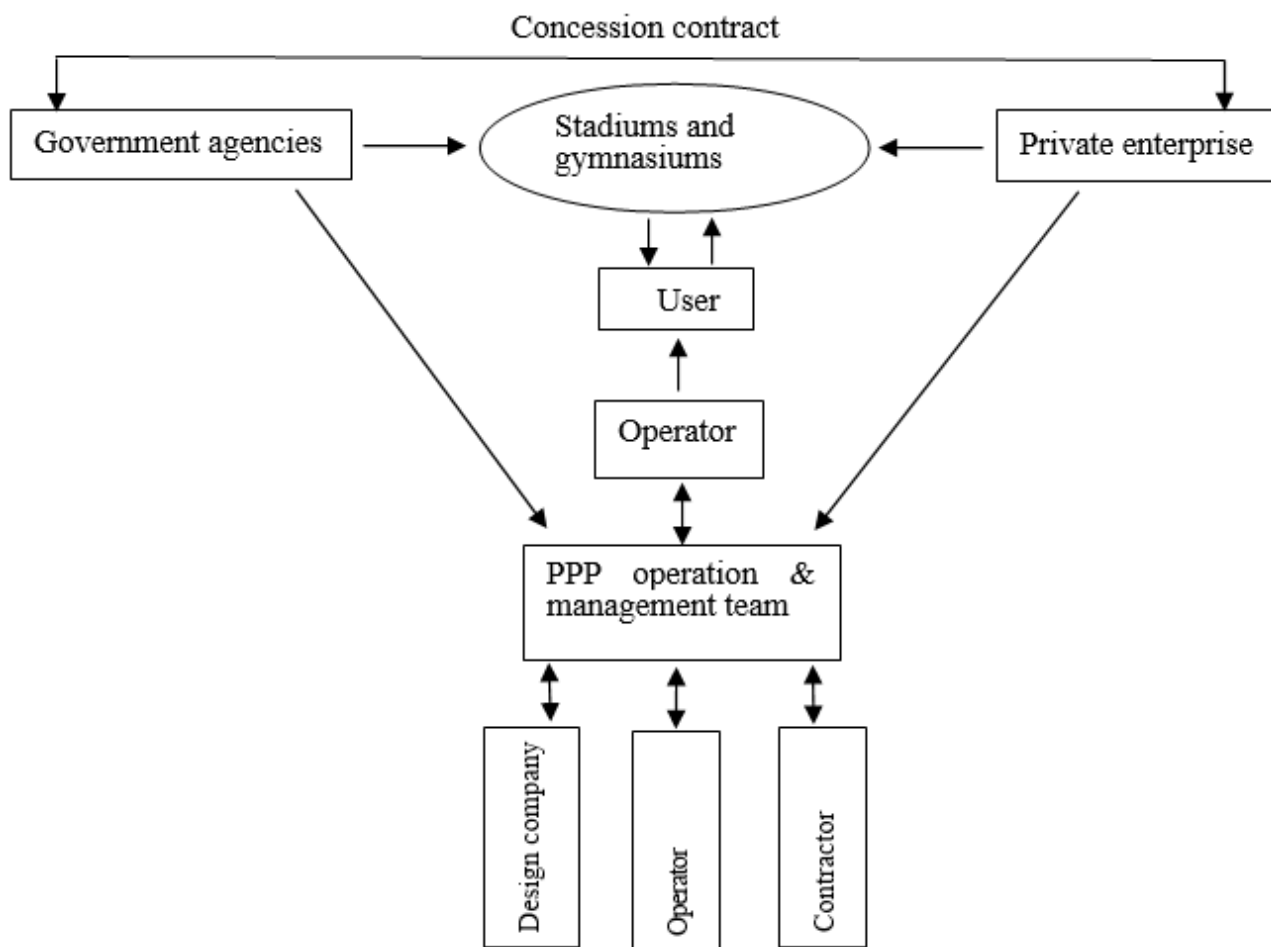


Fig. 1 Operation mechanism diagram of large scale stadium and gymnasium

2. The Interest Demand and Sharing Way of Various Operators of the Large Stadiums and Gymnasiums

2.1 Government Sector

Economic benefits. The economic benefits of government sector in stadiums and gymnasiums are generally reflected in the increase of employment rate and tax revenue brought by stadiums and gymnasiums operation. For large stadiums, the stadiums and gymnasiums operations are the key to achieving the stable employment. The tax revenue collected by the government on the operating income of large stadiums and gymnasiums consists of two parts, namely, direct tax revenue and indirect tax revenue, mainly including the income tax paid by the staff of the stadium and the gymnasiums and the sales tax on tickets and commodities and etc. However, the revenue generated from the continuous operation of the stadiums and the gymnasiums will bring in more taxes, mainly due to the business tax paid by the staff in the subsequent goods and services. The effective use of stadiums and gymnasiums as a catalyst for the development of neighboring areas, attracting new residential and commercial land to generate new tax revenues, is also an effective way for government departments to pursue economic benefits.

Urban development benefits. In many cases of stadiums and gymnasiums PPP programs, the purpose of the cooperation between government departments and the private enterprises is to revitalize specific geographical areas, especially those that are underdeveloped. For example, Neille Island, Pennsylvania, Ohio River Park Stadium. Built on a living, architectural, industrial and chemical waste disposal plant, the park is now a multiple purpose sports and leisure centre with indoor and outdoor sports facilities for thousands of people a day. In theory, this revitalization is achieved through the form of real estate development projects. Usually, in the overall planning that comes with the development of large-scale sports facilities, large-scale stadiums and gymnasiums are often

regarded as major projects, and the real estate, entertainment and leisure facilities around the venues are often also regarded as large-scale projects. These venues and new business environments can attract new businesses and new residents, create new sources of income, but also bring additional vitality to previously underutilized venues, and ultimately achieve the goal of revitalizing specific areas.

Symbolic benefits. The symbolic benefits mainly refer to the enhancement of stadiums' and gymnasium's reputation and image, civic pride and social cohesion. The symbolic benefits of the stadiums and gymnasiums are mainly realized by holding large scale sports events and attracting professional teams to settle in. The establishment of large scale events is actually a kind of recognition to the development of the city, and the high exposure of the city in the whole country and even the whole world during the period of the event will undoubtedly enhance the reputation and image of the city, the sense of civic pride, the social cohesion and so on. In addition, the construction of new stadiums and gymnasiums is also an important reason for attracting professional teams to settle in. The success or failure of professional teams is tied up with city reputation, image, civic pride, social cohesion and other factors.

2.2 Private Enterprises

The preferential policies of government departments in the operation of stadiums and gymnasiums. The construction and operation of large stadiums and gymnasiums is a complicated project with huge investment. For example, in the aspects of land acquisition, infrastructure construction and so on, it is necessary to deal with all aspects of the relationship. As the policy makers, the government has a great advantage in coordinating the relationship between the departments, which is embodied in the preferential policies such as taxation, infrastructure construction, land use and so on.

The public-private cooperation is a kind of affirmation to the private enterprise own development. During the operation of large stadiums and gymnasiums under the PPP mode, from naming rights, advertising positions to seeking tenants and holding sports events, private enterprises that have the right to operate stadiums and gymnasiums generally do not take full charge of all the business in operation. In order to maximize the economic benefits, the non-professional business is transferred to the more professional team through cooperation. Compared with large scale stadiums and gymnasiums built and operated by public and private companies, large scale sports stadiums and gymnasiums built and operated by private enterprises have shortcomings in terms of risk aversion and credibility. Therefore, private enterprises want to work with government departments to enhance their own cooperation with other groups.

2.3 Stadiums and Gymnasiums Users

The interests of the public are mainly focused on the quality of the public sports services and the spillover effect brought about by the operation of the stadiums and gymnasiums. Through combing out some financing cases of stadiums and gymnasiums, it is found that the public sports services concerned by the community mainly focus on the free admission of stadiums and the supply of large scale sports events, etc. The spillover benefits brought by the stadiums and gymnasiums are mainly focused on the increase of employment opportunities and economic income, and the improvement of facilities around the stadiums and other multiple content.

3. Risk of Large Stadiums and Gymnasiums Operating Under PPP Mode

According to the stage characteristics of the participants and the PPP project risks, the risks in the stadiums and gymnasiums operation under the PPP mode are divided into the risks borne by the government departments, the risks borne by the private enterprises and the risks shared jointly by the government departments and the private enterprises.

3.1 Types of Risks Borne by Government Departments

The risk of policy change. In the United States, tax policy is most common when U.S. government agencies issue municipal bonds to raise funds for the construction and maintenance of large scale sports stadiums and gymnasiums. One of the characteristics of municipal bonds is that 90% of venue funding must be guaranteed by government departments. It is with government guarantees that private enterprises can secure funding for cooperation with the public sector, but once tax policy changes, there is no government guarantee. The leverage of municipal bonds may not be able to give play to the original policy push effect, which is undoubtedly a risk to the maintenance financing of operation and management of stadiums and gymnasiums. In addition, as the entry of professional teams is the key to the sustainable operation of most large scale stadiums and gymnasiums in PPP mode, the departure of the team is undoubtedly a huge risk for large stadiums and gymnasiums in PPP mode. One of the incentives for this risk is that the tax policies of other competitive cities are superior to those of the city. The public sector, as a policy maker, is better at controlling and coping with policy risks than the private sector, so these risks are generally borne by the government.

Enterprise moral hazard. According to the investigation, most of the entrustment contracts stipulate that the trustee shall carry out the operation and management of the entrusted venues in the name of the trustee according to the entrustment's entrustment, and the legal consequences arising therefrom will be borne by the trustor; Therefore, in order to control the moral hazard of enterprises in the entrusted operation of stadiums and gymnasiums, the agreement between the owner and the trustee of the venue is generally specified in the contract between the trustee and the third party, which requires the prior consent of the trustee. There are also some government departments and private enterprises on corporate moral hazard to buy commercial insurance.

3.2 Types of Risks to be Borne by Private Enterprises

Because private enterprises bear the management right of large stadiums and gymnasiums under PPP mode, the risks in operation are usually taken by private enterprises. Venue idleness is an extremely important risk for operators, so in the PPP mode, government departments attach great importance to the control of the risk of stadiums and gymnasiums idling when signing contracts with private enterprises. In general, using the contract agreement, the operator is required to hold how many large sports events in the venue within the management period, otherwise, pay penalty for breach of contract. In this way, the government transfers the risk of stadiums and gymnasiums idling to the private enterprise.

4. Application of PPP Mode in the Operation of Large Stadiums and Gymnasiums in the United States

4.1 Policy Guidance and Project Mechanism are the Necessary Premises for the Application of PPP Mode in Large Scale Stadiums and Gymnasiums

The states in the United States have greater autonomy in the formulation of policies and regulations for large scale stadiums and stadiums PPP projects. Therefore, the PPP mode adopted by the United States in the operation of large scale stadiums and gymnasiums is based on its national conditions and systems. Microscopically, from the point of view of some cooperation agreements of the PPP project in the United States, the government and private enterprises need to have clear regulations on the mechanisms of project market access and exit, return on investment, risk sharing, performance appraisal, etc. This is a necessary premise to ensure efficient operation.

4.2 The Flexible Application of Tax Leverage in PPP Mode can Achieve a Win-Win Situation in Reducing Government Financial Pressure and Effective Public Investment

Flexible tax policies are the main way for U.S. government departments to participate in the construction and operation of large stadiums under the PPP model. The total investment of 54 new and renovated stadiums in the four major professional sports federations in the United States from

1994 to 2004 was US \$131.6 billion. Of that total, \$80.2 billion was spent on public finances, accounting for 60.94 percent of the total, while the bulk of U.S. government spending came from tax revenue. The most common tax policy in the United States for the construction of large stadiums is the issuance of municipal bonds, and some domestic tax laws do not allow bondholders to profit from the interest earned on the issuance of municipal bonds. The interest required to apply this method is lower. In addition, the US government also attaches great importance to the use of tax leverage to protect the effective recovery of public financial input. According to the nature of tax payers, some scholars have classified the tax policies of the United States concerning the recovery of investment in professional stadiums and gymnasiums, including: tax on tickets, taxes on radio and television, taxes on advertisements and business activities in stadiums and gymnasiums, Income tax for athletes, tax for dressing rooms, etc. These taxes are collected with the operation of stadiums, which link the recovery of public financial investment with stakeholders of stadiums, to a certain extent, realize the effective recovery of public financial investment of stadiums and gymnasiums. For example, the BB&T Center has a total investment of \$200, 12 million, of which \$84 million is invested by Blodward County as a government agency, funded mainly by \$137 million in tax-exempt bonds and \$47 million in taxable bonds. The \$13.4 million annual debt service is mainly covered by a \$8 million tour tax and a \$2 million sales tax, with the rest coming from stadiums' profits and investment gains.

4.3 Participation of Professional Sports Clubs in the Operation of Large-Scale Stadiums is a Feasible Way to Apply the PPP Model in the Operation of Stadiums and Gymnasiums

Professional sports clubs (hereinafter referred to as clubs) adopt PPP mode to participate in the investment of stadiums and stadiums, and the operation is the main mode for American private enterprises to participate in the operation of large scale stadiums and gymnasiums. Taking NFL as an example, the club has become the main power to invest and operate private enterprises in large scale sports stadiums and gymnasiums under PPP mode. Of NFL's 29 public stadiums, 22 teams have taken the PPP model to invest in the stadiums used by the club, most of which are invested by local governments in the United States, with the club participating in only a small portion of the investment. After the stadium was completed, the ownership of the stadium was owned by the United States government, and the club was granted the right to operate for a certain period of time. The average life of the 22 teams granted the right to operate was 28 years. The four major professional sports federations in the United States strictly control the supply of teams, and the general practice in various places to attract professionals to stay is to build the venues directly or in cooperation with the clubs, which build the venues in the content of the venues. The cultivation fan community and so on aspect has the innate superiority.

References

- [1]. JUDITH GRANT LONG. Public/Private Partnerships for Major League Sports Facilities[M].UK: Routledge,2013: 241—601.
- [2]. Wang Longfei, Wang Yan, Liu Yunzhou.The public financial support of American sports stadiums and gymnasiums and its enlightenment[J]. Sports Science, 2009, 29 (10):24.
- [3]. Chen Yuanxin. Investment and Financing Practice for Large Sports Venues[M].Beijing: Beijing Sport University Press, 2012:15-16.
- [4]. Wang Longfei, Wang Peng. Tax policy in the construction of professional sports stadiums and gymnasiums in the United States and its enlightenment[J]. Journal of Xi'an Physical Education University, 2015N 32 (1): 33.
- [5]. Liu Xindan, Zhang Lijie. The Public Service of Western Large Scale stadiums and gymnasiums and its Enlightenment[J]. Sports Culture Guide. 2012 (111): 108.
- [6]. BB&T Center [EB/OL]. [2017-10-20]. <http://hockey.ballparks.com/NHL/FloridaPanthers/newindex.htm>.