# Review of Financing Model of Stadium and Gymnasium Construction in China

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## Abstract

By methods of documentation, logical analysis, the current status of financing model of stadium and gymnasium construction in China is summed up. It shows that we should clear up financing barriers, further develop capital market, set up diversified financing system and enforce supervision on construction and operation of stadiums and gymnasiums.

## Keywords: Stadium and gymnasium, Financing mode

With the reform of management mechanism and operation mechanism of stadiums and gymnasiums in China, the financing model used by the construction of stadiums and gymnasiums has been shifted from government investment to market-leading financing gradually, in the process of which the social power and individual investment has been increased and the foreign capital has entered by the proof of many successfully profitable cases related to independent investment and operation in this field.

## 1. Stadium and gymnasium

Stadium and gymnasium includes two parts as stated in the concept. A stadium is defined, by the Code of Building Design issued by the Ministry of Housing and Urban-Rural Development of the People's Republic of China, as a spacious outdoor venue for sporting events or other events, which consists of a field or stage surrounded by a structure designed to allow spectators to stand or sit and view the event. It generally has 6 standardized 400-meter runways, a football field in the center of the yard and is surrounded by grandstand that has no less than 500 seats. A gymnasium is a athletic building that equipped by the specialized training facilities to carry on a single item or multiple items indoor tournaments, such as ball, indoor track-and-field games, ice-sports, gymnastics(skill), martial arts, boxing, beating, weight lifting, nelson, judo and etc. It has match and practice yard, grandstand, assistance building and facilities. According to the function, it can be classified into synthetic gymnasium and specialized gymnasium.

## 2. A review of model research

#### 2.1 BOT model

Build-operate-transfer (BOT) is a form of project financing, wherein a private entity receives a concession from the public sector to finance, design, construct, and operate a facility stated in the concession contract. This enables the project proponent to recover its investment, operating, and maintenance expenses, to get reasonable profit by receiving the fee for services in the project and to transfer the facility to the public sector free of charge at the end of the concession period. In China, BOT model is able to solve the problems related to operation and management of public athletic facilities under market-oriented economy. We should lead advanced experience accumulated both at home and abroad related to operation and management of public athletic facilities by using competition mechanism, which will not only work out the problems of item and can also help the existing large stadiums and gymnasiums in our country adapt to sporting industrialization reform.

# 2.2 PPP model

Public–private partnership (PPP) describes a government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies. In this financing structure, the government does not involve in as a direct investor or borrower. The construction of the National Stadium used in the 2008 Beijing Olympic Games was typically financed by the PPP model. Beijing State-Owned Assets Management Co., Ltd. and Shangxin Group unified as the National Stadium Co., Ltd. to build the Bird's Nest. Under the consideration of financial and capital balance, the former group financed the project by 58% on the government's behalf, and the later did the other 42% and constructed the building. The later has franchise on the Stadium for 30 years, during which she has right to operate on it in order to pay debt and get profits from it. 30 years later, the former will take back the operating right. In the case, the Beijing government utilizes social capital to set up and operate the large stadium, which not only shows significant improvement in operation and management of large stadium in China, but only offers a sample model to other stadium construction for Olympic Games.

# 2.3 ABS model

An asset-backed securitization (ABS) model is the process, in which the illiquid but foreseeable stable cash net flow is transferred to marketable and circulating securities in financial market after risk and profit factors in assets being separated and reconstructed by arrangement of law and financing structure. By this model, the original holder transfers this foreseeable stable profits, which is derivative from certain assets, to a specialized company (SPC) who will securitize these assets and enable them finance in international or local capital market. The foreseeable stable profit is the essential requirement in this model. When it works for large stadium construction, it means that by transferring illiquid assets to negotiable securities, the stadium profits will be realized before completion of stadiums. Therefore, ABS model has become the fastest developing financing tool in stadium construction.

# 2.4 Municipal bond financing model

Municipal bond is a bond issued by a city or local government or its authorized agencies. In this model, the government issues bonds to finance construction of stadiums and gymnasiums. There are mainly three kinds of municipal bonds used internationally: duty-backed bond, project income-backed bond and asset-backed bond. The first two are more traditional. The government issued bonds mainly include general obligation bonds and debenture bonds. The general obligation bond is paid off by the government's property tax. It is difficult to issue in the process of public vote. Once issued, the general obligation bond is less risky and costless. The party who issues debenture bond always has no right to levy so that the bond will be paid off by the returns from projects, therefore this type of bond is also called income bond. Municipal bond has been used in the developed countries for more than 100 years, such as in USA, Japan and Germany. At present, municipal bond is also used in China, such as Shanghai Fudong Developing Construction Bond and Chongqing City Construction Bond and Guangzhou Underway Construction Bond.

# 2.5 Private capital investment model

When private capital involving in construction or upgrade of stadiums and gymnasiums, the government will not have big pressure of raising heavy tax and taxpayer will not endure big risks. There are several accesses for private capital entering into stadium and gymnasium construction: donation, kind contribution, naming right, exclusive privilege, restaurant management right, various sponsor combination, life insurance combination, rental agreement and luxurious sets, preferred seat arrangement, permanent seat permission, parking fee, article earnings, dining service management right, advertising right, sales contract, bequest and accredit thing, housing donation, asset-backed security, various funds (private funds, industrial funds and etc.)

# 2.6 Project leasing financing model

The project organizer sets up a project company who performs as a tenant and leases the large stadiums and gymnasiums to develop, construct and pay rent to the financial leasing companies who have the ownership of stadiums. The project organizer and project company can pay rent before tax, as well as realize 100% financing without any other share capital investment.

# 2.7 Intangible capital financing model

By intangible capital financing model, organizers can auct, sell or transfer the naming right by taking advantages of high rate of media exposure, audience participation and public effect of large stadiums and gymnasiums. In recent year, this model has been used in stadium and gymnasium construction in our country and works well in both aspects of lessening the government's financial burden and publicizing enterprises. It shows itself as a mutual beneficial model and will perform well in stadium construction in the future.

## 2.8 Sports lottery financing model

Many nations raise funds by issuing sports lottery for the development of sporting industry. At present, various lotteries has been issued in about 120 nations around the world, mostly of which are sports lotteries. Lottery industry took the place of No. 6 in all the industries by its sales amount of US\$120 billion in 1996. On 10 October 1984, a sports lottery named Developing Sports Prize issued in order to raise capital for the Forth session of the International Marathon in Beijing and it became the first sports lottery in China. The Fujian Province Sports Development Lottery was issued on 1 November 1984 by the government and became the first sports lottery issued for the reason of financing large stadium construction.

# 3. Suggestions

## 3.1 Clear up financing barriers

In recent years, there are a series of searches on financing of stadium construction, such as in the Olympic Games, the Nanjing Tenth Sports Games and Changsa Five City Sports Meeting. But in general, there is no breakthrough in aspects of expanding financing channels and absorbing in private as well as foreign investment. When national demand of sports increasing, many cities come across difficulties in financing stadium construction merely by the governmental finance. Therefore, it is necessary to promote market reform. National capital should withdraw from profit-making to nonprofit-making stadium construction, which will provide more chance for private capital involvement in the stadium construction.

## 3.2 Implement diversified financing

The domestic and international large stadiums, particularly those equipped for the occupational athletics requirements, adopt PPP model and BOT model widely, which represents the current trend of financing in large stadium construction all around the world. PPP model and BOT model not only lower governmental construction investment on stadiums effectively, but also help their operation and development in future and avoid their being laid aside.

## 3.3 Expand financing channels

In the process of financing the stadiums used in the Olympic Games, the Nanjing Tenth Sports Games and Changsa Five City Sports Meeting, the related administrative departments have set up the idea that we can manage and develop stadiums in the same way as we do cities. The best example comes from the construction of New Century Sports Center in Changsa. It is practical that the government manages stadiums as we do cities to covers up capital shortage.

## 3.4 Strengthen supervision on construction

Stadium construction involves far-ranging social public interest so that it must be supervised by the related administrative departments regardless of being managed by state owned businesses directly or operated by private enterprises. The government may supervise the state owned businesses by controlling their budget amount directly, approving their investment scale and projects, nominating their representatives and watching on their pricing and profit distribution. And government may supervise the private enterprises by introducing competition system in order to improve efficiency of stadium operation.

## 3.5 Set up profit compensatory system

The investment of private capital in stadium construction is commercial in nature and profit related. It means no profit, no this kind of investment demand. Therefore, the government should set up the related price management system and profit compensatory system in order to limit investors' profit risk. In practice, the government can offer preferable policies and supports to projects in terms of land usage, infrastructure facilities and franchise. The private investors can recoup and further get relatively stable profits from this kind of low risky projects.

## 3.6 Accelerate capital market construction

The level of capital market has great influence on financing in stadium construction. In USA, the capital used in the stadium mainly comes from capital market. Capital scale of and financial tools used in capital market determine financing scale directly. It is because of her advanced capital market that financing in the field of sports industry in USA is model diversified, capital abundant and cost reasonable. Therefore, we should further support financing of stadium construction by deepening financial system reform, developing financial creative products and accelerating capital market development.

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