

Study on the multi-dimensional influence of large-scale sports events on the economic development of host cities

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Abstract. With the continuous development of the social economy, more and more cities have begun to take the initiative to host large-scale sports events. Therefore, it is essential to analyze large-scale sports events' impact on host cities' economic development. This paper examines this problem from four aspects. First, this paper explores the potential of each sports event in the context of large-scale sports event hosting and develops its related surroundings to meet consumer demand, thus driving the vigorous development of urban sports tourism. Then, combined with the exercise and display of the city's comprehensive strength, the event will show the image of a "promising government" and attract the circulation and introduction of foreign capital. Then, by demonstrating the government's ability to coordinate and innovate, it can promote the long-term economic benefits brought by population inflow to the city, and undertake the city to promote the development of surrounding less-developed cities through transportation and other infrastructure construction, to promote regional coordinated development. This paper analyzes and comments on the positive impact of hosting large-scale sports events on urban economic development from these four aspects. At last, this paper expounds on the negative impact of hosting large-scale sports events, which may bring about a large amount of money to build venues, such as capital deficit and idle venues, and analyzes the specific impact.

Keywords: Large-scale sports events, sports tourism, population mobility, Regional coordinated development.

1. Introduction

The report to the 19th National Congress of the Communist Party of China pointed out that "the principal contradiction in society has evolved into the contradiction between unbalanced and inadequate development and the people's ever-growing needs for a better life." The per capita income level continues to rise, people's interest in sports competitions, and the demand for more specialized sports facilities is rising. According to research, large-scale sports events have tourism leverage benefits, and the holding of sports events will promote the tourism of countries and cities [1]. At the same time, the sports industry is cross-cutting and has a strong connection with many industries. Therefore, the development of the sports industry can drive the common development of other related industries and jointly promote the rapid development of the national economy [2]. As a result, many cities are increasingly enthusiastic about hosting large-scale sports events. However, hosting major sports events requires a lot of infrastructure construction and funding. Although the value of holding large-scale events cannot be judged simply by the return of income, few cities are willing to host sports events with low economic benefits. Therefore, it is extremely important to actively and deeply evaluate the specific economic impact brought by large-scale sports events, and evaluate the actual impact of events on urban economy. The author has read a large number of literature and found that most of the current research focuses on the single influencing factors of large-scale sports events on the economic development of host cities, but few comprehensively evaluate the combined effects of these multiple factors.

To fill the research gap, the author hopes to summarize the various impacts of large-scale sports events on the economic development of host cities through this article.

2. Large-scale Sports Events and Urban Economic and Social Development

2.1. Hosting Large-scale Sports Events to Promote the Development of Urban Tourism

As an important way to promote human health, sports tourism has a wide range of participation and strong interaction, which is in line to comprehensively improve the health quality of the Chinese nation and realize the coordinated development of people's health and economic and social development [3]. European and American countries in the promotion of sports tourism mainly to athletes as the object of publicity and packaging, to obtain economic benefits. At present, China is still in the reform period, and the benefits obtained by packaging athletes are low compared with European and American countries. China is actively utilizing tourism resources to boost sports tourism, understand the audience's needs, and cater to their consumption needs. At the same time, the different characteristics of different sports events, strengthen the attraction of various sports, develop the surrounding resources, and tap the consumption potential. The hosting of large-scale sports events is an opportunity to develop urban sports tourism. Using the popularity and publicity of sports events, combined with the city's development and publicity, can attract many tourists and audience consumption, and create economic benefits for the city. The city's cultural heritage and event heritage attract both domestic and foreign tourists after the game.

The host city must consider and make reasonable arrangements for the rational use of facilities and venues to promote sports tourism after large-scale events. The sports facilities and venues retained after the event can attract a large number of tourists by creating sports experience activities. Professor Li Hai, Dean of the School of Economics and Management of Shanghai University of Sport, based on the relevant reports and selection data of four major categories of sports tourism scenic spots, sports tourism destinations, sports tourism events and sports tourism routes in the database of China Sports Tourism Quality projects from 2013 to 2020, The methods of mathematical statistics, LDA (latent Dirichlet allocation) topic analysis model and machine learning are comprehensively applied to analyze the development status and overall distribution characteristics of high-quality sports tourism projects in our country, and at the same time provide decision-making reference for the next development of high-quality sports tourism projects [4]. Based on the above research and relevant data analysis, Professor Li Hai summarized four points: First, the rapid growth of sports tourism projects has significantly contributed to domestic recycling, poverty alleviation, and rural revitalization. Second, the sports tourism boutique projects appear regional centralized trend, the development is not balanced. Third, the theme of sports tourism projects is constantly enriched, showing a diversified trend. Fourth, the continuous expansion of the radiation area of sports tourism events is conducive to promoting the balanced flow of resources [4].

Experts and scholars in the industry hold diverse perspectives on the elements of urban cultural soft power. Yu Xiaoman believes that the soft power of urban culture is more reflected in the development status and level of its cultural industry [5]. Sports events promote cultural integration by integrating the city's historical, regional, and advanced foreign cultures, expanding their cultural significance, and fostering a unique cultural core competitiveness [6]. Hosting large-scale sports events enhances urban transportation, communication, and sports venues, promoting tertiary industry development, cultural soft power, and international competitiveness, while also improving infrastructure like transportation and communication in the host city. Hosting large-scale sports events attracts tourists, helps them understand the city's history and culture, and fosters cultural exchanges between the host city and other cities. Innovation is crucial for a city's flourishing, and the value of culture lies in innovation. Bidding and hosting such events provide opportunities to catalyze cultural innovation for host cities [6]. According to the event itself, a series of peripheral products, badges, songs, mascots, and stamps have driven the audience's consumption, improved the economic benefits generated by the event, highlighted the city culture, and enhanced the soft power of the city.

2.2. Hosting Large-scale Sports Events Promotes City Financing

In this new era, FDI competition has become more and more intense. An increasing number of studies have pointed out that an active local government is important for attracting FDI. This is because "proactive government" can not only pool resources and provide infrastructure, but also improve the business environment and reduce transaction costs [7]. However, whether the government itself is active and promising is difficult to comprehensively observe and accurately identify by domestic and foreign investors in a short period. Therefore, the government must innovate competitive strategies and actively demonstrate its positive and promising image. To this end, many cities use hosting major sports events as a positive signal to the government.

Large sports events have many participants and a wide variety of events. Such events have a huge demand for sports space, and the management work involved is also extremely complex. From venue construction to event operation, from security to information services, every link needs to be carefully planned and efficiently executed. Therefore, this puts forward extremely high requirements for the infrastructure, ecological environment, organization and coordination ability, and logistics support of the host city.

First, in terms of infrastructure, cities need to have enough hardware conditions such as stadiums, transportation networks, and accommodation facilities to meet the needs of things. This is not only the size and number of venues themselves, but also the supporting roads, public transport, communication networks, and other infrastructure. Secondly, a good ecological environment is also the key to the success of large-scale sports events, including air quality, greening level, water resources management and so on.

In terms of organization and coordination ability, the government needs to demonstrate strong resource allocation and coordination ability to ensure the orderly progress of various preparatory work for the event. This not only involves the sports department but also includes the close cooperation of public security, transportation, health, publicity and other departments. In terms of logistics, it is necessary to ensure that the life and work needs of athletes, coaches, spectators and staff are fully met, which puts forward high standards for supply chain management, food safety and medical services. Hosting large-scale sports events provides a chance for a city to showcase its strong resource coordination and comprehensive management capabilities to the world. By successfully hosting the event, the government can send out a positive signal of "promising government", which can not only enhance the international image of the city, but also enhance the confidence of domestic and foreign investors in the city.

In addition, the success of major sports events can also attract more foreign direct investment (FDI) inflows. Through the window of the event, international investors see the development potential of the city and a good investment environment, which helps to promote the opening up of the city's economy and the process of internationalization. The city's hosting of large-scale sports events not only showcases its strength but also attracts foreign investment and promotes economic development. General Secretary Xi Jinping also expressed: "To achieve higher economic development and keep pace with global scientific and technological progress, people must continue to make good use of foreign investment." At present, "stabilizing foreign investment" has become a major focus of the government's economic work. Actively hosting large-scale sports events can serve as a potential source of foreign investment.

2.3. The Impact of Hosting Large-scale Sports Events on Population Mobility

Population, as the fundamental driving force to promote urban development, its flow and aggregation are directly related to the rise and fall of the city. With the arrival of the new era, people are more rational in their choice of migration destinations, and they regard the perfection of infrastructure construction and the supply capacity of public services as important considerations in deciding whether to migrate. In this process, the rise and development of sports gradually became a key factor in enhancing the attractiveness of the city, playing a positive role.

In the context of the development of the new era, the city's infrastructure construction and public service capacity became the basic conditions to attract people to move in. The improvement of infrastructure such as roads, transportation, communication, water supply and power supply, as well as the quality supply of public services such as education, health care and culture, are all important factors when people choose to live in cities. Sports, as a cultural and social activity, significantly enhances a city's image, improves citizens' health, promotes social harmony, and positively impacts its attractiveness, making it a vital cultural phenomenon. The vigorous development of sports not only provides citizens with a variety of sports activities, enhances their health, but also becomes an important part of urban culture. The construction of stadiums, the holding of sports events and the emergence of sports stars have virtually enhanced the visibility and reputation of cities, making cities more advantageous in talent competition and population flow. Therefore, the development of sports has become an indispensable part of urban development in the new era, which not only plays a positive role in promoting population migration but also injects new vitality into the sustained prosperity of the city.

The growth of sports significantly contributes to the happiness of urban residents, enriching their social and cultural life, and ultimately improving their overall happiness. The active development of sports reflects the city's regular care for residents' lives. Taking sports as a way of life and investing in urban infrastructure construction will also help to improve the livability of cities, thus generating a stronger attraction for talent, thereby improving the concentrations of talent and promoting the transformation and upgrading of local industries [8], enhancing the stickiness of residents and enhance the residents' sense of belonging and loyalty to the city. Hosting large-scale sports events not only showcases a city's charm but also enhances its visibility and creates a unique city brand, making it an effective promotional tool. Such events as business cards promote the image of the city to a broader stage. This is not only an important opportunity to exercise and demonstrate the ability of urban management and service, but also a powerful force to attract the population to move in and promote urban development.

To host large-scale sports events, cities need to demonstrate efficient management capabilities and high-quality service levels in event organization, security, transportation coordination, information dissemination, and other aspects. The demonstration of this ability can not only leave a deep impression on the contestants and the audience but also enhance the international image of the city and enhance the soft power of the city. Through such an international stage, the city brand can be shaped and spread, and then enhance the international status and influence of the city. In the long run, this economic effect will be transformed into a continuous driving force for urban development, attracting more talent and investment, promoting the optimization and upgrading of industrial structure, and providing a steady stream of power for the long-term economic growth of the city.

Therefore, hosting large-scale sports events is not only an important means of external publicity for cities, but also an important catalyst for urban economic development. It brings not only short-term glory and prosperity to the city but also long-term development potential and sustainable economic vitality.

2.4. Hosting Large-scale Sports Events to Promote the Coordinated Development of Urban Areas

Taking Beijing's hosting of the 2008 Summer Olympic Games and the 2022 Winter Olympic Games as an example, China fully considered the issue of maximizing the economic effect of the Olympic Games when preparing for the 2022 Winter Olympic Games. In 2016, General Secretary Xi Jinping pointed out: "We should take the preparation of the Winter Olympic Games and the Winter Paralympic Games as an important starting point to promote the coordinated development of Beijing, Tianjin, and Hebei, make great efforts to promote institutional innovation, mechanism innovation, management innovation and policy innovation, promote the coordinated development of transportation, environment, industry and other fields first, key breakthroughs, and play a leading role in the full implementation of the coordinated development strategy of Beijing, Tianjin and Hebei.

People should give full play to the promoting role of the preparations for the Beijing Winter Olympic and Paralympic Games in urban development, implement the strategic positioning of the capital city, and further give play to the radiating role of Beijing in driving the development of the Beijing-Tianjin-Hebei region [9]." The two cities were innovatively selected to give full play to the leading roles of Beijing and Tianjin. During the preparations for the Winter Olympics, more than 2,000 kilometers of connecting roads and "bottleneck roads" were opened and widened in the three regions of Beijing, Tianjin and Hebei. The high-quality education and medical resources of Beijing and Tianjin were further shared with Hebei, and the attractiveness of Hebei for talents and industries was constantly enhanced, which was conducive to the industrial transformation and upgrading of Beijing, Tianjin and Hebei [10].

Hosting large-scale sports events promotes the infrastructure construction between the host places, and greatly improves the investment in inter-city transportation infrastructure. For example, since 2016, the Beijing-Zhangjiao high-speed Railway, the Capital Region Loop Expressway, the Yangao Expressway, the Beijing-Tibet Expressway, the Beijing-new Expressway, and the Taihang Mountain Expressway have been opened to traffic one after another. On the other hand, it improved the investment in urban infrastructure, such as the renovation and reconstruction of urban roads, Zhangbei flexible DC power grid project and many projects have been approved [10]. The construction of transportation facilities promotes inter-city communication, reduces inter-city transportation costs, improves inter-regional transaction efficiency, realizes inter-regional division of labor and cooperation according to different resource endowments and comparative advantages among cities, and promotes regional professional development. At the same time, the construction of transportation infrastructure helps to break the barriers of resource flow, promote industrial agglomeration, promote the development of emerging industries, and play a strong role in promoting the upgrading of underdeveloped areas [11]. In particular, the construction of high-speed and high-speed rail has promoted the flow of talent, reduced the cost of information exchange, enhanced the learning effect of less developed cities, promoted the improvement of urban production efficiency, promoted the upgrading of industries [12], and promoted the growth of regional industrial income.

2.5. The Negative Impact of Hosting Large-scale Sports Events on Urban Development

Some cities lack thorough preliminary demonstration and planning before hosting large-scale sports events, and insufficient consideration is given to actual needs and post-competition utilization. In the early stage of the event, there may be environmental problems in the construction of venues. During the event, a large number of people flood into the city in a short period, and there may be a problem of congestion in the city, which puts forward higher requirements for urban security and infrastructure construction. After the event, there may be a low utilization rate of venues and high maintenance costs of facilities, resulting in the burden of capital flow. With the construction of venues and the development of events, many spectators and tourists flow into the city, which is followed by a series of engineering construction and personnel commuting to increase carbon dioxide emissions. Marathon events in China often put great pressure on urban ecology, such as a large number of paper cup cleanings, excessive population concentration leading to increased carbon emissions, and a large amount of food and garbage discarded by participants and spectators along the route [13]. At the same time, large-scale sports events held in scenic spots have caused varying degrees of damage to the ecological environment (such as desert garbage, vegetation destruction, and water pollution). At present, the pressure of hosting large-scale sports events in China is mainly manifested in the pollution of the atmospheric environment, water environment, and noise environment during the construction of large-scale sports venues, and the total amount of solid waste discharge is too large. During the event, problems such as total water resources consumption, total carbon dioxide emission, total solid waste emission, noise pollution, excessive resource consumption, and traffic congestion will be caused [14].

After the event is completed, the problem of low management fund consumption and utilization rate of venues is more common. Whether it is the Olympic Games or other major sporting events, the

facilities are only at full capacity during the time of the games. Generally, sports events of the same scale will not be held in the short period after the game, so a large number of existing sports venues and facilities are idle, and the overall utilization rate is low, resulting in a great waste of resources [15]. Because of the existence of these problems, cities should conduct a complete and reasonable assessment of their hosting capacity and the fund consumption required by the event itself before hosting large-scale sports events.

3. Conclusion

Under the background of the new era, more and more cities will develop sports undertakings as part of urban development, and the enthusiasm for hosting large-scale sports events is also rising. This paper takes the hosting of large-scale sports events as the research object and finds that the hosting of large-scale sports events has a diversified impact on the economic development of host cities. Hosting large-scale sports events can bring rich short-term economic benefits to host cities, attract a large number of tourists and spectators, and promote urban sports tourism through the sale of creative surrounding areas and the development of special sports experience projects. In addition to bringing short-term economic benefits to the city, hosting large-scale sports events can be used as an opportunity to show their service management capabilities and public facilities construction foundation, show their "promising government" image, attract foreign direct investment (FDI) inflows, and attract population migration to promote urban development. At the same time, large-scale sports events require large venues, which can promote the construction of infrastructure such as construction and transportation, and promote the development of regional integration.

This paper is a comprehensive review and summary of the economic impact of hosting large-scale sports events on the host city, which is conducive to future researchers to conduct an integrated analysis of the economic impact factors of large-scale sports events on the city. However, this paper did not consider the variables generated by the uncertainty in the hosting of sports events. In the future, the above-related variables can be further refined to facilitate in-depth research on this topic.

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