

# Research Article

# **Evaluation of Government Management Performance for Government-Guided Funds in the Chinese Sports**

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Since 2007, providing government-guided funds has gradually become an important policy means to develop the sports industry. First, this study defined the concept of government-guided funds. Second, Jiangsu Province was chosen for a case study. By referring to relevant requirements, a hierarchical model of government management performance evaluation for government-guided funds in the sports industry was established. Finally, the index system was used to evaluate the government management performance related to government-guided funds for the sports industry in Jiangsu, and corresponding suggestions were proposed to optimize the management and organization processes.

# 1. Introduction

Since 2010, the Chinese sports industry has gradually entered a high-speed development period, and its promotion effect on fitness programs nationwide has been increasingly prominent [1]. Document no. 46, "Several Opinions of the State Council on Accelerating the Development of the Sports Industry and Promoting Sports Consumption," issued in 2014, essentially reveals that there is great national attention to the sports industry at the policy level [2]. Later, the General Office of the State Council successively published multiple policies to further facilitate the high-quality development of the sports industry in the future. According to preliminary statistics, the market size of the sports industry in 2020 reached 2575 billion yuan, accounting for 2.53% of the national economy, with a low proportion. However, judging from the market scale and growth rate of China's sports industry, China's sports industry is growing. The total output of the national sports industry increased from 1.7 trillion yuan in 2015 to nearly 3 trillion yuan in 2020. Over the years, the growth rate of the gross output value of China's sports industry has always maintained at a level of more than 10%, much higher than the GDP growth rate in the same period. In general, the Chinese sports industry

has advantages such as the fast growth of output value, adequate development momentum, and obvious resource superiority [3, 4]. Future development will shift from the current focus on scale to the pursuit of quality improvement and competitiveness expansion (General Administration of Sport of China, 2016).

Although the development momentum of the Chinese sports industry is satisfactory, the proportion of the sports industry's output value to the total output value only reached 1% in 2017, which is lower than the output value levels (1.5%-3%) of the traditionally strong national sports industries, such as in North America and Europe [5]. In addition, multiple problems exist in the Chinese sports industry, such as dominating supply industries, insufficient consumption structures, a lack of market vitality, weak supporting policies, imbalanced execution forces, low marketbased allocation of resources, an immature industry support system, weak nationwide fitness awareness, and low social involvement [6, 7]. Hence, it is urgently necessary to transform and upgrade the development pattern. Undoubtedly, these factors are related to China's national conditions, such as its large population base and relatively slow sports culture development compared with economic development [8, 9]. In a word, although the domestic sports industry has

achieved good development, it still lags far behind the world level and still needs to make a lot of efforts to catch up. The solution of these problems requires the joint efforts of the government, relevant personnel, and enterprises to promote the healthy and stable development of the sports industry by formulating reasonable development plans, improving relevant laws and policies, enhancing the market competitiveness of enterprises, increasing their investment and financing channels, and expanding relevant markets. Government sectors at all levels in China have put forward multiple policy-level proposals to solve the problems.

At present, how to effectively attract funds is a critical issue. Especially for the sports industry, how to make the best of "the visible hand" to attract more social capital into the sports field under the guidance of government funds for future development has become a significant topic. Based on this, the idea of government-guided funds to promote industrial development emerged [10-12]. As a "visible hand" in the sports field, government-guided funds for the sports industry are mainly invested in enterprises or projects that are supported by fiscal policies in the forms of financial aid, subsidies, and awards to better facilitate the development of industries and enterprises [13]. Since 2007, government-guided funds for the sports industry have become an important policy means for local governments to integrate regional resources and develop the sports industry.

As of January 2020, government-guided funds for provincial sports industries had been established in 23 places, including Beijing, Tianjin, Hebei, Heilongjiang, Shanghai, Jiangsu, Zhejiang, Anhui, Fujian, Shandong, Henan, Hubei, Hunan, Guangdong, Hainan, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, and Qinghai. Ningxia was preparing for government-guided funds; Shanxi was planning to establish government-guided funds; Inner Mongolia, Liaoning, Jilin, Jiangxi, and Xinjiang had no plan to establish government-guided funds for the time being. Guangxi had suspended its plans for some reason. All provinces (districts and cities) in China established a corresponding scale of government-guided funds according to their local social and economic base, the development status of the local sports industry, and their future development goals [14, 15].

In regard to the existing government-guided funds for the sports industry established by each province, if effective quality tests of the processes and benefits cannot be conducted, some problems may arise, such as the existence of idle funds, the waste of public resources, inconsistency between the scope of the actual use of the funds and the purpose of the special funds, a lack of rationality in fund allocation, a lack of standards for government management performance self-evaluation, and incomplete internal management systems. All of the above problems not only violate the original intention of the governments in allocating special funds but also inevitably have negative impacts on the development of the sports industry [16]. Thus, it is very important to evaluate and supervise the actual government management performance for government-guided funds in the sports industry. The actual government management performance not only reflects the current macro control

and fund-guiding function of the Chinese government in the sports industry but also provides a reference point for government-guided fund input plans and the future development of the sports industry in the next stage [17].

The existing government-guided funds for the sports industry in each province and city were chosen as the objects of study. First, the quantity, scale, input, output, management status, and system establishment of the existing government-guided funds for the sports industry in each province and city were summarized in this research [18, 19]. Then, the government management performance evaluation of government-guided funds for China's sports industry was analyzed. This paper attempted to establish a set of government management performance evaluation systems for government-guided funds for the sports industry suitable for Chinese national conditions by referring to successful domestic and overseas experiences and incorporating the design principle of the index system. In addition, the methods, indexes, and standards for government management performance evaluation were explored to provide a theoretical reference for the evaluation of government management performance for such funds.

## 2. Literature Review

2.1. Concept of Government-Guided Funds for the Sports Industry. As an effective attempt by the government to solve the problem of market failure through financial funds, government-guided funds for the sports industry have become an important means to achieve and promote further development of the industry. Further development can be simply interpreted as the effect of increasing capital investment and effectively attracting large amounts of social capital investment, thus increasing the supply of sports products and services. Beijing was the first to set up provincial sports industry development guidance funds in China. In 2007, in order to prepare for the 2008 Beijing Olympic Games and leave Beijing a rich Olympic heritage, Beijing took the lead in establishing the Beijing sports industry government guidance fund. After Beijing successfully applied for the 2022 Winter Olympics, the special guidance fund for the development of Beijing's sports industry has increased its support for ice and snow sports, contributing to the success of the 2022 Beijing Winter Olympics.

Since government-guided funds for the sports industry are based on China's actual development environment and the foundation of the Chinese sports industry, related research on the concept and its connotations is mainly concentrated in China. The main research objects of similar research carried out abroad are industrial development funds and industrial investment funds, which are theoretically fundamentally different from the core research objects of this research.

Xing and Zhou (2015) proposed the concept of government-guided funds for the sports industry, namely, a special fund support system established by local governments through subsidizing the sports industry, enterprises, and projects according to the local industry development status and in combination with policy requirements,

opinions, decisions, and development plans for regional sports industry development. The goals of accelerating the allocation efficiency of sports resources, promoting the development of local sports production enterprises, and improving the development level of regional industries are achieved through government-guided funds. Cheng (2016) proposed that government-guided funds for the sports industry refer to fiscal special funds jointly arranged by all levels and multiple departments to facilitate regional sports industry development. Wang (2018) proposed that government-guided funds for the sports industry are policy-based funds that are provided by governments in accordance with the requirements of national laws and regulations based on specific industrial development goals, operated and managed in a market-guided manner, and invested in sports-related industries with high growth potential. Such funds are not invested for profit, and the main sources include public welfare funds of sports lottery tickets, social funds, and earnings. The sports bureaus of some provinces and cities have also defined concepts of provincial government-guided funds.

In conclusion, the concept of government-guided funds for the sports industry in this study is that governmentguided funds for the sports industry refer to special financial funds that are established by governments at all levels through provincial budgets and aim to guide more social organizations and social capital into the sports industry and support the development of the sports industry through financially aiding, subsidizing, and rewarding innovative, demonstrative, and important sports industry projects and organizations.

2.2. Studies on the Evaluation of Government Management Performance for Special Funds. The evaluation of government management performance for special funds is based on performance theory and relevant government management principles; real-time monitoring of fund expenditures, use, and management; macro control analysis; and certain management measures and policy requirements. In addition, the evaluation result affects fund budgeting, the amendment of management measures and efficiency control steps to achieve the goal of improving the efficiency of capital allocation, use and management, and the enhancement of the level of government management and public services. The relevant research content can be divided into four categories: fundamental theory, evaluation index systems, performance evaluations for specific special funds, and the introduction of third-party evaluations (Shan, 2013; Wei, 2015; Zheng and Liao, 2015; Liu, 2016; Guo, 2018).

2.3. Studies on Performance Evaluations of Government-Guided Funds for the Sports Industry. Government-guided funds for the sports industry in China were first established in Beijing in 2007, and there are just a few corresponding studies. In particular, the research is very limited compared with the related research of government-led funds. The main research directions involve the tentative exploration of the definition, function, and mechanism of government-guided funds for the sports industry; the practice and exploration of provincial and urban government-guided funds; and the influence of government-guided funds for the sports industry on the development of the sports industry. A few scholars explored and investigated performance evaluations of government-guided funds for the sports industry. Jiang (2009) tried to assess government-led funds, including the establishment of corresponding evaluation systems for seven categories, such as organization, business nature, investment preference, industry dispersion, and the number of projects managed. Li and Bao (2011) emphasized that the evaluation basis of government-led funds should focus on the policy effect and reflect the governmental industry orientation, policy support direction, and leverage effect. On this basis, a 5D qualitative evaluation system was established.

Foreign studies on the evaluation of government management performance for government-guided funds started early, involve a wide range of fields, and place more emphasis on quantitative analyses. The United States is the origin of venture capital government-guided funds, and the research on their performance evaluation began earlier. In 1994, Brewer and Genay studied the profitability of American SBICs (Small Business Investment Corporations) and concluded that using SBA (Small Business Administration) leverage would reduce the return on equity investment. As early as 1997, the OECD underlined the important significance of government-led funds for investment in high-risk industries. Aernoudt (1999) used the investment promotion rate, growth rate of output value, and employment rate as important indexes of fund evaluation. Cumming and Mac-Intosh (2005) assessed Canada's labor-sponsored venture capital (LSVC) and proposed that "profit" should be used as the main evaluation index, and "management" should be adopted as an auxiliary evaluation index. Frederic (2017) proposed that the British government should undertake a multidimensional assessment of the definitions of government-guided funds and goals divided on the basis of the industry and area and developed evaluation indexes such as successful exit, merger exit, failure exit, enterprise alliance, and appropriation by installment. In terms of governmentguided funds for the sports industry, due to the influence of national political and economic systems, various countries around the world have implemented investment and financing means suitable for their national conditions and the development status of their sports industry. In academic circles, foreign research on government-led, governmentguided funds for the sports industry is relatively limited, while studies on investment fund/government-guided funds are relatively abundant.

In conclusion, foreign countries studied governmentguided funds early, and the studies mainly focus on quantitative analyses. However, based on the early foreign evaluation research, research on the combination of Chinese national conditions and development status continues to develop. Studies on capital and funds for the sport industry in China are more specific and directional. In addition, these studies mostly focus on specific funds, start from practical problems, and concentrate on corresponding theoretical knowledge structures and practices. In China, the guidance fund is generally initiated and established by the financial funds invested by the government. Due to institutional reasons and traditional thinking, many local governments cannot put aside the management ideas of the guidance fund. The "paternalistic" thinking is serious, there is too much administrative interference, the market law is ignored, the policy effect is blindly pursued, and inappropriate restrictions are made, which is not conducive to the development of the guidance fund itself. Currently, domestic research on performance evaluations of government-guided funds for the sports industry is in the development and improvement stage and mostly fails to be implemented in practice.

## 3. Methodology

Using the documentation method, relevant materials related to the sports industry and government management and journal articles related to industry government-guided funds, government management, and performance evaluation methods are consulted in databases such as CNKI, Pro-Quest, Web of Science, and Google Scholar. This study obtained the government management performance evaluation index system weights of the government management of the provincial sports industry guidance fund through an expert questionnaire. A total of 11 experts were selected, of which 3 were leaders of a provincial (regional, municipal) sports industry government work department, 6 were in the sports industry in universities, and 2 were representatives of the person in charge of the sports industry government-guided fund project. The content of the survey laid the foundation for the finalization of this index system. Analytic hierarchy process regards the research object as a system and makes decisions according to the thinking mode of decomposition, comparative judgment, and synthesis. It has become an important tool of system analysis developed after mechanism analysis and statistical analysis. The weight setting of each layer in the analytic hierarchy process will finally directly or indirectly affect the results, and the influence of each factor in each layer on the results is quantitative, very clear, and definite. This method can especially be used for the systematic evaluation of unstructured characteristics and the systematic evaluation of multiobjective, multicriteria, multiperiod, etc. When constructing the evaluation index system, this study used the analytic hierarchy process to obtain an index system with a clear hierarchy and weights for the evaluation of government management performance for sports industry government-guided funds.

## 4. Research Design and Process

This study was based on government-guided funds for domestic and overseas sports industries and government management performance; it mainly involved defining the concept of government-guided funds for the sports industry and summarizing the relevant studies and development status of government-guided funds for the provincial sports industries in China. Second, this study analyzed the operation and management status of government-guided funds for the sports industry in Jiangsu Province through a case study. Then, a hierarchical model for the government management performance evaluation of government-guided funds for the sports industry was established by referring to relevant requirements and practices of government management performance evaluation and incorporating successful domestic experiences from other areas. The weights were determined by a survey of experts, and a comprehensive government management performance evaluation index system was built for governmentguided funds for the sports industry. Finally, the index system was used to evaluate the government management performance for government-guided funds for the sports industry in Jiangsu, and corresponding suggestions were proposed to optimize the management status and organizational process.

## 5. Results and Discussion

5.1. Development Status of Government-Guided Funds for the Provincial Sports Industries in China. Since document no. 46 of the state council was issued and implemented, establishing government-guided funds for the sports industry has become a major policy-based means for local governments to integrate regional resources and drive the optimization and development of the structure and scale of their regional sports industry. The provinces and cities set different quotas for government-guided funds according to their respective industry development foundations and goals. Based on the reported data of each province and city from 2019, the quotas of government-guided funds for the sports industry in each province and city can be roughly divided into three tiers: 100 million RMB, 10 million RMB, and 1 million RMB.

On a national scale, government-guided funds for the provincial sports industries have presented the following development characteristics in recent years. (1) In terms of fund scale, the government-guided fund quota for the sports industry in each province and city tends to be stable, and some provinces (districts and cities) have properly adjusted their government-guided fund quota for the sports industry. (2) In terms of territorial scope, the areas where government-guided funds for the sports industry are established have gradually expanded from the eastern region to cover the central and western regions. (3) With regard to fund benefits, the number of projects supported by government-guided funds for the sports industry has grown exponentially, and the leverage effect is significant. Government-guided funds for the sports industry play a great promotional role in driving sports industry development and attracting social capital investment while gaining the effects of both social benefit and economic benefit.

To date, Beijing, Tianjin, Shanghai, Jiangsu, Zhejiang, Fujian, Hubei, Guangxi, Hainan, Gansu, and other provinces (regions and cities) as well as Shijiazhuang, Nanjing, Shenzhen, and other prefecture-level cities have issued corresponding management measures to promote governmentguided funds for the development of the sports industry and have explicitly defined the fundamental principles, departmental duties, and scope and mode of governmentguided fund management in various places. They have also divided the whole process into various stages and requirements: project application, review, process management, risk control, and performance evaluation.

5.2. Case Study: Government Management Performance Related to Government-Guided Funds for the Sports Industry in Jiangsu. Government-guided funds for the sports industry in Jiangsu were established in 2011; this is a typical case of early establishment and remarkable comprehensive benefits in China. The guiding funds are mainly used to support the overall plan for the development of Jiangsu's sports industry and relevant policies, which can guide various types of capital into the field of sports industry, lead the formation and rapid development of emerging sports formats as soon as possible, and significantly improve the ability of independent innovation and market competitiveness. The funds are mainly guided and coordinated by the provincial government and are jointly managed by the department of finance and sports bureau. Since the funds' establishment, a batch of quality projects has been intensively developed to drive rapid development in the provincial sports industry, and the enthusiasm of society to invest in the sports industry has been greatly aroused. Meanwhile, the establishment of the funds has led to the sports industry in Jiangsu playing an important supporting role in forming a favorable development situation nationwide. Hence, Jiangsu was chosen for this case study.

5.2.1. Establishment. The government-guided funds for Jiangsu are appropriated from the provincial financial budget and public welfare funds from sports lottery tickets. In 2011 and 2012, the total amount of government-guided funds was 60 million RMB, while the annual quota was 80 million RMB in 2013 and 100 million RMB from 2013 to 2019. In the past eight years, a total of 1010 projects were supported by 800 million RMB of special funds.

5.2.2. Division of Management Responsibilities. In the project budget decision-making stage in Jiangsu, the main responsibilities of the provincial department of finance include developing special fund management measures; working with the sports bureau to implement rules and supporting policies; preparing and executing the annual provincial budget; participating in making annual project application notices and releasing announcements; joining in project reviews, expert reviews, and field visits; and determining and arranging funds for the proposed projects. The main responsibilities of the provincial sports department are investigating and specifying annual financing priority matters for special funds and preparing annual working plans, sending notices of the annual project application, releasing the application announcement, developing project assessment plans and review standards together with the provincial department of finance, organizing announcements, and organizing funded project reviews, expert assessments, field visits, proposals, and fund arrangements with the provincial department of finance. The primary responsibilities of the urban and county-level departments of finance are cooperating with the sports department regarding applications and auditing the qualification of organizations. The key responsibilities of the urban and county-level sports departments are cooperating with the local departments of finance according to relevant regulations and auditing project qualifications, feasibility, and correlation with the development of the sports industry.

In the project fund input stage in Jiangsu, the main responsibilities of the provincial department of finance and provincial sports bureau are publicly announcing annual supporting projects and providing funds. The major responsibilities of the urban and county-level departments of finance are supervising and managing subsidies and the timely appropriation of funds according to the budget law and the relevant requirements of treasury payments and government procurement.

In the project management and supervision stage in Jiangsu, the key responsibilities of the provincial department of finance involve making fund catalogs public and participating in supervision and inspection. The primary responsibilities of the provincial sports department are supervising and guiding the urban and county-level sports departments' project supervision and inspection and organizing the supervision of direct provincial projects. The major responsibilities of the urban and county-level departments of finance are collecting special funds that are not used as required or idle special funds. The urban and county-level sports departments are responsible for cooperating with the department of finance to supervise the supporting projects and track feedback and performance evaluation.

In the project performance evaluation stage in Jiangsu, the provincial department of finance is mainly responsible for organizing special fund performance evaluations with the provincial sports bureau. The major responsibilities of the provincial sports department include setting performance goals for special funds, self-evaluating its project performance, and submitting evaluation reports. The urban and county-level departments of finance are mainly responsible for coordination with the sports department.

5.3. Measure for the Administration of Government-Guided Funds for the Sports Industry in Other Provinces. In the project budget decision-making stage, Beijing established a joint committee of sports industry departments. The committee is mainly responsible for clearly defining the budget, final accounts of funds, and implementation details. The committee determines the key support projects; ensures the support methods, application conditions, and funding allocations in different periods; and organizes screenings, reviews, and publicity. In Hainan, the department of culture and sports and the department of finance prepare and arrange, respectively, annual budgets for special guidance funds. In Guangxi, the department of finance is mainly responsible for budget management, review, allocation, and appropriation. The fund allocation plan needs to be publicized for at least 7 days. The sports bureau is mainly responsible for expert review and project resource library construction. The project reviews require the participation of professional institutions or qualified judges. Zhejiang, Fujian, Gansu, and other places also require the relevant management departments to formulate clear special fund use methods, budgets, and annual work plans and ensure that, at this stage, they should screen, assess, and review the applications of guiding fund projects.

In the project fund input stage, Zhejiang requires special government-guided funds for the sports industry to pass

through provincial transfer payments and to be issued to the finance and sports departments at all levels within 60 days after the budget is approved. Fujian requires that funds be issued before the end of September and allocated to project users within 20 days of receiving the provincial fiscal funds. Beijing, Guangxi, and other places also clearly require that the fund user uses the guiding fund according to the arrangement requirements within 6 months, and if the user violates the regulations, the government may recover the guiding funds or terminate the project and readjust the arranged funds.

In the project management and supervision stage, Beijing requires that the municipal finance bureau be responsible for supervising and inspecting the use of special funds and implementing performance appraisals for major projects. Zhejiang also requires in its administrative measures that funds should not be used in the fiscal budget of the same level in violation of regulations. Fujian also stipulates in its administrative measures that special funds must be earmarked for use, subject to supervision, and audited by competent authorities and institutions at the same level. If a project is cancelled for any reason, the remaining funds will be returned immediately. If there are violations, the funds will be recovered, and the user will be punished in accordance with relevant laws and regulations. Hubei has also strengthened its regulations on accountability and added a system of accountability for violations such as illegal use and false declarations. The Hainan Provincial Department of Finance is mainly responsible for supervising and inspecting the management, operation, and use of special guidance funds and recovering funds from units that violate regulations and canceling their application qualifications within five years. Shijiazhuang requires that units that guide the use of funds report on the progress of the projects and the use of the funds regularly, hire qualified experts to conduct audits, and conduct acceptance audits after projects are completed.

In the project performance evaluation stage, Fujian clearly proposes establishing a performance appraisal system, which mainly involves the use of experts and commissioned institutions organized by the relevant provincial departments to conduct performance appraisals, which are used as a voucher for the arrangement of special funds for the next year. In Guangxi, the department of finance and the sports bureau jointly carry out performance appraisals, conduct regular inspections and irregular spot checks on project progress, and establish a related work report system. Hainan also proposed in its measures that it can introduce third-party performance evaluations as needed and adjust the amount of support accordingly. Gansu requires the project unit to issue relevant completion, performance evaluation, and audit reports after the project is completed to provide a basis for the subsequent annual budget preparation.

In general, the management methods for governmentguided funds for the sports industry adhere to the principles of "special funds for exclusive use" and "individual accounting," combined with provincial and municipal conditions, to define the rights and responsibilities of the whole guiding fund process: budget decisions, capital investment, management supervision, and performance evaluation. The division of labor at all levels of various government departments is clear, and they are basically fully responsible for guiding the funds. However, there are also certain problems. The requirements for the management of the city and county government departments in some areas are too general; some areas have performance issues. Insufficient attention is given to the links between self-evaluations and otherevaluations; most regions mainly focus on the performance evaluation of fund users, ignoring the performance evaluation of the government departments themselves.

## 5.4. Construction of the Government Management Performance Evaluation Index System for Government-Guided Funds for the Sports Industry

#### 5.4.1. Construction Principles of the Evaluation Index Model

(1) Principle of Operability. The construction of the evaluation index system needs to comply with the principle of operability and objectively, scientifically, and systematically reflect the overall performance of the government's management of the sports industry's guiding funds. In the selection of indicators, special attention should be paid to the consistency within the scope. The construction of the indicator system is to serve regional policy-making and scientific management. The calculation measurement and calculation method of indicator selection must be consistent and unified. Each indicator should be as simple and clear as possible, with strong microcosmic and easy to collect. Each indicator should have strong practical comparability. Moreover, when selecting indicators, we should also consider whether quantitative processing can be carried out, so as to facilitate mathematical calculation and analysis. Therefore, the index selection level should not be too complex and numerous to ensure feasibility and operability.

(2) Systemic Principles. The systemic principle is to ensure the integrity and balance of the evaluation system, and the object of decision-making is a complete system. Full consideration should be given to the practical significance of each indicator, the logical correspondence of each level of indicators, and the relative effect of each indicator on the overall evaluation indicator system to coordinate the relationship between the overall goal and the subobjectives.

(3) Principle of Representativeness. Based on the principle of representativeness, when conducting a systematic evaluation and analysis of the overall performance of the government's management of guiding funds, to avoid unnecessary impacts on the construction and utility of the indicator system due to excessive levels and quantities of indicators, the indicators should be selected with strong representative indicators that reflect the core and key issues and enhance the scientific nature and representativeness of the evaluation system.

5.4.2. Construction of the Evaluation Index Model. Based on a review of theoretical research, policy documents, and practices in various places, including Jiangsu, 4 primary indexes

Primary indexes	Secondary indexes	Third-level indexes	Descriptions		
		A <sub>11</sub> fund allocation system	Whether to set up a management system to guide the allocation of funds		
		A <sub>12</sub> disclosure of application information	Whether to disclose project declaration information and related requirements		
	A <sub>1</sub> allocation program	A <sub>13</sub> fund allocation process	Whether the distribution process strictly complies with relevant national and regional management methods and system requirements		
A, budget decision-		A <sub>14</sub> allocation result publicity	Whether the project to be supported is handled in accordance with the management measures for information disclosure and publicity and the opinions of all sectors of society are extensively listened to		
making	A <sub>2</sub> allocation	A <sub>21</sub> decision criteria	Whether to clarify the focus and scope of the guiding fund projects according to the requirements of the local sports industry development policy		
	decision	A <sub>22</sub> decision result	Whether the decision result meets the scope of the support standards, with a focus on investing in the sports industry encouraged by the government		
	A <sub>3</sub> project	A <sub>31</sub> set project performance goals	Whether to formulate a clear and detailed annual work plan linked to the budget guidance fund allocation		
	performance goal	A <sub>32</sub> quantification of project performance goals	Whether the performance target of the guiding fund project can be quantified		
	B <sub>1</sub> government-	B <sub>11</sub> availability rate of government- guided fund appropriation	Guidance fund availability rate (actual investment amount of guidance fund/government commitment amount*100%)		
B, fund	guided fund input	B <sub>12</sub> timeliness rate of government-guided fund appropriation	Timeliness of guiding funds		
input	B <sub>2</sub> social capital	B <sub>21</sub> Total scale of social capital input	Guide social capital related to the total scale of the sports industry		
	input	B <sub>22</sub> annual growth rate of the total scale of social capital input	Annual growth rate of the social funds invested in the sports industry		
		C <sub>11</sub> management measures	Whether there are clear guiding fund management methods and relevant implementation rules, fund support policies, etc.		
	0	$C_{12}$ management organization setup	Set up a special fund management agency to coordinate the linkage of various departments at all levels		
	C <sub>1</sub> process management	C <sub>13</sub> decision-making level	The administrative ability of the management department, the professional ability of the review committee, and the performance of the duties of the management department		
		$\rm C_{14}$ supervision, tracking, and feedback	Carry out project implementation supervision, feedback tracking, and performance appraisal		
C, project management		C <sub>21</sub> financial control system	Set up a complete financial management system, separate accounting of funds, and strict implementation of the accounting system		
C	C <sub>2</sub> fund management	C <sub>22</sub> fund use	The use of funds complies with national financial regulation and local fund management methods		
		C <sub>23</sub> fund recovery	Recover the guiding funds that are not used in accordance with regulations or are idle and deposited		
		C <sub>31</sub> management measures for project performance evaluation	Whether to establish the management method for the performance evaluation of the guiding fund project		
	C <sub>3</sub> project performance evaluation	C <sub>32</sub> project performance self-evaluation	Whether to conduct project performance appraisals and carry out performance self-evaluations		
	e variation	C <sub>33</sub> performance evaluation report	Whether to submit the performance evaluation report of the guiding fund project to the financial department		

# TABLE 1: Indicators and descriptions of the evaluation index system.

Primary indexes	Secondary indexes	Third-level indexes	Descriptions	
	D <sub>1</sub> industry	D <sub>11</sub> growth rate of the economic benefit index of the fund use organization	The growth rate of economic efficiency indicators such as operating income, profit, taxation, and employment of the fund-using unit	
D, guiding	guiding effect	D <sub>12</sub> annual growth rate of the total size of the industry that is promoted for development	Guide the annual growth rate of the total scale of the relevant sports industry clearly specified in the fund management measures	
effect		$D_{21}$ satisfaction of the service object	Satisfaction of fund users	
	D <sub>2</sub> comprehensive social benefit	D <sub>22</sub> promote residents' participation in sports	Free opening of venues in the region, attendance at events, scale of participants, etc.	
		D <sub>23</sub> demonstrated promotion effect	The project's influence on upstream and downstream industries and other industries	

TABLE 1: Continued.

TABLE 2: 1-9 level pairwise scale of judgment relationships.

Scales	Relationship
1	Both indicators are equally important
3	Comparing the two indexes, the $i$ index is slightly more important than the $j$ index
5	Comparing the two indexes, index $i$ is more important than index $j$
7	Comparing the two indexes, the $i$ index is obviously more important than the $j$ index
9	Comparing the two indicators, index $i$ is extremely more important than index $j$
2, 4, 6, 8	The importance comes from the middle of the above two adjacent judgments
Reciprocal	If the comparison between index <i>i</i> and <i>j</i> is judged as $a_{ij}$ , then the comparison between index <i>j</i> and <i>i</i> is judged as $a_{ji} = 1/a_{ij}$

TABLE 3: Index weight determination based on the square root method.

Step description	Calculation formula
1 Calculate the product of each row element of the judgment matrix	$M_i = \prod_{j=1}^n b_{ij} (i = 1, 2, \dots, n)$
2 Calculate the $n_{\rm th}$ root of $M_1$	$\overline{W_i} = \sqrt[n]{M_i} (i = 1, 2, \cdots, n)$
3 The vector $\overline{W_i}$ is normalized. $\overline{W_i}$ is the required feature vector	$W_i = \frac{\overline{W_i}}{\sum_{i=1}^n \overline{W_i}} (i = 1, 2, \dots, n)$
4 Calculate the maximum characteristic root $\lambda_{max}$ of the judgment matrix.	$\lambda_{\max} = \sum_{i=1}^{n} \frac{(AW)_i}{nW_i}$
<ul> <li>Check the consistency of the judgment matrix.</li> <li>(1) Calculate the random consistency ratio CR by referring to the average randomness index RI</li> <li>5 (2) Compare the result with 0.01. When CR &lt; 0.10, the analytic hierarchy process results are considered to have satisfactory consistency, and the weight distribution is reasonable; if CR &gt; 0.10, it is necessary to adjust the value of the element and redistribute the weight. Test the values until the results are consistent</li> </ul>	$CR = \frac{CI}{RI}$

TABLE 4: List of average random heterogeneity index values.	TABLE 4: List o	f average random	heterogeneity index	c values.
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Matrix order	1	2	3	4
RI	0.00	0.00	0.58	0.90

were developed according to the design principles. After goal layer G, criterion layer C and program layer P were confirmed. The goal layer includes 4 primary indexes: A, budget decision-making; B, fund input; C, project management; and

D, guiding effect. The criterion layer contains 10 secondary indexes, and the program layer covers 27 third-level indexes (see Table 1 for the specific indicators and descriptions).

5.4.3. Empowerment of the Evaluation Index Model. The analytic hierarchy process (AHP) was applied to determine the weight of the index system. There were three main detailed steps. The first step was building a hierarchical structure model in which the evaluation goals of this study were the 4 primary indexes, 10 secondary indexes, and 27 third-level indexes. The

Primary indexes	Secondary indexes	Third-level indexes			
		A <sub>11</sub> fund allocation system (0.4125)			
	A allocation program (0.3325)	$A_{12}$ disclosure of application information (0.2322)			
	$A_1$ allocation program (0.3325)	A <sub>13</sub> fund allocation process (0.2067)			
A, budget decision-making		$A_{14}$ allocation result publicity (0.1486)			
(0.4368)	$A_2$ allocation decision (0.1396)	A <sub>21</sub> decision criteria (0.7941)			
	$A_2$ anotation decision (0.1590)	A <sub>22</sub> decision result (0.2059)			
	A <sub>3</sub> project performance goal	$A_{31}$ set project performance goals (0.7162)			
	(0.5279)	A <sub>32</sub> quantification of project performance goals (0.2838)			
	B <sub>1</sub> government-guided fund	$B_{11}$ availability rate of government-guided fund appropriation (0.7586)			
$\mathbf{D}$ for $\mathbf{d}$ is much (0.2224)	input (0.7375)	B <sub>12</sub> timeliness rate of government-guided fund appropriation (0.2414)			
B, fund input (0.2324)	R again antital input (0.2625)	B <sub>21</sub> total scale of social capital input (0.6667)			
	$B_2$ social capital input (0.2625)	$B_{22}$ annual growth rate of the total scale of social capital input (0.3333)			
		$C_{11}$ management measures (0.2368)			
		$C_{12}$ management organization setup (0.0858)			
	$C_1$ process management (0.4826)	$C_{13}$ decision-making level (0.2672)			
		$C_{14}$ supervision, tracking, and feedback (0.4102)			
C, project management		C <sub>21</sub> financial control system (0.4473)			
(0.1552)	C <sub>2</sub> fund management (0.15216)	) C <sub>22</sub> fund use (0.3861)			
		$C_{23}$ fund recovery (0.1666)			
		$C_{31}$ management measures for project performance evaluation (0.5 $C_{32}$ project performance self-evaluation (0.1953)			
	C <sub>3</sub> project performance evaluation (0.36536)				
	evaluation (0.50550)	$C_{33}$ performance evaluation report (0.2809)			
	D <sub>1</sub> industry guiding effect	$D_{11}$ growth rate of the economic benefit index of the fund use organization (0.6900)			
D, guiding effect (0.1756)	(0.6806)	$D_{12}$ annual growth rate of the total size of the industry that is promoted for development (0.3100)			
		$D_{21}$ satisfaction of the service object (0.3170)			
	$D_2$ comprehensive social benefit (0.3194)	D <sub>22</sub> promote residents' participation in sports (0.3170)			
	(0.51)1)	$D_{23}$ demonstrated promotion effect (0.3660)			

TABLE 5: Government management performance evaluation index system for government-guided funds for the sports industry and its weight.

TABLE 6: Value table of the qualitative index evaluation grades.

Index level	Excellent	Good	Moderate	Poor
	Fully meets the evaluation indexes, even higher than the relevant requirements of the national or local government	Within the industry standards of the evaluation indexes; meets the relevant requirements of the national or local government	Basically completes the relevant work within the national or local regulations, but there are still certain problems	Work is not complete; no established benefits
Value	0.9-1 point	0.6-0.9 point	0.3-0.6 point	0-0.3 point

next step was constructing a judgment matrix, which adopted a 1-9 pair scale and obtained pair scale values of the indexes at each level by summarizing the opinions of the expert group (Table 2); collecting the questionnaires concluded the findings. Finally, the square root method was adopted to calculate the maximum eigenvalue of the judgment matrix and corresponding eigenvector *W* (Tables 3 and 4). The following government management performance evaluation index system for government-guided funds for the sports industry is obtained, as shown in Table 5.

5.4.4. Empirical Research on the Performance Evaluation of the Government Management of Sports Industry Government-Guided Funds. This study used an index system with established weights to conduct an empirical study on government management performance related to sports industry guidance funds in Jiangsu Province. The main evaluation criteria were primarily based on the relevant regulations and management methods of the state and Jiangsu Province and the situation of sports industry guidance funds in Jiangsu Province from 2014 to 2019,

Quantitative index	Excellent (0.9-1 point)	Good (0.6-0.9 point)	Moderate (0.3-0.6 point)	Poor (0-0.3 point)
B <sub>11</sub> availability rate of government- guided fund appropriation	100%	90%-100%	80%-90%	Less than 80%
$B_{1,2}$ timeliness rate of government- guided fund appropriation	Timely disbursement	Basic on-time disbursement	Within 10% overdue	Exceed 10% of the time limit
$\mathbf{B}_{21}$ total scale of social capital input	$\rm B_{21}$ total scale of social capital input Social capital $\div$ government-guided funds $\ge 50$	$50 > social capital \div government-guided funds \ge 30 > social capital \div government-guided funds \ge 15 Social capital \div government-guided funds < $	$0 > $ social capital $\div$ government-guided funds $\ge 15$	Social capital ÷ government-guided funds < 15
$B_{2,2}$ annual growth rate of the total scale of social capital input	≥5%	2%-5%	0%-2%	<0%
$D_{12}$ annual growth rate of the total size of the industry that is promoted for development	≥30%	15%-30%	1%-15%	<1%

TABLE 7: Value table of evaluation grades of the quantitative index.

Primary indexes	Secondary indexes	Third-level indexes	Score	Third- level indexes	Secondary indexes	Primary indexes	Total
		A <sub>11</sub> fund allocation system	0.9	0.05391			
	A <sub>1</sub> allocation	A <sub>12</sub> disclosure of application information	0.9	0.03033	0 12769		
	program	A <sub>13</sub> fund allocation process	0.8	0.024	0.12768		
A, budget decision-		A <sub>14</sub> allocation result publicity	0.9	0.01944		0.32482	
making	A <sub>2</sub> allocation	A <sub>21</sub> decision criteria	0.8	0.03872	0.0488		
interents	decision	A <sub>22</sub> decision result	0.8	0.01008			
	A <sub>3</sub> project	A <sub>31</sub> set project performance goals	0.7	0.11564	0 1 4 0 2 4		
	performance goal	A <sub>32</sub> quantification of project performance goals	0.5	0.0327	0.14834		
B, fund input	B <sub>1</sub> government-	B <sub>11</sub> availability rate of government-guided fund appropriation	1	0.13	0 1714		
	guided fund input	B <sub>12</sub> timeliness rate of government-guided fund appropriation	1	0.0414	0.1714	0.21614	
	B <sub>2</sub> social capital input	B <sub>21</sub> total scale of social capital input	0.8	0.03256			
		B <sub>22</sub> annual growth rate of the total scale of social capital input	0.6	0.01218	0.04474		
		C <sub>11</sub> management measures	1	0.0178			
	$C_1$ process	C <sub>12</sub> management organization setup	0.7	0.00448	0.06084		0.79949
	management	C <sub>13</sub> decision-making level	0.7	0.014			
		C <sub>14</sub> supervision, tracking, and feedback	0.8	0.02456			
	C <sub>2</sub> fund management	C <sub>21</sub> financial control system	0.8	0.00848			
C, project management		C <sub>22</sub> fund use	0.8	0.00728	0.01849	0.11764	
		C <sub>23</sub> fund recovery	0.7	0.00273			
	$C_3$ project performance evaluation	C <sub>31</sub> management measures for project performance evaluation	0.6	0.01782			
		C <sub>32</sub> project performance self-evaluation	0.7	0.00777	0.03831		
		C <sub>33</sub> performance evaluation report	0.8	0.01272			
D, guiding	$\mathrm{D}_1$ industry guiding effect	D <sub>11</sub> growth rate of the economic benefit index of the fund use organization	0.8	0.066	0.0002		
		D <sub>12</sub> annual growth rate of the total size of the industry that is promoted for development	0.9	0.0333	0.0993	0.14089	
effect		D <sub>21</sub> satisfaction of the service object	0.7	0.01246			
	D <sub>2</sub> comprehensive social benefit	D <sub>22</sub> promote residents' participation in sports	0.6	0.01068	0.04159		
		D <sub>23</sub> demonstrated promotion effect	0.9	0.01845			

TABLE 8: The model of government management performance evaluation for government-guided funds for the sports industry and the scores.

self-assessment reports of government-guided fund performance, and related management principles.

Since most of the indicators involved in the index system are objective indicators, the data collected can be used to directly evaluate the government management performance of Jiangsu Province related to its governmentguided funds. Therefore, this article is based on Table 2, establishing a value table of qualitative index evaluation grades (Table 6) and a value table of quantitative index evaluation grades (Table 7) and combining relevant confidential materials to obtain the various scores of the Jiangsu provincial guidance fund government management performance evaluation, which are then converted to a final score that is obtained according to the weight of the achievement value (Table 8). The evaluation of the government management performance related to sports industry guidance funds in Jiangsu Province produced a comprehensive score of approximately 0.7995, indicating that the overall management is relatively strong. The score of index A, budget decision-making, is 0.7436, which is mainly because the establishment of project performance goals is not clear enough and the level of quantifiable targets is low. Index B, fund input, has a score of 0.9300, indicating that Jiangsu Province is relatively timely and sufficient in both government-guided funds and social capital investment; in particular, the in-place and timeliness rates of special funds are high. Index C, project management, has a score of 0.75803; the decision-making level and project performance self-evaluation can be improved. The total score of index D, guiding effect, is 0.8023; comparatively, the industry guidance effect is relatively good, and the comprehensive social benefits need to be improved. In the future, China's government should focus on the demonstration effect of government-guided funds, especially continuing the positive influence on residents' participation in sports.

# 6. Conclusion

According to the research, this article defines governmentguided funds as follows: government-guided funds for the sports industry are funds established by governments at all levels through provincial budget arrangements for sports industry projects or companies that are innovative, exemplary, and driven by funding, subsidies, and rewards. Based on comprehensive theoretical research, policy documents, and the practical application of sports industry government-guided fund management measures issued by various regions, including Jiangsu Province, this study established a total of 4 first-level indicators, 10 second-level indicators, and 27 third-level indicators. Through hierarchy analysis, a relatively complete performance rating system for government management of the sports industry was constructed.

The final score of the government management performance related to sports industry government-guided funds in Jiangsu Province is 0.7995. On the whole, the government's management is relatively strong. According to the research, the following optimization suggestions are put forward for government management. First, in the budget decision-making stage, it is recommended that the performance goals be clarified and the amount of quantifiable targets be increased. Second, fund investors suggest continuing to expand the primary and secondary leverage effects to stimulate more social capital investment in the sports industry. Third, in terms of project management, it is suggested that qualified social institutions or an expert database be established to improve the level of comprehensiveness in decision-making, focusing on project performance evaluation, self-evaluation of management work, process supervision, and management. Finally, related work should be strengthened in terms of guiding effects, a focus should be put on creating social benefits while increasing economic benefits, and the demonstration and driving effects of government-guided funds should be expanded.

# **Data Availability**

The tables used to support the findings of this study are included in the article.

# **Conflicts of Interest**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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