

## *Retraction*

# **Retracted: Performance Management of Special Fund for Sports Industry Development in Jiangsu Province**

### **Complexity**

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Manipulated or compromised peer review

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

In addition, our investigation has also shown that one or more of the following human-subject reporting requirements has not been met in this article: ethical approval by an Institutional Review Board (IRB) committee or equivalent, patient/participant consent to participate, and/or agreement to publish patient/participant details (where relevant).

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

### **References**

- [1] Y. Wen, X. Chen, T. Gu, and F. Yu, "Performance Management of Special Fund for Sports Industry Development in Jiangsu Province," *Complexity*, vol. 2021, Article ID 5586971, 15 pages, 2021.

## Research Article

# Performance Management of Special Fund for Sports Industry Development in Jiangsu Province

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In 2011, Jiangsu Province set up the guidance fund for sports industry. In 2016, Jiangsu Provincial Finance Department jointly issued the document with Jiangsu Provincial Sports Bureau, which was changed to “Jiangsu Special Fund for Sports Industry Development.” By 2019, Jiangsu Province has funded 1,009 sports industry development projects with a total investment of 796.6 million yuan. The effect of the investment has attracted extensive attention from the government, society, and enterprises. Entrusted by Jiangsu Sports Industry Guidance Center, this research team spent one year on the performance research of 1,009 projects supported by special funds for the development of sports industry, from the construction of evaluation index system to the design, issuance, collection, and processing of questionnaires. Using the methods of literature, questionnaire, expert interview, and mathematical statistics, this paper takes the performance management of the special funds for the development of sports industry in Jiangsu Province as the research object, based on the investigation and analysis of the current situation of the special funds for the development of sports industry in Jiangsu Province. It analyzes the special funds from four aspects: the rate of funds in place, the ratio of funds pulled, the completion rate of project implementation, and the rate of fund prerecovery. Then, this paper expounds the current situation, effectiveness, and problems of the performance management of the special funds for the development of sports industry and puts forward some countermeasures and suggestions for improvement.

## 1. Introduction

In 2014, the Opinions of the State Council on Accelerating the Development of Sports Industry and Promoting Sports Consumption and the Notice of the General Office of the State Council on Printing and Distributing the Outline of Building a Sports Power were issued, which set off a round of upsurge of sports industry development. Sports industry is a green and sunrise industry but also a relatively late start industry, which needs long-term investment and market cultivation. Special funds for sports industry development have become an important means and method for government departments to support the development of sports industry [1]. In 2007, Beijing set up a sports industry guidance fund, with an annual support amount of 500 million yuan, becoming the first region in China to set up a

sports industry guidance fund. After that, Jiangsu, Shandong, Guangxi Zhuang Autonomous Region, and Tianjin successively set up sports industry development guidance funds.

Jiangsu Province is a big economic province and a strong sports province in China. In 2011, Jiangsu Province seized the development opportunity, issued the implementation opinions on accelerating the development of sports industry, and printed and issued the Interim Measures for the use and management of special funds for the development of sports industry in Jiangsu Province. Since the establishment of sports industry guidance fund in 2011, Jiangsu Province has supported a total of 1009 projects, which has aroused widespread concern of the government, society, and enterprises, and the policy effect has gradually become prominent.

Through the data collation and field investigation of the special fund for the development of sports industry in Jiangsu Province in recent years, we found that some enterprises did not use the special fund in a standardized way, and the direction of fund use was not clear. It was difficult to deal with the special fund problems. The supervision and management of sports administrative departments was not timely, and there was a lack of comprehensive performance evaluation. Inviting the institutional involvement of civilian experts is very important way in Government's performance management system [2]. So, the research group was entrusted by Jiangsu Sports Industry Guidance Center and Jiangsu Modern Sports Industry Research Service Center to evaluate the performance. It takes one year from the construction of evaluation index system to the design, distribution, collection, and processing of questionnaire to conduct performance management research on 908 projects in the first phase of the cultivation cycle of Jiangsu Sports Industry Development Special Fund (according to the characteristics of project development, Jiangsu Sports Industry Guidance Center takes the eight years from 2011 to 2018 as the first period of cultivation cycle). This study starts with the development status of the special funds for the development of sports industry in Jiangsu Province, analyzes the performance data of the special funds for the development of sports industry in Jiangsu Province, and finds out the existing problems, so as to further enrich and improve the relevant systems and procedures in the future work and make the special funds more standardized and efficient.

The innovation of this study is that it is the first time to conduct a comprehensive performance evaluation on the special funds for the development of China's provincial sports industry. It makes an objective and accurate evaluation on the use effect of the special funds for the development of Jiangsu Province's sports industry in recent years according to the time and region from the four indicators of the fund arrival rate, fund pull ratio, implementation completion rate, and fund recovery rate. The research was adopted by Jiangsu Provincial Sports Bureau and highly praised by government departments. The results were included in the blue paper of Jiangsu Sports Industry Development Report (2019-2020), which played a positive role in the development of Jiangsu Sports Industry and provided theoretical reference for the development of China's sports industry to a certain extent.

## 2. The Performance of Special Funds for Sports Industry Development

*2.1. Special Funds for Sports Industry Development.* We used "sports industry" and "guide fund" as the key words in the main database of EBSCOhost and China National Knowledge Infrastructure (CNKI) from the year of 2008 to 2021 and searched 58 literatures.

Yu-Fei and Wen-Ysu [1] believed that guiding funds had a series of practical problems, such as nonstandard

project evaluation process, low professional degree of management organization, unscientific fund allocation mechanism, inadequate supervision and audit, poor performance evaluation effect, and weak supporting policies. Cheng [3] believes that the function of guiding funds must include giving play to the "guiding" role of social funds, strengthening the macro-control role of the government in the development of sports industry, and realizing the scale, diversification, and multilevel investment of social funds in sports industry.

A sound and transparent budgeting and accounting structure is a fundamental building block for good public sector governance. Good governance of public resources should be based on continuous assessment of the effects of different policies related to financial inputs [4]. Compared to the implementation of accounting reforms in Western countries, which have been widely discussed in the academic literature [5, 6], much less is known about similar reforms and their outcomes in developing countries and countries with transition economies [7]. Jovanović [8] believed that government accounting cannot be identified as primarily budgetary accounting since budgetary execution reports and accounting reports primarily focus on receipts and expenses on the cash flow basis.

Han and Zhang [9] believed that in the design of budget performance goals and indicators by local governments, due to the coordination with the annual budget and other reasons, short-term goals were set adequately, the number of indicators with high display was relatively high, and there were many quantitative indicators. Medium- and long-term goals, indicators with low visibility, and qualitative indicators are relatively brief or not much.

At present, the research on the special funds for the development of sports industry in academic circles is still in its infancy, and most scholars study from a macro perspective, mainly focusing on the concept, investment characteristics, operation mechanism, management status, construction of evaluation index system, effect, and other aspects of the special funds for the development of sports industry.

*2.2. Performance Management of Special Funds.* We used "guide fund" and "evaluation" as the key words in the main database of EBSCOhost and China National Knowledge Infrastructure (CNKI) from the year of 2000 to 2021, and searched 80 literatures.

A crucial element in performance management is performance measurement, which refers to the specification of any abstract mission and general goals and the evaluation of performance by means of valid indicators [10]. Performance measurement is an important link in the process of performance management because it can generate information that reflects the actual work effect. The performance information generated by performance measurement can be used for organizational decision making to improve work efficiency. Until now, despite not using systems theory, a myriad of HRM research has explored the link between HR

systems or specific subsystems within the HR system and organizational performance [11–13].

The next stage of performance measurement is the determination of how to measure. Specifically, the measurement of performance related to qualitative outcomes is a challenging task. It is essential to create precise and valid performance indicators that can accurately measure performance. Although many indicators have been introduced, some are inaccurate or irrelevant. For example, if the government agency responsible for doling out guiding funds uses the number of stadiums as a measure of its performance, an unrelated indicator may be created. Therefore, the design of accurate and effective indicators is an important factor to determine the success of a performance measurement system. Therefore, these metrics must be modified through a continuous performance measurement feedback process.

In Ram et al.'s study on noncompliant small firms and regulatory change, they posit that organizations do not just operate through formal or informal systems. Schleicher et al. [12] drew attention to the increased research attention on the impact of informal processes either beyond or in conjunction with formal processes, but the “formal/informal distinction has not always been articulated clearly in the literature,” and their review suggested that “the various formal and informal process elements of PM differ in how consistently they affect PM effectiveness.”

Weissert and Jones [13] figured out devolution and increased local governments' autonomy often come with the paradox of increased higher governments' oversight and involvement. The government can introduce accrual accounting to improve the management and decision making of government agencies. In many countries, Grubnic and Woods [14] thought that higher governments also have responsibilities for ensuring, through oversight, that local governments engage in good and capable governance and are “fit for purpose.” This provides further reason for overseeing that local governments adopt adequate PM systems in pursuit of goals.

Experts and scholars have studied the performance management of the special funds for sports industry in some provinces and cities in China, including Shanghai, Xi'an, Suzhou, Guangxi, Changzhou, Shandong, Hubei, Jiangxi, Yunnan, Inner Mongolia Autonomous Region, Xinjiang Production and Construction Corps, and other regions. And the special fund include the government financial special funds, university financial special funds, small and micro enterprise development funds, and new rural construction funds.

### 3. Research Methods

**3.1. Literature Method.** This research mainly takes EBS-COhost, CNKI, Wanfang Data, VIP database, Nanjing Library, library of Nanjing Sport Institute, Jiangsu Sports Industry Guidance Center, and Nanjing Sports Bureau as the

main ways to obtain the literature and realize the collection of relevant literature.

**3.2. Questionnaire Survey Method.** Combined with the actual situation of enterprises, the research group has formulated the Questionnaires, such as Performance Evaluation of Special Funds for the Development of Sports Industry in Jiangsu Province, the Basic Information of Project Units, the Declaration of Projects, the Investment and Use of Project Funds, and the Special Funds for the Development of Sports Industry in Jiangsu Province. The questionnaire survey started in March 2018 and distributed performance evaluation questionnaires to 569 projects supported. The first round of questionnaires was collected in June. After two months of data proofreading and the second round of data collection in September, all 569 questionnaires were finally collected. The research group has gone through five rounds of repeated data collection and verification, including enterprise data collection and research group data verification, enterprise data re-collection and research group data verification, and enterprise partial data re-collection, which last for one year, and finally formed four statistical indicators: the rate of capital in place, the ratio of capital pulled, the completion rate of project implementation, and the rate of capital prerecovery.

**3.3. Expert Interview Method.** The research group invited experts from Jiangsu Provincial Sports Bureau, Nanjing Sport Institute, School of Sports Science of Nanjing Normal University, enterprises, and institutions to form a 12-member expert team. The first round of interviews is mainly to understand the development status and characteristics of the special funds for the development of sports industry in Jiangsu Province, so as to deepen the perceptual knowledge of the group members on the special funds for the development of sports industry in Jiangsu Province; the second round of interviews focuses on the selection of performance evaluation system indicators and the construction of evaluation system; the third round of interviews focuses on the design of questionnaire survey, the way of distribution, and the way of recovery. The last round is to interview the existing problems and solutions of the performance evaluation of special funds.

**3.4. Statistical Method.** This paper uses Excel and SPSS to analyse the number, including the implementation of the special funds for the development of sports industry in Jiangsu Province, the ratio of funds to pull back the budget and other data. We need to understand the distribution and use of special funds and the problems encountered in the process of using the special funds, so as to further understand the development of sports industry in Jiangsu Province performance evaluation of the special funds for the

exhibition. The statistical formulas involved in this paper are as follows.

For calculation of median in ungrouped data, the data should be sorted first, and then the position of median should be determined, when calculating the median based on ungrouped data. If a group of data is ranked from small to large as  $X_1, X_2, \dots, X_N$ , median  $M_e$ , then there are

$$M_e = \begin{cases} X_{(N+1)/2}, & N \text{ is odd number,} \\ \frac{1}{2} \{X_{N/2} + X_{(N/2)+1}\}. \end{cases} \quad (1)$$

For calculation of median of grouped data, when calculating the median of grouped data, we should first determine the position of the median according to the formula  $N/2$  and determine the group of the median and then use the following formula to calculate the approximate value of the median:

$$M_e = L + \frac{(\sum_{i=1}^N f_i/2) - S_{m-1}}{f_m} \times d, \quad (2)$$

where  $M_e$  represents the median;  $L$  represents the lower limit of the median group;  $S$  represents the cumulative times of each group below the median group;  $f_m$  represents the times of the median group; and  $d$  represents the group distance of the median group.

The formula for calculating the mean value of ungrouped data is as follows:

$$\bar{x} = \frac{x_1 + x_2 + \dots + x_n}{n} = \frac{\sum_{i=1}^n x_i}{n}. \quad (3)$$

The formula for calculating the mean value of grouped data is as follows:

$$\bar{x} = \frac{x_1 f_1 + x_2 f_2 + \dots + x_k f_k}{f_1 + f_2 + \dots + f_k} = \frac{\sum_{i=1}^k x_i f_i}{\sum_{i=1}^k f_i}. \quad (4)$$

## 4. Current Situation of Special Funds for Sports Industry Development in Jiangsu Province

*4.1. Development Scale of Special Funds for Sports Industry Development in Jiangsu Province.* Under the increasingly complex social and economic environment, it is particularly important to conduct scientific performance evaluation and analysis [15], and performance management systems (PMS) are integral to an organization's resource management [16]. Special fund for sports industry development aims to stimulate social capital to invest in sports industry through administrative means, and the special fund for the development of sports industry in Jiangsu Province comes from the government budget and sports lottery public welfare fund, which is jointly managed by the provincial finance department and the Provincial Sports Bureau under the guidance and coordination of the provincial government.

*4.1.1. Number of Projects Supported by Special Funds.* The special fund for the development of sports industry in Jiangsu Province has been invested since 2011, and 89 projects have been supported in the first year. In the first three years, the number of supporting projects increased by an average of 20.6% year by year, until 2014, and the number of supporting projects reached the peak, reaching 144. In 2015, the number of supporting projects decreased rapidly by 19.44%, and now the number of projects remains around 110 in recent years (see Figure 1). From this, we can see that the projects supported by special funds have experienced accurate development from surface to point. Nowadays, the special funds for the development of sports industry are more targeted. The special funds have changed from large-scale support for sports projects in the initial stage to support key categories of projects and strengthen the support for projects.

*4.1.2. Amount of Projects Supported by Special Funds.* With the introduction of a series of policies to increase the development of sports industry, Jiangsu Provincial Department of Finance has increased the support of special funds for the development of sports industry in order to meet the needs of the development of sports industry in Jiangsu Province. The support amount of the special fund for the development of provincial sports industry increased from 60.1 million yuan in 2011 to 80 million yuan in 2013 and stabilized at about 100 million yuan in the six years after 2014. The total amount of government finance in the special fund for sports industry development shows a trend of steady increase at first and then tends to be stable (see Figure 2). From 2011 to 2019, Jiangsu Province invested a total of 796.6 million yuan in the development of sports industry.

*4.2. Current Situation of Performance Management of Special Funds for Sports Industry Development in Jiangsu Province.* In order to accurately grasp the implementation of the project and understand the use efficiency of the special funds for industrial development, Jiangsu Provincial Sports Bureau, together with the Provincial Department of Finance, conducts regular performance evaluation on the projects supported by the special funds, and the provincial sports industry guidance center organizes the third party to implement the evaluation because a large number of developing countries directly involve citizens in the local government decision-making process, mainly in public policy decisions, public service delivery, and project monitoring and evaluation [17].

After determining the performance evaluation index system and performance evaluation scheme, performance management will be implemented in stages.

Performance management is implemented in four stages (see Figure 3). First, the provincial sports bureau issues a notice to carry out the performance evaluation of projects

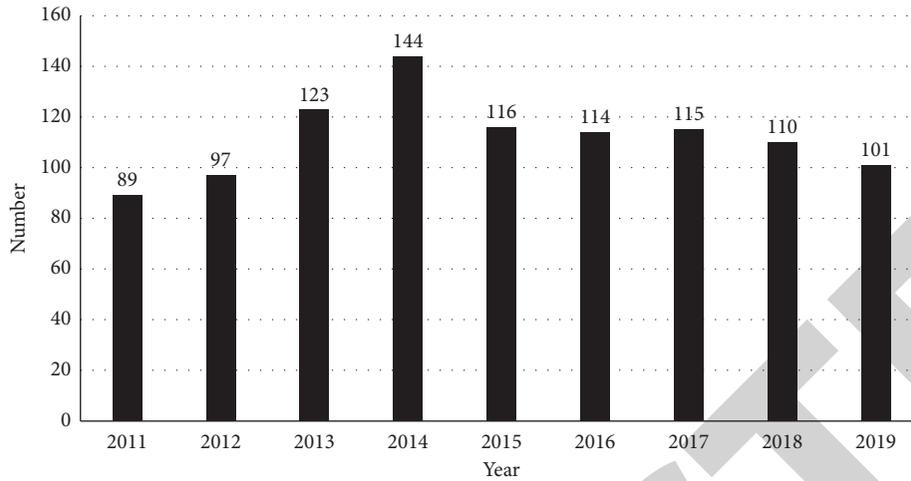


FIGURE 1: Number of sports industry development projects supported by special funds in Jiangsu province from 2011 to 2019.

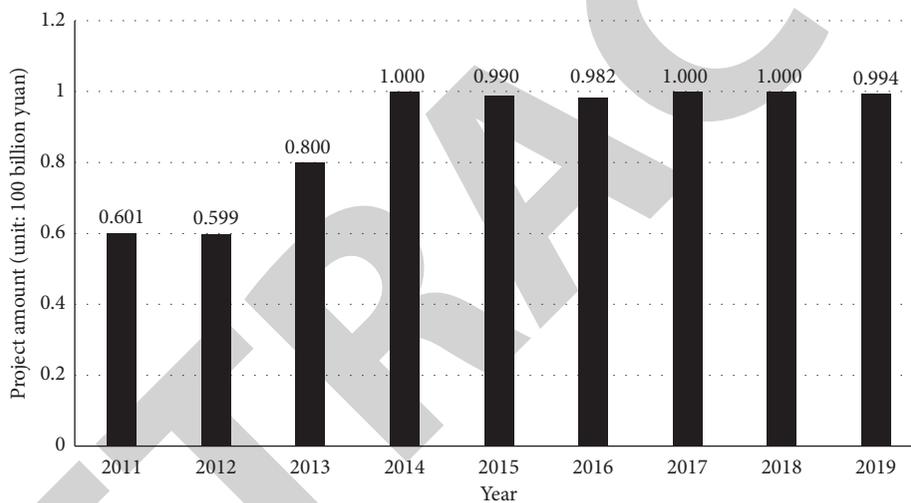


FIGURE 2: Amount of special funds support projects for sports industry development in Jiangsu province from 2011 to 2019.

supported by special funds; then, the municipal and county sports departments assist the Provincial Sports Bureau in organizing the performance evaluation; then, the completed project units fill in the performance evaluation self-evaluation form and submit the project summary report; finally, the Provincial Sports Bureau and the Provincial Department of Finance organize experts or committees. The intermediary agencies are entrusted to carry out project performance evaluation on the supporting projects according to the performance evaluation indexes.

### 5. Analysis on the Performance Evaluation of Special Funds for Sports Industry Development in Jiangsu Province

Performance management is often normatively presented as a rational process of operationalizing policy goals, measuring, analyzing results, and using the results to inform policy decisions [18], and the government officers must constantly scan a sea of new information and judge if this

information is relevant to evaluating the objection [19]. In the process of data collection of performance evaluation of special funds for sports industry development in Jiangsu Province, the following problems are encountered. Due to the sensitivity of the data, such as the business income of the enterprise and the tax added value of the project unit, it is not convenient to make public; due to the difficulty of data collection, such as the growth rate of the number of people participating in sports fitness training, and the media exposure rate of the event, it is difficult to collect accurate data; due to the urgency of time, such as the satisfaction of the public and the satisfaction of the service object, there is no questionnaire investigation. Therefore, experts have discussed for many times [20]. The first phase of performance evaluation only announced four indicators of 908 projects supported by the special fund for sports industry development in Jiangsu Province from 2011 to 2018, including fund arrival rate, fund pull ratio, project implementation completion rate, and fund recovery rate, which were analyzed according to time and region.



FIGURE 3: Implementation process of performance management of special funds for sports industry development in Jiangsu province.

5.1. *Analysis of Fund Availability Rate.* The capital in place rate is the ratio of the actual capital in place and the planned investment. The calculation formula is as follows [20]:

$$AR = \frac{AF}{PI} \times 100\%. \quad (5)$$

AR refers to the arrival rate of special funds for sports industry development. AF refers to the actual funds in place of special funds for sports industry. PI refers to the amount

of planned to be invested of special funds for sports industry development.

The total amount of the special fund for the development of sports industry in Jiangsu Province declared by the enterprises is about 34.304 billion yuan in 8 years. When all the projects are completed in 2018, the total amount of the actual funds in place is about 27.785 billion yuan, and the overall fund in place rate is about 81.00%. This paper makes statistics on the fund arrival rate of 908 projects supported by

the special fund for the development of sports industry in Jiangsu Province from 2011 to 2018 and analyzes them by year and region.

*5.1.1. Annual Analysis of Fund Availability Rate.* According to the statistics of the fund arrival rate of supported projects from 2011 to 2018 (see Table 1), it can be seen that the planned investment in 2012 is about 2.071 billion yuan; the actual investment in 2012 is about 1.842 billion yuan, and the fund arrival rate is about 88.96%, which is the highest over the years; the planned investment in 2011 is 7.570 billion yuan; the actual investment in 2011 is 3.657 billion yuan; the fund arrival rate is 48.31%, and the fund arrival rate is 48.31%. The rate of arrival is the lowest. From 2011 to 2018, 144 projects were supported in 2014, with the largest number of supported projects. However, the number of projects with a capital in place rate of 100% or higher accounted for only 31.94%, which was the lowest from 2011 to 2018. In 2016, 114 projects were supported, with a capital in place rate of 100% or higher accounting for 43.85%, which was the highest from 2011 to 2018.

*5.1.2. Regional Analysis of Fund Availability Rate.* From 2011 to 2018 in Jiangsu Province, the funds in place rate of special funds to support the project is also different. The actual investment of Lianyungang City is about 490 million yuan, and the planned investment is about 509 million yuan. The total amount of actual investment is close to the total amount of planned investment, and the overall capital arrival rate is about 96.32%. In addition to Lianyungang, Yangzhou, Yancheng, and Suzhou have an overall capital in place rate of more than 70%; Suzhou, Xuzhou, Changzhou, Suqian, and Taizhou have a capital in place rate of more than 70% and less than 90%; Nanjing, Yancheng, Yangzhou, and Huai'an have a capital in place rate of less than 50%. In the proportion of projects with a capital availability rate of 100%, Lianyungang, Yancheng, and Nantong have a higher proportion, while Nanjing, Suqian, and Xuzhou have a lower proportion (see Table 2 for details).

*5.2. Capital Pull Ratio Analysis.* The capital pull ratio refers to the ratio of the funds actually invested by the enterprise in the supported project and the funds supported by the government:

$$PR = \frac{AF}{GF} \quad (6)$$

PR is the capital pull ratio of special funds for sports industry development. AF is the actual funds in place of special funds for sports industry development. GF refers to the government funds of special funds for sports industry development.

The ratio of fund pull can reflect the ability of the government to implement the special fund for the development of sports industry to drive social funds into the field

of sports industry, which is also one of the most important indicators to evaluate the effect of the special fund for the development of sports industry. From 2011 to 2018, the enterprises who took the Jiangsu Province sports industry development special fund were planned to invest 75.7 billion yuan, but in the end they actually invested 36.57 billion yuan, and the capital pull ratio is 48.31%. The research group counted the actual investment of 908 projects supported by the special fund for the development of sports industry in Jiangsu Province from 2011 to 2018 and the amount of support funds and analyzed the pulling benefits of the special fund according to the year and region.

*5.2.1. Annual Analysis of Capital Pull Ratio.* From the perspective of project capital pull ratio from 2011 to 2018, in 2011, 60.1 million yuan of supporting funds were obtained, and the total amount of enterprise's actual investment was about 3.657 billion yuan, which was much higher than that in other years; in 2016, 98.2 million yuan of supporting funds were obtained, and the total amount of enterprise's actual investment was about 2.450 billion yuan, which was about 24.75, which was the lowest over the years. From the analysis of capital pull ratio over the years, we can see that 2011 is the start year of the special fund for the development of sports industry in Jiangsu Province, which quickly attracted a large number of social capital investment. However, the capital pull ratio does not rise with the increase of the total amount of support funds but tends to be stable. Due to the special funds for the development of sports industry, social funds which are about 25 times of the amount invested by the government are invested into the sports industry every year (see Table 3), so as to promote the steady development of the sports industry.

*5.2.2. Regional Analysis of Capital Pull Ratio.* According to the regional analysis, from 2011 to 2018, Nanjing City, Suzhou City, and Wuxi City got the most support funds, which were 100.3 million yuan, 77.1 million yuan, and 64.75 million yuan, respectively. The actual investment of enterprises in Huai'an City and Yangzhou City was 1.917 billion yuan and 2.183 billion yuan, respectively. The capital pull was relatively high, more than 60%, while that of enterprises in Suqian City was higher. The actual investment is about 331 million yuan; the capital pull ratio is about 15.97, and the capital pull ratio is the lowest (see Table 4). Therefore, it can be seen that there is no direct proportion between the total amount of support funds and the total amount of actual investment funds.

It can be seen from Table 4 that the average value of the support funds obtained by various regions in Jiangsu Province is about 47.9357 million yuan; the average value of the actual investment funds is about 161.70635 million yuan; the average value of the capital pull ratio is about 36.90, and the capital pull ratio is relatively high. From 2011 to 2018, we can see that Huai'an City, Yangzhou City, and Yancheng City are the top three in terms of capital pull ratio, which are

TABLE 1: Capital availability rate of each year from 2011 to 2018 (data from Jiangsu Sports Industry Guidance Center).

Time	Number of supporting projects	Actual funds in place (ten thousand yuan)	Planned investment (ten thousand yuan)	Rate of disbursement	Proportion of projects with capital availability rate greater than or equal to 100%
2011	89	365740.56	757036.26	48.31	35.96
2012	97	184201.36	207050.61	88.96	38.14
2013	123	223631.33	359130.73	62.27	39.02
2014	144	258559.93	356846.01	72.46	31.94
2015	116	245041.24	283350.02	86.48	36.21
2016	114	231900.87	304108.45	76.25	43.85
2017	115	237416.30	295950.69	80.22	35.96
2018	110	525654.05	651911.32	80.63	40.00

TABLE 2: Capital availability rate of various regions from 2011 to 2018 (data from Jiangsu Sports Industry Guidance Center).

Region	Number of supporting projects	Actual funds in place (ten thousand yuan)	Planned investment (ten thousand yuan)	Rate of disbursement (%)	Proportion of projects with capital availability rate greater than or equal to 100 (%)
Lianyungang	44	49029.18	50905.00	96.32	63.64
Yancheng	43	66443	166842.00	39.82	62.79
Zhenjiang	39	82250.75	129991.99	63.27	53.85
Yangzhou	47	98193.58	231154.18	42.48	40.43
Suzhou	113	357232.67	444808.21	80.31	40.71
Xuzhou	43	67503.04	87558.11	77.10	37.21
Nanjing	124	151277.65	437511.64	34.58	29.84
Changzhou	87	220058.52	284991.40	77.22	45.98
Suqian	28	30958.6	40922.00	75.65	17.86
Nantong	49	130294.32	221329.16	58.87	59.18
Wuxi	102	258094.79	410836.23	62.82	39.22
Huai'an	37	97995.83	312024.70	31.41	48.65
Taizhou	40	35222.85	46620.69	75.55	45.00
Provincial level	112	100846.8	354490.94	28.45	23.21

TABLE 3: Capital pull ratio from 2011 to 2018.

Year	Actual investment (10,000 yuan)	Support fund (100 million yuan)	Capital pull ratio
2011	365740.56	0.601	60.85
2012	184201.36	0.599	30.75
2013	223631.33	0.800	27.95
2014	258559.93	1.000	25.86
2015	245041.24	0.990	24.75
2016	231900.87	0.982	23.61
2017	237416.30	0.920	25.80
2018	524098.05	1.000	52.41

TABLE 4: Multiplier effect of special funds in Jiangsu Province from 2011 to 2018.

Region	Actual investment (10,000 yuan)	Support fund (100 million yuan)	Capital pull ratio
Huai'an	2650	191688.92	72.34
Suzhou	7610	383209.81	50.36
Wuxi	6325	261846.68	41.40
Changzhou	5670	230132.13	40.59
Yangzhou	3160	218314.02	69.09
Zhenjiang	2980	96393.35	32.35
Yancheng	2610	154127.95	59.05
Xuzhou	3290	76460.38	23.24
Nantong	3820	141315.65	36.99
Nanjing	8870	281634.15	31.75
Suqian	2075	33130.90	15.97
Lianyungang	2680	50781.33	18.95
Taizhou	2280	37242.00	16.33
Provincial level	13090	107611.61	8.22
Average value	4793.57	161706.35	36.90

about 72.34, 69.09, and 59.05, respectively, while Lianyungang City, Taizhou City, and Suqian City are the bottom three, which are about 18.95, 16.33, and 15.97, respectively (see Figure 4).

**5.3. Project Implementation Completion Rate Analysis.** The so-called project implementation completion rate refers to the ratio of the number of completed projects and government supported projects. The calculation formula is as follows:

$$CR = \frac{CP}{GP} \times 100\%. \quad (7)$$

CR refers to the project implementation completion rate of special funds for sports industry development. CP refers to the number of completed projects of special funds for sports industry development. GP refers to the number of projects of special funds for sports industry development.

From 2011 to 2018, 784 projects supported by the special fund for sports industry development in Jiangsu Province have been completed, and 124 projects have not been completed. The overall implementation completion rate of the projects is about 86.34%.

**5.3.1. Annual Analysis of Project Implementation Completion Rate.** From 2011 to 2015, a total of 116 projects were supported and 107 projects were completed in 2015, with a completion rate of 92.24%, the highest from 2011 to 2015; in 2016, 114 projects were supported and 90 projects were completed, with a completion rate of 78.95%, the lowest from 2011 to 2018. From the overall situation from 2011 to 2018, the overall implementation completion rate of sports industry development special fund support projects shows a downward trend (see Figure 5). However, it is worth mentioning that from 2011 to 2015, the number of projects supported by special funds in 2014 was the largest, with a total of 144, but the completion rate of project implementation was lower than that in 2013 and 2015, the multiplier effect of special funds was only higher than that in 2015, and the capital arrival rate was lower than that in 2012 and 2015. Therefore, the completion rate of project implementation was not related to the multiplier effect of special funds, the capital arrival rate, and the number of supported projects.

**5.3.2. Regional Analysis of Project Implementation Completion Rate.** From 2011 to 2018, Suzhou supported 113 projects, 107 of which were completed, with a completion rate of 94.69%; Huai'an supported 37 projects, 35 of which were completed, with a completion rate of 94.59%; Lianyungang supported 44 projects, 41 of which were completed, with a completion rate of 93.18%. The completion rate ranks in the top three, which is higher than that of other regions. At the same time, 50% of the regions have a project implementation completion rate of more than 80%, and

85.71% of the regions have a project implementation completion rate of more than 70% (see Figure 6).

**5.4. Analysis of Fund Recovery Rate.** The so-called capital recovery rate refers to the ratio between the amount of capital recovered in the current year and the total amount of project support in the current year. The calculation formula is as follows:

$$RR = \frac{RF}{GF} \times 100\%. \quad (8)$$

RR refers to the recovery rate of special funds for sports industry development. RF refers to the actual funds in place of special funds for sports industry development that the government needs to recover from projects that fail to implement as planned. GF refers to the government funds of special funds for sports industry development.

The special fund coordination group carries out evaluation and investigation according to the indicators of fund implementation, project approval, business management, financial management, project completion, and fund utilization, which is finally decided by the Provincial Sports Bureau and the Provincial Department of Finance. Since the special fund recovery projects in 2018 have not been announced to the public, this study analyzes the fund recovery projects from 2011 to 2017. Among the 798 projects supported from 2011 to 2017, the total supporting funds are 597.2 million yuan. It is estimated that the supporting funds of 24 projects will be recovered, and a total of 11.7261.83 million yuan of special funds will be recovered, including 6.1493.95 million yuan recovered at provincial level, 5.5768.135 million yuan recovered at municipal level, 9.6639.135 million yuan recovered from 2011 to 2015, and 2.0622.95 million yuan recovered from 2016 to 2017. Therefore, from 2011 to 2017, the overall recovery rate of special funds for sports industry development in Jiangsu Province is about 1.96%. According to the report of Jiangsu Provincial Sports Bureau on the performance evaluation results and treatment of the special funds for the development of sports industry in Jiangsu Province from 2011 to 2017, the fund recovery rate of 798 projects supported by the special funds for the development of sports industry in Jiangsu Province from 2011 to 2017 was counted and analyzed according to the year and region.

**5.4.1. Annual Analysis of Fund Prerecovery Rate.** From 2011 to 2017, the Sports Bureau of Jiangsu Province needs to recover 24 special funds for sports industry development. From the perspective of project fund recovery in each year, there was no project requiring special fund recovery in 2015, and the fund recovery rate was 0, which was the lowest from 2011 to 2017; in 2014, the special fund of 8 projects was recovered, totaling 4.769 million yuan, and the fund recovery rate was about 4.77%, which was the highest from 2011 to 2017. In terms of projects never implemented, the

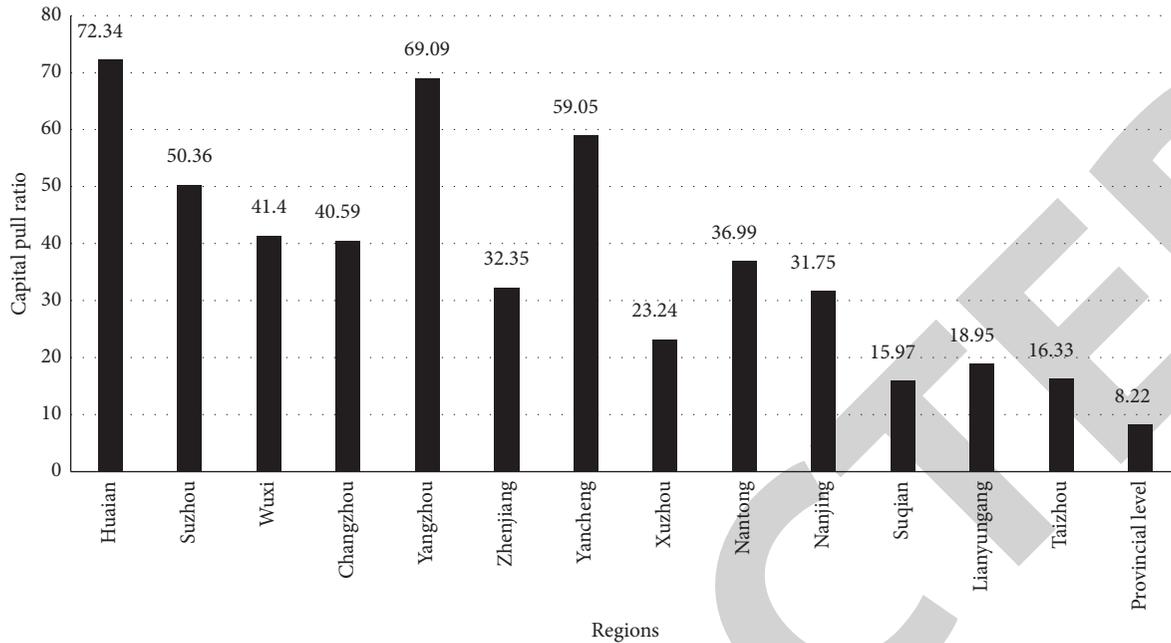


FIGURE 4: Capital pull ratio of Jiangsu Province from 2011 to 2018.

number of projects with special funds recovered in 2015 was the least, and the number of projects with special funds recovered in 2014 was the most (see Figure 7).

**5.4.2. Regional Analysis of Fund Recovery Rate.** According to the provincial financial departments and provincial sports departments, to carry out the performance evaluation of special funds, they can decide to recover part of the project support funds. From the perspective of project fund recovery in various regions, it is expected to recover 24 special fund support projects from 2011 to 2017, including Wuxi, Changzhou, Xuzhou, Yancheng, Suqian, and provincial projects. From 2011 to 2017, a total of 34 projects in Yancheng City were supported, and a total of 18.7 million yuan of special funds for sports industry development were issued, of which 1.075 million yuan of special funds including 2 projects needed to be recovered, and the fund prerecovery rate was about 5.75%, which was the highest in the province; 97 projects in Wuxi City were supported, and a total of 61.15 million yuan of special funds were issued, and 3 projects needed to be recovered, with a total of 1.18135 million yuan of special funds. It can help to recover the funds, and the prerecovery rate of funds is 1.80%, which is the lowest among the regions that need to recover the special funds (see Figure 8). In addition, there are no major projects not implemented in Nanjing, Suzhou, Zhenjiang, Nantong, Yangzhou, Taizhou, Huai'an, and Lianyungang, so there are no projects that need to recover special funds, and the fund prerecovery rate is 0.

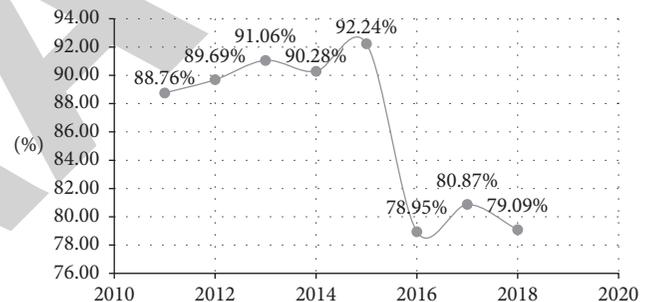


FIGURE 5: Completion rate of project implementation from 2011 to 2018.

## 6. Problems and Countermeasures of Performance Management of Special Funds for Sports Industry Development

The special fund for sports industry development, as a financial public policy fund, is a combination of various businesses rather than a simple superposition. Various businesses need to cooperate with each other. Any shortage can affect the normal development of the special fund for sports industry development. By combing the development status of the special fund for the development of sports industry in Jiangsu Province in recent years and investigating the situation of the supported enterprises, the paper finds out the following deficiencies and puts forward countermeasures, so as to provide some reference for the performance evaluation of the special fund for the development of sports industry in the future.

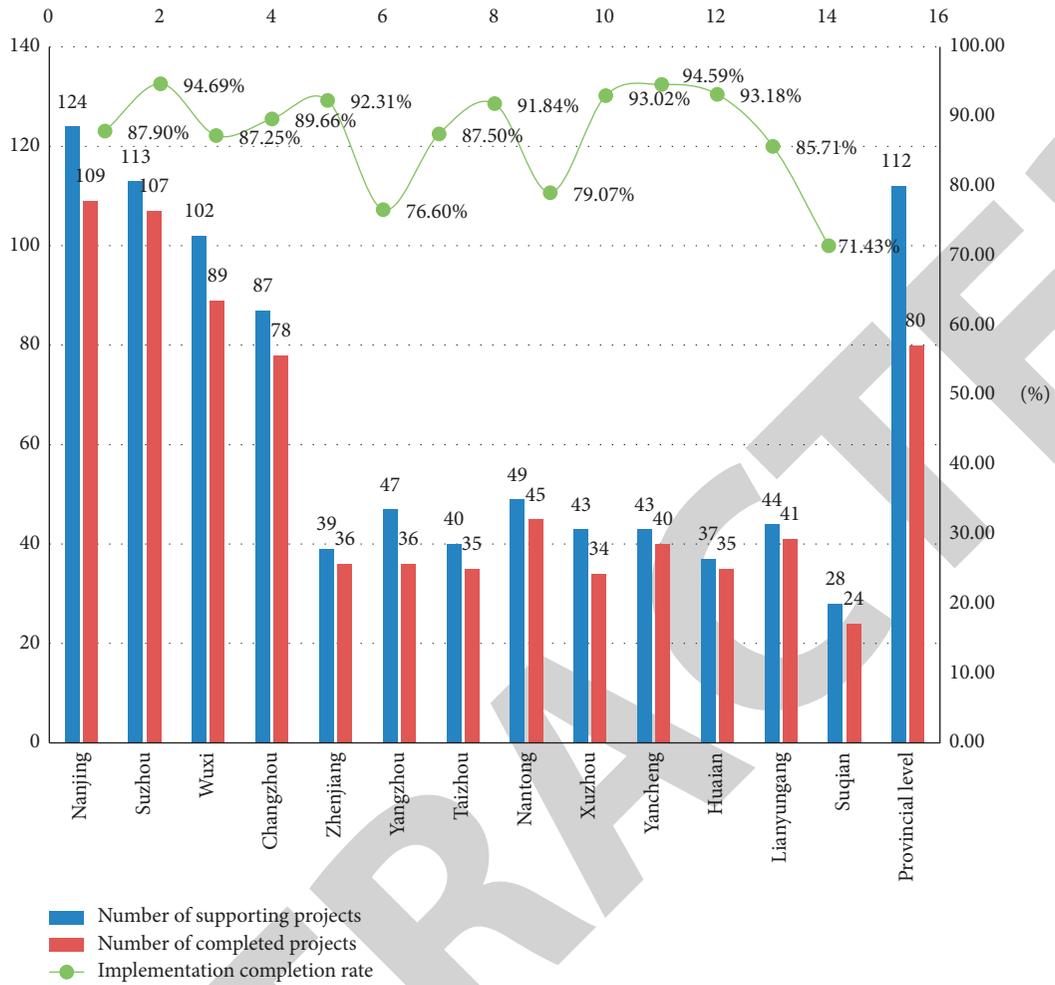


FIGURE 6: Implementation completion rate of supporting projects in various regions from 2011 to 2018.



FIGURE 7: Project fund recovery rate from 2011 to 2017.

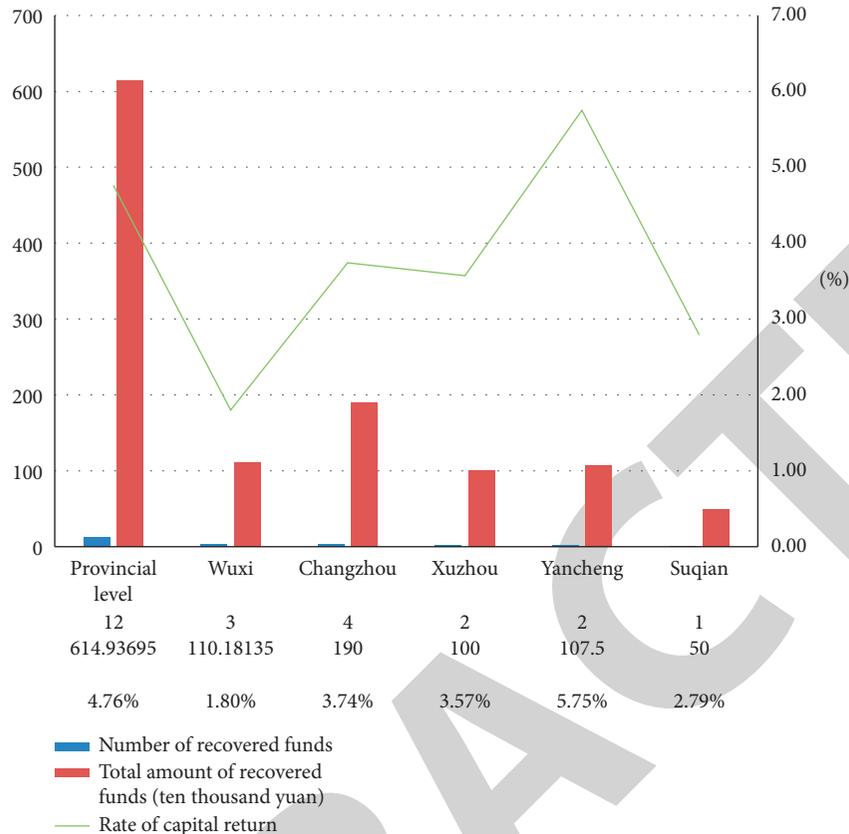


FIGURE 8: Fund prerecovery rate of supporting projects in various regions from 2011 to 2017.

### 6.1. Problems in Performance Management of Special Funds for Sports Industry Development

**6.1.1. The Operability of Some Common Financial Indicators Is Not Strong.** On the performance evaluation of special funds, Jiangsu adopts the provincial financial department to carry out the performance evaluation of special funds together with the provincial sports department. In practice, the sports department is the leading one. The sports department supervises and inspects the supporting units, sets up the target of the performance evaluation of special funds, urges the relevant units to carry out the project performance self-evaluation, and sends the evaluation reports to the Provincial Government Department [21]. In recent years, Jiangsu Provincial Sports Bureau has made a set of performance evaluation index systems. The coordination group found that some indicators could not be collected, and some enterprise data could not be disclosed; the operability of indicators was poor, and the key indicators were not highlighted, which further increased the difficulty of performance evaluation. For example, the standardization of project approval, the effectiveness of system implementation, the compliance of fund use, the controllability of budget implementation, and other indicators cannot make accurate quantitative evaluation and analysis of the use of special funds through the investigation of enterprises.

**6.1.2. The Supervision and Management Is Not Timely and the Follow-Up Speed Is Slow.** Since the establishment of the special fund for sports industry development in Jiangsu Province in 2011, the performance evaluation of the special fund is a new problem that plagues the special fund for sports industry development, lacking a clear supervision and management mechanism [22]. On the one hand, the inspection also found that individual projects were not implemented; the actual investment of a few projects was significantly lower than the declared budget; some units' financial accounting was not standardized, and the special funds were used beyond the scope. Individual enterprises even resorted to fraud, interception, misappropriation, or misappropriation of special funds, which affected the normal implementation of the project. The Provincial Sports Bureau, together with the Department of Finance, has supervised the rectification of the problem projects. For those who violate the relevant provisions of the special fund management, in principle, the special fund will be recovered or the declaration qualification will be cancelled within three years, but the actual operation is more difficult. On the other hand, in the process of performance evaluation, the division of responsibilities of various departments is not clear; the coordination and communication is not smooth; the performance evaluation is not timely, and the problem handling and follow-up speed is slow.

*6.1.3. It Is Difficult to Deal with the Special Funds.* From 2011 to 2015, Nanjing, Suzhou, and Wuxi completed the largest number of sports industry development projects in Jiangsu Province, but there are still few projects that have not been implemented, are being implemented, or partially implemented. In the implementation process of few projects, there are a series of problems, such as no independent special subjects are in the financial account; the project special funds are used beyond the scope [19]; the difference between the budget investment and the actual investment is large, and the main body of the project implementation unit is inconsistent. Therefore, the Provincial government decided to recover the funds of 19 supporting projects. For these projects that need to recover funds, the Provincial Department of Finance and the Provincial Sports Bureau have taken measures, but some enterprises have closed down, which leads to the difficulty of recovering the special funds for supporting projects.

## *6.2. Improvement Countermeasures of Performance Management of Special Funds for Sports Industry Development*

*6.2.1. To Establish a Practical and Operational Performance Evaluation Index System.* According to the first round of Jiangsu Province sports industry development special fund performance evaluation problems, the government and the enterprises set up Optimization-Based Sense and Response System [23]; the relevant departments should timely give feedback, abandon the inappropriate evaluation index, and select the evaluation index with strong operability and simple operation process. Performance evaluation indicators can be divided into functional indicators, comprehensive indicators, and technical indicators according to different index attributes [24]. The evaluation mechanism should take economic benefits as the main evaluation index but also take into account the social benefits of the project [14]. It should consider the integrity of the index system and the operability of the evaluation index [25], so as to avoid giving up the performance evaluation of special funds for the supported enterprises due to the lack of operability of the evaluation index.

*6.2.2. To Improve the Supervision Mechanism of Special Fund Performance Management.* The perfect supervision mechanism should cover the whole process of the use of funds, comprehensively manage the implementation of funds, the progress of projects and the achievement of benefits, implement the regular reporting system for the progress of projects, understand the use of funds in real time, and avoid the illegal use of special funds. We should deepen and broaden performance management practice, using audit assessments, field study, and survey research [26].

In the way of on-the-spot supervision, the guiding effect of funds is really implemented, which avoids the risk of capital loss to a certain extent. In order to realize the supervision function of the evaluation mechanism,

accountability implies evaluation of what has been done well or less well [27]. We should ask the scientificity and pertinence of the establishment of the evaluation index system and maximize the derivative benefits of special funds on the premise of ensuring the safety of funds. Jiangsu Province sports industry development special fund management coordination group should timely carry out regular special fund performance evaluation on the projects of supported enterprises and institutions. After the periodic evaluation, it should timely supervise the implementation progress of relevant projects, speed up the development and improvement of projects, and ensure the implementation of supported projects according to the original plan [28].

*6.2.3. To Increase the Fund Recovery of Special Fund Support Projects.* From 2011 to 2017, most of the projects supported by the special fund for the development of sports industry can be implemented as planned and achieve the expected results. However, a small number of enterprises are unable to complete the construction of the project due to various reasons. Take the export service project of Wuxi Xinwei Stadium as an example; due to the need of urban road construction, more than 85% of the five large factories in the original site of Wuxi shipyard have been demolished, which has no value to continue to implement the project [29], and the project has not been implemented in the end. For the projects not implemented or partially implemented, it is necessary to report to the provincial finance department and the Provincial Sports Bureau for approval and recover the special funds in time. For the project cancelled for some reason, the project unit must make the final accounts and report to the Provincial Department of Finance and the Provincial Sports Bureau for approval [15]. The relevant departments should strengthen the recovery of special funds to avoid the situation that the funds cannot be recovered due to enterprise reasons.

*6.2.4. To Increase the Application of Performance Evaluation Results of Special Funds.* On the basis of completing the performance evaluation of the existing project special funds, we should increase the application of the performance evaluation results of the special funds. For the special fund management department, it is necessary to objectively analyze the reasons for the performance level of the special funds in various projects and regions, take targeted measures, and continuously improve the management level and efficiency of the special funds by the management department, especially in the evaluation of supporting projects [30]. It is necessary to give full play to the guiding role of the performance evaluation results of the special funds and take the performance evaluation results as the follow-up special funds in order to improve the quality and efficiency of special fund support projects, promote the sports industry to achieve leapfrog development, and meet the people's needs for a better life.

## 7. Conclusion

In the development process of sports industry, the special fund for sports industry development is not only to overcome the problem of market failure in sports investment and financing but also an important supporter of China's sports industry. At present, the research on the performance management of the special funds for the development of China's sports industry is still in the exploratory stage. Academic research should be ahead of the actual situation, and the performance management of the special funds for the development of China's sports industry should also have a sense of advance. The local governments that set up the special funds for the development of sports industry fight for their own actions. They lack the awareness of the importance of the performance evaluation and management of the special funds, the unified evaluation standards and standardized management process, and the supervision and management mechanism. As a result, there are various problems and confusion in the performance evaluation of the special funds for the development of sports industry. Whether the funds can effectively play the role of guidance, demonstration, and cultivation of special funds determines whether it can effectively leverage social capital into the sports industry, and it depends on the performance management of special funds development being implemented in an orderly and scientific way [17]. The special fund for the development of sports industry is a new thing in China, and there will be some deficiencies or problems in the process of its development. However, as long as the scientific and standardized management and regular performance management are carried out, it will have a huge role in promoting the development of China's sports industry.

### Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

### Conflicts of Interest

The authors declare that they have no conflicts of interest.

### Acknowledgments

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