

## **ВІДГУК РЕЦЕНЗЕНТА**

к.е.н., доцента, доцента кафедри публічного управління та адміністрування  
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на дисертаційну роботу аспіранта кафедри публічного управління та адміністрування **Liu Ziming (Люй Цзімін)** «Management of Sport Industry for Sustainable Development» («Менеджмент спортивної індустрії для сталого розвитку»), поданої на здобуття ступеня доктора філософії з галузі знань 07-управління та адміністрування за спеціальністю 073 - «Менеджмент»

**Relevance of the topic of the dissertation.** The relevance of the topic lies in its significance within the broader context of China's evolving sports landscape and the global emphasis on sustainability. China has experienced substantial growth in its sports industry, driven by increased interest, investments, and government initiatives. Examining management strategies for sustainability becomes crucial to ensure the long-term success and positive impact of this burgeoning sector. As the sports industry expands, it brings about environmental and social implications. Sustainable management practices can address issues related to resource consumption, waste generation, and social equity, aligning with China's broader goals for sustainable development.

China's increasing role as a host for major international sporting events, such as the Olympics and other championships, emphasizes the need for effective management strategies that consider sustainability. These events provide a platform to showcase sustainable practices and leave a lasting legacy. Internationally, there is a growing focus on sustainability within the sports industry. Research on sustainable management practices in China contributes to the global discourse and facilitates knowledge exchange and collaboration.

The topic of the dissertation is highly relevant due to the dynamic growth of the sports industry in China, the associated environmental and social challenges, government priorities, global sporting events, and the increasing importance of sustainable practices within the international sports community. Addressing these

aspects through effective management strategies is essential for the continued success and responsible development of the sports industry in China.

The aim of the dissertation is to substantiate the theoretical foundations and develop practical recommendations regarding that influence and promote the development management system of the sports industry; determine internal and external mechanisms that influence the development of the sports industry; expand the boundaries of the theory, and improve methods and application principles of the management of the sports industry.

**Connection of work with scientific programs, plans, topics.** The dissertation was carried out in accordance with the directions of research work of the Department of Management named after professor L.Mykhailova of the Sumy National Agrarian University: "Development of management in the context of international integration processes" 2019-2023 (state registration number 0119U001336), within by the author was carried out the topic of Research on Management of Sport Industry for Sustainable Development.

**The scientific novelty of the obtained results.** The most important research results that reveal the content of the dissertation, characterize its scientific novelty and are presented for defence include the following:

The main theoretical provisions outlined in this work have reached the level of methodological developments and practical recommendations, are used and implemented in management practice. In particular:

*For the first time:*

-the evaluation index system for sustainable development of the sports industry is proposed based on the developmental theory of the sports industry, encompassing an assessment of both internal and external factors as well as evaluating the management capacity for sustainable development in a multi-agent sports industry;

*Improved:*

- theoretical and methodological foundations of the theory of empirical study of the behaviour sports industry multi-agent;

- the index system for a thorough assessment of the sports industry to multi-agent management capabilities, foster sustainable economic development within the sector, and enhance the managerial proficiency for ensuring its sustainable growth;

- the TOPSIS entropy weight model through calculating the weights of the government factor and grassroots governance as primary drivers of economic influence for the sustainable development of the sports industry;

- methodological principles for assessment fundamentally impact the industrial structure the management capacity for sustainable development in the sports industry.

*Acquired further development:*

- the concept of improving the sustainable development management ability of the sports industry and ensuring the sustainable and balanced development of the sports industry (structure strengthening, structure reconstruction, structure time and space). This will help improve the management capabilities of the various management players, solve the tasks facing the sports industry and achieve the management goals set by the state;

- approaches of sustainable development management ability of sports industry by optimizing the main factors of sports industry development management, which is based on correctly promoting the scale of digital economy agglomeration and planning agglomeration areas are the embodiment of the national management ability, which is conducive to improving the quality of sustainable development of the sports industry and achieving the national management objectives.

**The practical significance of the obtained results** lies in: establishing and enriching the new theory and method principles, putting forward new solutions to scientific problems, and providing a set of scientific provisions and conclusions for demonstrating the sustainable development strategy and practical suggestions of China's sports industry. The practical and methodical proposals put forward were implemented

in the activities of the Henan Development and Reform Commission and the sports economy.

### **The main results obtained personally by the author**

The aim of the dissertation is to improve the theoretical, methodological and organizational foundations of Management of Sport Industry for Sustainable Development.

According to the goal, the following tasks were completed in the dissertation:

- to improve the relevant theories of sports industry development;
- to analyze the sports industry sustainable development mechanism theory;
- to reveal the internal and external mechanisms that influence and promote the development of the sports industry;
- to analyze the development status of sports industry;
- to compare and analyze the development status of sports industry between China and higher developed countries;
- to develop the sustainable development of China's sports industry management strategy.

The object of the study is to the internal and external mechanisms of management of the sports industry for sustainable development, summarize the relevant theories, development status of the sports industry and justify China's sports industry management strategy.

The subject of the study is a set of theoretical, methodical and applied aspects of managing of Sport Industry for Sustainable Development.

In this dissertation for the scientific degree of Doctor of Philosophy, a variety of research methods are widely used, including a retrospective analysis of the literature, comparative studies, a combination of qualitative and quantitative research, a symbiosis of theory and empirical research, as well as a mathematical statistics analysis, graphical and tabular methods.

To provide a scientific foundation for selecting the optimal path for the sustainable development of the sports industry, this study develops causal diagrams, flow charts, and system dynamics equations to depict system optimization. Furthermore, a dynamic model is established to optimize the sustainable development of the sports industry system. Based on China's internal and external paths towards sustainable development and optimization in its sports industry, simulation parameters are designed to propose seven distinct paths: traditional development; driven by sports services; driven by leading industries; driven by coordinated development; driven by resource optimization; driven by sports technology innovation; and demand-driven optimization.

Firstly. Change ideas and implement institutional reform. Since sports is an industry, it should be established and operated according to the modern enterprise system. While competitive sports are enterprise-oriented, we should also actively cultivate and develop the consumer market of mass sports, and establish the management system of mass sports and the operation mechanism of self-investment of mass sports. Sports operators should change their operation mode, accelerate the pace of adjustment and reorganization of enterprises, and form a reasonable operation scale. In addition, it is necessary to strengthen the technology and service marketing innovation of sports enterprises, and improve the related sports services.

Secondly. The government has increased its support to vigorously develop the sports industry. Relevant departments should strengthen the development plans for the sports industry, strengthen policy guidance, implement the fiscal, tax, investment and financial support policies determined by the central government, relax the working conditions for sports business activities, and encourage various economic components to invest and operate in the sports industry. We will establish an investment and financing mechanism for sports development with diversified investment subjects and investment channels, expand the scale of the sports industry and raise the market-oriented level.

Thirdly. Improve the quality of all kinds of sports talents, and attach importance to the role of human resources. The development of sports undertakings depends more

and more on the degree that sports workers use advanced theories to guide their work. "Science and technology revitalize the body", establish a joint mechanism of scientific research and training, scientific research provides paid services for sports teams, so that sports science and technology from public welfare to business oriented, facing the society, market oriented, demand oriented, participate in competition, and accelerate the commercialization of scientific and technological achievements. It should cooperate with relevant departments in relevant institutions to set up a sports information industry group and a "national network sports information system", and give full play to the advantages of information of text information, electronic information, film and television information and other media information to jointly develop the sports information industry.

Fourthly. The vensim-PLE simulation software is utilized to conduct simulations and comparative analyses of various pathways, aiming to enhance the value added by the sports industry, promote employment development, and optimize the strategic-level structure of the sports industry. This approach represents the most scientific and sustainable mode of development. The completion of constructing a sports powerhouse has set forth the target task for making the "sports industry a national pillar industry by 2035." Simultaneously, through adjusting external economic variables, optimizing resource allocation, fostering scientific and technological innovation, as well as refining demand optimization pathways can expedite China's sports industry towards sustainable development, optimization, and upgrading.

In finally, the sustainable development of the sports industry extends beyond the implementation of the development strategy. This entails transitioning from a sports material consumption economy to a service-based economy, with an emphasis on not only the proportion but also the level and quality of sports services. Neglecting these aspects will result in being trapped in a self-perpetuating cycle of services, hindering sustainable development. Therefore, adjusting China's approach to sustainable development in its sports industry should involve reasonable planning for its overall growth. Shifting focus from solely improving the proportion of the sports service

industry to developing both sports goods manufacturing and sports service industries is crucial for achieving sustainability. This paper systematically elaborates on countermeasures and suggestions for optimizing China's sports industry through six key areas: rational planning of key formats, activating innovation factors, promoting coordinated internal development within the industry, reforming demand-side practices, addressing regional imbalances in development, and implementing comprehensive management.

During a detailed review of the text of the dissertation work, scientific works of the recipient, study of the report on the results of the plagiarism check (Unicheck program), no grounds for doubting the academic integrity and level of scientific training of the recipient were established. The text of the dissertation is consistent with the dissertation's scientific works, which have undergone a double-blind review, which is also a confirmation of the absence of signs of falsification of the research results.

The dissertation work of **Liu Ziming** «Management of Sport Industry for Sustainable Development» is the result of the applicant's independent research and does not contain elements of plagiarism and borrowing according to the resolution of the CMU dated 12.01.2022 No. 44, paragraph 9. The used ideas, results and texts of other authors have a link to the corresponding source.

### **Number of scientific publications**

The main scientific provisions and results of research on the topic of the dissertation were published in 14 scientific works, including: 3 articles in specialized scientific publications of Ukraine; 2 articles were published in scientific periodicals of the Organization for Economic Cooperation and Development, which are included in the Scopus/ Web of Science Core Collection scientific-metric database; 9 theses in materials of scientific conferences.

### **Articles in periodical scientific publications indexed in the Web of Science Core Collection and/or Scopus databases**

1. **Ziming, L.** Management of sports industry: moving to economic development. *Marketing and Management of Innovations*, 2021. 4, 230-236.

<http://doi.org/10.21272/mmi.2021.4-18>

2. **Liu Ziming**, Tetiana Kharchenko Innovations in the field of sports industry management: assessment of the digital economy's impact on the qualitative development of the sports industry. *Baltic Journal of Economic Studies*. Vol. 9 No. 3, 2023. Pp. 10-21.

<https://doi.org/10.30525/2256-0742/2023-9-3-10-21>

**Articles in scientific publications included in the list of specialized scientific publications “B” category of Ukraine**

3. Tetiana Kharchenko & **Liu Ziming** The Relationship between Sports Industry Development and Economic Growth in China. *Oblik i finansi, Institute of Accounting and Finance*. 2021. issue 1 (91), pages 136-140, March.

DOI: 10.33146/2307-9878-2021-1(91)-136-140.

5. Liu Ziming, Kharchenko T.O The impact of sport industry on economic development. *Economy and Society*, 2022. (39).

<https://doi.org/10.32782/2524-0072/2022-39-6>

5. **Liu Ziming**, Tetyana O. Kharchenko Under the belt and road background of the new path of sports tourism industry development in China. *Mechanism of an Economic Regulation*, 2022. (1-2(95-96), 127-130.

<https://doi.org/10.32782/mer.2022.95-96.19>

**Other publications**

6. **Liu Ziming**, Kharchenko T.O. Determining the Degree of Connection between the Development of the Sports Industry and Economic Growth in the Regional Context: Evidence from 31 Provinces in China. *Economic of development*. Vol.20 No.2 (2021), 8-18.

DOI: 10.57111/econ.20(2).2021.8-18.



7. **Liu Ziming**, Тетяна Харченко. Research on the development of rural sports industry and sports economy. *Наука онлайн: Міжнародний електронний науковий журнал*. 2021. №3.

URL: <https://nauka-online.com/publications/economy/2021/3/22-2/>

8. **Liu Ziming**, Kharchenko T.O. Research on the countermeasures for the sustainable development of sports economy in Ukraine. *International Journal of Recent and Development*. Vol. 8, Issue, 12 (C), pp.114-116. Online ISSN: 2349-4182, Print ISSN: 2349-597

9. **Liu Ziming**, Kharchenko T.O. Research on the Development Path of Sports Industry in the Context of Belt and Road. *Turkish Journal of Computer and Mathematics Education*. Vol.12 No.14 (2021), 3780-3783.

URL: <https://turcomat.org/index.php/turkbilmat/article/view/11019/8201>.

10. **Liu Ziming**. Research on the Relationship between China Sports Industry Added Value and Economic Development Index Based on Grey Correlation Analysis. *Current issues of world and national economy: estimates and development strategies: Proceedings of the international scientific-practical conference (Lviv, March 27, 2021)*. NGO "Lviv Economic Foundation". p. 100-103.

11. **Liu Ziming**. (2021). VAR model parameter estimation of the Relationship between Sports Industry Development and Economic Growth in China. *Modern Movement of Science: abstracts of the 12th International Scientific and Practical Internet Conference (April 1-2, 2021)*, P1. Dnipro. p. 97-100.

12. **Liu Ziming**, Kharchenko T.O. Impact of sports industry development on rural economy. Глобалізація: співвідношення міжнародних та національних економічних інтересів під впливом нових викликів: *матеріали VIII Міжнародної науково-практичної конференції (м. Одеса, 9 квітня 2021 р.)*. МГУ, 2021. С. 60-63.

13. Liu Ziming Analysis on the connectivity of sports industry and economic development. Collection of abstracts XVIII International scientific and practical conference of young scientists (Ternopil, May 6, 2021). p. 48-52.

14. **Liu Ziming.** Research on the countermeasures for the sustainable development of sports economy in Ukraine. *Today economy in the context of global changes in society: a collection of materials of the scientific-practical conference (Zaporozhye, September 4, 2021).* Zaporozhye: NGO "SIEU", 2021. p. 29-33.

### **Remarks and wishes for the content.**

Characterizing the dissertation work of Liu Ziming as a whole, it should be noted that it certainly has relevance, scientific and practical significance. During the review of the work, some issues of a debatable nature, comments and suggestions arose:

1. Based on the previous literature review (p.1.1) and the current situation theoretical approaches to justify the essence of the sports industry and Conceptual Approaches to the Implementation of Components of Sustainable Development in the Sports Industry (p.1.2), this paper lays the thinking and logic of study, provides guidance for the writing of this study, and lays the theoretical review of this study. But it would be better deeply desirable to reveal the opinions of world-renowned scientists regarding theoretical approaches and methods of sports industry management.

2. In p.1.3 it is desirable to pay attention to the methodology of calculation of performance evaluation indicators of Sustainable Management in the Sports Industry.

3. If we are talking about the current status and dynamics of sustainable development in the Chinese Sports Industry (p. 2.1) it is desirable to confirm your opinions with analytical data, presented in tables and graphs, which will show the dynamics of the research problem during the studied period.

4. Along with the situation in China, it would be advisable to learn about the current status and dynamics of sustainable development in the sports industry (p. 2.1) in comparison with European countries or the most developed countries in the world.

5. Solving the issue of substantiation of the management strategy for the sustainable development of China's sports industry (p. 3.2), would like to inquire about action plans for the first 2-3 years. What measures should be implemented during this period?

However, the indicated comments and wishes do not fundamentally affect the overall positive assessment of the dissertation work, are not fundamental and do not reduce its rather high overall assessment.

### **Correspondence of the dissertation to the specialty and profile of the board**

Dissertation work by **Liu Ziming** «Management of Sport Industry for Sustainable Development», which was submitted for defence to a specialized academic council for obtaining a degree doctor of philosophy in the field of knowledge 07 management and administration with a specialty 073 management in terms of its relevance, scientific and theoretical level, main results of validity, main provisions and results published in professional publications, novelty of the setting and practical significance meets the requirements of the order of the Ministry of Education and Culture of Ukraine No. 40 of January 12 of 2017 "On the approval of the requirements for the preparation of the dissertation" and Resolution of the Cabinet of Ministers of Ukraine of January 12, 2022 No. 44 "On the approval of the Procedure for awarding the degree of Doctor of Philosophy and the cancellation of the decision of the one-time specialized academic council of the institution of higher education, scientific institution on awarding the degree of Doctor of Philosophy" with changes introduced in accordance with Resolution of the Cabinet of Ministers No. 341 of March 21, 2022. The content of the dissertation corresponds to the passport of the specialty.

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Підпис завіряється

