

## REVIEWER'S REVIEW

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for YU ZHIJIANG's dissertation

**"DEVELOPMENT OF THE SPORTS INDUSTRY IN THE  
CONDITIONS OF GEO-ECONOMIC CHALLENGES",**

applied for the degree of Doctor of Philosophy  
from the field of knowledge 07 Management and administration  
in the specialty 073 Management

**Relevance of the dissertation topic.** China's socialist market economy continues to develop and grow, and the rapid development of the sports industry is gradually progressing steadily. The sports industry is gradually developing and has become an important supporting emerging industry to directly promote the healthy economic growth of China in the new era. The relationship between the sports industry and economic development is also getting closer. When the level of economic development reaches a certain stage, it will lay the foundation for developing the sports industry. When the sports industry develops to a certain scale, it will have a multiplier effect on economic growth and promote economic development. The critical time is to promote the construction of contemporary sports revitalization as well as the rapid and healthy development of the sports industry at this important historical critical moment.

Currently, existing research from the perspective of geo-economy and industrial development, determine that China's sports industry is faced with a double attack of the high-end blockade and low-end lock. Global trends are focuses on the most core areas such as finance, trade, science, and technology. In this case, China's sports industry has to face barriers and challenges almost everywhere. Thus, the selection and study of the development of China's sports industry from the perspective of geo-economics has important practical significance, in particular, for formation the targeted development strategies. These arguments determine Yu Zhijiang's dissertation work as relevant and timely, with the aim of improving the theoretical and methodological foundations and developing practical recommendations for development of the sports industry in the conditions of geo-economic challenges.

**Connection of work with scientific programs, plans, topics.** The dissertation research was carried out within the framework of the scientific research plan of the following projects:

- Fujian Province Social Science Planning Project No. FJ2022B023;
- Henan Social Science Federation Research Project No. SKL-2022-2344.

**The degree of validity and reliability of scientific statements, conclusions and recommendations.** The scientific propositions, conclusions and recommendations set out in the dissertation are sufficiently substantiated, have a deep scientific meaning and are important for the development of economic science. The obtained scientific results are reliable and are based on theoretical and empirical research. The formulated goal

corresponds to the research topic, object and subject, scientific and methodological requirements.

The methodological basis of the dissertation is a detailed empirical analysis on specific problems in the operation of the sports industry. Scientific provisions, conclusions and recommendations are derived using a general scientific and managerial approach to scientific knowledge of the sports industry theory and theoretical support for China's sports industry from the perspective of geo-economy. In the course of the research, the author applied a wide range of general scientific and special research methods. Significant volumes of processed scientific literature, statistical data, regulatory information, Internet resources and other sources confirm the scientific results. The analysis of the content of the dissertation proves that it is characterized by a systematic approach to solving specific tasks and achieving the set tasks.

The scientific propositions, conclusions and proposals presented in the dissertation are scientifically based from a theoretical and methodological point of view and are reliable, based on the sports industry theory and sports economics, research of domestic and foreign scientists. The scientific provisions developed by the author are confirmed by the experience of ensuring the development of the sports industry under geo-economic theory.

In a dissertation, the object, subject, and goal have a logical relationship. The object of the study is the process of development Chinese sports industry. The subject of the research is to use the geo-economic theory, industrial competition theory and other theories to study the international competitiveness of China's sports industry, the choice of competitive sports industry, and the geoeconomic challenges and development path. Dissertation research is an independent scientific work of the author. The scientific results, conclusions and proposals put forward for defense were obtained by the author personally.

The presented dissertation work of Yu Zhijiang has a logical structure. The content fully discloses the topic of scientific research. The applicant presented the material competently, logically, using modern English language and style. The content of the dissertation corresponds to its essence. There is a proper relationship between the sections and subdivisions of the work, all sections contain figures and tables. Links to informational resources are correct. The results presented in the work are confirmed by implementation certificates. Conclusions to the sections of the dissertation and general conclusions are logical and are confirmed by the results of testing at international and all-Ukrainian scientific and practical conferences, publications in scientific specialized publications of Ukraine, international journal indexed in the scientific-metric database Scopus. All of the above allows us to assert sufficient validity and reliability

**The scientific novelty of the obtained results** lies on the theoretical studies and questionnaire survey, the development of scientific-practical and methodical recommendations for the development of China's sports industry in the conditions of geo-economic challenges.

The scientific results are reliable and can be presented as follows in terms of their scientific essence:

*first*

- the conceptual theoretical and methodological foundations of the development of China's sports industry from the point of view of meeting the country's internal needs and protecting its national economic, political, and cultural security are substantiated in order to promote the implementation of China's geo-economic development strategy;

- formulated axiological characteristics of geoeconomic problems (contradictions) of the development of the sports industry, which are based on adaptation to the new international geoeconomic model, determination of the needs of the global value chain and industrial division of labor, in order to form priority sports industries;

*improved:*

- system for assessing the level of international competitiveness of China's sports industry, which, in comparison with existing practice, is based on the use of the FCE method and geo-economic factors of influence, in order to determine the advantages of priority areas of the sports industry;

- methodical approach to the index assessment of the international competitiveness of China's sports industry, which, unlike the existing ones, is built on the basis of the characteristics of the coefficient of variation, standard deviation and ranking of geo-economic factors of choice, which allows to form complex characteristics regarding the indicators of the first and second level of influence;

- criterion measures and a system for evaluating the international competitiveness of China's sports industry from the point of view of geoeconomics, based on the application of group decision-making techniques (AHP - Analytic Hierarchy Process), in order to determine the sectoral vectors of the strategic development of the sports industry in conditions of uncertainty and multicriteria;

*received further development:*

- theoretical generalization of the types of methods and methods of ensuring the international competitiveness of China's sports industry based on the formation of a system of strategic positioning of the industry, which will allow timely diagnosis of problems and provide stimulation of the progressive development of China's sports industry;

- the conceptual and categorical apparatus of the theory of the development of the sports industry due to the deepening of the essence of such concepts as:

"sports industry" provided that it is considered as a set of industries for the production of sports goods, construction of sports infrastructure, the industry of sports competitions, sports fitness and the industry of recreation, sports tourism, which makes it possible to apply a systematic approach to the study of geo-economic problems of the functioning of the international competitive environment and the justification of the most priority spheres of the sports industry;

"international competitiveness of the sports industry" from the point of view of geo-economic challenges and its division into realistic and potential, which allows determining target orientations, the efficiency of resource allocation and the ability of the sports industry to structural transformation;

scientific substantiation of the main challenges and threats to the development of

the sports industry, based on taking into account the state of development and the structure of the sports goods industry, which will contribute to the active integration of the industry strategy into China's geo-economic strategy, the liberalization of international trade and the promotion of cooperation;

the formation of a modern toolkit for ensuring the progressive development of the sports industry, based on a stimulating component, which allows making appropriate changes in the strategic forecast for the distant perspective of the development of the sports industry in China in the conditions of the formation of a new international geo-economic model.

**Practical significance of the obtained results.** The practical significance of the obtained results lies in the identification and substantiation of new solution to a scientific problem, putting forward a complex of scientifically based provisions and conclusions for the development of the sports industry itself and China's national economy proving the fully safeguard national interests and feedback the implementation of China's geo-economic strategy. The proposed practical and theoretical recommendations are implemented in the activities of the Ministry of Education and Science of Ukraine in terms of the formation requirements for dissertation studies.

**The structure and content of the dissertation.** Compliance of the dissertation with the established requirements.

The dissertation is a complete, complete scientific work. Her manuscript contains a complete set of structural elements corresponding to the established requirements: abstract, introduction, three sections, conclusions, list of used sources, appendices. The total volume of work is 168 pages. The text of the dissertation contains 28 tables, 9 figures, a bibliography of 175 sources. The dissertation is enriched with logical schemes, structured tables, graphic interpretations, which allow to comprehensively perceive the conducted research as a detailed and generalized scientific work.

The abstract of the dissertation fully reflects its structure, reveals the obtained scientific results and conclusions, the structure and ordered logic of the conducted research.

The introduction to the dissertation contains all structural elements, including information on the practical approbation of the research results, as well as the author's personal contribution to scientific works published in co-authorship.

In the first chapter, in particular, was investigated the conceptual approaches to the definition of the essence of the international competitiveness of China's sports industry from the point of view of geo-economics; summarized methodical approaches to assessing the international competitiveness of China's sports industry from the point of view of geo-economics by creating a system of integral indices.

Among the advantages of the second chapter should be noted:

proposed by the author approach to combine the Porter-Dunning diamond model and geoeconomic theory, uses the Delphi method to conduct several rounds of expert interviews and investigations;

formed by the author an indicator system for the international competitiveness of China's sports industry from the perspective of geoeconomics. As for indicator system, it includes first-level indicators and 26 second-level indicators consisting of seven

factors of production factors, demand conditions, industrial strategies and competitors' performance, related supporting industries, transnational economic activities, government factors, and opportunities.

In the third chapter of the dissertation was justified the strategic concept which provides the limitations of traditional sports goods manufacturing transnational economic cooperation in the pursuit of geographical interests, such as insufficient attention to political interests and geo-economic security. The proposal of the geo-sporting goods manufacturing industry has enriched the content system of geo-economics, helped the country formulate a scientific geo-strategy, and expanded the scope of geo-economic activities.

The conclusions drawn by the author based on the results of the research are meaningful and reveal the results of the research objectives.

In general, it can be stated that the presented dissertation is complete and original, contains valuable scientific propositions of a theoretical and applied nature, and practical proposals are brought to the level of practical use.

An analysis of the plagiarism check report for the presence of textual borrowings (Strike plagiarism program) was carried out. The reviewers came to the conclusion that the dissertation work of Yu Zhijiang on the topic "Development of the sports industry in the conditions of geo-economic challenges" is the result of independent research of the acquirer and does not contain elements of plagiarism and borrowing in accordance with the resolution of the CMU dated 12.01.2022 No. 44, paragraph 9 Used ideas, results and texts of other authors have a link to the corresponding source.

**Completeness of presentation of the dissertation material in scientific publications.** The main results of scientific research were published in 14 scientific articles: 4 articles in specialized publications of Ukraine, 1 article in journals included in the scient metric databases Scopus, the rest in other journals and conference materials.

Scientific publications meet the requirements of clauses 8, 9 of the Procedure for awarding the degree of Doctor of Philosophy and canceling the decision of the one-time specialized academic council of a higher education institution, scientific institution on awarding the degree of Doctor of Philosophy (Resolution of the Cabinet of Ministers of Ukraine dated January 12, 2022 No. 44). Acquaintance and detailed analysis of the presented scientific works makes it possible to assert that the elements of scientific novelty, on which the dissertation is positioned, are fully explained in the articles and theses of the reports.

The content of the publications, the characteristics of the publications in which they are placed meet the requirements for the publication of the scientific provisions of the dissertation work. Of the scientific works published in co-authorship, only the author's work was used in the dissertation, as indicated in the list of publications. Thus, there are reasons to claim that the dissertation research contains the author's scientific vision regarding the achievement of the set goal and the solution of the specified scientific and applied task.

**Article in periodical scientific publications indexed in the Scopus databases:**

1. **Zhijiang Yu**, Viktoriia Medvid, Yuzhong Le. Measurement and spatiotemporal evolution of geo-economic relationships in China's sporting goods

### Remarks and wishes for the content.

Characterizing the dissertation work of Yu Zhijiang 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. In order to improve the methodological base of the research, in section 1.3, more attention should be paid the conceptual approaches research to the competitiveness sports industry.

2. It would be expedient to transfer the tables 2.14-2.19 in the appendices taking into account the identity of the approaches to the calculation of data, which are given in tables from 2.13 to 2.19 in terms of indicators B1-B7.

3. The analysis period in Figure 2.4 is 2014-2020. The comparability of the partial ratio of three types of sports consumption defined in Figure 2.4 with the current tendencies is questionable.

4. In section 3.1, for deepen the research of the geo-economic challenges which China sporting goods industry faces, it would be desirable to expand the statistical base of research for the period up to 2022.

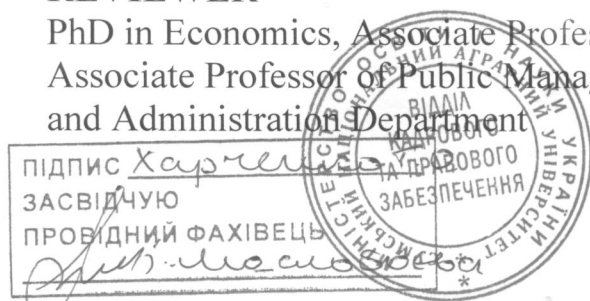
However, the indicated comments and wishes do not fundamentally affect the overall positive assessment of the dissertation work, are not fundamental and do not reduce its rather high overall assessment.

### Correspondence of the dissertation to the specialty and profile of the council:

Dissertation work of Yu Zhijiang "Development of the sports industry in the conditions of geo-economic challenges", which was submitted for defense to the specialized academic council for obtaining the degree of Doctor of Philosophy in the field of knowledge 07 Management and administration in the specialty 073 Management according to its relevance, scientifically - the theoretical level, the main results of validity, the main provisions and results published in professional publications, the novelty of the statement and the practical significance meet the requirements of the order of the Ministry of Education and Culture of Ukraine No. 40 of January 12, 2017 "On approval of requirements for the preparation of a dissertation" and the Resolution of the Cabinet of Ministers of Ukraine of January 12 No. 44 of 2022 "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 dated 03.21.2022. The content of the dissertation corresponds to the passport of the specialty.

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