



School-Club Synergy: An Economic Analysis of Market Failure, Government Intervention, and Development Paths for Youth Sports Club

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Abstract. Against the backdrop of China's "Healthy China" strategy and deepening sports-education integration, youth sports clubs face the core economic dilemma of balancing profitability and public welfare, leading to market failure and ambiguous government intervention boundaries. From an economic perspective, this study integrates quasi-public goods, information asymmetry and other theories to analyze this dilemma, verifies the inherent market failure of youth sports clubs and the dynamic ambiguity of government intervention boundaries, and reconstructs the Efficiency-Fairness-Sustainability (EFS) Three-Dimensional Theoretical Model. Combining the model with international practical cases, the study proposes targeted development paths from policy guidance, market operation and school-club synergy, aiming to realize the organic combination of an "effective market" and a "promising government".

Keywords: Youth Sports Clubs, Market Failure, Government Intervention, School-Club Synergy, EFS Model, Sports Economics.

1 Introduction

China's sports industry exceeded 3 trillion yuan in 2023 [17], with youth sports becoming a core growth engine. As key social forces in youth sports development, clubs complement school physical education by meeting personalized and professional sports needs. The "Double Reduction" policy and deepening sports-education integration have further released consumption demand, creating a favorable environment for school-club synergy [10].

Despite initial synergy efforts, problems persist: poor communication, uneven resource allocation, and imperfect policies (Zhang et al., 2025). Club development also faces the Matthew Effect and the profitability-public welfare dilemma. These issues fundamentally revolve around the "market operation-government intervention" rela-

tionship. Existing studies lack systematic theoretical analysis of clubs' inherent market failure, endogenous contradictions, and dynamic intervention boundaries, nor construct targeted models combined with school-club synergy practice.

Taking the "market-government" relationship as the core thread, this study integrates economic theories with school-club synergy practice to reconstruct a theoretical model and explore development paths, aiming to enrich the research system and inform policy and cooperation optimization.

2 Theoretical Logic: From Market Failure to the Intervention Boundary

2.1 Inherent Market Failure: the Theoretical Necessity of Government Intervention

Youth sports clubs exhibit inherent market failure characteristics, with quasi-public goods theory and information asymmetry theory constituting the core theoretical basis for government intervention. From the perspective of quasi-public goods theory, the sports services provided by clubs possess dual attributes: public welfare services (such as campus event co-organization) have positive externalities, with social benefits far exceeding the club's individual benefits; core services (such as professional competitive training) are exclusive and competitive, requiring fee-based operation for profitability. The profit-seeking nature of the market drives clubs to reduce public welfare service supply and concentrate resources on high-profit services, leading to insufficient sports service inclusiveness and market failure [14].

From the perspective of information asymmetry theory, triple information gaps exist in the club sector: parents find it difficult to judge service professionalism, leading to false publicity and market disorder; lack of information sharing between clubs and schools hinders in-depth synergy; the government's incomplete grasp of club operation data results in inaccurate policy guidance. Information asymmetry reduces market efficiency and increases synergy costs, requiring the government to compensate for market defects through industry standards, information disclosure systems, and synergy platforms [1].

In summary, the inherent market failure caused by quasi-public goods attributes and information asymmetry, superimposed with the resource limitations of school physical education, determines the theoretical necessity of government intervention [14].

2.2 Endogenous Contradiction: the Ambiguity and Dynamics of Government Intervention Boundaries

Market failure clarifies the necessity of intervention, but the "degree" of intervention becomes the core issue. Mixed organization theory points out that youth sports clubs are hybrid organizations where commercial and social logics coexist, pursuing both economic and social goals simultaneously. Clubs need to achieve profitability through

market-oriented operation for survival, while also bearing social responsibilities such as improving teenagers' physical health and promoting sports equity [9]. Excessive pursuit of profitability leads clubs to deviate from social values and refuse low-income public welfare synergy; excessive emphasis on public welfare plunges them into operational difficulties and loses synergy capabilities. This tension is the endogenous contradiction of clubs, making government intervention boundaries impossible to fix—for clubs at different development stages and with different synergy capabilities, the government needs to dynamically adjust intervention methods and intensity, thus intervention boundaries are inherently dynamic.

2.3 The Risk of Governance Failure: the Core is Seeking a Dynamic Balance Point

Government failure theory warns that insufficient or excessive intervention will trigger new governance risks. Non-market failure theory points out that government intervention may lead to efficiency losses due to internalities, information deficiencies, and incentive distortions [15]. In the context of youth sports clubs, government failure manifests in two forms: insufficient intervention—failure to formulate industry standards or build synergy platforms, leading to a return to market failure; excessive intervention—forcible price setting and rigid synergy requirements, ignoring the clubs' market subject attribute and inhibiting their operational vitality. Practical risks of excessive intervention have emerged: some local governments force clubs to provide free training for schools without considering operational costs, leading to reduced services and formalized synergy; some governments uniformly regulate venue construction and curriculum setting, resulting in services disconnected from teenagers' needs and low resource utilization efficiency.

Therefore, club development faces the dual risks of market failure and government failure. The core solution is to seek a dynamic balance between market operation and government intervention according to industrial characteristics, club development stages, and synergy needs, rather than drawing a fixed line [14].

3 The EFS Three-Dimensional Theoretical Model for School-Club Synergy

3.1 Core Connotation of the EFS Model

Taking "seeking a market-government dynamic balance and promoting in-depth school-club synergy" as the core goal, the EFS model takes Efficiency, Fairness and Sustainability as three core dimensions. These dimensions support and integrate with each other, with school-club synergy running through all dimensions as the core path to achieve the model's goal. The model aims to solve the club's profitability-public welfare contradiction, alleviate market failure, and improve synergy efficiency.

3.2 Efficiency dimension: the core foundations

This dimension focuses on the club's market operation efficiency and school-club synergy's resource allocation efficiency, embodying the market's decisive role in resource allocation.

At the club level, large-scale operation, technological innovation and standardized management reduce operational costs and improve capital returns [13]; characteristic courses and optimized services enhance market competitiveness and accumulate resources for public welfare synergy. At the synergy level, relying on government-built platforms, schools open venues and student resources to clubs (without affecting normal teaching), and clubs open professional coaches, courses and event resources to schools, realizing resource integration, avoiding idle waste and improving the overall supply efficiency of sports services [7].

3.3 Fairness Dimension: the Core Value

This dimension focuses on sports service inclusiveness and synergy coverage, embodying clubs' practice of public welfare attributes and representing a key orientation of government intervention. In service supply, clubs offer affordable basic services alongside high-end value-added services; the government provides subsidies and tax relief for inclusive services [10]. In synergy coverage, the government encourages clubs to cooperate with rural and weak schools through inclusive policies, establishing pairing mechanisms between urban clubs and rural schools to address the Matthew Effect in resource allocation [14].

3.4 Sustainability Dimension: the Ultimate Goal

This dimension focuses on the long-term sustainability of the club's business model, school-club synergy mechanisms, and the youth sports industry ecosystem, achieving the unification of economic, social and synergy sustainability.

For economic sustainability, clubs build a "basic inclusive + high-end value-added" two-tier model, expanding profit channels through event operations and brand authorization [3]. For ecological sustainability, with club-school synergy as the core, the government, clubs, schools, communities and sports enterprises form a symbiotic industry ecosystem to realize complementary advantages and benefit sharing [10].

4 Development Paths Based on the EFS Model

Guided by the EFS model, combined with youth sports club development contradictions and school-club synergy practical needs, this study proposes targeted development paths from three dimensions: policy guidance, market operation, and school-club synergy.

4.1 Policy Guidance: Constructing a Precise Policy Support and Supervision System

As the policy maker, supervisor and synergy builder, the government constructs a precision policy system around the three dimensions of the EFS model to avoid government failure and provide institutional guarantees for club development and synergy. First, improve the inclusive policy support system [10]. Second, formulate standardized industry supervision standards [12]. Third, build normalized synergy platforms [2]. Fourth, strengthen regional resource planning [14].

4.2 Market Operation: Optimizing the “Profitability + Public Welfare” Two-tier Business Model

As market players, clubs optimize their business models based on the EFS model's efficiency and fairness dimensions to balance profitability and public welfare and provide sustainable support for synergy. First, build a "basic + value-added" two-tier service model: reasonably allocate resources between inclusive basic services and high-end value-added services, forming a virtuous circle of "profit promoting public welfare and public welfare building brand" [6]. Second, improve operational efficiency and professional capabilities [4]. Third, proactively connect with synergy market demand: develop characteristic courses complementary to school physical education, participate in government-built synergy platforms, and cooperate with rural and weak schools to build social brands [10]. Fourth, expand diversified profit channels [11].

4.3 School-club Synergy: Building a Comprehensive Resource Integration and Cooperation System

Clubs and schools, as the core subjects of synergy, build a comprehensive cooperation system based on the EFS model's sustainability dimension to improve synergy efficiency and realize long-term development. First, establish normalized communication mechanisms: build online information sharing platforms to ensure smooth information transmission [2]. Second, realize all-dimensional resource sharing: sign venue sharing agreements, establish teacher mutual employment mechanisms, and jointly develop characteristic courses to form a complete physical education system of "basic teaching + professional training + event practice". Third, establish scientific evaluation and feedback mechanisms: formulate a multi-dimensional synergy evaluation index system, adopt quantitative and qualitative methods for regular evaluation, and collect multi-party feedback to optimize synergy models and service content [5].

5 Conclusion and Future Research Directions

5.1 Research Conclusions

Taking youth sports clubs as the research object and the "market-government" relationship as the core thread, this study integrates multiple economic theories to analyze the theoretical logic of club development, and reconstructs the EFS Three-Dimensional Theoretical Model combined with school-club synergy practice, drawing the following core conclusions:

The inherent market failure of youth sports clubs caused by quasi-public goods attributes and information asymmetry, superimposed with school physical education resource limitations, determines the theoretical necessity of government intervention; the endogenous profitability-public welfare tension of clubs as hybrid organizations makes government intervention boundaries ambiguous and dynamic.

Youth sports club development faces dual risks of market and government failure, and the core solution is to seek a dynamic balance between market operation and government intervention according to industrial characteristics, club stages and synergy needs, realizing the combination of an "effective market" and a "promising government".

The EFS model with Efficiency, Fairness and Sustainability as core dimensions (school-club synergy runs through all) provides a systematic theoretical tool for solving club development contradictions; the development paths of policy guidance, market operation and school-club synergy realize the organic combination of an "effective market", a "promising government" and "efficient synergy".

5.2 Future Research Directions

This study provides theoretical and practical references for youth sports club development and school-club synergy, and several contents are worthy of further expansion:

Conduct quantitative research on the "government intervention-market operation" two-way elastic balance model, design quantitative indicators and formulas combined with regional and club type characteristics to realize precise matching of government intervention [14].

Explore the impact of digital age data elements on club development, analyze the influence of sports data confirmation and circulation on club business and synergy models, and explore data-driven development paths [8].

Carry out empirical research on the EFS model, select different regional and type clubs and schools as samples, and verify and optimize the model through questionnaire surveys and case analysis [16].

Study the differentiated characteristics of school-club synergy in urban-rural and eastern-western China, and formulate targeted synergy strategies to promote regional youth physical education equity [14].

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Disclosure of Interests

The authors declare no conflict of interest.

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