

ECONOMIC RESILIENCE AND SUSTAINABLE DEVELOPMENT OF SPORT IN THE CONTEXT OF GLOBAL ECONOMIC TRANSFORMATIONS

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***Abstract.** Modern sports face major economic challenges due to financial crises, climate change, digitalization, and the effects of the COVID-19 pandemic. These transformations have forced sports clubs and organizations to rethink their economic models to ensure sustainability and financial resilience. In this context, adopting efficient economic strategies is essential for maintaining balance and long-term development. This study analyzes the main strategies and key factors that contribute to economic sustainability in sports. These include diversifying funding sources, implementing digital technologies to optimize costs, and promoting public-private partnerships. Additionally, public policies play a crucial role in supporting sports infrastructure and ensuring economic protection mechanisms during crises. Based on international literature and best practice examples, the study highlights the importance of an integrated approach to strengthening financial resilience in sports. Increasing sustainable investments, fostering innovation, and enhancing adaptability are key factors for the success of sports organizations in the context of global transformations.*

***Keywords.** economic sustainability, sport, financial resilience, digitalization, public policies.*

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1. Introduction

In recent decades, sport has evolved from a purely cultural and social phenomenon into a complex economic sector with a significant contribution to the global economy (Andreff, 2019). The sports industry generates substantial revenues through events, sponsorships, broadcasting rights, and sports tourism, becoming interconnected with numerous other industries (Smith & Stewart, 2021). In this context, the concept of economic sustainability in sport has gained particular importance, especially in light of global economic challenges.

The financial crises of recent years, including the 2008 global economic recession and the COVID-19 pandemic, have had a significant impact on the sports sector (Deloitte, 2021). Sports clubs and organizations have been compelled to reconsider their financial strategies in order to survive during periods of instability. For instance, studies by Késenne (2020) highlight that the pandemic led to dramatic declines in sports clubs' revenues due to the absence of spectators, thereby reducing income from ticket sales and merchandising. Moreover, the suspension of competitions and restrictive measures generated considerable economic losses for leagues and sports federations (Ratten, 2020).

Beyond economic crises, sport is also confronted with challenges related to digitalization and climate change (Trendafilova et al., 2013). Digitalization has produced major transformations in the way sporting events are organized and monetized, requiring clubs to invest in technological infrastructure and digital platforms to maintain revenue streams (Parganas & Anagnostopoulos, 2022). Simultaneously, climate change affects outdoor sports, prompting international federations to adopt sustainable policies aimed at reducing the carbon footprint of sporting events (Orr & Inoue, 2019).

Another essential aspect is the role of public policies in ensuring the economic sustainability of sport (Houlihan & Green, 2011). Governments and international bodies develop financial support strategies and regulatory frameworks aimed at maintaining the economic stability of clubs and federations. For example, the European Union has implemented measures to support sports infrastructure and promote a fair distribution of revenues between large and small clubs (European Commission, 2021).

Economic sustainability and resilience in sport are essential factors for maintaining financial balance and ensuring long-term development. Recent studies emphasize the need for effective adaptation policies, given the multiple challenges currently facing the sports sector. An analysis of the economic strategies employed by sports organizations can provide viable solutions for achieving durable financial stability.

Therefore, it is essential for sports organizations to adopt innovative business models that not only respond to immediate economic challenges but are also flexible and prepared to adapt to long-term changes. The implementation of sustainable strategies, such as investments in environmentally friendly infrastructure, diversification of revenue sources, and the promotion of transparent and responsible financial management, represents key steps in ensuring sustainable economic development in sport. Furthermore, the integration of emerging technologies, such as artificial intelligence and data analytics, can significantly enhance operational efficiency and identify growth opportunities in global markets (Parganas & Anagnostopoulos, 2022).

Another important factor in maintaining the economic sustainability of sport is the involvement of fans and the broader community. Sport has evolved from a simple competition into a global experience, and fan loyalty and engagement are critical factors in building a robust economic ecosystem. Sports clubs and organizations must better understand fan preferences and respond by offering personalized experiences and creating digital platforms that facilitate continuous and mutually beneficial interactions. This type of engagement can lead to increased revenues from sponsorships, broadcasting rights, and merchandising, while also fostering a loyal long-term supporter base (Houlihan & Green, 2011).

Economic sustainability in sport is a multidimensional concept that requires an integrated approach. Economic and environmental challenges, as well as the rapid impact of technology on the industry, necessitate that sports organizations adopt innovative solutions that not only ensure survival in times of crisis but also enable long-term development. Research in sports economics emphasizes the importance of close collaboration among all stakeholders - including governments, international organizations, clubs, sponsors, and fans - in order to build an economically sustainable and resilient sports sector.

2. Literature Review

The concept of economic sustainability in sport has gained increasing scholarly attention over the past two decades, particularly in the context of globalization, financial instability, and rapid technological advancement. The transformation of sport into a major economic sector has generated complex financial structures, diversified revenue streams, and increased exposure to systemic risks (Andreff, 2019).

Sports economics literature emphasizes that professional sport operates within a hybrid model that combines market-driven mechanisms with regulatory and institutional frameworks (Smith & Stewart, 2021). Unlike traditional industries, sport is characterized by competitive balance requirements, revenue-sharing systems, and governance mechanisms that influence financial performance and long-term sustainability. These structural particularities make the sports sector especially sensitive to macroeconomic shocks.

The global financial crisis of 2008 marked a turning point in the financial management of sports organizations. Studies indicate that reduced public funding, declining sponsorship investments, and lower consumer spending significantly affected clubs and federations (Késenne, 2020). More recently, the COVID-19 pandemic exposed the vulnerability of revenue models heavily dependent on matchday income and live spectators. Deloitte (2021) reports substantial revenue losses across major European leagues, highlighting the urgent need for diversified and resilient financial strategies.

In response to these disruptions, researchers have increasingly focused on resilience as a key analytical framework. Financial resilience in sport refers to the capacity of organizations to absorb shocks, adapt to changing environments, and maintain operational continuity (Ratten, 2020). Sustainable business models, strategic financial planning, and effective governance structures are identified as critical determinants of long-term viability.

Digital transformation represents another major theme in contemporary literature. The expansion of digital broadcasting, streaming platforms, and data analytics has reshaped revenue generation and fan engagement strategies (Parganas & Anagnostopoulos, 2022). Digital ecosystems enable sports organizations to diversify income sources, enhance global reach, and optimize performance management. However, they also require significant investment and organizational adaptability.

Environmental sustainability has also emerged as an integral component of economic sustainability. Climate change increasingly affects sporting events, particularly outdoor competitions, while stakeholders demand environmentally responsible practices (Orr & Inoue, 2019). The integration of green infrastructure, carbon reduction policies, and sustainable event management contributes not only to environmental protection but also to long-term economic stability and reputational capital.

Public policy and governance structures further influence the economic sustainability of sport. Houlihan and Green (2011) underline the importance of regulatory frameworks, state support mechanisms, and international coordination in maintaining sectoral stability. The European Commission (2021), for example, promotes financial transparency, fair competition, and balanced revenue distribution to strengthen resilience within the European sports model (European Commission, 2021, Houlihan & Green, 2011)

Overall, the literature suggests that economic sustainability in sport is multidimensional, encompassing financial diversification, digital innovation, environmental responsibility, and institutional governance. While significant progress has been made in understanding individual components, there remains a need for integrated approaches that address systemic global transformations and their long-term implications for the sports sector.

3. Methodology

Research Design. This study is based on a qualitative, exploratory, and comparative research design aimed at examining the mechanisms that support economic sustainability and financial resilience in sport within the context of global systemic transformations. The research adopts an interdisciplinary approach, integrating perspectives from sports economics, public policy, and strategic management.

Research Methods. To achieve the research objectives, the following methods were employed:

1. **Systematic literature review** - A structured review of international scientific publications was conducted to identify theoretical models, conceptual approaches, and empirical findings related to economic sustainability and resilience in sport. The analysis focused on peer-reviewed articles, institutional reports, and policy documents.
2. **Legislative and public policy analysis** - National and international regulatory frameworks influencing the sports economy were examined using comparative legal analysis. This method enabled the identification of policy instruments that contribute to financial stability, governance efficiency, and equitable resource distribution.
3. **Comparative case study analysis** - Ten international projects and initiatives that successfully implemented economic sustainability models in sport were analyzed. The case study method facilitated the identification of best practices, innovation patterns, and resilience strategies applicable across different institutional contexts.

Research Organization. The research was conducted over a 12-month period and involved:

- The review and critical analysis of more than 50 international scientific studies in the field of sports economics and sustainability;
- A comparative examination of legislative frameworks and public policies in the European Union, the United States, and selected Asian countries;
- An in-depth evaluation of 10 international projects that implemented financial sustainability and resilience mechanisms in sports organizations.

Data were synthesized through qualitative comparative analysis, allowing for the identification of common patterns, strategic approaches, and structural determinants of economic resilience in sport.

4. Results and Discussion

In order for our research to be further developed, we analyzed the economic crises that had a significant impact on global sport, affecting club financing, infrastructure, and investments. Subsequently, we classified them into several aspects, as follows:

Aspect No. 1. The impact of economic crises on sport. The COVID-19 pandemic represented one of the greatest recent challenges, generating massive losses in the sports industry.

The COVID-19 pandemic and its effects on sports clubs' revenues. According to a report conducted by Deloitte (2021), the COVID-19 pandemic reduced the revenues of European sports clubs by approximately 30%. In addition, 20% of small organizations were forced to suspend their activity due to a lack of financial resources. These data are supported by the 2021 FIFA report, which shows that the football industry lost approximately \$14 billion due to the pandemic (Deloitte, 2021).

Table 1. Impact of the COVID-19 Pandemic on European Sports Clubs' Revenues

Indicator	Before the pandemic (2019)	After the pandemic (2020–2021)
European clubs' revenues	€28.9 billion	€20.3 billion (–30%)
Number of suspended clubs	–	+20%
Matchday revenues	€4.6 billion	€1.7 billion (–63%)

Source: Authors' elaboration based on Deloitte (2021) and FIFA data cited in the study.

Aspect No. 2. The effects of economic recessions on sport. Studies conducted by Késenne (2020) show that economic recessions led to reductions in sports clubs' budgets, decreases in players' salaries, and even the bankruptcy of certain sports organizations. For example, following the 2008 financial crisis, several clubs from lower European leagues declared bankruptcy.

Successful Models of Economic Sustainability. In order to address these challenges, some countries have implemented effective economic sustainability strategies in sport.

Germany. Public Funding Policies

Germany adopted a strategy to financially support football clubs through public policies. According to the Bundesministerium des Innern und für Heimat (2022), the German government allocated additional funds to Bundesliga clubs in order to reduce dependence on sponsorship revenues (Bundesministerium des Innern und für Heimat, 2022). Example. The “50+1 Rule” model ensures that the majority of club shares are owned by members, thereby protecting economic stability.

United States. Public-Private Partnerships

The United States promotes public-private partnerships for investment in sports infrastructure. Studies by Smith & Stewart (2021) show that this strategy has ensured economic balance for many professional leagues, such as the National Basketball Association and the National Football League.

Japan. Digitalization and Revenue Optimization

Japan has invested heavily in the digitalization of sports management. According to the Ministry of Education, Culture, Sports, Science and Technology of Japan (2023), the use of artificial intelligence and big data analytics has increased the financial efficiency of clubs (Ministry of Education, Culture, Sports, Science and Technology of Japan, 2023).

Aspect No. 3. The role of technology in increasing economic resilience. Integration of Digital Technologies. The adoption of emerging technologies has become a key factor in the

economic resilience of sport. According to the PwC report (2022), technologies such as blockchain, NFTs, and virtual reality have increased sports clubs' revenues by 15% in recent years (PwC, 2022).

Table 2. Economic Impact of Digital Technologies in Sports Organizations

Technology	Economic Impact
Blockchain	10% revenue increase through digital ticketing
NFTs	+5% revenue through digital collections
Virtual reality	Increased fan engagement and online monetization

Source. Authors' elaboration based on PwC (2022)

Practical-methodological recommendations

- Diversification of funding sources through the integration of digital technologies and European funds.
- Creation of favorable fiscal policies for sport through government subsidies and public-private partnerships.
- Development of economic risk management mechanisms for sports organizations.
- Implementation of financial education strategies for sports managers.
- Investment in education and training for the implementation of new technologies – Sports clubs and organizations must invest in staff training to adopt and utilize emerging technologies such as blockchain, NFTs, and virtual reality, which can contribute to revenue growth and increased economic efficiency.
- Creation of an integrated resource management system - Implementation of digital platforms to help clubs manage financial and human resources more efficiently, reducing operational costs and maximizing revenues.
- Promotion of public-private partnerships for infrastructure - Encouraging investments in sports infrastructure through cooperation between the public and private sectors, contributing to the development of high-quality facilities and the generation of new financial flows.
- Development of climate adaptation policies - Adoption of ecological and sustainable measures to minimize the negative impact of climate change on outdoor sports, such as implementing technologies that reduce carbon emissions and natural resource consumption.
- Diversification of revenue models - Sports clubs must explore new sources of revenue, including increasing fan participation in virtual events, selling digital products and services, and developing subscription models for access to events and exclusive content.

5. Conclusions

Global sport is currently experiencing profound economic transformations, driven by financial crises, accelerated digitalization, and evolving consumer behavior. Ensuring sustainable economic equilibrium in this context necessitates the adoption of robust strategies for financial sustainability and organizational resilience.

A key approach to addressing these challenges lies in the comprehensive digitalization of the sports industry. Emerging technologies-including online streaming platforms, augmented and virtual reality, and artificial intelligence-offer significant potential for creating new revenue streams, enhancing fan engagement, and increasing accessibility for athletes and spectators alike. Concurrently, strategically structured public-private partnerships have become indispensable for mobilizing financial resources and developing sports infrastructure in a sustainable and efficient manner.

Furthermore, adaptive and flexible economic policies are critical to enabling rapid responses to market fluctuations. Interventions such as restructuring funding models, optimizing resource allocation, and diversifying revenue sources can substantially mitigate the exposure of sports organizations to global economic instability.

In conclusion, the future trajectory of global sport will depend on stakeholders' capacity to implement innovative, technology-driven strategies while fostering resilient economic frameworks. By embracing a sustainable and adaptive model, the sports sector can not only safeguard its continuity but also promote long-term growth and development in the face of contemporary global challenges.

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