

Improving the analysis of financing sources of sports organizations of various organizational and legal forms in Russia

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Abstract:

Modern sports organizations are affected by complicated economic conditions. Their organizational and legal form significantly impacts the sports club's (organization's) mission and goals. On the other hand, activities of a sports organization are facilitated by financial sources, and the efficiency is determined by funding elements, structure, and amount. In this regard, this study's objective is to improve the analysis of financing sources for sports institutions of various organizational and legal forms. This article outlines a quadratic model of financing sources concentration for sports institutions and assesses the level of (sources of) financial participation enabling the authors to expand the previous studies. The model apodicticity is based on the fact that the initial information represents the data of accounting registers. Accounting procedures are performed continuously in any organization, regardless of the organizational and legal form, and at the end of the period (month, quarter, year, etc.), they are balanced. The reliability of bookkeeping records is a principle of accounting. Comparative analytical methods, economic and mathematical modeling, and regression analysis elements were used to build a model and assess the degree of each financial source's participation in the work. The analysis results revealed differences in the sources for financing commercial and non-profit sports organizations, the degree of financial participation of sources, and the gaps that determine the source's transition to another level of financial participation. The permanent flow of financial resources requires the management team of a sports organization to monitor them continuously. It enables making managerial decisions if the financial resources have been redistributed, their deficit has emerged, the search for additional sources is needed, etc. As a result of the discussion, it was revealed that sports organizations pursue different goals in their activities; depending on this, they (sports organizations) are either commercial or non-commercial legal entities. However, the studies carried out previously do not reflect the specifics of sources for financing sports organizations of various organizational and legal forms and the level of their financial participation. The results of an empirical study will enable the management team to optimize the composition and structure of financing sources for sports institutions within the existing organizational and legal form.

Key Words: sponsorship, financial participation level, financial resources, managerial decisions

Introduction

Financial sources (FS) form the activity basis of any organization. The sources split into own, borrowed, and raised. The organizational and legal form determines the composition and structure of financial sources of an organization or a sports institution. For example, when a commercial sports organization (SO) is planted, the main expectations are related to yielding economic benefits and maximizing them in the future. The presence of profit/loss enables analyzing the FS indicators using profitability or efficiency in activities of a commercial organization. On the other hand, non-profit SO run on revenues derived from sales of tickets to competitions, matches, from renting sports and recreation complexes, obtaining charitable and sponsorship contributions, etc. These organizations are focused on demonstrating sports achievements and human abilities, promoting a healthy lifestyle and certain sports, etc.

Reputable scholars discuss urgent issues of international sports law at annual conferences organized by the editorial board of the International Sports Law Journal and the Asser International Sports Center, including the FIFA transfer system, labor rights and relations in sports, protection of human rights in sports, the European Union and sports management, arbitration in international sports, the work of the World Anti-Doping System, the organization and holding sports competitions, public and private regulation of sports and others. Considering the financing of sports organizations, contemporary scientists conclude insufficient state participation in their activities or investigate the public-private partnership problems. However, it is possible to identify internal financial reserves by performing a detailed elaboration and analysis of the available financial sources of a sports organization, which will allow managers to make adequate decisions.

The efficient SO activity is possible with a sufficient level of financial support indirectly depending on its organizational and legal form.

The problems of assessing FS significance, composition, structure, and concentration require a consistent solving the following tasks:

- Providing a comparative analysis of the existing organizational and legal SO forms in the Russian Federation and abroad (Downward *et al.*, 2009; Millar and Doherty, 2016; Pijetlovic, 2017; Borgers *et al.*, 2018; Sabinina and Kuznetsova, 2018; Pochinkin *et al.*, 2018; de Dycker, 2019; di Marco, 2019);
 - Analyzing the relations between income diversification and organizational and legal support of sports organizations (Wicker *et al.*, 2013; Iglin, 2014; Wicker and Breuer, 2015; Zyukin *et al.*, 2017);
 - Outlining the problems of foreign and domestic sports financing (Enjolras, 2002; Ulseth, 2004; Ahlert, 2005; Okayasu *et al.*, 2010; Petrikova and Slobodyanyuk, 2013; Kurochkin, 2016; Per'kova, 2017; Ibsen *et al.*, 2019; Chernobrovina, 2019; Morgan *et al.*, 2020);
 - Providing a more detailed and accurate analysis of SO's financing (Porter 1998; Tyaglov and Ponomareva, 2013; Wicker and Breuer, 2015; Rohde and Breuer, 2016; Hoeber and Shaw, 2017; Nikitin *et al.*, 2017; Timiryarova and Rakhmatullin, 2018; Polteva and Kurilov, 2018; Nefedov *et al.*, 2018);
 - Justifying the need to optimize the composition and structure of SO financial sources within a particular organizational and legal form (Hemme *et al.*, 2017; Sabinina and Kuznetsova, 2018; Chernobrovina, 2019).
- These problems can be solved within an integrated approach comprising the achievements of legal and economic sciences. FS optimization by results of their analysis and within a certain organizational and legal form will improve SO competitiveness.

The data reflected in the bookkeeping records and serving as a source of financial statements should be an informational basis for analyzing financial sources, their ranking, and assessing each source's level of financial participation. This information will provide the analytical procedures with credibility, transparency, succession, and continuity.

The article includes several sections: Section 2 summarizes the proposed research methodology; Section 3 highlights the procedure of data describing, processing, and analyzing its results. Section 4 discusses the main issues of concern, and a summary of the study findings is presented in Section 5.

Materials and methods

According to the authors, FS analysis for SO activities shall start with an assessment of FS participation level. In this view, we used comparative analytical methods, economic and mathematical modeling, and elements of regression analysis. Accounting procedures are performed consistently in any organization, including SOs. Thus, sources of analysis shall be selected from the total values of accounting values for a month, quarter, half-year, nine months, etc., determining the study period. The accuracy and reliability of the bookkeeping records is a basic principle of accounting; therefore, the data of bookkeeping records and financial (accounting) statements will ensure the accuracy and reliability of the results of analytical procedures. The analysis results are intended to make managerial decisions, so the SO administration sets the frequency of analytical procedures, their period, sources, and scope.

Assessment of the engagement degree for each FS in SO activities shall be started with their ranking. The source that has the largest share in financing shall be assigned the lowest rank value (r_i). FS of equal shares should bear equal ranks. Let us designate with p_i the value of the Financial Participation (FP) Coefficient corresponding to i source (Formula 1):

$$p_i = 1 - \frac{n}{2} \times \frac{r_i}{\sum r_i} \quad (1)$$

where n – the number of FS engaged in SO activity (Nikitin *et al.*, 2017; Nefedov *et al.*, 2018).

The coefficient p_i value ($0 < p_i \leq 1$) will determine the FP level according to Table 1.

Table 1. FP Coefficient scale

FP Coefficient value	FP level description
$0 < p_i \leq 0.2$	Negligible
$0.2 < p_i \leq 0.4$	Weak
$0.4 < p_i \leq 0.5$	Moderate
$0.5 < p_i \leq 0.7$	Medium
$0.7 < p_i \leq 0.9$	Significant
$0.9 < p_i \leq 1$	Strong

Source (developed by the authors)

In the authors' views, FS analysis will enable SO managers to control the amount and timing of monetary resources' receipt, as well as their intended use, since by providing financial or other assistance, a beneficiary and a sponsor pursue their own goals (marketing, commercial, etc.). On the other hand, some sources of their own are targeted and should be used to achieve this goal.

The concentration of SO financing sources means the sum of shares of all financial incomes and revenues for running its activities (Formula 2).

$$SF = \sum OS_j + \sum BS_k + \sum SS_i \quad (2)$$

where:

SF is financing sources

OS_j is the share of j -th own FS for SO activities, where j is the coefficient of changing the number of own sources;

BS_k is the share of k -th borrowed FS for SO activities, where k is the coefficient of changing the number of partners providing borrowed funds;

SS_i is the share of i -th sponsor partner in the total amount of FS of the sports organization, where i is the coefficient of changing the number of sponsor partners.

The analysis of FS shares is very important for SO management. It performs not only the control function for report compilation about the intended use of funds to the owners and partners. Moreover, it is possible to assess the participation level and degree to mitigate the negative consequences of the impact on SO management, if necessary. The influence of an owner or a sponsor partner can be manifested as follows: in influencing the policy and interfering with SO internal affairs; in lobbying for organizational and financial issues; in unjustified promotion of certain athletes; in interfering with training and competition processes, etc. For assessing the FS significance, it is proposed to introduce a positive-definite quadratic model of FS concentration for SO, wherein each term is determined by the FP Coefficient (Formula 3).

$$Q_F = \sum (p_j \cdot OS_j^2) + \sum (p_k \cdot BS_k^2) + \sum (p_i \cdot SS_i^2) \quad (3)$$

where:

Q_F is a quadratic model of FP concentration of SO financial sources;

$\sum (p_j \cdot OS_j^2)$ is a quadratic model of FP concentration of SO's sources;

$\sum (p_k \cdot BS_k^2)$ is a quadratic model of FP concentration of persons' (legal entities and individuals) providing SO with borrowed funds;

$\sum (p_i \cdot SS_i^2)$ is a quadratic model of FP concentration of SO sponsor partners.

The quadratic model or the level of FP concentration has a wide variety range. It enables analyzing all elements of SO financing sources. Accounting and financial reporting data are used as the initial information, which ensures the apodicticity of the quadratic model of financial participation concentration of the sources of the sports organization. It should be noted that the content of the bookkeeping records is a trade secret of a legal entity, but this information is available to sports organization managers. Financial statements are published on the organization's website following the results of the reporting period, and they are available to external users.

According to the authors, the analysis of SO financing sources can be supplemented with Formula 3. It will facilitate revealing the relationship between the organizational and legal form and FS structure. A commercial SO in the form of a joint-stock company or a business company has numerous FS requiring the multidimensional nature of their analysis. The multi-dimensionality is determined by FS type (own, borrowed, raised), commercial SO participant and partner type (Russian Federation legal entities or individual residents deration, Russian Federation state organizations, foreign legal entities, or individual Russian Federation non-residents), as well as the volume, temporary and targeted funding type. It is worth noting that the type of sport the commercial SO is focused on will determine its investment attractiveness and affects the sources of funding, as popular sports have more extended financial support (for example, football, hockey, etc.).

Non-profit SO receives free assistance from financial partners who voluntarily choose the type, time, place, content, and volume of the targeted assistance, which, in its turn, can be of targeted and promotional nature. Benefactors and sponsors, when providing financial support to a non-profit sports organization, pursue their own goals. Financial sponsors are willing to promote their product on the market using the opportunities of a non-profit SO (for example, advertising, etc.). Thus, a sports organization FS analysis should be supplemented by assessing FP level and a quadratic model of FS concentration, taking into account the SO organizational and legal form.

Results

Economic and mathematical modeling and applied statistics methods enable methodology adjustment for a more accurate sports organization FS analysis. The analysis is based on the data of the sports organizations' financial statements published on the websites, formulas 1, 2, 3, and recommendations from the Materials and Methods section. Accounting (financial) statements are formed at the end of the reporting period after summing up and closing bookkeeping records. The sequence of accounting procedures ensures the reliability, accuracy, and transparency of further analytical actions.

Football Club "L" (JSC "FC L") is one of the most highly ranked clubs in Russia. The Club has won the championship title three times and the Russian Cup eight times. The legal form of the club is a joint-stock company. The main partners of the sports club are JSC "RZD", JSC "FGC", JSC "RZD L", JSC "WRC-1", JSC SOGAZ, JSC "TD RZD", LLC "A", Bosco di Ciliegi Group of Companies (CG BdC), LLC "PC H", etc. The number of Football Club staff is 230 persons. JSC "FC L" is a member of the public organization "L" Russian Fitness and Sports Society (OO RAA"L").

The above-listed JSC "FC L" financial partners are commercial organizations owned by a major business. The football club has income from the sale of tickets to matches, from the use of the club's logo (emblem), revenues from sports events arrangement, the rental of a sports and recreation complex, paid training, payments for the medical office use, etc. Using financial statements' data, we will assess the FP level of various FS for commercial SO JSC "FC L". The calculated data is presented in Table 2.

Table 2. FP level of Football Club "L" financing sources

Financing source	Financing share, %	Rank (r_i)	FP coefficient (p_i)	FP level	Elements of the quadratic model
Own	76.0				
Receipts for competitions arrangement	26.25	1	0.929	Strong	640.14
Commercial income	15.79	2	0.857	Significant	213.67
Receipts from ticket sale	14.73	3	0.786	Significant	170.54
Revenues from the rental of a sports and recreation complex	14.61	4	0.714	Significant	152.40
Receipts for symbol use	4.62	6	0.571	Medium	12.35
Borrowed	13.28				
Short-term loans	13.28	5	0.642	Medium	113.22
Raised funds (sponsors)	10.51				
JSC "FGC"	2.68	7	0.5	Moderate	3.59
JSC "RZD L"	1.48	8	0.429	Moderate	0.94
JSC "WRC-1"	1.35	9	0.357	Weak	0.65
JSC SOGAZ	1.35	9	0.357	Weak	0.65
JSC "TD RZD"	1.09	10	0.286	Weak	0.34
LLC "A"	0.98	11	0.214	Weak	0.21
CG BdC	0.98	11	0.214	Weak	0.21
LLC "PC H"	0.6	12	0.143	Negligible	0.05
Other	0.21	–	–	–	–
	Σ 100%	Σ 98	–	–	$Q_F^L=1308.96$

The highest FP level ("strong") is assigned to an own source – it is "receipts for competitions arrangement". The paper uses the data for the period when the competitions were not held with empty stands, and it provided this source with the highest FP level. The gap between the "strong" and "significant" levels is just over 10 percentage points (from 26.25% to 15.79%). The three sources (all club's own) have FP coefficients ranging from 0.714 to 0.857 and corresponding to the "significant" level. The total share of these sources in financing the football club activities makes about 45%, which is more than 1.7 times higher than the "receipts for competitions arrangement". The next "medium" FP level has two sources, one of which is the club's own, and the other is borrowed. The range of FP share variety within this level is quite wide, about 9%. However, the borrowed funds are used to achieve a certain goal (repairs, purchase of sports equipment, etc.). Then the loan funds shall be repaid, mostly at the expense of own sources, increasing the financial load of the sports organization.

The two sponsors JSC "FGC" and JSC "RZD L" jointly provide just below 4% of funding for JSC "FC L" activities and have a "moderate" FP level. The minimum share participation gap, just 0.13 of percentage points, ensures the transfer of partners to the next "weak" FP level. At this level, there are five sponsors, and their joint share in financing JSC "FC L" activities totals 5.75%. The difference between "weak" and "insignificant" levels makes 0.38% of shared FP.

It is worth mentioning that 76% of the commercial SO JSC "FC L" activities are financed from their sources, and only about 11% – from sponsor partners who are also commercial organizations, five of which are major businesses. The public organization RAA "L" comprises many SOs of various organizational and legal forms. Let's evaluate the financial sources of the autonomous non-profit organization Volleyball Club "L-N" (ANO VC "L-N"). The club has a strong position in the Super League, has repeatedly won the Russian Cup, and was the winner of the Champions League. Its organizational and legal form is an autonomous non-profit organization. The general sponsor of the volleyball club is JSC "RZD"; the main sponsor partners are the Government of the Russian Federation, the All-Russian Volleyball Federation, State Unitary Enterprise "Radio 54", "BH" Company Group, JSC Transport Company "RK" (TC "RC"). Table 3 shows the results of calculating the coefficients and the FP level of various FS in Volleyball Club "L-N" activities.

Table 3. FP level of Volleyball Club “L-N” financing sources

Financing source	Financing share, %	Rank (r_i)	FP coefficient (p_i)	FP level	Elements of the quadratic model
Raised funds (sponsors)	77.6				
JSC “RZD”	31.2	1	0.886	Significant	862.47
TC “RC”	18.7	2	0.771	Significant	269.61
State subsidies	12.5	3	0.657	Medium	102.66
“BH” Company Group	9.8	4	0.543	Medium	52.15
SUE “Radio 54”	5.4	7	0.2	Negligible	5.83
Own	21.3				
Receipts from ticket sale	8.3	5	0.429	Moderate	29.55
Revenues from the rental of a sports and recreation complex	7.6	6	0.314	Weak	18.14
Commercial income	5.4	7	0.2	Negligible	5.83
Other	1.1	–	–	–	–
	Σ 100%	Σ 35	–	–	$Q_F^{L-N}=1346.24$

The two companies have a “Significant” FP level, including the General Sponsor. The range of this level is quite wide and makes more than 12%. In contrast to commercial SO Football Club “L”, the main FS of the autonomous non-profit organization Volleyball Club “L-N” are raised funds. The transition to the next “Medium” level occurs after 6.2 percentage points. This financial level is provided by two sources, one of which is a state subsidy. The next levels, “Moderate” and “Weak”, have their own financial sources – “Receipts from ticket sale” and “Revenues from the rental of a sports and recreation complex”, respectively. According to the authors, by the end of 2020, the share of “Receipts from ticket sale” will be even less, and it may lead to the decrease in FP level of own FS specified above.

The last “Negligible” level has two FS of equal share in volleyball club funding: one own FS (“commercial income”), the other FS is raised (SUE “Radio 54”). More than 77% of Volleyball Club “L-N” activities are funded by sponsor partners, and about 21% – from its own sources. Football Club “L” has 14 main FS, and Volleyball Club “L-N” has 8 FS. Its sources form the basis of the financial activity of commercial SO Football Club “L”. In the non-profit organization Volleyball Club “L-N”, there is a redistribution of financial resources towards the raised sources. A commercial organization compensates for the shortage of its funds with borrowed and raised resources, while a non-profit SO has to rely on sponsor partners heavier than on its financial opportunities. The results of calculations of the positive-definite quadratic model (Tables 2, 3) facilitate drawing the following general conclusions:

- The value of the quadratic model indicators below 1500 is observed due to a large number of financial partners ($5 < n \leq 15$), since at $n=1$, the indicator value will be $\max Q_F = 10000$;
- The sum of the first two terms of the QFL coefficient is less than the first term of the QFL-N indicator, which is due to a greater significance of the first FS of the volleyball club;
- The sum of the first two components of the coefficient Q_F^L is less than the first component of the indicator Q_F^{L-N} due to the greater importance of the first FS of Volleyball Club “L-N”;
- The sum of the first two components, Q_F^L and Q_F^{L-N} , makes 853.81 and 1132.08, respectively; it evidences the most significant financial contribution of the relevant FS; FP coefficients enhanced the share indicators;
- The most significant by value elements of Q_F^L and Q_F^{L-N} indicators are related to different financing sources; it occurs due to the organizational and legal form and sets the direction of financial resources redistribution;
- A sharp reduction in the quadratic model elements is due to the share of each source or partner being less than 10%, and the square of the relevant share is significantly reduced by the FP coefficient.

The analysis of sports organizations with different organizational and legal forms showed differences in the sources of financing for their activities, which are indirectly associated with the organizational and legal form. In further studies, the authors plan to investigate the tightness of this connection using correlation analysis methods.

Thus, the quadratic model enables analyzing the changes in each component involved in the calculation algorithm. FP coefficients widen the gaps determining the transition of sources or partners to other FP levels.

Discussion

Important subjects of public relations in physical exercise and sports are various fitness and sports organizations acting as legal entities. According to Article 48 of the Civil Code of the Russian Federation (CC RF), a legal entity is an organization endowed with civil capacity that has separate property and is liable with it for its obligations, can acquire property and personal non-property rights on its own behalf, bear its own liabilities, bear civil liabilities and may sue and be sued in a court of law. According to the legislation of foreign countries, organizations or institutions, i.e., legal entities, act as independent participants in civil legal relations, while many Civil Codes of foreign countries do not comprise a definition of this concept. The most important features of a legal entity as a subject of legal relations are property isolation and independence.

Based on the provisions of the Civil Code of the Russian Federation, legal entities can be classified by various criteria. One of them is the activity objective of a legal entity; depending on it, commercial and non-commercial legal entities are distinguished. Non-profit organizations, unlike commercial ones, do not have profit-making as their main activity objective and do not distribute their profits (income) between the organization members and participants. Commercial and non-commercial legal entities, according to CC RF norms, can be established only in the organizational and legal forms provided for by the legislation. Legal entities in physical exercise and sports can be incorporated as joint-stock companies, limited liability companies, state and municipal unitary enterprises, etc., i.e., in the forms peculiar to commercial organizations, as well as in the form of a public organization (association), including sports federations, in the form of foundations, non-profit partnerships, institutions, autonomous non-profit organizations, legal entities associations (unions), etc., i.e., in the forms peculiar to non-profit organizations.

The issues of civil legislation reforming as to legal entities and the prospects of legal regulation development in incorporation and activity of legal entities of various organizational and legal forms have been reviewed in many papers by Russian scientists (Sukhanov, 2018; Dolinskaya, 2019). Special attention is paid to the legal mode of the property of a legal entity and financial aspects of activities of legal entities of various organizational and legal forms (Soifer, 2018; Baturina, 2018; Kosov, 2019).

Many topical issues of legal regulation of sports relations are discussed on pages of foreign legal literature, including the public and private correlation principles in activity regulation of sports law participants. In particular, it is assumed that the division between "strictly" public and "strictly" private regulation modes is a well-conceptualized illusion. Using FIFA as an example, the authors claim the danger of a private association being turned into an enterprise with an elite structure that uses its powers extensively. Capturing private associations by influential groups and promoting their interests can easily limit the benefits of private ordering. In this situation, the state's role means acting for the benefit of civil society by implementing the strategic steps to help the sports organization cope with administrative failures without compromising the existence of private activity mode (Hock and Gomtsian, 2018).

As A. Di Marco views it, the recent reforms related to sports organizations improve their efficiency. Highlighting the growing sports' economic aspect, the possibility of applying the corporate theory to sports organizations, in particular, in control and managing the significant cash flows that should be subject to transparent accounting, is recognized as a relevant approach. Di Marco points out the need to create a legal framework applicable to sports organizations of all organizational and legal forms (di Marco, 2019).

S. De Dycker, examining the latest events in sports (scandals, corruption, mismanagement, etc.), justifies the need to implement the tools capable of improving the management efficiency in SO of various levels (international or national), organizational, and legal forms. In his opinion, such a tool should be the sports management code. Compliance with these legal norms will ensure the opportunity for SO to rely on a certain amount of state subsidies (de Dycker, 2019).

While discussing the efficiency of SO management, Di Marco and De Dycker focus on legal aspects and do not consider the formation and features of FS for SO activities. Considering the scope and content of sports exceptions in the context of EU economic regulations' application, K. Pijetlovic outlines the peculiarities of the sports sector. She notes that regardless of the athlete status (professional, semi-professional, amateur) while being engaged in sports, the person is more or less engaged in economic activity. Grants, sponsorship agreements received by an athlete (including amateurs) generate the funds raised by the sports organization, and athlete's participation in competitions provides economic benefits to organizers, increasing the sports organization's own FS (Pijetlovic, 2017).

The article by P. Millar and A. Doherty deals with the development of non-profit SO. The authors relate the development of a public SO with building up its capacity and propose implementing a comprehensive model focused on the effective increase of a non-profit SO organizational potential. However, any changes, including the organizational ones, require financial support, and it requires finding an FS and evaluating the efficiency of model adaptation and resource use (Millar and Doherty, 2016).

According to A. Morgan, T. Taylo, and D. Adair, the raised funds in the form of sponsorship donations play a significant role in sports events. While deciding on funding, partners (sponsors) take into account many factors, such as sports activity type, brands of teams participating in the sports events, reliable interpersonal relationships, positive inter-organizational culture, etc. Because of the efficiency of the relationship between sponsors and sports events organizers, this study is of great importance, but it does not take into account the level of financial participation of this sponsor partner in SO activities in general compared to other FS (Morgan *et al.*, 2020).

European scientists, examining the problem of financing sports clubs, stipulate that the main recipients of state subsidies for providing recreational sports in EU countries are voluntary sports clubs. Municipalities are the most important funding level. Analyzing various sports types, the density of sports clubs' location, and sports facilities in the municipality, the authors conclude that municipal levels of direct and indirect subsidies are weakly correlated with the sports clubs' density and increasingly correlated with sports facilities. It is worth mentioning that this study will allow changing the municipal subsidy flows to optimize the financing of sports clubs/organizations (Ibsen *et al.*, 2019; Elmose-Østerlund and Iversen, 2020).

The research of other scientists is devoted to the competition of commercial and non-profit sports organizations. The reasons for the competition are sports, financial aspects, and club features (Rossi *et al.*, 2020). Despite the commercial sector growth, the number of people involved in sports does not increase proportionally, which causes a shift in demand from non-profit sports service providers to commercial ones (Borgers *et al.*, 2018; Downward *et al.*, 2009). This situation harms the financial standing of a non-profit organization, as the amount of membership fees and voluntary donations from members of sports (non-profit) clubs declines (Enjolras, 2002). Besides, loss of production of public goods due to the number reduction of non-profit SO's members entails the sequestration of government subsidies to the non-profit sector (Ulseth, 2004; Ahlert, 2005; Okayasu *et al.*, 2010).

Examining the organizational issues of non-profit sports clubs, Wicker and Breuer relate the problems to the organization's financial standing with the recruitment and retention of coaches and club members. Using the multi-level analysis, an open system model, and a hierarchical data structure, the researchers studied the impact of the external environment on non-profit sports club activities. The scientists have found that problems with production, financial, human resources, etc. are not always caused by inefficient organization management (Wicker and Breuer, 2015). In other works, relying on the theory of unforeseen circumstances, the authors claim that the diversity of missions in the sports sector facilitates a high level of income diversification of a non-profit organization having a positive effect on the financial standing of a sports club (Wicker *et al.*, 2013).

In Russia, the issues of sports sector financing are also highlighted. Emphasizing the priority of sports industry development and the need for its financing, E. Per'kova (2017) justifies the inevitability of joint participation of the state and private business in sports industry development (Petrikova and Slobodyanyuk, 2013; Per'kova, 2017). Another group of Russian scientists assumes that sports industry development under the new economic conditions has resulted in the emergence of sports organizations of various ownership forms having the opportunity to engage extra-budgetary funds (Kurochkin, 2016; Sabinina and Kuznetsova, 2018; Pochinkin *et al.*, 2018; Chernobrovina, 2019).

As the discussion outcome, it is worth mentioning that sports organizations pursue different activity objectives. The activity objective is the criterion for classifying legal entities, depending on which commercial and non-commercial sports organizations are distinguished. Previous studies do not reflect full FS distinctive features and their FP in SO of various organizational and legal forms. The majority of scientific researchers are engaged in analyzing the legal regulation of sports relations and the financing of the activities of either commercial or non-commercial sports organizations, without specifying their financial sources. According to the authors, the organizational and legal forms of sports organizations and the sources of financing for their activities have a correlation dependence, which is planned to be investigated in future studies.

It should be noted that the authors investigate the issues of legal regulation of sports relations in the Russian Federation within the framework of a grant from the Russian Foundation for Fundamental Research. The economic component of these relations is essential. According to the authors, the most significant publications are devoted to the sources of legal regulation of sports relations in the Russian Federation and abroad (Kovalenko, Shavandina, 2020), improvement of athletes' competitiveness assessment as an element of the legal regulation of sports relations in the Russian Federation (Shavandina, Kovalenko, Pratsyuk, 2020), urgent issues of legal and economic regulation of athletes' salaries in Russia and foreign countries (Kovalenko, Shavandina, 2020), etc.

At the requests of representatives of the legislative authorities, the authors have analyzed the regulatory legal acts of the Altai Territory regarding physical culture and sports from the standpoint of compliance with the rules of legislative technology by several criteria. It was concluded that there is no single set of such rules, and this fact, in particular, is the reason for the presence of many technical defects in the legislation. Therefore, the proposal is supported by the need to adopt a specialized act, which would enshrine the proper requirements and rules of legislative technology (Kovalenko, Tydykova, Shavandina, 2020). The research results were published in authoritative publications in Russia and abroad.

Conclusions

The SO organizational and legal form determines the commercial or non-profit nature of its main activity objective. To successfully perform its functions in the sports services market, a SO needs financial capital. In this regard, it is important to analyze FSs and their impact on SO organizational and managerial decisions affecting the rights and interests of third parties.

Thus, the analysis of SO of various organizational and legal forms should be supplemented with an assessment of FS significance based on the positive-definite quadratic model. For each financial source, the model calculates the concentration level and the FP coefficient justifying the FS importance. It is necessary to highlight the main features of significance assessment for SO financial resources:

- The method is based on a comprehensive approach to assessing the FS of SO funding;
- The assessment is done based on public accounting statements;
- FS ranking by partners, activities, or income correlates with SO management efficiency enhancement;
- The assessment of FS significance is executed both in space, i.e., in comparison to other sources, and in time, i.e., as of a certain date;

– The algorithm for calculating all quadratic model coefficients does not require any special software. The SO activity is not always efficient if it is supported by a small FS number. Since the organizational and legal form largely determines the FS composition and structure, the SO should regularly analyze them. It is required for making managerial decisions in case of FS redistribution, their deficit occurrence, the search for additional sources, etc.

Thus, the proposed quadratic model enforced by FP coefficients of relevant sources enables us to analyze the changes in each component involved in the final indicator calculation algorithm. In their turn, the coefficients determining the level or significance of financial participation extend the gaps and determine the transition of FS or partners to other levels. The analysis results will help management teams optimize SO financing sources' composition and structure within the existing organizational and legal forms.

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