Mandatory Disclosure Level, Sports and Financial Performance of Brazilian Soccer Clubs

ABSTRACT

Objective: The purpose of this paper is to evaluate the level of mandatory disclosure of Brazilian soccer clubs in order to verify the existence of a relationship between accounting disclosure, financial performance, and the clubs’ sporting performance.

Method: We employ a qualitative and quantitative research method by empirically developing a disclosure index. The data were collected on the websites of soccer clubs and their federations. The sample is composed of 76 Brazilian soccer clubs belonging to the ranking list of the Brazilian Football Confederation. A multiple linear regression allowed investigating the relationship between the main variables of the study.

Originality/Relevance: The work contributes to a discussion about the soccer performance and the conformity of the recognition, measurement, and disclosure of the accounting acts and facts of the Brazilian soccer clubs. These entities have become important sources of business and stakeholders are more interested in the transparency of their transactions.

Results: There is a low adhesion of sports entities to the mandatory disclosure requirements. It was observed that of the 36 items of mandatory disclosure, no club complied with 100% of the rules of publication, recognition, measurement, and disclosure accounting. While the average of all clubs was 33.8%, Clube de Regatas Flamengo and Sport Club Internacional reported 88.9% of the mandatory disclosure.

Theoretical/Methodological contributions: We find that the level of mandatory disclosure is positively related to the intangible asset, revenue, sports performance, locality of the club and the period of experience in disclosing the mandatory accounting items.

Social/Management contributions: This analysis can provide insights that allow the stakeholder to observe the level of economic and sports organization of Brazilian soccer clubs, and the degree of commitment to transparency and governance.

Keywords: Intangible Assets; Soccer Team; Mandatory Disclosure; Disclosure Index.

How to Cite (APA)

1 INTRODUCTION

Soccer clubs have played an important economic role by fueling the interest of investors in different countries (Dimitropoulos, Leventis, & Dedoulis, 2016; Kennedy, 2013; Leoncini & Silva, 2005; Storm & Nielsen, 2012). The main reason for the new business is directly related to players’ contracts, which become intangible assets that are potentially beneficial to the club’s economic development (Chen, 2001; García & Rodrigues, 2007; Junior & Ferreira, 2018; Maia, Cardoso, & Ponte, 2013). Since the Bosman case in 1990, the transparency of actions with players has undergone many changes (Constantino, 2009).

Many sports entities, especially in Europe, have changed their status from semi-professional to joint-stock companies primarily to adapt to market changes that involve a high volume of revenue in athletes’ sales (Andrikopoulos & Kaimenakis, 2006). In Brazil, the concept of soccer as business increased with the enactment of Law No. 9.615 of 1998, known as the Pelé Law. For all that, and due to the various scandals and complaints of administrative irregularities in the Brazilian soccer environment, Law 10.672 of 2003 was created to provide greater financial security for investors.

Therefore, elements to be observed by sports entities were included, such as principles of financial and administrative transparency, morality in sports management, and social responsibility of its leaders. At that time, there were no specific rules for providing adequate and comparative financial information on soccer clubs. The segment needed regulations and principles that could assist them in preparing disclosures, geared not only to internal users but also to stakeholders (Morrow, 1999).

At the same time, the Union of European Football Associations (UEFA) has enforced rules to deal with the licensing of soccer teams in European competitions. According to Opran and Oprisor (2014), from the UEFA rules, the accounting policies of soccer clubs have now followed national and international accounting regulations. This has influenced not only the management of European soccer clubs but also of other countries, as the case of Brazil.

Therefore, Brazilian Federal Accounting Council (CFC) established rules to assist all sports entities in the standardization of financial statements, providing procedures for preparing and publishing reports accounting (Silva, Teixeira, & Niyama, 2009). Based on this context, Brazilian entities started to adopt regulations presented in Resolution No. 1.429 of 2013 (General Technical Instruction [ITG] 2003). In 2017, the CFC standard changed after the debate with sports entities, class organs and the Brazilian Football Governance Public Authority, in order to meet international legal requirements and bring greater clarity and transparency to the market. (Girotto, 2017).

In this way, the accounting disclosure has become a mechanism for legitimizing the strategic management and transparency of Brazilian clubs. According to Suchman (1995), legitimacy is associated with company norms, values, and beliefs. An organization seeks to legitimize its acts in order to obtain some economic gain, to maintain its current state of leadership or to repair a certain action that has been poorly articulated.

Disclosures are essential to the understanding of stakeholders about the conduct of the business involved in the world of financial transactions. In this context, the disclosure of soccer allows the transparency of the financial movements of such resources since the transactions have assumed great relevance in the economic context of the world, changing the condition of the entity responsible, from entertainment to a business company. In the Brazilian scenario, the transfer of more than 45 million euros from player Vinicius Junior of Clube de Regatas Flamengo in his transfer to Clube Real Madrid, was important to see how clubs are registering and making such information available.
In order to contribute to the literature on the management of soccer clubs, we evaluated the level of mandatory disclosure of Brazilian soccer clubs, empirically developing an indicator of disclosure. Thus, the research aims to answer the following problems: What is the level of disclosure of financial and managerial information of Brazilian soccer clubs in relation to the accounting standards that segment accountability? To answer the question, this paper verifies how the recognition, measurement, and disclosure of accounting procedures are associated with the legitimation of the management of intangible assets, and the financial and sports performance of Brazilian soccer clubs. The work uses data from 76 Brazilian clubs ranked by the Brazilian Football Confederation in order to present a degree of compliance for the disclosure and its relation to the position of the club regarding its stakeholders.

2 LITERATURE REVIEW

2.1 Determinants of mandatory disclosure

Accounting disclosures play an important role in the decision-making of users. With the context of globalization experienced by organizations, the quality by which this information reaches the decision maker is a fundamental part in understanding the recognition policy, measurement and disclosure (Barth, Landsman, & Lang, 2008; Chaney, Faccio, & Parsley, 2011; Lambert, Leuz, & Verrecchia, 2007; Moura et al., 2017). Thus, accounting theory in assuming a process of normative approach seeks to recommend what is to be communicated and in what way information should be presented and disclosed, analyzing the cultural, socioeconomic and historical environment (Silva, 2007).

Regarding the disclosure of information, Verrecchia (2001) presents the main motivations that conditions preferences for disclosure by organizations. The author points out three lines of research on which the disclosure act can be based: association-based disclosure, in which disclosure occurs in association and in relation to the behavioral changes of the investors.

The second research line, denominated efficiency-based disclosure, is related to the preference for disclosure from the most efficient information to assist in the decision-making process of the interested parties, due to lack of information. The third one is the discretionary-based disclosure, whose main objective is the discretionary motivation of the manager or organization to evidence certain information. From this line of research, it is assumed that the issuance of laws and regulations is not enough reason for managers to disclose information (Holanda et al, 2012).

The change experienced by sports modality in recent years has required a greater observation regarding the disclosure of equity information and the cash flows generated by its activities. Notwithstanding this process, soccer clubs also need rules and principles that can somewhat ‘standardize’ information for their stakeholders, so that the focus of rational economic reporting decisions is not of limited use to many stakeholders of the club (Morrow, 2013).

The scenario assumed by soccer clubs was modified following the promulgation of Law No. 9.615 / 98, known as the Pelé Law, which elevated soccer clubs to the concept of business because of the large number of player revenues and transfers (Araújo & Buesa, 2012; Holanda et al., 2012). From this event, the clubs had greater transparency and management in disclosing the financial statements, as well as extinguishing the players' pass procedure by regulating the work contract between the athlete and the entity. Silva et al. (2009) verified that with the advent of the law, there was a reduction in the main source of revenue of the clubs with the extinction of what was considered the most precious 'asset'.

After several scandals and denunciations of irregularities in the administration of Brazilian soccer, a new law was promulgated. Law no. 10.672 of 2003 aimed at moralizing soccer and included principles to be observed by sports entities, such as principles of financial and administrative transparency, morality in sports management and social responsibility of its leaders. With this change, clubs were required to adopt the same procedures for preparing and publishing the financial statements of other companies and, in addition, clubs should be duly audited. Although the procedures for information were governed by Law no. 6404 of 1976 (corporation law), the lack of specific rules for sports entities did not allow comparability of the information disclosed (Silva et al., 2009).

Regarding this theme, Resolution no. 1,429 of 2013 (General Technical Instruction [ITG] 2003) arises, in which it presents policy of requirements regarding the uniformity of the accounting records, with standards of evidence of the athletes, their costs and amortization in the statements, as well as the recognition policy, and measurement of other accounting practices. This standard changed in October 2017, after a long debate of the sports entities, class organs and the Brazilian Public Authority of Football Governance. The purpose of the standard is to provide greater standardization and harmonization of Brazilian procedures in relation to the world sports scenario and compliance with guidelines issued by the FIFA licensing body (Oliveira & Andrade, 2018).

The adoption of this new rule, besides allowing responsible management of the resources of the club, aims to present the entity's real estate, according to the norms of international standards, with respect to human resources, contract revenues with clients, lease or other procedures which have been amended. It is believed that the standardization of sports sector procedures can reduce distortions in financial reporting and especially provide better governance of clubs. According to Dimitropoulos (2011), regulation may increase pressure on managers to provide true information and transparency of clubs.

Unlike Brazil, European clubs are regulated by the licensing bodies of the soccer team, as in the case of UEFA (Union of European Football Associations). Oprean and Oprisor (2014) emphasize that this is relevant to the soccer scenario, as this body, by allowing clubs to apply their own accounting policies, provided that these policies are in accordance with national and international accounting regulations, exert a compliance with the rules, since it is the one that authorizes the activities of the club. An example of this is in the requirement that clubs adopt mandatory IAS 38, which deals with intangible assets, that is, players.

2.2 The accounting treatment for soccer players

The accounting treatment of this equity component is an area of interest for theoreticians, academics and professionals that are being studied, mainly due to its unique characteristics. However, interest is the same for soccer companies, more specifically when you think of players as an asset, which together with commonly known assets such as land or facilities, are practically the only resource of value and investment of a player (Forker, 2005; Morris et al, 1996; Oprean & Oprisor 2014; Rowbottom, 2012).

The financial statements of soccer clubs have a historical concept restricted to management reports in which directors informed their creditors of the use of investments. The main purpose was providing evidence of assets and liabilities using historical cost concept and convention measurement. When analyzing such an assertion in the case of soccer clubs, the fulfillment of such a role would not be reliable, especially when it was verified that significant intangible assets, such as the skills and services provided by the players, could be omitted (Morrow, 1999).

Oprean and Oprisor (2014) emphasize that the most important element for a soccer club is its team of players, because without it the existence of the club, so little of the other
assets and the carrying out of the activity of the company itself would not be justified. Soon, the players have a certain degree of potential economic benefits for the club. Such an assumption has been the object of contrast for studies since it is believed that it is not allowed to count 'persons' since one does not have the right of ownership or control over them.

One of the great questions about how to recognize an asset of a company is centered on the fact of the economic benefit that this asset can generate. Amir and Livne (2005) presented in their work questions about the applicability of this premise, demonstrating that the relationship between investment in player contracts by soccer companies and future benefits may be tenuous.

Cunha (2010) sought to show that there is a strong correlation between the sports value of the team and the economic value of the club since the expectation associated with the individual performance of each player maximizes the team’s performance. Mnzava's (2013) findings revealed that the intangible assets invested by the sports company positively affect financial and sporting performance, as well as provides a strategic advantage, as in the case of player registration costs. However, the author believes that it is not possible to accurately infer that intangible assets affect the firm's productivity and financial performance.

2.3 Hypotheses rationale

Intangible assets are important resources for the differentiation of sports entities. According to Kayo et al. (2006), such assets contribute to the achievement of important competitive advantages. Studies show that soccer clubs with a higher competitive performance have a team of high value compared to other financial items (Mourão, 2012), reaching, in some clubs, around 50% to 60% of the total amount of their assets (Lozano & Gallego, 2011; Mnzava, 2013). This is because athletes generate indirect resources through ticket sales, television contracts, and sponsorships, maximizing the club's financial performance (Amir & Livne, 2005).

H1: There is a positive relationship between the level of mandatory disclosure and the intangible asset of Brazilian soccer clubs.

According to Cunha (2010), the resources used in the European teams assume a strong positive correlation between the team's sports value and the club's economic value, since there is an expectation associated with the individual performance of each player, maximizing the club's performance, contributing to raising the level of revenues obtained. In Mnzava's study (2013), the results revealed that the invested intangibles positively affect financial and sports performance. Thus, Brazilian clubs have fostered a new management position aimed at increasing their business value (Nascimento et al., 2015). Given the evolution of soccer from a simple sporting event to a breakthrough in the world of finance, the amount of club revenue required a new form of compulsory disclosure (Pavlović, Mijatović, & Milačić, 2013). Once attributed this strategy to Brazilian soccer clubs, we are associated the hypothesis 2.

H2: The level of compulsory disclosure is positively influenced by the financial performance of soccer clubs.

According to Mnzava (2013), the sporting performance is positively related to the financial performance of the club. Revenue and demand seem to have an influence on the rendering of accounts. The increase in player prices motivated a higher level of club management and quality of the level of disclosure (Risaliti & Verona, 2012). Promptly
disclosures become the best clubs' instruments to legitimize their economic and social activities (Morrow, 1999).

\[ H_3: \text{The disclosure level of a soccer club is positively influenced by the sporting performance.} \]

In the European context, clubs must publish the financial statements, but if they do not, they are not excluded from the competitions. According to Oprean and Oprisor (2014), however, this attitude can damage the image of the club, as well as a possible drop in revenues. In Brazil, disclosure requirements have been required since 2013. As there are no stricter regulations regarding compliance with accounting procedures, some teams may also not comply with the current standards for publication of mandatory disclosures.

\[ H_4: \text{There is a positive relationship between disclosure level and the beginning of the obligation to publish financial statements for soccer clubs.} \]

The process of developing a region is reflected in the socioeconomic structure of individuals' standard of living, cultural nature and public investment actions. The sporting area also receives reflections of these variables so that the literature associates a positive relationship between economic development and sports activities of a specific population dimension (Berument & Yucel, 2005; Mourão, 2004-2005). Brazil has cultural, social and economic diversity. The country’s largest economic volume is concentrated in the south and southeast, where there are also the largest soccer clubs in terms of revenue and number of fans. Therefore, we have constructed hypothesis 5.

\[ H_5: \text{There is a positive association between the level of disclosure and regionality of the soccer club.} \]

The Brazilian calendar of competitions is one of the most important events in the South American region. From the participation in the competitions, the clubs receive greater visibility and increase of revenues, with the coming of new investors, sponsors, and players sales. All participation of soccer clubs is related to compliance with conditions previously defined by the CBF and the South American Football Confederation. Therefore, club participation in soccer events ensures a positive relationship with the increase in the level of disclosure.

\[ H_6: \text{The sports competitions with greater visibility present a positive relationship with the level of mandatory disclosure of the soccer clubs.} \]

3 METHOD AND SAMPLING

The participants of the study were 220 Brazilian soccer clubs, ranked by the Brazilian Football Confederation (CBF) in 2018. The ranking is dynamic, following pre-established scores in the competitions of the last five years (CBF, 2018).

At the first moment, the accounting data for year \( t \) (2017) were obtained from the website of the sports club or its state federation, reaching 29 financial statements. In the second moment, we request financial information from other clubs, through electronic messages, social networks or phone calls. Thus, 47 more clubs were added to the sample, totalizing 76 clubs. Therefore, the sample reached 34.6% (\( n = 76 \)) of the 220 clubs.
3.1 Data Analysis and Variables

This research is classified as exploratory, with qualitative and quantitative approaches. For the qualitative approach, the technique of content analysis (Bardin, 2008; Silverman, 2009; Weber, 1990) was used, while in the quantitative, the descriptive statistics of data and the estimation of a multiple regression model were applied.

IBM SPSS Statistics (version 20) was used for data management and analysis. The process involved the transcription of the cross-sectional data of each sampled club (i) as well as the financial information based on the research objective: relationship of the disclosure level with the financial and sporting performance of the club. The documentary analysis used as a search tool a checklist that sought to verify the observation of the ITG 2003 standard by the clubs sampled. For Souza et al. (2016), the checklist allows, when analyzing the list of items, the researcher to obtain the necessary elements for his research.

The disclosure index assumes the role of a dependent variable and is an alternative method that allows the researcher to make reports based on the extension and quality of the information, providing a substitute score, indicative of the level of disclosure of the entity (Král & Cuskelly, 2017; Souza et al., 2015). The presentation of this index, associated to the degree of compliance practiced by soccer clubs with accounting standards, reflects the familiarity between the accounting practices of sports entities and the requirements of the regulations regarding disclosure and accountability of the entity with its investors and supporters. The index creation is justified since similar studies have also used a checklist or index for studies on soccer club mandatory disclosures (Cunha, 2010; Leite & Pinheiro, 2013; Maia et al. 2013; Shareef & Davey, 2005; Yi & Davey, 2010).

The index includes 36 items of recognition, measurement, and disclosure, being assigned the value 1 (one) if the item comply with the standard or 0 (zero) otherwise. The complete list of checklist terms can be provided if requested. The result made it possible to generate a ranking between 0 and 100% of the level of mandatory disclosure. Equation 1 represents the calculation of the disclosure index:

\[
DI = \left\{ \frac{\sum_{i=1}^{n} REC + \sum_{i=1}^{n} MES + \sum_{i=1}^{n} DIS}{n} \right\} \times 100\%
\]  

(1)

Where,
- \(REC\) represents recognition items
- \(MES\) represents measurement items
- \(DIS\) represents disclosure items
- \(n\) is the total of items

Other indicators of the statistical model were obtained from the site of the Brazilian Football Confederation of 2017 or from the club’s own website. As in Cunha (2010) who presented in his work a linear regression model that associated the degree of compliance with the accounting standards related to his study with a disclosure index, a similar model that allowed the verification of the logarithm of the percentage of disclosure index and explanatory variables was estimated, according to the Equation (2):

\[
\ln(\%\ DI) = \beta_0 + \beta_1(\ln(\%\ L_1)) + \beta_2 ROA_i + \beta_3 \ln Revenue_i + \beta_4 \ln Performance_i + \beta_5 Year_i + \beta_6 Region_i + \beta_7 National_i + \beta_8 International_i + \epsilon_i
\]  

(2)
Equation (2) estimates the rate of disclosure of soccer club information in relation to intangible assets and total assets, in the ratio between net income and total assets, in the revenue, in the sports performance and binary variable ‘year’, the influence of regional and participation of national and international competitions.

For asset and liability variables (intangible assets, total assets, surplus/deficit, and revenues), we use the information in the financial statements. Due to the large variation of the values presented by each soccer club, we assumed natural logarithm values for intangible assets, total assets, and revenues. The equity variable ‘ROA’ assumes the rate of return on assets, which expresses the operational performance of each club and was selected to express itself as the control variable (Rezende & Dalmácio, 2015). For the variable performance, we assume the natural logarithm of the score provided in the National Club Rankings.

For the study of H4, the financial statements for the year 2014 of each club were used and the adherence to the current norm was verified. Therefore, a binary variable ‘year’ with a value of ‘1’ was adopted for teams that, for more than 3 years, have disclosed the demonstrations according to the standards, considering that the standard is 2013 with influence in 2014, and ‘0’ otherwise. In H5, the location of the headquarters of each club was used in the address of the official website. Thus, the binary variable ‘region’ assumed the value ‘1’ for clubs belonging to the south/southeast regions and ‘0’ for the other regions.

In order to study the importance of soccer clubs in participating in competitions of greater visibility and organized by licensing bodies, the ‘national’ binary variable was used and assumed the value ‘1’ for the clubs that participated in the series A of the Brazilian Championship in year t of the sample and ‘0’ otherwise. Complementing the importance of club competitions, another variable was included in the model – ‘International’ which assumed the value ‘1’ for clubs that participated in some international competition in year t and ‘0’, otherwise. Therefore, we intend to verify H6.

We expect predictors to be positive because they are coefficients in which the literature identifies as an augmentative relation to the disclosure level of each sports club. Table 1 presents the dependent and independent variables of the statistical model, theoretical basis and expected effect, which was found in the literature review and was used for similar studies.

4 RESULTS

The exclusion of 144 clubs out of 220 of the initial sample implies observing the difficulty that the researchers found for empirical studies of Brazilian soccer clubs: lack of data dissemination. This result shows a low adhesion of the sports entities to the mandatory disclosure requirements. According to Proni and Libanio (2016), these Brazilian cases are related to the difficulty that most clubs have in positively associating sports performance with efficient financial and asset management.

The result of the mandatory disclosure index showed that none of the clubs scored 36 points. While the average of the mandatory disclosure index was 30.8%, the standard deviation reached 22.9 (p-value <0.05). The tests revealed that the Clube de Regatas Flamengo and Sport Club Internacional, 7th and 10th placed in the CBF ranking, respectively, presented a result of mandatory disclosure level of 88.09% (p-value <0.05). The club with the lowest index was Esporte Clube Noroeste, 214th placed in the CBF ranking, located in São Paulo, that obtained a result of 2.78%. Table 2 summarizes the results of the top 10 soccer clubs.
It is worth noting that Brazilian rules do not distinguish between any type or size of clubs regarding mandatory disclosure. This suggests that even clubs considered of the national soccer elite do not exercise the highest degree of mandatory information. Therefore, important accounting information may not arrive for the stakeholders.

This fact can be corroborated by verifying, after the checklist performed, the existence of a disparity in the disclosure index ranking results between clubs of certain equality, such as the case of Grêmio (22nd placed in the disclosure index) and the International. According to these results, while out of the 36 items in the disclosure index, the International Club presented 31 verified items, Grêmio club presented only 21, the lowest value being the items related to the process of disclosure of information according to the rules in force.
Table 2
Summary of the top 10 soccer clubs in the survey

<table>
<thead>
<tr>
<th>SOCCER CLUB</th>
<th>DI (%)</th>
<th>DISCLOSURE INDEX (DI) - RANKING</th>
<th>CBF’s RANKING (Sport Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clube de Regatas Flamengo</td>
<td>88.89</td>
<td>1º</td>
<td>7º</td>
</tr>
<tr>
<td>Sport Clube Internacional</td>
<td>88.89</td>
<td>2º</td>
<td>10º</td>
</tr>
<tr>
<td>Fluminense Football Club</td>
<td>83.33</td>
<td>3º</td>
<td>12º</td>
</tr>
<tr>
<td>São Paulo Futebol Clube</td>
<td>80.56</td>
<td>4º</td>
<td>11º</td>
</tr>
<tr>
<td>Sociedade Esportiva Palmeiras</td>
<td>77.78</td>
<td>5º</td>
<td>1º</td>
</tr>
<tr>
<td>Coritiba Foot Ball Club</td>
<td>75.00</td>
<td>6º</td>
<td>17º</td>
</tr>
<tr>
<td>Cruzeiro Esporte Clube</td>
<td>69.44</td>
<td>7º</td>
<td>8º</td>
</tr>
<tr>
<td>Santos Futebol Clube</td>
<td>69.44</td>
<td>8º</td>
<td>4º</td>
</tr>
<tr>
<td>Associação Desportiva São Caetano</td>
<td>69.44</td>
<td>9º</td>
<td>93º</td>
</tr>
<tr>
<td>Botafogo de Futebol e Regatas</td>
<td>66.67</td>
<td>10º</td>
<td>8º</td>
</tr>
</tbody>
</table>

Note: Clubs with the same DI score were ranked by CBF’s Ranking. The complete ranking list can be provided if requested.

Table 3 details the descriptive statistics of our regression data.

Table 3
Descriptive statistics (n=76)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln%DI*</td>
<td>2.9814</td>
<td>3.3200</td>
<td>1.1943</td>
<td>1.4264</td>
<td>1.02</td>
<td>4.49</td>
</tr>
<tr>
<td>Ln%IA</td>
<td>1.6035</td>
<td>1.9424</td>
<td>1.7446</td>
<td>3.0435</td>
<td>-4.0176</td>
<td>4.5018</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.4825</td>
<td>-0.3130</td>
<td>1.7040</td>
<td>2.9037</td>
<td>-8.1345</td>
<td>2.0454</td>
</tr>
<tr>
<td>LnPerformance</td>
<td>7.5352</td>
<td>8.00064</td>
<td>1.6788</td>
<td>2.8184</td>
<td>3.2189</td>
<td>9.6348</td>
</tr>
</tbody>
</table>

Notes: *Dependent Variable. All variables (except ROA) have been logarithmised.

Table 4 presents the correlation matrix of the statistical model. The results demonstrate low correlation coefficients and that are not perfectly linear, registered by a statistically significant level of significance. This means that there are no problems of endogeneity. To check the robustness of the results or violation of any assumption of the linear regression model, we performed the statistical tests. The Kolmogorov-Smirnov statistical test showed p-value higher than the levels of significance, representing the normality of the model residues.

Table 5 shows the results of the regression of the statistical model. It is possible to verify the sensitivity of the adjusted coefficient of determination ($R^2$) of which 74.2% of the model can explain the 'Ln% DI' by the predictors used. Statistical tests of variance inflation factor (VIF) allow rejection of the null hypothesis of multicollinearity of the model. In the Durbin-Watson test, the error-independence hypothesis is satisfactory with a value of 2.41. With p-value above 5%, the White’s test allowed to confirm the homoscedasticity of the model.
Table 4
Correlation matrix (Pearson’s coefficient)

<table>
<thead>
<tr>
<th></th>
<th>Ln (%DI)</th>
<th>Ln (%IA)</th>
<th>ROA</th>
<th>Ln Revenue</th>
<th>Ln Performance</th>
<th>Year</th>
<th>Region</th>
<th>National</th>
<th>Interna</th>
<th>lonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln (%DI)</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ln (%IA)</td>
<td>0.610(a)</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.264(b)</td>
<td>0.179(c)</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ln Revenue</td>
<td>0.637(a)</td>
<td>0.323(a)</td>
<td>0.321(a)</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ln Performance</td>
<td>0.669(a)</td>
<td>0.349(a)</td>
<td>0.163(c)</td>
<td>0.472(a)</td>
<td>0.586(a)</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>0.261(b)</td>
<td>0.152(c)</td>
<td>-0.127</td>
<td>0.152(c)</td>
<td>-0.008</td>
<td>0.247(b)</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td>0.597(a)</td>
<td>0.384(a)</td>
<td>0.183</td>
<td>0.501(a)</td>
<td>0.618(a)</td>
<td>0.647(a)</td>
<td>0.134</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>0.452(a)</td>
<td>0.345(a)</td>
<td>0.147</td>
<td>0.420(a)</td>
<td>0.512(a)</td>
<td>0.614(a)</td>
<td>0.223(b)</td>
<td>0.760(a)</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

Note: Significance level: 1% (a); 5% (b); 10% (c)

Table 5
Results of Linear Regression

<table>
<thead>
<tr>
<th></th>
<th>Estimated Coefficients</th>
<th>St.Error</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-</td>
<td>-0.1512</td>
<td>0.494</td>
<td>-0.306</td>
<td>0.760412</td>
<td>0.804</td>
<td>1.244</td>
</tr>
<tr>
<td>Ln %IA (a)</td>
<td>+</td>
<td>0.236</td>
<td>0.047</td>
<td>4.982</td>
<td>0.000005</td>
<td>0.789</td>
<td>1.267</td>
</tr>
<tr>
<td>ROA</td>
<td>+</td>
<td>0.066</td>
<td>0.049</td>
<td>0.358</td>
<td>0.179066</td>
<td>0.560</td>
<td>1.787</td>
</tr>
<tr>
<td>Ln Revenue (a)</td>
<td>+</td>
<td>0.071</td>
<td>0.026</td>
<td>2.779</td>
<td>0.007064</td>
<td>0.447</td>
<td>2.236</td>
</tr>
<tr>
<td>Ln Performance</td>
<td>+</td>
<td>0.151</td>
<td>0.066</td>
<td>2.371</td>
<td>0.020599</td>
<td>0.459</td>
<td>2.179</td>
</tr>
<tr>
<td>Year (a)</td>
<td>+</td>
<td>0.764</td>
<td>0.236</td>
<td>3.231</td>
<td>0.001913</td>
<td>0.459</td>
<td>2.179</td>
</tr>
<tr>
<td>Region (b)</td>
<td>+</td>
<td>0.370</td>
<td>0.178</td>
<td>2.074</td>
<td>0.041887</td>
<td>0.805</td>
<td>1.242</td>
</tr>
<tr>
<td>National</td>
<td>+</td>
<td>0.415</td>
<td>0.295</td>
<td>1.409</td>
<td>0.163388</td>
<td>0.321</td>
<td>3.113</td>
</tr>
<tr>
<td>International (b)</td>
<td>-</td>
<td>-0.696</td>
<td>0.314</td>
<td>-2.217</td>
<td>0.030055</td>
<td>0.387</td>
<td>2.584</td>
</tr>
</tbody>
</table>

N (observations) 76
R² 0.742
Adjusted R² 0.712
Statistical F 24.145
Significance F 5.76E-17
Durbin-Watson 2.41

Notes: Significance level: 1% (a); 5% (b); 10% (c)
(d)VIF values close to 10 indicate the presence of Multicollinearity
Model estimated with a constant and with dummy variables for club specific effects

Except for the 'international' variable that presented a negative sign of the estimated coefficient (-0.696), the other variables corroborated with the expected signal in the model. Regarding the significance of the variables, we verified that the t-statistic test of the explanatory variables 'Ln% IA', 'LnRevenue' and 'year' were at a significance level of 1%. The 'performance', 'region' and 'international' indicators presented significance at 5%. However, 'ROA' and 'national' were not statistically significant.
5 DISCUSSION

We evaluate the level of mandatory disclosure of Brazilian soccer clubs by empirically developing a disclosure indicator, in order to verify the existence of a relationship between accounting disclosure, financial performance and sports performance of Clubs. Intangible assets, club revenue, performance, location, and experience in accounting have positively influenced the club's level of mandatory disclosure. Therefore, the results confirm the research hypothesis that the level of disclosure required is being affected by each club's financial and sporting performance. Silva et al. (2009) observed a similar phenomenon in the study.

As predicted, the positive sign of the coefficient ‘year’ and its significance in the estimation shows that, on average, clubs that already disclose their financial statements for more than 3 years tend to have a higher degree of compliance with the standards in their disclosures, corroborating H₄. In the same way, we observed that the market area of the soccer club positively influences the level of mandatory disclosure, corroborating with H₅ that the geographic location and the cultural, social and economic reality may affect the commitment of the accounting disclosure.

The structure of the competition and its degree of importance in the Brazilian teams' disclosure behavior were observed by the ‘national' and 'international’ variables that considered the competitions of greater relevance for the competitive and financial return of the club. We verified that there was no significance for the participating clubs of the ‘Brazilian series A’ that are regarded as the national soccer elite. As opposed to expected, we find that the clubs' mandatory disclosure rates tend to decrease, on average, from their participation in international competitions, indicating a negative relation with the degree of compliance with the disclosures. As a result, we could not confirm the H₆.

The results also show that there is no significant relationship between the return on assets and the mandatory disclosure index. This result can be justified by Dye's (2001), who explains that an entity only discloses information that is positively favorable to its image. Therefore, poor financial results can signal poor management for investors and other stakeholders. Complete results and full data for these clubs can be provided if requested.

As in the studies by Dani, Santos, and Hein (2016); Zelbrassikowoki et al. (2018), the research results do not allow us to infer a positive and significant correlation between the Disclosure index and the sports ranking provided by CBF, since clubs with good positions in the CBF ranking did not present similar positioning in the disclosure index.

Furthermore, the results allow us to infer that Brazilian clubs are still resisting improving their professional management. Unlike international clubs that assume the sports market in the same characteristics as other business companies, Brazilian clubs face political and administrative variables that hinder a better social, institutional, and economic organization. For Leoncini e Silva (2004), this opposes common characteristics of Brazilian soccer management, in which predominates 'love for the shirt and unconditional passion for the team'. Thus, the inconsistency between positive sports results and managerial efficiency with timely accounting information becomes a major challenge in the national scenario.

However, the new position taken by the major world clubs, such as the European, Arab, and Chinese clubs present to Brazilian football the flaws that prevent organizational and sports dynamics. Some clubs, such as São Caetano, already have a new strategy for running their business (Leoncini e Silva, 2004). With the entry of a new management company into the club in 2001, the results show a better commitment to financial efficiency and soccer fans. This can be corroborated with the result of the disclosure index that placed the club in 9th
position, even if the club is presenting unsatisfactory results in sports performance according to CBF.

The disclosure process for Brazilian clubs is in line with the third motivation presented by Verrecchia (2001), which is the managers’ discretion to provide useful information. The institutional reality of each Brazilian club can be one of the determining factors in the process of financial and administrative transparency and, consequently, the quality of accounting information. Another determinant is that although there is a regulatory initiative in accounting procedures and disclosure of sports entities in Brazil, regulation and pressure on managers to provide true and transparent club information is still incipient (Dimitropoulos, 2011).

The updated Accounting Manual for Sports Entities seeks to improve the quality of financial statement information from the base year 2018 publications. It is hoped that clubs with better management processes and better financial structure will achieve better commitment with established standards and provide reliable information to its users. Therefore, the disclosure index presented in the research may change. However, if the new results do not present consistent changes, we will need to verify possible resistances and causes.

6 CONCLUSION

This study identified the mandatory disclosure index of Brazilian soccer clubs ranked by the Brazilian Football Confederation. As an empirical contribution, we verified compliance with standards and adherence to the disclosure of information regarding the financial and sporting performance of each club, especially regarding the adoption of recognition and measurement of players’ contracts as intangible assets.

The change in management in soccer clubs is a phenomenon that has become an important issue in the process of accountability. From the Bosman case to the new reality of recognition of its players as the assets of the club, this significantly increased revenues to levels never seen for sports entities. This fact also happens in the Brazilian scenario, which led to an adjustment of the norms to ensure greater transparency and comparability with international teams.

Firstly, the results showed that the level of disclosure required by each Brazilian soccer club is associated with the participation of intangible assets, the number of revenues, sports performance, location and time experience in disclosing information. Second, the results suggest that the level of compliance of Brazilian club disclosures is not satisfactory. Furthermore, we show that the disclosure index does not have a positive correlation with sports performance as measured by the CBF ranking. Therefore, we found empirically failures to comply with the information provided to stakeholders and that Brazilian soccer authorities could set goals to improve the quality of information in this segment.

Our model did not allow us to infer about the morality of soccer clubs and any association with the efficiency of financial or sports performance. In addition, it is possible to identify as a limitation of the research the impossibility of considering institutional factors that may affect the disclosure index.

As a suggestion for future research, it is suggested to verify if the changes in the Accounting Manual for Sports Entities presented changes in the results of this research. In addition, it is also important to verify the statistical significance of the club's debt level with the level of mandatory disclosure, since the reality of the control of Brazilian clubs' debts is a trend, given the constant presence of equity deficits over the years.
REFERENCES


Júnior, G., & Ferreira, F. A. (2018). Evidenciação do ativo intangível nas demonstrações contábeis de clubes brasileiros de futebol: um estudo à luz do CPC 04 e das NBC (ITG 2003 (R1)).


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**Resumo**

**Objetivo:** O objetivo deste artigo é avaliar o nível de divulgação obrigatória de clubes de futebol brasileiros, a fim de verificar a existência de uma relação entre divulgação contábil, desempenho financeiro e esportivo dos clubes.

**Método:** Empregamos um método de pesquisa qualitativa e quantitativa, desenvolvendo empiricamente um índice de divulgação. Os dados foram coletados nos sítios dos clubes de futebol e de suas federações. A amostra é composta por 76 clubes de futebol brasileiros pertencentes ao ranking da Confederação Brasileira de Futebol. Uma regressão linear múltipla permitiu investigar a relação entre as principais variáveis do estudo.

**Originalidade/Relevância:** O trabalho contribui para uma discussão sobre o desempenho do futebol e a conformidade do reconhecimento, mensuração e divulgação dos atos e fatos contábeis dos clubes de futebol brasileiros. Essas entidades se tornaram importantes fontes de negócios, tornando os stakeholders mais interessados na transparência de suas transações.

**Resultados:** Existe uma baixa adesão das entidades esportivas aos requisitos obrigatórios de divulgação. Observou-se que dos 36 itens de divulgação obrigatória, nenhum clube cumpriu 100% das regras de reconhecimento, mensuração e evidenciação contábil. Enquanto a média de todos os clubes foi de 33,8%, o Clube de Regata Flamengo e o Sport Club Internacional registraram 88,9% da divulgação obrigatória.

**Contribuições teóricas/metodológicas:** Concluímos que o nível de divulgação obrigatória está positivamente relacionado ao ativo intangível, receita, desempenho esportivo, localidade do clube e o período de experiência na divulgação dos itens contábeis obrigatórios.

**Contribuições sociais/para a gestão:** Essa análise pode fornecer uma compreensão do segmento, permitindo que o stakeholder possa observar o nível de organização econômica e esportiva dos clubes de futebol brasileiros, assim como seu grau de comprometimento com a transparência e a governança.

**Palavras-chave:** Ativos Intangíveis; Clubes de Futebol; Disclosure Obrigatório; Índice de Disclosure.