



## 'Creative accounting' in the Spanish professional football League: An attempt to dodge the rules economic control?

Rudemarlyn Urdaneta Camacho<sup>a</sup>, Juan Carlos Guevara Pérez<sup>a,b</sup>, Emilio Martín Vallespín<sup>a</sup>, Fernando Llena Macarulla<sup>c</sup>

*a) Department of Accounting and Finance, Faculty of Economics and Business, University of Zaragoza, Zaragoza-SPAIN.*

*b) IGOID Research Group, Department of Physical Activity and Sport Sciences, University of Castilla-La Mancha, Toledo-SPAIN.*

*c) Universidad de Zaragoza - Institute on Employment, Digital Society and Sustainability (IEDIS), Zaragoza-SPAIN.*

<sup>b</sup>Corresponding author.

E-mail address: [jguevara@unizar.es](mailto:jguevara@unizar.es)

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### ABSTRACT

Over the past decade, many studies have analysed the contribution of UEFA's Financial Fair Play (FFP) regulations and the Reglamento de Control Económico (RCE) of the Spanish Football League (LFP) to the financial sustainability of clubs. However, compliance with the regulations may create incentives to adopt accounting practices that seek to "dress up" the financial statements of clubs, deviating from the main objective of presenting a true and fair view of the entity. This study analyses the financial and non-financial factors that lead to earnings management practices in Spanish professional football, to identify the impact that the implementation of the LFP RCE has had on the quality of accounting information. Given the importance of intangible assets in the football industry, as they represent the rights paid for the transfer of players, the study uses Key's (1997) model to consider this item to obtain discretionary accrual adjustments. Subsequently, panel data (FGLS) allows us to identify possible relationships between these adjustments and financial and non-financial variables.

The results show that smaller and more leveraged first division clubs are more prone to manipulate their accounting information after the introduction of RCE. In contrast to previous studies focusing on large teams, the present study provides a comprehensive analysis of one of the most popular European leagues (the Spanish league), considering clubs of different sizes. In addition, the study opens a debate on the appropriateness of specific accounting parameters in the football industry, such as the treatment of intangible assets related to player rights, which are one of the main items used by clubs to implement earnings management practices.

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## Contabilidad creativa en el fútbol profesional español: ¿Un intento de regate al control económico?

### RESUMEN

A lo largo de la última década, numerosos estudios han analizado la contribución del Reglamento de Juego Limpio Financiero (JLF) de la UEFA y del Reglamento de Control Económico (RCE) de la Liga Española de Fútbol (LFP) a la sostenibilidad financiera de los clubes. Sin embargo, el cumplimiento de la normativa puede incentivar la introducción de prácticas contables que intenten "maquillar" los estados financieros de los clubes, desviándose del objetivo principal de mostrar la imagen fiel de la entidad. Este estudio analiza los factores financieros y no financieros que conducen a prácticas de earnings management en el fútbol profesional español, con el objetivo de identificar el impacto que la implantación del RCE de la LFP ha tenido sobre la calidad de la información contable. Dado que el inmovilizado inmaterial tiene una gran importancia en la industria del fútbol, ya que recoge los derechos pagados por el traspaso de jugadores, el estudio utiliza el modelo de Key (1997) para considerar esta partida y obtener los ajustes discretos por periodificación. Posteriormente, los datos de panel permiten establecer posibles relaciones entre estos ajustes y variables financieras y no financieras.

Los resultados muestran que los clubes de primera división más pequeños y más apalancados son más propensos a manipular su información contable tras la aplicación del RCE. A diferencia de estudios anteriores centrados en grandes equipos, el presente estudio proporciona un análisis exhaustivo de una de las ligas europeas más populares (la española) considerando clubes de diferentes tamaños. Además, el estudio abre un debate sobre la idoneidad de determinados parámetros contables dentro de la industria del fútbol, como el tratamiento de los activos intangibles ligados a los derechos de los jugadores, evidenciado como una de las principales partidas utilizadas por los clubes para introducir prácticas de gestión de beneficios.

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## 1. Introduction

Spanish football is a socio-economic phenomenon that attracts extensive media coverage and generates many financial resources of an unlimited nature, which in recent years has made its clubs among the richest in the Football Money League rankings (Deloitte, 2019; 2020).

Their results at both national team and club level have been outstanding in recent decades, winning two European Championships (2008 and 2012) and one World Cup (2010), and attracting top-level players who make their league one of the most visible in the world, with some of the world's best football stars competing there and their clubs usually occupying top positions in European competitions.

Despite the reform of the Sports Law in 1990, the main objective of which was to bring about an economic transformation by transforming the clubs into public limited companies (except for Real Madrid, FC Barcelona, Ath. Bilbao and Osasuna), the finances of Spanish football continued to show debts and losses (Barajas & Rodríguez, 2010). Over the next two decades, the professional league continued to accumulate debts and losses, to the point where the sustainability of the business model was questioned and there was a risk that the competition would be distorted by financial doping. All of this explains why the Spanish football industry is still in need of efficient management that can reconcile the sporting spectacle with financial results.

The same financial problems affect almost the entire European football industry (Barajas & Rodríguez, 2010), as they operate under soft budget constraints, so that very few go bankrupt, although they chronically operate on the brink of financial collapse and with the same inefficiency that could be observed in companies in socialist or post-socialist economies (Storm & Nielsen, 2012).

However, Spain is one of the most affected countries, with clubs facing debts to players, workers, suppliers and even the tax authorities. Between 2004 and 2012, more than half of all first and second division teams filed for bankruptcy. In most cases, they were rescued by foreign investors known as 'sugar daddies', with the risk to the sustainability of the industry that this type of investment of dubious origin is volatile (Urdaneta-Camacho et al., 2022).

Faced with this situation, UEFA and some countries such as Spain have developed regulations such as UEFA's Financial Fair Play (FFP) regulations in 2012 and the Financial Control Regulations (RCE) of the Spanish Football League (LFP) in 2014. As a result of the new regulations, many clubs have had to adopt strict rationalisation measures at the cost of limiting their sporting potential (Plumley et al., 2019). However, at the same time, these pressures have created problems between regulators as principals and clubs as agents (Schubert, 2014; Sánchez et al., 2017). This has led clubs to attempt to 'make up' their financial statements and deviate from the primary objective of presenting a true and fair view of the business (Healy & Wahlen, 1999). These accounting practices are known as earnings management.

There are specificities in the football business that make it advisable to introduce specific parameters in the measurement of the adjustments practised, which are not usually considered in other sectors, such as the importance of intangible assets within assets, since this item includes the rights paid for the transfer of players. However, the literature on accounting earnings management in sports is scarce (Guevara et al., 2021). The studies by Dimitropoulos (2011) and Dimitropoulos et al. (2016), which analyse teams from the main European professional football leagues, stand out and

point out that the generalisability of such findings remains an open empirical question, as there are no studies analysing professional leagues from any country. In this respect, the present study aims to fill this gap in the literature.

This study analyses the financial and non-financial factors that lead to earnings management practices in Spanish professional football, to identify the impact that the implementation of the LFP's RCE has had on the quality of accounting information.

European professional football clubs operate under soft budget constraints, such that very few go bankrupt, although they are chronically on the verge of financial collapse, and with the same inefficiency that can be observed in firms in socialist or post-socialist economies (Storm & Nielsen, 2012). This study responds to the interest in analysing the extent to which the increased accountability and financial control requirements of football regulators may lead clubs to adopt practices that circumvent these regulations.

Therefore, among the practical implications of the study, its usefulness stands out in identifying the clubs that need to be monitored in terms of their finances, as well as envisioning the most sensitive parameters given the recent entry into force of the new UEFA Club Licensing and Financial Sustainability Regulations for the 2022-2023 season (UEFA, 2022).

The paper is divided into the following sections: after the introduction, section two contextualises the subject area and the literature by briefly outlining the background to the LFP's RCE, the state of the art in Spanish football finance, the theoretical framework to which the study subscribes and the formulation of hypotheses. Section three develops the methodology used. Section four contains the analysis of the results, which are discussed and commented on in section five. Finally, section six presents the conclusions and describes future developments.

## 2. Previous literature

To ensure the financial viability of clubs, UEFA adopted the FFP regulation in 2010. UEFA monitors the financial situation and performance of clubs since accounting information, which requires clubs to maintain a 'break-even point' between their income and expenditure (Morrow, 2013; UEFA, 2010). To this end, the organisation prescribes strict penalties, such as fines or exclusion from European competitions, for clubs that deviate from the prescribed parameters (Solberg & Haugen, 2010). Furthermore, the inability to meet the financial thresholds set by FFP would automatically lead to a loss of revenue, which would threaten the financial viability of most clubs. UEFA reports predicted that FFP would bring about a change in mentality for many clubs, leading them to adopt a more balanced approach to managing their business (UEFA, 2010).

In line with the FFP regulations, in 2014 the LFP introduced additional financial controls that tightened its supervision, both of past seasons (*a posteriori*) and of budgets for future seasons (*a priori*), through the RCE of clubs and sports limited companies (*Sociedades Anónimas Deportivas* (SADs)) affiliated to the Spanish LFP. The general objective of the RCE is to "promote the solvency of clubs and SADs" (art. 1-2). In addition, among its specific objectives, it proposes to "improve the economic and financial capacity of clubs, increasing their transparency and credibility" (art. 1-3a) and 2-aFFP (UEFA, 2010). Some national regulations, such as the Transparency Law (TL/19, 2013), have contributed to improving the disclosure of financial information, although there is still

some way to go in terms of accountability (Urdaneta et al., 2021).

### 2.1. Win a good reputation and sleep at ease

Unfortunately, European football finance has often not enjoyed a good reputation (Lago et al., 2006; Storm & Nielsen, 2012). This fact has led to an extensive academic production that proves the sector's problems (Andreff, 2007; Barajas & Rodríguez, 2010; 2014), due to a culture in which maximising performance on the pitch permeates the club's management logic (Kennedy, 2013), and whose bad practices have motivated the creation of European regulations such as the UEFA FFP and national regulations such as the LFP's RCE.

However, despite this bad reputation, the finances of European football have improved in recent years due to the new regulations (Franck, 2018), reducing their losses, especially in Spain (Ahtiainen & Jarva, 2020; Barajas et al., 2019). In this sense, the FFP can be considered the first regulation in European football that tries to transform the traditional approach of "utility maximisation" (UM), where wins are prioritised, into a "profit maximisation" (PM) approach, which is most common in the American context. The clubs have better financial health compared to UM-oriented clubs and they were more likely to comply with the FFP regulations (Nicolillo & Zampatti, 2016; Wilson et al., 2013).

In Spain, there has been a tendency to prioritise on-field victories (UM) over the American contextual model (PM). In the early 21st century, Spanish football reached its competitive peak, winning two Euro Cups (2008 and 2012) and the 2010 World Cup. Some of the world's greatest footballers played in the Spanish league, and Spanish clubs often occupied top positions in European competitions and in the UEFA coefficient ranking, as well as being among the highest-earning teams in UEFA (Urdaneta et al., 2021). However, Spanish football may be undergoing a paradigm shift in which the classic UM approach is being replaced by a PM approach, and in which the logic of winning on the pitch is being eclipsed by the search for improvements in its financial health (Urdaneta-Camacho et al., 2022), even if this means a deterioration in its competitive balance (Plumley et al., 2019).

In this respect, studies point out that the results of these regulatory efforts may differ from the objectives intended by the regulators and may worsen rather than improve the financial performance of clubs (Dermit-Richard et al., 2019). Therefore, the imposition of regulatory control related to economic-financial information could lead to a deterioration in accounting quality (Dimitropoulos et al., 2016).

### 2.2. A look at the finances of Spanish football

According to the latest executive summary of the *Consejo Superior de Deportes (CSD)*, professional competition as a whole has made a profit for the eighth consecutive year (CSD, 2020). In this respect, the regulations introduced have allowed for greater disclosure of financial information and improvements in the economic figures of the sector (Urdaneta et al., 2021).

The overall objective of the LFP's RCE is to "promote the solvency of Clubs and SADs" (Art 1-2). This requires protecting its stakeholders by guaranteeing the clubs' ability to pay (Art 1-3b), which requires a look at such behaviour in the short and long term.

Firstly, Working Capital (WCap), understood as current assets minus current liabilities, has allowed us to observe the

operational capacity of clubs in the short term, before the FFP regulations (García & Rodríguez, 2003), and after their implementation (Barajas et al., 2017; Dermit-Richard et al., 2019; Sakinc, 2014).

The WCap Fund is of special interest, being one of the few indicators analysed in the Balance Sheets periodically published by the CSD on the Economic and Financial Situation of Spanish Football (CSD, 2020). According to the latest report (1999-2020), the mean WCap for the whole period is negative, worsening by more than 53% during the 2019-2020 season, being the worst figure in the last 20 years (CSD, 2020). This is due to an increase in short-term debts as consequence of the acquisition of commitments with the Spanish Official Credit Institute (ICO) to cope with the impact of COVID-19 (CSD, 2020). Therefore, despite regulatory efforts, clubs haven't been able to have sufficient means to meet their commitments in the short term.

Secondly, leverage (LEV), measured by the ratio of total debts to total assets, has been a widely used indicator in the literature seeking to analyse the impact of UEFA's FFP (Ahtiainen & Jarva, 2020; Dimitropoulos & Scafarto, 2019; Dimitropoulos & Koronios, 2018). This is due to the propensity of European football clubs to resolve debt financing and sustain severe losses to enhance their on-field performance (Dermit-Richard et al., 2019; Dimitropoulos & Tsagkanos, 2012).

In Spain, a 2019 annual report reflects a decrease in leverage ratio (Sánchez et al., 2019), even though the total debt of Spanish clubs has increased after the regulations (CSD, 2020). This is perhaps because assets have also increased in greater proportion (Ahtiainen & Jarva, 2020), which has allowed the debt ratio to decrease in recent years, improving the ability of clubs to meet their commitments.

Concerning this increase in assets, it is important to note that in Spain, since the 1996-1997 season, the value of intangible assets has exceeded that of tangible assets, and has been growing steadily due to the inclusion of the price paid for players' rights in this item (García & Rodríguez, 2003). These rights are amortised on a straight-line basis for the acquisition contracts, although clubs must establish procedures to verify the reasonableness of the net book value of these rights and account for the corresponding impairment if the market value is estimated to be lower. This is of concern as intangible assets support most clubs' debt, despite the volatility of this item as the value of players depends on market behaviour. Some clubs have also included as intangible assets the estimated value of the club's seat in the league, calculated according to a study commissioned by the LFP itself. However, this item does not meet the accounting criteria for recognition as an asset and therefore should not appear on the balance sheet. This practice has been noted as a reservation in the audit reports of some clubs, such as Real Zaragoza S.A. (ADYTUM, 2021).

Finally, to observe the improvements in the economic and financial capacity of clubs envisaged by national and international regulators, the economic profitability (Return On Asset-ROA), represented by operating income before taxes and interest divided by total assets, has been a common variable when assessing the performance of clubs under FFP (Dimitropoulos, 2016; Dimitropoulos & Koronios, 2018; Mareque et al., 2018; Urdaneta et al., 2021). In Spain, clubs have moved from a negative result to profit from the 2012-2013 season onwards (CSD, 2020), which justifies the improvements in ROA observed in previous studies (Urdaneta et al., 2021).

### 2.3. Theoretical framework: Agency problems and accounting earning management in sport

Because of the separation between owners and managers, the agency theory (Jensen & Meckling, 1976) and its complementary variant, the contractual network theory, have their origin in economic theory. This phenomenon has made it possible to develop a positive accounting theory (Watts & Zimmerman, 1978) based on which to establish criteria for the preparation of accounting information, assuming that the interests of management are not necessarily congruent with those of shareholders. In this context, the basic point of inductive neo-positivism (Watts & Zimmerman, 1978) is that it explains the regulatory process through the political model, with the consequent abandonment of the theoretical framework, underpinning some incentives for companies to manipulate accounting figures. Hence, procedures have been established to mitigate information asymmetries and to assess the efficiency with which management performs its functions (Brickley et al., 1995).

Firms' incentives to manipulate can be classified into three groups: contractual incentives, political and governmental incentives, and valuation incentives. According to the debt theory (Watts & Zimmerman, 1978, 1986), those firms close to violating debt contracts have incentives to increase the profit figure and thus avoid the negative consequences of violating the terms of the agreement. According to political cost theory, the greater the tax and regulatory issues, the greater the incentives for management to manipulate the outcome downwards (Watts & Zimmerman, 1978, 1986).

Countless studies on accounting earning management have subscribed to this theoretical framework, forming robust literature that offers multiple alternatives to address this problem from different types of organisations and environments (Callao et al., 2014). In this regard, some studies analyse the introduction of new regulations in the European environment (Callao & Jarne, 2010). More recent studies have looked at earning management practices in the Spanish environment (Arcas-Pellicer et al., 2022), specifically in the sports industry (Guevara et al., 2021).

On applying these assumptions in professional football within the framework of the profit-oriented "utility paradigm", the implementation of financial regulations, such as the LFP's RCE, leads to possible valuation incentives according to which accounting statements serve to value the organisational performance of clubs based on their profits (O'Byrne, 1990; Watts & Zimmerman, 1986).

This new scenario brings with it a concern for political costs, understood as the costs derived from the economic regulations that are set on the clubs. Therefore, in the framework of Regulatory Theory, we can understand the role of accounting information in the regulatory process to which a club is subjected (Jensen & Meckling, 1976). Thus, by introducing RCE, the LFP has the power to carry out revenue redistribution among clubs by setting fines, penalties etc. Thus, under the economic theory of regulation, the set of rules existing at a given time is the resulting equilibrium between two opposing forces, those who receive transfers and those who grant them, from the ratio of which it follows that the more visible firms tend to be more regulated (Watts & Zimmerman, 1986).

Based on the above, one would expect that management's reaction to environmental pressures would be to choose the accounting methods that are most in line with their interests to somehow steer the profit and loss figure or other such measures to their advantage (Jensen, 2003; Smith, 1976).

Therefore, the introduction of the new regulations has

brought with it a scientific production in which agency problems are evidenced from different perspectives (Sánchez et al., 2017), either through the increase of fees for auditing services (Mareque et al., 2018), the hiring of reputable firms (Big 4) to signal to the market and regulators that they can comply with regulatory requirements (Dimitropoulos, 2016), or the quality of accounting information itself (Dimitropoulos, 2011; Dimitropoulos et al., 2016). In the latter respect, accounting earning management (EM) is the most used methodology through the estimation of discretionary accruals (DA). Accruals are the accounting adjustments between cash flows and income and depend on managerial estimates and assumptions; thus, they are subject to managerial discretion and manipulation. DA are defined as that part of income or expenses that do not involve cash flows (Guevara et al., 2021).

### 2.4. Formulation of the Hypotheses

The sporting performance of a club is often a determinant of its financial performance (Barajas et al., 2005; Szymanski & Kuypers, 1999), and has been a common variable when considering the impact of FFP regulation on European clubs (Dimitropoulos & Scafarto, 2019; Mareque et al., 2018). This fact gives a financial advantage to clubs competing in the first division, making them less vulnerable to engaging in earning management practices. However, the scope of such studies is limited, as UEFA FFP only concerns clubs participating in UEFA competitions. In this respect, the present study is contextualised in Spain, where La Liga's RCE involves all first and second division clubs. *A priori*, one might expect that second division clubs would be more interested in implementing earning management practices to try to show a better picture of their financial situation given they have significantly fewer revenues while some expenses are difficult to reduce. However, introducing earning management practices requires not only a willingness to do so, but also the availability of assets and accounting items that can be used to apply earning management. Since second division clubs tend to move much fewer resources, particularly intangible assets from player transfers, their scope to introduce earnings management practices is more limited. Based on this argument, we formulated our first hypothesis as follows:

**H1.** *First division clubs have a higher level of earnings management.*

Regarding the sporting performance of clubs, other aspects to consider as possible determinants of earning management practices are the threshold of relegation and promotion between the first and second divisions and participation in European tournaments. On the one hand, the enormous pressure due to the economic impact of being in one or the other division could be a stimulus to introduce earning management practices in those clubs that are close to relegation or promotion. On the other hand, earning management could be determined by increased revenues from participation in European tournaments and being under the regulatory scrutiny of UEFA FFP. Therefore, following the postulates of previous literature suggesting that environments with higher volatility in results are more prone to earning management practices (García-Osma et al., 2005; Paiva et al., 2019) our second and third hypotheses are as follows:

**H2.** *Clubs in a promotion or relegation situation have a higher level of earnings management.*

**H3.** *Clubs participating in European tournaments have a higher level of earnings management.*

Despite the efforts of the LFP's RCE, most clubs are not able to have sufficient means to meet their short-term commitments (CSD, 2020). In this regard, the WCap Fund has proven to be of particular interest when assessing the financial performance of Spanish football, noting that on average it has not only been negative over the last 20 years but also shows its worst record during the 2019-2020 season (CSD, 2020). However, this situation is not homogeneous in all cases, and we can find clubs with a systematically positive WCap and others with continuous liquidity risks. We do therefore expect those clubs with a lower WCap to have more incentives to introduce performance management practices to offer a more balanced liquidity position, which leads us to formulate our fourth hypothesis as follows:

**H4.** *The WCap of clubs is inversely related to the level of earnings management.*

For the quantification of financial performance, it is common to use ratios such as financial profitability (ROE-Return on Equity) and economic profitability (Return On Asset-ROA). Although the most common ratio when evaluating the financial profitability of a company is the ROE, the number of teams reporting negative equity in the football industry distorts the comparison between clubs and makes this ratio lose part of its meaning (Sánchez et al., 2016). For that reason, because the denominator in ROA is the number of total assets of the teams, which never assumes negative values, the specialised literature has been inclined to use ROA as a measure of performance in Spanish football in particular (Barajas & Rodríguez, 2010; Mareque et al., 2018), and European football in general (Dimitropoulos et al., 2016; Dimitropoulos & Tsagkanos, 2012; Dimitropoulos, 2016).

The accounting data, and especially ROA, are generally better indicators of financial performance than measures based on market values, such as Altman's Z-score or Tobin's Q (McGuire et al., 1988). In addition, this possibility is ruled out because no Spanish football club is listed on the stock market. Therefore, following previous studies (Dimitropoulos, 2016; Dimitropoulos & Koronios, 2018; Mareque et al., 2018; Urdaneta et al., 2021), we have used ROA (represented by operating income before taxes and interest divided by total assets) to test our fifth hypothesis (H5)

**H5.** *ROA is inversely related to the level of earnings management.*

The European football clubs seem to be more win maximizers than profit maximizers and are willing to resolve debt financing and sustain severe losses to enhance their on-field performance (Dimitropoulos & Tsagkanos, 2012). In Spain, according to the latest CSD executive summary, debt levels have increased across the board (with creditors, credit institutions and other private debts) (CSD, 2020). This fact could pave the way for a breach of the LFP's RCE that would compromise the clubs' ability to pay when meeting their commitments to their stakeholders (1-3bRCE (LFP, 2016) and 2-bFFP (UEFA, 2010)). Therefore, we believe that leverage (as measured by the ratio of total debt to common equity) will have a positive relationship with earning management because of the tendency to report small positive income, formulating our sixth hypothesis as follows:

**H6.** *Leverage of football clubs is directly associated with the level of earnings management.*

Firm size is positively related to business performance and viability because it can lead to economies of scale in operations and greater control of resources by stakeholders (Orl-

itzky, 2001). Additionally, the potential for regulatory scrutiny increases as firms become larger and more profitable (Van Tendeloo & Vanstraelen, 2005; Watts & Zimmerman, 1990). This behaviour has been confirmed in previous studies on clubs in major European professional football leagues (Dimitropoulos et al., 2016), where the vulnerability of small clubs exposes them to engage in earning management practices. Therefore, we expect a negative sign in this relationship, formulating our seventh hypothesis as follows:

**H7.** *The size of clubs is inversely related to the level of earnings management.*

The need also arises to consider whether the observed changes are due to a process of football clubs maturing because of financial regulations. We have focused on the implementation of the LFP's RCE since it involves all first and second division clubs, unlike the UEFA's FFP which only affects clubs with a chance of participating in European competitions.

Furthermore, the Spanish LFP's RCE is stricter than UEFA's FFP as it includes ex-ante and ex-post controls of clubs' finances, allowing budgets and spending plans (such as player costs) to be drawn up before the start of the season, thus allowing situations of excessive indebtedness or financial imbalance to be detected before they occur (RCE, 2014).

Therefore, our eighth and last hypothesis is as follows:

**H8.** *Earning management practices have increased owing to the implementation of the RCE standards.*

### 3. Methodology

#### 3.1. Sample and Data

The sample initially comprised the 42 clubs in the top two Spanish professional football leagues; clubs that did not provide full financial reports for the period under study (from 2011 to 2021;  $t = 11$ ) or that were relegated to the third tier in any of these two seasons were excluded. Finally, we have obtained a balanced panel of 25 clubs ( $n = 25$ ), of which all of them are SADs (which excludes Real Madrid, FC Barcelona, Athletic Bilbao and Osasuna because they are the only Spanish football clubs that are not private limited companies), a total of 275 observations. The financial data has been manually processed and extracted from the Iberian Balance Analysis System database (SABI) and the transparency portals on the club's websites.

Although the sample size is comparatively small compared to the usual ones in this type of studies, it accounts for almost the entire population. This limitation is characteristic in the case of studies focused on the football industry, as has been observed when analysing the Italian league (Dimitropoulos & Scafarto, 2019; Ghio et al., 2019), Spanish (Urdaneta-Camacho et al., 2022; Mareque et al., 2018), French (Dermit-Richard et al., 2019), Croatian (Alajbeg et al., 2022), Greek (Chelmis et al., 2019) among others.

This limitation in the sample size of the domestic leagues (20 teams per category) has stimulated the traditional tendency towards studies based on generic information of the most visible clubs in each league (and therefore not the most representative of reality), obtained through large databases. In this regard, we highlight the importance of the data provided in this study, since, being obtained by hand, they allow greater discrimination of information in a sector characterized by the lack of availability of financial information, and more specifically in Spain, before the implementation of

the Transparency Law (TL, 2013), allowing to reflect the heterogeneity between clubs of different sizes and divisions, so extrapolating the results to environments other than Spain is an open question.

### 3.2. Estimation of Discretionary Accruals

The Discretionary Accruals (DA) as a measure of earning management are the result of subtracting Non-discretionary Accruals (NDA) from Total Accruals (TACC). Because many Spanish clubs do not disclose information on their cash flow statements, TACC are calculated indirectly through a balance sheet approach proposed by Hribar & Collins, (2002) that assumes that the adjustments for a period are obtained by subtracting the change in current liabilities from the change in current assets that are not cash, for that given period, as can be seen in the following expression:

$$TACC_{it} = (\Delta CA_{it} - \Delta Cash_{it}) - (\Delta CL_{it} - \Delta STDEBT_{it}) - DEP_{it} \quad (1)$$

where:

- $TACC_{it}$  = Total accruals in year  $t$  for club  $i$ .
- $\Delta CA_{it}$  = the change in current assets of club  $i$  in period  $t$ ;
- $\Delta CL_{it}$  = the change in current liabilities of club  $i$  in period  $t$ ;
- $\Delta Cash_{it}$  = the change in cash and cash equivalents of club  $i$  during period  $t$ ;
- $\Delta STDEBT_{it}$  = the current maturities of long-term debt and other short-term debt included in current liabilities during period  $t$ ;
- and  $DEP_{it}$  = depreciation and amortization expense of club  $i$  during period  $t$ .

All variables are weighted by lagged total assets ( $TA_{t-1}$ ) to control for scale differences.

To differentiate between the discretionary and nondiscretionary parts of TACC, we have chosen to use the Key (1997) model, which adds the intangible fixed assets to the (Jones, 1991) model, in which the expected adjustments are calculated as a function of the variation in gross income and property, plant and equipment (PPE), which is controlled through depreciation and amortization expense adjustments, and where all variables in the accruals expectations model are scaled by previous year assets to reduce heteroscedasticity.

The choice of this model is because football players' transfer rights are the core assets in Football Clubs Public Companies (SADs). They are partially recognized as intangible fixed assets in accounting, which makes them particularly important in the football industry (Martín Lozano & Carrasco Gallego, 2011; Rodrigues, 2008).

Based on this criterion, the discretionary accrual will be the residuals obtained by applying the generalized least squares (GLS) technique to the following expression:

$$TACC_{it}/TA_{it-1} = \alpha_1(1/TA_{it-1}) + \alpha_2(\Delta REV_{it}/TA_{it-1}) + \alpha_3(PPE_{it}/TA_{it-1}) + \alpha_4(INMAT_{it}/TA_{it-1}) + \varepsilon_{it} \quad (2)$$

where:

- $TACC_{it}$  = Total accruals in year  $t$  for club  $i$ .
- $TA_{it-1}$  = Total assets in year  $t - 1$  for club  $i$ .
- $\Delta REV_{it}$  = Revenues in year  $t$  less revenues in year  $t - 1$  for club  $i$ .
- $PPE_{it}$  = Gross property, plant and equipment in year  $t$  for the club  $i$ .

$INMAT_{it}/TA_{it-1}$  Intangible assets in year  $t$  divided by total assets in year  $t-1$  for club  $i$ .

As in Dimitropoulos et al., (2016), we have used the GLS model for its usefulness when there are heteroskedasticity problems (see Table 4). These models provide a more efficient and consistent estimates in the presence of these problems, allowing for more accurate analysis of the data.

### 3.3. Conditioning factors of Earning Management

The absolute value of the discretionary adjustments obtained from the residuals in equation (2) is our measure of earnings management. The absolute value is used because the sign is not relevant, only the magnitude. In this sense, earnings management can involve accruals that increase or decrease revenues to achieve earnings targets. A higher value indicates a higher level of manipulation in financial statements, hence lower earnings quality (Dimitropoulos, 2011; Dimitropoulos et al., 2016). To test our research hypotheses, we introduced the absolute value of DA as the dependent variable in the following model:

$$|DA_{it}| = \alpha_0 + \alpha_1 DIV_{it} + \alpha_2 UpDow_{it} + \alpha_3 EUR_{it} + \alpha_4 WCap_{it-1} + \alpha_5 ROA_{it-1} + \alpha_6 LEV_{it-1} + \alpha_7 SIZE_{it} + \alpha_8 RCE_{it} + \varepsilon \quad (3)$$

Where the higher the absolute value of discretionary accruals  $|DA|$ , the greater the level of earnings management. To test the first three hypotheses, we have considered dummy variables that take values 1 for the first division and 0 otherwise to test H1, DIV (Ahtiainen & Jarva, 2020), value 1 in case of promotion or relegation and 0 otherwise to test H2 UpDown, and value 1 in case of competing in European tournaments and 0 otherwise to test H3 EUR. Given its economic-financial nature, we have decided to lag the following three variables ( $WCap_{it-1}$ ,  $ROA_{it-1}$  and  $LEV_{it-1}$ ) to address possible endogeneity problems by reverse causality with our dependent variable. Therefore, The  $WCap_{it-1}$  is the difference between current assets and current liabilities of the previous period. In this way, to test H4 we will know whether the margin of manoeuvre available to clubs to honour their short-term commitments is a condition of earning management.

The model also incorporates the  $ROA_{it-1}$  of the previous period (represented by operating income before taxes and interest divided by total assets) to test our fifth hypothesis (H5). To contrast H6 incorporates the variable leverage ( $LEV_{it-1}$ ) of the previous period as a variable widely used in the literature (Ahtiainen & Jarva, 2020; Dimitropoulos, 2011; Dimitropoulos et al., 2016; Dimitropoulos & Scafarto, 2019; Dimitropoulos & Koronios, 2018). This variable is measured by the ratio of total debts to total assets, since the more leveraged clubs are more likely to engage in earning management practices.

Additionally, the model incorporates two variables of interest to test the last two hypotheses. Firstly, to test our seventh hypothesis (H7), model equation (3) considers the natural logarithm of total assets ( $\ln TA$ ) at the end of the fiscal year as a proxy variable ( $SIZE_{it}$ ) for club size, a widespread method to normalize potentially biased values in financial studies (Guevara et al., 2021), and that has proven to be an important factor concerning the quality of accounting in previous research in the sports field (Dimitropoulos, 2011; Dimitropoulos et al., 2016). In this regard, larger clubs are expected to have minus earning management practices, as the effect of regulatory scrutiny increases as companies become

larger (Van Tendeloo & Vanstraelen, 2005; Watts & Zimmerman, 1990). Secondly, to test our eighth and last hypothesis (H8), we have considered adding the dummy variable  $RCE_{it}$  to the model, which is intended to capture the effect of the new regulation. This variable takes value 0 for seasons before the RCE implementation (2011 to 2014) and value 1 for those after the regulation (2015 to 2021).

#### 4. Results

**Table 1. Descriptive statistics of the discretionary accruals ( $|DA|$ )**

Year	<i>n</i>	Minimum	Maximum	Median	Mean	Desv st
2011	25	-0,40936	0,537	0,035	0,080	0,288
2012	25	-0,40315	0,303	0,010	-0,029	0,197
2013	25	-0,41779	0,337	-0,009	-0,022	0,170
2014	25	-0,76385	0,515	-0,018	-0,049	0,319
2015	25	-1,07397	0,472	0,014	0,006	0,317
2016	25	-0,40905	1,017	-0,114	-0,013	0,306
2017	25	-1,31628	0,295	-0,010	-0,068	0,355
2018	25	-1,00548	0,345	-0,060	-0,063	0,251
2019	25	-0,34987	0,511	0,008	0,005	0,165
2020	25	-0,22265	0,285	-0,025	-0,003	0,145
2021	25	-0,20547	0,193	-0,020	-0,006	0,108

Source: Own elaboration.

When analysing the medians of the DA (Table 1), a predominance of negative adjustments is observed, which suggests a tendency to manage profits downward. However, the large differences between maximum and minimum values as well as between means and medians are evidence of heterogeneity in the observations for each year.

#### 4.1. Multivariate Analysis

Model equation (3) has been operationalized with the GLS technique from a balanced panel of 25 clubs ( $n = 25$ ) over the 11 seasons ( $t = 11$ ) in which clubs have published their audits financial statements/reports, for a total of 275 observations. The model was also tested using the (Doornik & Hansen, 2008) normality test. The findings indicate that all the residuals in the model have a normal distribution with a significance level of 1%.

The descriptive statistics (2011-2021) for equation (3) in Table 2 also reveal a large heterogeneity in the financial indicators and the size of the clubs in the sample. The negative mean and median values of the WCap variable highlight the liquidity problems faced by most clubs. On the other hand, there is a moderately low economic performance, below 5% on average in both divisions (ROA= 0.033 and 0.0190 respectively), although almost half of the clubs are loss-making and there is an unusually large divergence between the maximum and minimum values. High levels of leverage are also observed in both divisions, on average close to 90% of assets (LEV=0.841 in first division and LEV=0.8498), which justifies that the control of indebtedness is one of the aspects on which the RCE places the greatest emphasis. Moreover, some clubs still show a leverage higher than 1, which in any other industry would imply a situation of technical bankruptcy as the entity's equity is negative.

In general terms, there are no high correlation coefficients between the variables in the model (see Table 3). In this case, the highest coefficients (>0.5) are presented by the Size variable concerning DIV, EUR and WCap, which is logical if we consider that the largest teams tend to be part of the first division, participate in European competitions and have a higher WCap, although this study only considers SADs, which excludes the two largest clubs, Real Madrid and FC Barcelona.

**Table 2. Descriptive statistics first and second division (2011-2021) for equation (3)**

		$DA_{it}$	$DIV_{it}$	$UpDow_{it}$	$EUR_{it}$	$WCap_{it-1}$	$ROA_{it-1}$	$LEV_{it-1}$	$SIZE_{it}$	$RCE_{it}$
1° DIVISION	<i>n</i>	144	144	144	144	144	144	144	144	144
	Minimum	0.005	1	0	0	-358750.58	-1.051	0.316	16.306	0
	Maximum	1.074	1	1	1	36004.96	0.571	2.195	20.817	1
	Median	0.123	1	0	0	-20233.22	0.033	0.841	18.479	1
	Mean	0.158	1	0.167	0.326	-44075.445	0.03	0.866	18.524	0.736
	Desv st	0.171	0	0.374	0.471	70680.314	0.183	0.36	0.98	0.442
2° DIVISION	<i>n</i>	131	131	131	131	131	131	131	131	131
	Minimum	4E-04	0	0	0	-28955.714	-1.1547	0.0668	13.4947	0
	Maximum	1.316	0	1	1	17867.59	0.8624	3.8392	18.4366	1
	Median	0.134	0	0	0	-2926.5803	0.019	0.8498	16.7368	1
	Mean	0.188	0	0.1145	0.0076	-4063.5851	-0.0075	0.9136	16.6178	0.7176
	Desv st	0.191	0	0.3196	0.0874	7383.5825	0.2509	0.6058	1.0893	0.4519

DA: Discretionary accruals, its a proxy variable for earning management captured through the error term of the model equation (3). SIZE: is the natural logarithm of end-of-year total assets. Working capital is expressed in thousands.

**Table 3. Pearson Correlation matrix (2011-2021) variables equation (3)**

Variable	DA_Abs	Div	UpDow	EUR	WC	ROA	LEV	SIZE	RCE
DA_Abs	<b>1</b>								
Div	-0.0833	<b>1</b>							
UpDow	<b>0.2704</b>	0.0747	<b>1</b>						
EUR	<b>-0.1793</b>	<b>0.4194</b>	<b>-0.1869</b>	<b>1</b>					
Wcap	0.0960	<b>-0.3635</b>	0.1131	<b>-0.4881</b>	<b>1</b>				
ROA	<b>-0.1671</b>	0.0863	<b>-0.1180</b>	0.0014	0.0519	<b>1</b>			
LEV	<b>0.2672</b>	-0.0481	0.1005	-0.0897	-0.0931	<b>-0.1847</b>	<b>1</b>		
Size	<b>-0.2211</b>	<b>0.6788</b>	-0.0285	<b>0.5460</b>	<b>-0.5737</b>	0.0537	-0.1024	<b>1</b>	
RCE	-0.0249	0.0208	-0.0085	0.0020	0.7970	<b>0.2355</b>	<b>-0.3045</b>	<b>0.1214</b>	<b>1</b>

Note: Values in bold are different from 0 with alpha significance level = 0.05.

4.2. Estimations

The most frequently used panel data models are fixed effects (FE) and random effects (RE) and those are our starting points. To discriminate between these two models, a Hausman test was performed which yielded a Chi-square = 7.00 corresponding to a p-value = 0.4284, which would be recommending the random effects estimates (Model 1). This is also consistent with the data structure of the sample (N>T). The results are satisfactory, both in terms of the expected signs of the estimated parameters and their statistical significance (R2 = 0.5648) (see Table 5).

To guarantee the robustness of the model, it has been necessary to verify the presence of some possible problems such as cross-sectional dependence, serial correlation and heteroscedasticity. In this sense, it has been possible to rule out a problem of cross-sectional dependence from the test (Pesaran, 2015) by obtaining a statistic of 0.319 and a p-value= 0.7496, and the Friedman's test (Friedman, 1937), whose statistic is 9.785 and a p-value= 0.9954. However, we have been able to verify a possible autocorrelation problem with the test proposed by (Wooldridge, 2002) by obtaining an F = 6.882 and a p-value= 0.0149 (< 0.05). Additionally, we perform the Breusch & Pagan (1979) and Cook & Weisberg (1983) tests for heteroskedasticity in a linear regression model, whose results (Chi-square= 152.58 corresponding to a p-value= 0.0000) indicate a heteroskedasticity problem. Finally, we estimated the variance inflation factor (VIF), whose result (Mean VIF = 1.57) indicates that multicollinearity is not an issue.

Table 4. FE vs. RE, Cross-Section Dependence, Heteroskedasticity and variance inflation factor tests

Tests	Model equation (3)
Hausman FE vs. RE test	$\chi^2=7.00$ , Prob.= 0.4284
Pesaran's test of cross-sectional independence	CD=0.319, Prob.=0.7496
Friedman's test of cross-sectional independence	CD=9.785, Prob.= 0.9954
Wooldridge test for autocorrelation	F=6.882, Prob.= 0.0149
Breusch-Pagan / Cook-Weisberg heteroskedasticity test	$\chi^2=152.58$ , Prob.= 0.000
Variance inflation factor for multicollinearity	Mean VIF =1.57

Source: Own elaboration.

The Feasible Generalised Least Squares (FGLS) model presents a solution to these issues, which is why it has been the model selected (Model 2) to interpret the estimates of equation (3), and whose results accompany the preliminary Random-Effects GLS Regression estimates in Table 5.

The results show a positive and significant relationship between clubs playing in the first division (p=0.040\*), clubs in positions close to relegation or promotion (p=0.000\*), and DA, so our first (H1) and second (H2) hypothesis are accepted. We reject our third, fourth and fifth hypotheses because, although a negative relationship is observed between DA and the  $EUR_{it}$ ,  $WCap_{it-1}$  and  $ROA_{it-1}$  variables, as expected, it is not statistically significant. However, the positive relationship between DA and leverage is statistically significant (p=0.001\*\*\*), thus accepting our sixth hypothesis (H6). The seventh hypothesis (H7) is also accepted, as there is a highly significant negative relationship (p=0.000\*\*\*) between DA and club size (SIZE). Finally, a positive and significant relationship between RCE and DA can be observed, so we can accept our octave and last hypothesis (H8).

Table 5. Results of the estimation of equation (3)

	MODEL 1			MODEL 2		
	Random-Effects GLS Regression			FGLS Regression		
	Coefficient	z	Significance	Coefficient	z	Significance
$DIV_{it}$	0.0590	1.99	<b>0.047*</b>	0.0594	2.05	<b>0.040*</b>
$UpDow_{it}$	0.1484	4.85	<b>0.000***</b>	0.1490	4.96	<b>0.000***</b>
$EUR_{it}$	-0.0050	-0.14	0.885	-0.0041	-0.12	0.902
$WCap_{it-1}$	-2.91	-1.11	0.265	-2.91	-1.15	0.251
$ROA_{it-1}$	-0.0708	-1.41	0.158	-0.0721	-1.47	0.142
$LEV_{it-1}$	0.0754	3.39	<b>0.001***</b>	0.0748	3.45	<b>0.001**</b>
$SIZE_{it}$	-0.0458	-3.68	<b>0.000***</b>	-0.0460	-3.81	<b>0.000***</b>
$RCE_{it}$	0.0870	3.06	<b>0.002***</b>	0.0871	3.12	<b>0.002**</b>
Constant	0.7766	3.75	0.000	0.7802	3.88	0.000
R-sq =	0.5648		Time periods =	10		
Number of obs =	250		Number of obs =	250		
Number of groups =	25		Number of groups =	25		

Note: Asterisks indicate statistically significant coefficients at 1% (\*\*\*) , 5% (\*\*) and 10% (\*) levels.

4.3. Sensitivity analysis

To examine the robustness of the findings, we conducted several sensitivity tests to model specification, variable definition and measurement. First, we re-estimated DA using the model of Jones (1991) as modified by Dechow et al., (1995), which corrects the change in sales for the change in receivables. This is because the Jones model does not consider the variations between sales and customers, considering that the variation in sales is non-discretionary, without considering the possible anticipation of these and, with it, the variation in the number of debtors. The results remain unchanged after this modification. Secondly, we replace the absolute value of the DA of the dependent variable in model equation (3) with TACC to capture any problems from possible accrual misspecification arising from the estimation of the (Key, 1997) model. The results remained unchanged after this modification. Third, we include a constant to provide additional control for heteroscedasticity and re-estimate the DAs for the (Key, 1997) model and the results remain qualitatively unchanged. Consequently, our findings are robust to alternative methods for calculating DA.

5. Discussion

One of the contributions of this study has been to apply the adaptation to the model of Jones (1991) introduced by Key (1997) in which intangible fixed assets are considered within the estimation of DA, given the importance of this factor in the football industry. Therefore, the presence of DA opens the way for possible agency problems (Jensen & Meckling, 1976), given the valuation incentives introduced by considering the organisational performance of clubs based on the profits reported in their accounting statements (O'Byrne, 1990; Watts & Zimmerman, 1986).

The results of the analysis have revealed the existence of DA in the application of the accrual principle in the accounting of Spanish first and second division football clubs. Although the number of downward adjustments involving a higher value of assets or profit or loss is higher than upward adjustments, the difference is not significant and therefore no common pattern of behaviour can be observed in these adjustments. However, there is evidence of an intensification of such practices after the implementation of the RCE, which suggests that the establishment of financial monitoring and control mechanisms lead football club management bodies to



pay more attention to the importance of accounting information as a tool to support their financial performance. This behaviour is consistent with the results observed by Dimitropoulos et al. (2016) at the European level after the entry into force of UEFA's FFP, which revealed an attempt by club managers to promote an image of a financially robust organisation at the expense of impairing accounting quality. In this respect, a sign that has traditionally been well appreciated by markets and stakeholders is for organisations to show a certain stability in their financial results, as this predictability conveys confidence in their management. To achieve this objective, organisations often try to smooth out the results by taking advantage of the discretion offered by accounting rules in the valuation of certain transactions (Jacob & Jørgensen, 2007). These practices are neither good nor bad in themselves, if they are not intended to deliberately distort the true and fair view (Walker, 2013).

The analysis reveals some factors that are relevant in identifying the propensity of clubs to introduce earning management practices. In particular, the division in which they participate, the size of the club, leverage and the implementation of LFP's RCE are elements that are related to this phenomenon, while  $WCap_{it-1}$  and  $ROA_{it-1}$  are not significant. The lack of relationship between profitability and earning management practices in Spanish football, in contrast to what has been observed in other sectors (Guidry et al., 1999), is since managerial remuneration is rarely linked to financial performance, nor are dividends usually distributed to shareholders as suggested by the Positive Accounting Theory (Watts & Zimmerman, 1986).

In this respect, it is striking that earning management practices are mainly linked to first division clubs, but at the same time, the size of the clubs is negatively related to earning management practices. The combination of the two relationships puts the spotlight on the smaller first division clubs, those that are supposed to occupy the lower-middle tier of the league table, as the main suspects in earning management information. The fact that larger clubs are less likely to manipulate their accounting figures is a phenomenon that has already been observed in previous studies (Dimitropoulos, 2011; Dimitropoulos et al., 2016) and could be justified, within the framework of Regulation Theory (Jensen & Meckling, 1976), as a consequence of the role of accounting information in the LFP's RCE regulatory process, as more visible clubs tend to be more supervised (Watts & Zimmerman, 1986). In turn, the fact that first division clubs are more likely to introduce profit management practices than second division clubs would contribute to reinforcing our starting hypothesis that one of the main items used by clubs to introduce profit management practices is the accounting of intangible assets linked to players' rights. In the case of second division clubs, the impact of this item is much less relevant as most player movements are made at zero cost, without paying a transfer fee, which limits the ability to introduce profit management practices.

In particular, the results have identified that clubs classified in positions of relegation to the second division or promotion to the first division are more likely to introduce earning management practices. Throughout the 11 seasons analysed, it is observed that many of the clubs that are promoted to the first division are teams that had been relegated 1 or 2 seasons before (e.g. Valladolid, Almería, Betis, Osasuna, Rayo Vallecano, Getafe or Levante). This fact suggests that the probability of promotion to the first division is higher for clubs that have been relegated in the previous two seasons, a period in which La Liga provides financial support to clubs relegated

to the second division to partially compensate for the reduction in revenue (Royal Decree-law 5/2015, April 30th, 2015). The amount of these grants varies according to the volume of revenue in the previous 5 years and the number of seasons they have remained in the first division. These clubs will have additional funding compared to the other clubs, which will allow them to make signings to have a better chance of promotion in sporting terms and to introduce earning management practices. It is evident that clubs in situations close to relegation or promotion are under enormous pressure due to the financial impact of being in one or the other division. In this sense, although the results do not allow us to make a categorical statement in this respect, this situation could lead to the payment of bonuses to third parties and the introduction of earning management practices to camouflage them.

The study also shows a significant positive relationship between DA and leverage (LEV), with the most leveraged clubs being the ones that manipulate more, as has been observed in European clubs (Dimitropoulos, 2011). In the framework of the debt theory (Watts & Zimmerman, 1978, 1986), the results suggest that, on the one hand, smaller clubs are less able to take advantage of economies of scale or to resort to their sources of financing, while on the other hand, more indebted clubs are more exposed to the need to resort to external sources of financing. This positive relationship between the debt ratio and earning management is the most widely analysed and the one on which there is the greatest consensus in the literature on earning management. The underlying idea is that the management of organisations close to defaulting on debt agreements has incentives to artificially increase profit and thus avoid the negative consequences of breaching the terms of the contract (García-Osma et al., 2005). This scenario occurs in the field of football where the economic control regulations of both UEFA and the LFP put special emphasis on limiting the indebtedness of clubs.

An important limitation at the time of conducting this study has been the availability of financial information, as despite the advances brought about by the transparency law, there are still clubs that do not publish their financial information, or that financial information is not available for a certain period, which has negatively impacted the sample size. Another factor that has affected the sample size has been the sporting performance of the clubs, with the consequent survival bias caused by those clubs that have been relegated to the third division during the time series analysed. Consequently, the study sample is close to the total population. The lack of sufficient data due to the small sample size and the lack of heterogeneity of practices necessary to analyze the differences has not allowed us to study the role of corporate governance aspects such as the existence of an audit committee or the presence of external directors that the literature identifies as factors limiting earning management practices.

### 5.1. Managerial insights

The results show that the introduction of economic control standards tied to accounting data in an industry, such as Spanish football, that prioritizes sporting performance over financial performance may not be sufficient to achieve financial sustainability and may lead to a loss of reliability of the information and a deterioration of the competitive balance. In this context, we have observed a deterioration in the quality of accounting that is determined by leverage, the club's size, the division in which they participate and the implementation of LFP's RCE. Clubs are incentivized to manipulate their

accruals to produce a more predictable profit stream.

## 5.2. Practical implications

This study can be a useful tool to identify the clubs that need to be particularly monitored (small clubs that are close to relegation or recently relegated and in financial difficulties) as well as the parameters to focus on (valuation of intangibles).

In this respect, already in Spain, the LFP's RCE contemplated the changes introduced for the regulation of expenses by the new UEFA Club Licensing and Financial Sustainability Regulations (UEFA, 2022), implemented in June 2022 for the 2022-2023 season. However, the new rules provide for relaxation measures that increase the acceptable deviation of clubs' loss thresholds from EUR 30 million to EUR 60 million, whereby many currently sanctioned clubs would normalise their situation. Therefore, the acceptable deviation of expenses could open a loophole that stimulates earning management practices when looking for a break-even point in the clubs' results.

## 6. Conclusions

This study analyses the financial and non-financial factors that lead to earnings management practices in Spanish professional football, with the aim of identifying the impact that the implementation of LFP's RCE has had on the quality of accounting information. For this purpose, a sample of 25 teams competing in the first and second division leagues during a period comprising the 4 seasons before and the 6 seasons after the implementation of the LFP's RCE has been used.

The results confirm the presence of DA in Spanish professional football. Furthermore, following the entry into force of the LFP's RCE, the clubs' earnings management practices have intensified. A first conclusion that can be drawn from this behaviour is that the perception of being subject to stricter scrutiny through financial control regulations awakens greater attention in clubs to the economic information they project through their financial statements. The entry into force of the RCE has therefore reinforced the value of accounting as a communication vehicle for football clubs, since if they did not perceive its relevance, they would not be concerned about introducing discretionary adjustments.

As for the causes of this manipulation, the financial situation of the clubs is not shown to be a particularly determining factor paradoxically, as it is only the leverage of the clubs that has a significant impact on earnings management. The accumulation of debts by clubs generates a greater concern among creditors to monitor the financial situation of the club, which could provide an incentive for managers to adjust the accounting information to reflect the fact that the economic management of the institution has been effective. This incentive may be even greater in situations such as those that have occurred with some frequency in recent years, with the need to refinance debts or carry out capital increases with the entry of new shareholders.

On the contrary, it is the institutional characteristics and sporting situation of the clubs that drive the introduction of earnings management practices. In this sense, the results identify smaller first division clubs as the most likely to manipulate information. Clubs in positions of relegation to the second division and promotion to the first division are the most likely to engage in earning management practices as they experience significant variations in operating income and expenses with the change of division that may affect

the financial balance of the entity and compliance with economic control rules. Additionally, the lesser media coverage to which these smaller clubs are subjected makes it more likely that they will try to manipulate financial information and sometimes justify poor sporting performance to shareholders and fans with efficient economic management. Thus, although it is usually said that SADs prioritise sporting performance over economic performance, this study shows an interest in the image projected through their financial reports.

In this respect, future studies could contrast these findings with other Spanish professional sports, or with professional football leagues in other countries. Other variables such as the sporting performance of the clubs, or the structures of the governing bodies and organisational culture could also be considered as determinants of earning management (Jarne-Jarne et al., 2022), or the quality of accounting information could be observed from other perspectives such as the opinions collected in the clubs' audit reports.

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## Conflicts of interest

The authors declare that they have no conflicts of interest.

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