

Ownership Structure and Financial Performance in European football

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Structured Abstract

Purpose: This paper analyses the relationship between ownership structure and financial performance in the five major European football leagues from 2007/08 to 2012/13 and examines the impact of the Financial Fair Play (FFP) regulation.

Design/methodology: The sample used is comprised of 94 teams that participated in the major European competitions: German Bundesliga, Ligue 1 of France, Spanish Liga, English Premier League and the Italian Serie A. The estimation technique used is panel-corrected standard errors (PCSEs).

Findings: The results confirm an inverted U-shaped curve relationship between ownership structure and financial performance as a consequence of both monitoring and expropriation effects. Moreover, the results show that after FFP regulation, the monitoring effect disappears and only the expropriation effect remains.

Research limitations: The lack of transparency of the information provided by some teams has limited the sample size.

Practical implications: One of the main issues that the various regulating bodies of the industry should address is the introduction of a code of good practice, not only for aspects related to the transparency of financial

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6 information, but also to require greater transparency in the information
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8 concerning corporate governance.
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10 **Social implications:** Regulating bodies could also consider other additional
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12 control instruments based on corporate governance, such as for example,
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14 corporate governance practices, corporate governance codes, greater
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16 transparency and control of the boards of directors, etc.
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19 **Originality/value:** This study tries to provide direct evidence of the impact
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21 of large majority investors in the clubs and FFP regulation on the financial
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23 performance of football clubs.
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28 **Keywords:** Corporate Governance, Ownership Structure, European Football
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30 Industry, Financial Fair Play.
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35 **Article Classification:** Research paper.
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1. INTRODUCTION AND MOTIVATION

The football industry has experienced significant growth during the last two decades evidenced by enhanced revenue streams mainly attributed to the re-organization of the largest football leagues (England, Spain, Italy, France and Germany) during the 1990s, the expansion of European competitions and intense media interest and coverage (Dimitropoulos and Tsagkanos, 2012). According to Nauright and Ramfjord (2010), this improved the capability of football clubs to increase their revenue streams and create additional cash flows, along with the internationalization of product markets, the television broadcasts and the possibility of direct ownership which has led to an increased number of foreign investors pouring money into the big European football clubs. These owners directed the clubs' efforts towards pursuing a more professionalized operational model, especially in the clubs' daily operations.

However, despite the significant influx of cash, the financial situation of the clubs continued to deteriorate at an ever increasing rate. According to Millward (2013), if normal business practices had been applied in the English Premier League, half of the clubs would be insolvent. The reason for this inconsistency between the increased capability to generate revenue and the lack of profits is that the majority of the clubs' revenues are used to improve the sporting success of the clubs by investing in talent. The outcome of this is a dramatic financial situation for the industry with the level of

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6 aggregated debt of the European football clubs reaching multimillion euro
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8 figures, and many of the clubs on the verge of bankruptcy (Dimitropoulos,
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10 2009, 2010 and 2011). With the aim of introducing more discipline and
11
12 rationality in club football finances, the Union of European Football
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14 Associations (UEFA) has established 'Financial Fair Play' (FFP) standards.
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16 The various leagues and national authorities of the most important domestic
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18 European competitions have also recently established their own regulations
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20 following UEFA's example.
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25 Despite the pressure from UEFA for more rational financial practices
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27 on behalf of the clubs' management, this new regulation can create
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29 significant agency problems between the clubs and the UEFA. Schubert
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31 (2014) argues that the conflict of interest between UEFA and football clubs
32
33 becomes apparent by the fact that clubs are obligated to operate within the
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35 limitations of their revenues on one hand, and on the other hand they must
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37 achieve their sports objectives. Experience shows that club managers are
38
39 inclined to sustain heavy losses, or become increasingly dependent on
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41 external investors, to enhance their success on the field. To put it another
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43 way, clubs are torn between short-term sporting success and the overall long-
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45 term financial solvency required by the main regulatory body (Schubert,
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47 2014). In this context, club managers may be tempted to engage in
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49 opportunistic behaviour to comply with UEFA regulations (Dimitropoulos,
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51 2011; Dimitropoulos et al., 2016). As Schubert (2014) suggests, clubs may
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6 attempt to circumvent the rules by manipulating their balances. A potential
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8 remedy to this agency conflict is the reduction of information asymmetry
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10 between clubs and regulators and the incorporation of modern corporate
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12 governance principles in the clubs' daily operations (Dimitropoulos, 2014).
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15 In this context, besides the 'Financial Fair Play' regulation, interest in
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17 corporate governance has grown as an additional mechanism to improve the
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19 viability of the industry (Farquhar *et al.*, 2005). Michie (2000) and Michie
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21 and Oughton (2005) point out that there is an urgent need to analyse
22
23 alternative forms of ownership and the governance of football clubs. In this
24
25 sense, recent literature has analysed the influence that various corporate
26
27 governance mechanisms have on financial performance in the football
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29 industry (Dimitropoulos, 2011; Dimitropoulos and Tsagkanos, 2012; Wilson
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31 *et al.*, 2013). However, research into sport governance still remains an
32
33 unexplored area of sport finance.
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38 In this sense, and regarding corporate governance, we consider
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40 ownership structure as a corporate governance mechanism following Biswas
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42 and Bhuiyan (2008) and Demb and Neubauer (1992) and this paper
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44 investigates the relationship between ownership concentration and financial
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46 performance using a novel measure of ownership structure. According to
47
48 Gedajlovic and Shapiro (2002), ownership concentration has been used as a
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50 barometer of agency costs (in studies emphasizing economic incentives) and
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52 as an indication of the strength of the ties a firm has with its investors
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6 (emphasizing social context theories). The football industry presents a
7
8 unique setting for examining the impact of ownership concentration on
9
10 corporate performance for two reasons. First, because the European football
11
12 industry lacks a market for corporate control and second, because European
13
14 clubs tend to have insider dominated boards (Dimitropoulos and Tsagkanos,
15
16 2012), both which create conditions that allow managers sufficient room for
17
18 exercising discretion over daily operations. Therefore, in the absence of
19
20 capital market control mechanisms and active outside directors, the
21
22 monitoring of managers by block holders as a governance mechanism takes
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24 on increased significance (Shleifer and Vishny, 1997).
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28 In this sense, the literature on corporate governance considers that
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30 shareholder ownership can act as a control mechanism as a consequence of
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32 the monitoring effect (Shleifer and Vishny, 1986). However, Kim *et al.*
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34 (2007), indicate that although the concentration of ownership is a corporate
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36 governance mechanism for reducing agency problems between management
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38 and owners, the existence of large shareholders can lead to an agency
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40 conflict between large and small shareholders (Acero and Alcalde, 2014). In
41
42 this sense, when the level of ownership concentration is high, the effect of
43
44 ownership concentration becomes negative as a result of the possible risk of
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46 the expropriation of minority shareholders (expropriation effect).
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51 Thus, following the above arguments, this study proposes a non-
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53 linear relationship (inverted U-shaped curve) between ownership structure
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6 and financial performance as a consequence of both monitoring and
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8 expropriation effects. We built a data base containing information on clubs
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10 of the five major European leagues: Bundesliga in Germany, League 1 in
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12 France, the Liga in Spain, the Premier League in England and Serie A in
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14 Italy using data from the 2007–08 to 2012–13 seasons. Our results confirm
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16 this non-linear relationship (inverted U-shaped curve) for the study sample.
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18 We also use different performance measures to check for robustness.
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22 Besides analysing the effect of ownership structure for the entire
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24 period, we also run alternative models (pre- and post-Financial Fair Play
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26 regulation) to analyze more in depth the relationship between ownership
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28 concentration and firm financial performance in order to study the effects of
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30 the new regulation. The results show that FFP regulation acts as a control
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32 mechanism and performs a monitoring effect. However, the expropriation
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34 effect persists in the post-FFP regulation period and a negative relationship
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36 between ownership structure and firm financial performance is found with
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38 high levels of ownership concentration.
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43 This paper contributes to the existing literature in several ways.
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45 Firstly, there are other papers such as Dimitropoulos (2011), Dimitropoulos
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47 and Tsagkanos (2012) and Dimitropoulos (2014) that examine different
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49 corporate governance mechanisms and their impact on financial performance
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51 in the football industry, however they do not do an in depth analysis of the
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53 effect of ownership concentration in the form of block ownership. Thus this
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6 study tries to provide direct evidence of the impact of large majority
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8 investors in the clubs (a phenomenon that has increased significantly over
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10 the last ten years) on their bottom line performance. Moreover, this study
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12 provides ample evidence on the impact of Financial Fair Play regulation on
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14 the financial performance of football clubs. Since UEFA's licensing
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16 regulation has put profitability back in the agenda (in terms of the break-even
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18 rule) this study tries to assess whether the implementation of this regulation
19
20 has changed investor behaviour towards clubs and if there is a shift in clubs'
21
22 financial goals and operations. Consequently, evidence from this study could
23
24 have useful policy implications, primarily for UEFA regulators, as a way to
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26 assess the effectiveness of the new regulation and as to whether ownership
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28 structure could be a useful mechanism, or a detriment, for achieving the
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30 regulators' goals.
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35 The rest of the paper is structured as follows: the next section reviews
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37 the theoretical framework and proposes hypotheses for testing. The empirical
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39 work is then explained and the main results are presented. The paper ends
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41 with the main conclusions of the study.
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46 47 **2. CORPORATE GOVERNANCE, OWNERSHIP STRUCTURE** 48 49 **AND FOOTBALL** 50

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52 In recent decades, interest in corporate governance has increased as
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54 the financial crisis has deepened for many football clubs. This has led to an
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6 increased interest in corporate governance within football clubs as mentioned
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8 by Farquhar *et al.* (2005). Michie (2000) and Michie and Oughton (2005)
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10 suggest there is an urgent need to consider alternative forms of ownership
11
12 and governance for football clubs, since directors' behaviour has often
13
14 proven they are more concerned with personal financial benefits or social
15
16 status than with the interests of their stakeholders (Farquhar *et al.*, 2005).
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18 Furthermore, as the Football Governance Research Centre (2005) declared,
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20 football clubs are not very effective at balancing shareholders' and
21
22 stakeholders' interests with those of the organisation; therefore, expanding
23
24 the research on corporate governance in this industry is necessary.
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29 Dimitropoulos (2011) and Dimitropoulos and Tsagkanos (2012)
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31 highlight that research on sport governance is quite limited, consequently, a
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33 more in depth study could prove interesting since it also has the peculiarity
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35 of considering business objectives, including financial considerations, as
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37 well as success 'on the pitch' (Wilson *et al.*, 2013). According to Biswas and
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39 Bhuiyan (2008) there are several corporate governance mechanisms.
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41 Nevertheless, as Demb and Neubauer (1992) mention, the ones most
42
43 commonly used are, perhaps, the structure of the board of directors,
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45 ownership structure, regulations or codes and direct social pressure. Taking
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47 this into account, this paper focuses on analysing the effect that ownership
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49 structure has on financial performance of football clubs, with particular
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51 attention being given to ownership concentration.
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6 The literature on corporate governance considers that shareholder
7 ownership can act as a control mechanism. Shareholders with large blocks of
8 shares have a greater interest in controlling management behaviour (Shleifer
9 and Vishny, 1986). The literature on corporate governance coincides in
10 highlighting the presence of significant shareholders as one of the primary
11 control mechanisms, as a consequence of the monitoring effect. Large
12 shareholders have greater incentives to monitor management behaviour
13 (Shleifer and Vishny, 1986; Seifert *et al.*, 2005), therefore as the equity stake
14 of the blockholders increases, so does their supervision. According to Hu and
15 Izumida (2008), if blockholders are interested in extracting more value from
16 their investments, they may increase their share in firms that have performed
17 well, thus benefitting from future firm performance. This motivates them to
18 exercise better control over managerial decisions, which has a positive effect
19 on firm financial performance. This argument has been verified by several
20 studies such as Barclay and Holderness (1992) and Gedajlovic and Shapiro
21 (2002) who indicate that earnings persistence and firm market value increase
22 if ownership is concentrated in the hands of a few blockholders and
23 especially in institutions such as banks. Since capital dispersion creates free-
24 rider problems and makes managerial monitoring difficult, a positive
25 relationship between ownership concentration and firm financial
26 performance is expected (De Miguel *et al.*, 2004, Hu and Izumida, 2008).
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6 However, Kim *et al.* (2007) and Thomsen *et al.* (2006) argue that
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8 although the concentration of ownership is a corporate governance
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10 mechanism for reducing agency problems between management and owners,
11
12 the existence of large shareholders can lead to agency conflicts between
13
14 large and small shareholders, where large shareholders may attempt to
15
16 expropriate the wealth of minority shareholders. In this sense, concentrated
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18 ownership may also lead to worse performance, as proposed by the
19
20 expropriation hypothesis. In some contexts, the agency problem stems from
21
22 the conflict between controlling owners and minority shareholders, instead of
23
24 between managers and dispersed shareholders. In these cases, large
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26 shareholdings has a cost, since majority owners can redistribute wealth – in
27
28 both efficient and inefficient ways – from other minority shareholders whose
29
30 interests need not coincide with those of the majority shareholders (Shleifer
31
32 and Vishny, 1997). Evidence in the literature suggests that the association
33
34 between ownership concentration and financial performance is not
35
36 monotonic and differs significantly based on the country's legal origin and
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38 level of investor protection (Thomsen *et al.*, 2006). For example, the study of
39
40 Hu and Izumida (2008) in the Japanese market proved a U-shaped
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42 relationship between ownership concentration and performance providing
43
44 support for both effects in the literature (monitoring and expropriation
45
46 effects). Besides, in the context of football organizations, the controlling
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48 shareholders do not necessarily have to consider the interests of the minority
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50 shareholders. They can pursue their own interests and take advantage of their
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6 privileged position as the visible heads of the club, ignoring the interests of
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8 the other owners, or of the club in general. Thus, business decisions can be
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10 taken with the objective of seeking to maximize an owner or dominant
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12 individual's utility as opposed to seeking financial profit (Hamil *et al.*,
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14 2010).
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Thereby, the simultaneous impact of both effects (monitoring and expropriation) can result in a nonlinear inverted U-shaped relationship between ownership concentration and financial performance. Thus, the following hypothesis is formulated:

H1: There is a nonlinear inverted U-shaped relationship between ownership concentration and financial performance

The present study aims to examine the validity of the above hypothesis in the five major European football leagues which all present significant levels of ownership concentration. The ownership structures of Italian football clubs are controlled directly either by individuals or by families, or indirectly through corporate groups; therefore, family management predominates. The predominance of ownership in the hands of family groups involves a lack of separation between ownership and control. This translates into less external tax pressure on the running of these entities, which, in turn, can have implications for the clubs' financial behaviour (Hamil *et al.*, 2010). Moreover, with the creation of the Premier League in 1992, British clubs turned to the stock market to obtain financing (Wilson *et*

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6 *al.*, 2013). However, the Premier League is a competition that generates high
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8 levels of income and has attracted considerable outside investment. This has
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10 led to an increasing concentration of capital in the past (Wilson *et al.*, 2013).
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13 Regarding Spanish clubs, they were transformed into SADs (Public
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15 Limited Sports Companies) at the beginning of the 1990s, but this did not
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17 have the desired effect on the financial discipline of the companies in the
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19 Spanish football industry. On the one hand, the conversion into SADs
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21 involved an intense process of concentration of capital in the hands of a
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23 small number of shareholders, often just one person; and at the same time the
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25 debt situation of a fair number of Spanish clubs became critical. This
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27 situation led the LFP (Spanish Professional Football League), supported by
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29 the CSD (Spanish High Council for Sport), to approve control regulations in
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31 January 2013 to contribute to the economic and financial sustainability of
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33 professional football.
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38 On the other hand, German football experienced its crisis in 2002
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40 when the company Kirch Media, the owner at that time of the television
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42 rights for the competition, went bankrupt (Drut and Raballand, 2012).
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44 However, the ownership structure and governance style of the German clubs
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46 is distinct from the classic legal form of a corporation. The changes
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48 introduced by the DFL (Deutsche Fußball Liga) include the establishment of
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50 the so-called '50+1' rule, by which members/fans must have majority
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52 ownership of all German clubs competing in either of the Bundesliga (first
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6 and second divisions). The associations (called *Verein* in German) own 50
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8 percent plus one of the voting rights of any football club corporation
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10 (*Kapitalgesellschaft*) (Dietl and Franck, 2007). What underpins the member
11
12 ownership model of governance is the belief that fans will ensure that the
13
14 club will operate in the benefit of the community and in its long-term
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16 interests, rather than operating in the interests of the private owners.
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18 According to Ferkins and Shilbury (2015a, b) this type of governance model
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20 guarantees the participation of football fans and avoids severe conflicts of
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22 interest between the investors and fans-members. Moreover, according to
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24 Müller et al. (2012) German civil law imposes a series of requirements on
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26 these member associations (already existent for clubs that are corporations)
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28 such as requiring general meetings and boards of directors. However, many
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30 clubs have gone beyond the minimum requirements and have implemented
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32 voluntary governance mechanisms such as supervisory boards, audit
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34 committees, disciplinary boards, etc. The goal of these voluntary
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36 mechanisms is the enhancement of the clubs' governance structure and their
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38 professional status.
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44 Lastly, the financial crisis of the French football industry is deeply
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46 rooted in governance issues that have not yet been resolved despite the
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48 monitoring of clubs by the DNCG (*Direction Nationale de Contrôle de*
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50 *Gestion*) (Andreff, 2007). However, Drut and Raballand (2012) state that the
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52 French league is the one with the most financial control of the five major
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6 competitions compared here. The important role played by the DNCG has
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8 resulted in the French clubs being more balanced financially and the fans and
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10 unions assuming control of the league's governing body, thereby limiting the
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12 power of the owners of the professional clubs.
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14 15 **3. DATA AND METHODOLOGY** 16

17 18 **3.1 Data** 19

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21 The sample used is comprised of 94 teams that participated in the
22
23 main European competitions: the German Bundesliga, Ligue 1 of France, the
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25 Spanish Liga, the English Premier League and the Italian Serie A. The data
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27 comes from the Amadeus database for the seasons ranging from 2007–08 to
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29 2012–13. The clubs' annual reports have also been consulted directly.
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31 Nevertheless, it has been very difficult to compile some of the information,
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33 such as ownership structure for example, thus evidencing a certain lack of
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35 transparency in this industry's information.
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39 As mentioned above, the main objective is to present empirical
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41 evidence of the relationship between ownership structure and business
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43 performance. To achieve this, the model proposes an estimation that uses
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45 different measures of performance as dependent variables and ownership
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47 structure as the main explanatory variable. We also include a group of
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49 control variables.
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53 The generic specification of the model used in the estimates is the
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55 following. All the variables (except for Growth, which is the annual mean
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6 growth rate of operating income for the last three seasons) in the model are
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8 lagged in order to prevent multicollinearity problems:
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$$10 \quad \mathbf{Performance}_t = \beta_1 + \beta_2 \mathbf{Ownership}_{t-1} + \beta_3 \mathbf{Ownership}_{t-1}^2 + \beta_4 \mathbf{1_FirmSize}_{t-1} \\ 11 \\ 12 \\ 13 + \beta_5 \mathbf{Growth} + \beta_6 \mathbf{Debt}_{t-1} + \mathbf{Year\ and\ country\ dummies} + \varepsilon \quad (1) \\ 14$$

15 **Dependent Variable**

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18 In order to measure financial performance we used return on assets
19 (ROA) and return on sales (ROS). Following previous studies such as
20 Dimitropoulos (2011) and Dimitropoulos and Tsagkanos (2012), we employ
21 return on assets (ROA) as the performance measure. Additionally, in this
22 study we use return on sales (ROS) to check for robustness.
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29 **Independent Variables**

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32 The *Ownership* variable has been included to analyse the effect that
33 ownership structure, and specifically the level of concentration of ownership,
34 has on performance. The Amadeus database includes the percentage of
35 control through direct ownership. We take into account the sum of the three
36 major shareholders with the aim of exploring the relationship between
37 ownership concentration and performance. The model also includes
38 *Ownership*² in order to explore the non-linear relationship between
39 ownership concentration and performance (monitoring and expropriation
40 effects).
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Control Variables

In line with the previous literature (see Dimitropoulos (2011), Dimitropoulos and Tsagkanos (2012) and Wilson (2013), among others) the following control variables were included in the specification of the model. These additional control variables have been proven to be significant determinants of financial performance and viability by previous research (Dimitropoulos and Tsagkanos, 2012).

Specifically, we controlled for football club size which is measured by the natural logarithm of each club's total assets at the end of the fiscal year (*l_FirmSize*). According to Orlitzky (2001) and Dimitropoulos and Tsagkanos, (2012), firm size is positively related to firm performance and viability because it may lead to economies of scale in operations, greater control over external stakeholders and resources, and in the case of football clubs, larger clubs can attract better athletes, which can further increase their financial performance. Additionally, we control for the impact of firm debt (the variable *Debt* is the ratio of total liabilities to total debt). Singh and Faircloth (2005) document that high leverage adversely affects a firm's future investment opportunities, which in turn can have a negative impact on the long-term operating performance and solvency. However, a firm's indebtedness can also act as a control mechanism (Fernández and Gómez (1999), Lozano *et al.* (2005), Acero and Alcalde (2014)). A certain level of debt generates a series of contractual obligations that reduces management's

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6 discretionary power over the firm's free cash flow, thus guaranteeing the
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8 optimization of resource use (Jensen, 1986). Finally, a variable capturing
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10 growth opportunities (*Growth* of sales) is included in the model and
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12 estimated as the annual mean growth rate of operating income from the
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14 previous three seasons, following Dimitropoulos (2011), Wilson *et al.* (2013)
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16 and Dimitropoulos (2014). The model also includes dummy variables for
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18 each year and each league.
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21 22 **3.2. Methodology** 23

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25 Firstly, a preliminary analysis was conducted to determine the
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27 relationships between the explanatory variables used in the regression. Table 1
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29 presents the Spearman's correlation matrix calculated for each pair of
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31 variables which shows that no multicollinearity bias is observed.
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35 Regarding the descriptive statistics, we can observe (Table 1) that the
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37 teams in the sample have highly concentrated ownership (67.88%). The
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39 overall figures from the five leagues indicate negative performance (-6.43
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41 ROA and -13.58 ROS). Income growth averages 7.62 and there is a high debt
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43 ratio (1.11).
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46 **(Insert Table 1)**
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52 Prior to carrying out the necessary estimates, an ANOVA analysis was
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54 performed to verify whether or not there were significant differences in the
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6 variables of interest (ROA and ROS) between the different leagues. The
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8 analysis was performed both for the entire period (seasons 2007-08 to 2012-
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10 13) as well as for two subsamples (pre-FFP and post-FFP). The results are
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12 shown in Table 2.

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15 **(Insert Table 2)**
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18 As shown in Panel A of Table 2, significant differences are found in
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20 both ROA and ROS between the five leagues analyzed. To determine between
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22 precisely which leagues these differences occur, a Bonferroni¹ test was
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24 conducted whose results are discussed hereafter. For the variable ROA,
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26 significant differences were found between the English league and the leagues
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28 of Germany, Spain, France, and Italy with the English league showing the
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30 worst outcome. For the variable ROS it is the German league which shows
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32 figures that are significantly different from the other leagues and it is this
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34 league which shows the best results (the German league has a negative ROS,
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36 but it is close to zero while the other leagues show figures that are
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38 significantly more negative). The return on sales (ROS) figures reveal an
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40 industry with recurrent losses, with the German league having the least
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42 negative results.
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47 For the pre-FFP period (2007-2010) (see Panel B of Table 2) the
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49 finding are similar to those mentioned above. In the case of the ROA, there
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54 ¹ The details of the Bonferroni test results have not been included to avoid making the
55 contents of Table 2 overly extensive. However they are available to the reader upon request
56 to the authors.
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6 are significant differences between the English and German leagues, with the
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8 former showing the worst results and the latter the best figures. For the ROS
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10 variable, significant differences are found between Germany (the best) and
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12 the other four leagues. As Drut and Raballand (2012) point out, this may be
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14 due to the establishment in the 1960s of a process to grant the licences
15
16 required to participate in the competition, known as the
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18 Lizenzierungsordnung. This process involved regulating the clubs' finances,
19
20 controlling their levels of debt and imposing restrictions on the amounts that
21
22 could be paid to their personnel. These authors state that, based on existing
23
24 data, this process has prevented German clubs from registering recurrent
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26 deficits and generating significant debt.
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31 Finally, for the period post-FFP (2011-2013) (see Panel C of Table 2)
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33 no significant differences are found between the leagues for the variable
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35 ROA, which may be due to the changes introduced in the different leagues as
36
37 result of the implementation of Financial Fair Play by the UEFA. In this
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39 regard, for example, the First Division in Spain and Premier League in
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41 England established their own regulations in 2013. These regulations impose
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43 a series of limits on club expenditure (especially the cost of staff), on losses
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45 that can be incurred in a three year period, and stipulate a series of penalties
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47 for clubs that do not comply, including the loss of points obtained in the
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49 competition. The response of the Italian authorities ('Salva Calcio' Law) has
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51 focused exclusively on introducing legislative changes with the sole purpose
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6 of improving the balance sheets and income statements of the clubs through
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8 techniques of financial engineering. In the case of ROS, significant
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10 differences are observed between France (showing the worst results) and the
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12 German and Spanish leagues which show the best results.
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15 Summing up the discussion regarding the findings in Table 2, the
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17 German clubs appear to be the most profitable and viable relative to the
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19 clubs of the other leagues, during both the pre- and post-FFP periods. This
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21 may be attributed to the governance structure of German clubs. Member
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23 associations have the motivation and dedication to safeguard the long-term
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25 interests of the clubs and deter any misappropriation of funds; more so than
26
27 the private owners. According to Ferkins and Shilbury (2015a, b) this type of
28
29 governance model guarantees the participation of football fans and avoids
30
31 severe conflicts of interest between the investors and fans-members.
32
33 Consequently, fans may intervene and block decisions that would deteriorate
34
35 clubs' financial performance and sustainability. This fact is verified by
36
37 reports published by Deloitte (2015, 2014) which indicate that the
38
39 "Bundesliga" is the most profitable of the "top 5" European leagues, and has
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41 significantly lower operating costs.
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47 Following this descriptive analysis, a regression analysis was
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49 performed with the objective of contrasting the hypotheses formulated for
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51 the study. The estimation technique used was panel data, since it allowed us
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53 to take into account both variations between companies and time variations
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6 in the explanatory variables. From this perspective, three types of panel data
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8 estimations were proposed; the first, ordinary least square (OLS) with the
9
10 grouped panel; the second and third consider the time variation by including
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12 random effects (REM- Random Effects Model) and fixed effects (FEM-
13
14 Fixed Effects Model), respectively. To determine which of the three models
15
16 was the most suitable, first we carried out the Breusch-Pagan LM test for
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18 random effects. This test makes it possible to choose between the OLS
19
20 estimation of the grouped panel and the estimation with random effects.
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22 After testing, we concluded that the random effects are relevant, and,
23
24 therefore, the use of the estimation including them was preferable to the
25
26 grouped panel estimation. To demonstrate that the estimation of fixed effects
27
28 is a better method than OLS, we conducted the F significance test for fixed
29
30 effects (FEM) (Greene, 2000). This test showed us that the FEM estimation
31
32 was more suitable than the OLS estimation of the grouped panel. Finally, the
33
34 Hausman test demonstrated that the random-effect and fixed-effect
35
36 estimators did not differ substantially and that the fixed-effect model better
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38 explained the sources of variation and was therefore more appropriate than
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40 the random-effect model.
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46 Lastly, the results of the Wooldridge test (Wooldridge, 2001), indicated
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48 that our model did not present problems of autocorrelation. However,
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50 according to a Wald test (Greene 2000) our model posed problems of
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heteroscedasticity. The abovementioned problem of heteroscedasticity can be solved by the estimation of panel-corrected standard errors (PCSEs).

4. EMPIRICAL RESULTS

Table 3 shows the results of the proposed models estimated using panel-corrected standard errors (PCSEs). First, we can observe a significant positive effect of *Ownership* and a negative effect of *Ownership*² on ROA and ROS. These results allow us to conclude that hypothesis 1 is confirmed. The results confirm a non-linear relationship (inverted U-shaped curve) between ownership concentration and performance. This is evidence of the existence of both monitoring and expropriation effects. Regarding the control variables, Table 3 shows all of them exert a positive influence.

(Insert Table 3)

Additionally, we ran alternative models both pre- and post-Financial Fair Play regulation (pre-FFP: between 2007/08 and 2009/10; post-FFP: between 2010/11 and 2012/13). With these subsamples we wanted to determine if the financial control established by UEFA had influenced the aforementioned relationship between ownership structure and financial performance.

(Insert Table 4)

Table 4 shows the results of the models estimated using panel-corrected standard errors (PCSEs) in two separate subsamples; pre- and post-

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6 FFP (before and after the year 2010). With these new estimations we can
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8 observe that before Financial Fair Play regulation the results are unchanged,
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10 indicating that there are both monitoring and expropriation effects, in other
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12 words, there is a non-linear relationship between ownership concentration and
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14 performance (inverted U-shaped relationship). However, after FFP regulation,
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16 the monitoring effect disappears and we can only observe the negative
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18 relationship between ownership concentration and performance (expropriation
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20 effect). Therefore, we could conclude that FFP regulation has the same effect
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22 as monitoring (FFP regulation acts as a control mechanism) but FFP regulation
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24 does not solve the expropriation problem. In this sense, the expropriation
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26 effect persists in European football despite the control exerted by the FFP
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28 standards. A high level of ownership concentration has a negative impact on
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30 the financial performance of European football clubs.
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35 On the other hand, regarding the control variables, the results remain
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37 the same for the cases of Firm Size and Growth (positive relationship),
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39 however there is no evidence of any effect of Debt on performance (with the
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41 exception of a positive effect on ROA in the pre-FFP regression).
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45 **5. DISCUSSION AND CONCLUSIONS**

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47 This paper has focused on analysing the relationship between ownership
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49 structure (as a corporate governance mechanism) and the financial
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51 performance of football clubs participating in the five major European
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53 leagues.
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6 Our results confirm an interesting finding: there is a non-linear
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8 relationship (inverted U-shaped curve) between ownership structure and
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10 financial performance as a consequence of both monitoring and
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12 expropriation effects. In organizations with disperse ownership, an increase
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14 in the level of ownership concentration has a positive effect on performance
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16 (*monitoring effect*). However, when the level of ownership concentration is
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18 high, the effect becomes negative as a result of the possible risk of the
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20 expropriation of minority shareholders (*expropriation effect*). In addition, the
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22 results show that after FFP regulation, the monitoring effect disappears and
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24 only the expropriation effect is observed (negative relationship). Therefore,
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26 we could conclude that FFP regulation has the same effect as monitoring, but
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28 FFP regulation does not solve the expropriation problem of the minority
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30 shareholders.
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35 The results show that high levels of ownership concentration have a
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37 negative effect on financial performance both pre- and post-FFP period. This
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39 important finding implies an entrenchment effect of shareholders owning a
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41 high percentage of the shares and the possible risk of expropriation of
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43 minority shareholders. In this context, and as implications of the study, we
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45 consider that, besides financial control, regulating bodies could also consider
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47 other additional control instruments based on corporate governance, and,
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49 specifically, related to ownership structure. The results of the study highlight
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51 the need to apply other control mechanisms in addition to FFP regulation, for
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6 example; corporate governance practices, corporate governance codes,
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8 greater transparency and control of the boards of directors, etc. in order to
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10 protect the interests of minority shareholders and other stakeholders, since
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12 FFP regulation has failed to correct the expropriation effect and this has a
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14 negative impact on performance. It would be interesting to consider the
15
16 possible positive effects of regulations that enable control mechanisms in
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18 companies where the level of ownership concentration is very high. We
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20 could take as an example the German Bundesliga whose teams have the best
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22 financial results as well as good sporting results, in addition to the best
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24 average stadium attendance. Therefore, the '50+1' rule imposed as a good
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26 governance model in the German Bundesliga, or other initiatives aimed at
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28 giving stakeholders, not only a voice, but also power and control, should be
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30 considered.
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35 Finally, as practical implications, we believe that one of the main issues that
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37 the various regulating bodies of the industry should address is introducing a
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39 code of good practice, not only regarding transparency concerning financial
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41 variables, but also to demand more transparency in corporate information,
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43 such as the structure of the boards of directors, the degree of independence of
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45 its members, their rotation, and so on, since this information could be of
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47 great interest for the various stakeholders participating in this unique
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49 industry.
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Table 1. Correlation Matrix (Spearman) and Descriptive Statistics

	ROA	ROS	Ownership	FirmSize	Growth	Debt	<i>Mean</i>
ROA	1.0000						-6.4332
ROS	0.7471**	1.0000					-13.5844
Ownership	-0.2685**	-0.2861**	1.0000				67.8815
FirmSize	0.0607	0.1019**	0.0203	1.0000			135172.8
Growth	0.2748**	0.3390**	-0.0458	0.0249	1.0000		7.6243
Debt	-0.4272**	-0.2927**	0.1376**	-0.0608	-0.0571	1.0000	1.1137

Note: ** p<0.01 ; p<0.05 *

Average of the seasons 2006/07, 2007/08, 2008/09, 2009/10, 2010/11, 2011/12, and 2012/13.

Source: Self production with data from AMADEUS.

Table 2. Descriptive Statistics per leagues and ANOVA Analysis

<i>Panel A (Total sample)</i>		ROA		ROS	
		Mean	ANOVA (F (sig))	Mean	ANOVA (F (sig))
Germany		-0.858		-0.394	
Spain		-4.009		-11.849	
France		-4.882	5.098 (0.000)	-20.898	9.576 (0.000)
Italy		-7.543		-15.752	
England		-11.291		-13.432	
<hr/>					
<i>Panel B (Pre-FFP)</i>		ROA		ROS	
		Mean	ANOVA (F (sig))	Mean	ANOVA (F (sig))
Germany		0.503		0.805	
Spain		-4.141		-16.351	
France		-3.330	3.847 (0.004)	-17.820	5.278 (0.000)
Italy		-8.616		-16.191	
England		-11.322		-12.462	
<hr/>					
<i>Panel C (Post-FFP)</i>		ROA		ROS	
		Mean	ANOVA (F (sig))	Mean	ANOVA (F (sig))
Germany		-2.673		-1.992	
Spain		-3.836		-5.930	
France		-6.926	1.728 (0.144)	-24.951	6.613 (0.000)
Italy		-6.112		-15.166	
England		-11.245		-14.743	

Table 3. Heteroskedastic panels corrected standard errors (PCSE)

Variable	(1) ROA		(2) ROS	
	Coefficient	Error-Std Robust	Coefficient	Error-Std Robust
<i>Ownership</i>	0.293***	0.091	0.237**	0.113
<i>Ownership</i> ²	-0.003***	0.001	-0.003***	0.001
<i>l_FirmSize</i>	2.576***	0.768	1.820*	0.939
<i>Growth</i>	0.258***	0.044	0.419***	0.059
<i>Debt</i>	2.577*	1.383	0.233	0.854
<i>Year and country dummies</i>	<i>Included</i>		<i>Included</i>	
<i>Constant</i>	-36.13***	9.472	-23.98**	11.355
R ²	0.167		0.240	
Observations	562 (94teams)		561 (94teams)	

Note: *** Statistical significance at the 1 percent level, ** statistical significance at the 5 percent level; * statistical significance at the 10 percent level. All independent variables are lagged (except growth)

Table 4. PCSE, Heteroskedastic panels corrected standard errors

Variable	(1) ROA			(2) ROS		
	Pre FFP	Post FFP		Pre FFP	Post FFP	
	Coefficient (Error-Std)	Coefficient (Error-Std)	Coefficient (Error-Std)	Coefficient (Error-Std)	Coefficient (Error-Std)	Coefficient (Error-Std)
Ownership	0.422** (0.115)	0.081 (0.117)	-0.086** (0.040)	0.312** (0.138)	0.101 (0.128)	-0.127*** (0.048)
Ownership²	-0.004*** (0.001)	-0.001 (0.001)	-0.004*** (0.001)	-0.002 (0.001)
l_FirmSize	2.725*** (1.027)	2.321** (1.039)	2.225** (1.049)	1.104 (1.215)	3.108** (1.325)	2.972** (1.322)
Growth	0.132** (0.058)	0.368*** (0.065)	0.365*** (0.064)	0.293*** (0.092)	0.561*** (0.075)	0.557*** (0.075)
Debt	4.500** (1.786)	-1.096 (2.503)	-1.293 (2.464)	1.222 (0.993)	-0.655 (2.100)	-0.934 (2.093)
<i>Year and country dummies</i>	Included	Included	Included	Included	Included	Included
Constant	-41.39** (12.631)	-29.31** (13.278)	-26.55 (13.291)	-17.76 (14.417)	-41.62** (16.149)	-37.78** (15.909)
R ²	0.192	0.212	0.207	0.192	0.326	0.321
Observations	280 (94teams)	282 (94teams)	282 (94teams)	280 (94teams)	281 (94teams)	281 (94teams)

Note: *** Statistical significance at the 1 percent level, ** statistical significance at the 5 percent level; * statistical significance at the 10 percent level. All independent variables are lagged (except growth)