The Impact of Corporate Governance in the Financial and Sports Performance of European Football Clubs

Ricardo Jorge Botelho Silva

080401074@fep.up.pt

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Supervisor:

Miguel Augusto Gomes Sousa, PhD

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Bibliographical Note

Ricardo Jorge Botelho Silva, was born in Vila Nova de Gaia, on May 31st, 1990.

He has concluded high school in Escola Secundária Almeida Garret in 2008.

In the same year, he enrolled the University of Porto at Faculty of Economics (Faculdade de Economia da Universidade do Porto). During this period of time he started his professional career in JRCM – Contabilidade, Lda has an assistant accountant.

After concluding his degree in 2013 he started at the same University the Master in Finance.

In 2014 he changed company and started working for adidas Business Services as assistant accountant where he remains until today as an Accountant. He is also a certified SAP consultant and a sports lover.
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Abstract

The aim of this paper is to analyse the impact of corporate governance (focused on some key mechanisms as board size, board independence, managerial ownership, institutional ownership and chief executive officer duality) in the financial and sports performance of the main football clubs in the European Union since 2009 to 2014. Football is considered nowadays by many the most popular sport worldwide, and running a football club is the same as running a normal company. It is then fundamental to study the corporate governance mechanisms applied to this industry as they were to all other industries. Some studies have been made on the corporate governance and the main conclusions are that higher managerial and institutional ownership, enlarged board size and independence and the separation of the CEO and chairman roles conduct to higher levels of financial performance. These studies were made on a firm level. Some analysis focused on clubs’ profitability and viability reached the conclusion that those indicators also have an impact for the clubs that have insolvency problems and low financial performance. The results of this study aim not only to measure the impact of the corporate governance mechanisms on the financial performance but also on the sports performance. The main objective of football clubs is to achieve good sports results that consequently will also lead to better financial performances or *vice versa*. Furthermore, it is inseparable that to foster better sports results clubs must have good financial performances. Based on the data obtained and on the goal of the study some econometric models are created to measure the correlations between the variables in focus.

**Key-words:** Football Clubs, Corporate Governance, Financial Performance, Sports Performance

**JEL-Codes:** G38, G32, G30
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1. Introduction

Corporate governance has evolved as a crucial issue not only for an enterprise’s function and control, but also for providing a degree of confidence for the proper functioning of the market economy (OECD, 2004).

Shailer (2004) referred corporate governance as the mechanisms, processes and relations by which corporations are controlled and directed.

According to the OECD Principles of Corporate Governance (2004) the Governance structures identify the distribution of rights and responsibilities among different participants in the corporation (such as the board of directors, managers, shareholders, creditors, auditors, regulators, and other stakeholders) and include the rules and procedures for making decisions in corporate affairs. Corporate governance includes the processes through which corporations' objectives are set and pursued in the context of the social, regulatory and market environment. Governance mechanisms include monitoring the actions, policies and decisions of corporations and their agents. Those practices are affected by attempts to align the interests of stakeholders with the company interests.

Nowadays, the football industry moves millions of euros and has a great impact both in the economic and social world. A better understand how the Corporate Governance influences the financial and sport performance of the clubs is so of huge importance.

Initially a good Corporate Governance, a good financial performance and a good sports performance will be defined. Then using a sample of the biggest listed clubs from the six more important European Leagues will be used considered as the sample of the study. The used of listed clubs is crucial, otherwise the information needed, namely information about their corporate governance structure be difficult to retrieve.

This study will be structured as follows. After this introductory Chapter, the next Chapter will present the literature review, followed by a description of the methodology in place, including the description of the variables and of the statistics, in the Chapter 3. The estimated regressions that tried to establish a relationship between the Corporate
Governance mechanisms and the financial and sports performance will be presented in Chapter 4. Finally, in Chapter 5 the main conclusions, limitations of the studies and open topics for further research will be presented.
2. Literature Review

2.1. The Corporate Governance

On this chapter we focus on the relevant definitions related to the topic under analysis accordingly to the literature and we present the main theories on the topic purposed in a similar study.

The notion of Agency Theory is indissociable from any Corporate Governance study. Shleifer and Vishny (1997) defend that agency problems appear when managers have almost total discretion capacity over how to invest and spend investor’s wealth. Since investors will choose the projects that maximize their own benefits (Jensen, 1986), they protect themselves by choosing the projects that specifically require their skills (Shleifer and Vishny, 1989) and paying themselves millionaire compensations (Murphy, 1998). The conflicts with the owners arise when managers own less than 100% of equity the agency problem exists. The only way to mitigate and reduce those agency risks is through the implementation of good Corporate Governance mechanisms.

Examples of agency problems are the “free-rider problem”, the “horizon problem”, the “employee theft” and the “empire-building” (Shleifer and Vishny, 1997). The first one appears when one agent has incentive to avoid work once its individual effort is not directly observable. The second one consists on the fact that agents that expect to leave the firm in near future, their preponderance on long-term impact is much lower. The employee theft means that employees use firm resources on their own benefit. The empire-building problem consists on managers trying to manage a wide number of agents to increase their compensation or security (Hart, 1995).

However, the main and most difficult agency problems to mitigate are the Adverse Selection and the Moral Hazard (Berndt and Gupta, 2009). When an agent, prior to the establishment of the contract, has better private information than the principals we are facing the Adverse Selection problem. After establishment of the contract, agents have incentive to deviate once the principal is not able to observe deviations immediately.
According to the Agency Theory it is impossible to avoid the agency problems, the unique chance is to minimize them by contractual, monitoring, alignment of interests and market solutions (Ross, 1973).

The first economic approach to the agency risk was given by Adam Smith (1776) who claimed that it is not feasible to expect for a manager to manage the money of someone as he would manage his own money. Although at that point in time the companies’ size was considerably small, and so, the agency costs between the shareholders and the managers was not a relevant problem. With the growth of the companies over the years increase the demand for qualified management. It started to become evident the separation between ownership and management. Amongst with the companies’ growth there was a need for further capital investment that lead to the rise of the shareholders number, representing a decrease of each one individual influence. Fama & Jensen (1983) stated the importance of agency risks claiming that with this capital dilution, companies benefit from selecting an expert and adequate manager.

Jensen and Meckling (1976) developed the theory of agency initiating the Corporate Governance studies. This theory claims that the separation of the ownership from the management may conduct managers to perform actions based on their interests. The authors claim that the agency problems exist, and so, the agency risks also exist each time there is a contract between an agent, called the principal, that empowers other agent to manage part of his capital on his behalf. Considering that both individuals are rational, they want to maximize their utility and value, the manager, with the objective of maximizing is own utility and value can take actions with prejudice to the owner. The authors considered in their study that the development of an efficient contract between shareholders and managers is very difficult to achieve. Consequently, conflicts may rise between managers and stakeholders leading to discrepancies and inefficiencies that decrease the value of a firm. Accordingly to the authors, with Corporate Governance strategies, shareholders are able to control the managers’ performance reducing the probabilities of inappropriate behaviour and actions. If all the variables remain constant, with higher monitoring of the directors’ actions the agency problems should reduce and so increase the company performance. The authors claim that it is fundamental to monitor the behaviour of the managers and to protect the interests of all stakeholders.
2.2. The Corporate Governance Mechanisms

Mathiesen (2002) defined Corporate Governance as a field that investigates how to secure and motivate efficient management of corporations by the use of incentive mechanisms like contracts, organizational designs and legislation. However, the main concern relies on the financial performance increase by those mechanisms. Shleifer and Vishny (1997) claimed that Corporate Governance handles how the suppliers of finance guarantee the return of their investment. In a more detailed perspective, Monks and Minow (2008) defined Corporate Governance as the structure that pretends to make sure that the proper questions are took in place and that checks and balances are in place to verify if the answers reflect what is best for the creation of long-term, sustainable value. Governance is fundamental since all the parties involved are not trustful to do what is better for the organization permanently.

It is still important to access if implementing Corporate Governance mechanisms really matters to the firm value. McKinsey (2002) placed a survey of institutional investors and concluded that good governance is an important factor affecting stock selection. Furthermore, a team from Harvard found that buying well-governed firms and selling poorly governed ones yielded excess returns of 8.5%.

A key aspect of the Corporate Governance mechanisms to be implemented is the cultural issues. It is fundamental to observe and analyze the cultural environment of the firm since it is necessary to adopt different mechanisms accordingly to the environment (Li and Harrison, 2008).

In an international perspective the legal framework defines the nature of the governance problem; however the legal rules vary across countries. This country-level variation in the governance problem leads to country-level variation in the governance solutions (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1998). The quality of legal protection for investors differs across different countries due to the law and the enforcement. When a country has weak legal protection the ownership tends to become highly concentrated, which implies on the importation of the corporate governance solutions.

There are several Corporate Governance mechanisms, which can be either internal or external (Weir, Laind and McKnight, 2002).
2.2.1. Internal Mechanisms

The ownership structure may create incentives for investor to monitor the managers. However, its efficiency it is not consensual among financial literature. Morck (1988) claims that the low concentration (up to 5%) increases firm value due to the convergence of interests. The same author however claims that a higher percentage leads to entrenchment and more opportunistic behavior. Jensen (1983) defended that split ownership can create different level of agency problems. On the other hand this mechanism helps to align managers’ and shareholders’ interests since it reduces the incentives for managers to extract rents (Jensen and Meckling, 1976). In terms of ownership mechanisms and cultural issues there are several Corporate Governance mechanisms accordingly to the country and culture (Shleifer & Vishny, 1997) that can be analysed per region.

2.2.1.1. The Corporate Governance Models

There are different corporate governance models that are normally implemented in different regions in the world. The American model supports the temporary interest of the shareholders in the company, the distance between the CEO and the investors, the active role of the market in the corporate control and the prevail of the investors interests over other stakeholders (Djelic, 1998 and Orru, 1997). The Asian models have usually a bank has the parent company that manages and provides liquidity. The banks are also allowed to have significant parts of the company, being self-governing. There are strong barriers to organizational changes and a strong lack of transparency. This model reduces agency conflicts and gathers easier funding but raises the question of the conflicts of interests and the inefficiency allocation of resources. Then we have the Continental model, used primarily in continental Europe and accordingly to Barca and Bech (2001) gives priority to the shareholders – they control the company – the families and founders usually are the main shareholders, the relationship between the CEO’s and the shareholders is stable, the institutional investors are very important in the companies’ structure, the shareholders have a longstanding interest in the company,
the market is considered as inefficient for control, the banks have a strong role and the employers strong rights.

Another internal corporate governance mechanism is the Board of Directors. There are two basic board models, the one-tier and the two-tier boards (Tan, 2011). The first ones are related with market-based system and they primary responsibility is to monitor the management in behalf of the owners, focusing on the overall panorama and not the daily business decisions and is implement mainly in United Kingdom and United States of America. On the other hand, we have the two-tier boards that are associated with bank-centered systems like Germany and Japan and have two separated government bodies – the supervisory and the management board. The first system has less bureaucracy and faster decision making while the second one has a clearer delineation of duties and greater independence.

One of the main aspects studied in the Corporate Governance field regarding the Board of Directors is the board size. Boone et al. (2007) defend that the existence of small and medium boards promotes innovation. Jensen (1983) claims that a board can be considered small when it has 8 members, while Lipton and Lorsch (1992) defend that it is up to 10 members. Black et al. (2006) figured the number has up to 8 members. Furthermore, smaller boards tend to replace the CEO more efficiently. Yermack (1996) concluded for a negative relationship between Board Size and companies’ value. Once the monitors have increasing importance on the boards also the outsiders are becoming more important (Rosenstein and Wyat, 1990). The authors defended that some problems that can arise from these mechanisms is the fact that the independent members may not be really independent, some directors can be serving the board for too long, the board size can easily escalate to inefficient numbers, the directors can lack expertise and can have residual interest in the company, and it is usual that the CEO is also the Chairman.

The auditor also has an important role on the Corporate Governance mechanisms (Mitra, 2012). These mechanisms have been evolving in order to be adjusted both the social and market needs. The role of the auditor is normally represented by an audit committee that should include non-executive directors by majority, approve the appointment of the auditors, establish the audit fees, approve all non-audit services provided and review earnings releases and management’s presentations to analysts (Xie,
Davidson and DaDalt, 2003). All the members of this committee should have a financial background and should be qualified professionals.

### 2.2.2. External Mechanisms

The main external mechanism used is the threat of takeover (Walsh and Seward, 1990). When a firm is poorly managed it becomes an easy target for a hostile takeover, since markets its price should drop a lot if markets are efficient. As stronger and more efficient the capital markets are more efficient the takeover threat act as a protection mechanism.

The importance of the Corporate Governance mechanisms became more evident with further studies on the field made by Shleifer and Vishny (1997), Yermack (1996), Brown & Caylor (2009) Kaserer & Moldenhauer (2008), Rose (2007), Lehmann, Warning, & Weigang (2004), Elsayed (2007). Shleifer and Vishny defend that those mechanisms, fundamentally the board of directors, are considered important to protect the interests of creditors and investors, and also protecting the firm value and viability. All other studies provide evidence that the financial performance is higher in companies that have implemented real corporate governance mechanisms. Despite the implementation of all those mechanisms, their efficiency was questioned by the occurrence of some public scandals like ENRON and Parmalat. Cadbury (1992) defined the importance of the development of the British companies to the success of the British economy and consequently, the World’s economy. He developed the now famous Cadbury Report (1992)\(^1\), where it is suggested that the companies’ board members should be free to allow them to grow, but in a responsible and transparent way, a good Corporate Governance system. Many empirical studies have considered the board size and its impact on the firm financial performance. Both Yermack (1996), Eisenberg, Sundgren, and Wefls (1998), and Jensen (1993) claimed that reduced boards relate with higher market valuation and profitability considering that the advantages of increased

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\(^1\) Also entitled Financial Aspects of Corporate Governance, was issued in 1992 by “The Committee on the Financial Aspects of Corporate Governance” with Adrian Cadbury as chairman. The report aims to set recommendations regarding the accounting metrics and company boards trying to mitigate risks of failure in the Corporate Governance. It is the base to several other codes both in European Union and United States.
control may be overcome by prejudicial management decisions. Fitsenberg and Malkiel (1994) also defend the idea that shorter boards allow an easier consensus amongst the board member and conduct to a more reliable communication, thus best decisions are made and so improved financial performance. This theory gained power due to the verifications performed by Coles, Daniel, and Naveen (2008) and Boone, Field, Karpoff, and Raheja (2007). On the other hand, larger boards allow a greater pool of expertise, greater management control and better accesses to contracts and resources (Cheng, 2008). Forbes, and Milliken (1999), Yawson (2006), and Pye (2000) defend that the larger boards lead to increasing agency problems, given the difficulty to coordinate its members and to reduce the obstacles in the strategic decisions process.

2.3. The impact of Corporate Governance in the firms

It was during the 21st century that several papers regarding the topic of Corporate Governance appeared. Some examples are the Cadbury Report (1992), Vienot I (1995)\(^2\), Vienot II (1999)\(^3\) and Cromme (2002)\(^4\) which represent the recent influence of the Corporate Governance in the firms. Furthermore the study on this topic was expanded beyond the shareholders-managers relationship since that on the present days all the stakeholders are considered in the Corporate Governance mechanisms. All the agents that have influence in a normal basis of a company are considered, since the creditors, suppliers, government, banks, regulators, clients, sponsors and in an extreme point the society in general. This new trend is more evident in Europe as in the United States of America the capital markets perspective drive the Corporate Governance mechanisms. In fact, the Corporate Governance in the USA plays a role so fundamental that it is the only country that has it legislated through the Sabarnes-Oxlet Act (2002)\(^5\). The risk

\(^2\) The Vienot I report was published in 1995 following the need for transparency by the managers of listed companies and the increasing weight of foreign minority shareholders. Having as basis the Cadbury Report, it is a list of recommendations that facilitates the integration of the Corporate Governance principles into the French Boards of Directors.

\(^3\) Published in 1999, is a report with the recommendations of the committee on Corporate Governance chaired by Marc Vienot. It focuses on two issues, the separation of the Chief Executive Officer and the Chairman roles and the Disclosure of the compensation granted to corporate offices of listed companies.

\(^4\) Cromme is also known as the German Code of Corporate Governance and it was created to establish a set of rules and recommendations on the Corporate Governance topic for the German listed companies.

\(^5\) A United States of America federal law that establishes a group of new or expanded requirements for all the American public companies boards, managements and accounting, impacting also private companies.
management, sustainability and the social responsibility of the companies are now taken into consideration by the Corporate Governance mechanisms. It is a great evolution from the classic studies in the Finance field that only took into consideration the financial performance.

The deregulation of the capital markets, the improving international mobility and their intensive growth, the multinational companies’ globalization and the growth of the financial assets in the wealth of the people demands for a continuous evolution and improvement of the Corporate Governance.

2.4. The Corporate Governance of football clubs

Dimitropoulos (2012) studied the Corporate Governance mechanisms effects in football clubs concluding for a positive correlation between them and the financial performance and viability. They measured the efficiency of the Corporate Governance mechanisms by the size of the board of directors, the level of board independence, the level of ownership on the managers’ side, the existence of institutional investors, and a negative correlation of the financial performance and viability with the role of the CEO as the chairman of the board. In the football industry there are few studies on the corporate governance topic, nevertheless, Naftemporiki (2010) concluded that the mean size of the board of directors in the industry is between seven and ten members. Dimitropoulos (2011) studied the impact of the board size in the clubs financial performance and concluded that the football clubs with smaller board size report financial statement with higher quality.

Accordingly, the issue of efficient corporate governance in sport organizations was initially raised in 1997 by the Australian Standing Committee on Recreation and Sport. Similar reports were published in the UK and New Zealand and by respective federations and research centres and also by the International Olympic Committee. On that direction, Sport and Recreation New Zealand (2004) and Standards Australia (2003) have published a set of governance principles for sport organizations which among others declare that sport organizations must be accountable to shareholders and
stakeholders and provide transparent and reliable information to all interested parties, internal and external.

Dimitropoulos and Tsagkanos (2012) analysed the impact of corporate governance in the football clubs. They used a sample of 67 clubs, where the majority were non-listed clubs. They used as dependent variables accounting indicators like the Returns on Assets and the Solvency ratio (our study will focus only on listed clubs, allowing the use also of market indicators).

The authors concluded that the European football clubs are owned in 47.4% by insiders (managers and officers) and 48.9% from institutional investors. It was also found that the majority of the Boards are composed by nine members were 46.6% of them are independent. However, the CEO duality is not accomplished, the clubs are small sized, highly leveraged and only 11.6% of them are listed.

The results obtained shown that the ROA – returns on assets - and SR - solvency ratio - are positively correlated, that ROA is positively correlated with board size and negatively with the CEO Duality, suggesting that football clubs with increased board size and those where the roles of CEO and board chairman are separated achieve greater levels of profitability.

Profitability is positively correlated to firm size and negatively to leverage as the viability of the clubs is positively correlated both with board size and board independence, this means that independent directors can perform a more efficient control on managers decisions.

The variables managerial ownership, institutional ownership, board size and board independency are both positive and significant as expected.

The CEO duality variable is negative and significant which indicates that the clubs that do not have the CEO duality have a worst financial performance.

The authors also found that listed football clubs are related with higher values of the solvency ratio, therefore, presenting small probability of default relative to their unlisted counterparts. Additionally, listed football clubs are characterized by higher board size and board independence compared to unlisted ones.
The study by Dimitropoulos and Tsagkanos (2012) will be the base of our work. However, since our sample only includes listed clubs, we will allow also use market indicators as dependent variables of our models. Furthermore, as we aim to measure the impact of the corporate governance not only on financial performance but also on sports performance.

2.5. **The measure of financial performance**

Currently earnings-per-share (EPS) is known has the single most popular and widely used financial performance indicator. Graham et al. (2001) shown, in their survey to 400 financial United States executives, that the great majority consider that earnings were the most important measure to report to third parties. Furthermore, EPS is also considered as the basis to strategic decision-making such as share valuations, management performance incentive remunerations and mergers and acquisitions negotiations. It is a simple calculated indicator and easy to understand that leads the managers decisions since they are congratulated each time there is a positive EPS growth. Taking this into consideration, it is not odd to find that managers have a special concern on EPS when it is linked to their compensation.

Atkins et al. (2010) consider that the great motivation regarding the EPS is the fact that EPS summarises the earnings generated for shareholders and the shareholder’s views appeal to investors and management alike. Brown (1999) argues that when companies face severe pressure to meet the expectations of the markets, the underperformance of EPS compared to the estimates has a several impact in share prices. Furthermore, the share prices face a big movement as a response to earnings surprises. This reinforces the perception that short-term earnings drive share price changes instead of long-term cash-flow expectations.

Despite being one of the most popular indicators it is also one of the most contested ones. This is visible in the three major limitations: the inability to reflect shareholder wealth creation, the EPS management and an inherent bias towards positive EPS growth.
Nevertheless, even with the limitations we consider that due to the major use of the indicator it will be used in our study has the indicator of financial performance.

The main objective of our study is to find the relation between the Corporate Governance and the financial and sports performance of the football clubs. We intend to measure if the implementation of good Corporate Governance in the football clubs has impact on the financial performance of them.

Furthermore, given the social impact of football clubs we intend to analyse if the sports performance has also any impact in the financial performance, taking as premise the fact that if a club has a good sports performance it will have more benefits and more supporters, which consecutively, should lead to better financial results.
3. Methodology, Data Collection and Descriptive analysis

The main objective of this dissertation is to study the relation between the Corporate Governance and the financial and sports performance of the football clubs. Taking into consideration the impact of football in the financial, economic and social world, football clubs should be governed as a regular firm and so it is of huge importance to understand led to a better sport performance because in the end it’s the decisive factor regarding the survival of not of a professional football club. Additionally, this study will try also to understand if as expected the sport performance has also any impact in the financial performance. A good sports performance will eventually led to more supporters, which consecutively, should led to better financial results.

Following the lights of the European Transparency Directive (2013), the public listed companies face the obligation of providing transparent information to the general public, both the community and the investor. Furthermore, the legislation establishes that the companies have to publish all the information that can impact the market. Moreover, the Directive obligates the companies to publish quarterly financial reports and interim management statements.

Given the above mentioned disclosure, with the aim of obtaining the most credible and reliable data, all the information was obtained from the published Financial and Corporate Governance Reports, databases and other sources for a sample of European listed football clubs on diverse European markets. Some information was also retrieved from the Bloomberg\(^6\) platform, namely for the clubs that only publish the annual reports in their domestic language. The financial ratios were retrieved from Datastream, Amadeus and the annual reports, while the sport performance indicators were collected from zerozero\(^7\), a huge Internet database that contains football results for all European competitions for the last decades. The period of analysis includes the seasons between 2011/2012 and 2013/2014 (inclusively).

\(^6\) http://www.bloomberg.com/
\(^7\) http://www.zerzero.pt/
Our sample of 21 European listed clubs, shown in Table 1, includes all listed clubs that have participated in the first division of their national league and in the major international European leagues.

### Table 1 - Description of the sample

<table>
<thead>
<tr>
<th>Club</th>
<th>Country</th>
</tr>
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<tbody>
<tr>
<td>AALBORG BOLDSPIKLUB</td>
<td>Denmark</td>
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<tr>
<td>AFC AJAX</td>
<td>Netherlands</td>
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<td>AS ROMA</td>
<td>Italy</td>
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<tr>
<td>BESIKTAS</td>
<td>Turkey</td>
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<tr>
<td>BORUSSIA DORTMUND</td>
<td>Germany</td>
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<tr>
<td>BRONDBY IF B</td>
<td>Denmark</td>
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<tr>
<td>CELTIC</td>
<td>Scotland</td>
</tr>
<tr>
<td>FENERBAHCE SPORTIF HIZMET</td>
<td>Turkey</td>
</tr>
<tr>
<td>FUTEBOL CLUBE DO PORTO</td>
<td>Portugal</td>
</tr>
<tr>
<td>GALATASARAY</td>
<td>Turkey</td>
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<tr>
<td>JUVENTUS</td>
<td>Italy</td>
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<tr>
<td>LAZIO</td>
<td>Italy</td>
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<tr>
<td>OLYMPIQUE LYONNAIS</td>
<td>France</td>
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<tr>
<td>PARKEN SPORT &amp; ENTERTAINMENT</td>
<td>Denmark</td>
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<td>RUCH CHORZOW</td>
<td>Poland</td>
</tr>
<tr>
<td>SILKEBORG</td>
<td>Denmark</td>
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<td>SPORT LISBOA E BENFICA</td>
<td>Portugal</td>
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<td>SPORTING</td>
<td>Portugal</td>
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<td>Turkey</td>
</tr>
<tr>
<td>ARSENAL FC</td>
<td>England</td>
</tr>
<tr>
<td>MANCHESTER UNITED</td>
<td>England</td>
</tr>
</tbody>
</table>

### 3.1. Independent Variables

With the objective of observing the impact of Corporate Governance mechanisms in the European football clubs will we follow the main study developed until today regarding the financial performance of football clubs (Dimitropoulos, 2012). Although, additionally to the financial performance our study will also analyses the impact of Corporate Governance mechanism in the sport performance.

So, using a panel data analysis we estimated the following model:
\[
EPS(t) = c + BSIZE(t) + BINDEP(t) + MANOWN(t) + INSTOWN(t) + CEODUAL(t) + u(t)
\]  
(1)

\[
SPORTS(t) = c + BSIZE(t) + BINDEP(t) + MANOWN(t) + INSTOWN(t) + CEODUAL(t) + u(t)
\]  
(2)

Equation 1 – The impact of the Corporate Governance mechanisms in the financial performance

Equation 2 - The impact of the Corporate Governance mechanisms in the sports performance

The exogenous (independent) variable “BSIZE” is the absolute number of directors that belongs to the board. Naftemporiki (2010) studied the board size on the football industry and concluded that the average board size is between 7 and 10. Boone et al. (2007) defended that the maintenance of small and medium boards enhances innovation. It is visible through all the reviewed literature that if the boards are very large there is a negative impact in the firms’ value. Accordingly to Dimitropoulos (2012), evidence shows that listed clubs tend to have larger boards than unlisted clubs. “BINDEP” represents the percentage of independent directors present in the board as it is a proxy for the board independence (Rosenstein and Wyat, 1990). The authors found evidence that the presence of independent directors is done on behalf of shareholders interest. However, the conclusion that the increasing number of independent directors enhances the firm value was not reached.

“INSTOWN” represents the percentage of shares owned by institutional companies and the variable “MANOWN” represents the percentage of shares detained by the managers. Shleifer & Vishny (1997) defended that the ownership is highly influenced by the geographical region. Jensen (1983) defended that split ownership can create different level of agency problems. Morck (1988) defended that the low concentration of the ownership increases firm value due to the convergence of interests amongst the owners. Despite Dimitropoulos (2012) found a positive impact of the ownership variables in the model, considering the literature reviewed we expect a negative impact.

The last independent variable is “CEODUAL” and is a dummy variable that takes the value of 1 if the the club has a different chairman from the CEO and 0 otherwise. Rosenstein and Wyat (1990) defended that having the same individual sharing the position of CEO and Chairman can lead to lack of expertise and residual interest on the company which may not fulfil the shareholders expectations.
A correlation matrix of all variables is presented in Table 2.

**Table 2 - Correlation matrix**

<table>
<thead>
<tr>
<th></th>
<th>BINDEP</th>
<th>BSIZE</th>
<th>CEODUAL</th>
<th>EPS</th>
<th>INSTOWN</th>
<th>MANOWN</th>
<th>SPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BINDEP</td>
<td>1.00</td>
<td>0.58</td>
<td>0.01</td>
<td>-0.10</td>
<td>-0.16</td>
<td>-0.07</td>
<td>-0.20</td>
</tr>
<tr>
<td>BSIZE</td>
<td>0.58</td>
<td>1.00</td>
<td>0.25</td>
<td>0.35</td>
<td>-0.11</td>
<td>0.13</td>
<td>-0.18</td>
</tr>
<tr>
<td>CEODUAL</td>
<td>0.01</td>
<td>-0.25</td>
<td>1.00</td>
<td>0.11</td>
<td>-0.06</td>
<td>-0.27</td>
<td>0.22</td>
</tr>
<tr>
<td>EPS</td>
<td>-0.10</td>
<td>0.35</td>
<td>0.11</td>
<td>1.00</td>
<td>-0.23</td>
<td>0.08</td>
<td>0.18</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>-0.16</td>
<td>-0.11</td>
<td>-0.06</td>
<td>-0.23</td>
<td>1.00</td>
<td>-0.50</td>
<td>-0.13</td>
</tr>
<tr>
<td>MANOWN</td>
<td>-0.07</td>
<td>0.13</td>
<td>-0.27</td>
<td>0.08</td>
<td>-0.50</td>
<td>1.00</td>
<td>-0.07</td>
</tr>
<tr>
<td>SPORTS</td>
<td>-0.20</td>
<td>-0.18</td>
<td>0.22</td>
<td>0.18</td>
<td>-0.13</td>
<td>-0.07</td>
<td>1.00</td>
</tr>
</tbody>
</table>

From the analysis of the matrix we are able to observe that, as expected, there is high correlation between the board independence and the board size variables. Also, between the managerial ownership and the institutional ownership variables high correlation is visible.

### 3.2. Dependent Variables

As proxy for the financial performance the “EPS” variable was used. Graham et al. (2001) performed a survey amongst 400 American financial executives and concluded that the vast majority consider the earnings-per-share as the most important indicator to report on. Atkins et al. (2010) found evidence that the EPS reflects the earnings generated for the shareholders and is key both for investors and managers. Furthermore, Brown (1999) argued that when a company is pressured to meet the market expectations and is not able to present and EPS similar to the one expected, the price of the shares is seriously impacted. The author also found that share prices are impacted as a response to earnings surprises.

As proxy for the sport performance we developed our own measure based on the club coefficient rankings publish by UEFA every year. UEFA is the entity responsible for the organization of the two major football competitions in Europe and the rankings are based on the sports results of clubs competing in the five previous seasons of the competitions organized by UEFA. The ranking is calculated has the sum of all points won in the previous five years, plus 20% of the association coefficient over the same
period. The points won by the clubs and attributed by UEFA are calculated as presented in Tables 3 and 4.

**Table 3 - UEFA Champions League points system**

<table>
<thead>
<tr>
<th>UEFA Champions League points system</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>First qualifying round elimination</td>
<td>0.5</td>
</tr>
<tr>
<td>Second qualifying round elimination</td>
<td>1</td>
</tr>
<tr>
<td>Group stage participation</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Group stage win</td>
<td>2</td>
</tr>
<tr>
<td>Group stage draw</td>
<td>1</td>
</tr>
<tr>
<td>Round of 16 participation</td>
<td>4</td>
</tr>
</tbody>
</table>

Since 2009/10 clubs have been awarded an additional point if they reach the round of 16, quarter-finals, semi-finals or final.

**Table 4 - UEFA Europa League points system**

<table>
<thead>
<tr>
<th>UEFA Europa League points system</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>First qualifying round elimination</td>
<td>0.25</td>
</tr>
<tr>
<td>Second qualifying round elimination</td>
<td>0.5</td>
</tr>
<tr>
<td>Third qualifying round elimination</td>
<td>1</td>
</tr>
<tr>
<td>Play-off elimination</td>
<td>1.5</td>
</tr>
<tr>
<td>Group stage win</td>
<td>2</td>
</tr>
<tr>
<td>Group stage draw</td>
<td>1</td>
</tr>
</tbody>
</table>

Since 2009/10, clubs have been guaranteed a minimum of two points if they reach the group stage and are awarded an additional point if they get to the quarter-finals, semi-finals or final.

In order to include the national competitions also we have created a system point according to the Table 5. The sport performance measure is a weighted indicator of the similar competitions that the clubs enrol during the season. Given the characteristics of
the indicator we assume that if a club has a 0 indicator the sport performance is bad. From 0 to 10 in a specific season indicates the season was reasonable. From 11 to 29 the season is considered a good season and higher than 30 the season is considered excellent.

<table>
<thead>
<tr>
<th>Competition</th>
<th>Phase</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Champions League</td>
<td>1/8</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>¼</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Semi-Final</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Final</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Winner</td>
<td>8</td>
</tr>
<tr>
<td>National League</td>
<td>3rd place</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2nd place</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Winner</td>
<td>30</td>
</tr>
<tr>
<td>National Cup</td>
<td>Final</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Winner</td>
<td>7</td>
</tr>
<tr>
<td>Super Cup</td>
<td>Winner</td>
<td>3</td>
</tr>
<tr>
<td>Europa League</td>
<td>1/16</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1/8</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>¼</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Semi-Final</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Final</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Winner</td>
<td>6</td>
</tr>
</tbody>
</table>

### 3.3. Descriptive Statistics

The descriptive statistics for the model variables are presented in Table 6.
We can observe that typically the Board of Directors of the listed clubs in Europe is composed by an average of 8 board members, of which 35% (approximately 3) of them are independent.

The maximum number of directors making a board is 15 and the maximum percentage of independent directors in a board is 75%.

On the other hand the percentage of ownership detained by the managers is of 42%.

The institutional investors have on average 15% of the shares, but the highest value observed is of 78%. In some clubs those type of investors are not represented in their ownership structure.

It is also noticeable that the great majority of the clubs (90%) under analysis have a separation between the CEO and the Chairman.

The clubs in our sample present in average the earnings-per-share equal to 1.21 euro. The highest value observed is 20.62 euro.

Finally from the analysis of the sports performance indicator we can conclude that on average the analysed clubs have good seasons, with some clubs obtaining the excellent classification on a specific season.

---

Table 6 - Variables statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Max</th>
<th>Min</th>
<th>Std. Dev.</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Size (number)</td>
<td>7.81</td>
<td>7</td>
<td>15</td>
<td>4</td>
<td>3.13</td>
<td>84</td>
</tr>
<tr>
<td>Board Independence (n. Of independent directors)</td>
<td>0.35</td>
<td>0.38</td>
<td>0.75</td>
<td>-</td>
<td>0.19</td>
<td>84</td>
</tr>
<tr>
<td>Managerial Ownership (percentage)</td>
<td>42%</td>
<td>53%</td>
<td>89%</td>
<td>0%</td>
<td>32%</td>
<td>72</td>
</tr>
<tr>
<td>Institutional Ownership (percentage)</td>
<td>14.73%</td>
<td>7.24%</td>
<td>78.04%</td>
<td>0%</td>
<td>18.91%</td>
<td>84</td>
</tr>
<tr>
<td>CEO Duality (Y or N)</td>
<td>0.90</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>0.29</td>
<td>84</td>
</tr>
<tr>
<td>EPS</td>
<td>1.21</td>
<td>-</td>
<td>20.62</td>
<td>-</td>
<td>3.89</td>
<td>80</td>
</tr>
<tr>
<td>Sports</td>
<td>15.31</td>
<td>10</td>
<td>46</td>
<td>-</td>
<td>14.05</td>
<td>84</td>
</tr>
</tbody>
</table>

---

8 This variable does not include Trabzonspor as the club does not share that information publicly.
4. Regression Analysis

The objective of this section is to study the factors that might have influence in the European football clubs financial and sports performance.

The Corporate Governance variables will be introduced to measure if they impact the clubs financial and sports performance and finally we will analyse both the impact of that mechanisms and of the sports performance in the clubs financial performance.

4.1. The impact of Corporate Governance mechanisms on the financial performance

As suggested in the literature the adoption of good Corporate Governance mechanisms enhances the clubs’ financial performance. The aim of this regression is to measure the impact of the already discussed mechanisms in the analysed clubs financial performance. Given the analysed correlation between the variables the model will be estimated with different variables at the time in order to obtain the most accurate results.

\[ EPS(t) = c + BSIZE(t) + BINDEP(t) + MANOWN(t) + INSTOWN(t) + CEODUAL(t) + u(t) \]  

(1)

Equation 3 – The impact of the Corporate Governance mechanisms in the financial performance

Where,

EPS, represents the indicator of financial performance;

BINDEP, the percentage of the independence members of the board of directors;

BSIZE, the board size;

MANOWN, the level of managerial ownership;

INSTOWN, the level of institutional investor ownership;

CEODUAL is a dummy variable that represents the existence (or not) of duality between the chairman and the CEO.

The results of the regression are shown in table 7.
Table 7 - Financial performance output

<table>
<thead>
<tr>
<th>Variables</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-3.11</td>
<td>-4.127</td>
<td>2.58</td>
<td>-6.268***</td>
<td>-1.757</td>
</tr>
<tr>
<td>BINDEP</td>
<td>-11.835*</td>
<td>-2.898</td>
<td>-10.358*</td>
<td>-4.966**</td>
<td></td>
</tr>
<tr>
<td>BSIZE</td>
<td>1.043***</td>
<td>0.531***</td>
<td>1.018***</td>
<td>0.439***</td>
<td></td>
</tr>
<tr>
<td>INSTOWN</td>
<td>-6.442***</td>
<td>-3.88698</td>
<td>-5.673*</td>
<td>-3.426546</td>
<td></td>
</tr>
<tr>
<td>MANOWN</td>
<td>-1.970773</td>
<td>-0.21473</td>
<td>-0.63075</td>
<td>0.32406</td>
<td></td>
</tr>
<tr>
<td>CEODUAL</td>
<td>3.077**</td>
<td>2.438338</td>
<td>1.027018</td>
<td>3.91*</td>
<td>1.989244</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.353***</td>
<td>0.147***</td>
<td>0.03</td>
<td>0.295***</td>
<td>0.124***</td>
</tr>
<tr>
<td>Observations</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td>80</td>
</tr>
</tbody>
</table>

***p<0.01, **p<0.05,*p<0.1

From the analysis of the output we observe that the model is globally significant. However, we can conclude that the variable MANOWN is not statistically significant individually. Previously, we have noticed that MANOWN is correlated with variable INSTOWN, and also that when we estimate the models with each variable at the time the signal is impacted (Model I and IV). Given this, and considering that the adjusted R-squared is highly impacted in Model V, we will rely on model IV to our study.

The variable BINDEP, shows a negative value, meaning that an increase of one board member has a negative impact in the financial performance of the clubs. On the other hand, when the board size increases one unit the EPS always increases relatively.

The CEO Duality has a positive impact on the financial performance of the clubs.

Furthermore, from observing the constant we can conclude that if all the independent variables are set to 0 the financial performance would be negative. This also leads us to the conclusion that without proper Corporate Governance mechanisms the clubs would have negative financial performances.

In summary, variables BSIZE, MANOWN and CEODUAL are positively correlated with the clubs financial performance. On the other hand, the variable representative of the board independence is negatively correlated with our exogenous indicator.

These findings in Model IV met the conclusions from Dimitropoulos and Tsagkanos (2012).
4.2. The impact of Corporate Governance mechanisms on the sports performance

As stated in the previous sections we intend to measure if the use of good Corporate Governance mechanisms enhances the clubs sports performance. The aim of this regression is to test the influence of the mechanisms under analysis in the clubs sports performance. Given the analysed correlation between the variables the model will be estimated with different variables at the time in order to obtain the most accurate results.

\[ SPORTS(t) = c + BSIZE(t) + BINDEP(t) + MANOWN(t) + INSTOWN(t) + CEODUAL(t) + u(t) \]  

(Equation 4 - The impact of the Corporate Governance mechanisms in the sports performance)

Where,

SPORTS, represents the measure of sport performance;

And all the other variables the same meaning as in the previous equation.

The output of the regression is shown in table 8.

<table>
<thead>
<tr>
<th>Variables</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>23.794*</td>
<td>24.579***</td>
<td>32.283***</td>
</tr>
<tr>
<td>BINDEP</td>
<td>-21.211**</td>
<td></td>
<td>-20.458**</td>
</tr>
<tr>
<td>BSIZE</td>
<td>0.136264</td>
<td>-20.071**</td>
<td></td>
</tr>
<tr>
<td>INSTOWN</td>
<td>-19.04*</td>
<td>-18.954*</td>
<td>-21.901**</td>
</tr>
<tr>
<td>MANOWN</td>
<td>-10.027*</td>
<td>-9.893*</td>
<td>-12.214**</td>
</tr>
<tr>
<td>CEODUAL</td>
<td>6.958034</td>
<td>6.671773</td>
<td></td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.0859**</td>
<td>0.098**</td>
<td>0.091**</td>
</tr>
<tr>
<td>Observations</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>

***p<0.01, **p<0.05, *p<0.1

From the observation of the values we conclude that the model is statistically significant for a confidence level of 95%. Taking into consideration the autocorrelation between the variables (presented before in the correlation matrix), we estimated the model again with each variable at the time.

All the variables have a negative impact on the sports performance. Which means that an increase in one of the variables impact the performance of the clubs negatively.
However, it is noticeable that the constant has a high coefficient. This can be caused by the small number of independent variables, which means that other variables can be the factors that influence the sports performance of football clubs. We conclude that the Corporate Governance mechanisms have impact on the sports performance but are not the only explanatory factor. For a future study we leave open the analysis of the impact of wages, assets and budget on the sports performance.
5. Conclusions

The aim of this study was to investigate the impact of the Corporate Governance mechanisms in the financial and sports performance of the European football clubs. Our sample included 21 listed clubs participating in European football leagues, over the period 2010-2014.

The literature showed that the implementation of efficient mechanisms such as a large board size and its independence as well as the separation between the CEO and chairman roles were a major contributor to good financial performance. In our sample the ownership by managers and institutions seems to negatively impact the financial performance of the clubs. Managers need to understand the importance of implementing good Corporate Governance mechanisms not only to allow the participation of all the clubs' stakeholders, but also to be able to show to the market that the clubs are trustful and from there, be able to obtain other sources of financing. The protection of the shareholders and stakeholders interests should be one of the main objectives of the clubs, since preventing the managers’ expropriation of wealth and maximizing the clubs’ economic results and social return, will ultimately lead to better financial and sport performance.

Nevertheless, from what we have analysed, the Corporate Governance mechanisms seem to not have a direct impact in the clubs sports performance. This variable should be impacted more by clubs’ budget, assets and wages, since those seem to have a direct influence, even if they are decided by the Board of Directors. We have found evidence that the Corporate Governance mechanisms studied have impact on the clubs financial performance, indicating, also that the clubs should have proper mechanisms implemented in order to achieve better financial indicators and be more attractive to the market and consequently to investors.

The European football clubs do not seem to focus on the financial markets, explained by the concentrated ownership, which can be sign that better regulations regarding the Corporate Governance mechanisms are needed and UEFA should restructure the regulatory requirements together with the exchange stocks regulators.

Finally, there are some limitations to our study that need to be highlighted. Firstly, the usage of the EPS as the financial indicator, despite being one of the most common and
used financial indicator, its use is contested by several authors. Also, our study is limited to Europe and to a unique sport, as so, we leave the door open for future studies of covering these topics. Furthermore, with a time spawn of 4 years the conclusions can be biased, so, for further suggestions, a broader timeline can give more strength to our findings.
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Appendix

Appendix 1- Sample analysis

For all clubs the value of revenues, total assets, net income and earnings per share were obtain in the databases mentioned and the descriptive statistics are shown in this appendix.

All the values are an average of the data retrieved for the four seasons under analysis and have been converted from their original currency to euro according the exchange rate published by the Portuguese Central Bank.

Appendix 1 - Sample detailed statistics

<table>
<thead>
<tr>
<th>Club</th>
<th>Revenues</th>
<th>Assets</th>
<th>Net Income</th>
<th>EPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AALBORG BOLDSPILKLUB</td>
<td>16.58</td>
<td>16.09</td>
<td>5.34</td>
<td>0.00</td>
</tr>
<tr>
<td>AFC AJAX</td>
<td>103.80</td>
<td>132.00</td>
<td>16.60</td>
<td>0.00</td>
</tr>
<tr>
<td>AS ROMA</td>
<td>114.60</td>
<td>215.10</td>
<td>-38.60</td>
<td>0.00</td>
</tr>
<tr>
<td>BESIKTAS</td>
<td>66.84</td>
<td>53.88</td>
<td>-42.15</td>
<td>0.00</td>
</tr>
<tr>
<td>BORUSSIA DORTMUND</td>
<td>260.70</td>
<td>292.30</td>
<td>11.70</td>
<td>0.37</td>
</tr>
<tr>
<td>BRONDBY IF B</td>
<td>16.34</td>
<td>25.74</td>
<td>-19.99</td>
<td>0.00</td>
</tr>
<tr>
<td>CELTIC</td>
<td>87.99</td>
<td>131.24</td>
<td>15.23</td>
<td>5.32</td>
</tr>
<tr>
<td>FENERBAHCE SPORTIF HIZMET</td>
<td>95.28</td>
<td>93.36</td>
<td>-54.36</td>
<td>0.36</td>
</tr>
<tr>
<td>FUTEBOL CLUBE DO PORTO</td>
<td>72.00</td>
<td>211.00</td>
<td>-36.00</td>
<td>0.00</td>
</tr>
<tr>
<td>GALATASARAY</td>
<td>104.88</td>
<td>234.42</td>
<td>-26.25</td>
<td>1.04</td>
</tr>
<tr>
<td>JUVENTUS</td>
<td>307.50</td>
<td>495.90</td>
<td>-6.70</td>
<td>0.02</td>
</tr>
<tr>
<td>LAZIO</td>
<td>78.70</td>
<td>174.90</td>
<td>7.10</td>
<td>0.08</td>
</tr>
<tr>
<td>OLYMPIQUE LYONNAIS</td>
<td>104.40</td>
<td>309.50</td>
<td>-26.40</td>
<td>0.00</td>
</tr>
<tr>
<td>PARKEN SPORT &amp; ENTERTAINMENT</td>
<td>146.21</td>
<td>350.52</td>
<td>0.87</td>
<td>1.11</td>
</tr>
<tr>
<td>RUCH CHORZOW</td>
<td>7.41</td>
<td>4.42</td>
<td>-0.59</td>
<td>0.00</td>
</tr>
<tr>
<td>SILKEBORG</td>
<td>7.72</td>
<td>66.59</td>
<td>-0.98</td>
<td>0.02</td>
</tr>
<tr>
<td>SPORT LISBOA E BENFICA</td>
<td>76.00</td>
<td>441.00</td>
<td>14.00</td>
<td>0.11</td>
</tr>
<tr>
<td>SPORTING</td>
<td>29.60</td>
<td>146.80</td>
<td>0.40</td>
<td>0.00</td>
</tr>
<tr>
<td>TRABZONSPOR SPORTIF YATIR</td>
<td>31.26</td>
<td>81.33</td>
<td>-31.20</td>
<td>0.19</td>
</tr>
<tr>
<td>ARSENAL FC</td>
<td>330.48</td>
<td>1135.60</td>
<td>40.80</td>
<td>-</td>
</tr>
<tr>
<td>MANCHESTER UNITED</td>
<td>1007.28</td>
<td>2827.05</td>
<td>55.43</td>
<td>15.67</td>
</tr>
</tbody>
</table>

The largest club in our sample is the Manchester United (United Kingdom), while the smallest club is the Ruch Chórzow (Poland). However, Fenerbahce (Turkey) is the club with the lowest net income average for the period analysed. Regarding the EPS it is visible that the great majority of the clubs present a null result. The club with highest value is Manchester United, while the club with lowest value (excluding the null values) is Juventus (Italy).