

PORTUGUESE FOOTBALL: MANAGING TO COMPETE

Luis Filipe Simão

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Supervisor:

Prof. Dr. António da Silva Robalo, ISCTE Business School, Department of
Marketing, Operation and Management

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Abstract

Football Industry has changed a lot during the last decades and turned into more than just sports or entertaining, into a more complex management challenge. It is now influenced by and influences international environment and organizations, as there is an increasing number of followers and money generation associated with this Sport.

For all the complexity and diversity that can be found in the Football business, which cannot be studied all at once, this dissertation's focus was to find out how competitive the Portuguese Football Clubs are between each other. Although the findings haven't been compared to other football leagues, it is a starting point to further compare with other international leagues.

Keywords: Football, Sports Management, Club, Competition, Premier League.

J.E.L: M29; Z29

Resumo

A Indústria do Futebol mudou completamente durante as últimas décadas, transformando-se em algo mais do que um Desporto ou entretenimento, transformando-se num maior desafio de gestão. Como tal, é agora influenciado e influenciador do ambiente em redor e de organizações, com crescente influência devido ao constante aumento de seguidores e movimentação de dinheiro associadas a este desporto.

Dada a complexidade existente na Indústria do Futebol, que não é possível cobrir de uma só vez, optou-se, através desta Dissertação, em focar-se no Futebol Português e no quão competitivo serão os seus clubes de futebol entre si. De referir que, apesar de não existir, neste estudo, uma comparação direta com clubes de outras ligas, trata-se de um bom ponto de partida para o fazer e procurar perceber mais sobre os clubes de futebol portugueses.

Palavras-chave: Futebol, Gestão Desportiva, Clube, Competição, Primeira Liga.

J.E.L: M29; Z29

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List of Abbreviations

FFP – Financial Fair Play Regulations

FIFA – International Federation of Football Association

FPF – Portuguese Football Federation

GDP – Gross Domestic Product

HR – Human Resources

TV – Television

UEFA – Union European Federation Association

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1. Introduction

The world is in a constant change and adapting to new realities. Last decades, with the development of technology, this changes are happening faster and globally. Therefore, with all this changes happening around us, it is fair to say that, over time, it affects the way we live.

Football, like almost any other matter, is no exception. Since its creation, the Sport has changed a lot, not just on how it is played, but also in the way it is managed. Globalization brought in new challenges and club's management became more than managing people to play the Sport and entertain people. It is now, more than ever, a business that generates and moves considerable amounts of money and football clubs are now more alike to corporate companies than they were before. It's no longer a Sport just to entertain, but also a Sport where clubs compete among them to have more income and profit, as well as a good financial situation, making management decisions to be as relevant as the performance of the players on the pitch.

Considering this, it is possible to say that Management in Football Industry is a lot more complex now-a-days than what it was just 50 years ago. The high number of followers make it have a great macro environmental impact over society and, as a consequence, makes it very influencing over people's life, especially in countries that have a strong interest in it, as it is the case of our country – Portugal.

For all that's been mentioned, there are a high number of variables related to Football that could be explored, both in a macro point of view like the impact in society, corporate responsibility, influences over a population's life, among others, and in a micro point of view like the change in the rules of the game, players mobility and so on. As it is not possible to cover everything in just one study, this one will focus on the understanding of the Portuguese Football Clubs and the existing competition among them in order to find a relation between financial information of the clubs, team's composition (in terms of number of players and nationalities) and the club's performance (rank and titles won).

2. Theoretical Framework: Football Industry

2.1 Football Industry Structure

Football is one of the most popular collective sports in the world and a thriving business, particularly in Europe (Gerrard, 2004), but also throughout the world, both in revenue and spectators. Despite this growth, there are important issues that sports leagues have to deal with in order to ensure its long term success. One of the key issues is the competitive balance, which is reflected by the uncertainty of the results in sporting events (Michie and Oughton, 2004). The excitement generated by the uncertainty of the outcome of the event generates fan interest and therefore leads to increased demand for the service and sporting events view (Rottenberg, 1956).

Due to the outstanding importance for professional team sports, competitive balance has become an important topic of discussion among researchers in sports economics. A wide variety of approaches have been introduced, each of which attempt to provide a better quantification and more efficient competitive equilibrium. As Zimbalist (2002) notes, "there are almost as many ways to measure competitive balance as there is to quantify the money supply" (p. 112).

As in any economic process of professional team sports, the inputs (talent, training) are combined with the capital (stadium) to produce benefits (Game) that is sold to customers (ticket holders, viewers). Unlike other industries, the production of sports industry cannot exist without a competitor.

Note that, the top teams are companies that are intrinsically concerned with matters of economy and finance (Morrow, 2003). The field performance is inextricably linked to financial measures, such as paying the players and the expenses of the clubs (Avgerinou, Giakoumatos, Konstantinakos & Mountakis, 2006).

Since the birth of professional football, intermediaries have established transnational networks in order to provide the best conditions for the mobility of players. Progressively, these have become key figures in the football industry.

Aided by the legal reforms in the regulation of players' labor market, sports clubs significantly increased their bargaining power, as well as an increase in higher revenues of the clubs.

Since the scenario of transfers in winter 2011 through the implementation of the Transfer Matching System (TMS), FIFA began collecting the first official data contained in transfers of international players. In the first nine months of 2011, international transfers of 7,854 players have been recorded for a total amount of US \$ 1.734bn (TMS 2011).

Several studies have focused on the agents, focusing on the theoretical and legislative aspects of this profession. For example, Holt et al. (2006) provide a description of the activity of the agents of football through the game theory.

Siekmann et al. (2007) illustrate the different legal frameworks related to the activity of sports agents in several states throughout the world. In 2009, a research project commissioned by the European Commission examined the role of sports agents in the European Union. This study provides a description of the legal, social and economic contexts in which agents operate (KEA et al., 2009).

Measure the volume of football intermediary business is a difficult task. Indeed, it is usual that the representatives' fees are never fully disclosed. Sometimes these payments can also follow some illegal practices. In addition to the Football League in England, to our knowledge, the English Premier League is the only league that clearly disclose the fees paid by clubs to agents. In 2009/10, the total amount paid to agents was about £67m (BBC, 2010) and this value has been increasing over time. In 2016/17, the amount paid reached £220m (BBC, 2017).

Note that, the FIFA regulation, in its Article 3 states that the activities of football agents can only be held by individuals (FIFA, 2008). Although this regulation does not prevent licensed agents organize their activity in the form of a company. Since 2010, this is no longer the case of France, with the entry of Law No. 2010-626 (Sports Code, 2011). Thus, the new regulations on sports agents approved by the French government forbade them to organize their activity in the form of a company. This decision was taken mainly for

tax reasons, in order to be able to identify the representative of the players, who might otherwise hide their identity behind a company.

In general, the agents can be classified as follows: autonomous agents with their own business as a legal entity; autonomous agents without company as individuals; and agents employed by the company.

As a result, in 2008, the new requirements set out in Article 4 have been placed on agents to establish their own activity as business enterprises (FIGC, 2011). It specifies that the licensed agents may operate through its companies only if authorized by the players/customers when they sign the official mandate. Agents have to be major shareholders of their companies and the number of shareholders that act as the company's licensed agents is limited to a maximum of three.

Moreover, it is forbidden for companies of agents, sell their shares for any football bodies, and vice versa, in order to avoid conflicts of interest. Finally, the company's legal representative must be a licensed agent. Regarding the structure of agents of companies, half of them have other shareholders in addition to the agent. Agencies often group together a number of partners that can support the core business, bringing even more experience in order to differentiate the services provided to customers, or to reach new markets and activity sectors.

2.2 Football, Clubs and Players - An overview of the world of football

With such a high number of followers, the world of football has long been regarded as an industry whose characteristics were more and more like an entertainment service. The ranking of football as business activity has come to revive the economies of countries where football is promoted as a national sport. Today, in most countries football is a large percentage of GDP, because football events also drive a large number of other sectors, such as communication, catering and transport.

Thus, the globalization of the football industry has led to a high concentration of resources in the hands of some European and South American clubs that had the economic resources to face foreign competition and other entertainment companies (Nilsson, 2005).

Football has successfully triggered other team sports like hockey, basketball or handball, and was accepted as the main sport that retains the most media attention and public reception in the world (Horne & Manzenreiter, 2002). According to FIFA, there is a sporting event to record 49.2 million people throughout the world in terms of viewers.

Most notions about business assumes that the company develops, produces and sells a product to a consumer or buyer based on a mutually agreed price. Football evokes more than a service, an experience and entertainment. It was transformed into a media event for the benefit of millions of viewers, some of which are present at the event. The TV recordings also serve as library records (Avgerinou, Giakoumatos, Konstantinakis & Mountakis, 2006).

The mediated events affect to the own stadium or arena, which are enabled to transform ordinary places in special locations. Currently the arena of the top clubs represent the state of the art sports-leisure architecture, and that are associated with various businesses such as VIP rooms, garden areas, food. Similarly, all kinds of products that are and can be sold to football events such as flags, banners, scarves and hats and footballs are other products that are in association with the events of the football and make it a business (Avgerinou, Giakoumatos, Konstantinakis & Mountakis, 2006).

2.3 Evolution and Context of Football Industry

Considering what's been said before, with all the events that occurred in the last three decades, it is not surprising that football clubs turned into commercial companies which encouraged some investors to take prominent positions in such undertakings.

The developments in the media sector allowed the clubs to negotiate more advantageous broadcast rights. As an example, the creation of the Champions League during the season

of 1992 and 1993 resulted in a competition that brought together several top clubs in Europe. This organization organized by UEFA generated approximately EUR 610 million in revenues in 2005/06. This amount was distributed to participants through competition (Deloitte & Touche, 2007).

The analysis of the financial performance was considered only in accordance with the total revenue obtained by the clubs, regardless of the competition in which it participates (Haas et al., 2004).

Zuber, Yiu, Lambc and Gandar (2005) considered the participation of a club in European competitions, which passed the first stage of the competition and reached the finals. The clubs to reach the final stage, benefited from broadcast rights and income per day, and other income.

Could it will thus be noted that the strong economic growth that the football industry has seen since the late 1990s, attracted the attention of the scientific and academic community to identify issues related to the performance of the management of football clubs.

Scientific studies until now, focused mainly on own performance and analysis of the determinants of financial performance. According to Szymanski (1998) the performance of a football club is reflected in two fields, the performance of the players and the strategic actions undertaken by the clubs.

Performance determinants are essentially the issues related to the game itself, the management of clubs guided by the market (Ozawa, Cross & Henderson, 2004), players skills (Gerrard, 2005) and coaches (Dawson & Dobson, 2002), coaching change to (Audas, Dobson & Goddard, 2002; Bruinshoofd & Weel, 2003; Hope, 2003), the market size or base of support for the club (Buraimo, Forrest & Simmons, 2007), strategic actions undertaken by the clubs (Heij, Vermeulen & Teunter, 2006).

The results of successful performance or sporting failure that the club has in national and international competitions comes down to the ability to achieve victories, to win competitions in which it participates as financial performance measures the value created by the club for investors (Heij, Vermeulen & Teunter, 2006). According to those authors,

any company that aims to survive and thrive over time is dependent on its ability to generate funds to reward factors of production. However, the football industry gives shareholders the ability to be linked to sporting performance.

Some current theoretical derivations were developed based on profit theory. Gerard (2005) developed a model of using resources for technical analysis of the efficiency and demonstrated that the clubs that seek to reconcile the sporty performance with the financial expense. This premise is also present in one preposition of Unified Theory of Capital and Labor Markets in Major League Baseball (Vrooman, 1997).

Note also the study of Dobson and Godbard (2004) has identified that the English clubs in a context of financial constraints, seek to maximize revenue and victories with the maximization of profit. In the same line of research Gerrard and Dobson (2000) and Morrow (1999) argue that in order to maximize sports performance to a profit, minimum level has to be achieved, together with maintaining the financial solvency of the club.

In addition to the theoretical developments in the literature, one can find some empirical studies examining the relationship between sport and financial development. One of the first studies conducted on this subject was made by Arnold (1991) that, through the OLS model, found that the level of revenue for English clubs was strongly associated with sports performance during the period 1905-1985.

Later, Szymanski (1998) examined the relationship between sports results and profit before tax of 40 English clubs for over 20 years. The results showed that in only 54% of cases, improved performance in sports reflected in an increase in profits of clubs. Even though the only variables considered were the revenues and salaries, there is a positive relationship between these two variables and sports performance.

Similarly, Szymanski (1998) and Szymanski and Kuypers (1999) describe two general principles on performance in football, the best performance leads to increased revenues and the increase in wage costs leads to better performance of the football league.

The study on the relationship between performance and revenues due to Dobson and Goddard (1998), which analyzed a sample of 77 clubs that have maintained their signature

in the league for 48 years, which shows a relationship between revenue and sports performance.

Despite these assumptions, Barajas et al. (2007) analyzed, using the OLS model, the effect of sports performance in revenues and net profits of Spanish clubs participating in the league between 1998 and 2002. In the first case, there was a correlation between 66.8% and 88.5% and in the second case, only 14.1%. These results demonstrated that to obtain more revenue, the players have to have more talent and greater sports performance.

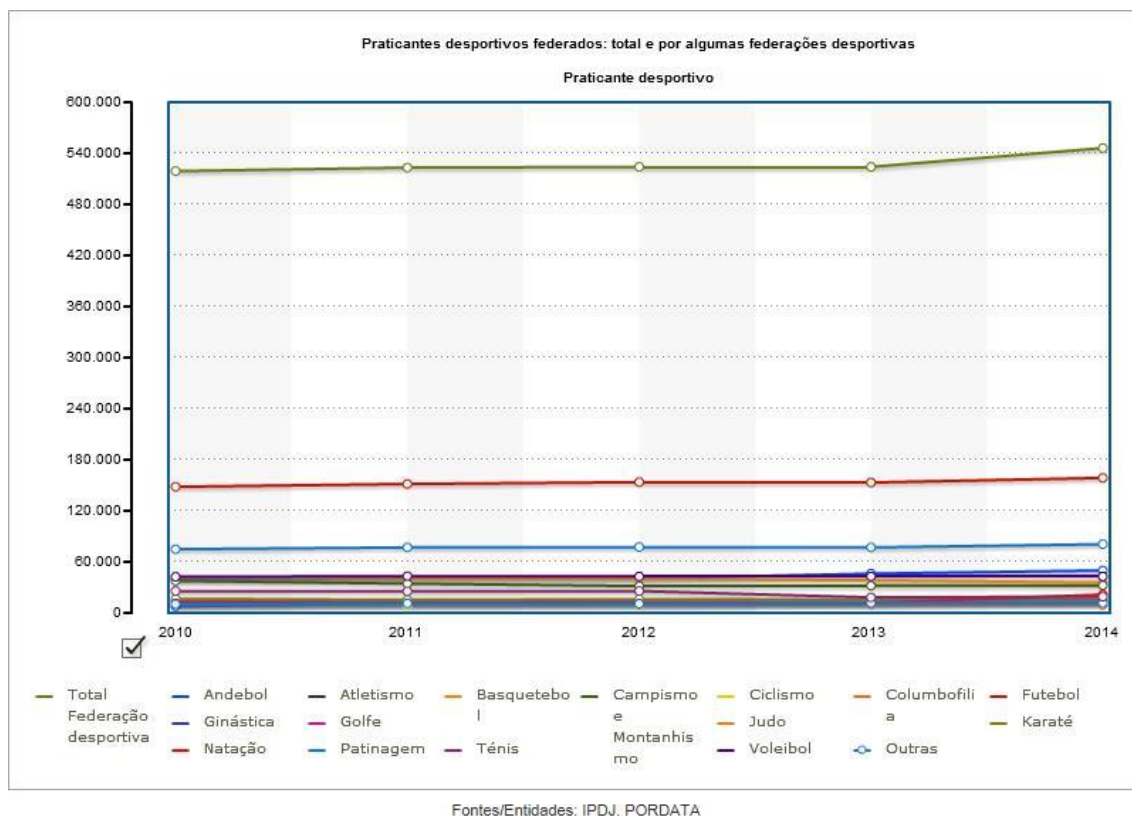
Thus, it is concluded that the direction of causality in the financial performance precedes sports performance is a sport theory of prophecy.

2.4 Panorama of Football Industry in Portugal

Regional development has a strong exogenous influence through linkages of the various economic activities and on society itself. According to Mourão (2010) the sports like football to be quite ambitious and powerful, need a set of infrastructure and support that can sustain their activity. Such infrastructure may only be found in places with strong development rates.

In the case of Portuguese football, it may also be noted that reflects this reality, such as Benfica, Porto and Sporting representing the top teams of the league and fall of the two most developed regions of the country (Mourão, 2005).

Football as a spectacle needs spectators, and they may be in large numbers and on a regular basis. Similarly, there aren't clubs if there are no players and in sparsely populated areas there is less likely to form a football club. The following chart shows the number of people in Portugal who practice a sport.



Attends is thus an expansion of football which has become a real spectacle, with clubs increasingly grown into corporate molds and thus allowing further development of relations with other potential investors. Portugal is considered a small country, it is argued that population levels are not consistent with the number of football clubs.

Over the years, social changes that have occurred in football clubs and their environment. These changes promoted a new way of understanding football. Thus, in addition to being considered an activity and national element has to be explained in order to generate profits at the economic level (Santos and Greuel, 2010). As consequence of this changes there is a need for a more professional management of football clubs, in order to achieve a positive financial record. Nevertheless, managers of football clubs face several challenges, as the speed of transmission, information and its quality is fast and have a direct effect over the decisions made (Santos e Greuel, 2010).

After 80 years, the football industry has evolved significantly in their finances and profits. It is the international body FIFA that most stimulates this economic evolution of football clubs and that legislates the rules (Cross, 2005).

In our country, the most illustrative example are the teams that play the championships organized by the District Football Associations, which have an average lower cost than leading football clubs, but usually also lower revenue. Nevertheless, competitions are organized in a way that allows multiple clubs from the same country to participate in different competitions and, with that, being able to benefit from that, making the gap between stronger clubs lower than it would if only one could take the opportunities.

In this context, it is pertinent to the analysis of the amount of fans the club has and what the return of a game in terms of audience, the demographic expansion of the fans and what the intensity of devotion to the club (Lopes, 2009).

Professional football in Portugal is organized in various competitions that take different degrees of importance in this mode (*Federação Portuguesa de Futebol*, 2017):

- Portuguese League of Professional Football
- Portugal Cup
- Super Cup
- League Cup

When sports performance has impact on stock prices of a football club, Boido & Fasano (2007) distinguish two different transmission channels. According to the authors, there is the emotional channel, where the investor's sentiment plays an important role in determining some investment decisions. It should be noted that some emotional factors play a key role in defining financial market prices (Stracca, 2004).

In this aspect, Falter, Perignon & Vercruysse (2008) concluded that consumer choices are often influenced by the sports performance, this is because, in the event that a negative result will be a negative reaction in consumer demand. According to the authors, the experiences that are based on the most important sporting events in the world as the World Cup. The teams' trophy of achievement represents a period of great joy for the winning country, which makes consumers look more often a particular good or service, that is, there is a positive behavior.

Consequently, success in the field can lead to higher advertising revenue, increased sales of merchandising products and increased brand awareness, which as a result leads to a greater ability to create value for investors.

Are the sports results that influence the investors' state of mind causing human reactions that lead to feelings of optimism or pessimism (Edmans, Garcia, & Norli, 2007). Consequently, the effect on the investor's psychological behavior leads to the purchase or sale of shares in sports undertakings (Samagaio, Couto & Caiado, 2009).

According to Bell, Brooks, Matthews & Sutcliffe (2011), football results can affect stock prices through humor, confidence and emotional state of investors. For example, after a victory, fans can become more optimistic, more confident in their abilities, and less risk averse, making them more willing to buy stock risk, with adverse effects after a loss (Kaplanski & Levy, 2010). Markman & Hirt (2002), report that football fans predict that their team will win, and that it is possible to find a greater reaction in the share price after the defeats rather than after the victories. Duke & Ferreira (2008) concluded that there is a moderate correlation between stock returns and the sporting and financial performance of the club.

2.5 The Football Industry as a Prospective Management

Considering the evolution of the Football Industry and the changes mentioned before, it's natural to think that managing Football Clubs has also changed over the last decades. But what is management? Management control is a term first introduced by Anthony (1965) defined as the process to ensure effectively and efficiently the organization's resources towards the achievement of the objectives and aims. More recently, Kloot (1997) cautioned that management control exists in organizations in order to ensure the achievement of objectives.

It should be noted classical definition of Barnard (1938), by which an organization is a system of two or more persons consciously coordinating activities. In this context, the coordination of these activities is carried out continuously and expliciting purposes

(Rosanas, 1994). Thus, according to Rosanas (1994, p.223) measure the achievement of objectives of the organization can change the top management behavior. And this change of people's performance is the reason for the system, for example, the goal is to guide the performance of the members of the organization, according to the actual data available.

Following this thought, it is stated that the management has four essential functions:

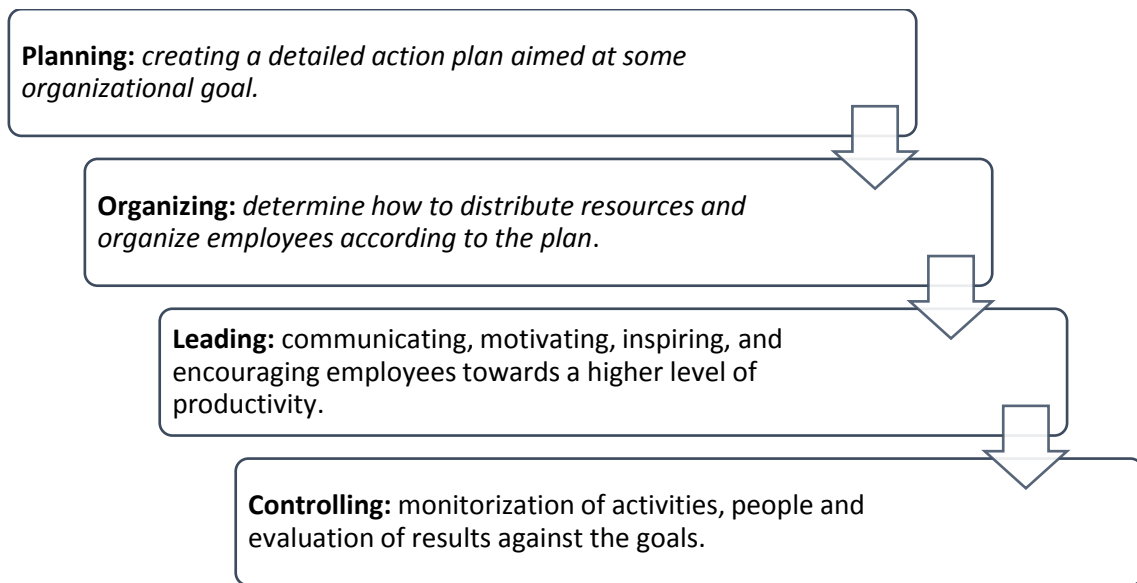


Figure 1 – Four Functions of Management

Source: Adaptation from Rosanas, 1994

Most authors cautioned that management control is a process used subjectively, by managers in order to influence the performance and behavior of their employees (Tannenbaum, 1967; Collins, 1982; Flamholtz, 1983; Inzerilli and Rosen, 1983; Amat, 1992; Fisher, 1995), and put into practice the strategic organization, in order to achieve the objectives and targets proposed (Anthony, 1990; Collins, 1982), both effectively and efficiently (and Anthony Dearden, 1976).

It is a process that requires the establishment of rules governing the behavior of employees, measures the quality and evaluates and corrects the deviance (Henderson and Lee, 1992; Coates et al, 1993). According to Kloot (1997) the majority of management control systems are considered as models of closed and cybernetic cycle. Cybernetic

control systems are models in which the objectives are properly set, the outputs are measurable.

On the overall level of organization, it can be assumed that top managers are interested in whether the organizational goals and pass this interest to all employees and employees (Rosanas, 1994). For the management control process to be successful, they must take into account the environmental characteristics (Collins, 1982). The same means to say that self-regulation of the company's management system solves the strategic problems in relation to the environment and the operational problems (Soldevila, 2000). Thus, the process management control should be considered from two dimensions, a social dimension and organizational dimension. The social dimension has the determinants of society to which it belongs and the organizational dimension is related to the expansion of the company, the development of productive factors and market (Neimark and Tinker, 1986).

The challenges of the Football Industry as it is now, with Clubs having a corporate dimension, the four functions of management provide a strong tool for the management of Football Clubs, where preparation of a football season takes place before the official start, not just with the preparation of the teams and the players, but also with the planning, organization, leading and controlling of the Clubs assets, investments and perspectives.

2.5.1 Main Forms Of Performance Monitoring

In recent decades there have been many academic papers that were focused on performance measurement in companies. According to Almazan, Rosas Garcia Cazares & Chavez (2009) performance is defined as the relevant shares used in order to achieve the organization's goals that can be measured in terms of contribution to company goals. Thus, the positive performance is the performance of management procedures with quality attributes that relate to profitability, efficiency, productivity and effectiveness (Almazan, Rosas Garcia Cazares & Chávez, 2009).

According to Mitchell (2002) organizational performance measure should be made, based on four variables:

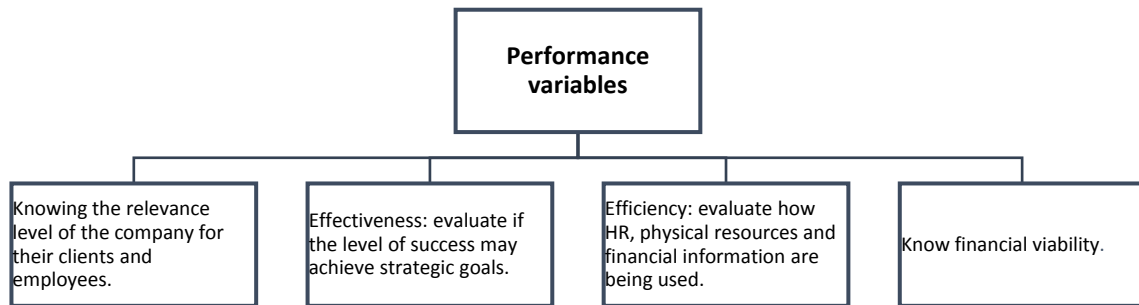


Figure 2 – Four Performance Variables

(Source: Adaptation from Mitchell, 2002)

Once again, this performance variables can be applied to Football Clubs, reinforcing the idea of how corporative they became.

The performance measurement system is defined as the integrated set of individual indicators that are intended to quantify the efficiency and effectiveness as well as the production of information on the performance of the activities and business processes (Montenegro, 2004; Neely & Platts, 2005).

Thus, performance measurement is the activity where it is determined the level of performance, which is important for the improvement, adjustment or regulation of a specific activity. Most of the performance measurement systems that are developed in the companies were created based on the set of practices that have been implemented in several attempts to improve the performance of employees (Folan & Browne, 2005).

The last few years have witnessed an increased interest in the role of performance measurement strategic systems essentially in helping managers to create strategic

competition. According to Kaplan and Norton (1996) it is important to consider four different perspectives where companies are linked together, that is, financial perspective, customer perspective, perspective of internal processes, the prospect of learning and innovation. The following diagram shows these four performance measurement perspectives.

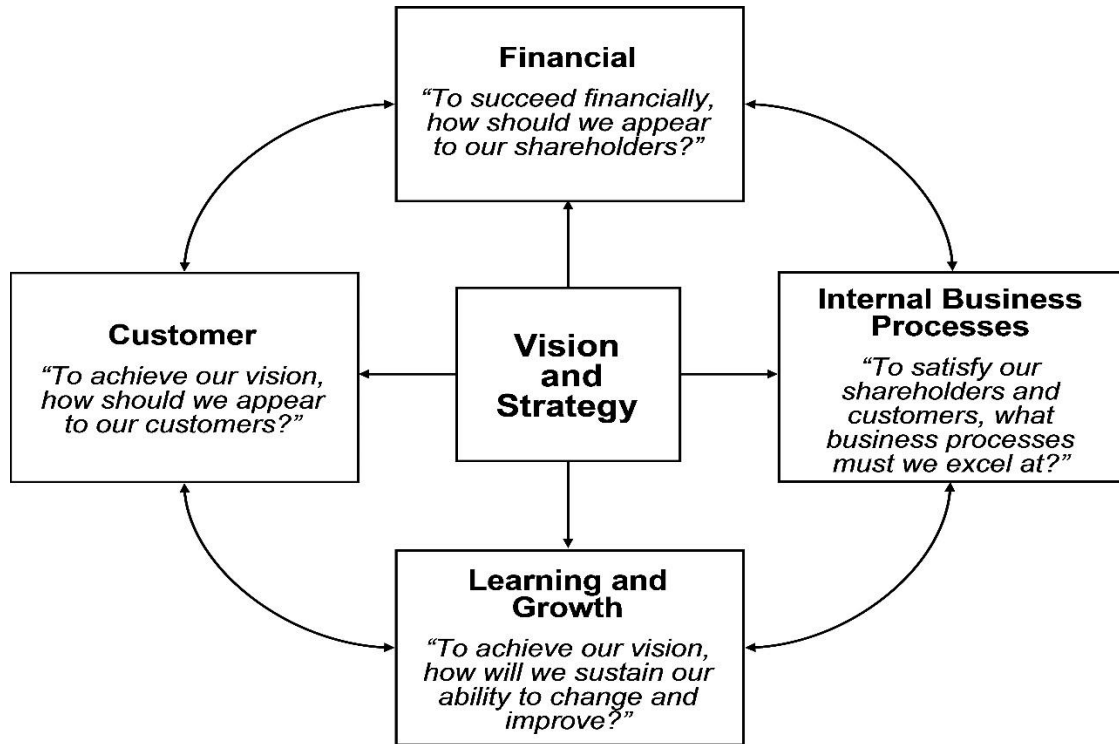


Figure 3 – Four Performance Measurement Perspectives

Likewise, a sporting organization has the same structure as other organizations, as they are formed by people, in a controlled and organized manner, working for the same objective, although through a different management. We therefore classify the sports manager as a profession inserted in the sports world with training and qualifications for the development of the function. Therefore, the sports manager must know deeply the mission and objectives, history, culture and values, and personally participate in the process with dedication (Soucie, 2002).

As suggested by Cross & Henderson (2003), football clubs have in recent decades past to provide in addition to leisure activities, business organizations and consequently

witnessed a change in strategic leading European clubs. According to Aleemullah (2012) the concept of sporting success has covered skills to win trophies in the field and a way to create value. As a result of financial fair play, most clubs face the challenge of carrying out certain short-term strategies that are based on essentially the search for financial success (Aleemullah, 2012).

The analysis of the sports and financial performance becomes important when one wants to study what the strategic objectives to be achieved by the managers of football clubs (Kessenne, 2007), which take the teams to maximizing their profit. Teams must be seen as a utility maximizers in the pursuit of profit targets, subject to certain financial restrictions.

Based on observations of 5 seasons, Barros and Leach (2006) concluded that clubs more revenue and more efficient in most cases are well-executed. The scale effect is a key factor to explain the different levels of competition between the clubs. Haas (2003), and Haas et al. (2004) found that only between $\frac{1}{4}$ to $\frac{1}{3}$, respectively, English and German clubs were efficient (depends on the technique used to DEA).

2.6 The Process of Change in Club Management

According to Drucker (2001) management is necessary for all human endeavors that integrate into one organization, people who have different skills and knowledge and, therefore, it is transversal to all organizations. Currently, before strong financial constraints arises different challenges to sports clubs, in relation to their efficiency, to accomplish its objectives, sports clubs must meet a set of available resources and adapt its financial structure to achieve acceptable levels of efficiency that can ensure their sustainability (Guzman, 2006). It is particularly important to adopt management models that ensure the development satisfaction present needs without compromising the ability of future generations.

According to Wicker & Breuer (2011) sports clubs form the base of the pyramid of the sports system and are characterized by being financed through grants and contributions of members and by setting goals that meet the expectations and interests of these

(Heinemann & Puig, 1996; Robinson & Palmer, 2010). Thus, as a result, clubs must be financially stable and described as associations whose members are ambitious for the achievement of common goals (Wicker, Breuer & Hennigs, 2012). Are aspects of such the capture of human resources, financial capacity and management infrastructure that represent the main challenges of sports clubs, and require them to evolve towards greater acquisition of greater organizational capacity (Wicker & Breuer, 2011).

People and processes are the main focus of change management, which includes activities such as development of innovative forms of measurement, motivation and performance. Change management includes the analysis and definition of all the changes that the organization needs to face and also the development of activities that allow the reduction of risk and cost to maximize the return (Wicker, Breuer & Hennigs, 2012). From this perspective, innovation is seen as the process of change, enabling the understanding that all states organizational change, by creating new rules and values. According to Cowling Mailer (1998), "does not study the change itself, but mainly its effects and all processes associated with it" (1998, p.334).

The current reality in sports organizations reflects a state of successive endless changes and presents daily in all their aspects, bearing in mind that the causes and consequences of the change process are interlinked (Meyers, 2009). But the current organizational environment requires progress that can somehow question the "ways of doing and organizing" organizational activities, (Guzman, 2006). Progress those who go to seek sources and improvement of roads, using experiences of new organizational solutions. According to Myers, (2009) the frequent changes in the last decades of the century, both the socio-cultural level, such as economic and technological level organizations, mean that greater flexibility is required, associated with greater organizational creativity, which main aim is to conduct to rapid and effective adaptation strategies. Also important was the intensification of competition at various levels with the emergence of new forms of competitiveness in the context of a globalized economy, where it is faced with new market requirements that have increasingly dynamics and instability, with organizations coming across new forms of consumption, behavior changes, attitudes and expectations, (Garcia-Sanchez et al., 2007). Among all these competitive factors, Human Resources undoubtedly represent a basic factor of competitiveness, integrating HR in work

organization, being defined as a set of policies and practices of the own organization (Esteve et al., 2011).

The management of human resources is one of the factors to which the author Peter Drucker (1994) refers to as having an important role in the reorganization of the company, as the new technologies play a key role in competitiveness. Thus, the author argues in his theories that the way organizations manage the new technologies of information and communication will make the difference between those who win and those who lose. Having this into consideration, it's possible to say that factors such as creativity, speed and competitiveness are key points of organizational success (Drucker, 1994; Esteves et al, 2011.).

Relating this with the previous information, where there is the idea of Football Clubs as big corporate entities that provide more than entertainment, it is noticeable that Football has a strong relation to people. People make the sport, whether it is inside, as an employee of the Club, or outside, as a supporter or even a business partner. For all these reasons, Football Clubs have now a close link to people and to human resources.

2.7 Relations Between Economic Variables And The Performance Of Football Teams

For all that's been stated, it's clear that professional football has become a multimillion dollar industry. To some extent, due to all the globalization of the sport, it seems that it has lost much of its local charm and many of its inherent geographical features. However, the location also appears to play an important role in modern football. In fact, the geographical basis of this sport is widely apparent in a variety of geographical scales: global, national and local, as is shown by international competition among countries, professional team's patterns, and the ratio of fans to the teams and locations of games.

Generally, there is a very strong link between a football team and the city where it is located. However, professional football teams in Europe are not formally local monopolies with a large state of permanent league, because poor performance in the field

brings bad position, while the good performance allows teams to compete in international championships. Given these considerations, a city can host zero, one or more successful football teams. Obviously, competitiveness and international football success differ markedly between European cities (Heuer et al., 2011)

There is a vast literature on the question of whether professional sports help local economies to develop. The literature that specifically address the determinants of success in international football is based on the success of national teams of models. These studies consider countries as units of analysis and, in general, focus on testing the influence of social, demographic, economic factors, and cultural and geographical factors on the performance of national teams (Magnussen & Storm, 2005).

Most scientific studies on football, consider that the population and per capita income in the cities where the games are held, as two main significant long-term determinants. Some authors determine the hypothesis that income is an important explanatory variable of football consumption. Thus, the most common variables are the population and GDP per capita. Given the size of the people who watch football games, it is pertinent to analyze the role played by the market, local economic environment as determinants of success (Dejongue, 2004).

There is broad consensus in the literature on the relationship between demographic and economic variables identification, which is an international football success explanation. Thus, these studies identify that the success of football increases with population and income. More specifically, the football performance of a country and its per capita income follows a quadratic relationship. The population is used for the potential needs of the market. From a theoretical point of view, it is emphasized that the most populous cities offer a greater potential for domestic market for their teams. GDP a second variable, which can be included in the model as a potential need for the domestic market. However, it can be said that GDP is not suitable since it can be polarized by a scale effect. This means that geographical areas characterized by a large population are likely to have a higher GDP simply because of their size.

In addition to determining the demand side, the spatial distribution of the economy, the activity is also driven by production costs reflected in the conditions of the labor market,

such as wages and unemployment. Theoretically, for most football teams this reasoning is not valid, because football markets are clearly targeted because of the strong preference of the fans. So, turning to small geographic unit of analysis, market demand for motives may be at work as well. Furthermore, the literature on the spatial distribution of economic activity also mentions that the agglomeration economies may be relevant for the manufacturing companies.

There are other non-economic factors influencing football teams. For example, there is a strong relationship between football and culture so that cultural influences may contribute to promoting the international success of football in a team / city. To give an example, the popularity of football as a spectator sport depends on specific cultural factors underlying a particular city. Other variables that can potentially affect cities and their relative performance, could be the environment (weather) geographical, preferences for other sports, institutional factors.

It is often said that viewers and fans can serve as the twelfth of a soccer ball when the team has an extra important match to play. A packed stadium can lift the team so they can win the match (Solberg & Haugen, 2010).

Most of the research have shown that people identify with winning sports teams (Cialdini et al, 1976; Cialdini & Richardson, 1980; End of 2001; Joinson, 2000; Wann & Branscombe, 1990).

End, Dietz-Uhler, Harrick and Jacquemotte (2002) identified that there is a positive relationship between preference and the percentage of team wins. These results suggest that the preference of the team is concerned with the identification of performance.

Some previous studies have evaluated the performance in sport through different approaches. Some studies have analyzed the specific efficiency of players (Torgler and Schmidt, 2007), while others measure the efficiency makers taking into account the characteristics of the team (Fizel and D'Itri, 1997 to Dawson et al., 2000), as well as analysis of sports performance teams in competition involving (Carmichael et al 2000; Barros et al .. 2008). Barros and García del Barrio (2008) consider the financial and sporting objectives in order to measure performance.

The performance of a football team can be studied through the analysis of its results in the field, and it is these results which represent the most important role in the management of a club, more than financial results (Bosca et al., 2006).

The production process can be related to the fact that the football teams reaching their maximum level of sports performance in various competitions in which they participate, making use of available resources. That is, the planning of the manager and the quality of the players will have a vital effect on the results.

2.8 Performance Evaluation of Tangible and Intangible Aspects of the Football Field

Intangible aspects are considered as intellectual capital, and are increasingly becoming a competitive advantage for organizations, especially the sports organizations. The use of these assets give rise to doubts consistent with the accounting.

The football club activities could be divided into three main categories: first generation, income through ticket sales, broadcast rights, match day services and sponsorship. Second, the contract negotiation of the players, and thirdly, develop and improve the talent (Szymanski and Kuypers, 1997).

An asset can be either tangible (machinery, equipment, etc.) or intangible. Intangible assets represent a broad concept - which could be, for example scientific or technical knowledge, licenses, trademarks or intellectual capital (IASB, 2012). IAS 38 is a framework that deals with various issues of intangibles, in order to prescribe the accounting and treatments for these. In order to determine whether an asset is tangible or intangible several criteria must be considered. Tangible assets are treated in accordance with IAS 16, as the fixed equipment (IASB, 2012).

Usually the cost of an intangible asset acquired can be measured through trust, especially when there is a charge in the form of cash or other monetary assets (IASB, 2012). The cost has its purchase price and the active preparation costs for the use (IASB, 2012). Nevertheless, to identify when the asset will generate future economic benefits is difficult.

The main objective of Financial Fair Play Regulations is to improve the economic capacity and increase transparency and credibility (UEFA, 2012). FFP has various rules and regulations, of which two are of great importance: (i) the requirement for balance specified in Article 58-63 and (ii) the reinforced rules on accounts payable in arrears (art. 65-66).

Note that some clubs beyond the recruitment and training of its players in order to complement the strategy of the club, opted for investment in creating their own structures.

The market of the current football is important to promote competitiveness to increase revenues, unlike other markets (Szymansky, 2001). Participation in their National Major Leagues of Professional Football and UEFA competitions associated with an improvement in quality and competitiveness of competitions in which clubs participate, contribute to an increase in revenue. These funds can be used for the improvement of working conditions as well as the acquisition and player retention.

3. Problem Statement

3.1 Research Paradigm

As mentioned before, the purpose of this work is to gain a deep understanding about the competitiveness of the Portuguese Football Clubs, by analyzing inputs and outputs of their performance, both on the pitch (outcome of the matches played, that is, victories and losses) and outside the pitch, on a management level (income, costs, players, etc.).

The reason why it is important to analyze beyond match results, that is, if a club wins or loses matches, is to understand some of the management decisions that are behind the success (or not) of a team and, therefore, may influence their sports performance. As mentioned before, football clubs are now more than an organization created to entertain people, they are now “corporate-clubs”, whose interest is to achieve victories on the matches played and to be as profitable as possible. Management of sports clubs is now more complex and competitive than ever.

In short, the main goal is to obtain information about financial data of Portuguese football clubs and observe their sports performance in order to understand which management decisions are more decisive, or have a bigger impact, over their success.

3.2 Research Objectives

This research will focus on Portuguese Football Clubs, by analyzing specific information about selected Portuguese Football Clubs, like financial information, players and supporters, in order to find if there is a high level of competition among Portuguese Football Clubs. In more detail, the aim is to:

- i. Identify the main differences on financial information, either on their income sources or their main expenses;
- ii. Establish a relationship between the financial information described above and the sport's outcome, that is, the club's match results and lastly their classification on the Portuguese Premier League and titles won;
- iii. Verify if Portuguese Football Clubs have a similar composition of players, regarding their number and nationalities;

- iv. Describe the Club's relationship with supporters, by analyzing their presence in the Club's matches.

3.3 Research Questions

The Research Question that this work explores is:

Are Portuguese Football Clubs competitive among them?

In order to be able to answer the question above, it is important to understand the current situation of the most prominent clubs playing in Portugal. To do it so, it's important to focus on the clubs that show a good record of sports' performance over a period of time, because those will most likely be the ones that have been able to stay more competitive over time. Nevertheless, it is important to explore other questions, like the following ones:

- Is there a correlation between a club's rank and their revenue sources?
- What about a relation between a club's rank and their expenses?
- Do the main Portuguese Football Clubs generate profit?
- Are Portuguese Football Clubs mainly formed by Portuguese Nationals?
- Do supporters help to win matches?

4. Data

4.1 Research Design

The research used was based on a quantitative approach. To decide whether to use a qualitative or quantitative research, it's important to know the kind of data that's going to be collected. Quantitative methods are related to numerical databases and try to test hypothesis through fixed variables. This method is applicable for rather larger samples because they are standardized (Silverman, 2006) and facilitate the finding of generalizable data (Patton, 2002).

Nevertheless, some argue that this type of research has little or no contact with people and, therefore, variables may be defined in a random way (Silverman, 2006). Moreover, some social events are simply not explained by the measurement of numbers or statistics, meaning that, in this situations, a quantitative research method might rather limit the chances of a finding (Silverman, 2006).

The choice of this research methodology is related to the nature of research question. In the context of this research, the analysis will trust, essentially, numerical data regarding financial information, ranks, among others.

4.2 Population Definition

As the analysis is focused on whether Portuguese Football clubs are competitive or not, the population shall be composed by professional Football clubs who are registered and participating in Portuguese competitions. The following section will explain the criteria of selection of clubs to be analyzed.

4.3 Sampling Method

In a simplified version, we can define two main approaches for sampling: random sampling and non-random sampling. The difference between the two types referred is that in the random sample the probability of any member of the population being selected is known, while in the non-random sampling it is not. For this study, a non-random sampling

was used, because the selection was made by professional judgement. The reason for this choice was that, in order to find out the key elements for competitive clubs, it is important to understand from the ones that show more competitive skills. In this perspective, it was delimited the population as the football clubs playing in the Portuguese Premier League, because this is the most important National competition (*Federação Portuguesa de Futebol*, 2017). Nevertheless, the clubs that participate in this competition are not always the same, as the clubs ranked in the bottom are relegated to other competitions – Portuguese Second League – and clubs from this last one are promoted to the Premier League. This helps the competition to be fiercer, as every team's objective is to play in the Portuguese Premier League.

Besides the dynamic change in the teams, also the number of teams in the Premier League has been changing last years. The number of participating clubs has been changing between 18 and 16 (currently it is 18).

For the reasons above, were selected 12 teams based on their recent history within this competition, that is, teams that have been playing mostly in the Portuguese Premier League in the last years. Based on the applied judgment, were selected the following teams to be analyzed: *Porto, Benfica, Sporting, Braga, Vitória de Guimarães, Académica, Gil Vicente, Marítimo, Vitória de Setúbal, Rio Ave, Nacional e Paços de Ferreira*.

4.4 Data Collection and Procedures

4.4.1 Data Collection

To conduct the present investigation, Primary Data collection was used. The reason for this research method is related to the lack of studies available on the Portuguese Football. In Primary Data analysis, the individuals who collect the data are the ones who treat and analyze the same information (Church, 2002).

The information used was collected: (i) from the Portuguese Premier League statistics regarding the clubs, attendance and players, provided by FPF, in order to understand the sports' performance, (ii) from the clubs financial statements in order to understand the financial results. Some reports were accessed directly on the club's website and others were obtained after request by mail or physical meeting. (iii) Finally, information about

followers (supporters) in some online platforms defined as social media (Facebook and Twitter) were collected by accessing these applications or online platforms.

The financial data collection considered a period of 10 sporting seasons, from the season 2005/06 until 2015/16. Regarding this information, the main difficulty was that for some of the clubs it was not possible to get the financial statements of some seasons, therefore they had to be estimated based on the existing financial reports of other seasons for that team and similar ranked teams for the analysis period.

4.4.2 Data Preparation: Variables

The sources consulted to obtain the previously mentioned data contained extensive information and so it was needed to define relevant information to use. Considering the game elements previously discussed in this research, there were 3 main elements that were considered for the variables: sports performance, supporters and financial performance.

For the sports performance (outputs) were considered the following variables:

- Season – sports season considered, ranging from 2005/06 to 2015/16;
- Club – clubs considered to analysis (already mentioned before);
- Points – final points obtained in the end of the season;
- Rank – final classification in the end of the season;
- Wins – number of matches won in the end of the season;
- Draws – number of draw matches in the end of the season;
- Loses – number of defeated matches in the end of the season;
- Goals Scored – total number of scored goals in the end of the season;
- Goals Against – total number of goals conceded in the end of the season;
- Player's n.º - total number of players in the team for that season;
- Player's av. Age – player's average age in the team for that season;
- Portuguese Players (%) – percentage of Portuguese players.

The supporter's analysis considered the following variables:

- Total Attendance – total number of spectators in the stadium for that season;
- Average Attendance – average spectators in the stadium per match;
- Stadium Average Occupation (%) – average stadium occupation, considering the average number of spectators and the stadium capacity;
- Lowest Spectators n.º - lowest number of spectators in the stadium for a match;
- Highest Spectators n.º - highest number of spectators in the stadium for a match;
- Facebook followers – number of followers in the club's official page on the social media Facebook;
- Twitter followers – number of followers in the club's official page on the social media Twitter.

Finally, the financial performance considered the variables below:

- Total income (without player's transfers) – total income without income resulting from player's sells;
- Sports receipts from European Competitions – total income resulting from the club's participation in the European Competitions, namely European Champions League and Europe League;
- Sports receipts from attendance – income from ticket sales;
- Membership fees – income from associates fees;
- Publicity – income resulting from advertisement and publicity services;
- T.V. rights – income from television broadcasting rights;
- Receipt from player's transfers – income from player's sells;
- Other sports receipt – income from sources that don't apply to the mentioned before;
- Assets – club's assets;
- Total costs – total expenses;
- External services and supplies – total expenses with external services and supplies;
- Personnel costs – total expenses with all human resources.
- Amortization and Provision – amortization and provision expenses;
- Other costs – expenses that are not included in the above segments.

5. Analysis Of Collected Data

5.1 Descriptive Summary

In order to analyze the collected data, some descriptive statistics were performed and the conclusions are as following:

Table 1 – Descriptive statistics of clubs

		Number of teams
Season	2005/06	12
	2006/07	12
	2007/08	12
	2008/09	12
	2009/10	12
	2010/11	12
	2011/12	12
	2012/13	12
	2013/14	12
	2014/15	12
	2015/16	12
	Total	132
		Number of participations
Club	Académica	11
	Benfica	11
	Braga	11
	Gil Vicente	11
	Guimarães	11
	Marítimo	11
	Nacional	11
	Paços de Ferreira	11
	Porto	11
	Rio Ave	11
	Sporting	11
	Vit. Setúbal	11
	Total	132

Table 1 shows that the data used is composed by a total of 12 different Portuguese football clubs, referring to information about the seasons starting in 2005/06 until 2015/16.

Table 2 – Descriptive statistics of players

	n	Min	Max	M	dp
Number of players	123	25	47	33,67	4,42
Player's age average	123	21,84	26,16	24,35	1,00
Portuguese players (%)	123	18,75	72,41	43,67	11,45

Table 2 indicates that each football club studied has an average of 34 players in their team, whose average age is 24. Also, 43,67% of the players are Portuguese.

Table 3 – Descriptive statistics of sports performance

	n	Min	Max	M	dp
Points	123	23	88	47,16	16,64
Rank	123	1	18	7,28	4,54
Won matches	123	4	29	13,11	6,04
Lost matches	123	1	17	7,87	2,74
Draw matches	121	1	19	10,32	4,77
Goals for	123	20	88	42,33	14,91
Goal against	123	13	63	36,06	11,88

Table 3 expresses that the Portuguese clubs get an average of 47 points, 13 victories per season, 8 defeats, 10 draws, score on average 42 goals and concede and average of 36 goals.

Table 4 – Descriptive statistics of stadium attendance

	n	Min	Max	M	dp
Total attendance per season	123	23526	855474	218792,58	227201,39
Average attendance per match	123	1568	50322	14037,31	14457,01
Average Attendance per match (%)	123	13,00	86,00	45,36	19,15
Lower attendance on a match	123	347	36599	8714,19	10049,13
Higher attendance on a match	123	2064	64235	22128,57	19331,72

Table 4 shows that the average attendance for the considered period was 218.793 supporters per club. Also, the average attendance per match was 14.037 supporters, which gives an average of 45% of stadiums' capacity occupation. In the season 2012/13 the club *Vitória de Guimarães* had a match played without any attendance as punishment imposed from the FPF, which also happened to the club *Nacional da Madeira* in the season 2013/14 for one match. If we don't consider these two matches where there was no supporters in the stadium, it's possible to notice that the lowest number of supporters in the stadium was 347, while the maximum reached 64.235 supporters at a stadium in a single match.

Table 5 – Descriptive statistics of club's income (in euros)

	n	Min	Max	M	dp
Income (without player's transfers)	123	1666659	126075000	21556802,02	28539377,47
Income from UCL	123	1	36170000	2872415,46	6468758,48
Income from UEL	123	1	15677046	601518,60	1879275,54
Income from attendance	123	25372	23699000	3742654,35	6186471,59
Other income	123	80847	33680780	4499912,54	5145899,21
Income from memberships	123	1	9508000	1125011,15	2243265,04
Income from publicity	123	66000	21151000	3659747,89	5399369,60
Income from TV rights and broadcasting	123	450000	34628000	5040005,15	6327760,66
Income from player's transfers	55	340000	114959838	19571144,25	24866732,78
Assets	123	1200000	476378000	75413078,55	113207231,94

Table 5 indicates that the average income (without player's transfers) of the Portuguese clubs represented are 21.556.802 euros. Clubs that participate in the UEFA Champions League get an average income of 2.872.415 euros from it and those who find their way to compete in the UEFA Europe League get an average income of 601.519 euros from it. Attendance income represented, in average, 3.742.654 euros. From all the other sources of income for the clubs, highlight for the average 5.040.005 euros that clubs got for T.V. rights and the average income of 19.571.144 euros from player's sold.

Table 6 – Descriptive statistics of club's expenses (in euros)

	n	Min	Max	M	dp
External services and supplies	123	-42048000	-481948	-7407330,11	9930510,65
Personnel Costs	123	-75790000	-1001471	-14132479,54	18063153,14
Amortizations	118	-18409000	3230223	-1996897,85	3480322,49
Other expenses	123	-9542000	-43254	-1447196,99	1640895,50
Total expenses	123	-124425000	-3027143	-24937847,37	31224860,25

Table 6 shows the expenses for Portuguese clubs by category, where it is possible to find that, on average, clubs spent 7.407330 euros in external services and supplies and 14.132.480 euros in personnel costs (staff), among other expenses.

5.2 Findings

The gathered data can provide some insightful information to help understand some success factors, both on a sporting level but also on a management perspective because in the end what matters is to achieve success while maintaining a sustainable financial

position. From the observation of the variables in the gathered data, considering the sports performance only, it's possible to observe that all the clubs who have won the Portuguese Premier League during the 11 seasons considered had always the highest number of won matches in that specific season. A little less obvious is that in 10 out of the 11 seasons, the winning club scored more goals than any other team, while in 9 out of the 11 seasons the winning club have also conceded less goals than any other club.

Despite the sports performance it is also important to understand the management and their impact on the sports success. Nevertheless, the management should be balanced and sustainable, in the sense that Clubs should be able to keep on top of the competitions but also avoid having poor financial results that could result in bankruptcy (bad management).

On the other hand, looking into the financial information it is possible to observe that management differs from club to club. An interesting fact is that in most cases, expenses are higher than the income, if we don't consider player's transfers. On the other hand, it's possible to conclude that winning the championship doesn't necessarily mean to have the most income or profit for that season, which gives management some empowerment because it tells that the financial results will not depend exclusively on the sports performance.

Considering that the financial variables (income and expenses) represent the management's decisions and influence, for this research, these variables were considered the inputs that, combined, will help to achieve the outputs for the sporting performance. In this perspective, some tests were performed to find out a correlation between inputs and outputs, as shown below.

Table 7 – Correlation between sports performance and attendance with financial performance (income variables)

Outputs	Inputs	Income (without player's transfers)	Income from UCL	Income from UEL	Income from Attendance	Other income	Membership	Income from Publicity	Income from TV rights	Income from player transfers	Assets
Points	p	,843**	,665**	,373**	,812**	,675**	,526**	,841**	,766**	,651**	,795**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Rank	p	-,684**	-,522**	-,290**	-,661**	-,534**	-,515**	-,696**	-,607**	-,480**	-,634**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Matches Won	p	,854**	,674**	,380**	,821**	,693**	,528**	,853**	,770**	,652**	,806**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Matches Lost	p	-,510**	-,400**	-,253**	-,477**	-,475**	-,279**	-,505**	-,438**	-,410**	-,491**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Matches Draw	p	-,735**	-,578**	-,310**	-,727**	-,572**	-,564**	-,755**	-,645**	-,485**	-,684**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Scored Goals	p	,853**	,703**	,368**	,809**	,703**	,494**	,848**	,761**	,719**	,828**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Goals Against	p	-,681**	-,536**	-,277**	-,666**	-,511**	-,495**	-,702**	-,599**	-,520**	-,613**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total Season Attendance	p	,918**	,704**	,338**	,928**	,678**	,725**	,935**	,813**	,593**	,884**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Average Attendance	p	,918**	,693**	,348**	,930**	,688**	,755**	,940**	,794**	,571**	,881**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Average Attendance (%)	p	,661**	,479**	,271**	,633**	,608**	,460**	,646**	,586**	,380**	,623**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Minimum Attendance on a match	p	,890**	,666**	,289**	,917**	,649**	,732**	,914**	,787**	,500**	,854**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Maximum Attendance on a match	p	,892**	,676**	,335**	,906**	,665**	,740**	,917**	,766**	,565**	,861**
	Sig.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

From the above table 7 it is possible to notice a positive correlation between the variables points, matches won, goals scored and attendance with the general income variables, meaning that an increase of the various receipts tend to be associated with a better output of the mentioned data.

On the other hand, there is a negative correlation between the variables rank, matches lost, matches draw and goals against and the general income variables, which means that an increase in the income will generate a reduction of the sports outputs mentioned.

Table 8 – Correlation between sports performance and attendance with financial performance (expenses variables)

Outputs	Inputs	External services and supplies	Personnel costs	Amortizations	Other costs	Total costs
Points	<i>p</i>	-,785**	-,816**	-,600**	-,635**	-,824**
	Sig.	0,00	0,00	0,00	0,00	0,00
Rank	<i>p</i>	,648**	,661**	,468**	,555**	,670**
	Sig.	0,00	0,00	0,00	0,00	0,00
Matches won	<i>p</i>	-,796**	-,828**	-,600**	-,645**	-,834**
	Sig.	0,00	0,00	0,00	0,00	0,00
Matches lost	<i>p</i>	,479**	,493**	,337**	,412**	,499**
	Sig.	0,00	0,00	0,00	0,00	0,00
Matches draw	<i>p</i>	,687**	,711**	,543**	,539**	,715**
	Sig.	0,00	0,00	0,00	0,00	0,00
Goals scored	<i>p</i>	-,805**	-,822**	-,585**	-,638**	-,832**
	Sig.	0,00	0,00	0,00	0,00	0,00
Goals against	<i>p</i>	,642**	,673**	,437**	,456**	,668**
	Sig.	0,00	0,00	0,00	0,00	0,00
Total season attendance	<i>p</i>	-,837**	-,895**	-,727**	-,658**	-,901**
	Sig.	0,00	0,00	0,00	0,00	0,00
Average attendance	<i>p</i>	-,842**	-,894**	-,707**	-,660**	-,900**
	Sig.	0,00	0,00	0,00	0,00	0,00
Average attendance (%)	<i>p</i>	-,606**	-,625**	-,453**	-,518**	-,633**
	Sig.	0,00	0,00	0,00	0,00	0,00
Minimum attendance on a match	<i>p</i>	-,807**	-,864**	-,690**	-,646**	-,869**
	Sig.	0,00	0,00	0,00	0,00	0,00
Maximum attendance on a match	<i>p</i>	-,835**	-,875**	-,649**	-,628**	-,879**
	Sig.	0,00	0,00	0,00	0,00	0,00

**. Correlation is significant at the 0.01 level (2-tailed).

Looking into table 8 one could say that there is a correlation between the variables points, matches won, goals scored and attendance with total costs, particularly influenced by personnel costs. The influence of higher personnel costs over a better sports performance could be explained by higher wages and higher bonuses paid to players due to their achievements and success on the pitch. Nevertheless, it could also be that higher wages could turn on player's motivation and effort to achieve success on the pitch.

6. Conclusion

6.1 Conclusions

Is there a correlation between a club's rank and their revenue sources?

Generally, the better the rank, the better the Club's revenue streams tend to be. Although income can be a reward for winning titles, there are other sources of income that are more specific and allow to have a better understanding if a club's sports' performance (victories) can result in higher income. Regarding this issue, it is possible to notice that there was a relation between the matches won and the income from attendance. Nevertheless, it is important to understand the game behind the pitch, where management can influence the future of the club, as it is responsible for many of the decisions that will affect their financial statements. For example, one of the highest responsibilities of Football Clubs are their personnel costs, and management has a direct influence on the wages. On the other hand, some of the income is also directly dependent of management's approval and negotiation skills, like the player's transfers that plays an important role on the Portuguese Football Clubs financial statements.

What about a relation between a club's rank and their expenses?

It was possible to observe the existence of a relation between a club's rank and their expenses. The clubs that perform better in the Portuguese Premier League tend to have higher expenses, especially with the personnel costs. Nevertheless, there could be several explanations for this fact, like the rewards that players get when they achieve certain objectives like winning the Championship. Also, it could be explained by higher wages for the most talented players, as a way to keep them happy and motivated and, more important, in the club itself. Also, it could be explained by the size of the club itself, as many clubs have other sports' competitions and teams, which could get more investment as the club's success on the pitch also increases, meaning that the bigger the club gets, the more expenses it will have.

Do the main Portuguese Football Clubs generate profit?

Yes. From the analysis of the Portuguese Football Clubs' financial statements, it was possible to find that they can be sustainable. But what does sustainability mean? Based on existing literature on this topic it is possible to say that a sustainable business is one that operates in the interest of all current and future stakeholders in a manner that ensures the long-term health and survival of the business and its associated economic, social, and environmental systems (Landrum and Edwards, 2009).

So, taking a look into the data of the selected Football Clubs it's possible to notice that, most of them, have higher expenses over income, if no player's transfers are considered. Having more expenses than income, if constant over several sports seasons, will have a negative impact on the club's sustainability and could lead to bankruptcy. Nevertheless, when considering the income of the players' transfers, the financial performance tends to be neutral or positive.

As football is more complex now-a-days and players move between clubs on a higher quantity today than they did before, meaning that players' transfers are a part of the business, it's fair to say that transfers are part of the game. In this perspective, management can choose to try to sell players for a higher value than they were bought, or even to invest into young players' formation and sell them for profit.

As a conclusion, we could say that most clubs show higher expenses over income for the general financial variables, but adding players' transfers' income manage to keep a positive overall income. As players' transfers get more importance and higher values from season to season, it is fair to say that they are, currently, part of the business.

Are Portuguese Football Clubs mainly formed by Portuguese Nationals?

By looking into the selected clubs for this analysis, we can observe that more than half of the players in the Portuguese Premier League are non-Portuguese players. Football business industry, like almost any other current business in our planet, is exposed worldwide. Besides the existing regulation of FIFA and UEFA and the competitions among clubs from different countries that contribute to an internationalization of clubs, there are also signs of internationalization on the teams itself.

Do supporters help to win matches?

Research shows that the better the sporting performance (matches won), the higher is the attendance on the club's matches. This is not enough to say if supporters help to win matches, because it is not possible to say that supporters' motivation will help the football players to play better and achieve better results, because on the other hand it can also be that the better the football team plays, the more supporters there will be at the stadium. Either way, it is noticeable that the more sports success a team has, the more it tends to have their stadiums fill in with more supporters per match.

Also, besides the impact that supporters may have on the football team and their sports' performance, there is also an impact over the income, as income from attendance plays an important role on club's financial statements. It's also for this reason that there is a trend in football clubs' management to engage more and more with the supporters, by having social institutions, events and promotions to engage with fans.

Are Portuguese Football Clubs competitive among each other?

Although Portuguese Football is not as competitive as other Leagues in Europe, if we consider that there are clubs from other countries that have a higher dominance concerning sports' success, by looking into their victories in European competitions, it is also fair to say that Portuguese Football has a good potential to become more appealing for supporters, football lovers and business investors. This potential is shown by several factors, like the constant presence of Portuguese clubs in the final stage of European competitions, and also by the recognition of good Portuguese players that get media's attention and individual prizes.

Portuguese Football Clubs show that there is big competition among them, although there are 3 clubs that are clearly dominant: Porto, Benfica and Sporting. The competition exists because the less competitive clubs are relegated for a second league, which keeps a rotation of the less successful clubs out of the Premier League. On the other hand, having more than 50% of foreign players in the Portuguese Premier League shows that the National competition is interesting enough to attract players from other countries, which can contribute with more talent and international exposition.

Finally, it's very important to keep a healthy record over the financial situation, which, as mentioned before, it's not entirely connected with the sports' performance, but also with the club's management. But no matter the management's vision, which has a lot of important decisions to define the future like, for example, buying players and promoting them to sell for higher prices or investing into youth squads, it seems to be very important to connect with people. Fans can have an important impact over a team's success, both regarding the financial and the sports' performance. Having a good sports' performance will help to have more attendance on the Club's matches which will help to keep the player's motivated and will generate more merchandise sold, which will also improve the media's attention and therefore increase all the other sources of income like T.V. rights from broadcasting and publicity, which helps the club to be able to face their expenses and responsibilities and pursue a long-term sustainability.

6.2 Limitations of the research

This research has its limitations, which will now be pointed out. To start, there is a few literature and studies regarding Portuguese Football, as there are other Football Leagues that have more attention and followers. On the other hand, there is also a lack of information regarding Portuguese Football Clubs, especially concerning financial information. The reason for the lack of information is that most clubs didn't have the obligation to show their financial statements until recently, making it a confidential information for the club's administration. Nevertheless, as the collected data concerns Portuguese Clubs, some of the findings may not be valid in other countries, which could mean that it is not possible to compare two different leagues based on the same type of information collected.

6.3 Suggestions for further studies

Football Industry is a business that generates and moves billions of euros each year globally, which turns it into an interesting business area. Also, the uncertainty of the sports outcome makes it have a lot of followers worldwide. Nevertheless, its complexity makes it difficult to study and cover all their Industry areas in just one study, which is why it is important to try to focus in a few topics to explore. However, after understanding

the business and competition in a country (like Portugal), the next step should be to compare with other countries.

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