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The catchment area and the performance of football clubs in Europe

Master thesis

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PREFACE

In front of you lies the master thesis with which I complete my Master of Science Economic Geography at the University of Groningen. It marks the end of my time as a student and hopefully the start of an interesting professional period.

I completed this thesis for the greater part in Italy at the Politecnico di Milano during the Erasmus European exchange program. Therefore I would like to thank my supervisor in Milan, Ilaria Mariotti. She has been very patient and helpful with constructing the thesis. Although she is not an expert on the field of football she tried to understand the subject and thought along with me, what I really appreciated.

Special thanks I would like to give to my supervisor in Groningen, Paul van Steen. With his critical and useful feedback he guided me through the difficult starting period and helped me to improve the quality of the paper. Also I want to mention Wim Meester for providing me honest and useful suggestions in a critical stage of the thesis.

Finally my parents, the most important people during my university period. I would like to thank them for supporting me in my choices and confidence in my abilities.

I hope you will enjoy reading my thesis.

Yours sincerely,

Eric van Heesen

ABSTRACT

This study examined the relationship between the local catchment area and the on-field performance of football clubs from the five major European leagues. In the early days the local catchment area of a football club could be seen as the major determinant because this was the place where it attracted the talent, fans and sponsors from. But with the globalization process in the football industry it is theoretically possible to attract talent, fans and sponsors from all over the world. Therefore it is an actual question whether the local catchment area is still related to the on-field performance of football clubs.

Also other determinants of on-field performance are taken into account, the historical success nationally and internationally as well as foreign ownership. The first two are based on the theory of *success breeding success*, which implicates that well performing clubs remain strong. Foreign ownership on the other hand is often associated with investments of large amounts of capital. Together with catchment area these are mainly the determinants of on-field performance. Furthermore the relationship between the football clubs' main sponsor origin and the on-field performance is investigated.

Based on a multiple regression analysis it can be concluded that the local catchment area is still a determinant of on-field performance, but historical national success can be marked as the major predictor of performance. Also international historical success contributes significantly to the performance. All these determinants are found to have a positive relationship with the performance. The multiple regression indicated as well that foreign ownership is not significantly related to performance, while the origin of the shirt sponsor is actually related. This implies that football clubs with international shirt sponsors perform significantly better than clubs with local or national sponsors.

Keywords: European football, catchment area, on-field performance, foreign ownership, shirt sponsorship

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1. INTRODUCTION

1.1. RESEARCH BACKGROUND

Why does London accommodate six football clubs in the highest football division, while Berlin has none in 2013? Why did football clubs from major European cities like Rome, Paris, Berlin and till last year London never win the most important European cup? In other words: is there a relationship between the location and performance of European football clubs?

There is various literature from different sports concerning the relationship between the on-field performance (performance in the national or international leagues) and the off-field performance (which can vary from attendance numbers to financial performance) of a sports club. Much of the existing literature is about the relationship between attendance and on-field performance, which is found to be positive (e.g. Pinnuck & Potter, 2006; Rottenberg, 1956; Szymanski & Smith, 1997). According to Buraimo and Simmons (2006) market size even is a major determinant of league outcomes in professional team sports around the world.

Based on the above you would expect that a bigger local catchment area, and thus higher attendance, would lead to a better performance of the concerning football club. A bigger local catchment area means besides the higher attendance, a higher fan base potential, greater opportunities to attract talented local football players, and a higher potential of attracting financial support of local businesses (Walker, 1986). More fans mostly means a higher income for recette and merchandising for the club (Szymanski & Smith, 1997), while a higher fan base is attractive for sponsors as well.

Football clubs with a higher income out of these sources can afford higher salary costs and transfer payments for football players. It can be assumed that because of this, the quality of the team is higher what makes the chances of a better performance greater as well. Szymanski and Smith (1997) argue that performance of a club is highly related to the wage bill.

Catchment area potential

Walker (1986) already investigated the relationship between city size and performance of English football clubs between 1968 and 1973. He found that the relationship was positive, which was in line with the existing literature. The found positive relationship could be a result of the traditional fan culture. According to Pred (1983) football fans are extremely loyal to their club, because of the authentic sense of place.

But times have changed, so has the European football industry. European football clubs have fans all over the world now, as a result of the worldwide broadcasting of football matches and extended worldwide marketing and merchandising. Duke (2002) called it the McDonaldisation and Disneyisation of, in his case, English football. The sport is approached through a more American (commercial) model nowadays, with key roles for advertising, sponsorship and television. It's not self-evident any more that sponsors are local businesses, they can come from all over the world as well. The industry of football has globalized together with the general worldwide ascent of free-market or neo-liberal political-economic policies (Giulianotti & Robertson, 2009), which could imply that location is not that important any more. Or has location become even more important in the

football industry, just as what for example McCann (2008) claims for the worldwide economy in general?

Of course other factors also have an influence on the on-field performance of a football club as well. The catchment area can maybe be seen as a starting point and a certain requirement to act at the highest level, because football clubs from small villages had no chance to compete with the clubs from the cities in the early days. But the past performance of a football club is also very important for future performance. Not only does a rich history attract more talented players, fans and sponsors, a league championship in the previous season for example will ensure a club of more financial budget through participation in the financial attractive Champions League. The higher financial budget gives them the advantage to attract better players which again makes the chance of a better performance greater (Szymanski and Smith, 1997).

Another factor which could have a big influence on the performance of a football club is the sort of ownership. The globalization of football not only means a possible global fan base and global market for sponsors, it also implies the possibility of foreign ownership. English football clubs like Manchester City and Chelsea are good examples of football clubs where the entrance of a rich foreign owner resulted in on-field success. In the Netherlands, an example is the Vitesse football club, based in the city of Arnhem (150.000), and in August 2010 taken over by Merab Jordania, an entrepreneur and former football player from Georgia.

1.2. RESEARCH GOAL

The goal of this research is to see whether the local catchment area of football clubs from the five major European football leagues is still a major predictor of the on-field performance. The aim is to provide insight into the relationship between the size of the local catchment area and the on-field performance, with other predictors of performance taken into account as well. Provide insight into the relationship between sponsorship and on-field performance is also part of the aim of this research.

1.3. RESEARCH QUESTIONS

The goal of this research leads to the following research question around which this research will be conducted:

To what extent is the on-field performance of selected football clubs in Europe related to their local catchment area?

In order to answer this main research question, a number of sub-questions must be answered.

- 1. What distinguishes the selected European football competitions of England, Germany, France, Italy and Spain from other football competitions and from each other?
- 2a. To what extent is the on-field performance of football clubs from these five competitions related to the catchment area of the football club?
- 2b. To what extent is the on-field performance related to the history of the football club?
- 2c. To what extent is the on-field performance related to foreign ownership of the football club?

• 2d. To what extent is the on-field performance related to the origin of the main shirt sponsor of the football club?

1.4. SCIENTIFIC RELEVANCE

The relationship between the catchment area and on-field performance of football clubs is often ignored in scientific research. Often the budget is taken as a predictor of performance, what is proven to be true (e.g. Szymanski & Smith, 1997). But the budget of a football club is a result of different aspects, including the catchment area, historical performance, type of ownership and sponsors.

Walker (1986) is the only known author who provided insight in the explicit relationship between local catchment area and league performance. His analysis was however based only on football clubs from the English league, which is the case with most of the research within the football industry. Because national leagues are hardly comparable, research is often limited to one national league. This research tries to overcome these difficulties with using a general ranking instead of a national league ranking.

The research of Walker was also limited in a way it only provided a correlation analysis. Using a broader approach where other important elements are taken into account as well, this research can provide more information than the specific correlation between local catchment area and performance.

Finally, the research of Walker is quite outdated with important developments taken place after his research. There is a necessity to explore the relationship again to see whether the findings of Walker are still applicable in the globalized football industry.

1.5. RESEARCH SCOPE

This research focuses on the five biggest football leagues of Europe; England, France, Germany, Italy and Spain. According to the UEFA coefficient list, these countries are the five best performing leagues of Europe (UEFA, 2013). Due to the globalizing process of the last decades talent and success have been concentrating in these five leagues (e.a. Deloitte, 2013; Haan et al., 2002; Poli & Ravanel, 2008). The concentration of talent and success in the five major competitions resulted in an increase of global attention. For this reason it is more conceivable that the importance of the local catchment area has changed in these countries.

Because this research focuses only on the major European leagues and they differ in many ways from the minor leagues, the findings are not meant to be applicable on other European football leagues than England, France, Germany, Italy and Spain.

1.6. RESEARCH METHOD

There is chosen for secondary (desk) research to obtain the information needed to answer the research questions. With secondary research many data can be collected in a relatively short period, while it is reliable and accurate. Another reason to choose solely secondary data is because there's no need to gather in-depth information for the specific football clubs or leagues.

The data will be used in a multiple linear regression model to find the relationships between the local catchment area, historical performance and foreign ownership and the on-field performance. Besides the multiple linear regression model an ANOVA analysis will be conducted to investigate the relationship between the origin of the shirt sponsor and the performance of a football club.

The research methodology is fully explained in chapter 6 of this report.

1.7. RESEARCH OUTLINE

The research outline for this research is presented in figure 1.1.

FIGURE 1.1: RESEARCH OUTLINE



This report started with the introduction section in which the goal of the research was presented. The next phase consists out of chapter two to five where the results of the literature study is pointed out. In this literature study there is attention for the football club characteristics, the catchment area of football clubs, the globalization of the football industry and the geography of football clubs' main sponsorship. Chapter six concerns the methodology of the study, where the regression and the ANOVA model will be further explained. The results of the regression and ANOVA analysis are presented in chapter seven. Finally, the report will end with the conclusions and a discussion in chapter eight.

2. FOOTBALL CLUB CHARACTERISTICS

In order to understand the development of football clubs we have to define the football club characteristics and see how they changed over time. This will be done by investigating the football clubs' characteristics and objectives, 'path dependency' and the different sources of revenues.

2.1. FOOTBALL CLUB CHARACTERISTICS

With the great changes over the past decades in the European football sector, the professional football club transformed from a leisure institute towards a business (Peterson, 2012). According to Andreff (2008) the legacy from amateur sport managed by voluntary workers and financed by benevolent patrons has faded away in European high level sport leagues and clubs.

Taylor observed already in 1971 the changing structure of the football sector since the early sixties: "the old working-class supporters—with their subcultural 'soccer consciousness' that centered on the local team, masculinity, active participation, and victory—were being squeezed out, to be replaced by the 'genuine', middle-class spectators and their presumed interest in family football, spectacle, skill, and performative efficiency" (Taylor, 1971, pp. 359, 364).

The characteristics of the football industry have been getting closer to the entertainment or service sector, because the match can be seen as the main output of a football club. And since one can decide whether to go to the cinema, casino, theme park or a stadium to watch a football match, the football industry could be considered as a service industry. The service sector faces other development routes compared to the manufacturing sector. Manufacturing companies move forward by developing their products into better or cheaper products. Selling a service means combining a tangible product together with a set of services. But those services have become so embedded in the market, that developing and moving further is not possible. Therefore, service companies try to move beyond services, into experiences or entertainments (Levitt, 1983). Try to "experience the club" is what we see at football clubs nowadays. Dutch football club Ajax Amsterdam for example created an Experience Center in the center of Amsterdam to experience the history and feeling of Ajax (Luymes, 2010). Also tours through the stadium of the football club are widely used to let people 'experience the club'.

The 'experience' of the club is part of the merchandising, selling the 'brand' (Giulianotti & Robertson, 2004). As will be pointed out in chapter 3 'branding' is becoming of greater importance for football clubs. In contrast to the main output of a football club, the match, merchandising is not restricted to a geographical area. Home matches are played according to the league rules at one location. Besides that European football clubs are still tied closely to their domestic market for reasons of finance (most income derives from competition in a national league) or law (e.g. to gain recognition from FIFA) (Giulianotti & Robertson, 2004). For these reasons the location of a football club can be considered as fixed. Originally clubs were dependent on the local catchment area of this location.

Different previous studies have argued that people are the most important assets of an organization and have a great influence on organizational performance (e.g. Huselid, 1998; Schneider, 1987). In the service sector people are even more important because the value is

mostly captured by people. That is why many corporations spend a large amount of money recruiting people to their organization (Popper, 2001). Since there wouldn't be an output (and therefore no revenues) without the players, they are seen as the crucial part within the football organization. Recruiting the best sporting talent, whether it are the players or coaches, is a crucial competency for an effective football organization (Ratten, 2011).

2.2. THE OBJECTIVE OF EUROPEAN FOOTBALL CLUBS

Recruiting the best sporting talent improves the quality of the output of a football club, the match. The quality of the match is determining the satisfaction of fans and sponsors. The higher the quality (which can be equated to sportive success), the more fans and sponsors a football club can attract. On this part European football clubs differ from football clubs in North-America. The concept of utility maximization is more stressed in Europe, whereas in North-America the profit maximization assumption is still the most common (Vampley, 1982). This is mainly because the North-American football leagues have different features. It is possible for a club to move to another location where the market is bigger, while ending lowest in the league does not cause relegation to the next lower level. When teams do not have to win matches to avoid relegation towards a lower level, making profits instead of winning is a more obvious motive (Sandy et al., 2004).

European clubs have as said not only the profit maximization objective. The objective function of the owner of the club depends on both profits and league position (e.g. Sloane, 1971; Szymanski & Smith, 1997). In sport teams always strive for the top of the mountain, so their goal should be winning prices. Points gained in the relevant national league have been used as a proxy for sporting success in other recent papers on professional football (Haas et al., 2004; Espitia-Escuer & García-Cebrián, 2004; Sánchez Martínez, 2006; Guzmán & Morrow, 2007). Besides the sportive objective, a well performing club attracts more spectators, gains price money, gets a larger share of broadcasting revenues and participation contributions from the UEFA for joining European competitions (Peterson, 2011). The total club wage is often used as a measure for the talent stock (Jardin, 2009; Szymanski & Smith, 1997), while as said recruiting the best sporting talent is a crucial competency for an effective football organization. So maximizing revenues (and profits) is giving clubs the best chance on sporting success.

2.3. SHAPED BY HISTORY

As pointed out before, well performing clubs are gaining more revenues through various channels, which creates a 'success breeding success' process (Walker, 1986). In a way football clubs can be seen the same way as Putnam et al. (2003, pp. 8) illustrate institutions: "they are shaped by history". The value chain of the football business constructed by Salomon Brothers Inc. (1997) shows the underlying process of this phenomenon (figure 2.1).

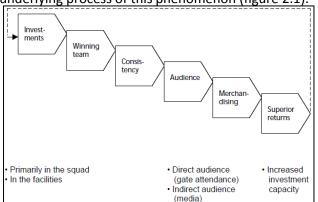


FIGURE 2.1: VALUE CHAIN OF FOOTBALL CLUBS (SOURCE: SALOMON BROTHERS INC. , 1997)

So history of football clubs matters because it is 'path dependent'. In that sense the amount of prices won by a club can be regarded as an indicator of the current success.

As will be further described in the next chapter, supporters want to associate themselves with winning teams. Especially with the contemporary importance of television losing teams on the other side lose quickly the empathy of television viewers (Alt, 1983).

Taken together there is reason to assume that big football clubs remain strong in the future. But there is also an important role for the league structure which determines the football club's revenues in a certain way.

2.4. FOOTBALL CLUBS' REVENUES

Some sources of revenues for well performing clubs were already mentioned earlier, but it is of importance to know what the main sources of revenues are. The Sports Business Group at Deloitte is investigating since the season 1996/1997 the sources and total generated revenues of European football clubs. They split the sources of revenues into three categories: match day revenues, broadcasting revenues and commercial revenues (Deloitte, 2013).

Figure 2.2 shows the origin of the top 20 clubs in the Deloitte Money League 2011/2012. The ranking is based on financial performance of European football clubs, measured by the total of revenues in the given football season. It is striking that all the clubs of the top 20 come from the 'big five leagues'. The clubs differ in their category shares for every league. Premier League clubs for example show high shares on broadcasting and match day revenues, while Bundesliga clubs have a high share of commercial revenues and Italian Serie A clubs show a significant lower share of match day revenues compared with the other leagues. The two representatives from the Spanish La Liga, FC Barcelona and Real Madrid, gain the highest revenues from broadcasting rights, but this is a result of the unique distribution system of broadcasting rights in Spain. The French Ligue 1 clubs show a sort of similar distribution of revenues as the Serie A clubs, which is a result of the lagging stadium infrastructure in France (Deloitte, 2013).

FIGURE 2.2: NUMBER OF CLUBS BY ORIGIN IN DELOITTE MONEY LEAGUE 2011/2012 (SOURCE: DELOITTE, 2013)



3. THE CATCHMENT AREA OF FOOTBALL CLUBS

The catchment area of a football club is the area in which the club is able to attract fans and sponsors from. But how can this catchment area be measured? In this chapter a comparison will be made with earlier studies while the effects of the changing industry on the sort of supporters will be examined.

3.1. THE SCOPE OF THE REGIONAL 'FANBASE'

Shortly mentioned already in the previous chapter, football clubs were in the early days mainly a local service. The proliferation of teams focused on suburbs, neighborhoods or even the street (Taylor, 2008). The appeal of football lay in the expression of a sense of civic pride and identity (Holt, 1989). Teams consisted mainly of local players, and, as will be pointed out in the next chapter, until the nineties of the previous century most revenues came from ticketing, local subsidies and local sponsors. It was therefore easy to assume that the catchment area of a club was restricted to the place where the football club was located in. Bale (1983) argued that the financial and sporting success of clubs was also related to the changing location patterns of other economic and social activities. Football clubs in economic declining regions were performing worse as well.

Walker (1986) allocated football clubs to SMLA's, Standard Metropolitan Labor Areas, which were briefly defined as travel to work areas. This measurement was used in Britain as a variant of the American *Standard Metropolitan Statistical Area*. The SMLA was seen as an urban core plus a metropolitan ring with in total a minimal population of 50.000 people (Goddard & Champion, 1983). According to Walker it would be a more accurate representation of the catchment or market area population for league football than formal city populations. For match visitors it makes sense because the catchment area is by this restricted to travel time instead of city borders.

A shift to a more 'consuming fan', a concept which will be explained in the next paragraph, makes the potential fan base of a football club global. And with the global fan base the scope for sponsorship becomes global as well. It becomes therefore difficult to measure the contemporary catchment area for football clubs and maybe varies by the sort of supporter.

3.2. FROM FAN TO CONSUMER

As mentioned in the previous chapter the corporate-driven transformation of football since the early sixties led to a replacement of the old local working-class fans by a new sort of supporter due to the 'bourgeoisification' of the football culture (Taylor, 1971). The recent globalization process in the football industry created even more different kind of football club supporters.

Giulianotti (2002) identifies four types of spectators for contemporary football clubs. These four different types are shown in figure 3.1.

The classic *supporter* is a traditional/hot spectator characterized by a long-term personal and emotional investment in the club. "Supporting the club is a key preoccupation of the individual's self, so that attending home fixtures is a routine that otherwise structures the supporter's free time" (Giulianotti, 2002, pp. 33). They have a strong relationship with the favored club and identify themselves with the cultural history and identity of the club.

The traditional/cool spectators are *followers* of the clubs, but also of the players, managers, and other football people. The follower has an "implicit awareness of, or an explicit preconcern with, the particular senses of identity and community that relate to specific clubs" (Giulianotti, 2002, pp. 34). They have certain traditional motives to support the favored club.

FIGURE 3.1: FOUR DIFFERENT TYPES OF SPECTATORS (SOURCE: GIULIANOTTI, 2002)

	HOT				
	THICK SOLIDARITY	Topophilic Spaces	Product-mediated Distances	THICK/THIN SOLIDARITY	
	Sup	porter	Fan		
TRADITIONAL ·	Grounded Subcultural Identity relations		Non-reciprocal Relations	Market Identity	CONSUMER
	Nested Identity	Symbolic exchange relations	Virtual Relations	Cosmopolitan Identity	CONSCINE
	Follower		Flâneur		
	THICK/THIN SOLIDARITY	Instrumental spaces	Simulation spaces Non-places	THIN SOLIDARITY	
		CC	OOL		

Fans are the hot/consumer spectators typified by a form of intimacy or love for the club or its specific players. The fans' identification with the club and its players is expressed through the consumption of related products. This is interesting because 'brand-improvement' of football clubs can satisfy the current fans or even attract new fans. It depends on the thickness of solidarity of the fan whether the fan will drift into other markets when the club fails to deliver on its market promises (such as brand-improvement) (Giulianotti, 2002). But in general the brand loyalty and inelastic demand of fans for club shares and merchandise are consciously intended to provide the club with financial stability, which enables the club to attract better players (Conn, 1997).

The *flâneur* is a cool/consumer spectator who gets more attracted by success, the presence of starplayers and signifiers (shirt color, shirt design etc.). The flâneur seeks the sensation of football in the virtual arena, through for example television or Internet. They are characterized by a thin form of solidarity with the favored football club(s) and the association with winning is particularly favored (Giulianotti, 2002).

The commercialization of the football industry towards entertainment intensifies, so the fan identity comes more and more under pressure to enter the area of the flâneur (Giulianotti, 2002). This can be seen as a shift towards a more *consuming fan*, mentioned earlier in this chapter.

4. GLOBALISATION OF THE FOOTBALL INDUSTRY

The contemporary industry of European football is, by all accounts, different than the industry in its early days. As with any other industry the process of globalization had (and still has) a major influence on many aspects of the game. In this chapter the most important issues of the globalizing process in the industry of European football will be described: the growing importance of television; the effects of the Bosman Case; the changing financial structure of football clubs; and foreign ownership.

4.1. THE GLOBALIZATION PROCESS OF THE FOOTBALL INDUSTRY

First of all it's of importance to define the concept of globalization to understand what kind of influence the globalizing process can have on the football industry. For this the definition used by Giulianotti & Robertson (2004, pp. 546) can be applied, in which they investigate the globalization of the football industry: "We understand globalization as being characterized by two distinct but closely connected processes. Social actors possess greater senses of 'globality': that is, globalization is marked by increasing subjective consciousness of the world as a whole; or, in other words, it involves heightened awareness of the world as a 'single place' (Robertson, 2002). It is also characterized by a global intensification of social and cultural 'connectivity', such as through telecommunications and international travel (cf. Tomlinson, 1999)."

These two latter aspects, telecommunications and international travel, had a major influence on the catchment areas of European football clubs. As was discussed in the previous chapter, catchment areas of football clubs were in the beginning primarily limited to the town or neighborhood where the club was located. With the entrance of satellite television the scope of the clubs' fan base exploded. Baimbridge et al. (1996) were the first ones who studied the economical effects of satellite television broadcasting of Premier League football matches. They found that the broadcasting of football had positive net financial effects for Premier League teams, which means that the broadcasters were overpaying the clubs with respect to live coverage of matches. This was a first indication that the broadcasting of football matches could enlarge the catchment areas of clubs.

Nowadays it is possible to watch football matches all over the world due to satellite television or internet. The British Premier League for example is broadcasted in 212 territories around the world, reaching 643 million homes in the season 2011-2012 (Barclays Premier League, 2013-a). The Premier League also has become an important part of British tourism by attracting 750.000 foreign fans to see a Premier League match during the season 2010-2011. Obviously this cannot be separated from the reduced costs in international travelling. Of course not all foreign fans are able to visit Premier League matches, but the Barclays Premier League tries to solve that problem by organizing the Barclays Premier League Trophy Tour. This is a tournament featuring three Premier League teams against local opposition to engage the local foreign fans actively to Premier League teams (Barclays Premier League, 2013-b).

Manchester United is the striking example of a club with a globalized catchment area. A survey performed by Kantar Sports (Manchester United, 2012) showed that Manchester United has 659 million 'followers' all over the world, which means 10 percent of the world population. There can be drawn some critical note by the term 'follower', but still the surveys shows that a global fan base is of increasing importance, because the huge global fan base makes United one of the highest valued sports team in the world with an estimated value of \$ 2,24 billion (Forbes, 2012).

The main result of the globalization process in the football industry is the concentration of the sports success in a few European football competitions (Dejonghe & Van Opstal, 2010). This is a process that can be seen in other industries as well with only a few competitors operating on a world scale.

4.2. THE BOSMAN CASE

The concentration process in the football industry took a flight after the Bosman Case in 1995. The European Court of Justice declared that the existing football transfer system was in conflict with the freedom of movement, part of the European law. Football players at the end of their contract were free to move at an international labor market. Another consequence of the Bosman Case was that the European Football Federation (UEFA) had no right to limit the amount of foreign players that a team can put on the pitch. The Bosman Case was a further step in the creation of a single European market, which can be seen as an ultimate globalization process according to the definition given at the beginning of this chapter.

The Bosman Case obviously increased the players' mobility within Europe in favor of the major competitions. The bargain power shifted from the clubs towards the players which resulted in an increasing competition to attract the best player talents (Dejonghe & Van Opstal, 2010). As described in chapter 2 the European football clubs have a win maximizing structure, so they try to maximize the performance on the pitch. Under these conditions teams with higher budgets hire more and better players to increase their probability to win. The increased competitiveness between leagues and teams results in a migration of player talent to the main competitions (Darby, 2001; Van De Moortele, 2003; Dejonghe, 2004; Dejonghe, 2005; Poli & Ravenel, 2008). Haan et al. (2002) saw the free movement of players even as a death penalty for many minor European competitions. In this sense, location becomes even more important, just as for example McCann (2008) argues for the worldwide economy in general.

4.3. TEAMS' BUDGET AND THE CONCENTRATION OF SUCCESS

The concentration of success within the main five European competitions is as said a result of the increased importance of a team's budget. According to inter alia Szymanski & Smith (1997) performance is highly related to the teams' wage bills. Much literature finds that the total turnover of the club is the main variable that gives long term assurance of sports success (In Dejonghe & Van Opstal, 2010: Szymanski & Kuypers, 1999; Dobson & Goddard, 2001; Hall et al., 2002; Dejonghe, 2004; Dejonghe & Vandeweghe, 2006; Dejonghe, 2007-b; Deloitte, 2005; 2006; 2007; 2008; 2009). As pointed out in the beginning of this chapter the growing worldwide fan base is leading to higher revenues for clubs due to higher income from broadcasting rights. At the same time a bigger catchment area is interesting for (global) sponsors and gives more opportunities in (global) merchandising.

The changing structure and environment of European professional football forced many football clubs after the nineties of the previous century to change their financial structure. The traditional Spectator-Subsidies-Sponsors-Local or SSSL-model was based on ticketing, local subsidies and local sponsors as main revenues. But with the globalizing process taking place within the football industry many clubs changed this structure into a Media-Corporations-Merchandising-Markets-Global-model (MCMMG-model). In this financial model broadcasting rights and sponsorships became the main revenues (Andreff & Staudohar, 2002; Duke, 2002). In chapter 5 the origin of the European club main

sponsors will be investigated in further detail but concerning the broadcasting rights it's not strange that it has been of growing attention as can be seen in table 4.1 where the broadcasting deals of the English Premier League are shown. The total revenues which have to be distributed among the Premier League clubs grew significantly every period, with the exception of the 2004-2007 period.

TABLE 4.1: HISTORICAL TV DEALS ENGLISH PREMIER LEAGUE (SOURCE: HARRIS, 2012)

Deal period	Total period revenue (in million £)	Total revenue per year (in million £)	
1992 - 1997	253,5	50,7	
1997 - 2001	848	212	
2001 - 2004	1.561	520	
2004 - 2007	1.454	485	
2007 - 2010	2.528	843	
2010 - 2013	3.382	1.127	
2013 - 2016	5.000 - 6.000*	1.700 - 2.000*	
* Estimates. Overseas rights <i>might</i> be a lot higher than this.			

4.4. FOREIGN OWNERSHIP

Foreign ownership is often seen as a recent phenomenon in European football, but actually already existed since the entrance of the game in continental Europe. Most European clubs were founded by British people, but there are also many examples of other foreign founders. FC Barcelona was for instance founded by a Swiss accountant (Taylor, 2007).

Of course there should be made a distinction between the original foreign founder and foreign owners nowadays, because they have totally different incentives. According to Andreff and Staudohar (2000) nowadays more entrepreneurs and corporations are entering the sports business. Foreign ownership is often considered as an investment with a large amount of capital involved. The investments in transfer fees and wages improve the quality of the team, making it possible for every team to compete at the highest level (Peterson, 2012). Wilson et al. (2013) found out that in the English Premier League clubs with foreign investors perform better in the league than clubs with another ownership structure, but are also less financially reliant. Although foreign ownership is considered as an 'investment', only six of the twenty Premier League clubs were making profit in the 2008-09 season (Chu, 2010).

In other European football leagues foreign ownership is not that common as in the English Premier League. In Italy and France foreign ownership is still quite rare while in Spain four of the twenty La Liga clubs were owned by foreign investors in the 2011-12 season (Peterson, 2012). In the German Bundesliga clubs are restricted to the '50+1 rule', which ensures that the majority of a club has to be owned by its members. As a result foreign investors can never own the majority of the shares (Kelly et al., 2012).

5. THE GEOGRAPHY OF FOOTBALL CLUBS' MAIN SPONSORSHIP

In the previous chapters it became obvious that the industry of football has changed dramatically the last centuries. The globalization of the football industry could imply a global scope for football club sponsors as well. In this chapter literature about the objectives and significance of sponsorship will be pointed out, while the sponsorship in European football will be examined more closely.

5.1. THE OBJECTIVES OF SPONSORSHIP

Commercial sponsorship is different than advertising and has been defined by Meenaghan (1983) as "...the purchase (in cash or kind) of an association with a team, event, etc. in return for the exploitable commercial potential linked to that activity".

Companies can have different reasons for being a football club's main sponsor. In the existing literature there is an overall consensus about the objectives of sponsorships and the importance of it. Nevertheless there are different approaches to classification (Jeanrenaud, 2006).

There is a distinction to make between direct and indirect objectives. With a direct objective the sponsor expects a rapid change in the behavior of its existing and potential customers. With the latter the sponsor is looking for increased visibility of its brand or products, contact with a particular segment of its client base or an enhancement of its image (Jeanrenaud, 2006).

There is also a classification possible which distinguishes corporate and marketing objectives (table 5.1).

TABLE 5.1: CORPORATE AND MARKETING OBJECTIVES (SOURCE: ARTHUR ET AL., 1998; HULTMAN & LINDGREN, 2001)

Corporate objectives	Marketing objectives
Increase awareness of the company	Increase sales
Enhance company image	Increase brand or product awareness
Community involvement	Target specific customer base
Improve public perception of the company	Brand positioning
Enhance employee motivation	
Assist staff recruitment	

5.2. SPONSORSHIP IN FOOTBALL

5.2.1. THE CASE OF EUROPEAN FOOTBALL

The different kind of objectives can explain the wide range of sectors represented in the main sponsorships of European football clubs. Companies are seeking for a good fit with their corporate strategy (Jeanrenaud, 2006). The image of the sport, and in football the specific club, needs to match with the objective of the company. Of course companies rather identify themselves with winning teams, that's why high profile brands adorned the shirts of most leading teams (Rosson & Scotia, 2001). Another reason bigger teams attract high profile brands is because exposure of the brand highly depends on TV coverage. Successful teams are more televised and normally play more games. They often reach the final rounds of national and European cup competitions (Rosson & Scotia, 2001). But sport in general has proved to be an attracting market for sponsors. As stated by Bell & Campbell (1999): "Sport is a universal language that crosses boundaries and elicits a lot of passion.

Companies want to associate their brand with such powerful passions, and sponsorship can deliver this."

For European football clubs the sponsorship structure has changed a lot, as will be discussed in the next paragraph as well. The single benefactor of the early days has been replaced by a whole pool of sponsors (Cowen, 2001). Professional football clubs have structured their hotchpotch of sponsors in the form of a pyramid as indicated in figure 5.1 (Bühler, 2006). The total of sponsors can be divided into four categories, where the main sponsor is in the top of the pyramid. In most cases the main sponsor is the sponsor whose name or brand appears on the shirt. That's why the terms of main sponsors and shirt sponsors will be used interchangeably in this research.

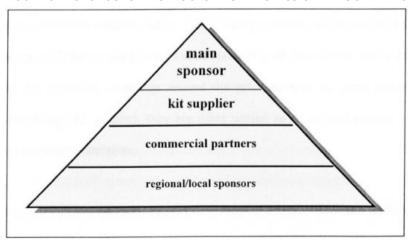


FIGURE 5.1: SPONSORSHIP STRUCTURE OF PROFESSIONAL FOOTBALL CLUBS

5.2.2. THE SIGNIFICANCE OF SPONSORSHIP IN FOOTBALL

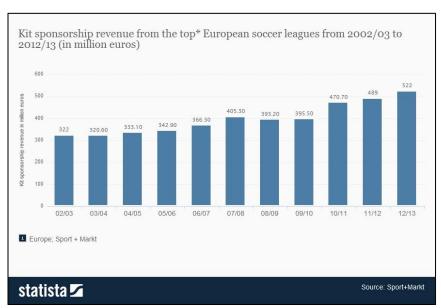
Much is said already about the growing importance of sponsorship in the football industry. Where until the nineties local sponsorship was together with local subsidies and ticketing the main source of revenue, football clubs are now moving to a financial structure with broadcasting rights and sponsorship as the main revenues (Andreff & Staudohar, 2002). This is also found by Duke (2002), who described it as the McDonaldization of the football industry.



FIGURE 5.2: SPORT SPONSORSHIP REVENUES WORLDWIDE 2006-2015

The rise of TV broadcasting resulted in the globalization of sports sponsorship. The impact of television rights on sport is comparable to sponsoring revenues, since the size of sponsorship packages depends on the media audience (Jeanrenaud, 2006). Figure 5.2 shows the growing revenues in sports sponsorship worldwide. The value of the sports sponsorship market in Europe was in 2012 approximately 14 billion US dollars, almost 70% of the total European sponsorship market. Football takes the most important place within the European sports sponsorship market (Price Waterhouse Coopers, 2011). The revenues from shirt sponsorships in the six major European football leagues (England, Germany, France, Italy, Spain and The Netherlands) have risen significantly as well the last ten years, as can be seen in figure 5.3 (Sport+Markt, 2012).

FIGURE 5.3: SHIRT SPONSORSHIP REVENUES TOP EUROPEAN FOOTBALL LEAGUES



6. METHODOLOGY AND DATA

In this research the relationship between the catchment area and the on-field performance of European football clubs will be investigated. In order to justify this research, the data and research design should be explained. In this chapter will be described what kind of methods and techniques were used to do this research. Also the sources of data, the econometric model and the motivation for this methodology will be clarified.

6.1. INTRODUCTION

From the literature study in the previous chapters it becomes clear that there are several factors which influence the on-field performance of European football clubs. It is agreed in the literature that the football club's budget is on the long term the main determinant for on-field performance. But the budget is a result of various elements which will be used as variables in this research, in fact the catchment area, historical success and foreign ownership. Because sponsorship is not a given element but more a result of performance and its determinants, the relationship between main sponsorship and on-field performance will be taken apart.

Catchment area

As mentioned in the literature the catchment area of a football club is of great importance, because it determines the potential amount of fans and sponsors. The size of the catchment area of fans and main sponsors can be considered as the same, where sponsors with their 'shirt advertisement' always reach people who are interested. In this research the catchment should be seen as the *original* catchment area, because it is understood that nowadays many clubs have a global catchment area. Just as pointed out in chapter 2, the location of football clubs can be considered as fixed and in this research there will be investigated whether the *local* catchment area (which is a result of the location) is still applicable on football clubs.

Historical success

Clubs are shaped by history, because as Walker (1986) argued: *success breeding success*. The historical success is an important element in the current performance. The historical success can be divided in national success and successful European performance. European success is not only more difficult to achieve, it gives also more status, financial opportunities and exposure.

Foreign ownership

Foreign ownership is often considered as an investment with a large amount of capital involved (Peterson, 2012). With this capital the quality of the team can be improved which makes the probability of better on-field performances higher. Foreign ownership should therefore be included as a potential predictor for performance.

Sponsorship

The main sponsorship can be seen as part of the commercial revenues and is for many football clubs a big source of revenues. In contrast with the other determinants named above, the main sponsor is not a given element, as mentioned earlier. In fact the revenues out of shirt sponsorship are a result of the historical success, current performance and catchment area. Therefore sponsorship will be taken apart in this research. Further methodology is described in paragraph 6.2.4.

6.2. DATA

6.2.1. DATA SOURCES

The gathering of information is done with secondary (desk) research. The advantages of this type of research are that it is relatively cheap and quick to obtain, while the data is generally accurate and reliable. Also it is the sort of data which fits best with the research questions, since the research covers multiple European countries and no in-depth information is needed.

Different secondary data sources are used to construct the dataset matching with the different variables. An overview of the used variables is given in table 6.3. Data is used from 98 football clubs, divided over the five major European football leagues: Spain, Italy, Germany, England and France (see table 6.1).

TARI	F 6 1 ·	FOOTRALL	CLUBS LISED	IN THE DATASET
IADL	L U. I.	IOOIDALL	CLUBS USED	IN THE DATASET

Spain	Italy	Germany	England	France
Barcelona	Juventus	Bayern München	Manchester United	Paris Saint-Germain
Real Madrid	AC Milan	Borussia Dortmund	Manchester City	Olympique Lyon
Atlético Madrid	Napoli	Bayer Leverkusen	Chelsea	Lille
Valencia	Lazio	Schalke 04	Arsenal	Marseille
Málaga	Udinese	Borussia Mönchengladbach	Tottenham Hotspur	Bordeaux
Real Sociedad	AS Roma	Hannover 96	Everton	Saint-Etienne
Sevilla	Fiorentina	Stuttgart	Liverpool	Nice
Real Betis	Internazionale	Wolfsburg	Newcastle United	Montpellier
Athletic Bilbao	Catania	Freiburg	Fulham	Toulouse
Levante	Parma	Hamburger SV	Aston Villa	Lorient
Getafe	Bologna	Mainz 05	Swansea City	Rennes
Osasuna	Cagliari	Nürnberg	West Bromwich Albion	Valenciennes
Espanyol	Chievo Verona	Eintracht Frankfurt	Stoke City	Nancy
Mallorca	Atalanta	Werder Bremen	Wigan Athletic	Sochaux
Deportivo La Coruña	Genoa	1899 Hoffenheim	West Ham United	Évian Thonon Gaillard
Rayo Vallecano	Sampdoria	Augsburg	Norwich City	Ajaccio
Real Valladolid	Palermo	Greuther Fürth	Sunderland	Bastia
Granada	Siena	Fortuna Düsseldorf	Southampton	Troyes
Real Zaragoza	Torino		Reading	Stade de Reims
Celta de Vigo	US Pescara		Queens Park Rangers	Stade Brest

6.2.2. DEPENDENT VARIABLE: ON-FIELD PERFORMANCE

There is chosen for the Euro Club Index (Infostrada Sports, 2013) as a measurement for on-field performance. This index takes into account the national (league and cup) and international performance (UEFA Champions League, Europa League and Super Cup) over a period of three years, where current performance has a higher impact than older performance. The major advantage of this index is the universal character, which makes the clubs from the different leagues comparable. The national leagues differ in many aspects, for example in restrictions for foreign players, distribution of broadcasting money or revenues from the European TV pool. That is the reason national league performances of clubs cannot be compared with other leagues. In the Euro Club Index the relative strength of a country is taken into account with the performance of the national representatives in UEFA Champions League, Europa League and Super Cup. This relative national strength overcomes the problems of incomparability.

Because only the current indexes of the clubs who were playing on the highest level in the season 2012/13 were available, a historical analysis was not possible. Although the current index takes performance of the last three years into account, it is quite sensitive for recent positive or negative performance. And because the exact mathematical method is not given price, a calculation for the historical performance is unfortunately not possible. Yet it is the best known universal European club ranking.

6.2.3. INDEPENDENT VARIABLES

Catchment area

NUTS3 is taken as a measurement for the catchment area. There is chosen for this measurement because it is in a certain way standardized and uniform for countries within the European Union. The NUTS3 regions are also rather comparable with the SLMA's which Walker (1986) used in his analysis, described in chapter 3. The catchment area is hereby not seen as just the city population but as a travel to work area. It is understood that there are differences between the NUTS3 region classifications of the five countries. However, the NUTS3 regions are still considered as representative for the catchments areas, because there are also differences in the geography of the countries which can be seen as the cause of the differences in NUTS3 region classification.

When there is more than one club in the same region, the population will be equally shared between these clubs. By doing this, it is again in line with the analysis of Walker (1986).

Historical success nationally

As said above historical success can be divided in national and international historical performance. For national historical performance the percentage is taken from the amount of national prizes that could have been won since 1964. This year is chosen as starting point, because it was the first season of the Bundesliga. Furthermore the impact of historical success before that year was not as big as it is nowadays (the prize money for example was not that high those days).

With national prizes the regular league and the major cup are taken into account. In England the FA cup is considered as the major cup, because it has the richest tradition and the highest prize money compared with the League Cup. Super Cups are also not included because they are a result of another prize (league champion or cup winner).

Because the probability of winning the league is higher with a lower number of teams in the league, the percentage of the possible league championships since 1964 should be corrected. The percentage is therefore corrected by the deviation from the average number of teams the national league consisted of since 1963/64. In table 6.2 the average teams and corrected score for each league are pointed out.

TABLE 6.2: AVERAGE TEAMS AND CORRECTED SCORES PER LEAGUE

	Average teams	Corrected score
Average	19,03	1
Spain	18,78	0,987
Italy	17,47	0,918
Germany	17,96	0,944
England	21,04	1,106
France	19,92	1,047

Historical success internationally

International historical performance is simply measured by the fact whether the football club ever won one of the two major European cups (UEFA Champions League/European Cup or UEFA Europa League/UEFA Cup) before the season 2012/13. Again European Super Cups are not taken into account because participation is a result of a won prize. Although both cups differ in prestige, there is chosen to not make a distinction. Not many football clubs achieved to win a major European cup, so separating both cups would create even less useful cases. It is also difficult to say what the difference in prestige and winning effects are. Weighting therefore would be very complicated.

Foreign ownership

Ownership can be considered as foreign if the majority of shareholders is foreign. The majority of shares must be at least foreign since the beginning of the season 2012/13.

TABLE 6.3: OVERVIEW OF THE USED VARIABLES

Variable	Definition	Source
On-field performance	On-field performance of football clubs measured in the Euro Club Index	Euro Club Index (Infostrada Sports)
Catchment area	Catchment area of football clubs measured in the corrected population of NUTS3 regions	Eurostat
History national (%)	National history of football clubs measured in the corrected percentage of possible major national prizes won since 1964	Websites of national leagues and cups
History international (dummy no/yes)	International history of football clubs measured European prize(s) won (no/yes)	UEFA
Foreign ownership (dummy no/yes)	Foreign ownership of football clubs (no/yes)	Football clubs' shareholders information

6.2.4. DATA FOOTBALL CLUBS' SHIRT SPONSORS

For the investigation of the football clubs' shirt sponsors also secondary data is used. To collect the data of the various shirt sponsors, the websites of the football clubs and companies themselves are used. Some football clubs are playing with two main shirt sponsors. The main sponsor is chosen on this order of importance: most matches on the shirt; most used in home matches; biggest visibility on the shirt.

Origin sponsor

The town or city where the company is founded can be marked as the origin of the sponsor. Sometimes the shirt sponsor is due to mergers or take-overs part of a bigger group, so the origin becomes very unclear. In this situation there is taken a closer look if there are any ties to the football club's origin. If not, the current headquarter is used as origin.

The origin of the sponsor company can be marked as local, national or international. The origin can be considered as local if the origin of the sponsor is the closest town (or city) or not further than 30 kilometers away from the football club's origin. If the origin place is not local, but still from the same country as the football club, the sponsor can be considered as national. If the sponsor is from another country than the football club itself, the sponsor can be marked as international.

Finally, the origin of the shirt sponsor can be classified into continent.

6.3. ECONOMETRIC MODEL

To find out if the catchment area of a football club explains the variance in on-field performance, with the other three variables of importance taken into account, a multiple linear regression model is considered as the best tool to achieve this. Before conducting a regression analysis, a Pearson correlation analysis will used to find the mutual relationships.

The econometric model of the multiple regression can be simply formulated as follow:

$$Y = B + a_1\chi_1 + a_2\chi_2 + a_3\chi_3 + a_4\chi_4 + \varepsilon$$

Where:

Y = On-field performance

 χ_1 = Catchment area

 χ_2 = Historical success nationally

 χ_3 = Historical success international

 χ_4 = Foreign ownership

Within the model a_1 , a_2 , a_3 and a_4 are the regression coefficients, B is the constant factor and ε is the error term which corrects the equation for the part which is not explained by the other variables (1- R^2).

Football clubs' shirt sponsors and on-field performance

The investigation of the football clubs' shirt sponsors stands on its own and is not part of the multiple regression analysis. To find the relationship between the origin of the shirt sponsor and the on-field performance of a football club, an One-way ANOVA model is conducted. This model is chosen because of the type of variables, where the on-field performance is continuous while sponsor origin sort is categorical.

7. RESULTS

In this chapter the different analyzed data will be presented. In the first paragraph results of the variables which explain the on-field performance will be explained, as well the dependent variable itself. The relationships between the different variables and the outcomes of the multiple linear regression model will be pointed out as well. The second paragraph covers the data of the football clubs' shirt sponsors.

7.1. THE DETERMINANTS OF ON-FIELD PERFORMANCE

7.1.1. RESULTS OF THE INDIVIDUAL VARIABLES

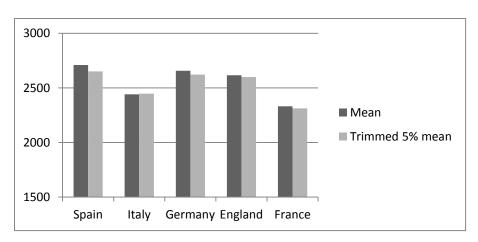
On-field performance

As explained in the previous chapter, the on-field performance of the different football clubs is measured in the *Euro Club Index* and is even as the *Catchment area* and *Historical success nationally* a continuous variable. As shown in table 7.1 the lowest ECI is 1504, which belongs to the Italian club US Pescara, while the highest value is 4285, corresponding with FC Barcelona. The latter is also one of the four clubs with a value marked as an outlier. These clubs are performing much better than the remainder of the sample. Although they are quite different than the other cases, the values are not illegitimate scores. Trimming (removing outliers) or Winsorize (replace outliers by certain percentiles) (Barnett & Lewis, 1994) them would make the findings of the analysis less powerful, because these cases are an important part of the research. That is the reason for keeping these outliers with the same value in the dataset.

TABLE 7.1: DESCRIPTIVE STATISTICS CONTINUOUS VARIABLES

	Mean	5% trimmed mean	Minimum	Maximum	Outliers
Euro Club Index	2548,7	2515,9	1504	4285	Manchester United, Bayern München, Barcelona and Real Madrid
Population catchment area	911.937	862.374	115.628	3.078.408	Espanyol, Barcelona and Napoli
Corrected percentage won national championships	4,42	2,93	0	46,3	Real Madrid, Barcelona, Atletico Madrid, Juventus, AC Milan, Internazionale, Bayern München, Manchester United, Arsenal, Liverpool, Lyon, Saint-Etienne, Marseille and Bordeaux

FIGURE 7.1: AVERAGE EURO CLUB INDEX COMPARED AMONG THE DIFFERENT LEAGUES



The data consists of football clubs from five different national leagues. Therefore it is useful to compare the clubs from the different leagues in terms of average on-field performance. As shown in figure 7.1 the average on-field performance of football clubs in the Spanish, German and English league is quite similar. Clubs in the Italian and French league however perform on average worse. This can be matched with the findings of chapter 2, in which the sort of revenues of football clubs were described. A result from the Deloitte Money League 2011/12 was the lower match day revenues in the Italian and French league which could be a result of the lagging stadiums in these countries (Deloitte, 2013).

Local catchment area

The difference between the minimum population of the catchment area (Greuther Fürth) and the maximum population (Napoli) is quite significant as can be seen in table 7.1. Also the catchment area variable contains outliers. The two clubs from Barcelona (Espanyol and FC Barcelona) and the club from Naples (Napoli) positively differ from the other cases. This is mainly a result of the demographic distribution of clubs where Espanyol, Barcelona and Napoli benefit from.

The differences in the population of the catchment area are also a result of the geography of the country, which is as said a determinant for the NUTS3 region classification. Where Germany has 429 NUTS3 regions, Spain has only 59 regions classified as NUTS3.

Historical success nationally

As shown in table 7.1 the values of historical national success are very different. Many clubs (58) have in the taken period never won a prize, while quite a lot of clubs (14) are marked as outliers, because they performed so much better than the rest of the observed clubs. These *outliers* can be seen as national top clubs and it is corresponding with the *success breeding success* argument of Walker (1986). There are some clubs that remain strong, while other clubs remain playing a role in the margin.

Historical success internationally

In table 7.2 the differences of historical international success between the leagues are shown. In Spain, Italy and England the amount of clubs who have won a major European prize are similar, while Germany is outperforming with seven successful clubs. In France only one club (Marseille) has won a European prize. In total 23,5% of the clubs has ever won an European prize, while 76,5% never won an European prize.

TABLE 7.2: HISTORICAL INTERNATIONAL SUCCESS DIVIDED INTO DIFFERENT LEAGUES

			European prizes won?		
			No	Yes	Total
Football league	Spain	Count	15	5	20
		% within Football league	75,0%	25,0%	100,0%
		% within European prizes won?	20,0%	21,7%	20,4%
	Italy	Count	15	5	20
		% within Football league	75,0%	25,0%	100,0%
		% within European prizes won?	20,0%	21,7%	20,4%
	Germany	Count	11	7	18
		% within Football league	61,1%	38,9%	100,0%
		% within European prizes won?	14,7%	30,4%	18,4%
	England	Count	15	5	20
		% within Football league	75,0%	25,0%	100,0%
		% within European prizes won?	20,0%	21,7%	20,4%
	France	Count	19	1	20
		% within Football league	95,0%	5,0%	100,0%
		% within European prizes won?	25,3%	4,3%	20,4%
Total		Count	75	23	98
		% within Football league	76,5%	23,5%	100,0%
		% within European prizes won?	100,0%	100,0%	100,0%

Foreign ownership

For foreign ownership the differences between the five leagues are much more significant, as table 7.3 shows. Because in Germany foreign ownership is not allowed due to the 50+1 rule the result is obvious. But in Italy and France foreign ownership is also really rare (respectively 0 and 1), while in Spain the majority (85%) of the club owners is domestic as well. Only in England (50%) foreign ownership is very common. Not less than 71,4% of all the foreign owners of the observed European football clubs belongs to an English club. The lack of foreign owners in the leagues of Spain, Italy and France can be a result of the league attractiveness. The huge broadcasting rights (see table 4.1) revenues in England can be seen as an indicator for attractiveness of the league. The broadcasting rights revenues in Spain (apart from Real Madrid and Barcelona), Italy and France are significantly lower (Deloitte, 2013), which could imply that these leagues are less interesting for foreign owners.

TABLE 7.3: FOREIGN OWNERSHIP DIVIDED INTO DIFFERENT LEAGUES

			Foreign owne		
			No	Yes	Total
Football league	Spain	Count	17	3	20
		% within Football league	85,0%	15,0%	100,0%
		% within Foreign ownership dummy	20,2%	21,4%	20,4%
	Italy	Count	20	0	20
		% within Football league	100,0%	0,0%	100,0%
		% within Foreign ownership dummy	23,8%	0,0%	20,4%
	Germany	Count	18	0	18
		% within Football league	100,0%	0,0%	100,0%
		% within Foreign ownership dummy	21,4%	0,0%	18,4%
	England	Count	10	10	20
		% within Football league	50,0%	50,0%	100,0%
		% within Foreign ownership dummy	11,9%	71,4%	20,4%
	France	Count	19	1	20
		% within Football league	95,0%	5,0%	100,0%
		% within Foreign ownership dummy	22,6%	7,1%	20,4%
Total		Count	84	14	98
		% within Football league	85,7%	14,3%	100,0%
		% within Foreign ownership dummy	100,0%	100,0%	100,0%

7.1.2. RELATIONSHIP BETWEEN THE VARIABLES

In the previous paragraph 7.1.1 the results of the variables *Euro Club Index*, Catchment *area*, *Historical performance nationally*, *Historical performance internationally* and *Foreign ownership* are pointed out individually. It is now important to figure out the mutual relationships between the different variables. As described in chapters 2, 3 and 4 the theory suggests a positive relationship of all these variables with the on-field performance. Now will be investigated if this is actual the case, starting with having a look at the correlations of the different variables. Because all the variables are continuous or dichotomous a Pearson Bivariate correlation test is conducted.

As table 7.4 shows, all the variables are significantly correlated with the *Euro Club Index* and with each other except the variable *Foreign ownership*. *Foreign ownership* is not significantly correlated with any of the variables. The relationship between the independent variables and the on-field performance differs from a low correlation (*Population catchment area*) to a moderate correlation (*Historical success internationally*) and a high correlation (*Historical success nationally*). Between the independent variables there is either a low (*Historical success nationally* and *internationally* with *Population catchment area*) or moderate correlation (*Historical success nationally* with *Historical success internationally*).

TABLE 7.4: PEARSON BIVARIATE CORRELATION TEST

	Euro Club Index	Population catchment area	Historical success nationally	Historical success internationally	Foreign ownership
Euro Club Index	1				
Population catchment area	,368*	1			
Historical success nationally	,723*	,275*	1		
Historical success internationally	,618*	,206*	,562*	1	
Foreign ownership	,166	-,061	,099	,049	1

^{*} Correlation is significant at the 0.05 level (2-tailed)

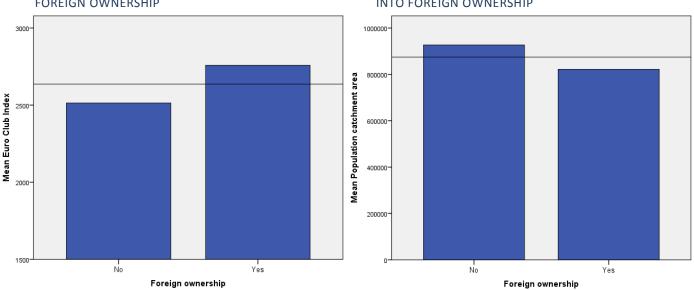
Table 7.5 shows the average on-field performance and catchment area of the dummy variables *Historical success internationally* and *Foreign ownership*. For *Historical success internationally* the values are in line with the theory discussed in chapter 2 and the relationships demonstrated in table 7.4. The on-field performance is better and the catchment area size is bigger for clubs with historical international success.

TABLE 7.5: AVERAGE ON-FIELD PERFORMANCE AND CATCHMENT AREA FOR HISTORICAL SUCCESS INTERNATIONALLY AND FOREIGN OWNERSHIP

		Euro Clu	ub Index	Population catchment area		
		Mean	5% trimmed	Mean	5% trimmed	
		Mean	mean	Mean	mean	
Historical success internationally	No	2372,8	2359,0	842.957	800.856	
Historical success internationally	Yes	3121,9	3099,1	1.136.870	1.085.620	
Foreign ownership	No	2513,8	2476,3	926.954	877.087	
Foreign ownership	Yes	2757,9	2758,0	821.836	774.442	

FIGURE 7.2: AVERAGE ECI DIVIDED INTO FOREIGN OWNERSHIP

FIGURE 7.3: AVERAGE CATCHMENT AREA DIVIDED INTO FOREIGN OWNERSHIP



The values for *Foreign ownership* show an interesting result though (as can also be seen in figure 7.2 and 7.3). While the average population of the catchment area for football clubs with a foreign owner is lower than football clubs with a domestic owner, the on-field performance is on average better for clubs with foreign owners. This is an interesting result, because in table 7.4 the positive relationship between the catchment area and on-field performance was demonstrated. When having a closer look, it's mainly due to the classification of the catchment area population. Most of the clubs have to share their potential catchment area with other football clubs, what makes their local catchment area smaller (see table 7.6).

TABLE 7.6: POPULATION SHARE FOREIGN OWNED CLUBS

Clubs with foreign owner	City	Population	Share
Getafe	Madrid	6.387.824	1/4
Granada	Granada	913.399	1
Málaga	Málaga	1.614.059	1
Arsenal	London	2.082.098	1/3
Aston Villa	Birmingham	1.065.652	1
Chelsea	London	1.128.535	1/3
Fulham	London	1.128.535	1/3
Liverpool	Liverpool	456.906	1/2
Manchester City	Manchester	1.475.665	1/2
Manchester United	Manchester	1.475.665	1/2
Queens Park Rangers	London	1.128.535	1/3
Southampton	Southampton	240.331	1
Sunderland	Sunderland	280.306	1
Paris Saint-Germain	Paris	2.268.313	1

7.1.3. REGRESSION MODEL

After examined in the previous paragraph the correlations between the variables a multiple regression model is followed to control the correlations between the independent variables.

As shown in table 7.4 there are no high correlation values *between* the independent variables, so there is no reason to suspect multicollinearity. Therefore all the independent variables can be analyzed within the same multiple regression model. In table 7.7 the results of the multiple regression analysis can be found, where the detailed results are listed in appendix I.

The results show that the chosen variables explain on-field performance quite well. *Population catchment area*, *Historical success nationally* and *Historical success internationally* are significant at a 95% level, while foreign ownership is significant at a 90% level. The model explains 62,7% of the variance in on-field performance, measured in the European Club Index. Of the four variables, historical national success is the best predictor of on-field performance (beta = ,496). The others have a less strong effect on the on-field performance.

TABLE 7.7: REGRESSION RESULTS FOR EUROPEAN CLUB INDEX

	В	SE	Beta	t
Constant	2177,242	61,540	-	35,379
Population catchment area	0,151E-03	0,056E-03	0,178	2,678**
Historical success nationally	28,521	4,515	0,496	6,317**
Historical success internationally	359,949	93,059	0,297	3,868**
Foreign ownership	166,112	93,884	0,113	1,769*
R-squared	0,627			
Adjusted R -squared	0,611			
No. observation	98			

^{*, **} indicates significance at the 90% and 95% level, respectively.

7.2. FOOTBALL CLUBS' SHIRT SPONSORS

7.2.1. RESULTS INDIVIDUAL VARIABLES

Origin sponsor

Of the observed 98 football clubs, 95 clubs have a main shirt sponsor. The shares of the sponsors' geographical origin differ not much from each other. Local origin is the most common (37,9%), before international (33,7%) and national (28,4%). As shown in figure in 7.4 most sponsors are coming from Europe (77,9%), while also the continents Asia (15,8%), North-America (5,3%) and South-America (1,1%) are present. On this aspect the continents are pretty evenly divided among the five leagues. Just the majority of Asian sponsors are belonging to a British football club (40%).

FIGURE 7.4: GEOGRAPHICAL ORIGIN SHIRT SPONSORS BY CONTINENT



There can be found some differences between the leagues, when comparing the geographical sort of origin (see figure 7.6). The high share of international sponsors in the Spanish La Liga (52,6%) stands out, together with the low share of local sponsors in England (20%). The German league instead has a high share of local sponsors (61,1%) and a low share of international sponsors (22,2%). In the French and Italian league the shares are quite equally distributed.

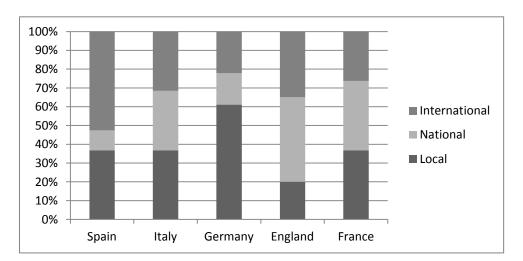


FIGURE 7.5: SHARES OF SPONSOR ORIGIN SORT DIVIDED INTO DIFFERENT LEAGUES

7.2.2. RELATIONSHIP WITH ON-FIELD PERFORMANCE

To see if there is a relationship between the geographical origin of the football club's sponsor and the on-field performance an one-way ANOVA test is conducted. The full results of the test are included in appendix II.

The one-way ANOVA was used to test for on-field performance among the three sponsors' geographical origin sorts. The on-field performance differed significantly across the three levels of origin, F(2.92) = 7.12, p = .001. Tukey post-hoc comparisons of the three groups indicate that the clubs with international sponsors (M = 2820.5, 95% CI [2608.59, 3032.41]) have significantly higher on-field performance than clubs with local sponsors (M = 2432.44, 95% CI [2326.38, 2538.51]) and national sponsors (M = 2406.56, 95% CI [2190.28, 2622.83]). Between local sponsors and national sponsors there is no significant difference in on-field performance.

These results are in line with the theory, which says that successful football clubs attract high-profile brands as sponsors (Rosson & Scotia, 2001). Since there are less high-profile brands in the world than low-profile brands, the probability that the high-profile sponsor has an international character is obviously higher. More successful football clubs create thus a global catchment area not only for fans, but also for sponsors.

In the previous paragraph figure 7.6 demonstrated that there are quite some differences between the leagues in terms of sponsors' geographical origin sorts. It is therefore important to check if there are distinctions to make between the five football leagues. Figure 7.7 illustrates the average ECI for each league divided among the origin sorts. These results show that except for the German Bundesliga the average on-field performance is higher for clubs with international sponsors than clubs with local or national sponsors. That the German league doesn't have a clear distinction

between national and international sponsors is not that surprisingly. Germany has the largest economy of Europe and after The United States, China and Japan the highest GDP of the world (IMF, 2013) and it might be that it has for that reason enough potential high-profile sponsors located in Germany itself.

Spain taly 2500 Origin sort sponsor

FIGURE 7.6: AVERAGE ECI FOOTBALL LEAGUES DIVIDED AMONG SPONSORS' ORIGIN SORT

8. CONCLUSIONS

In this section some conclusions will be drawn based on the results from the data analysis in regard to the literature review. There will be put forth to which extent the empirical results correspond with the found literature. After the research questions are answered the limitations of this research will be discussed. Finally, some recommendations for further research will be made.

8.1. CONCLUSIONS

The aim of this study is to provide insight into the relationship between the size of the local catchment area and the on-field performance, when the other predictors *foreign ownership* and *historical success nationally and internationally* are taken into account. Providing insight into the relationship between sponsorship and on-field performance is also part of the aim of this research.

Therefore the main question of this research is:

To what extent is the on-field performance of selected football clubs in Europe related to their local catchment area?

In order to answer this question literature study and data analysis was conducted. It was chosen to focus on the five major European football leagues Spain, Italy, Germany, England and France. The motivation for this choice is the belief that the assumption of a global catchment area is best applicable on these leagues. In these five leagues there has been a concentration of success; the globalization process in the football industry together with the commercialization of the sport led to increased importance of team budget which resulted in a migration of talent to the major leagues. The *success breeding success* argument implies that these major leagues become even stronger in the future, with growing attention of fans and sponsors.

The leagues differ in some aspects from each other. The Italian and French clubs are performing on average worse than clubs from Spain, Germany and England. This corresponds with the lower revenues of Italian and French clubs on match days, which could be a result of the lagging stadiums in these countries. Foreign ownership differs as well between the five leagues. In England foreign ownership is very common, while it is quite rare in Spain and France. In Italy there have not entered foreign owners yet and in the Bundesliga it is even not possible. In terms of sponsorship there is a difference between Germany and the other countries. In contrast to the other countries the German clubs rely more on sponsors originally located in Germany itself. An explanation could be that the German industry has enough potential high-profile brands for the domestic clubs.

The results from the data analysis show that the historical on-field performance is the major predictor of the current on-field performance and is positively related. Both national historical success and international historical success have more influence on the on-field performance than the size of the local catchment area. Again the *success breeding success* argument turns out to be very strong.

This doesn't mean that the local catchment area of a football club is not related to the on-field performance. In fact the empirical results demonstrated that the local catchment area of a football club significantly determinates in positive sense the on-field performance, but in lesser extent than historical success. This could be seen in accordance with the existing literature which does not agree

on the importance of the local catchment area nowadays. It is obvious however that the local catchment area nowadays is less decisive for the performance than in the past. The shift to a consuming fan, the rise of telecommunication and the relative drop of travel costs are underlying processes which make the catchment area of football clubs less local.

Based on the theory the assumption could be made that clubs with a foreign owner perform better, due to the investment with large amounts of capital involved. The contribution of foreign ownership in on-field performance actually turned out to be not significant. Therefore cannot be concluded that football clubs with a foreign owner perform better than clubs with a domestic owner. An explanation could be that not all foreign take-overs are accompanied with large amounts of capital. Some foreign owners could see the football club as a long-term way of investment, instead of having the short-term goal of being successful.

Where the size of the local catchment area might be still a predictor for the current on-field performance, this cannot be said for the sponsors. Football clubs with a local main sponsor (and thus maybe a potentially large local pool of sponsors) do not perform significantly better than football clubs with a national or international sponsor. In fact, international sponsors have in comparison with local and national sponsors a significant positive influence on on-field performance. This can be seen in relation with the connection between high-profile brands and successful football clubs. High-profile brands are often international brands which are willing to pay large amounts of money to commit themselves to a successful club.

To conclude, the local catchment area of a football club can still be seen as an important condition for the current on-field performance. Football clubs with a bigger local catchment area perform significantly better than the clubs with a smaller catchment area. But the catchment area is not the major driver of on-field performance any more. The historical success nationally and internationally have a greater contribution in the current performance. The argument that successful clubs remain strong is still applicable on the football clubs in the major five European leagues. Apart from the success related extra revenues fans *and* sponsors want to associate themselves with successful teams. That is the reason successful clubs attract more international high-profile sponsors. There might therefore be concluded that the local catchment area in the past was a major determinant for on-field performance, so most football clubs have won prizes over the years due to their larger catchment area. Nowadays because of the globalized character of the industry the local catchment area doesn't have to be that decisive any more, future performance is more dependent on the past performance.

8.2. LIMITATIONS

The research is based on the five major European leagues, what directly gives the limitations of this study. Because the characteristics of these five leagues differ in many ways from other European football leagues, it would be incorrect to generalize the findings and apply them on whole European football. Furthermore the limitations of the European Club Index, makes a more robust measurement of on-field performance impossible. Only the teams present in the highest division in 2012/13 are taken into account, while there is only used the current index.

The findings of this research are mainly based on the choice of measurement for the catchment area. Although this choice was well-considered and taken with great care, the classification of the

catchment areas is open for discussion. In an ideal situation, the catchment area of a football club is a reflection of the people in the stadium. Dejonghe (2006) investigated the catchment areas of football clubs in The Netherlands this way by taking the origin of the people with a membership. For this research it was obviously not feasible to collect this data in the given time.

Furthermore it is chosen to follow the methodology of Walker (1986) for dividing the catchment area among clubs located within the same region. It is difficult to decide whether this is the correct way to assign the local catchment area to clubs.

This research shows that the local catchment area is to a certain extent a determinant for on-field performance. But it is unclear whether the local catchment area is nowadays still that important or the historical success is just a result of the original catchment area and the current on-field performance is therefore just based mainly on historical success.

8.3. RECOMMENDATIONS

Based on the limitations of this research there can be drawn some recommendations for further research into this topic. Conducting a similar study with a broader and robust measurement of onfield performance would provide a more precise insight into the drivers of on-field performance of football clubs.

As said, the exact relationship between catchment area, historical success and on-field performance is still quite unclear. Investigating the specific relationship between the catchment area and historical success would offer a better understanding in the driving forces behind on-field performance.

To make this research implacable in the football industry, it would be interesting to investigate the clubs most attractive for foreign take-over. For this the used *ingredients* for on-field performance could be taken into account. Football clubs with a big local catchment area and great historical success but bad current on-field performance can be interesting for take-over for example.

Because this research is only based on the major five European football leagues, a study could be conducted in the smaller leagues of Europe as well to see what the exact differences are. The potential local catchment areas could be investigated for different countries, just as Dejonghe (2006) did for Dutch football clubs.

8.4. CONCLUDING REMARK

The outcomes of this research provided insight into the determinants of on-field performance of football clubs located in the major five leagues of Europe. There has been investigated whether the local catchment area is the main predictor of on-field performance, which is found to be not the case. Historical success nationally and internationally are found to be better predictors of on-field performance, although the local catchment area can still be seen as a determinant of performance, with a positive relationship.

The research distinguishes itself from existing literature by including multiple leagues and multiple determinants of on-field performance in the analysis. The football clubs of the five national leagues are made comparable by choosing a general performance index, which makes this research more extensive than existing studies on this topic.

LITERATURE

- Alt, J. (1983). Sport and cultural reification: From ritual to mass consumption. Theory, Culture and Society, Vol. 1(3), pp. 93-107.
- Andreff, W. (2008). *Globalization of the sports economy*. Rivista di diritto ed Economia Dello sport, 4(3), pp. 13-32.
- Andreff, W. & Staudohar, P.D. (2000). *The evolving European model of professional sports*. Journal of Sports Economics, Vol. 1(3), pp. 257-76.
- Andreff, W. & Staudohar, P.D. (2002). *European and US Sports Business Models*. In: Barros, C.P., Ibrahimo, M. & Szymanski, S. (eds.). *Transatlantic Sport: the Comparative Economics of North American and European Sports*. Edward Elgar Pub: Northampton, pp. 23-49.
- Arthur, D., Scott, D., Woods, T. & Booker, R. (1998). Sport sponsorship should ... a process model for the effective implementation and management of sports sponsorship programmes. Sport Marketing Quarterly, Vol. 7(4), pp. 49-60.
- Baimbridge, M., Cameron, S. & Dawson, P. (1996). *Satellite Television and the Demand for Football: a Whole new Ball Game?* Scottish Journal of Political Economy, Vol. 43(3), pp. 317-333.
- Bale, J. (1983). *The changing regional origins of an occupation; the case of professional footballers in 1950 and 1980.* Geography, Vol. 68, pp. 140-148.
- Barclay Premier League (2013-a). *The world's most watched league*, viewed April 17 2013, http://www.premierleague.com/en-gb/about/the-worlds-most-watched-league/>.
- Barclay Premier League (2013-b). *A growing fan base*, viewed April 17 2013, http://www.premierleague.com/en-gb/about/a-growing-fan-base/.
- Barnett, V, & Lewis, T. (1994). Outliers in statistical data. Wiley: New York.
- Bell, E. & Campbell, D. (1999). For the love of money. The Guardian.
- Bühler, A.W. (2006). *Football as an international business an Anglo-German comparison*. European Journal for Sport and Society, Vol. 3(1).
- Buraimo, B. & Simmons, R. (2006). *Market size and attendance in English Premier League football*. Working Paper, The Department of Economics, Lancaster University.
- Carmichael, F., Thomas, D., & Ward, R. (2000). *Team performance: The Case of English Premiership Football*. Managerial and Decision Economics, Vol. 21(1), pp. 31-45.
- Chu, B. (2010). *The debt league: How much do clubs owe?* The Independent, viewed on April 29 2013, http://www.independent.co.uk/sport/football/premier-league/the-debt-league-how-much-do-clubs-owe-1912244.html.
- Conn, D. (1997). The football business. Mainstream: Edinburgh.
- Cowen, M. (2001). Are the football sponsors saturating the market? Campaign, p. 21.
- Darby, P. (2001). The New Scramble for Africa: African Football Migration to Europe. In: Mangan, J. (ed.). Europe, Sport, World: Shaping Global Societies. Frank Cass: London, pp. 217-244.

- Dejonghe, T. (2004). Sport en Economie: een Noodzaak Tot Symbiose. Arko Sportsmedia: Nieuwegein.
- Dejonghe, T. (2005). *Football in Belgium: from Centre to Semi-periphery: Analyzing the Financial Ground*. Paper presented at the 7th IASE congress, Ottawa, June 18-21.
- Dejonghe, T. (2006). *Over slapende reuzen en wakkere dwergen. De geografie van het Nederlands voetbal.* Geografie, mei 2006, pp. 6-11.
- Dejonghe, T. (2007-b). Sport en Economie; een Aftrap. Arko Sports Media: Nieuwegein.
- Dejonghe, T. & Opstal, W. van (2010). *Competitive Balance between National Leagues in European Football after the Bosman Case*. Rivista di Diritto ed Economia Dello Sport, Vol. 6(2), pp. 41-61.
- Dejonghe, T. & Vandeweghe, H. (2006). Belgian Football. Journal of Sports Economics, Vol. 7, pp. 105-113.
- Deloitte (2005; 2006; 2007; 2008; 2009). *Annual Review of Football Finance*. Deloitte and Touche and Tohmasu: Manchester.
- Deloitte (2013). Captains of Industry: Football Money League. Sports Business Group: Manchester.
- Dobson, S. & Goddard, J. (2001). The Economics of Football. Cambridge University Press: Cambridge.
- Duke, V. (2002). Local Tradition Versus Globalisation: Resistance to the McDonaldisation and Disneyisation of Professional Football in England. Football Studies, Vol. 5, 1, pp. 5-23.
- Espitia-Escuer, M. & García-Cebrián, L.I. (2004). *Measuring the efficiency of Spanish first-division soccer teams*. Journal of Sports Economics, Vol. 5(4), pp. 329-346.
- Forbes (2012). Soccer's Most Valuable Teams, viewed April 17 2013, http://www.forbes.com/soccer-valuations/>.
- Giulianotti, R. (2002). *Supporter, Followers, Fans, and Flaneurs: A Taxonomy of Spectators Identities in Football*. Journal of Sport and Social Issues, Vol. 26 (1), pp. 25-46.
- Giulianotti R. & Robertson, R. (2004). *The globalization of football: a study of the glocalisation of the 'serious life'*. The British Journal of Sociology, Vol. 55(4), pp. 545-568.
- Giulianotti R. & Robertson, R. (2009). Globalization of football. SAGE Publications: London.
- Goddard, J.B. & Champion, A.G. (1983). *The Urban and regional transformation of Britain*. Taylor & Francis: London.
- Guzmán, I. & Morrow, S. (2007). *Measuring efficiency and productivity in professional football teams: evidence from the English Premier League*. Central European Journal of Operations Research, Vol. 15(4), pp. 309-328.
- Haan, M., Koning, R. & Witteloostuin, A., Van (2002). *Market Forces in European Soccer*. Universiteit Groningen, SOM Research Reports n. 02F18.
- Haas, D.J., Kocher, M.G., Sutter, M. (2004). *Measuring efficiency of German football teams by data envelopment analysis*. Central European Journal of Operation Research, Vol. 12, pp. 251-268.
- Hall, S., Szymanski, S. & Zimbalist, A. (2002). *Testing Causality between Team Performance and Payroll. The Cases of Major League Baseball and English Soccer.* Journal of Sports Economics, Vol. 3, pp. 149-168.
- Holt, R. (1989). Sport and the British: A modern history. Oxford University Press: Oxford.

- Hultman, M. & Lindgren, O. (2001). *Sport sponsorship in Sweden*. Bachelor's thesis, Luleå University of Technology, Sweden.
- Huselid, M. (1998). *The impact of human resource management practices on turnover, productivity, and corporate financial performance*. Academy of Management Journal, Vol. 38(3), pp. 635-72.
- Infostrada Sports (2013). Euro Club Index. Viewed on June 21 2013, http://www.euroclubindex.com/>.
- International Monetary Fund (2013). *World Economic Outlook Report*, World Economic Outlook Database, retrieved on June 29 2013, http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx>.
- Jardin, M. (2009). *Efficiency of French football clubs and its dynamics*. University of Rennes 1, Faculty of Economic (France), CNRS-CREM.
- Jeanrenaud, C. (2006). *Sponsorship*. In: Andreff, W. & Szymanski, S. (eds.). *Handbook on the economics of sport*, pp. 49-56.
- Jeanrenaud, C. & Kesenne, S. (Eds.) (2006). *The economics of sports and the media*. Edward Elgar: Cheltenham, UK, pp. 38.
- Kelly, K., Lewis, R. & Mortimer, T.R. (2012). *In Football We Trust?* International Journal of Business and Social Science, Vol. 3(8), pp. 243-254.
- Levitt, T. (1983). The globalization of markets. Harvard Business Review, Vol. 61(3), pp. 92-102.
- Luymes, A. (2010). Ajax krijgt 'experience center' in Amsterdam. ANP, 02-07-2010.
- Manchester United (2012). World's most popular FC, viewed April 17 2013, http://www.manutd.com/en/News-And-Features/Club-News/2012/May/manchester-united-global-following-confirmed-as-659million.aspx?pageNo=1>.
- Mc Cann, P. (2008). *Globalization and economic geography: the world is curved, not flat*. Cambridge Journal of Regions, Economy and Society, 1.3, pp. 351-370.
- Meenaghan, T. (1983). Commercial sponsorship. European Journal of Marketing, special issue, pp. 1–73.
- Moortele, K., Van de (2003). *De Migraties van Profspelers in de Voetbalwereld*. In: De Aardrijkskunde, Vol. 3-4, pp. 79-86.
- Peterson, M. (2012). *The Internationality of Football Clubs in Europe*. Masterthesis Faculty of Economics and Business, University of Groningen.
- Pinnuck, M. & Potter, B. (2006) *Impact of on-field football success on the off-field financial performance of AFL football clubs*. Accounting and finance: journal of the Accounting Association of Australia and New Zealand, Vol. 46(3), pp. 499-517.
- Poli, R. & Ravenel, L. (2008). *Annual Review of the European Players' Labour Market*. Editions CIES-CERSOT: Neuchâtel.
- Popper, E. (2001). *Hungrier times for headhunters*. BusinessWeek, viewed 22 April 2013, http://www.businessweek.com/careers/content/mar2001/ca2001036_509.htm
- Pred, A. (1983). *Structuration and place: On the beginning of sense of place and structure of feeling*. Journal for the Theory of Social Behaviour, Vol. 13(1), pp. 45-68.

- Price Waterhouse Coopers (2011). *Changing the game. Outlook for the global sports market to 2015*. PwC Sports & Leisure: UK.
- Putnam, R.D., Leonardi, R., Nanetti, R.Y. (2003). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press: Princeton.
- Ratten, V. (2011). *International sports management: current trends and future developments*. Thunderbird International Business Review, Vol. 53(6), pp. 679-86.
- Rivett, P. (1975). The structure of league football. Operational Research Quarterly, Vol. 26, pp. 801-812.
- Robertson, R. (2002). *Globality*. In: Smelser, N.J. & Baltes, P.B. (eds). International Encyclopedia of the Social and Behavioural Sciences, Vol. 9, Elsevier/Pergamon Press: Oxford.
- Rosson, P. & Scotia, N. (2001). *Football Shirt Sponsorships: SEGA Europe and Arsenal F.C.* International Journal of Sports Marketing and Sponsorship, Vol. 3, pp. 157-184.
- Rottenberg, S. (1956). The Baseball Players' Labour Market. Journal of Political Economy, Vol. 64, pp. 242-58.
- Salomon Brothers Inc. (1997). Football values. London.
- Sánchez Martínez, L.C. (2006). ¿Son compatibles el" bolsillo" y el" corazón"? El caso de las sociedades anónimas deportivas españolas. Estudios Financieros, Revista de Contabilidad y Tributación, Vol. 283, pp. 131-164.
- Sandy, R., Sloane, P.J. & Rosentraub, M.S. (2004). *The Economics of Sport, an International perspective*. Palgrave Macmillan: New York.
- Sloane, P.J. (1971). *The economics of professional football: the football club as a utility maximiser.* Scottish Journal of Political Economy, Vol. 8, pp. 121-146.
- Schneider, S. (1987). The people make the place. Personnel Psychology, Vol. 40(3), pp. 437-53.
- Sport+Markt (2012). European Football Jersey Report 2012/2013. Sponsorglobe Newsletter, Vol. 9(28), p. 2.
- Szymanski, S. & Kuypers, T. (1999). Winners and losers, the business strategy of football. Penguin Books: London.
- Szymanski, S. & Smith, R. (1997). *The English Football Industry: profit, performance and industrial structure.* International Review of Applied Economics, Vol. 11(1), pp. 135-153.
- Taylor, I. (1971). "Football mad": A speculative sociology of football hooliganism. In: Dunning, E. (Ed.). The sociology of sport: A selection of readings. Frank Cass: London, pp. 352-377.
- Taylor, M. (2007). *Football, Migration and Globalization: The Perspective of History*. Published online on Idrottsforum.org, http://www.idrottsforum.org/articles/taylor/taylor070314.html.
- Taylor, M. (2008). The association game: a history of British football 1863-2000. Pearson Education: Harlow.
- Tomlinson, J. (1999). Globalization and Culture. Polity: Cambridge.
- UEFA (2013). *UEFA Country Coefficients 2012-2013*, accessed January 16 2013, http://www.uefa.com/memberassociations/uefarankings/country/index.html.
- Vamplew, W. (1982). *The Economics of a Sports Industry: Scottish Gate-Money Football, 1890-1914*. Economic History Review, Vol. 35(4), pp. 549-67.

- Walker, B. (1986). The Demand for Professional League Football and the Success of Football League Teams: Some City Size Effects. Urban Studies, Vol. 23(3), pp. 209-219.
- Wilson, R., Plumley, D. & Ramchandani, G. (2013). *The relationship between ownership structure and club performance in the English Premier League*. Sport, Business and Management: An International Journal, Vol. 3(1), pp. 19-36.

APPENDIX I

Regression model

Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,792ª	,627	,611	322,241	,627	39,014	4	93	,000

a. Predictors: (Constant), Foreign ownership, Historical success internationally, Population catchment area, Historical success nationally

ANOVA^a

	Model		Sum of Squares	df	Mean Square	F	Sig.
Γ	1	Regression	16204736,74	4	4051184,184	39,014	,000в
l		Residual	9657049,468	93	103839,242		
l		Total	25861786,20	97			

a. Dependent Variable: Euro Club Index

Coefficients^a

		Unstandardize	Unstandardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2177,242	61,540		35,379	,000
	Population catchment area	,000	,000	,178	2,678	,009
	Historical success nationally	28,521	4,515	,496	6,317	,000
	Historical success internationally	359,949	93,059	,297	3,868	,000
	Foreign ownership	166,112	93,884	,113	1,769	,080

a. Dependent Variable: Euro Club Index

b. Predictors: (Constant), Foreign ownership, Historical success internationally, Population catchment area, Historical success nationally

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients			Collinearity	Statistics
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2177,242	61,540		35,379	,000		
	Population catchment area	,000	,000	,178	2,678	,009	,913	1,095
	Historical success nationally	28,521	4,515	,496	6,317	,000	,651	1,537
	Historical success internationally	359,949	93,059	,297	3,868	,000	,681	1,468
	Foreign ownership	166,112	93,884	,113	1,769	,080,	,982	1,019

a. Dependent Variable: Euro Club Index

Collinearity Diagnostics^a

				Variance Proportions					
Model	Dimension	Eigenvalue	Condition Index	(Constant)	Population catchment area	Historical success nationally	Historical success internationally	Foreign ownership	
1	1	2,889	1,000	,02	,02	,04	,04	,02	
	2	,879	1,813	,01	,00	,09	,10	,61	
	3	,730	1,989	,08	,09	,12	,08	,31	
	4	,346	2,890	,00	,01	,70	,78	,00,	
	5	,156	4,308	,88,	,87	,05	,01	,05	

a. Dependent Variable: Euro Club Index

APPENDIX II

The results of the One-way ANOVA for the relationship between sponsors' geographical origin and on-field performance are demonstrated her.

Descriptives

Euro Club Index

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Local	36	2432,44	313,482	52,247	2326,38	2538,51	1657	3494
National	27	2406,56	546,713	105,215	2190,28	2622,83	1504	3997
International	32	2820,50	587,764	103,903	2608,59	3032,41	1809	4285
Total	95	2555,80	518,914	53,239	2450,09	2661,51	1504	4285

ANOVA

Euro Club Index

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3391307,644	2	1695653,822	7,117	,001
Within Groups	21920211,56	92	238263,169		
Total	25311519,20	94			

Multiple Comparisons

Dependent Variable: Euro Club Index

Tukey HSD

		Mean Difference (l-			95% Confide	ence Interval
(I) Origin sort sponsor	(J) Origin sort sponsor	J)	Std. Error	Sig.	Lower Bound	Upper Bound
Local	National	25,889	124,270	,976	-270,15	321,93
	International	-388,056	118,592	,004	-670,57	-105,54
National	Local	-25,889	124,270	,976	-321,93	270,15
	International	-413,944	127,555	,005	-717,81	-110,08
International	Local	388,056 [*]	118,592	,004	105,54	670,57
	National	413,944	127,555	,005	110,08	717,81

^{*.} The mean difference is significant at the 0.05 level.

Homogeneous Subsets

Euro Club Index

Tukey HSD.a,b

		Subset for alpha = 0.05	
Origin sort sponsor	Ν	1	2
National	27	2406,56	
Local	36	2432,44	
International	32		2820,50
Sig.		,976	1,000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 31,229.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.