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Earnings management in English football

Evidence from the Premier League and the Championship

Masteroppgave i Økonomi og administrasjon/siviløkonom
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FORORD

Denne oppgaven er skrevet som en del av mitt 2-årig masterstudium ved NTNU Handelshøyskolen. Oppgavens omfang er på 30 studiepoeng. Temaet til oppgaven er earnings management i engelske fotballklubber.

Utvikling av den oppgaven har vært en lang modningsprosess. Det hele startet med en lidenskap for fotball og en interesse for regnskap som et informasjonssystem. En enkel idé har endelig blitt til en ferdigskrevet oppgave.

Arbeidet med den oppgaven har vært både morsomt og frustrerende, interessant og krevende. Det har vært en del detektivarbeid for å forstå organisasjonsstrukturen til enkelte fotballklubber. Jeg har tilbragt mange timer på Research Gate, Statas YouTube-kanal og Statas egne nettsider for å lage en datafil som kunne brukes i analyser. Arbeidet med min oppgave har vært en stor trøst for meg i den lange perioden når fotball i Europa var satt på vent.

Jeg må takke min samboer Aleksander for han har holdt ut den våren. Den tiden har vært like krevende for han som det har vært for meg, men allikevel har han håndtert mine opp- og nedturer på utmerket vis.

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Innholdet i denne oppgaven står for forfatterens regning.

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Kersti Tambet

ABSTRACT

The thesis studies whether football clubs in the two highest divisions in the English league system engage in earnings management. Earnings management is defined as management's discretion over accounting choices or real economic transactions to present a desired picture of the company's financial performance and position. The term covers the intentional choices of management, but not unintentional errors, or illegal manipulations.

To study the earnings management activities in English football clubs is relevant because the monitoring of clubs' finances by regulatory organs is tied to the accounting data. The existing literature on earnings management demonstrates that the accounting quality deteriorates when regulatory control is tied to accounting data. Previous research has found out that the clubs in the elite divisions in Europe managed their earnings more after the implementation of the FFP rules than before.

Total of 28 football clubs from the two top divisions in England – the Premier League and Championship – were used in the study. The period was seven seasons from the 2011-12 to the 2017-18 season. Data was collected from the Orbis database and manually from the clubs' annual financial reports. Two proxies of earnings management were used to evaluate earnings management: income smoothing and accrual management. Results indicate that English football clubs engage in earnings management, although there are no significant differences between the two leagues. Clubs with higher wages to revenues ratio engage more in earnings management. Football clubs are win maximisers, and the wage expenditure is related to footballing success. Therefore, the results indicate that the clubs may sacrifice the accounting quality to satisfy two contradictory objectives: the sporting success and the financial rules imposed by the regulatory organs.

The study is novel in three ways. Firstly, earnings management is analysed in one country's football leagues. Secondly, the sample includes clubs that participate in the lower leagues. Thirdly, the study employs two novel hypotheses: whether the clubs in the lower leagues engage more in earnings management and the effect of wage costs on the discretionary accruals.

SAMMENDRAG

Formålet med den oppgaven er å undersøke om engelske fotballklubber i to øverste driver med earnings management. Earnings management er definert som ledelses bevisste valg innen regnskapsregelverket eller gjennomføring av reelle økonomiske transaksjoner for å forbedre resultat («real earnings management»). Begrepet «earnings management» omfatter altså bevisste regnskapsvalg av ledelsen, men ikke de utilsiktede feil i regnskapet eller regnskapsmanipulasjon.

Det er aktuelt å studere earnings management i de engelske fotballklubber fordi fotballmyndigheter baserer sine finansielle kontroller av fotballklubber på regnskapsinformasjon. Tidligere forskning tyder på at regnskapskvaliteten forringes når det er regulatoriske kontroller knyttet til regnskapsinformasjon. For eksempel, fotballklubber i elitedivisjoner i Europa drev med mer earnings management etter implementering av «Financial Fair Play (FFP)» regelverket.

Utvalget besto av 28 fotballklubber fra de to øverste divisjonene i England (Premier League og Championship). Årsregnskapene til fotballklubber fra den 2011-12 sesongen til den 2017-18 sesongen ble brukt som datakilde, samt Orbis-databasen. To metoder ble brukt for å avdekke earnings management: resultatutjevning («income smoothing») og anormale periodiseringer («accrual management»). Resultater tyder på at engelske fotballklubber driver med earnings management, men det er ikke signifikante forskjeller mellom de to ligaene. Klubber med høyere ratio lønn vs. inntekter driver mer med earnings management. Det forklares ved at klubber er ikke profittmaksimerende, men de er heller vinnmaksimerende. Lønnskostnader er positivt relatert til sportslig suksess. Fotballklubber må oppnå to motstridende mål (sportslig og finansielt). Det kan føre til at fotballklubber tilfredsstiller alle stakeholdere på bekostning av regnskapskvalitet.

Denne studien bidrar til eksisterende forsking på tre måter: den studerer earnings management i ett lands fotballigaer, den inkluderer klubber fra lavere divisjoner i utvalget, og den tester to nye hypoteser (om ligatilhørighet eller ratio lønn/inntekter påvirker earnings management i engelske fotballklubber).

LIST OF ABBREVIATIONS

FA - Football Association

FFP - Financial Fair Play

FIFA - Fédération Internationale de Football Association

FL - Football League

GAAP - Generally Accepted Accounting Practices

PL - Premier League

P&S - Profitability & Sustainability

UEFA - Union of European Football Associations

e.g. - "exempli gratia"; for example

i.e. - "id est"; that is

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1 INTRODUCTION

"Football is the most important thing of the least important things in the world."

Arrigo Sacchi

Football is avidly discussed in almost every corner of the world. Football supporters discuss possible new transfers, their clubs' past and present achievements, and prospects for future success. The clubs' jerseys are worn with pride and the football supporters consider themselves the true owners of their clubs (Kennedy, 2013). Journalists debate on the various aspects of the beautiful game. However, the past months with the corona crisis have demonstrated that football is not that important in the grand scheme of things. Therefore, the quote by the legendary Italian football manager Arrigo Sacchi characterises poignantly the role football has in our society.

The football clubs have experienced a fantastic growth in revenues for the past decades. When the 2008-09 finnacial crisis put many industries on their knees, then the football industry was barely affected (Szymanski, 2010). The English Premier League is the clear market leader in the football industry (Deloitte, 2018). In addition, one can claim that the Premier League is the most competitive league. The Manchester City manager Pep Guardiola have argued that the Premier League is the most difficult league to win. Guardiola probably knows what he talks about since Manchester City is the reigning champion in England. In addition, he is one of the most succesful managers of out time because he has won the elite division in England, Spain, and Germany which are the top three leagues in Europe (The Independent, 2020). The Premier League clubs generate the highest revenues in the European football (Deloitte, 2018).

English professional football is divided into four tiers. The Premier League is the top league which is owned by the clubs (Premier League, 2020a). The three lower leagues are owned by the Football League. The current thesis uses the two top divisions in England – the Premier League and the Championship. The EFL Championship is a highly competitive football league, but the clubs operate in completely different conditions than their counterparts in the Premier League (Emery and Weed, 2006). The clubs in the Championship have many incentives to secure promotion to the promised land called the Premier League. The promotion results in an increase in revenues and publicity, although these benefits do not come cheaply as the reader will learn in chapter three of the thesis.

The key assets in football industry are the players' registration rights. The playing talent is scarce and highly inelastic goods (Franck, 2014). The cost of hiring the best talent has

skyrocketed since the mid-90s because of the liberation of players' contracts. Previous research has detected a link between the spending on players' wages and success on the football field (Hall et al., 2002). Yet, it is not the absolute spending on wages, but the relative spending to competitors (Szymanski, 2015).

The ever-increasing cost of best players in conjunction with the necessity to buy the best players to win matches have resulted in a financially distressed football industry. Football clubs are considered to be win-maximisers rather than profit maximisers as traditional companies (Garcia-del-Barrio and Szymanski, 2009). This means that the financial stability is of secondary importance compared to winning football games. Several thinkers in the field of football economics have expressed their concern for the financial situation of the industry (Hamil and Walters, 2010, Solberg and Haugen, 2010). Solberg and Haugen (2010) call it a paradox that football clubs fail to produce profits while increasing their revenues.

The dire financial situation of European football industry has not gone unnoticed by the European football association UEFA[1]. In 2011 the Financial Fair Play regulations were implemented for clubs participating in the European club football competitions, such as the Champions League and Europa League (Franck, 2014, Schubert, 2014, Szymanski, 2014). The aim of the regulations was to ensure the financial stability of European club football. The core of the regulations is the break-even requirement which urge the football clubs to "live within their means" and cover the footballing expenses with the revenues. The rule should promote a long-term thinking and reduce dependence on external financing to pay the costs. The latter means that the rules are meant to reduce large money injections by superrich owners, thus increasing the competitiveness of smaller clubs (Franck, 2014).

The Premier League and Championship have implemented their own financial fair play rules which are called the Profitability & Sustainability (P&S) rules in English football (English Football League, 2020a, Premier League, 2019). These rules are similar to the UEFA's FFP regulations. The P&S rules include a break-even requirement where relevant costs cannot exceed relevant income. The more detailed introduction into these regulations is given in chapter three.

The control of compliance with FFP rules is based on accounting data. More precisely, the basis for controlling the financial performance and situation of the football clubs is the audited annual reports. Prior research has shown that the accounting quality deteoriates when regulatory

[1] Union of European Football Associations

control is tied to accounting information (Healy and Wahlen, 1999). Walker (2013) points out that achieving regulatory targets are a motivation for earnings management. Dimitropoulos and his collegues (2016) tested whether this applies also on the implementation of FFP rules. Their research demonstrated that the accounting quality of European football clubs declined after the introduction of the FFP regulations in 2011. In addition, the authors demonstrated that football clubs in Europe are still in a dire financial situation despite of the FFP rules that were intended to the clubs' finances. The current thesis is inspired by and loosely based on the research by Dimitropoulos et al. (2016).

Earnings management is the managers' intentional choices within generally accepted accounting rules (GAAP) to present a desired result in the financial reports. The main objectives of accounting information is control and decision-making (Mellemvik et al., 1988). Therefore, the management's discretion with the accounting information corrodes the usefulness of presented information for several stakeholders. Managed earnings are considered to be of lower quality (Barth et al., 2008). Regulatory organs such as UEFA or the Football League are important stakeholders in the context of financial regulations in football industry (Dimitropoulos et al., 2016). The fact that football clubs may manipulate financial reports in order to secure licencing or avoid sanctions due to non-compliance, there is an agent-principal relationship between football clubs and the controlling organs (Schubert, 2014).

This thesis contributes to the existing knowledge on earnings management in football industry in two ways. Firstly, the sample includes clubs competing in the lower leagues. Previous research has focused on the national elite divisions in Europe because these clubs are more likely to participate in European competitions and thus be a subject to UEFA Financial Fair Play regulations. In addition the elite divisions have been preferred in the previous studies on earnings management because of the bias and effects caused by relegation and promotion (Dimitropoulos, 2011). My study is novel because it includes clubs participating in the second tier of a country's league system, namely the Championship.

Secondly, the current study differs from previous research because it focuses on a single country. Earlier research in accounting quality in football has had a broader sample with clubs from several European countries (Dimitropoulos, 2011, Dimitropoulos et al., 2016). The English football makes a good research subject in accounting issues since most of the clubs in the professional leagues are limited liability companies (Buraimo et al., 2006). Therefore, the clubs are obligated to make their annual financial reports public which means that the accounting information is relatively easily available. However, football clubs can be organised

as complex organisations and one must be prepared for some serious detective work to figure out the structure and which annual reports to use in analysis.

The empirical evidence of the study suggests that English football clubs do engage in earnings management. Clubs with higher wages to revenue ratio, intangible assets, and growth in revenues appear to manage their earnings more. Meanwhile, cash flows from operating activities are negatively associated with earnings management activities. However, the empirical results do not support the hypothesis that league participation have an effect on earnings management. Meaning that the clubs competing in the Championship do not manage their earnings more than their Premier League counterparts. Clubs in the two top tiers in English football also engage in significant income smoothing, i.e. the clubs increase their accruals when the cash flows are poor.

1.1 RESEARCH QUESTIONS

Do English football clubs in the two highest leagues engage in earnings management? Which factors affect earnings management in the Premier League and the Championship?

Two proxies for earnings management are used to answer the research question(s): income smoothing and accrual management. The models used in the study to evaluate earnings management activities are developed by credible researchers and acknowledged in the field of earnings management. Accounting information from the annual reports of football clubs was used in the analysis. The football clubs that competed either in the Premier League or the Championship from the 2011-12 to the 2017-18 seasons were included in the sample. The final sample consisted of 28 clubs which sums up to 196 firm-year observations.

1.2 LAYOUT OF THE THESIS

The thesis is organised as follows.

The scene is set in chapter two. The reader is presented with the context of football clubs in England. The chapter gives an overview of the development of the game in England and highlights the major changes in football. These changes helped to form football into the game people know and love. The chapter also provides an overview of the current league structure in English football.

Chapter three introduces the economics of football. The sporting success and economical rewards are intertwined in the football business due to the win maximising nature of the clubs. Financial input in form of investments in players are required to win football games which has

made the football industry financially unstable. The chapter gives an overview on the financial fair play rules that are implemented to counteract the clubs' overspending.

Chapter four presents the theoretical perspectives to understand and interpret the results of the study. The chapter also gives an overview on the aims of accounting information and proposes a philosophical approach to thinking about the earnings. An introduction into the field of earnings management is provided together with an overview on the current state of research on earnings management in football industry.

The methodological considerations in developing the research project are discussed in chapter five. The chapter introduces the philosophical assumptions that the research is based on and discusses the reliability and validity of the results.

The empirical results are presented in chapter six. Chapter seven is dedicated to discussing the results and placing these into the wider perspective and the existing literature. The limitations of the study are examined in the same chapter. The thesis is concluded in chapter eight which also provides the implications of the study and suggestions to future research.

Additional relevant information is presented in the appendices. For example, the appendix I provides a detailed overview on the football clubs used in the study.

2 CONTEXT – FOOTBALL IN ENGLAND

The chapter gives an introduction into the development of football England from the Middle Ages to the establishment of the Premier League in the early 1990s. The current structure of the professional football leagues is presented.

England is the cradle of the game that the world calls football. The game originates from the Middle Ages, but at these times football was a quite different game of what we are used to nowadays. The game played in the rural areas of England was violent and could even with fatalities. By the early 1800s, the game was mainly played by the upper-class at schools and in the universities (Dobson and Goddard, 2001).

The Football Association (FA)[2] was founded in 1863 (Buraimo et al., 2006). The FA Cup started in 1871 and is the oldest football competition in the world. The very first team to win the FA Cup was the Wanderers which was a team consisting of players that had attended the most prestigious universities in England, Oxford and Cambridge (Dobson and Goddard, 2001). Until the late 1870s, the Southern clubs comprising of players with public school[3] background dominated the football in England. In the 1880s, the clubs from industrial areas in the North started to gain power. The shift in power was caused by the factory owners who had attended public schools themselves (Dobson and Goddard, 2001). Preston North End, a club that still exists and currently plays in the third professional tier League 1 in England (Sky Sports, 2020), was the first Northern club to win the FA Cup in 1883 (Dobson and Goddard, 2001).

In the early days of organised football in England, the players were amateurs and the FA was against professionalism (Buraimo et al., 2006). It was illegal to pay the football players for their services. Although some clubs in the industrial areas did pay their players illegally, therefore risking with fines or even expulsion from the FA (Taylor, 2001). Buraimo et al. (2006) explains that the clubs earned money from the FA cup and that increased the competition for players, so the ban was lifted in 1885. How much the players were paid before the abolishment of the ban is difficult to assess to sports historians since the clubs were secretive about these topics because of possible sanctions by the FA (Taylor, 2001). In 1901 the wage cap was introduced, and the maximum weekly wage was set at £4. The maximum wage policy was abolished first in 1961 (Taylor, 2001).

[2] Hereafter the FA.
[3] The term "public school" may be misleading. The public schools are private elite schools in England.

It is argued that the professionalisation of football was the factor that laid the foundation for the establishment of the football league. The English Football League was founded in 1888 (2013, Dobson and Goddard, 2001, Garcia-del-Barrio and Szymanski, 2009). The first league consisted of twelve teams which was expanded to 16 teams in 1893. The same year, a second league with 12 participating teams was founded (Dobson and Goddard, 2001). Preston North End was the very first league winner (Szymanski, 2015).

In the early days, the football clubs were organised as clubs with an elected board. The problem with this organisation form was that the board members had personal responsibility for the club's liabilities. The board members could end up in the debtors' prison if the clubs could not repay their debts (Szymanski, 2015). The growth in commercialisation of the game led to clubs lending money to build stadiums which meant that organising football clubs as clubs was not optimal given the boards' personal responsibility for clubs' debts (Buraimo et al., 2006).

The concept of limited liability companies was introduced in England in 1855. Limited liability company means that clubs' shareholders get to elect the board, have right to receive dividends, and are liable only for the amount of their investment in the club (Buraimo et al., 2006). Birmingham City, yet another club that still exists today[4], was the first club to register as a limited liability company (Szymanski, 2015). In fact, it was Nottingham Forest that was the last one out to register itself as a limited liability company in 1982 (sic!). It means that the football clubs were the early adopters of this organisational form (Szymanski, 2015).

By the early 1920s the Football League had achieved the magnitude comparable to the professional league system of the present day. The league system consisted of 88 clubs in four divisions (Dobson and Goddard, 2001). The majority of football clubs were organised as limited liability companies, the players were professionals (Szymanski, 2015).

Buraimo et al. (2006) argues that the FA had always been against the commercialisation of football. For example, it was not allowed to pay the club directors for their services until 1981 (Buraimo et al., 2006). The football in England started to change in the late 1980s and the change was facilitated by two events (Emery and Weed, 2006). These events were the Hillsborough disaster and the establishment of the Premier League.

In April 1989, 96 Liverpool supporters died in the FA Cup semi-final match between Liverpool and Nottingham Forest in Hillsborough, Sheffield (Walters, 2011). The disaster was caused by faulty stadium management (Hamil and Walters, 2010). In 1990 the Lord Justice Taylor Report

[4] Birmingham City is included in the sample of the study.

was published. The report focused on the safety of football stadiums which had implications for commercialisation of football in England. Public funding (£200m) was used to increase the safety of football stadiums. In fact, most of the money went to the clubs that would soon form the English Premier League (Emery and Weed, 2006). The clubs were required to remove the pitch side fencing from the stadia and it was only allowed to sit during football games (Elliott and Smith, 2006). The increased safety of the stadiums caused a change in the demographics of spectators. The supporters with more resources started attend the games (Emery and Weed, 2006).

In 1992 the FA Premier League was founded. Why did it happen? The broadcasting income had been increasing and the top division of the FL received 50% of the income. The Premier League was established because the top clubs wanted more control over the TV rights (Buraimo et al., 2006). Until the establishment of the Premier League the broadcasting income was divided between all clubs in the four leagues of professional football (Emery and Weed, 2006). The rights were sold for the first time to a paid TV-broadcaster which resulted in a decade of increasing broadcasting income (Buraimo et al., 2006). The broadcasting revenues the clubs generate are distributed only between the clubs in the most prestigious league since the establishment of the Premier League (Emery and Weed, 2006).

There are four professional divisions of football in England. The elite division is the FA Premier League. The Premier League is organised as a private company that is owned by the clubs participating in the league. Each club has one share in the company. When a club gets relegated then the share is automatically passed on to a club that is promoted to the Premier League (Premier League, 2020a). The English Football League[5] comprise of four divisions: The Championship (the second tier), League One (the third tier) and League Two (the fourth tier) (English Football League, 2020b). The clubs in these four divisions are professional football clubs and are run as businesses (Emery and Weed, 2006). There are currently 91 clubs competing in the professional leagues (20 teams in the Premier League, 24 in the Championship, 23 in the League One, and 24 in the League Two) (Premier League, 2020b, Sky Sports, 2020).

The football season in English football takes place from August to May. The fiscal year follows the season, i.e. the clubs' fiscal year does not end on the 31st of December as usual. The football

[5] The brand name is the SkyBet EFL. The official names of the leagues are the SkyBet Championship, SkyBet League One and SkyBet League Two (English Football League, 2020b).

clubs do not end their fiscal years at the same time, but it is either the end of the May, June, or July (see Appendix I). The league system is based on relegation and promotion. It means that in the end of the season three of the worst performing teams get relegated to a lower league, meanwhile the three best teams from the league are promoted.

3 THE ECONOMICS OF FOOTBALL

3.1 FOOTBALL'S PECULIAR ECONOMICS

This chapter gives an overview of the peculiarities of economics in the football industry. Thereafter the factors that affect the sporting success are explained and how these factors have put football clubs in a demanding financial position. The regulatory organs in football industry have introduced financial rules to combat the overspending and to force the clubs to live within their means.

The football clubs in the top tier of England have experienced fantastic growth basically since the establishment of the Premier League. The Championship clubs have increased their revenues, but it is mainly due to the parachute payments (Deloitte, 2018). The most important sources of revenue for football clubs are matchday, commercial, and broadcasting income. The economical context of football clubs is characterised by increased revenues, increased wage costs (Deloitte, 2018), strong stakeholders (e.g. supporters) (Dimitropoulos et al., 2016), and increased dependence on rich owners (Franck, 2014). However, many clubs exist in the brink of insolvency (Hamil and Walters, 2010, Solberg and Haugen, 2010).

Several football thinkers acknowledge that football clubs are not like other businesses. According to Stephen Morrow (2013) is football a social business. It is economic is basis, but social in nature, and its economic activity affects or is affected by its stakeholders (Morrow, 2013). Morrow's argumentation is supported by the seminal article of Walter C. Neale (1964) on the economics of professional sports teams. Neale (1964) argues that professional sports clubs are not businesses in the traditional sense. However, the clubs are organised as businesses, but the core activities are not business-like.

Neale (1964) calls the economics of professional sporting teams peculiar because tighter competition means higher revenues. Hence, monopoly is not optimal in professional sports because the superiority of one competitor results in decreased interest and reduced revenues, according to Neale (1964). According to Gratton (2000) is the economics of football is peculiar because "the demand for the product is positively related to the uncertainty of outcome" (p. 11). This means that no club is interested in becoming too superior in terms of playing talent because it will result in decrease in interest and thus causing the reduction of revenues (Gratton, 2000). Therefore, football clubs are not like traditional businesses that would favour the position of a monopolist.

Football clubs are different from other companies because their primary aim does not seem to be to maximise profits. According to Sloane (1971), football clubs are rather utility than profit maximisers. Garcia-del-Barrio and Szymanski (2009) used data from Spanish and English football clubs to test whether the behaviour of football clubs is more like win or profit maximising. The authors conclude that the clubs' response to the choices of other clubs indicate that the clubs are rather win maximisers than profit maximisers (Garcia-del-Barrio and Szymanski, 2009).

3.2 ACHIEVING SPORTING SUCCESS

The most important assets of football clubs are the players' registration rights (Morrow, 1996). To understand why players' registration rights are the major cost drivers for the football clubs, we have to take a walk on the history lane and go back to the 1990s. Risaliti and Verona (2013) claim that the transformation happened largely due to the complete liberalisation of the players' transfers (the Bosman ruling)[6] and "the spread of new forms of television broadcasting of sporting event" (p.17). The liberalisation of players' transfers increased players' negotiation power which in turn caused the increase in costs related to players' wages (Risaliti and Verona, 2013). Football clubs are willing to invest more in the playing talent since they are win maximisers, according to Solberg and Haugen (2010).

Franck (2014) argues that playing talent is a scarce asset and its demand is highly inelastic which means that it is costly to obtain the best players. There exists a large body of evidence that players' wages are related to sporting success (Garcia-del-Barrio and Szymanski, 2009). Given that the playing talent is a scarce asset that costs more, then it is not so surprising to expect that teams that use more money on players have more sporting success. Hall et al. (2002) demonstrated that there is a causal link between wage expenditure and team performance and vice versa in English football. However, it is not the absolute expenditure on players that decide the sporting success of a football club, but it is rather the relative spending on wages compared to the competitors (Garcia-del-Barrio & Szymanski, 2009; Szymanski, 2010). As discussed

[6] Until 1995, before the event known as the Bosman ruling, if a new club wanted to sign a player whose contract with the old club had ended, then the club still had to pay transfer fee for the player. In 1995 the European Union Court of Justice ruled that the practice is against the Treaty of Rome which guaranteed European workers' rights to work in any European country. The ruling meant that any player playing for a European club is free to join any football club in Europe after the end of his contract. The former club could claim nothing for the transfer from the new club (Risaliti & Verona, 2013).

previously, football is characterised by uncertainty of outcome. Therefore wage costs cannot predict an outcome of a single game, or maybe even a single season, but according to the law of large numbers the clubs with higher wage costs tend to be more successful on the football field (Szymanski, 2015)[7].

Szymanski (2010) describes European football as a system with "more or less free entry though the promotion and relegation system and the absence of competitive restraints" (p. 32). However, the author argues that the rankings are relatively stable because the clubs do not have the same resources due to experience, reputation, and location (Szymanski, 2010). It means that there are clubs that usually win, and clubs that get relegated. The clubs must invest heavily in order to improve their rankings (Szymanski, 2010). Noll (2002) demonstrated that there is high turnover within the three top leagues in England.

The economical gap between the different leagues has widened due the developments in broadcasting rights. This causes dramatic economic consequences for clubs that get relegated to lower leagues (Garcia-del-Barrio and Szymanski, 2009). The large differences in revenues between leagues provide football clubs a powerful motivation to take risks in order to avoid relegation to lower leagues and to secure promotion (Buraimo et al., 2006).

The clubs that get relegated from the Premier League are paid money (parachute payments) to reduce the dramatic financial consequences of relegation. Parachute payments mean that the clubs that are relegated receive a percentage of their revenues during the three first years after relegation. Given the higher revenues in the Premier League, the parachute payments make up a significant amount in the Championship. 30% of total revenues in the Championship were the parachute payments in the 2016-17 (Deloitte, 2018). Deloitte (2018) claims that the gap is widening between the clubs that receive parachute payments and clubs that are not. Research shows that the parachute payments may distort the competition in the Championship (Wilson et al., 2018). The authors argue that the parachute payments offer an unfair advantage. The clubs that have been relegated are twice as likely to get promoted to the Premier League compared to the clubs not receiving any payments (Wilson et al., 2018).

[7] Leicester City is an obvious outlier. The club won the Premier League in the 2015-16 season. It is a notable achievement since the club was promoted to the top tier only from the 2014-15 season and was under administration in 2010.

3.3 INDUSTRY IN DISTRESS

The football industry has been criticised for being in a dire financial situation, an industry in distress (Hamil and Walters, 2010, Solberg and Haugen, 2010). Although the European football clubs are continuously increasing their revenues, not so many football clubs produce profits. It is a highly leveraged industry. Solberg and Haugen (2010) describe it as a paradox – football clubs with huge revenues operate in the brink of bankruptcy.

What causes this paradox? The wage expenditure is a major driver of large losses in the football industry (Buchholz and Lopatta, 2017). An example of the football clubs in a challenging financial situation is the Championship. The average wages to revenue ratio was 99% in the Championship in the 2016-17 season and the clubs reported a record combined loss (Deloitte, 2018). In comparison, the average wages to revenue ratio was 55% in the Premier League. The "big six"[8] clubs were the only clubs in the Premier League that had wage costs larger than the average of the league (Deloitte, 2018). Buraimo et al. (2006) argues that the wage expenditure becomes a problem when the club is relegated. The other causes of financial distress in English football are unused stadium capacity, losses in revenue due to relegation, and the clubs' failure to adapt wage costs to competing in the lower leagues (Buraimo et al., 2006).

The football clubs being in distress is often presented as a fact in the literature. Although, football thinkers have differing opinions on whether the English football is indeed in financial crisis. Stefan Szymanski (2010) suggests that the focus of the financial health of football clubs is exaggerated since not so many clubs have disappeared altogether compared to companies in other industries, hence the football industry appears rather stable. He illustrates his standpoint rather humorously, "Football clubs survive crises because, unlike most businesses, some of their customers seem willing to stick with them no matter how lousy the product" (Szymanski, 2010, p. 35).

Hamil and Walters (2010) come across as doomsday prophets compared to Stefan Szymanski (2010). The authors point out that most of the football clubs in England do not produce profits and have not managed it since the establishment of the Premier League. The authors call it rather dramatically "an inconvenient truth"[9] (Hamil and Walters, 2010). These two articles are

[8] The "big six" includes following football clubs: Arsenal, Chelsea, Liverpool, Manchester City, Manchester United, and Tottenham Hotspur.

[9] A reference to the Oscar-winning documentary called "The Inconvenient Truth" about global warming from 2006 (Hamil and Walters, 2010).

were written post financial crisis of 2008. Hamil and Walters (2010) argue that football clubs may get into serious trouble with external shocks like a global crisis. However Szymanski (2010) is convinced that the football clubs will not be affected as the financial crisis of 2008-09 proved.

3.4 THE FINANCIAL FAIR PLAY REGULATIONS

UEFA, Premier League and Football League have their own sets of financial rules. The most well-known and talked about are the UEFA's Financial Fair Play (FFP)[10] regulations which apply to the clubs participating in the European competitions (Premier League, 2017). The compliance with the financial rules issued by these governing bodies is primarily assessed based on the annual reports of the football clubs which are audited by external auditor (Premier League, 2017, UEFA, 2019, English Football League, 2020a).

3.4.1 THE UEFA FFP REGULATIONS

The aim of the UEFA FFP regulations is to improve the financial health of European club football (UEFA, 2015, UEFA, 2019). The FFP rules were implemented from the 2011-12 season which also marks the start of the research period of the current study. These rules require that football clubs do not have any overdue payables to other clubs, the employees, and tax authorities. Since 2013 the financial health of the football clubs is assessed after a break-even requirement. The annual financial information over a three-year period for all clubs participating in the European competitions is analysed by an independent Club Financial Control Body (CFCB) (UEFA, 2015).

The break-even requirement states that relevant expenses must not exceed relevant income during a monitoring period of three years (Franck, 2014). Relevant income is revenue from footballing activities, such as broadcasting, merchandising, ticket sales, and sponsorship. Relevant expenses are mainly costs associated with player registrations, e.g. wages, amortisation (Szymanski, 2014). Costs not included in the calculations are for example expenditure on youth academy and women's football (UEFA, 2019). Acceptable deviation of €5m from what clubs earn in the assessment period is allowed. The amount can be stretched

[10] Hereafter FFP.

even further given that owners or related parties are willing to cover the difference (UEFA, 2015)[11].

Non-compliance with the FFP can be punished with various sanctions from mild ones such as warning or fines. The more severe sanctions could be withholding the prize money, exclusion from the European competitions (as it happened to Manchester City) and a club can even lose their title (UEFA, 2015). The licence to compete in the European competitions is issued by the domestic associations or leagues (Szymanski, 2014).

3.4.2 Domestic FFP rules in English football

The Premier League has several financial rules in place that the clubs must follow for licencing purposes. The financial rules are a part of The Premier League Handbook which is available on the PL's website (Premier League, 2017). The main essence of the rules is that the clubs cannot have any overdue payables in form of transfer fees, wages to employees, and taxes. Short-Term Cost Control rules are related to the players' wages and restrict how much clubs can increase their wage bills (Premier League, 2019).

The Premier League's Profitability and Sustainability (P&S) rules are similar to UEFA's FFP breakeven rules. The clubs are assessed by the adjusted earnings before tax over a three-year period. The adjusted earnings before tax is the actual profit or loss corrected for depreciation of tangible fixed assets, amortisation and impairment of intangible assets such as goodwill (excluded costs related to player registrations), expenditures on youth academy, women's team and community development (Premier League, 2019). Thus, the costs and revenues that are used in the UEFA's breakeven calculations are the same in P&S breakeven calculations. The clubs are allowed to have an aggregated loss to some degree over the three-year assessment period, but then special rules apply which are too detailed for the scope of the thesis (Premier League, 2019).

The clubs in the Premier League is a subject to several governance rules according to the Premier League handbook. An example is the Owners' and Directors' test which limit who can either own a football club or act as a director. For example, a person cannot serve as a director

[11] A special rule applies if the owner wants to inject money into club through sponsorship deals via companies the owner is related to. The deals are investigated by UEFA and the break-even calculations are modified to the market value ("fair value") of the sponsorship deals. The ruling PL champion at the time of writing the thesis, Manchester City was banned from the European competitions for two seasons for breach of this rule. UEFA argued that City had inflated their sponsorship income and failed to cooperate with the CFCB (McMahon, 2020).

if (s)he has been convicted either in the UK or abroad. A person can be deemed unsuitable if (s)he has engaged in activities outside the UK which are illegal in the UK regardless of whether the person has been convicted or not. The rules also limit ownership and director positions for individuals who have been declared bankrupt or the clubs they have managed have had issues with insolvency twice or more in separate occasions (Premier League, 2019).

The Championship clubs must follow their own set of financial fair play rules which in are rather similar in principle to those of UEFA and the Premier League. The rules were first applied from 2011-12 season and the clubs' compliance with the rules was assessed annually, but since the 2016-17 season are Championship clubs evaluated over a three-year period. Sanctions for failure to fulfil the fair play rules can be registration embargo (for example if the club does not submit their annual accounts by the 1st of December, then the club will be under a registration embargo from the 1st of January) or financial penalties. The Profitability and Sustainability Rules use the same break-even calculation as the Premier League rules. The clubs are assessed by adjusted earnings before tax which is earnings before tax excluded some costs, e.g. women's football, depreciation and/or impairment of tangible assets (English Football League, 2020a).

3.5 CONCLUSIONS – THE SCENE IS SET

The football clubs are faced with a Catch-22[12] situation where they are obliged to reduce costs and "live within their means", but the industry they compete in is highly competitive and constant investments in player talent are required for success. However, the clubs are win maximisers which mean that they prioritise sporting aims over financial aims. Yet, the financial fair play regulations expect the clubs to adopt a more long-term mindset which should secure the financial stability of the industry. Therefore, football clubs exist in a context where they must satisfy two incompatible aims.

[12] The Merriam-Webster dictionary defines *catch-22* as "a problematic situation for which the only solution is denied by a circumstance inherent in the problem or by a rule" (https://www.merriam-webster.com/dictionary/catch-22).

4 THEORETICAL PERSPECTIVES

4.1 AGENCY THEORY

Agency theory is commonly used by researchers to study earnings management (Walker, 2013). Agency theory is concerned with the relationship between a principal who hires an agent to perform work for him (Eisenhardt, 1989). Agency theory regards the firm as a nexus of contracts (Walker, 2013). The principal-agent relationship is not limited to the relationship between shareholder and manager, but it includes relationships between the firm and its stakeholders.

There are two complementary streams of agency theory: positivist and principal-agent theory. Positivist agency theory is concerned with identifying conflict of interests between principal and agent. The theory proposes governance mechanisms that solve the agency problems. Agent-principal theory tries to determine which kind of contract is the most efficient in varying degrees of uncertainty, risk preferences, and so on (Eisenhardt, 1989).

Problems can arise in the agent-principal relationship because of goal incongruence between the two parties and the principal cannot observe the actions of the agent directly (it is either impossible or too expensive). Differences in risk preferences can also cause issues in the relationship (Eisenhardt, 1989). Eisenhardt (1989) points out that agency theory can be applied to various settings, amongst others regulatory policies which is relevant for the current thesis. The agency theory is based on number assumptions, e.g. self-interest, goal conflict, information asymmetry.

As discussed earlier the football clubs operate in an uncertain setting. The sporting success in football is uncertain since it is uncertain whether the investments in playing talent pay off. Companies operate under uncertainty that causes information asymmetries between the managers and shareholders, according to (Walker, 2013).

Researches have previously used agency theory to discuss agency problems between UEFA as the principal and football clubs as agents (Acero et al., 2017, Dimitropoulos, 2011, Schubert, 2014). The argument is that UEFA in a position of monopolist since it organises both the Champions League and Europa League (Schubert, 2014). The clubs must comply with the FFP rules if they want to compete in the European club competitions which can be interpreted as a contract between the two parts. The same rationale can be applied to the P&S rules in English

football. The football clubs competing in the English professional leagues must comply with the rules to obtain licencing and avoid sanctions.

According to Schubert (2014), the agency problem arises because the football clubs are win-maximisers, not profit-maximisers. So, there is a goal incongruence between the financial and sporting aims (Schubert, 2014). The clubs must balance between two contradictory aims: they need to operate within their revenues and achieve their sporting success. This causes the conflict of interest between the football clubs and regulatory organs such as UEFA. Given the ever-increasing costs related to players' registrations, the football clubs are in a tricky position. They can either decrease the expenditure on players and risk decline in the competitiveness of the squad or they can increase the revenues to meet the break-even requirements. The latter can be achieved by success on the football field which in turn requires investments in playing talent as discussed in the previous chapter. Although Schubert (2014) discusses the agency problems between the European football clubs and UEFA, the same rationale can be applied to the English setting because the core of the financial regulations are similar.

Similarly, it can be argued that the regulatory organs of football industry and the clubs have different risk preferences. UEFA and the other regulatory organs want to secure the financial stability of the industry. Meanwhile, the clubs seem to be willing to take more risks and invest in playing talent without the certainty that the risk will pay off.

The regulatory organs use clubs' annual accounts to evaluate the compliance with the financial fair play regulations and rewards and punishments are tied to this information. Given the flexibility of the accounting rules and the subjectivity that goes into the production of the annual accounts, there is information asymmetry between the regulatory organs such as UEFA and a football club. The clubs can be opportunistic because of the information asymmetry. As claimed by Jones (2011), management's choices in accounting policies is significantly motivated by management's opportunism. Choosing accounting policies to achieve certain targets can be considered as an opportunistic behaviour (Jones, 1991). Football clubs may be motivated to behave opportunistically to comply with the financial fair play regulations (Dimitropoulos, 2011).

Two types of information asymmetry are central in agency theory: moral hazard and adverse selection. Hidden action or moral hazard is the situation where the principal cannot observe what the agent is doing. Hidden information or adverse selection is a situation where the principal can observe the actions of the agents but cannot assess them because he lacks information (Schubert, 2014).

Possible solutions to the agency problems are the reduction of information asymmetry and resolving the conflicts of interests (Schubert, 2014). Schubert (2014) claims that UEFA tries to reduce the information asymmetry by controlling the clubs. The independent Club Financial Control Body (CFCB) is established to execute the control function.

4.2 STAKEHOLDER THEORY

Eisenhardt (1989) advises using agency theory in combination with other theories in research since agency theory can give a rather unilateral view on the organisation. Using complementary theories can characterise the organisational complexity better. Stakeholder theory is used to illustrate the complexity of the nexus of interested parties a football club must satisfy in its attempt to achieve its greatest aim to win football matches.

The most well-known and used definition of a stakeholder was coined by Freeman in 1984. He defines stakeholder as "any group or individual who can affect or is affected by the achievement of an organization's objectives" (Freeman, 1984, in Collier, 2008, p. 935). Stakeholders can be diverse, e.g. owners, customers, employees, local communities, policymakers. The stakeholders may have a variety of aims which are not always in line with the company's aims. In football research are owners, supporters and regulatory organs considered as strong stakeholders for football clubs (Dimitropoulos et al., 2016), also local communities (Brown et al., 2006) and players (Senaux, 2008).

Stakeholder theory is not just about stating that a firm has stakeholders (Donaldson and Preston, 1995). Stakeholder theory helps the management of an organisation to identify the various stakeholders and reconcile their differing interests (Dimitropoulos et al., 2016). The theory also tries to answer the question which stakeholders the management should pay attention to and which not (Mitchell et al., 1997). Managing multiple stakeholder relationships is "critical to the company's strategy, long-term competitive advantage, and creating organisational wealth" (Walters, 2011, p. 52).

The foreign ownership model is common in English football (Wilson et al., 2013). This means that the club is acquired by a wealthy individual (often called "a sugar daddy" in football literature) or a group who has the means to cover the losses and invest heavily in player talent (e.g. Roman Abramovich in Chelsea). Owning a football club is rarely about earning profits for the owners. It is more about prestige, a football club is more a trophy asset (Wilson et al., 2013). As discussed previously, football clubs are more win-maximisers rather than profit-maximisers which outweighs the motivation to run a football club as a business (Wilson et al., 2013).

However, Wilson et al. (2013) suggest that the clubs may be changing their mindset and start managing their activities as business because of the Glazer takeover of Manchester United and the implementation of UEFA's FFP rules which aim to reduce financial mismanagement.

A strong group of stakeholders for a football club are the supporters[13]. Football supporters are not like the customers of any other company because they identify themselves with the club. Football clubs offer their stakeholders mainly intangible emotional rewards such as community membership (Buchholz and Lopatta, 2017). Solberg and Haugen (2010) claim that supporters are only interested in the club finances when it comes to buying new players. They demand new signings or sacking the manager when the club is not doing well enough in the football field no matter whether the club can afford it or not.

Supporters are strong stakeholders because they can affect the revenues. Dissatisfied supporters may choose not to attend the football games which means a reduction in matchday revenues. Therefore, clubs may invest in new players just to satisfy the fans who expect sporting success (Dimitropoulos and Koronios, 2018, Solberg and Haugen, 2010). Stefan Szymanski (2010)uses Leeds United as an example of how Leeds United got into serious financial problems while chasing their Champions League dream[14]. The author asks, "And, when Leeds United flew too close to the sun in trying to win the Champions League, how many fans would have tried to dissuade the club directors from their reckless course of action?" (Szymanski, 2010, p. 37).

Supporters as strong stakeholders can affect other stakeholders. Creditors such as banks and tax authorities can be more lenient with football clubs because they do not want to risk with community disapproval (Buraimo et al., 2006). Buraimo et al. (2006) claim that if regular industries had produced losses like several English football clubs, then it would have caused action from the creditors.

[13] An example on how clubs actively use both stakeholder engagement and participation is something called the supporters' trusts. For example, Arsenal engages supporters in their activities through Arsenal Supporters Trust and Arsenal Independent Supporters Association which gives supporters a possibility to meet the senior representatives of the club. The club meets the former group twice a year, but the cooperation with the latter happens regularly. These groups were originally set up to tackle the issues surrounding the development of the Emirates stadium (Walters, 2011).

[14] Leeds United invested heavily in player and reached the Champions League semi-final in 2001. The club failed to qualify for the Champions League for the next season which resulted in the sale of star players and eventually relegation (Szymanski, 2010).

The regulatory organs in the football industry such as UEFA, the Premier League and the Football League are strong stakeholders with a lot of power to affect the goal achievement of the football clubs. The aim of the financial fair play regulations is to secure the financial stability of the football industry. The football clubs are monitored based on the accounting information in the audited annual financial reports (English Football League, 2020a, Premier League, 2019, UEFA, 2019).

The regulatory organs can impose a variety of sanctions on football clubs that fail to comply with the financial fair play regulations (English Football League, 2020a, Premier League, 2019, UEFA, 2019). The sanctions can affect the achievement of sporting (a transfer ban may reduce the competitiveness of the squad. deduction of points may cost the club a promotion or cause relegation to a lower league in the worst case scenario) and financial goals of the football clubs (the regulatory organs may withhold the prize money; the club may be banned from the competitions). When football clubs fail to achieve their sporting goals, then it means that the clubs will not meet their financial targets either. Solberg and Haugen (2010) argue that a decline may cause the supporters to lose interest which in turn affects revenues. Therefore, the football clubs are highly dependent of the compliance with the FFP rules.

Strong stakeholders with contradicting goals in financially distressed industries mean that the management must try to satisfy all stakeholders while sacrificing the accounting quality (Dimitropoulos et al., 2016).

4.3 Financial Reporting

4.3.1 Aims of accounting

Accounting information is a representation of economic phenomena (Robinson et al., 2015). Financial reports communicate economic information to stakeholders. Mellemvik et al. (1988) describe accounting so poetically by calling it an artificial language to communicate information to reduce uncertainty in control and decision making. Accounting have two basic objectives – accountability and should offer a basis for decision making. The accountability objective is also called the stewardship or control objective. Hence, accounting should provide information about the use of resources (Mellemvik et al., 1988). The annual financial reports are expected to give a true and fair view of the firm's financial position and performance in the period (Risaliti and Verona, 2013). In this sense, the accountability objective functions in an agent-principal setting. If financial reports do not give a true and fair view on the company's

financial performance and position, then the principal cannot control the actions of an agent (Mellemvik et al., 1988).

The use of control function in accounting requires reduction of information asymmetry (Tiessen and Waterhouse, 1983, in Mellemvik et al., 1988). However, accounting can be used to produce financial statements which present a distorted picture of firm's financial performance, thus instead increasing the information asymmetry (Mellemvik et al., 1988). In case of football clubs and their stakeholders, especially regulatory and licencing organs, the control function of accounting stands central since the control of compliance with the FFP regulations is tied to the presented accounting information. Management's discretion and earnings management causes the information asymmetry to increase. Therefore, it is relevant to study earnings management because it has implications for various stakeholders.

Hopwood (1990) argues that one aim of accounting is creating visibility; to make the unobservable visible. Not just visible, but accounting makes these abstract concepts into something that is real and precise. The author uses cost and profit as examples of unobservable abstract concepts that accounting makes visible. Dechow et al. (2010) define the reported earnings as a function of the company's fundamental financial performance:

$$\text{Reported earnings} \equiv f(X)$$

X: the enterprise's financial performance during a reporting period

f : the accounting system that converts the unobservable X into observable earnings

Dechow et al. (2010) argue that the unobservable fundamental performance X is not defined for with a particular stakeholder in mind. The authors discuss that it is also noteworthy that the financial performance is not equal the reported earnings. The accounting system converts company's fundamental performance into observable earnings. Therefore, the underlying actual financial performance is the unobservable variable, it is the accounting system that has made it something quantifiable (Dechow et al., 2010). The argumentation of Dechow et al. (2010) concurs with the Hopwood's view on earnings. Firm's fundamental performance is something unobservable, but it is made visible by the accounting system.

Dechow et al. (2010) list three reasons why the fundamental performance is not equal to the reported earnings. Firstly, the accounting system cannot produce a representation of X that is relevant for all stakeholders. Secondly, the performance is measured by a set of predefined standards which will not measure X perfectly for "any given firm" (Dechow et al., 2010). Thirdly, the implementation of an accounting system requires estimations and judgements. Accounting systems are somewhat flexible which can cause the unintentional and intentional

errors, according to Dechow et al. (2010). The authors argue that the accounting system inherently cannot measure the economic performance perfectly. In addition, the accounting system is unable to reflect the fundamental perfectly for every stakeholder that is interested in the presented information.

In conclusion, the accounting information should present a true and fair view of the firm's financial performance and position. The accounting information should be useful for the control and decision-making purposes. Yet, what complicates the story is that the underlying fundamental performance is not observable and the accounting system that is meant to measure it does not do it perfectly.

4.3.2 FINANCIAL REPORTING QUALITY

This subsection aims to give an overview on what kind of information is relevant for control and decision-making. The previous subsection discussed what the aims of accounting are and argued that the financial reports are supposed to give a true and fair view on the firm's performance and financial position. The current subsection attempt to describe that kind of information.

Robinson et al. (2015) describe the quality of financial reports as the quality of information presented in these reports. Financial reports of high quality provide decision-makers with decision-relevant information and provides a faithful representation of the firm's financial performance and position at the end of the reporting period (Robinson et al., 2015). As discussed in the previous subsection, the accounting system cannot measure the fundamental performance perfectly and present information that is relevant for any stakeholder.

In the financial reports the players' registrations are registered as intangible assets (Rowbottom, 2002). However, players coming through the club's own academy are not capitalised as intangible assets in the accounts, thus giving a partially distorted picture of the actual situation of the football clubs. Morrow (2013) argues that the traditional financial reporting produces information that is not relevant for many football stakeholders. The author calls for fuller and different information to be presented in the financial reports of football clubs because of the social nature of football and the implementation of FFP (Morrow, 2013).

Accounting quality can be affected by opportunistic discretion exercised by managers and non-opportunistic error in estimating accruals (Barth et al., 2008). Previous research has detected that if the regulatory organs use accounting data in monitoring the financial position and performance, then it leads to reduction of accounting quality (Dimitropoulos et al., 2016).

Discretion in accounting choices is used to manage earnings to meet the imposed regulatory requirements, according to Healy and Wahlen (1999).

4.4 EARNINGS MANAGEMENT

4.4.1 DEFINITION OF EARNINGS MANAGEMENT

In the previous subsection we looked at what kind of information is of high quality. This section will discuss the activities that corrode the quality of accounting information.

Earnings management is defined as:

The use of managerial discretion over (within GAAP[15]) accounting choices, earnings reporting choices, and the real economic decisions to influence how underlying economic events are reflected in one or more measures of earnings (Walker, 2013, p. 446).

Earnings management is the management's intentional choices within the accounting standards to produce biased financial reports (Robinson et al., 2015). The definition does not include accounting choices that are not in line with the accounting standards (accounting fraud) or unintended errors. Earnings management is an indication of lower accounting quality (Dimitropoulos et al., 2016). Healy and Wahlen (1999) argue that the accounting standards are supposed to permit management to use their judgement. A firm's managers know their business the best and can choose the accounting methods to precisely convey the firm's performance, and thus "increasing the value of accounting as a form of communication" (Healy and Wahlen, 1999, p. 366). However, the management can also use their judgement to manage earnings (Healy and Wahlen, 1999).

Walker (2013) divides the motives for earnings management in three categories: (1) achieving contractual targets, (2) influencing investors' expectations of future cash flows and firm's risk, and (3) affecting the information on firm's financial strength that third parties may be interested in. The latter is of greatest interest for the current thesis. Third parties such as regulatory organs may be interested in accounting information and evaluate the firm's performance and position based on it, according to Walker (2013). The regulatory organs such as UEFA or domestic leagues in England use accounting data to evaluate compliance with the FFP rules. In the previous chapters it was established that football clubs are win-maximisers that strive for sporting success which may be the source of goal incongruence between clubs and the

[15] GAAP – Generally Accepted Accounting Practices.

regulatory organs. Therefore, it can also be a motive for the clubs to engage in earnings management to secure the much-desired licencing and avoid sanctions.

Management earnings activities can be divided into either managing by making real economic transactions actions or using accruals (Robinson et al., 2015). Real that real earnings management is the timing of real economic activities to make the financial reports look better (Walker, 2013). However, the economical transactions are not necessarily optimal business-wise (Campa, 2019). Walker (2013) claims that taking real management actions are value-destroying[16]. Managing earnings by real economic transactions is more costly, but it is harder to detect for regulatory bodies than accrual management (Zang, 2012). Accrual management is the use of the accounting rules within GAAP to execute discretion over the levels of accruals. The existing literature focuses primarily on the use of accrual basis of accounting systems to manage earnings (Walker, 2013).

The field of research in earnings management can be rather overwhelming for a new beginner trying to dive into the topic. Various authors classify the earnings management activities differently. As explained divides Walker (2013) the management's discretionary activities into accrual and real earnings management. Dechow et al. (2010) operates with a more elaborate classification of earnings quality proxies. The authors divide the proxies into three categories: properties of earnings (e.g. earnings persistence, residuals from accruals models, earnings smoothness), "investor responsiveness to earnings, and external indicators of earnings misstatements" (Dechow et al., 2010, p. 350). Hence, Dechow et al. (2010) focus on earnings quality and the activities that affect it. Dimitropoulos et al. (2016) uses two earnings management proxies: income smoothing and accrual management. These are activities that are called earnings quality proxies by Dechow et al. (2010). In conclusion, *earnings management* are the activities that reduce *earnings quality* and thus the informativeness of accounting information.

The current thesis uses accrual management and income smoothing as the two proxies to study earnings management in English football clubs. The choice of these two methods are based on

[16] Derby County got into trouble with the financial fair play regulations by selling its stadium to its owner Mel Morris in the 2017-18 season. The sale of stadium resulted in an annual profit of £14.6m and compliance with the P&S over the three-year monitoring period. English Football League charged Derby County with the breach of P&S rules (Conn, 2020).

the research by Dimitropoulos et al. (2016) that studies the accounting quality before and after the implementation of FFP rules by UEFA.

4.4.2 ACCRUALS-BASED EARNINGS MANAGEMENT

The accrual accounting models use either total accruals (Dimitropoulos et al., 2016, Jones, 1991, Kothari et al., 2005) or specific accruals (Healy and Wahlen, 1999, McNichols, 2000). The existing literature is divided on which models are the most useful. The use of specific accruals means that a researcher focuses on one specific post in the financial report. Healy and Wahlen (1999) argue that specific accruals models can provide more information to the regulatory organs because the setters of regulations require information of which accruals are manipulated. An advantage with specific accruals is that generally accepted accounting practices can be used to assess the non-discretionary component of accruals (McNichols, 2000).

Walker (2013) argues that using total accruals because the firms can manipulate several posts. This approach is supported by Jones (1991). She argues that using total accruals represent a larger portion of the discretionary activities of the management. The models of total accruals are called the models of discretionary accruals (Walker, 2013). The current thesis uses a total accruals model developed by Jones (1991) which is modified by Kothari et al. (2005) and adapted to the football setting by Dimitropoulos et al. (2016).

Total accruals are defined as the difference between net income and operating cash flow. The earnings management divides total accruals into non-discretionary (normal) and discretionary (abnormal) accruals (Walker, 2013, Dechow et al., 2010). Normal accruals are defined as "what a firm's accruals would have been if it had not used accruals to manage reported earnings" (Walker, 2013, p. 453). Discretionary or abnormal accruals represent the bias in accounting information resulting from management's discretionary accounting choices (Dechow et al., 2010). The abnormal component of accruals is of lower quality (Dechow et al., 2010). Discretionary accruals models are the primary methods to expose earnings management (Walker, 2013, Dechow et al., 2010).

Several models have been proposed to calculate the discretionary accruals in the earnings management research. The models start with estimating the non-discretionary component of total accruals (Walker, 2013). The residuals from the regression analysis are the estimates for the discretionary accruals (Dimitropoulos et al., 2016). The most well-known model to distinguish the discretionary and non-discretionary accruals is the Jones (1991) model (Walker, 2013). The model estimates the non-discretionary accruals as the function of changes in sales

and the level of plant, property, and equipment (PPE) (Jones, 1991). The Jones (1991) model has been modified to improve the statistical performance (Dechow et al., 2010, Dechow et al., 1995, Kothari et al., 2005, Walker, 2013). Dechow et al. (2010) provides a rather extensive overview on the various models to assess the discretionary accruals.

Dechow et al. (2010) warn that the estimated abnormal accruals are often positively correlated with the total accruals of the firm. Meaning that if a company has extreme accruals then the abnormal accruals are extreme as well. The positive correlation between total accruals and abnormal accruals could mean that the estimated abnormal accruals are not a product of accounting choices. Abnormal accruals may instead be a result of misspecified model or could contain a component of firm's fundamental performance which one must consider when interpreting the results (Dechow et al., 2010).

4.4.3 EARNINGS MANAGEMENT IN FOOTBALL INDUSTRY

The existing literature on earnings management in football industry is scarce. The reason could be that the accounting quality and the relevance of the accounting information did not become relevant before the regulatory organs of the football industry started to establish the financial fair play regulations. The subchapter presents the results from the few research articles.

Dimitropoulos (2011) studied how corporate governance affects earnings management and thus earnings quality in European football clubs. The sample consisted of 67 clubs from 10 countries and the study covered the pre-FFP period 2006-09. Only the clubs competing in the elite divisions were included in the sample. The author looked at three earnings management proxies: reporting small positive result, accrual management, and income smoothing (Dimitropoulos, 2011).

The results of the study indicate that aggressive earnings management activities are reduced by the corporate governance systems of higher quality. Factors like increased board independence, managerial and institutional ownership, and small board size contributes to higher accounting quality through reducing earnings management activities by the management of football clubs. Meanwhile the CEO duality did not seem to influence managers' discretion (Dimitropoulos, 2011). The author argues that sound corporate governance systems are required to protect the interests of various stakeholders. Proper corporate governance systems in the football clubs would secure that the compliance with the FFP is a part of daily operations (Dimitropoulos, 2011).

Playing talent is the most important asset of football clubs. Risaliti and Verona (2013) documented the dubious accounting policies for players' registrations in Italian football in the 1999-2009 period. The Bosman ruling and commercialisation along with the questionable accounting policies caused the financial crisis in the Italian football system. By the early 2000s the Italian football industry was in a dire financial situation. The clubs did not counteract the crisis caused by ever-increasing players' wages with cost-reduction activities, but they rather implemented window dressing policies of players' registration rights to conceal the huge losses, according to Risaliti and Verona (2013).

The clubs' managers overvalued players' transfers to mask losses and negative shareholder equity. Risaliti and Verona (2013) explain that although the overvaluation of players' transfers created a picture of better financial performance, it also caused the costs for the football clubs to escalate further due to the increase in amortisation costs. The total collapse of Italian football industry was averted by a legislative intervention[17] which obliged the clubs heavily to write down the players' registrations in the clubs' balances (Risaliti and Verona, 2013). The example from the Italian football illustrates that the managers may use window-dressing policies in the capitalisation of intangible assets in the financially distressed industries as demonstrated by Jones (2011). The example also exemplifies the special position football has in the society. Stakeholders such as government are willing to lend a helping hand to save the industry.

The implementation of FFP regulations has attracted the attention of accounting researchers. The current thesis is inspired by and loosely based on the article by Dimitropoulos et al. (2016). Dimitropoulos et al. (2016) explain that research from other industries have demonstrated that accounting quality is reduced when regulatory targets are tied to accounting information. The researchers embarked on the quest to analyse how the implementation of FFP has affected the accounting quality of European football clubs. The sample consisted of 109 football clubs from the elite leagues across Europe (e.g. UK, Norway) for 2008-2014. The period was divided into two sub-periods: the pre-FFP period (2008-2010) and the post-FFP period (2011-2014). Three common proxies of accounting quality were used in the research: earnings management, accounting conservatism, and auditor switching (Dimitropoulos et al., 2016).

The results of the study demonstrate that the financial situation of the clubs did not improve after the implementation of FFP which it intended to do (Dimitropoulos et al., 2016). Although,

[17] The regulation was so beautifully known as the "salva calcio" or "save football" decree (Risaliti and Verona, 2013).

it can be argued that the research period covers the early days of FFP regulations and changing the financial situation of the entire time requires time. Dimitropoulos et al. (2016) suggest based on the empirical evidence that the clubs engaged in more aggressive earnings management activities, switched to a non-big-4 auditor to smaller companies, and exhibited less accounting conservatism. The authors suggest that in the accounting quality may be reduced significantly in distressed industries with strong stakeholders with contradicting aims (e.g. UEFA and supporters in the football industry) (Dimitropoulos et al., 2016).

Earnings persistence is a proxy for earnings quality. Earnings consist of two components: the accrual and the cash flow component. Previous research indicates that the earnings are more persistent when earnings are primarily comprised of the cash flow component rather than the accrual component (Dechow et al., 2010). Dimitropoulos and Koronios (2018) analysed whether the implementation of the FFP rules affected the earnings persistence of European football industry. Earnings persistence expresses whether the financial performance is maintained in the future which is related to the usefulness of accounting information in the decision-making (Dimitropoulos and Koronios, 2018).

The results of the study indicate that the cash flow component of earnings is more relevant for predicting the future earnings than the accrual component, thus supporting the findings from previous research. The earnings persistence increased in the post-FFP period. Interestingly, the earnings persistence increased more in the smaller leagues than in the big-5 leagues (Dimitropoulos and Koronios, 2018). The authors' explanation to these results is that the clubs from smaller leagues are more dependent on the revenues from the UEFA competitions, thus they are more motivated to produce persistent earnings in order to secure licencing (Dimitropoulos and Koronios, 2018).

4.5 HYPOTHESIS DEVELOPMENT

The subchapter proposes several hypotheses which are based on the context of football clubs and existing literature on earnings management. The hypotheses are mainly based on the research by Dimitropoulos (2011) and Dimitropoulos et al. (2016). Two novel hypotheses are proposed: do clubs in lower leagues engage in more earnings management and whether wages to revenue ratio affects management's discretion over accruals.

As stated earlier the regulatory organs of football industry use accounting data to evaluate the compliance with the FFP rules. This provides management an incentive to make accounting choices that present better financial performance and position to avoid sanctions and achieve

licensing to participate either in the European or domestic competitions. The sanctions can range from deduction of points and transfer embargo to a ban from European competitions and cause sporting and economic consequences in form of reduced revenue, losing their top players, and decline in the competitiveness of the team. Dimitropoulos et al. (2016) demonstrated that the accounting quality of the European football clubs deteriorated after the implementation of the FFP rules. Regulations tied to accounting data provides a strong motivation to management to manage earnings (Walker, 2013).

Therefore, English football clubs have incentives to manage earnings because monitoring of their financial performance and position is based on accounting information. Hence the first hypothesis suggests that English football clubs engage in earnings management.

H1: English football clubs engage in earnings management.

Previous research on earnings management have excluded clubs from lower divisions. This is explained by the need to avoid bias from relegation and promotion (Dimitropoulos, 2011) and that these clubs are more likely to compete in European competitions (Dimitropoulos et al., 2016). Dimitropoulos et al. (2016) argues that the accounting information is more reliable in the clubs participating in the elite divisions. However, Dimitropoulos et al. (2016) demonstrated that in financially distressed industries the accounting quality deteriorates in order to satisfy the demands from strong stakeholders. Many thinkers in the field of football economics have reflected on how come football clubs with ever-increasing revenues fail to produce profits (Hamil and Walters, 2010, Solberg and Haugen, 2010).

The financial situation in the lower leagues is bleaker than in the top divisions. Emery and Weed (2006) illustrate how the clubs outside the Premier League are faced with different financial issues than their counterparts in the top tier of the league system. The clubs operate in a context that is unlike the Premier League. For example, Deloitte (2018) reports that the Premier League clubs increased their revenues by 25% to £4.5m and generated record combined operating profit over £1 billon in the 2016-17 season. In addition, no clubs reported operating loss in their annual reports (Deloitte, 2018). Meanwhile, the Championship clubs also increased their revenues by 30%, but this increase was mainly due to parachute payments and solidarity payments from the Premier League. Despite the increase in revenues the clubs reported combined operating loss (Deloitte, 2018). These numbers illustrate the gap between the Premier League and the Championship.

However, Dechow et al. (2010) argue based on the prior literature that companies struggling financially may in fact engage less in earnings management because these companies have less opportunities to manage earnings.

The following hypothesis is proposed based on the financial position of the Championship:

H2: Football clubs in the Championship engage more in earnings management than the clubs participating in the Premier League.

As discussed in the previous chapter, the sporting success is related to wage expenditure (Szymanski, 2015). The liberation of players' transfers in the mid-90s has resulted in the increase of players' wages. Playing talent is a scarce asset (Franck, 2014) which means that football clubs must invest more in players to win football games. On the other hand, the FFP rules require that the costs that arise from footballing activities must be covered with revenues from footballing activities (English Football League, 2020a, Premier League, 2019, UEFA, 2019). Expenses related to players' registrations are the largest costs in the profit and loss statements (Szymanski, 2015). In the 2016-17 season wages to revenues ratio was 99% in the Championship (Deloitte, 2018) which means that the clubs used all revenues on wages. Meanwhile, the ratio in the Premier League was 0.55.

If the clubs use a large portion of their revenues on wages, then one can assume that they struggle to comply with the FFP regulations. Hence, these clubs have an incentive to manage earnings.

H3: Football clubs with higher wages to revenue ratio engage more in earnings management.

The previous research suggests several factors that affect the level of earnings management in companies. The following hypotheses are largely based on the article by Dimitropoulos et al. (2016).

The cash flow component of earnings is more persistent and thus of higher quality (Dechow et al., 2010). Operating cash flows are important for assessing the firm's performance (Robinson et al., 2015). Dimitropoulos et al. (2016) argues the companies that generate positive operating cash flows have less incentives to manage earnings through accrual management. Thus, it is expected that the variable CFO has a negative coefficient.

H4: Operating cash flows are negatively associated with the discretionary accruals.

The prior research suggests that larger companies engage less in earnings management because these companies are under a tighter scrutiny by the shareholders and regulatory organs

(Dimitropoulos, 2011). The variable size is defined as the natural logarithm of total assets (Dimitropoulos et al., 2016). Dimitropoulos et al. (2016) detected in their research on EM behaviour pre- and post-FFP period that the size of football club had a significant negative effect on discretionary accruals, so it is expected that the variable SIZE have a negative coefficient in the regression analysis.

H5: Football clubs that are larger in size engage less in earnings management.

One of the "usual suspects" in the earnings management literature to mitigate management's discretion over accounting choices is the external auditor. The financial reports audited by the big-4 audit companies are expected to exhibit higher accounting quality. Therefore, the big-4 auditors are associated with lower levels of EM (Dimitropoulos, 2011).

H6: the football clubs that have a big-4 company as the external auditor engage in less earnings management.

Foreign ownership is common in European football clubs (Wilson et al., 2013). The majority of foreign shareholders is associated with lower levels of EM (Dimitropoulos et al., 2016). Therefore, a negative coefficient is expected for the variable foreign ownership.

H7: Foreign ownership is associated with lower discretionary accruals.

Players' registrations are the most important assets that football clubs own. The ratio of intangible assets to total assets is included as a control variable based on Dimitropoulos et al. (2016). The players' registrations are capitalised as the intangible assets in the balance and amortised over the duration of the contracts. If there is an indication that the market value of a player is lower than the book value, then the decrease in value is registered as an impairment cost in the profit and loss account (Risaliti and Verona, 2013).

It is important to point out that the intangible players registrations in the balance may not often represent the true value. There are two reasons for this. Firstly, the clubs may not record the impairment costs accurately because it increases the negotiating power of the players and agents (Risaliti and Verona, 2013). Secondly, only these players' registration rights that are bought from other clubs are included in the balance. For example, players that are developed in the club's own academy are not included in the estimation of players registrations (Rowbottom, 2002). Neither are players that have arrived at the club as free transfers. Hence the players' registrations can either be significantly over- or undervalued in the balance.

Earlier research have found out that failing firms capitalise intangible assets more aggressively (Jones, 2011). Dimitropoulos et al. (2016) demonstrates that the intangible assets have a positive effect on the discretionary accruals in the European football clubs. Thus, it is expected that the variable IA has a positive regression coefficient.

H8: The higher level of intangible assets is associated with higher discretionary accruals.

Growth in revenues is defined as the percentage change in revenues by Dimitropoulos et al. (2016). Dechow et al. (2010) claims based on prior literature that growth is negatively related to earnings quality proxies. Dimitropoulos et al. (2016) demonstrates in their research on accounting quality in the European football industry that growth has a positive significant effect on discretionary accruals.

H9: Football clubs with higher growth in revenues manage their earnings more.

Higher leverage is associated with lower earnings quality (Dechow et al., 2010). The prior research have demonstrated that firms may manage earnings to avoid debt covenants (Dechow et al., 2010). The large portion of net debt in English football is soft loans, according to Deloitte (2018). Soft loans are interest-free loans that are usually borrowed from the owners. For example, the soft loans constituted 75% of net debt in the Premier League and 78% in the Championship in the 2016-18 season (Deloitte, 2018). Although the football clubs in England have high levels of debt, their financial position is special because large funding by owners. However, Dimitropoulos (2011) demonstrated that football clubs with higher levels of debt are associated with higher levels of discretionary accruals. Therefore, the leverage variable is expected to have a positive coefficient.

H10: The more leveraged football clubs engage more in earnings management.

4.5.1 SUMMARY OF HYPOTHESES

H1: English football clubs engage in earnings management.

> A significant correlation between the operating cash flows and total accruals' residuals indicate that English football clubs use accruals to manage earnings when cash flows are poor.

H2: Football clubs in the Championship engage more in earnings management than the clubs participating in the Premier League.

> A more negative Spearman correlation in the Championship clubs than in the Premier League indicate more income smoothing. A significant difference in Spearman

correlations between the PL and the Championship clubs indicate that the Championship clubs engage more in earnings management.

If the dummy variable LEAGUE in the regression analysis has a negative coefficient, then it suggests that the Premier League clubs have lower discretionary accruals.

H3: Football clubs with higher wages to revenue ratio engage more in earnings management.

A positive significant coefficient for the wages to revenue ratio (WREV) in the regression analysis suggests higher discretionary accruals.

H4: Operating cash flows are negatively associated with the discretionary accruals.

Variable CFO with a negative significant coefficient supports the hypothesis that clubs with higher operating cash flows engage less in earnings management.

H5: Football clubs that are larger in size engage less in earnings management.

Variable SIZE with a negative significant coefficient indicates that larger clubs engage less in earnings management.

H6: The football clubs with a big-4[18] company as the external auditor engage less in earnings management.

Variable AUD with a negative significant coefficient indicates that clubs with a big-4 auditor engage less in earnings management.

H7: Foreign ownership is associated with less earnings management.

Variable DFOWN with a negative significant coefficient indicates that clubs with foreign owners have lower discretionary accruals and thus engage less in earnings management.

H8: The higher level of intangible assets is associated with more earnings management.

Variable IA with a positive significant coefficient indicates that clubs with a higher level of intangible assets engage more in earnings management.

H9: Football clubs with high growth in revenues manage their earnings more.

A positive and significant coefficient of the variable GR indicates that English clubs with high growth in revenues engage more in earnings management.

[18] Deloitte, EY, KPMG, and PwC.

H10: The more leveraged football clubs engage in more earnings management.

Variable LEV with a positive significant coefficient indicates that highly leveraged football clubs engage more in earnings management.

5 DATA AND RESEARCH METHODS

5.1 PHILOSOPHICAL ASSUMPTIONS

Bell et al. (2019) argue that anyone who carries out research in social sciences should think about the philosophical assumptions of research. The authors claim that without considering the ontological, epistemological, and methodological assumptions one would not generate knowledge that is valuable and practically applicable.

Ontology is a study about the theories about the nature of reality. Ontology is concerned with how we understand and define reality and "the assumptions we make about what it means for something to exist" (Bell et al., 2019, p. 26). There are two positions within the study of ontology that define reality differently. Objectivism assumes that the reality exists objectively, the reality is independent of the researcher that seeks out to describe it. Constructionism state that the social phenomena are products of social interaction. Our assumptions about the reality determines how we should study it (Bell et al., 2019).

The aim of the study is to analyse earnings management in a football setting. How do a researcher understands the reality which (s)he is trying to say something about? Hopwood (1990) argues that the concepts like cost and profit do not exist objectively. These concepts are quantified and made real by accountants (Hopwood, 1990). Yet, these concepts are created to characterise the fundamental performance. We cannot observe a firm's performance directly, the performance is presented by the reported earnings which are a creation of the accounting system, according to Dechow et al. (2010). However, the underlying performance is objective. Earnings management is intentional accounting choices that are supposed not to characterise the objective reality. Therefore, the current research is based on the objectivist standpoint.

That leads us to the epistemological assumptions of the thesis. Epistemology is a study of how we can gain knowledge about the reality and it has implications on how we conduct the study Positivism is an epistemological position that has its roots in objectivism. Since the reality exists objectively of the researcher, then it can be measured (Bell et al., 2019). As discussed previously, the various models of discretional accruals are the most common methods to measure earnings management. The research logic in a positivist approach follows the research model in natural sciences and is deductive. A deductive approach means that the researcher postulates hypotheses and collects data to test them (Bell et al., 2019).

Thirdly, one must consider the methodological assumptions in developing a research project. Methodological considerations should answer the question of how we should do research (Bell et al., 2019). The current thesis adopts a quantitative research strategy because the aim is to quantify management's discretions in accounting information. This study is an attempt to test theories by using the collected data (a deductive approach), measure discretionary accruals, and assume that the reality is independent of me as an aspiring researcher. This approach corresponds to the qualitative research strategy according to Bell et al. (2019).

5.2 DEFINING VARIABLES

It is necessary to define the variables used in the analysis because (1) football clubs can earn money from various sources, and (2) different authors have defined some variables differently. A detailed overview on variables used in the study is presented in Appendix IV.

Revenue "refers to amounts charged (and expected to be received) for the delivery of goods or services in the *ordinary activities* of a business" (Robinson et al., 2015, p. 135). So, revenue is defined as the income from operating activities in this study. Operating activities for a football club are activities connected to the core business of producing football matches, such as ticket and merchandise sale, broadcasting. This income is classified as turnover in the annual financial reports (Chelsea FC, 2017). This means that profit from sales of tangible and intangible assets are not included in the revenue since selling players is not the core business of football clubs. The other operating income is also excluded from revenues because clubs can classify various things as other operating income. It is an issue with classification, some clubs classify some types of income as operating income, others may classify the same thing as extraordinary income.

"Net income equals (i) revenue minus expenses in the ordinary activities of the business, plus (ii) other income minus other expenses, plus (iii) gains minus losses" (Robinson et al., 2015, p. 137). Therefore, in this study net income is defined as ordinary profit or loss after tax but before comprehensive income.

Two definitions of leverage are used in the study since the two models used to estimate earnings management operate with different definitions. Leverage is defined as the ratio of total liabilities to book value of equity (Barth et al., 2008) or the ratio of total liabilities to total assets (Dimitropoulos et al., 2016).

League participation is defined as in which league a team participates in a given season.

5.3 SAMPLE SELECTION AND DATA COLLECTION

For the purpose of this study the primary data was collected from the annual reports of the sample football clubs and the Orbis database. The annual reports of the football clubs were retrieved either from the Companies House[19] website or some clubs' websites. The research period is seven football seasons from the 2011-12 season to the 2017-18. Additionally, data for the 2010-11 season was extracted from the annual financial reports to calculate some of the variables used in the study. The research period was chosen for to two reasons: (1) the financial fair play regulations were first implemented from the 2011-12 season; (2) the time period resulted in an acceptable sample size of 28 clubs that competed in the two top tiers in English football league system.

The sample consists of the clubs that participated either in the Premier League or the Championship from 2011 until 2018 and were not relegated to a lower division. All clubs in the sample are limited liability companies which are required to file their annual financial reports to Companies House. The annual reports used in the study had been audited by an external auditor. The following data were extracted from the annual reports and Orbis: total assets, total liabilities, total revenues, intangible assets, players' registrations, earnings before taxes (EBT), net income, cash flow from operations, ownership, and the name of external auditor. The league standings for the Premier League were obtained from the official Premier League website (Premier League, 2020b) and from the SkySports website for the Championship (Sky Sports, 2020).

The sample of football clubs as limited liability companies is not a homogenous one. The clubs in the sample are organised in various ways. Some of the clubs are "simple" companies where all activities are under one single company (e.g. Leicester City). Several clubs are controlled by holding companies (Manchester United, Chelsea, Arsenal). Some have changed their organisational structure during the time period in question (Liverpool, Leeds United, Burnley). So, a question arises – which annual reports to use? A series of considerations had to be made to decide which companies to use in the sample. Acero et al. (2017) used clubs competing in the top 5 leagues in Europe[20] to study ownership structure and financial performance. The authors point out that it was difficult to compile some of the information (e.g. ownership

[19] https://beta.companieshouse.gov.uk/?_ga=2.13536567.108056863.1592694441-119062273.1592694441

[20] German Bundesliga, Ligue 1 of France, Spanish La Liga, English Premier League and Italian Serie A (Acero et al., 2017).

structure) which is evidence for a lack of transparency in the information of the football industry (Acero et al., 2017). Similar issues were encountered in collecting data for the current study.

Ball and Shivakumar (2005) argue that it is more correct to use the club accounts in the analysis of football clubs' accounting information, because not all clubs have parent or holding companies and the authors argue that it would not be consistent to use both club and parent accounts. The authors warn against using holding company accounts because these can be manipulated (Ball and Shivakumar, 2005). This is not an issue in the current study because the aim of the study is to expose possible earnings management.

The first thing to consider was which kind of variables are needed in the analysis and what kind of information is in fact presented in the annual financial reports. For example, the earnings management models used in this study require cash flow from operations. Companies Act 2006[21] states that a company does not have to present cash flow statements if the accounts are consolidated in group's accounts. Instead the parent company reports consolidated cash flows of the group in its accounts. So, when a football club used this rule and did not present cash flow statements, then the annual reports of the parent company (usually a holding company) was used. Although, the annual reports of parent companies were not used uncritically.

Two criteria were used to determine whether it was acceptable to use the annual reports of the group (consolidated group accounts). The first criterion used was that the primary activity of the group is the operation of a professional football club. This information is included either in the strategic report or the directors' report in the annual report. For example, Middlesbrough is owned by a company called The Gibson O'Neill Group Limited which owns three companies, among others the football club Middlesbrough. Therefore, footballing activities are not the primary activity of the group, and it is rather impossible to extract for example cash flows from football from other activities. Thus, Middlesbrough had to be removed from the sample. There were similar issues with Sunderland. The emphasis is on the fact that the group operates *a* professional football club. Manchester City had to be removed from the sample because its structure was changed from the 2017-18 season and the club accounts did not include cash flow statements. It was impossible to use the annual reports of the holding company because City Football Group Holding is a company that owns several professional football clubs around the world (City Football Group Limited, 2019).

[21] A legislation in the UK. Available at: http://www.legislation.gov.uk/ukpga/2006/46/part/15/chapter/4.

The second criterion used to evaluate the annual reports of the holding companies was that most of the revenues are from footballing activities. For example, Arsenal owns some property development projects around the Emirates stadium, but the revenue from this part of the business is marginal relative to income from football. Cardiff City's primary activity is football, but they also have a multi-use stadium. The annual financial reports of the group were compared with the financial reports of the company. Since the revenues were rather alike in these reports, then the annual reports of the group were used for these two clubs because it has cash flows for the entire period in question. In the process of setting together the sample these trade-offs had to be made to end up with a balanced panel data.

There were 32 clubs that were not relegated to lower leagues in the 2011-2018 period. Some of the clubs had to be removed from the sample because the annual reports for either the football club or the holding company did not satisfy the criteria discussed earlier. In addition to the clubs already mentioned was West Bromwich excluded from the study because some data was missing due to restructuring of the company.

Table 5.1 gives an overview of the clubs in the sample. For more detailed information about the football clubs in the sample see appendices I and II.

Table 5.1. Overview of the sample.

Panel A: The number of football clubs in the sample

Total number of clubs in the Premier League and Championship 2011-2018	Number of clubs that were not relegated to lower leagues 2011-2018	Clubs removed from the sample due to data availability	Final sample
55	32	4*	28

Panel B: League participation from the season 2011-12 to 2017-18

Clubs in the Premier League	Clubs in the Championship	Clubs that were promoted to and/or relegated from the Premier League	Final sample
8ǂ	5×	15¤	28

*Manchester City, Middlesbrough, Sunderland, West Bromwich Albion

ǂArsenal, Chelsea, Everton, Liverpool, Manchester United, Stoke City, Swansea, Tottenham Hotspur

×Birmingham City, Derby County, Ipswich, Leeds United, Nottingham Forest

¤Aston Villa, Brighton & Hove Albion, Burnley, Cardiff, Crystal Palace, Fulham, Hull City, Leicester City, Newcastle United, Norwich, Queens Park Rangers, Reading, Southampton, Watford, West Ham United

The sample used in the study is a combination of consolidated group accounts and unconsolidated company accounts. The final sample consists of 28 football clubs that played either in the Premier League or the Championship from the 2011-12 season to the 2017-18 seasons. Only 8 of the 28 clubs in the sample played consistently in the Premier League. 15 clubs were promoted to or relegated from the English Premier League at least once during the research period. 28 clubs and 7 seasons sum up to 196 firm-year observations.

Table 5.2 gives an overview of the observations in the study. 56% of observations are from clubs that competed in the Premier League in the 2011-18 period. The rest of the result are commented on in chapter 6.1.

Table 5.2. Overview of observations.

	Nº. of observations	Percent of total sample
Nº. of obervations	196	100
Nº. of obervations in the Premier League	110	56.12
Nº. of observations in the Championship	86	43.88
Nº. of observations with foreign ownership	109	55.61
Nº. of observations with a Big-4 external auditor	87	44.39
Nº. of observations with consolidated annual reports	140	71.43

Data collected from Orbis was used as the basis in the development of the data file used in analyses. The numbers obtained from Orbis were controlled against the clubs' financial reports. The information extracted from the financial reports was preferred in case of discrepancies between Orbis and annual reports.

5.4 RESEARCH DESIGN

5.4.1 DESCRIPTIVE STATISTICS

Descriptive statistics (mean, standard deviation) for the variables used in the analysis were calculated for the sample, for the Premier League and the Championship. The differences in the means of the variables between the leagues were tested to find out whether the differences between the leagues are statistically significant. T-test was used on continuous variables, Z-test was used on categorical variables (dichotomous variables, such as AUD, FOROWN etc.), based on Dimitropoulos et al. (2016). Levene's test was used to find out whether we can assume equal variances or not in the t-test. The zero hypothesis of equal variances was rejected when the p-value was lower than 0.05.

Descriptive statistics were not calculated for every variable used in the analysis since the various models used in the study require slightly differently calculated variables. For example, the income smoothing proxy defined variable leverage (LEV) as debt divided by the end-of-year book value of equity (Barth et al., 2008). Meanwhile, the accrual management model uses leverage as a control variable, and it is defined as a ratio of total liabilities to total assets (Dimitropoulos et al., 2016). The same applies to the total accruals and operating cash flow variables.

Correlation describes the statistic relationship between two variables. A correlation coefficient illustrates the strength and the direction of the relationship (Ringdal, 2018). According to Ringdal (2018) is the Pearson's correlation the most common measure for the relationship between two variables which the current study employs.

5.4.2 EARNINGS MANAGEMENT PROXIES

Two earnings management were used in the study: income smoothing and accrual management.

5.4.2.1 INCOME SMOOTHING

Income smoothing is management's intentional reduction of earnings variability (Dimitropoulos et al., 2016).

A more negative correlation between operating cash flows and total accruals indicates income smoothing by the management because the management may increase accruals when the cash flows are poor, according to Barth et al. (2008). The authors use the Spearman correlation between the residuals of cash flows (CF) and total accruals (ACC_TA) to measure income smoothing. Firstly, the cash flow from operations and total accruals are estimated from several independent variables. Thereafter, the Spearman correlation between the residuals of these regression equations are calculated. More negative correlation between the residuals indicates income smoothing. The Spearman correlation is a special case of Pearson's correlation (Ringdal, 2018).

CF and ACC are estimated using following regression models:

$$CF_{it} = \alpha_0 + \alpha_1 SIZE_{it} + \alpha_2 GROWTH_{it} + \alpha_3 LEV_{it} + \alpha_4 DISSUE_{it} + \alpha_5 TURN_{it} + \alpha_6 AUD_{it} + \varepsilon_{it}$$

$$ACC\_TA_{it} = \alpha_0 + \alpha_1 SIZE_{it} + \alpha_2 GROWTH_{it} + \alpha_3 LEV_{it} + \alpha_4 DISSUE_{it} + \alpha_5 REV_{it} + \alpha_6 AUD_{it} + \varepsilon_{it}$$

Where:
CF = cash flow from operating activities divided by end of year total assets;
ACC_TA = total accruals divided by end of year total assets;
SIZE = the natural logarithm of total assets;
GROWTH = percentage change in sales;
LEV = end of year total liabilities divided by end of the year equity book value;
DISSUE = percentage change in total liabilities;
TURN = sales divided by end of the year total assets;
AUD = a dummy variable receiving (1) when the club's auditor is one of the Big-4 companies.

There are some variables in the original Barth et al. (2008) that are excluded from the model used in the current analysis because of the characteristics of the sample. Several dependent variables in the original model are not relevant for the sample. For example, a variable "the number of exchanges on which a firm's stock is listed" (Barth et al., 2008, p. 483) is not relevant for the current sample because only one of the clubs is listed on stock market (Manchester United).

Spearman correlations between the cash flow and accruals residuals were also estimated by an alternative model used by Dimitropoulos et al. (2016) in their research. Dimitropoulos et al. (2016) have adapted the proxy for income smoothing developed by Barth et al. (2008) for the footballing industry. Based on Dimitropoulos et al. (2016), operating cash flows and total accruals are estimated by following regression models:

$$CFO_{it} = \alpha_0 + \alpha_1 SIZE_{it} + \alpha_2 GROWTH_{it} + \alpha_3 LEV_{it} + \alpha_4 LIST_{it} + \varepsilon_{it}$$

$$ACC_{it} = \alpha_0 + \alpha_1 SIZE_{it} + \alpha_2 GROWTH_{it} + \alpha_3 LEV_{it} + \alpha_4 LIST_{it} + \varepsilon_{it}$$

Where:
CFO = cash flow from operating activities deflated by lagged total assets;
ACC = total accruals divided by lagged total assets;
SIZE = the natural logarithm of end-of-year total assets;
GROWTH = percentage change in sales;
LEV = the ratio of total liabilities to end-of-year total assets;
LIST = a dummy variable receiving (1) when a club is listed on the stock market.

Spearman correlations were calculated for the sample, the Premier League and the Championship. Fisher's Z-transformation[22] was used to evaluate whether the differences in Spearman correlations were significant between the two models and Premier League and Championship, based on (Dimitropoulos et al., 2016).

5.4.2.2 ACCRUAL MANAGEMENT

The current study uses the Jones (1991) model which is modified by Kothari et al. (2005) and adapted to the football setting Dimitropoulos et al. (2016). The non-discretionary accruals are estimated with the following pooled regression model:

$$ACC_{it}/TA_{t-1} = \alpha_0 + \alpha(1/TA_{t-1}) + \beta(\Delta REV_{it}/TA_{t-1}) + \gamma(PLAYER_{it}/TA_{t-1}) + \delta ROA_{it} + e_{it}$$

Where:
ACC = the total accruals measured as a difference between net income and operating cash flow;
ΔREV = the change in net sales;
PLAYER = the level of player contacts reported in the annual report;
ROA = return on assets at the end of fiscal year;
TA = total assets at the end of the fiscal year;
t = the season;
i = the club.

According to Jones (1991), revenues used to control for a firm's economic environment. She claims that the revenues are an objective measure of a firm's operations before managers' discretions (Jones, 1991). This is an argument for defining revenues as income from the core activities for football clubs which include revenues from matchday, broadcasting and commercial income. Although, the author admits that the managers may have incentives to manipulate revenues (Jones, 1991)[23].

The original Jones (1991) model and its modifications uses power, plant, and equipment (PPE) instead of players' registrations as an independent variable in the regression model. The author included PPE in her model to "control for the portion of total accruals depreciation expense" (Jones, 1991, p. 212). Dimitropoulos et al. (2016) use players' registrations in the balance sheet instead of property, plant, and equipment in their model. The authors explain it with players' registrations constituting the majority of total assets for the football clubs. Players' registrations

[22] See Appendix IV for an example how Fisher's Z-transformation was implemented in the statistical software Stata.

[23] As discussed previously, Manchester City was punished by UEFA for manipulating sponsorship income.

are capitalised as intangible assets and are amortised over the length of the players' contracts (Dimitropoulos, 2011).

Kothari et al. (2005) modified the Jones (1991) model by adding ROA in the equation as a control for performance.

The variables in the regression model (except for ROA) are standardized by lagged total assets to correct for heteroscedasticity (Dechow et al., 1995, Jones, 1991). Kothari et al. (2005) add a constant, α_0, in the regression equation as a control for heteroskedasticity that is not corrected by deflating the variables with lagged total assets.

The residuals from the regression analysis are the estimates for discretionary accruals (DACC):

$$DACC_{it} = ACC_{it}/TA_{t-1} - \hat{\alpha}\left(1/TA_{t-1}\right) - \hat{\beta}\left(\Delta Sales_{it}/TA_{t-1}\right) - \hat{\gamma}\left(PLAYER_{it}/TA_{t-1}\right) - \hat{\delta}ROA_{it}$$

The following model is estimated as the absolute value of discretionary accruals ($|DACC|$) as the dependent variable:

$$|DACC_{it}| = \alpha_0 + \alpha_1 LEAGUE_{it} + \alpha_2 WREV_{it} + \alpha_3 CFO_{it} + \alpha_4 SIZE_{it} + \alpha_5 AUD_{it} + \alpha_6 DFOWN_{it} + \alpha_7 IA + \alpha_8 GR_{it} + \alpha_9 LEV_{it} + \varepsilon_{it}$$

Where:

LEAGUE = a dummy receiving (1) if a club is in the Premier League, and (0) otherwise;

WREV = wages to revenue ratio;

CFO = operating cash flow divided by total assets;

SIZE = natural logarithm of total assets;

AUD = a dummy receiving (1) if big-4 auditor, and (0) otherwise;

DFOWN = a dummy receiving (1) if foreign ownership, and (0) otherwise;

IA = intangible assets divided by lagged total assets;

GR = percentage growth in revenues;

LEV = total liabilities divided by total assets.

Since discretionary accruals can both increase and reduce earnings, the absolute value of the residuals is used in the analysis (Dimitropoulos, 2011, Dimitropoulos et al., 2016). In econometrics panel data can be analysed three different regression methods: the pooled regression, GLS (generalised least squares) with fixed and random effects (Hill et al., 2012). The pooled regression oversees the panel structure in the data. Individual differences are ignored and the ordinary least squares (OLS) is used to estimate the regression equation (Hill et al., 2012).

To analyse the data with GLS the panel data structure was set after football clubs and the season variable was set as the time variable. The GLS fixed effects model controls for the club-specific differences. The random effects model assumes that the club-specific effects are not systematic, they are random. A Hausman test is used to decide whether fixed or random effects model should be used. The test compares the coefficients from the random effects model to the coefficients estimates by the fixed effects model (Hill et al., 2012). The zero hypothesis is that the two sets of estimators are identical. If the conclusion of the test is a rejection of the zero hypothesis, then the fixed effects model should be preferred (Hill et al., 2012).

5.5 RELIABILITY AND VALIDITY

Reliability and validity are used to evaluate the quality of research (Bell et al., 2019).

Reliability means that the results of the study are repeatable (Bell et al., 2019), i.e. repeated measurements with the same measuring instrument should result in same results (Ringdal, 2018). Validity is concerned with whether we are in fact measuring the concept we set out to measure (Bell et al., 2019, Ringdal, 2018). Random measurement errors affect the reliability of research, and systematic measurement errors reduce the validity (Ringdal, 2018).

According to Ringdal (2018) it is impossible to ensure that there are no random measurement errors in the data set. The aim of the researcher is to keep the random errors as low as possible by controlling quality of the collected data, thus securing that the research has high reliability (Ringdal, 2018). Reliability is especially important in qualitative research like the current project (Bell et al., 2019). Reliability is affected by how data is controlled, i.e. accuracy in registering data, detecting and correcting errors (Ringdal, 2018).

The current thesis is a work of a single person, i.e. one person has carried out each step of the research process. Thus, how to ensure the quality of the collected data is crucial for the reliability of the study since there was no double control of the data collection or registration. Both the annual financial reports and Orbis database were used to collect relevant data for the project. Data extracted from the financial reports of the football clubs was controlled against data from Orbis and vice versa. The accounting numbers collected from the Orbis database were not always consistent with the information in the financial reports. In these cases, the information in the financial reports was preferred because the clubs' annual reports are the primary sources of accounting information for a non-insider.

In addition, the annual reports of the football clubs in England must be audited by an external auditor which increases the reliability of the collected information. Stefan Szymanski (2015)

argues that the annual financial reports of English football are the best resources of football data. As discussed, English football clubs were the early adopters of the organisational form of limited liability company. Therefore, the clubs have always been required to file their audited annual reports to the authorities which means that it is relatively easy to get hold of the financial reports. In addition, random checks of the final data file were performed where the information in the file were controlled against the clubs' annual reports.

Bell et al. (2019) uses the term "measurement validity" when we are concerned whether we in fact measure that we claim. The issue is especially relevant when using the discretionary accruals models in research (Dechow et al., 1995, McNichols, 2000). Discretionary accruals models are developed to measure the normal level of accruals based on the firm's economic conditions (Jones, 1991). Dechow et al. (2010) raises several issues with the discretionary accrual models. The authors explain that the discretionary accruals component is positively correlated to the level of total accruals which means that companies with extreme accruals also have extreme abnormal accruals. So, Dechow et al. (2010) cast doubt on whether the discretionary accruals in fact reflect the management's discretion. Abnormal accruals could instead be a result of misspecified accruals models and measure the fundamental performance (Dechow et al., 2010).

The issue of how to model normal accruals so that the abnormal accruals only represent the accounting distortions appears to be central in the earnings management research and further research is required (Dechow et al., 2010). McNichols (2000) proposes to use specific accruals models instead, but several posts in financial reports may be managed as Jones (1991) pointed. So, there is no correct answer which method or model is the best to analyse earnings management. The use of all methods requires trade-offs; therefore, the research question could act as guidance in planning earnings management research.

In the research models that have been used by established researchers were used(Barth et al., 2008, Dimitropoulos et al., 2016, Jones, 1991). In addition, the quality of these models has been ensured by the tough process of getting article published in acknowledged journals. This increases somewhat the validity of the current research.

6 EMPIRICAL RESULTS

6.1 DESCRIPTIVE STATISTICS AND UNIVARIATE ANALYSIS

As discussed in the methods chapter the sample of the study is a heterogenous mix of clubs that competed in the two top football leagues in England from the 2011-12 season to the 2017-18 season. Table 5.1 in the previous chapter shows that there is rather high turnover in the two highest professional leagues in England. There was in total 55 different clubs in the two top divisions during the research period. Of these 55 clubs only 32 clubs were not relegated to lower leagues in the sample period of seven seasons (approximately 58%).

Table 5.2 presents the overview of observations. A total of 196 firm-year observations was used in the study of which 56% are from clubs competing in the Premier League. 56% of the clubs have foreign owner, while the number is approximately 50% for the Premier League and the Championship (table 6.1). The majority of the annual reports used in the study are consolidated group accounts (ca. 71%). Of the sample clubs 44% have a Big-4 auditor. In average a whopping 60% of the clubs in the PL had Deloitte, EY, KPMG, or PwC as external auditors, meanwhile in average only 24% of the clubs in the Championship had one of the Big-4 auditors (table 6.1).

Table 6.1 gives an overview on the descriptive statistics of the sample variables. Mean, median, standard deviation, maximum and minimum values of the sample variables are presented for the total sample and the clubs competing in the Premier League and the Championship.

It is striking that the mean of earnings before taxes (EBT) is much higher than the median. The mean of EBT is still negative, but the difference between the mean and the median is approximately 300-fold (sic!). It could indicate that there are some clubs in the sample that have done extremely well in some years, thus inflating the mean value. Since the median is much lower than the mean, then the results suggest that at least 50% of the clubs in the sample do it much worse than an average club during these seven seasons. The table 6.1 shows that the highest profit and the worst loss in the sample have been in the Premier League.

Table 6.1. Descriptive statistics of the sample variables.

Panel 1. The sample

	EBT	ROA	TURN	ACC	|DACC|	CFO	GR	WREV	LEV	DISSUE	SIZE	DFOWN	IA	AUD
Mean	-10,523	-0.093	0.796	-0.086	0.165	0.003	0.294	0.828	1.330	0.158	18.439	0.556	0.307	0.444
Median	-3,768,000	-0.040	0.691	-0.080	0.094	0.015	0.053	0.731	1.012	0.112	18.319	1	0.308	0
Std. dev.	28,500,000	0.386	0.449	0.437	0.229	0.450	0.909	0.324	1.172	0.375	1.158	0.498	0.178	0.498
Minimum	-80,700,000	-1.689	0.144	-1.731	0.000	-1.831	-0.525	0.373	0.174	-0.861	16.032	0	0.002	0
Maximum	125,000,000	2.208	2.387	4.514	2.163	2.328	5.229	2.018	9.684	1.860	21.159	1	0.732	1

Panel 2. The Premier League

	EBT	ROA	TURN	ACC	|DACC|	CFO	GR	WREV	LEV	DISSUE	SIZE	DFOWN	IA	AUD
Mean	8,447,147	0.021	0.900	-0.165	0.128	0.217	0.547	0.640	0.968	0.180	19.055	0.518	0.391	0.600
Median	4,806,500	0.025	0.853	-0.103	0.073	0.120	0.133	0.617	0.792	0.121	18.878	1	0.400	1
Std. dev.	33,600,000	0.259	0.462	0.231	0.135	0.408	1.113	0.132	0.544	0.370	1.020	0.502	0.149	0.492
Minimum	-80,700,000	-0.977	0.293	-1.406	0.001	-0.811	-0.318	0.373	0.268	-0.861	17.319	0	0.112	0
Maximum	125,000,000	1.176	2.387	0.243	0.779	2.328	5.229	1.287	4.048	1.827	21.159	1	0.732	1

Panel 3. The Championship

	EBT	ROA	TURN	ACC	|DACC|	CFO	GR	WREV	LEV	DISSUE	SIZE	DFOWN	IA	AUD
Mean	-10,800,000	-0.239	0.662	0.014	0.213	-0.271	-0.029	1.067	1.793	0.130	17.652	0.605	0.199	0.244
Median	-8,820,971	-0.170	0.587	-0.034	0.127	-0.211	-0.033	1.009	1.228	0.099	17.588	1	0.149	0
Std. dev.	14,200,000	0.467	0.396	0.592	0.304	0.342	0.344	0.339	1.545	0.381	0.790	0.492	0.154	0.432
Minimum	-46,700,000	-1.689	0.144	-1.731	0.000	-1.831	-0.525	0.558	0.174	-0.697	16.032	0	0.002	0
Maximum	32,100,000	2.208	2.298	4.514	2.163	0.281	2.116	2.018	9.684	1.860	19.294	1	0.604	1

The average return on assets was negative for the sample in the period in question. The Premier League clubs had a ROA slightly over zero, meanwhile the average ROA in the Championship clubs was -24%. These results suggest that in average the clubs in the two top divisions in England did not operate profitably in these seven seasons.

The growth in revenue variable (GR) has also large differences between the mean and the median. Panel C in table 6.1 demonstrates that these two measures of central tendencies are rather similar in the Championship clubs. The situation is different for the total sample and the Premier League clubs. The median is much lower than the mean and both are closer to the minimum value than the maximum value. This indicates extreme values. Some clubs in the sample have had an extreme growth in revenues that has distorted the mean.

The results appear to confirm "the common knowledge" that football clubs are in a dire financial situation. The average earnings before taxes are negative for the sample, meanwhile average growth in revenue is almost 30%. It is worthy to mention that the average wages to revenue ratio for the football clubs in the sample is 83%. Even more alarming is that the ratio of total liabilities to total assets is in average 1.33. This means that in average the football clubs in the sample have negative equity.

In average a Premier League club had a pre-tax profit of £8.45m and a positive return on assets. On the other hand, a Championship club had a pre-tax loss of £10.8m and a negative ROA of -24%. In addition, the clubs in the Championship have in average negative cash flow from operating activities, a slightly negative growth in revenues and wages to revenues ratio over 1. The average ratio of debt to total assets was 1.8 in the Championship compared to 0.97 in the Premier League in the research period. These results illustrate that the football clubs in the Championship are in a more demanding financial situation compared to the counterparts in the Premier League.

Table 6.2 presents the results for the hypothesis testing on whether there are significant differences in variables between the Premier League and Championship clubs. The table displays the absolute values of the differences ($\text{mean}_{\text{Premier League}} - \text{mean}_{\text{Championship}}$), test statistics and p-values. The zero-hypothesis tested is that there are no differences between the two leagues and a two-tailed test is used to conclude on the test.

The differences in the sample variables between the two leagues are significant with an exception of foreign ownership and change in liabilities. These results further substantiate that the Championship clubs are in a worse financial position than the Premier League clubs. The Premier League clubs have significantly higher earnings before taxes, return on assets, turnover, operating cash flows, growth in revenues, and intangible assets. In addition are the Premier League clubs larger in size.

Table 6.2. Hypothesis testing for differences of means between Premier League and Championship.

	Difference in means	Test statistics	p-value
EBT	19,300,000	5.426	0.000**
ROA	0.260	4.643	0.000**
TURN	0.239	3.821	0.000**
ACC	-0.179	-2.655	0.009**
|DACC|	-0.085	-2.424	0.017*
CFO	0.488	8.906	0.000**
GR	0.576	5.128	0.000**
WREV	-0.427	-11.050	0.000**
LEV	-0.825	-4.728	0.000**
DISSUE	0.050	0.926	0.356
SIZE	1.403	10.856	0.000**
DFOWN	-0.086	-0.601	0.458
IA	0.192	8.825	0.000**
AUD	0.356	2.472	0.013*

All hypothesis tests were perfomed as two-tailed tests.
The difference between the means of the continuous variables is estimated with t-test.
The difference between the means of the dichotomous variables (AUD, DFOWN) is estimated with z-test.
* Significance at the 5% level.
** Significance at the 1% level.

Meanwhile, the Championship have significantly higher wages to revenues ratio and are more leveraged. It is noteworthy that the total accruals (ACC) and the absolute value of discretionary accruals ($|DACC|$) are significantly higher in the Championship. Table 6.2 shows that the difference in discretionary accruals between the two top leagues is significant at the 1% level which could indicate that the Championship clubs engage more in earnings management.

There is a marginal difference in average foreign ownership between the Premier League and the Championship. The difference between the leagues is not statistically significant. The same applies to changes in total liabilities (DISSUE).

6.2 CORRELATION ANALYSIS

Table 6.3 presents the Pearson's correlation coefficients of the sample variables in the research period.

Table 6.3. Pearson's correlation coefficients of variables.

	|DACC|	SIZE	IA	WREV	GR	AUD	LEAGUE	DFOWN	CFO
SIZE	-0.351***								
IA	0.148**	0.233***							
WREV	0.352***	-0.493***	-0.181***						
GR	0.118*	-0.032	0.071	-0.277***					
AUD	-0.271***	0.472***	0.082	-0.277***	-0.178***				
LEAGUE	-0.186***	0.603***	0.535***	-0.656***	0.316***	0.355***			
DFOWN	-0.099	0.128*	-0.054	0.160**	-0.093	0.013	-0.086		
CFO	-0.249***	0.276***	0.096	-0.631***	0.599***	0.055	0.539***	-0.283***	
LEV	0.299***	-0.554***	-0.005	0.484***	-0.049	-0.093	-0.350***	-0.063	-0.443***

*Significant at the 10% level.
**Significant at the 5% level.
***Significant at the 1% level.

The absolute value of discretionary accruals, $|DACC|$, is negatively correlated to the size of the football clubs, cash flows from operations and having one of the big-4 companies as the external auditor. $|DACC|$ is negatively associated with the variable LEAGUE which suggests that the Premier League clubs have lower absolute value of discretionary accruals.

The positive correlation between $|DACC|$ and WREV and LEV indicate that clubs with higher wages to revenue ratio and are more leveraged tend to have higher discretionary accruals. The correlation coefficients indicate that the Premier League clubs (LEAGUE) are larger in size, have more intangible assets and higher growth, meanwhile these clubs have lower wages to revenue ratio. Growth in revenues is positively correlated to the operating cash flows which means that higher growth is associated with higher (meaning more positive) cash flows.

6.3 EARNINGS MANAGEMENT IN ENGLISH FOOTBALL

6.3.1 INCOME SMOOTHING

Panel A in table 6.4 presents the Spearman correlations between the cash flows and accruals residuals. Panel B in the same table shows the Z-statistics and p-values to estimate whether

there are differences in correlations between the two models and two leagues. The Fisher's Z-transformation was used to test whether the differences are significant. Therefore, table 6.4 offers two possibilities for comparison: it is possible to compare the two models and the two leagues. The significance of the differences between the two models was estimated for the total sample, and the significance of the differences between the leagues was estimated for each model.

Panel B in table 6.4 demonstrates that the Dimitropoulos et al. (2016) model produces somewhat higher correlation coefficients for the total sample, the Premier League, and the Championship. In the panel B can we see that the difference in correlation coefficients for the sample is not significant (Z= -1.328; p=0.184). This suggests that although it was used rather different models in the analysis, these did not produce significantly different correlation coefficients for the sample.

Table 6.4. Spearman correlation between operating cash flows and accruals residuals.

Panel A. Spearman correlations.

Model	Sample	Premier League	Championship
Barth et al. (2008)	-0.236**	-0.171*	-0.184*
Dimitropoulos et al. (2016)	-0.359**	-0.356**	-0.273**

Panel B. Significance of differences in Spearman correlations between models and leagues.

Model	Sample		Premier League vs. Championship	
	Z-statistic	P-value	Z-statistic	P-value
Barth et al. vs. Dimitropoulos et al.	-1.328	0.184	-	-
Barth et al. (2008)	-	-	-0.090	0.928
Dimitropoulos et al. (2016)	-	-	0.625	0.532

*Significance at the 10% level.
**Significance at the 1% level.

Both models conclude that there is a significant negative correlation at the 1% level between the operating cash flow and total accruals' residuals (Panel A). This indicates that the English football clubs manage their earnings by income smoothing which supports the first hypothesis of the thesis. The Spearman correlations between the cash flow and accruals residuals were also calculated separately for the Premier League and the Championship. Panel A in table 6.4 demonstrates that the Spearman correlations between the residuals estimated with the Barth et al. (2008) are significant at the 10% level for both the Premier League and the Championship. The Spearman correlations between the residuals estimated with the Dimitropoulos et al. (2016) model are significant at the 1% level for both leagues. These results suggest that both the

Premier League and the Championship clubs engage in significant income smoothing, i.e. they increase accruals when the cash flows fail.

Hypothesis two suggests that the clubs in the Championship engage more in earnings management that the Premier League clubs. The two models used to estimate income smoothing activities produce different correlation coefficient for the two leagues, but correlations estimated with the Barth et al. (2008) are significant at the 10% level. According to Barth et al. (2008), the more negative Spearman correlation between cash flow and accruals residuals indicate income smoothing. Therefore, the two models indicate different conclusions between the Premier League and the Championship if just the values of the correlation coefficients are considered. Based on the estimation by the Barth et al. (2008) model have the Championship clubs a slightly more negative correlation between the operating cash flow and accruals residuals than the Premier League clubs. That could be an indication for more earnings management through income smoothing in the Championship clubs. However, the Dimitropoulos et al. (2016) model gives a completely opposite conclusion. The Spearman correlation coefficient is higher for the Premier League clubs that could indicate more earnings management in the top division in England.

However, the test for differences between the Spearman correlations (Fisher's Z-transformation) suggest that the difference between the two leagues in not significant for either of the models (presented in panel B in table 6.4). That mean that the empirical results do not support the second hypothesis of the thesis that the Championship clubs engage in more earnings management.

6.3.2 ACCRUAL MANAGEMENT

Table 6.5 presents the results from the accrual management model which tests whether league or expenditure on players' wages have an impact on the discretionary accruals. The model was estimated with three difference estimation techniques for panel data: pooled regression, GLS with fixed and random effects. The significance of the models (whether there is a significant relationship between the dependent and independent variables) is tested with an F-test for the pooled regression and GLS fixed effects model, and a chi-squared test for the GLS random effects model. The test statistics show that all three models are significant at the 1% level. The pooled regression and GLS random effects have higher R^2, R-squared, which indicate that approximately 31-32% of the variance in discretionary accruals is explained by the independent

variables. R^2 can be used as a "goodness-of-fit" measure to how well the estimated regression fits the data (Studenmund and Johnson, 2017).

Table 6.5. Regression results on accrual management.

	Pooled regression		GLS fixed effects		GLS random effects	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
LEAGUE	0.015	0.28	0.062	0.99	0.034	0.62
WREV	0.155	2.32**	0.199	2.69***	0.171	2.52***
CFO	-0.191	-3.49***	-0.242	-4.05***	-0.204	-3.75***
SIZE	-0.034	-1.75*	-0.029	-0.8	-0.031	-1.38
AUD	-0.037	-1.08	-0.232	-3.11***	-0.065	-1.61
DFOWN	-0.081	-2.62***	-0.149	-1.87*	-0.085	-2.26**
IA	0.280	2.81***	0.004	0.02***	0.211	1.92**
GR	0.085	3.99***	0.088	3.90***	0.085	4.02***
LEV	-0.011	-0.68	-0.045	-1.83*	-0.020	-1.10
R-squared	0.319		0.218		0.313	
F-value	9.69***		5.43***		-	
χ^2	-		-		67.23***	
Rho	-		0.407×		0.127	

The estimated model:

$$|DACC_{it}| = \alpha_0 + \alpha_1 LEAGUE_{it} + \alpha_2 WREV_{it} + \alpha_3 CFO_{it} + \alpha_4 SIZE_{it} + \alpha_5 AUD_{it} + \alpha_6 DFOWN_{it} + \alpha_7 IA + \alpha_8 GR_{it} + \alpha_9 LEV_{it} + \varepsilon_{it}$$

* Indicate significance at the 10% level.

**Indicate significance at the 5% level.

*** Indicate significance at the 1% level.

Rho indicates how much of the variance is explained by the club-specific effects.

×F-value=2.08 and p-value=0.03 indicate significant club-specific effects.

Hausman test: χ^2=15.79 and p-value=0.07

The data used in the analysis is panel data, so it is more natural to use GLS on this kind of data because pooled regression is an ordinary least squares regression model which ignores the panel data structure. Rho shows how much of the variance is explained by the club-specific effects in the panel data. Rho for the fixed effects model indicates that approximately 41% of the variance is explained by the club-specific effects. The F-test confirms that these effects are significant at the 5% level. The rho drops significantly for the random effects model which is not surprising since the test assumes that the individual differences are random and not systematic. The Hausman test concludes that at the 5% significance level that the differences in the coefficients

are systematic and the fixed effects model should be preferred over the random effects model. Although, the differences in the coefficients are not systematic at the 10% significance level and the random effects model should be preferred.

The second hypothesis of the thesis is that the Championship club engage more in earnings management and it was expected that the coefficient for the variable LEAGUE has a negative sign. Table 6.5 does not support the hypothesis. The coefficient is low and statistically not significant, but it is positive. Which means that the data indicates that clubs is in the Premier League have slightly higher discretional accruals than clubs in the Championship. But again, the coefficient is not statistically significant. Therefore, the conclusion is the results do not support the second hypothesis meaning that the Championship clubs do not appear to engage in more earnings management than the Premier League clubs.

The third hypothesis of the thesis is that clubs with higher wages to revenue ratio engage in more earnings management. The coefficients are positive and significant at the 5% level regardless of the estimation method. Therefore, the conclusion is that the empirical results support the third thesis.

There are two variables that have coefficients that are significant at the 1% level no matter which method is used to estimate the regression equation. These two variables are operating cash flow (CFO) and growth in revenue (GR). The operating cash flow has a negative coefficient which is as expected. This means that if we increase the operating cash flows with one unit, then the absolute value of the discretionary accruals is reduced with 0.242 units if we use the fixed effects model as the Hausman test suggested. This confirms the results from the correlation analysis that there is an inverse relationship between the operating cash flows and earnings management. Therefore, hypothesis number three is supported by empirical results. The clubs with higher operating cash flows seem to engage less in earnings management.

The growth in revenue has a significant positive effect on the absolute value of discretionary accruals as expected based on the previous literature. This indicates that clubs with higher growth in revenues have higher discretionary accruals. Thus, the results support the ninth hypothesis of the study that the English football clubs with higher growth in revenue manage their earnings more.

Intangible assets have a positive coefficient as expected meaning that clubs with higher levels of intangible assets are associated with a higher absolute value of discretionary accruals. The

coefficient is significant at least at the 5% level for all models and at the 1% level for the pooled regression and fixed effects models.

The variable size of football club has a negative coefficient as expected, but the coefficient is not significant at least at the 5% level for any of the models. The coefficient is significant at the 10% level if estimated by the pooled regression model. Therefore, the conclusion is that the size of football clubs does not seem to have a significant effect on the level of discretionary accruals and thus on earnings management in the Premier League and the Championship clubs.

It is expected the coefficient for the variable leverage (LEV) is positive because highly leveraged firms are associated with higher levels of discretionary accruals. The results from the regression analysis show that the coefficient is negative for all three models, but it is not significant for the pooled regression and GLS random effects model. The coefficient is significant at the 10% level for the GLS fixed effects model. Thus, data does not support the tenth hypothesis of the thesis. The level of leverage in English football clubs does not have a significant effect on the discretionary accruals and therefore on earnings management.

Two dummy variables were used as the dependent variables in the regression analysis: DFOWN (receiving 1 if the club has a foreign owner) and AUD (receiving value 1 if the club has a big-4 auditor). The variable of foreign ownership has a coefficient negative in all models as expected, but the coefficient is significant at different levels for various models. DFOWN has a significant at the 1% level in the pooled regression model which is the least preferred model to analyse panel data. GLS fixed and random models take into account the panel data structure and therefore are more correct to use. Hausman test indicates that fixed effects model should be favoured and the coefficient for DFOWN is significant at the 10% level. However, it is more common to use the 5% level of significance to conclude whether an independent variable has a significant effect on the dependent variable. Therefore, the conclusion is that foreign ownership does have a negative effect on the level of discretionary accruals, but it is not significant at the 5% level.

The hypothesis that the clubs audited by the big-4 companies engage less in earnings management is supported by the data. Table 6.5 shows that the coefficient for AUD is negative as expected and statistically significant at the 1% level for the GLS fixed effects model. Therefore, the data supports the sixth hypothesis since the Hausman test suggests the use of fixed effects model.

6.3.3 CONCLUSIONS ON HYPOTHESIS TESTING

H1: English football clubs engage in earnings management.

The results from both the Barth et al. (2008) and Dimitropoulos et al. (2016) models conclude that there is a significant correlation between the operating cash flow and total accruals' residuals which supports the first hypothesis. The clubs' significant income smoothing suggests that English football clubs engage in earnings management.

H2: Football clubs in the Championship engage more in earnings management than the clubs participating in the Premier League.

None of the models for income smoothing indicate a significant difference in Spearman correlations between the Premier League and the Championship clubs. The regression coefficient of the variable LEAGUE is positive, but not significant. Thus, the conclusion is that there is no significant difference in earnings management between the two top leagues in England.

H3: Football clubs with higher wages to revenue ratio engage more in earnings management.

The regression coefficient of wages to revenue ratio is positive and significant which means that the empirical results support the third hypothesis.

H4: Operating cash flows are negatively associated with the discretionary accruals.

Variable CFO has a negative significant coefficient in the regression analysis which supports the hypothesis that clubs with higher operating cash flows have lower discretionary accruals.

H5: Football clubs that are larger in size engage less in earnings management.

Variable SIZE has a negative coefficient, but it is not significant which means that that the size of football clubs does not have an effect on the level of discretionary accruals.

H6: The football clubs that have a big-4 company as the external auditor engage less in earnings management.

Variable AUD has a negative significant coefficient which supports the hypothesis that English football clubs with a big-4 auditor engage less in earnings management.

H7: Foreign ownership is associated with less earnings management.

The regression coefficient of the variable DFOWN is negative, but not significant at the 5% level which indicates that foreign ownership does not have an effect on the level of discretionary accruals.

H8: The higher level of intangible assets is associated with more earnings management.

IA has a positive significant coefficient which supports the hypothesis that clubs with a higher level of intangible assets engage more in earnings management.

H9: Football clubs with high growth in revenues manage their earnings more.

The regression coefficient of GR is both positive and significant which supports the hypothesis that the high-growth football clubs engage more in earnings management.

H10: Highly leveraged football clubs engage in more earnings management.

A positive coefficient was expected, but the regression coefficient of LEV is negative and not significant at the 5% level. Thus, the results do not support the hypothesis that highly leveraged football clubs engage more in earnings management.

7 DISCUSSION

The findings of the study are twofold. Firstly, the results confirm that English football clubs are in a demanding financial situation. This applies especially to the clubs participating in the second tier of the professional league system in England. Secondly, the analysis of the two proxies of earnings management support some of the hypotheses. Data supports the hypothesis that clubs with higher wages to revenues ratio have higher discretionary accruals, and thus engage in more earnings management. The results on the effect of which league a club competes in on earnings management activities is inconclusive.

7.1 FINANCIAL SITUATION OF ENGLISH FOOTBALL CLUBS

The fact that over 40% clubs that participated in the two top leagues during the research period were relegated to the lower divisions supports two points about the economics of football. Firstly, this supports the findings of Noll (2002) that there is a high turnover between the leagues. Secondly, it is hard to maintain the sporting performance.

The descriptive statistics and univariate analysis illustrate that although the clubs generate higher revenues, the financial situation remains dire. Solberg and Haugen (2010) call the situation rather dramatically a paradox. The sample clubs have in average negative earnings before taxes, but growth in revenues. In addition, the clubs in England are highly leveraged and in average have negative equity. The financial fair play rules were implemented to increase financial stability of the football clubs. The aim of the current study is not to find out which effect the FFP rules have been on clubs' finances, so it is not possible to comment on whether the financial situation of English football clubs have improved. Although, Dimitropoulos et al. (2016) results show that in the early years of the FFP in Europe, the clubs did remain in strained situation financially.

The analysis of the difference in sample variables between the Premier League and indicate that the Championship clubs are in a far worse financial situation. This is not a surprising result because several authors have discussed that the clubs in Championship compete in completely different conditions than the clubs in the promised land called the Premier League (Emery and Weed, 2006, Deloitte, 2018).

7.2 EARNINGS MANAGEMENT IN ENGLISH FOOTBALL CLUBS

The aim of the study was to analyse earnings management and the factors that affect the discretionary accruals in English football clubs. The existing research on the topic is scarce which could be explained by the lack of focus on financial reporting in the football industry before the implementation of the financial fair play rules. In the past decade, some knowledge has become available on earnings management in football industry.

If regulatory monitoring is tied to accounting data, then managers may be inclined to produce financial statements that present the desired financial performance (Walker, 2013). In addition, Dimitropoulos et al. (2016) demonstrated that managers have to satisfy two strong stakeholders – UEFA and the supporters – who have contradicting financial demands. In attempt to manage these stakeholder relationships the quality of financial reporting declines. Thus, the English football clubs have incentives to engage in earnings management.

The current study seeks to contribute to the literature on earnings management in football industry in three ways. Firstly, the study is an attempt to look closer at earnings management in one country's football clubs, namely football clubs in England. Earlier studies have focused on either European (Dimitropoulos, 2011, Dimitropoulos et al., 2016) or Italian football clubs (Risaliti and Verona, 2013). The English football is popular and highly competitive. Furthermore, the clubs are subject to the financial fair play rules similar to those of UEFA, so it is highly relevant to assess the quality of financial reports of the English football clubs.

Secondly, the study includes clubs from lower leagues rather than only using the clubs from the elite divisions. Previous research has solely focused on elite divisions for two reasons: to avoid bias from relegation and promotion; the clubs in the elite divisions are more likely to qualify to European competitions and thus become a subject to the UEFA FFP regulations (Dimitropoulos et al., 2016). However, football clubs in the lower leagues in England may in fact qualify to European competitions through the FA Cup system (a note in Dimitropoulos et al., 2016). Peeters and Szymanski (2014) have criticised the financial fair play rules because the financial instability is a problem in lower leagues, not in the top divisions. Therefore, there are motives to include clubs from the lower leagues in the sample.

Thirdly, the study tests two novel hypotheses: league participation and wage expenditure. The study aims to analyse whether competing in lower leagues affects the management's discretion over accounting choices. To be more precise, whether the clubs in the Championship engage more in earnings management than their counterparts in the Premier League. The

Championship represents the lower leagues in the study. Sporting success is modelled rather simply by league participation meaning whether a football club competes in the Premier League or the Championship in a given season. The second novel hypothesis is that clubs with higher wages to revenues engage in more earnings management. Football is a human capital heavy industry and players' wages are the largest expenses for a football club (Scafarto and Dimitropoulos, 2018).

7.2.1 LEAGUE PARTICIPATION[24]

The results of the study indicate that English football clubs in the two top divisions engage in earnings management. Income smoothing is the most common earnings management activity (Walker, 2013). A negative correlation between operating cash flows and accruals an indication that managers increase accruals as a response to poor cash flows, according to Barth et al. (2008). The results suggest significant income smoothing in English football clubs which supports the first hypothesis of the study.

The operating cash flow and total accruals' residuals were estimated by using two rather different models where the model used by Dimitropoulos et al. (2016) is in fact a modification of the Barth et al. (2008) model. The difference between the models is two-fold. Firstly, the (Barth et al., 2008) model includes more variables to estimate CFO and ACC. Meanwhile, Dimitropoulos et al. (2016) exclude several variables from the original model and use. Secondly, the models define some of the variables differently. Barth et al. (2008) divide ACC and CFO with the end of year total assets, but (Dimitropoulos et al., 2016) use lagged total assets to deflate these variables. The two models also define the variable leverage (LEV) differently. Leverage is defined as the ratio between total liabilities and end-of-year book value of equity in the analysis of Barth et al. (2008). Dimitropoulos et al. (2016) define leverage as the ratio of total liabilities to total assets in their analysis.

Despite the differences both models indicate that English football smooth their earnings. However, the results on income smoothing in the two separate leagues the results are not consistent. The conclusion based on the Dimitropoulos et al. (2016) is that both the Premier League and the Championship clubs manage their earnings through income smoothing. The discrepancy between the results could be due to differences in the models and too few

[24] League participation is defined as which league a club compete in in a given season (the overview is given in Appendix II).

observations. The sample constitutes of 196 observation. 110 of these are from the Premier League and 86 from the Championship.

One of the novel hypotheses in the study was whether clubs from the Championship engage more in earnings management than the Premier League clubs. The hypothesis of thesis is not supported by the empirical results neither from the accrual management or income smoothing models. The Fisher's Z-transformation was used to test whether there are significant differences between the Spearman correlations which would indicate that one of the leagues engage more in income smoothing. However, the differences in the Spearman correlations were not significant, therefore the conclusion is that the Championship clubs dot engage in more earnings management.

The previous research has demonstrated that financially distressed companies have more incentives to engage in earnings management (Dimitropoulos et al., 2016). The results in this study indicated that the clubs competing in the Championship are in a dire financial position. So, it is surprising that the results do not support the hypothesis. One possible explanation is that the Championship clubs do not have many opportunities to manage earnings through accruals precisely because of their demanding situation as (Dechow et al., 2010). However, the Championship clubs may also manage their earnings through real economic transactions. The example in chapter four about Derby County selling its stadium to its owner, thus achieving compliance with the P&S rules is a case of a Championship club using real earnings management.

7.2.2 WAGE EXPENDITURE

The empirical results support the hypothesis that clubs with higher wages to revenue engage in more earnings management. The motivation to manage earnings when the wages to revenue ratio is high can be explained with the financial fair play regulations. Players' wages are considered as relevant costs in the break-even calculations according to the FFP and P&S rules (English Football League, 2020a, Premier League, 2019, UEFA, 2019). Therefore, it is not surprising that clubs with higher wages to revenue ratio may be inclined to manage their earnings to comply with the FFP rules.

The result illustrates how football clubs try to satisfy two incompatible aims which results in reduced accounting quality as demonstrated by Dimitropoulos et al. (2016). Football clubs are win maximisers (Garcia-del-Barrio and Szymanski, 2009), but winning football games requires investments in players (Szymanski, 2015). The good players that can win the football games in

top football cost a lot money because playing talent is a scarce asset (Franck, 2014). Yet, the football clubs are obliged to comply with the financial rules. The regulatory organs in the football industry are strong stakeholders that can affect the clubs' achievement of sporting objectives by imposing sanctions for breaching the FFP rules.

The clubs have different risk preferences compared to the regulatory organs. The regulatory organs aim for long-term stability. However, the clubs are willing to take risks to secure promotion to a higher league or avoid relegation to lower leagues (Buraimo et al., 2006). Thus, the football clubs in England seem to be willing to sacrifice the quality of accounting information in order to achieve sporting success.

Earnings management corrodes the quality of the accounting information that the football clubs present to the external world. The football clubs have incentives to manage their earnings because of goal incongruence between the clubs and the regulatory organs. According to Schubert (2014) is the win-maximising nature of football clubs the cause for agency problems in the relationship between the football clubs and the regulatory organs. Football clubs are win maximisers that are willing to take risks to achieve their sporting goals (Buraimo et al., 2006), but the regulatory organs aim to reduce the spending of the football clubs. Therefore, the clubs may manage their earnings to achieve their sporting goals.

7.2.3 CONTROL VARIABLES

Several control variables were used in the regression analysis based on the research by Dimitropoulos et al. (2016).

Growth in revenues has a positive effect of discretionary accruals, and therefore on earnings management which is in line with prior research (Dimitropoulos, 2011, Dimitropoulos et al., 2016). Dechow et al. (2010) explain that companies that experience higher growth simply have more opportunities to engage in earnings management.

The variable of growth in revenue is somewhat problematic in the current study. The descriptive statistics suggest that some clubs have experienced notable growth in revenues, meanwhile some clubs have had large reductions in revenues. The explanation could be that the sample contains clubs that have been either relegated from or promoted to the Premier League during the research period. If a club is promoted, then the reward is a surge in the revenues (Szymanski, 2015). A similar logic can be applied to the clubs that are relegated from the Premier League. The growth in revenue is lower in the Championship clubs. The number is in fact negative, it means that the revenues are in average reduced by 3%. It is not a surprising result given that

clubs that are relegated to the Championship experience a decrease in revenues. So, the numbers for growth in revenues could be partially "blown up" by the promotion to and relegation from the Premier League.

The univariate analysis demonstrated that the growth in revenues was significantly higher in the Premier League than the Championship. The growth in revenues was over 50% (table 6.1) in the Premier League against the reduction of revenues by 3% in the Championship. Following the argumentation that the increase and reduction of revenues is partially explained by the promotion and relegation, then the results confirm that getting promoted to the Premier League results in a surge in revenues. The parachute payments could be the reason why the reduction of revenues in the Championship is rather modest.

Players' registrations are capitalised as intangible assets in the clubs' balances (Rowbottom, 2002). The results of the study demonstrate that the level of intangible assets is positively associated with earnings management which is in accordance with previous research (Dimitropoulos, 2011, Dimitropoulos et al., 2016). The variable of intangible assets has a positive significant when estimated with all three methods: pooled regression, GLS fixed and random effects models.

Based on previous literature we can assume that football clubs may manage their earnings through intangible assets for two reasons: players and agents' negotiation power (Dimitropoulos et al., 2016) and the FFP regulations (Walker, 2013). For example, the clubs may fail to record the impairment costs on players' registrations to protect their negotiation power in players' sales, according to Dimitropoulos et al. (2016). It is in the interest of football clubs that there is some information asymmetry between the parties that engage in the sale of football players. A club may not want the opposite parties to know how they value their players.

Risaliti and Verona (2013) argue that clubs may manage earnings through the intangible assets to mask losses and negative equity. Failure to record impairment costs have two effects on the accounting information in the financial reports. Firstly, the profit and loss account present higher profit or less negative loss. Either way, the annual result is improved. Secondly, overvalued players' registrations improve shareholders' equity in the balance. Costs related to players' registrations are included in the break-even calculations of both UEFA and domestic financial fair play regulations (English Football League, 2020a, Premier League, 2017, UEFA, 2019). This provides an incentive to not to register impairment costs on players' registrations.

The prior literature on earnings management in European football industry have demonstrated that higher operating cash flows are associated with less earnings management (Dimitropoulos et al., 2016).The results of the current study confirm that the same applies to English football clubs. Clubs that use a big-4 company as an external auditor engage less in earnings management which is supported by prior research on earnings management.

The firm size is associated with higher earnings quality and thus less earnings management (Dechow et al., 2010). The results of this study indicate that the size of football club have no significant effect on discretionary accruals which the opposite of what Dimitropoulos et al. (2016) detected in European football. The authors concluded that larger football clubs engage less in earnings management.

High leverage has been shown to have a positive effect on the discretionary accruals in previous research on European football (Dimitropoulos, 2011). Dimitropoulos et al. (2016) found that leverage had a positive, but non-significant effect on abnormal accruals, and thus on earnings management. However, the results of the current thesis suggest that leverage has a negative and non-significant effect on discretionary accruals. The need to satisfy loan covenants is considered as a motivation for earnings management (Walker, 2013). Yet, Deloitte (2018) reports that a large portion of loans in both the Premier League and the Championship are interest-free called soft loans by owners. This could explain the non-significant effect of leverage in the English football clubs. Although the clubs are highly leveraged and clubs in the sample have in average negative equity, leverage does not have an effect on earnings management possibly because loan covenants do not propose an issue for the football clubs. The negative coefficient for the leverage variable suggests that highly leveraged football clubs in England have fewer incentives to manage earnings because these clubs are bailed out by their owners.

7.3 LIMITATIONS OF THE STUDY

The study has some limitations. The limitations related to methods used in the analysis are briefly discussed in the subsection 5.5 on reliability and validity of the research project.

The sample size of 28 clubs is rather small summing up to 196 firm-year observations over 7 seasons. There are two possibilities to increase the sample size: to increase the number of football clubs in the study or to use a longer research period. The latter was not favourable because it would not have been optimal to use the pre-FFP seasons in the sample due to possible bias in data. Including the 2018-19 season was unfavourable because not all football clubs had

published their annual financial reports by the time of data collection. More football clubs could have been added to the sample by including clubs that participate in League 1 and 2 in England. However, the clubs in the two lowest leagues in the English professional league system operate in completely different conditions. So, the sample size of 28 was the most optimal and achievable given the context. Several trade-offs and compromises had to be made during the research process.

As mentioned in the methods chapter, the sample is not homogenous. The fixed effects model supports it since the results show significant club-specific effects on discretionary accruals. Although Ball and Shivakumar (2005) advise against using both consolidated group accounts and unconsolidated company accounts in research, it was not achievable because of football clubs in England are simply not a homogenous group of companies.

The clubs that were excluded from the study could indicate that the sample is an uneven representation of the football clubs in England. The clubs were excluded due to complicated organisational structures which made obtaining relevant information impossible. Ball and Shivakumar (2005) claim that consolidated group accounts can be manipulated. So, it is possible that the excluded clubs have presented their annual reports the way that it would make the job of an analyst complicated due to unavailability of data. The clubs can hide the earnings management activities with the help from complicated organisation structure. Acero et al. (2017) argues that there is a lack of transparency in the top 5 European football leagues because of the issues with the availability of information.

Some of the results apply only for English football clubs. For example, the positive effect of intangible assets or growth in revenues on discretionary accruals has been demonstrated in European football industry (Dimitropoulos et al., 2016). The results do not support the hypothesis that football clubs in lower leagues engage more in earnings management, but it does not mean that it not common in other lower leagues in Europe.

8 CONCLUSIONS

The aim of the thesis was to investigate earnings management in English football clubs. The sample consisted of 28 football clubs from the two highest football leagues – The Premier League and the Championship. The investigation period was seven seasons from the 2011-12 season to the 2017-18 season. Several statistical methods were used to evaluate the hypotheses proposed in chapter four. The descriptive statistics were used to get to know with the data, and correlation analysis was used to explore the relationship between the variables. Two proxies were used to assess the earnings management behaviour in the English football clubs: income smoothing and accrual management. In total three models were used to evaluate these proxies.

The results indicate that football clubs engage in earnings management. The significant correlation between the cash flow and accruals residuals suggest that the English clubs increase their accruals when the cash flows are failing. The study tested two novel hypotheses: whether league participation and wages to revenue ratio affect the level of earnings management. The empirical results do not indicate that the Championship clubs manage their earnings more than the Premier League clubs. The clubs with high wages to revenue ratio engage more in earnings management. The wage expenditure is related to sporting success; thus, the English football clubs appear to neglect the quality of accounting information to satisfy two contradicting objectives: the sporting success and compliance with the FFP rules.

The study confirmed that several factors that are known to have an effect on discretionary accruals also apply to the English football. For example, clubs with more positive operating cash flows engage less in earnings management, but growth in revenues is associated with a higher level of discretionary accruals.

8.1 IMPLICATIONS

The findings of the study have some implications for the stakeholders of football clubs. Firstly, the regulatory organs should be aware of the goal incongruence between the need to win football games and the compliance with the financial rules. The clubs may act opportunistically and choose accounting rules that reduce the quality of the accounting information.

The study also has some implications to any football supporter. Us football fans are rarely satisfied; we crave for new signings and sporting success. However, it is important to understand that the clubs' hands are tied, and it is more difficult now for the clubs to sign

established stars of the game. Understanding the complexity of the context that football clubs operate in may make some supporters appreciate the beautiful game even more.

8.2 SUGGESTIONS FOR FURTHER RESEARCH

It was previously mentioned briefly that real earnings management may be a futile future research project. The earnings can be managed by timing real economical transactions to make the firm seem more financially robust than it actually is. These economic transactions are not optimal in economic sense. So, it would be interesting to look at how football clubs use real economic transactions to manage earnings. Real earnings management can be studied both quantitatively and qualitatively. There are proposed some models to measure the real earnings management which means studying the sample as a whole. However, there is a possibility to conduct a qualitative study by looking at how the football clubs in fact implement the real earnings management (also, which transactions seem to be suspicious or dodgy; which clubs have been charged with the breach of FFP rules).

9 REFERENCES

ACERO, I., SERRANO, R. & DIMITROPOULOS, P. 2017. Ownership structure and financial performance in European football. *Corporate Governance,* 17**,** 511-523.

BALL, R. & SHIVAKUMAR, L. 2005. Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of Accounting and Economics,* 39**,** 83-128.

BARTH, M. E., LANDSMAN, W. R. & LANG, M. H. 2008. International Accounting Standards and Accounting Quality. *Journal of Accounting Research,* 46**,** 467-498.

BELL, E., BRYMAN, A. & HARLEY, B. 2019. *Business research methods,* Oxford, Oxford University Press.

BROWN, A., CRABBE, T. & MELLOR, G. 2006. ENGLISH PROFESSIONAL FOOTBALL AND ITS COMMUNITIES. *International Review of Modern Sociology,* 32**,** 159-179.

BUCHHOLZ, F. & LOPATTA, K. 2017. Stakeholder salience of economic investors on professional football clubs in Europe. *European Sport Management Quarterly,* 17**,** 506-530.

BURAIMO, B., SIMMONS, R. & SZYMANSKI, S. 2006. English Football. *Journal of Sports Economics,* 7**,** 29-46.

CAMPA, D. 2019. Earnings management strategies during financial difficulties: A comparison between listed and unlisted French companies. *Research in International Business and Finance,* 50**,** 457-471.

CHELSEA FC 2017. Chelsea FC PLC Annual report and financial statements for the year ended 30 June 2017.

CITY FOOTBALL GROUP LIMITED 2019. City Football Group Limited Director's report and financial statements for the year ended 30 June 2018.

DECHOW, P., GE, W. & SCHRAND, C. 2010. Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics,* 50**,** 344-401.

DECHOW, P. M., SLOAN, R. G. & SWEENEY, A. P. 1995. Detecting earnings management. *Accounting review,* 70**,** 193-226.

DELOITTE 2018. Roar power: Annual Review of Football Finance 2018. https://www2.deloitte.com/bg/en/pages/deloitte-analytics/articles/deloitte-football-finance-2018.html.

DIMITROPOULOS, P. 2011. Corporate Governance and Earnings Management in the European Football Industry. *European Sport Management Quarterly,* 11**,** 495-523.

DIMITROPOULOS, P., LEVENTIS, S. & DEDOULIS, E. 2016. Managing the European football industry: UEFA's regulatory intervention and the impact on accounting quality. *European Sport Management Quarterly,* 16**,** 459-486.

DIMITROPOULOS, P. E. & KORONIOS, K. 2018. Earnings Persistence of European Football Clubs under UEFA's FFP. *International Journal of Financial Studies,* 6**,** 43.

DOBSON, S. & GODDARD, J. 2001. *The economics of football,* Cambridge, Cambridge University Press.

DONALDSON, T. & PRESTON, L. E. 1995. The stakeholder theory of the corporation: concepts, evidence, and implications. *Academy of Management review,* 20**,** 65-91.

EISENHARDT, K. M. 1989. Agency Theory: An Assessment and Review. *Academy of Management Review,* 14**,** 57-74.

ELLIOTT, D. & SMITH, D. 2006. Cultural Readjustment After Crisis: Regulation and Learning from Crisis Within the UK Soccer Industry*. *Journal of Management Studies,* 43**,** 289-317.

EMERY, R. & WEED, M. 2006. Fighting for survival? The financial management of football clubs outside the 'top flight' in England. *Managing Leisure,* 11**,** 1-21.

ENGLISH FOOTBALL LEAGUE. 2020a. *Appendix 5 - Financial fair play rules* [Online]. Available: https://www.efl.com/-more/governance/efl-rules--regulations/appendix-5---financial-fair-play-regulations/ [Accessed February 11 2020].

ENGLISH FOOTBALL LEAGUE. 2020b. *Our Competitions* [Online]. Available: https://www.efl.com/-more/our-competitions/ [Accessed June 10 2020].

FRANCK, E. 2014. Financial Fair Play in European Club Football: What Is It All About? *International Journal of Sport Finance,* 9**,** 193-217.

GARCIA-DEL-BARRIO, P. & SZYMANSKI, S. 2009. Goal! Profit maximization versus win maximization in soccer. *Review of industrial organization,* 34**,** 45-68.

GRATTON, C. 2000. The peculiar economics of english professional football. *Soccer & Society,* 1**,** 11-28.

HALL, S., SZYMANSKI, S. & ZIMBALIST, A. S. 2002. Testing Causality Between Team Performance and Payroll: The Cases of Major League Baseball and English Soccer. *Journal of Sports Economics,* 3**,** 149-168.

HAMIL, S. & WALTERS, G. 2010. Financial performance in English professional football: 'an inconvenient truth'. *Soccer & Society,* 11**,** 354-372.

HEALY, P. M. & WAHLEN, J. M. 1999. A review of the earnings management literature and its implications for standard setting. *Accounting Horizons,* 13**,** 365-383.

HILL, R. C., LIM, G. C. & GRIFFITHS, W. E. 2012. *Principles of econometrics,* Hoboken, N.J, Wiley.

HOPWOOD, A. G. 1990. Accounting and Organisation Change. *Accounting, Auditing & Accountability Journal,* 3.

JONES, J. J. 1991. Earnings Management During Import Relief Investigations. *Journal of Accounting Research,* 29**,** 193-228.

JONES, S. 2011. Does the Capitalization of Intangible Assets Increase the Predictability of Corporate Failure? *Accounting Horizons,* 25**,** 41-70.

KENNEDY, P. 2013. 'Left wing' supporter movements and the political economy of football. *Soccer & Society,* 14**,** 277-290.

KOTHARI, S. P., LEONE, A. J. & WASLEY, C. E. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics,* 39**,** 163-197.

MCNICHOLS, M. F. 2000. Research design issues in earnings management studies. *Journal of Accounting and Public Policy,* 19**,** 313-345.

MELLEMVIK, F., MONSEN, N. & OLSON, O. 1988. Functions of accounting — a discussion. *Scandinavian Journal of Management,* 4**,** 101-119.

MITCHELL, R. K., AGLE, B. R. & WOOD, D. J. 1997. Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management. The Academy of Management Review,* 22**,** 853-886.

MORROW, S. 1996. Football Players as Human Assets. Measurement as the Critical Factor in Asset Recognition: A Case Study Investigation. *Journal of Human Resource Costing & Accounting,* 1**,** 75-97.

MORROW, S. 2013. Football club financial reporting: time for a new model? *Sport, Business and Management,* 3**,** 297-311.

NEALE, W. C. 1964. The Peculiar Economics of Professional Sports: A Contribution to the Theory of the Firm in Sporting Competition and in Market Competition. *The Quarterly Journal of Economics,* 78**,** 1-14.

NOLL, R. G. 2002. The Economics of Promotion and Relegation in Sports Leagues:The Case of English Football. *Journal of Sports Economics,* 3**,** 169-203.

PEETERS, T. & SZYMANSKI, S. 2014. Financial fair play in European football. *Economic Policy,* 29**,** 343-390.

PREMIER LEAGUE. 2017. *What is Financial Fair Play?* [Online]. Available: https://www.premierleague.com/news/102374 [Accessed June 9 2020].

PREMIER LEAGUE. 2019. *Premier League Handbook Season 2019-20* [Online]. Available: https://resources.premierleague.com/premierleague/document/2020/06/23/d26d1955-3ffe-4e62-a861-9a4ecf405e0e/2019-20-PL-Handbook-230620.pdf [Accessed May 30 2020].

PREMIER LEAGUE. 2020a. *About the Premier League* [Online]. Available: https://www.premierleague.com/about [Accessed April 14 2020].

PREMIER LEAGUE. 2020b. *Tables* [Online]. Available: https://www.premierleague.com/tables [Accessed March 1 2020].

RINGDAL, K. 2018. *Enhet og mangfold : samfunnsvitenskapelig forskning og kvantitativ metode,* Bergen, Fagbokforl.

RISALITI, G. & VERONA, R. 2013. Players' registration rights in the financial statements of the leading Italian clubs: A survey of Inter, Juventus, Lazio, Milan and Roma. *Accounting, Auditing & Accountability Journal,* 26**,** 16-47.

ROBINSON, T. R., HENRY, E., PIRIE, W. L. & BROIHAHN, M. A. 2015. International financial statement analysis. 3rd ed. ed. Hoboken, N.J.: Wiley.

ROWBOTTOM, N. 2002. The application of intangible asset accounting and discretionary policy choices in the UK football industry. *The British Accounting Review,* 34**,** 335-355.

SCAFARTO, V. & DIMITROPOULOS, P. 2018. Human capital and financial performance in professional football: the role of governance mechanisms. *Corporate Governance,* 18**,** 289-316.

SCHUBERT, M. 2014. Potential agency problems in European club football? The case of UEFA Financial Fair Play. *Sport, Business and Management,* 4**,** 336-350.

SENAUX, B. 2008. A stakeholder approach to football club governance. *Int. J. Sport Management and Marketing,* 4**,** 4-17.

SKY SPORTS. 2020. *Championship table* [Online]. Available: https://www.skysports.com/championship-table/2011 [Accessed March 5 2020].

SLOANE, P. 1971. The Economics of Professional Football: The Football Club as a Utility Maximiser. *Scottish Journal of Political Economy,* 18**,** 121-46.

SOLBERG, H. A. & HAUGEN, K. K. 2010. European club football: why enormous revenues are not enough? *Sport in Society,* 13**,** 329-343.

STUDENMUND, A. H. & JOHNSON, B. K. 2017. *A Practical guide to using econometrics,* Upper Saddle River, Pearson.

SZYMANSKI, S. 2010. The Financial Crisis and English Football: The Dog That Will Not Bark. *International Journal of Sport Finance,* 5**,** 28-40.

SZYMANSKI, S. 2014. Fair Is Foul: A Critical Analysis of UEFA Financial Fair Play. *International Journal of Sport Finance,* 9**,** 218-229.

SZYMANSKI, S. 2015. *Money and Football: A Soccernomics Guide: Why Chievo Verona, Unterhaching, and Scunthorpe United Will Never Win the Champions' League, Why Manchester City, Roma, and Paris St. Germain Can, and Why Real Madrid, Bayern Munich, and Manchester United Cannot Be Stopped,* Nation Books.

TAYLOR, M. 2001. Beyond the Maximum Wage: The Earnings of Football Professionals in England, 1900-39. *Soccer & Society,* 2**,** 101-118.

THE INDEPENDENT. 2020. *Pep Guardiola reveals why the Premier League has made him stronger as a manager* [Online]. Available: https://www.independent.co.uk/sport/football/premier-league/manchester-city-news-pep-guardiola-premier-league-stronger-vs-west-ham-latest-a8645996.html [Accessed February 5, 2020 2020].

UEFA. 2015. *Financial fair play: all you need to know* [Online]. Available: https://www.uefa.com/community/news/newsid=2064391.html [Accessed June 1 2020].

UEFA. 2019. *Financial Fair Play* [Online]. Available: https://www.uefa.com/insideuefa/protecting-the-game/financial-fair-play/ [Accessed June 1 2020].

WALKER, M. 2013. How far can we trust earnings numbers? What research tells us about earnings management. *Accounting and Business Research,* 43**,** 445-481.

WALTERS, G. 2011. The implementation of a stakeholder management strategy during stadium development: a case study of Arsenal Football Club and the Emirates Stadium. *Managing Leisure,* 16**,** 49-64.

WILSON, R., PLUMLEY, D. & RAMCHANDANI, G. 2013. The relationship between ownership structure and club performance in the English Premier League. *Sport, Business and Management,* 3**,** 19-36.

WILSON, R., RAMCHANDANI, G. & PLUMLEY, D. 2018. Parachute Payments in English Football: Softening the Landing or Distorting the Balance? *Journal of Global Sport Management,* 3**,** 351-368.

ZANG, A. Y. 2012. Evidence on the Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management. *The Accounting Review,* 87**,** 675-703.

Table II.1. Overview of the football clubs.

Club	Company's name	Ownership	End of fiscal year	Auditor	Accounting rules	Annual reports
Arsenal	Arsenal Holdings PLC	Foreign	May 31st	Deloitte	UK GAAP	Consolidated
Aston Villa	Recon Sports Limited[1]	Foreign	May 31st	PwC	UK GAAP	Consolidated
Birmingham City	Birmingham City PLC	Foreign[2]	June 30th	Edwards	IFRS	Consolidated
Brighton & Hove Albion	Brighton & Hove Albion Holdings Limited	UK	June 30th	BDO[3]	UK GAAP	Consolidated
Burnley	Burnley FC Holdings Limited	UK	June 30th	Cassons Audit Services[4]	UK GAAP	Consolidated
Cardiff	Cardiff City Football Club (Holdings) Limited	Foreign	June 30th	Moore Stephens LLP[5]	IFRS[6]	Consolidated
Chelsea	Chelsea FC PLC	Foreign	June 30th	KPMG	UK GAAP	Consolidated
Crystal Palace	CPFC 2010 Limited	UK	June 30th	RSM UK Audit LLP	UK GAAP	Consolidated
Derby County	Derby County Football Club Limited	UK[7]	June 30th	Smith Cooper LLP[8]	UK GAAP	Company
Everton	Everton Football Club Company Limited	UK[9]	May 31st	Deloitte	UK GAAP	Consolidated
Fulham	Fulham Football Leisure Limited	Foreign	June 30th	KPMG[10]	UK GAAP	Consolidated
Hull City	Hull City Tigers Limited	UK	June 30th[11]	Jacksons	UK GAAP	Company
Ipswich Town	Ipswich Town Football Club Company Limited	UK	June 30th	KPMG	UK GAAP	Consolidated
Leeds United	Leeds United Football Club Limited	Foreign[12]	June 30th	Gibson Booth[13]	UK GAAP	Consolidated
Leicester City	Leicester City Football Club Limited	Foreign	May 31st	PwC	UK GAAP	Company
Liverpool	The Liverpool Football Club and Athletic Grounds Ltd	Foreign	May 31st	Ernst & Young[14]	UK GAAP	Consolidated[15]
Manchester United	Manchester United PLC	Foreign	June 30th	PwC	IFRS	Consolidated
Newcastle United	Newcastle United Limited	UK	June 30th	Grant Thornton UK LLP[16]	UK GAAP	Consolidated
Norwich	Norwich City Football Club PLC	UK	June 30th[17]	BDO	UK GAAP	Consolidated
Nottingham Forest	Nottingham Forest Football Club Limited	Foreign[18]	May 31st	Baldwin Audit Services Ltd[19]	UK GAAP	Company[20]
Queens Park Rangers	QPR Holdings Limited	Foreign	May 31st	Moore Stephens LLP[21]	UK GAAP	Consolidated
Reading	The Reading Football Club Limited	Foreign[12]	June 30th	Myers Clark	UK GAAP	Company
Southampton	St Mary's Football Group Limited[22]	Foreign	June 30th	BDO	UK GAAP	Consolidated
Stoke City	Stoke City Football Club Limited	UK	May 31st	RSM UK Audit LLP	UK GAAP	Company
Swansea	Swansea City Football 2002 Limited	Foreign[23]	July 31st[24]	BDO[25]	UK GAAP	Consolidated
Tottenham Hotspur	Tottenham Hotspur Limited	UK	June 30th	Deloitte	IFRS	Consolidated
Watford	The Watford Association Football Club Limited	Foreign	June 30th	Myers Clark	UK GAAP	Company
West Ham United	WH Holding Limited	UK	May 31st	PwC	UK GAAP	Consolidated

[1] New ownership from the 2016-17 season, name until then Reform Acquisitions Limited.
[2] A new owner from the 2016-17 season.
[3] BDO since the 2017-18 season; the previous auditor was Mazars LLP.
[4] KPMG until the 2012-13 season.
[5] Chantrey Vellacott DFK LLP until the 2013-14 season.
[6] IFRS used from the 2012-13 season.
[7] The previous American owners sold the club to M Morris in September 2015.
[8] Since the 2012-13 season.
[9] Ownership change from the 2015-16 season.
[10] PKF (UK) LLP was the auditor during the 2011-12 season.
[11] The end of the fiscal year was changed from the 31st of July to the 30th of June from the 2013-14 season.
[12] Several changes in ownership during this period.
[13] Baker Tilly UK Audit LLP until the 2012-13 season.
[14] Since 2017-18; previously KPMG.
[15] Liverpool presents consolidated annual reports since the 2017-18 season.
[16] Ernst & Young until the 2014-15 season.
[17] Since the 2012-13 season; previously May 31st.
[18] Foreign ownership since the 2012-13 season.
[19] Since 2013-14; previously KPMG.
[20] Consolidated annual reports until the 2012-13 season.
[21] Chantrey Vellacott LLP until the 2013-14 season.
[22] DMWSL 613 Limited until 2012-13.
[23] British owners until 2014-15.
[24] Since the 2014-15 season; previously May 31st.
[25] Since the 2015-16 season; previously KPMG and Gerald Thomas & Co.

Table II.1. League participation.

Club	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Arsenal*	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Aston Villa	Premier League	Premier League	Premier League	Premier League	Premier League	Championship	Championship
Birmingham City×	Championship	Championship	Championship	Championship	Championship	Championship	Championship
Brighton & Hove Albion	Championship	Championship	Championship	Championship	Championship	Championship	Premier League
Burnley	Championship	Championship	Championship	Premier League	Championship	Premier League	Premier League
Cardiff	Championship	Championship	Premier League	Championship	Championship	Championship	Championship
Chelsea*	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Crystal Palace	Championship	Championship	Premier League	Premier League	Premier League	Premier League	Premier League
Derby County×	Championship	Championship	Championship	Championship	Championship	Championship	Championship
Everton*	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Fulham	Premier League	Premier League	Premier League	Championship	Championship	Championship	Championship
Hull City	Championship	Championship	Premier League	Premier League	Championship	Premier League	Championship
Ipswich Town×	Championship	Championship	Championship	Championship	Championship	Championship	Championship
Leeds United×	Championship	Championship	Championship	Championship	Championship	Championship	Championship
Leicester City	Championship	Championship	Championship	Premier League	Premier League	Premier League	Premier League
Liverpool*	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Manchester United*	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Newcastle United	Premier League	Premier League	Premier League	Premier League	Premier League	Championship	Premier League
Norwich	Premier League	Premier League	Premier League	Championship	Premier League	Championship	Championship
Nottingham Forest×	Championship	Championship	Championship	Championship	Championship	Championship	Championship
Queens Park Rangers	Premier League	Premier League	Championship	Premier League	Championship	Championship	Championship
Reading	Championship	Premier League	Championship	Championship	Championship	Championship	Championship
Southampton	Championship	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Stoke City*	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Swansea*	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Tottenham Hotspur*	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League
Watford	Championship	Championship	Championship	Championship	Premier League	Premier League	Premier League
West Ham United	Championship	Premier League	Premier League	Premier League	Premier League	Premier League	Premier League

* Premier League 2011-2018.

× Championship 2011-2018.

Unmarked clubs were either relegated from or promoted to the Premier League 2011-2018.

12 APPENDIX III VARIABLES

CF = cash flow from operating activities divided by end of year total assets.

CFO = cash flow from operating activities deflated by lagged total assets.

ACC_TA = total accruals divided by end of year total assets

ACC = total accruals divided by lagged total assets.

ΔREV = the change in net sales.

PLAYER = the level of player contacts reported in the annual report.

ROA = return on assets at the end of fiscal year.

TA = total assets at the end of the fiscal year.

SIZE = the natural logarithm of end-of-year total assets.

t = the season.

i = the club.

GROWTH/GR = percentage change in sales.

LEV = end of year total liabilities divided by end of the year equity book value (Barth et al. 2008).

LEV = the ratio of total liabilities to end-of-year total assets (Dimitropoulos et al. (2016).

DISSUE = percentage change in total liabilities.

TURN = sales divided by end of the year total assets.

IA = intangible assets divided by lagged total assets.

WREV = wages to revenue ratio.

LIST = a dummy variable receiving (1) when a club is listed on the stock market.

LEAGUE = a dummy receiving (1) if a club is in the Premier League, and (0) otherwise.

AUD = a dummy receiving (1) if Big-4 auditor, and (0) otherwise.

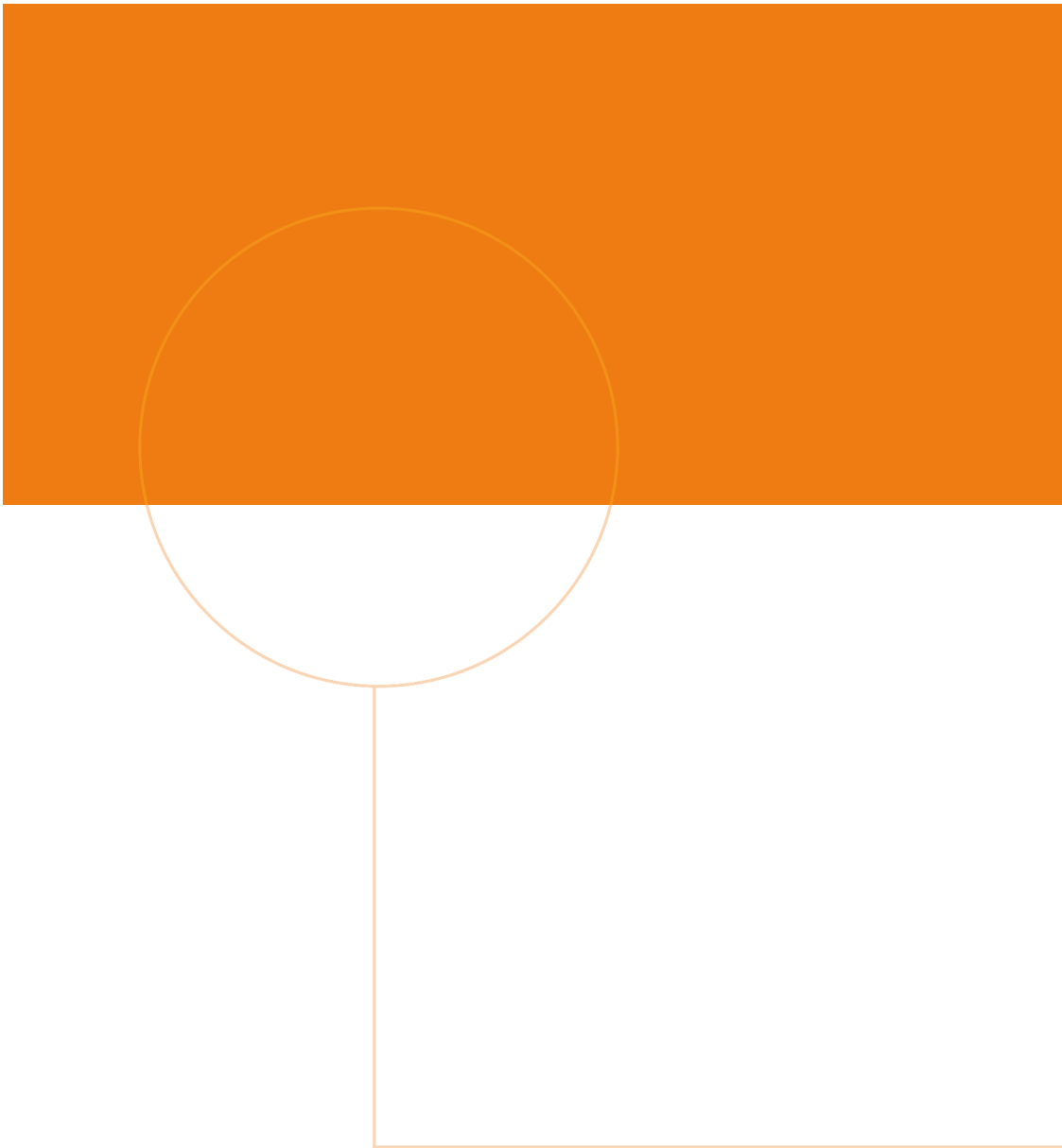
DFOWN = a dummy receiving (1) if foreign ownership, and (0) otherwise.

13 APPENDIX IV STATA

AN EXAMPLE OF COMMANDS FOR FISHER'S Z-TRANSFORMATION IN STATA

The commands were used to evaluate whether the differences in the Spearman correlations between the Premier League and the Championship are significant based on (Dimitropoulos et al., 2016).

```
. spearman CFresPL ACCresPL

 Number of obs =     110
Spearman's rho =      -0.1712

Test of Ho: CFresPL and ACCresPL are independent
    Prob > |t| =       0.0737

. scalar r1=r(rho)

. scalar N1=r(N)

. spearman CHresCH ACCresCH

 Number of obs =      86
Spearman's rho =      -0.1840

Test of Ho: CHresCH and ACCresCH are independent
    Prob > |t| =       0.0899

. scalar r2=r(rho)

. scalar N2=r(N)



. . scalar mu_Z = atanh(r2) - atanh(r1)

.
. . scalar sigma_Z = sqrt(1/(N1-3)+1/(N2-3))

.
. . scalar Z = mu_Z/sigma_Z

.
. . scalar pvalue = 2*normal(-abs(Z))

.
. . display "Z statistic = " %8.4g Z _n "P-value = " %8.4g pvalue
Z statistic =  -.09023
P-value =    .9281
```



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