UNIVERSITY OF LJUBLJANA
SCHOOL OF ECONOMICS AND BUSINESS

MASTER'S THESIS

VALUATION OF COMPANIES IN THE FOOTBALL INDUSTRY: THE CASE OF NEWCASTLE UNITED FOOTBALL CLUB

Ljubljana, October 11th, 2019 ROK STIBRIČ

AUTHORSHIP STATEMENT

The undersigned Rok Stibrič, a student at the University of Ljubljana, School of Economics and Business, (hereafter: SEBLU), author of this written final work of studies with the title Valuation of companies in the football industry: The case of Newcastle United Football Club, prepared under supervision of prof. dr. Aljoša Valentinčič

D E C L A R E

1. this written final work of studies to be based on the results of my own research;

2. the printed form of this written final work of studies to be identical to its electronic form;

3. the text of this written final work of studies to be language-edited and technically in adherence with the SEBLU's Technical Guidelines for Written Works, which means that I cited and / or quoted works and opinions of other authors in this written final work of studies in accordance with the SEBLU's Technical Guidelines for Written Works;

4. to be aware of the fact that plagiarism (in written or graphical form) is a criminal offence and can be prosecuted in accordance with the Criminal Code of the Republic of Slovenia;

5. to be aware of the consequences a proven plagiarism charge based on the this written final work could have for my status at the SEBLU in accordance with the relevant SEBLU Rules;

6. to have obtained all the necessary permits to use the data and works of other authors which are (in written or graphical form) referred to in this written final work of studies and to have clearly marked them;

7. to have acted in accordance with ethical principles during the preparation of this written final work of studies and to have, where necessary, obtained permission of the Ethics Committee;

8. my consent to use the electronic form of this written final work of studies for the detection of content similarity with other written works, using similarity detection software that is connected with the SEBLU Study Information System;

9. to transfer to the University of Ljubljana free of charge, non-exclusively, geographically and time-wise unlimited the right of saving this written final work of studies in the electronic form, the right of its reproduction, as well as the right of making this written final work of studies available to the public on the World Wide Web via the Repository of the University of Ljubljana;

10. my consent to publication of my personal data that are included in this written final work of studies and in this declaration, when this written final work of studies is published.

Ljubljana, October 11th, 2019 Author's signature: _____

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ABBREVIATIONS

Big 6 – Arsenal, Chelsea, Manchester City, Manchester United, Liverpool, Tottenham

Bn – Billion

BV – Book value

CAGR – Compounded annual growth rate

CAPEX – Capital expenditure

CAPM – Capital asset pricing model

CFG – City Football Group (holding company)

DCF – Discounted cash flows

EBIT – Earnings before interest and taxes

ECL – European Champions League

EPL – English Premier League

ERP – Equity risk premium

EUR – Euro currency

EV – Enterprise value

FA – Football Association

FCFF – Free cash flow to the firm

FCFE – Free cash flow to equity

FIFA – International Federation of Association Football

GBP – British pound currency

GGM – Gordon Growth Model

IAS – International Accounting Standards

IFRS – International Financial Reporting Standards

M&A – Mergers and acquisitions

mn – Million

P – Price

PGR – Perpetual growth rate

PV – Present value

RI – Residual income

SWOT – Strength, weaknesses, opportunities, threats

TV – Terminal value

UEFA – Union of European Football Associations

WACC – Weighted average cost of capital

WtR – Wages to Revenues ratio

YTM – Yield to maturity

INTRODUCTION

Although it may be the case that these are the most famous misquoted words attributed to former Liverpool manager Bill Shankly, Fifa (2010) published the following thought on its website: “Some people believe football is a matter of life and death, I am very disappointed with that attitude. I can assure you it is much, much more important than that.” Regardless of the fact whether Mr Shankly said these words or not, football is one of the most popular sports, attracting the attention of millions of people around the world.

The beginning of association football goes to 1863 in England when the representatives of couple of local clubs decided to sit down together and define the rules of the game (Goldblatt, 2008). Some decades later this sport turned into a multibillion industry. The ever present rivalry among football clubs and the desire to be the best in national and international competitions pushes the clubs to invest lots of funds in acquiring the best players and coaching staff. However, the success on the football pitches must also be supported by sound financial management of the club with aim to prevent financial distress as in historical cases of some clubs that ended in bankruptcy. Thus it is important to have adequate corporate governance principles in place, backed with investors who are willing to provide funds if necessary and promote the financial stability of football clubs.

In the light of the recent media reports regarding the potential sale (De Cosemo, 2019) of an English football club, the main purpose of this thesis is to provide the reader with an estimate of enterprise value of a private company through a case study of Newcastle United Football Club. Given the fact the club has not changed owners yet at the time of writing this thesis, I believe this information would be interesting for different stakeholders, particularly football fans and potential investors. It is expected the transaction will be done in the near future, especially when we take into account the recent mergers and acquisitions of companies (hereafter: M&A) in football sector and the owner’s willingness to sell the club.

Since Newcastle United is organized as a private company there were many challenges to overcome, including limited publicly available financial data. As private company valuation process varies for different private businesses, for example a barbershop and a large company with management board, the aim of this thesis is also to identify the appropriate techniques when it comes to valuation of a football club. Additionally, my goals (other than finding the enterprise value) are to estimate the weighted cost of capital for Newcastle United Football Club and offer support (or evidence to the contrary) for the supporters’ claims that the club is being poorly managed.

The main research question is answered through use of different valuation methods, supported by analysis of historical financial performance, sector trends and forecast of future prospects. The two sub-objectives are closely linked to the main objective and are therefore answered as a co-product of analysis.

This thesis is divided in six chapters and is structured as follows. After the introduction, the first chapter provides a theoretical overview of relevant valuation models – Discounted cash flows, Residual income, Relative valuation based on multiples of comparable publicly traded companies and comparable past transaction, and last but not least the Markham's multivariate approach. Since these models have their advantages and disadvantages, I also provide more colour on this topic. The aim of the first chapter is to provide clear understanding of underlying valuation theory that afterwards applied through the practical part of the thesis.

The second chapter focuses on a top-down analysis of the sector. By combining various sources of information, such as governing bodies, past research efforts, sector expert's views, media reports and similar I provide an overview of sector regulation and corporate governance trends in the European football. Additionally, I outline the motivation behind investing in this type of business. I continue with analysing the recent M&A trends, supported by most notable acquisition examples. The second chapter finishes with financial analysis of the European football sector, where particular focus is applied to English Premier League, a competition in which Newcastle United competes. Since officially disclosed data was scarce in some cases, I needed to rely on available information provided by providers of professional M&A services such as Mergermarket Limited and combine them with the relevant media reports that cover the football sector.

The third chapter includes analysis of Newcastle United from financial and strategic points of view. Financial performance, where key financial statements items are reviewed, is benchmarked to other clubs that participate in the English Premier League. Additionally, an explanation of accounting framework in case of transfers of football players to other clubs is provided. Supporters' claims that the club is being poorly managed are evaluated in this section. SWOT (strengths, weaknesses, opportunities, threats) analysis framework is used for strategic analysis, outlining the key internal and external factors that impact Newcastle United.

The fourth chapter is the valuation case study based on Newcastle United. Starting with overview of projected financials and the underlying assumptions, I continue with application of discounted cash flows approach and sensitivity analysis of changes in key variables. As one of the required valuation inputs, the estimate on weighted average cost is given. Residual income approach is the next used valuation method, followed by relative valuation based on comparable public companies and past transactions. Additionally, multivariate approach to valuation and its findings are presented. The chapter concludes with an overview of all valuation results that are presented in a football field chart. Last but not least, the answer to the key research question on the estimated fair value of Newcastle United is provided.

Limitations to valuation and potential recommendations for further research efforts are discussed in the fifth chapter. Finally, conclusion points based on findings of analyses and valuation results are presented in the last part of this thesis.

1 VALUATION THEORY OVERVIEW

Financial markets participants often face the common question when making investment decisions: What is the value of a particular asset? However, before answering this question with support of different asset valuation approaches, it is important to clarify what value actually is. Corporate finance theory considers several perspectives on meaning of value: *intrinsic value, fair market value, investment value* (Hitchner, 2011).

The term intrinsic value is used when referring to valuation of an asset by a hypothetical investor with complete understanding of the asset's characteristics. Fair market value is the price at which trade would happen between a seller and buyer where neither of the parties is compelled to act – they are informed about, willing and able to make a transaction. Since financial markets are not perfectly efficient, fair market values can diverge from their intrinsic values. In certain circumstances, for example, if potential synergies exist, a specific asset is worth more to a particular investor. Investment value term describes a situation when the price reflects investor's expectations and requirements, as well as potential synergies (Hitchner, 2011).

Corporate finance theory describes a wide range of models to value assets (Damodaran, 2002, p. 16). This thesis focuses on application of following models: discounted cash flow, relative valuation, residual income model, multivariate model. The first approach determines the asset's value as sum of the present value of all cash flows that will be received in the future. The second, relative valuation approach, determines asset's value in relation to the values of other comparable assets. The residual income approach is derived from the discounted dividend model and measures firm value from an equity-holder's and Economic Value Added perspectives (Pinto, Henry, Robinson & Stowe, 2010). Finally, as an alternative to traditional approaches, the multivariate model was developed specifically for valuation of football clubs and takes into account multiple variables that influence the club's value (Markham, 2013).

Although there are lots of similarities between public and private companies, an analyst faces additional challenge when valuing privately-held companies. There may be limited information available for valuation purposes because private companies are not so strictly governed by accounting and reporting standards. In addition, estimating risk parameters is more complicated since there are no observable market prices for equity (Damodaran, 2002, p. 928).

When selecting an approach for valuing a given company, an analyst should always take into consideration whether the model:

- Is suitable given the purpose of analysis
- Is appropriate based on the quality and availability of data
- Is consistent with the characteristics of the company that is subject of valuation

1.1 Discounted cash flow model

Before beginning with the valuation process, it is important to understand how the total firm value, i.e. enterprise value (hereafter EV) is computed. EV is the total market value of a firm's equity and debt, reduced for the value of cash and marketable securities that can be used for paying off the outstanding debt (Berk & DeMarzo, 2011, p. 27). The simplified equation 1 below describes this relationship:

$$Enterprise\ value = Market\ value\ of\ equity + Market\ value\ of\ debt - Cash \qquad (1)$$

A very popular valuation model used in practice is the discounted cash flow model (hereafter DCF) which determines the intrinsic value of a given company as sum of its expected future cash flows, discounted to the present value (PV) at the required rate of return (Brealey, Myers & Allen, 2011, p. 25). The following equation defines the calculation of the PV of future cash flows, where CF means cash flow, t denotes the year cash flow is received and r is the required rate of return:

$$Present\ value = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t} \qquad (2)$$

The DCF model is built on going concern principle which means we expect the firm to operate forever. This makes the cash flow projections very difficult to estimate for the period beyond the analysis timeline which is usually 3-5 years. Accordingly, we can make the valuation process more realistic by extending the second equation to a two-stage free cash flow model. The first stage resembles the period of variable cash flows with abnormal growth, whereas the second stage coincides with the period of constant growth and cash flows being generated in perpetuity. The sum of cash flows from the period beyond analysis forecast horizon is known as the terminal value (Brealey, Myers & Allen, 2011, p. 478). A general expression for the two-stage model is:

$$Present\ value = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t} + \frac{Terminal\ value}{(1+r)^n} \qquad (3)$$

A clear understanding of free cash flows and the ability to interpret the information correctly is required since free cash flows are not readily available data and need to be computed from financial statements. Free cash to the firm (hereafter FCFF) is the cash flow available to the firm's suppliers of capital, that is stockholders, bondholders and sometimes preferred stockholders, after all operating expenses have been paid and necessary working and fixed capital investments (i.e., capital expenditures) have been made. Another approach is the free cash flow to equity (FCFE) which is the cash flow available solely to the firm's stockholders after all operating expenses, capital expenditures, interest and principal payments have been made (Damodaran, 2002).

The DCF valuation heavily relies on expected future cash flows, growth and discount rates which makes the model vulnerable to uncertainty of its variables, especially for periods further in the future. Therefore, an analysis should be included to show how sensitive the valuation results are to changes in each of the model's inputs. Sensitivity analysis is an important technique that determines the effect on value of investment given a change in one input variable, all other variables held constant. A supplement to sensitivity analysis is scenario analysis which is a tool that computes the value of investment under a finite set of scenarios (e.g., optimistic, normal, pessimistic) where all underlying variables are changed simultaneously (Brigham & Daves, 2007).

Damodaran (2002) suggests using the DCF model for valuation in following cases:

- when companies pay low or no cash dividends
- the investor has discretion over the uses of free cash flow, i.e. has controlling stake
- when companies are levered and changes in capital structure are expected in the foreseeable future, especially if the company is acquisition target

In addition, the use of FCFF approach is favoured over FCFE when companies have negative FCFE and significant outstanding debt.

1.1.1 Determining FCFF and FCFE

FCFF, as mentioned before, is the cash flow available to all investors and can be calculated using the equation 4 below:

$$FCFF = EBIT * (1 - t) + Depreciation - CAPEX - \Delta NWC \quad (4)$$

Where EBIT is Earnings before interest and tax, t denotes the marginal corporate income tax rate, CAPEX is capital expenditure and ΔNWC means change in net working capital investment (Bodie, Kane & Marcus, 2011, p. 610).

Alternatively, an analyst can focus on cash flow available only to stockholders by calculating FCFE based on the following equation:

$$FCFE = FCFF - Interest\ expense * (1 - t) + Increase\ in\ net\ borrowings \quad (5)$$

Based on the equations 4 and 5 above we can observe that a change to capital structure has an impact on FCFE but not on FCFF. Increased leverage affects FCFE in the year the debt is issued since the FCFE will increase by the amount of newly issued debt. In the years after the debt is issued, the FCFE is reduced by the amount of after-tax interest expense.

1.1.2 Weighted average cost of capital

The firm's cost of capital is the rate of return required by the suppliers of capital – debtholders and equity investors – and can be seen as compensation for their contribution of capital. Therefore, the rate of return is measured as after-tax weighted average cost of capital (hereafter WACC). Market values of debt and equity are taken into account when determining the weights. The next equation describes the calculation of WACC:

$$WACC = \frac{E}{E+D} * k_e + \frac{D}{E+D} k_d(1-t) \qquad (6)$$

In this equation, k_e and k_d are the required return on equity and debt. Since firms can deduct their interest expenses for tax purposes it is important to also include the term (1 - t), where t denotes the marginal corporate income tax rate, that reflects the cost of debt on after tax basis. D and E correspond to the market values of debt and equity, respectively. Occasionally, firms deviate from their optimal capital structure for various reasons. Thus, it is important to use optimal target weights of equity and debt for valuation purposes (Koller, Goedhart & Wessels, 2015, p .294).

1.1.3 Cost of equity

The required return on equity of a particular firm can be estimated in many ways. Typical estimation tools include: Capital Asset Pricing Model (hereafter CAPM), multifactor models such as the Fama-French model, or a build-up method such as bond yield plus risk premium method (Damodaran, 2002; Hitchner, 2011, p. 183). Due to its simplicity and popularity among analysts in practice, CAPM is explained and used for valuation purposes in this thesis.

CAPM, a key element of modern financial theory, is an equilibrium model of the relationship between risk and return of a security. The security's expected return is based on its beta which is a measure of sensitivity in relation to the market-wide risk factors (Bodie, Kane & Marcus, 2011). These are the key assumptions underlying the CAPM (Bodie, Kane & Marcus, 2011, p. 281):

- financial markets are perfect and there are no taxes or transaction costs on security trades
- investors choose to hold only portfolios that yield maximum expected returns at a given level of risk, i.e. efficient portfolios
- investors have homogeneous expectations regarding the volatilities, correlations and expected return of securities

Equation 7 is used for calculation of required return on equity (k_e) under CAPM, where r_f denotes the risk-free rate and $E(r)_m$ is the expected return on market portfolio. The difference between the expected return on market portfolio and risk-free rate is known as the equity risk premium (ERP).

$$k_e = r_f + \beta * [E(r)_m - r_f] \qquad (7)$$

As shown in Equation 7, risk-free rate is one of the fundamental inputs to define the k_e. Contrary to some people's belief that the risk-free rate is given and easy to obtain, the reality shows this concept can be tricky and difficult to define and apply. This is why it is important to know how risk is measured in investments so that we can understand what makes an asset risk-free. Investors have their expectations on return they will make over given investment time horizon. However, the actual returns they make may be different from their expectations due to risk which can be defined as variation in actual returns around the expected return. Therefore, the actual returns should be always equal to the expected return for an investment to be risk-free. In order for this relation to hold true, two conditions have to be met. The first states there can be no default risk. Accordingly, only securities that qualify as such are the government bonds since the governments are in control of printing of money and they should be able to repay their debt at least in nominal terms. The second condition is there can be no reinvestment risk, meaning the fixed security must be a zero-coupon bond with maturity that matches the investor's investment horizon (Damodaran, 2008, p. 6).

As previously mentioned, beta is a measure of asset's sensitivity in relation to the market-wide risk factors. It is calculated as the covariance of the asset divided by the variance of the market portfolio. By applying this analogy, we can observe that assets that are riskier than average will have betas that are higher than 1 and the assets that are less risky than average will have betas which are less than 1. Simple "raw beta" can be obtained from ordinary least squares (OLS) regression of the return on the stock on the return of the market. It has been found that on average the beta value in a future period will be closer to the mean value of 1.0 (average systemic risk security) than to the value of the raw beta. Hence it makes sense to make an adjustment to the raw beta for the expected future reversal to the mean value. This adjustment is known as the Blume method, where following equation is applied (Brigham & Daves, 2007, p. 97):

$$Adjusted\ beta = \frac{2}{3} * Unadjusted\ beta + \frac{1}{3} * 1 \qquad (8)$$

It is not possible to estimate the beta of private company by using the OLS regression method because analysts do not have the access to series of market observations for non-public companies. However, the beta of non-public company can be indirectly estimated on basis of public peers' betas. Since public companies' betas reflect the actual capital structure of the firm, they are referred to as levered betas. With purpose to account for different capital structures, the initial beta needs to be unlevered and consequently adjusted for analysed company's financial leverage by using the Hamada formula, where β_U denotes the unlevered beta, β_E is the levered beta, D/E is the financial leverage and the apostrophe denotes the values of items of company that is the subject of analysis (Hitchner, 2011, p. 225):

$$\beta_U \approx \left[\frac{1}{1+D/E}\right] * \beta_E \qquad (9)$$

$$\beta'_E \approx [1 + {D'}/{E'})] * \beta_U \quad (10)$$

1.1.4 Cost of debt

Another component of the WACC equation is the cost of debt which is the cost of financing when a company takes a bank loan or issues a bond. Normally it is computed on an after-tax basis since interest payments are a tax-deductible expense, as shown in the equation 11.

$$r_d = pre - tax\ cost\ of\ debt * (1 - marginal\ tax\ rate) \quad (11)$$

When analysing investment-grade companies one can use the yield to maturity (hereafter YTM) of company's long-term, option free debt as a proxy for the company's cost of debt (Koller, Goedhart & Wessels, 2015, p. 290). YTM is the annual return that an investor earns on a bond if he or she buys the bond today and holds it until its maturity.

Sometimes firm's debt is not liquidly traded or reliable current market price of debt is not available. In such cases theory (Damodaran, 2002) suggests using debt-rating approach to estimate company's before-tax cost of debt. Using company's debt rating from a credit agency, analyst can estimate firm's before-tax cost of debt by comparing yield on rated bonds of similar companies for maturities that match the analysed company's existing debt. It is important to adjust the before-tax cost of debt for the effect of tax shield by applying the marginal tax rate.

Cost of debt for smaller or private companies is not easy to obtain as it is often the case there are no credit ratings available. In such situations Damodaran (2002, p. 285) suggests estimating a synthetic rating for a company based on its financial rations. As a first step, the analyst is required to compile financial characteristics within each rating class of rated companies. The next step would be to compute the interest coverage ratio (shown as equation 12) for the analysed company and compare it to the ones of the rated companies.

$$Interest\ Coverage\ Ratio = \frac{Earnings\ Before\ Interest\ and\ Taxes}{Interest\ Expense} \quad (12)$$

Based on this information the analyst then assigns a synthetic rating to the analysed company and determines the spread that needs to be added to the risk-free rate in order to estimate the firm's before-tax cost of debt. Finally, the adjustment for the tax shield is applied (1-marginal tax rate) to derive the company's after-tax cost of debt.

1.1.5 Estimating terminal value and growth rate

The final determinant of the DCF model is the terminal value (hereafter TV) that represents the value of the company in the distant future after the forecast period (Hitchner, 2011, p. 138). Financial analysts normally forecast company's financial performance for the next 3-

5 years. As we move further in the future periods, it becomes harder to predict the growth of a company. It is very unlikely that companies will be able to keep high growth in the distant future. Therefore, an analyst should impose a closure and estimate the sustainable growth rate (also called perpetuity growth rate - PGR) for a firm that will operate continuously or estimate its liquidation value (Damodaran, 2002). The same author mentions the terminal value can thus be estimated in following ways:

- Liquidation value
- Exit multiple
- Stable growth model

The liquidation value assumes the company will cease to exist and the value is often very different from the value of the company that follows the going concern principle (Graham & Dodd, 2009, p. 559). Since this thesis does not consider the liquidation of a football club this approach is not further explained. Exit multiple approach considers the asset will be worth some multiple of future earnings, revenues or book value (hereafter BV) at the end of the forecast period (Koller, Goedhart & Wessels, 2015, p. 264). This multiple can be estimated as today's industry trading average or median multiple. One needs to be careful when using this method since it is a combination of income and market approaches to company valuation and it may be difficult to support its use, however it can be used as a "sanity" check (Hitchner, 2011, p. 152). Stable growth model, also known as the Gordon growth model (hereafter GGM) assumes cash flows beyond the forecasted horizon will grow at a constant rate forever. An important factor having an impact on company valuation is also the transition phase from high growth period to stable growth period that can occur gradually (the H-model) or drop quickly (Hitchner, 2011, p.152). According to Damodaran (2002, p. 498) the terminal value is estimated using the GGM equation 13 below:

$$Terminal\ value = \frac{FCF_t * (1+g)}{r-g} \qquad (13)$$

Where t denotes the year of the last forecasted free cash flow, g is the perpetuity growth rate and r is the discount rate (that is explained in the next sub-chapter).

As a rule of thumb PGR should be either equal or less than the growth rate of the economy in which the firm operates. The PGR can significantly influence the terminal value of a company and its impact becomes larger when the PGR gets closer to the discount rate used in the estimation (Damodaran, 2002, p. 498).

1.1.6 Selecting appropriate discount rate

Discount rates for valuation purposes need to be defined appropriately relative to the cash flows that are being discounted. FCFF should be discounted with the WACC. Cash flows in

excess of amount required to service debt payments are treated as FCFE and should be discounted at the required return to equity - k_e (Berk & DeMarzo, 2011, p. 606).

1.2 Residual income model

Traditionally, the financial statements (especially the income statement) are prepared to present earnings available to company owners. Even though the income statement shows the expenses deducted for the cost of debt capital in form of interest expense, dividends or other charges for equity capital are not deducted. As a consequence, the accounting income may overstate returns from the perspective of equity investors (Pinto, Henry, Robinson & Stowe, 2010). As an alternative that would correct for this anomaly, Feltham and Ohlson (1995) published academic work on valuation based on the residual income which deducts all costs of capital.

The residual income model is based on close relationship between cost of equity and return on equity (Penman, 2013, p. 145). A company that has its cost of obtaining capital lower than its income – i.e. has positive residual income - is creating value. On contrary, a company that does not generate enough income to cover its capital costs is destroying value – i.e. operating with negative residual income. Consequently, higher residual income leads to higher company valuation.

The residual income (hereafter RI) can be computed by using the next equation:

$$RI_n = (ROE - r) * B_{t-1} = Net\ profit - (k_e * Book\ value\ of\ Equity_{t-1}) \qquad (14)$$

Where RI_n denotes the residual income in respective period, ROE is the return on equity, r is the required cost of equity and B_{t-1} is the BV of equity in the previous period (Penman, 2013, p. 145).

1.2.1 Overview of the model

The residual income model was derived from the Dividend discount model and the logic behind it is very similar to the concepts previously used in the DCF model (Plenborg, 2002). Based on the residual income valuation, the intrinsic value of equity can be broken into two components: (1) current BV of equity and (2) PV of expected future residual income as shown in equation 15 below:

$$V_0 = B_0 + \{\frac{RI_1}{(1+r)^1} + \frac{RI_2}{(1+r)^2} + \ldots + \frac{RI_n}{(1+r)^n}\} \qquad (15)$$

Where B_0 is the current BV of equity, RI_n is the residual income in the respective period, and r it the return on equity (Penman, 2013, p. 152).

Since forecasting residual incomes for each future period can be very difficult, the above equation 15 can be simplified by using the same multistage approach as in DCF model. The only difference arises by adding assumption about the pattern of the residual income growth (persistence factor - ω) after the forecasted horizon. Persistence factor has a value between 0 and 1, where 1 means the RI is going to persist at its current level and 0 means the RI will drop immediately to zero (Pinto, Henry, Robinson & Stowe, 2010, p. 229; Dechow, Hutton & Sloan, 1999). Equation 16 presents the calculation of continuing RI:

$$PV\ of\ continuing\ RI\ in\ year\ t-1 = \frac{RI_t}{1+r-\omega} \qquad (16)$$

The theory behind the residual income model assumes that the clean surplus relation holds. This assumption means that ending BV of equity should equal to the beginning BV plus earnings less any dividends paid out (Feltham & Ohlson, 1995). Accounting adjustments that bypass the income statement and affect the shareholder's equity directly, for example some extraordinary items such as currency translation gains or losses, would violate this assumption (Dechow, Hutton & Sloan, 1999). The authors however also state that from a practical point of view, the extraordinary items are usually nonrecurring and their impact is unlikely to significantly influence the prediction of future abnormal returns, i.e. residual incomes.

1.2.2 Advantages and disadvantages of the model

Based on Pinto, Henry, Robinson and Stowe (2010), the main advantages of using the residual income model can be summarized as following:

- Can be used for valuation of companies that do not pay dividends or do not have positive expected future free cash flows in the foreseeable future
- Is applicable for valuation of companies whose free cash flows are volatile
- Focuses on economic profitability rather than solely on accounting profitability
- Uses accounting data that is easy to find and does not require complex calculations
- Terminal value does not dominate the intrinsic value estimate

Dechow, Hutton and Sloan (1999) mention that the residual income model also has some limitations:

- The clean surplus relation must hold
- Significant and numerous adjustments are required to the accounting input data
- Key input, the accounting data, is subject of manipulation by the firm's management

1.3 Relative valuation model

Taking into account that DCF model and its underlying assumptions are correct but in certain situation may be difficult to apply, or the analyst wants to provide more support to their valuation outcome, he or she can choose an alternative approach to valuation that is based on market indices. A popular technique in the corporate finance society involves comparing the analysed company to similar, publicly traded companies. The rationale behind this approach is comparable to shopping for a used car where similar cars should sell for similar prices. In order to determine the fair value of a used car, a buyer or a seller can look at similar cars currently being sold in the market (Higgins, 2012, p. 363).

Damodaran (2002) mentions two components to relative valuation. The first one requires standardization of asset's price which is often done by converting price into multiples of earnings, BV or sales. The second involves finding a comparable company. However, this component is more challenging considering the fact that no two companies are identical and companies in the same business can still be different in terms of cash flow generation, growth potential and risk profile. Additionally, if the markets are pricing assets correctly, the marked-based and the DCF models should give the same value of an asset, as defined by fundamental corporate finance principle, the law of one price. This is why relative valuation can be used as a proxy to support the assumptions of DCF model.

Hitchner (2011, p. 260) suggests the analyst must possess good professional judgments skills when determining comparable companies. The first key factor of market approach to valuation is availability of information that dictates which methodology may be appropriate in certain situation. Secondly, the analyst must take into account the following factors when selecting a group of comparable companies:

- Similarity in business model / same sector presence
- Geographical footprint
- Firm size (in terms of sales, net income, assets, market capitalization)

Another important factor is application of forward-looking multiples since valuation of businesses is based on future expectations of firm performance. It may often be the case that companies in early stage of business cycle have low sales, negative income and high cash-burn rates but are anyways valued at positive market values due to investor belief of positive performance in the future (Hitchner, 2011, p. 261).

Last but not least, an analyst must also take into consideration applying premiums or discounts to valuation of companies. The general reason for this comes from ownership and marketability points of view. An investor who is interested in majority ownership of a firm may have strong incentive to pay a premium to a price with respect to have the privilege to take key decision in firm governance. On contrary, a minority stake investor assumes a passive role and may therefore be less willing to pay what the fair market value is at the

moment. Marketability discounts and premiums are related to whether the shares of companies are traded in liquid markets. Corporate finance theory suggests that illiquid assets should be purchased at discounts to compensate an investor for low marketability (Hitchner, 2011, p. 313). Discounts and premiums are generally reflected in multiples of past transactions and can be expressed in comparison to multiples based on publicly traded firms that do not include such discounts or premiums.

1.3.1 Comparable public companies and past transactions

The multiples of comparable companies (peers) may be known either because the firms are publicly traded or because they were recently sold and the transaction terms were publicly disclosed (Hitchner, 2011, p. 259). In practice, according to Hitchner (2011, p. 259) the following two methods are the most popular among analysts for relative valuation:

- Guideline Public Company method – based on reasonably comparable publicly traded peers, easily obtained via financial platforms such as Bloomberg Terminal
- Guideline Company Transaction method – based on transactions of reasonably comparable public or private companies, reported in databases such as Mergermarket

1.3.2 Selected most frequently used multiples

According to Damodaran (2002, p. 659), the most widely used measure of relative value are the earnings multiples, particularly the price to earnings (P/E) ratio. The ratio prices earnings growth since it compares the expected future earnings to current earnings (Penman, 2013, p. 179). This valuation method is relatively straightforward to apply once the appropriate measure of earnings (current, trailing, forward-looking) is chosen (Damodaran, 2002, p. 659). Since earnings can also be negative, the P/E ratio is meaningless for companies with negative earnings (Penman, 2013, p. 78). Another disadvantage of P/E ratios is lower comparability across different firms due to management discretion on accounting practices that can distort the reported earnings, particularly in regard to whether certain items are capitalized or expensed (Damodaran, 2002).

EV to EBITDA is another popular alternative multiple used by investment bankers for valuation of companies (Koller, Goedhart & Wessels, 2015, p. 336). One of the advantages of this multiple is that there are fewer companies with negative EBITDA than negative earnings which gives a bigger potential peer universe. Additionally, using EBITDA instead of earnings eliminates the problem of different depreciation methods used among companies that can make earnings incomparable. Since EBITDA represents flow to both, debt and equity, this multiple can be easily compared across companies with different capital structures (Damodaran, 2002, p. 704).

Price to sales multiples are generally not useful for company valuations, however in sectors where firms have unstable or negative profits these multiples can be helpful. Sales are always positive even for distressed firms. Additionally, sales cannot be distorted as earnings can be by poor accounting practices. On the other hand, price to sales multiples do not capture differences in cost structures across companies and high sales growth does not necessary translate into high operating profits. Therefore, theory suggests these multiples should be used as a last resort (Koller, Goedhart & Wessels, 2015, p. 348).

Investors have always been attracted to the relationship between price (hereafter P) of an asset and its BV. This explains why P/BV multiples are often considered in company valuations. The BV of equity is easy to determine since it only requires subtracting the BV of liabilities from the BV of total assets. Usually the BV is positive, even for firms that sometimes report losses, therefore it can be used in situations where price to earnings multiples cannot. On the other hand, P/BV multiples can be misleading due to different accounting standards used across firms. In addition, the multiple is not particularly useful for valuation of companies that do not hold significant tangible assets base. Last but not least, companies can have negative BV of equity if they sustain strong losses in one or more periods and thus make the P/BV multiples negative. (Damodaran, 2002, p. 719).

1.4 Multivariate model

As previous research efforts on valuation of sporting organisations were inconsistent, as well as limited and often focused on (non-football) sport franchises in North America, Markham (2013) was motivated to analyse the methodologies available for valuation of football clubs in England. In his research paper on what is the optimal method to value a football club, Markham (2013) tested something that is rather an unconventional approach to valuation in the world of corporate finance. His findings were based on use of a multivariate model. As the model was developed specifically for valuation of top-tier English football clubs, I believe the approach could be tested and used as a benchmark in assessing the accuracy of other more traditional valuation methods discussed in this thesis. Additionally, it could be viewed as support to other approaches in determining the fair value of analysed company in this thesis.

The key components of the model were derived from previous research efforts on valuation of non-European franchises and include the sports entity's revenues, control of wages, assets, and the capacity of club's stadium (Markham, 2013).

In line with Markham's findings (2013), revenues are an important factor from valuation perspective as they represent the ability of a club to generate cash. As presented in the later part of the thesis, broadcasting revenues are the main source of revenues for English clubs and are relatively equally distributed among all participating teams. Furthermore, control of costs, especially in terms of players' wages, is another influential factor as it is closely tied to clubs being able to generate a positive bottom line. As presented in Equation 17, the model

takes into account wages control twice. Firstly, it is indirectly expressed within the net profit and secondly as key performance indicator, expressed as wage to revenues ratio (where lower ratio indicates a better control of wages). Moreover, the main assets of a club, normally player registrations and sports facilities, need to be assessed in comparison to club's liabilities. Consequently, club's net assets are included in the multivariate model. Last but not least, stadium utilisation in terms of attendance to capacity ratio is another important input of the multivariate model. It is a measure that takes into consideration how successful the club is in using one of its core revenue generating assets (Markham, 2013).

The Equation 17 below takes into account all previously described key components of Markham's multivariate model and represents the relationships between them:

$$Club\ value = (Revenue + Net\ Assets) * ((Net\ profit + Revenue)/\ Revenue) * (Stadium\ Utilisation\ \%)/(Wage\ Ratio\ \%) \qquad (17)$$

2 SECTOR ANALYSIS

This chapter provides an overview of the European football market from aspects of regulatory bodies, corporate governance, and motivation behind investing in football clubs to recent mergers & acquisitions trends, and last but not least, financial analysis of the market.

2.1 Regulatory bodies

Evidence exists that people had passion for kicking a leather ball into a net stretched between two sticks already in the 3rd century BC in China. This game was named Cuju and it is still played today. However, it was not before the 19th century when the first glimpses of what we know as modern football today were documented in England. Due to different views on rules of the game the rugby football and association football branched off in 1863 and simultaneously this was the beginning of the first governing body in the new sport, the Football Association (Goldblatt, 2008). Shortly after, in 1886, the International Football Association Board (IFAB) was established as the guardian of the common Laws of the Game. The new body was tasked with "preserving, monitoring, studying and amending football rules" and still has the same authority as of today (IFAB, n.d.).

The new sport quickly became popular in the United Kingdom and since many British people were working abroad they soon spread the enthusiasm for football around the globe. This sparked the interest for competitions on international level and in 1904 in Paris the International Federation of Association Football (FIFA) was established. FIFA is international governing body of association football, responsible for many activities, including organization of international competitions, issuing regulations, promoting football and overseeing national associations. Its supreme body is the FIFA congress which is an

assembly made up of representatives of each member association who are entitled to one vote, regardless of their size or football influence. FIFA is headed by President who is elected for a four-year mandate by the member associations. The current President of FIFA is Gianni Infantino (FIFA, n.d.).

In 1954, the Union of European Football Associations (hereafter UEFA) was founded in Basel. UEFA is the governing body of European football that operates as a society entered in the register of companies following the Swiss civil code. Its headquarters are today located in Nyon, Switzerland. UEFA states on its website they are "working closely with its 55 member associations, other stakeholders and partners to promote, protect and nurture the sport at all levels." UEFA acts through following organs: the UEFA Congress, the UEFA Executive Committee, the UEFA President and the organs for the administration of justice. The current President of UEFA is Aleksander Čeferin (UEFA, n.d. a).

On a national level, the Football Association (hereafter the FA) has the role of the governing body for football in England. It is responsible for sanctioning competition Rule Books and it ensures the Laws of the Game are applied on the field and the rules and regulations regarding football are being obliged. Additionally, the FA also deals with all on and off field discipline matters (Premier League, n.d.). However, in England, since 1992, after lengthy discussion with different stakeholders, the First Division clubs resigned from the Football League and formed the Premier League (hereafter EPL) – the new top tier competition in England and also its organising body. It is organized as a private company which is owned by the 20 Member Clubs that compete in the league in the respective season. Each club is independent and has one vote in all the important matters. Decisions are accepted with the support of majority, i.e., at least 14 clubs. The FA is a special shareholder of the EPL with ability to exercise their vote on certain matters, but has no authority to participate in the day-to-day operations of the EPL. The current Chief Executive of Richard Scudamore (Premier League, n.d.).

2.2 Corporate governance and governance structure

McEnally and Kim (2007) describe corporate governance as "the system of principles, policies, procedures, and clearly defined responsibilities and accountabilities used by stakeholders to overcome conflicts of interest inherent in the corporate form." Furthermore, Berk and DeMarzo (2011) emphasize the importance of having effective corporate governance systems in place to prevent situations that negatively impacted many stakeholders in the past, known as notorious cases of Enron, etc. There are different governance structures and each of them has their own ways of mitigating the conflict of interest problem between the owners and managers of the company. Although we can observe some minor differences within the top European football leagues, Franck (2010) identified the following three governance structures as the most common in the football sector:

- Private limited company
- Public limited company
- Members' association

The majority of the football clubs, especially in England, are incorporated as private companies, limited by shares. This means they have separate legal identity, its owners are not liable for company's debt, the shares of the company can be relatively easily sold and bought but are not traded in organized market, and directors of the company are entitled to remuneration if the articles of association allow for that (The FA, 2015). These companies have to report their financial statements to Companies House, a British company registrar. By owning more than 50% of issued shares, the controlling party has the privilege of making important decisions, such as appointing board of directors (The FA, 2015).

A public limited company is similar to a private limited company, with major distinction arising from the fact that its shares are publicly traded in an organized market such as a stock exchange. Article 4 of Regulation No. 1606/2002 of the European Commission states that all listed companies are required to prepare financial statements in accordance with the International Financial Reporting Standards (IFRS) and need to publicly disclose them. These requirements increase transparency when it comes to availability of financial information on public companies. In 1983, Tottenham Hotspur was the first ever football club being publicly traded and many other English clubs followed them in the next years (Leach & Szymanski, 2015), however as of 2019 only one English club – Manchester United - remains to be listed on the stock exchange.

The third most common governance structure is the members' association, particularly popular in Germany (Franck, 2010). Historically, German football clubs were run as non-for-profit organizations by member's associations. Private ownership was not allowed under any circumstances but due to commercial success of the EPL the German clubs were put under pressure. In 1998 the "50+1 rule" was introduced which allowed the clubs to change the corporate structure into private or public limited companies with one important restriction. The majority stake (50% plus 1 share) must be retained in the hands of the club's members (supporters). In cases where an investor provides funding to football teams continuously for 20 years period, they are allowed to increase the ownership to 100%. As of today only three teams were granted with this exception, Bayer Leverkusen (sponsored by the pharmaceutical company Bayer), VfL Wolfsburg (sponsored by Volkswagen), and TSG Hoffenheim (sponsored by Dietmar Hopp). Football insiders claim this rule has contributed to financial stability of the German clubs and played important role in high capacity utilization of their stadiums (Bundesliga, 2017).

Effective governance structures contribute to good corporate governance practices, treating all football club stakeholders fairly. By all means, performance on the pitch and winning trophies are the most important criteria when assessing success of a football club but in order to be successful on the pitch, the club must have stable financial position off the pitch as

well. Having proper auditing and reporting mechanisms in place are the first steps towards stability in the long-term (Michie & Oughton, 2005). Nonetheless, in the recent history there were many examples of poor financial management and lack of good corporate governance practices in the world of football, ruining many clubs, including the likes of Leeds United, Parma Calcio 1913, Glasgow Rangers, and others (Michie & Oughton, 2005; The Economist, 2012). This is why strong corporate governance practices matter.

2.3 Motivation for investing in football clubs

Sir John Madejski, former owner of Reading Football Club once described an ideal football club investor as someone mercurial, with deep pockets and not being faint-hearted (Yueh, 2014). A comprehensive overview of possible reasons behind investing in football clubs, supported by research efforts of other authors in the recent years is presented in this chapter.

One of the core goals of managers in corporate finance theory is to maximize the shareholder's value (Berk & DeMarzo, 2011, p. 10) that can be achieved through numerous approaches, including profit maximization. Garcia-Del-Barro and Szymanski (2009) conducted a research on behaviour of football clubs in Spain and England. They concluded that football clubs deviate to a certain extent from the corporate finance principle mentioned before and are in fact maximizing their win ratio which is subject to a zero profit budget constraint. Furthermore, the authors support their findings by explaining that financial performance and revenues are closely tied to success on the football pitch and teams that would adopt profit maximization could risk relegation to lower reputation competitions which would have devastating consequences in terms of financial performance (Garcia-Del-Barro & Szymanski, 2009). Franck (2010) observed that only clubs from the EPL and German Bundesliga had moderate success in delivering operating profits in the first decade of the 2000s. However, after adjusting for player acquisitions, interest and tax expenses even the top performers in the EPL consistently finished their annual accounts with a negative bottom line (Franck, 2010). Despite teams are spending massive amounts of money with clear goal to achieve success, some authors claim that "winning games is likely to increase the club's subsequent cash flows and value via a number of routes" (Bell, Brooks, Matthews & Sutcliffe, 2012, p. 1).

When analysing historical stock performance of the publicly traded football clubs, one can observe there is very low return over long term, if any at all. Additionally, there are no diversification possibilities for football clubs since their core business is driven by intangible assets such as performances on the pitch and football players in the first team (Aglietta, Andreff & Brut, 2010; Johnson, 2018). This is reflected in strong sensitivity of the stock price to performances on the pitch, generating abnormal returns and trading volumes when teams are being successful (Palomino, Renneboog & Zhang, 2008). For example, Ajax's outstanding performances in the 2018/19 European Champions League (hereafter ECL) campaign positively impacted their share price but after shocking exit from the competition

the share price suffered significantly (McCormick, 2019). Furthermore, when Juventus was discussing the transfer of Cristiano Ronaldo in 2018, investors perceived signing of a football superstar as positive and the stock price reacted accordingly (Easton, 2018). Palomino, Renneboog and Zhang (2008) also found evidence that investors in the English clubs could use information from the sports betting market to adjust their trading strategies since the bookmakers generally predict outcomes on the pitch with certain degree of confidence. Another factor also influencing the share price is financial stability, especially the level of leverage (Pitel, 2019). In January 2019, the big three Turkish clubs that are listed on the Istanbul stock exchange reached an agreement with lenders to restructure their debt after having problems meeting their interest payments. The clubs' share prices increased after the market learned about this news (Pitel, 2019).

Based on poor financial discipline and stock price sensitivity we can conclude there is very limited evidence available that would support rational investor in investing in football clubs. However, Franck (2010) identified other possible reasons in favour of making such investments.

In the United States, there is a long business practice that owners of successful enterprises use sports teams as a marketing channel to promote their businesses, acquire additional customers and thus create financial spillovers. There are numerous examples of synergies between sports teams and sectors such as real estate, broadcasting, etc. (Franck, 2010). Moreover, there are also some similar examples of such investors in the English football clubs, namely Fulham and Newcastle United. Former Fulham owner Mohamed Al Fayed was running Harrods and Hotel Ritz business and Mike Ashley, the owner of Newcastle United, also owns online retailing business called Sports Direct (Franck, 2010; Yueh, 2014). Franck (2010) additionally mentions that investors might have social and political acceptance motives which he describes on example of wealthy Russian oligarch Roman Abramovich who acquired Chelsea in 2003 and consequently increased his ties to the local community. Although the author provides no evidence for that, Franck (2010) makes a valid suggestion that some investors might purchase football clubs just to enjoy themselves and increase their happiness, similar to having a passion for top class racing horses and owning one of them. The utility maximization principle in economics is subject to budget restrictions. Since the owner of Manchester City has relatively unlimited budget constraints he was able to purchase a top football club and thus maximized his utility from consumption (Franck, 2010).

In 2011, UEFA introduced the Financial Fair Play (FFP) rule to counter poor financial discipline and overinvestments in the football sector. In that year, top teams generated a record EUR 1,670 million (mn) net loss (UEFA, 2019). UEFA's latest report revealed positive effects of FFP introduction as the top teams generated net profit of EUR 615 mn in 2017 for the first time after introducing the FFP (UEFA, 2019). This represents an important milestone that could indicate end of negative profitability trend and signal better future financial discipline with consequently increased returns for the investors.

2.4 Recent trends and notable acquisitions of football clubs

This chapter provides an overview of recent M&A activity in football with notable examples that lead to transformation of football clubs.

2.4.1 Recent M&A activity in football sector

I used the database provided by Mergermarket database to identify recent M&A trends in the football sector. Similar to UEFA's Club licensing benchmarking report 2017, I decided to analyse transactions from beginning of June 2008 onwards but expanded the total analysis horizon to end of June 2019. Furthermore, I focused mainly on reported transactions that were related to clubs competing in the top two tiers of national league competitions. I identified a total of 137 transactions over the analysis horizon and all of them can be found in Appendix 2. The majority of acquired clubs were based in England (39%), followed by Spanish (16%) and Italian (15%) clubs. The most expensive transaction was done in 2016 when Chinese private investor acquired Italian giants AC Milan for reported EUR 740 mn. Atletico Madrid were involved in 4 minority stake deals with the latest deal in 2018 when Israeli investor Idan Ofer increased his ownership to 32% via his company Quantum Pacific Group (Atletico Madrid, 2018). Leeds United was another club that was involved in 4 transactions, with Italian businessman Andrea Radrizzani obtaining full ownership control of the club in 2017.

Half of the investors were of European origin, followed by Asians (25%) and North Americans (15%). Furthermore, Chinese investors were involved in 16 acquisitions out of 77 transactions between January 2014 and June 2019. This information is consistent with findings of UEFA's Club licensing benchmarking report 2017 where they observed influx of Chinese investors in the recent years (UEFA, 2019). Vast majority of investors identified over the entire analysed period were wealthy private individuals (71%), followed by financial sponsor companies such as private equity funds (25%). The remaining 4% represent special types of investors, namely football clubs that acquired other clubs (3 transactions), takeover by supporters' trust (1 transaction) and there were 2 deals where clubs bought back shares from minority investors.

2.4.2 Notable acquisitions of football clubs

In July 2003, Russian oligarch Roman Abramovich acquired majority stake in Chelsea Football Club for reported EUR 195 mn. Subsequently the club's shares were delisted from the AIM stock exchange (Mergermarket Limited, 2003). Due to substantial leverage the club's future was uncertain and the new owner agreed to repay the debt as part of the deal (BBC, 2003). Little was known at that time this acquisition will change the rules of the game when it comes to ownerships of football clubs. Sponsored by their wealthy owner, the club spent massive amounts in transfer fees to buy football stars. All the investments quickly paid

off in 2005 when the club won the EPL for the first time in 50 years (Wilson, 2013). In pursuit of European trophy, the owner adopted "whatever it takes" approach and was investing heavily in the first squad, replacing the management team whenever results on the pitch were not favourable. The club was consequently operating with negative bottom line for many years but thanks to regular capital injections from the owner the club was never in financial distress. The highlight of the club was definitely winning the ECL in 2012, fulfilling the long-term wish of the club owner. There is no doubt Mr Abramovich played the key role in Chelsea becoming one of the most successful clubs in the world, proven by winning remarking 18 trophies since his arrival to club (Chelsea Football Club, n.d.).

In May 2005, the US-based Glazer family announced they will be acquiring one of the most successful English teams, Manchester United Football Club, for total consideration of EUR 1,150 mn (Mergermarket Limited, 2005). After acquiring significant controlling stake, the new owners de-listed the club from the London Stock Exchange, following by a minority shareholder squeeze-out (Mergermarket Limited, 2005). This transaction is a special case in the football world since it was executed as a leveraged buyout by investors who had little interest in football and were purely financially motivated (Grant, 2007). Their idea was that the club itself will be able to generate sufficient funds to repay the outstanding debt in the coming years. However, due to mix of different factors, including the global financial crisis, the outstanding debt was not decreasing. The club had over EUR 1,100 mn of debt at some point and substantial portion of it was lent by hedge funds via special type of high-yield financing named payments in kind that reportedly reached interest rates around 16.25% (Sweeney & Head, 2010). In 2010 it became evident the debt levels are not sustainable and the management decided to refinance it via bond issue at more favourable interest rates (Bond, 2010), followed by initial public offering on the New York Stock Exchange in 2012 (Conn, 2012). Despite the debt problems, the club was largely successful on and off the pitch. Since the change in ownership the club won 19 major trophies in all competitions until end of the 2018/19 season (Manchester United, n.d.), supported by commercial success in form of lucrative sponsorship deals with brand names like AIG, AON, Chevrolet and Adidas (Stone, 2015; Manchester United, 2018).

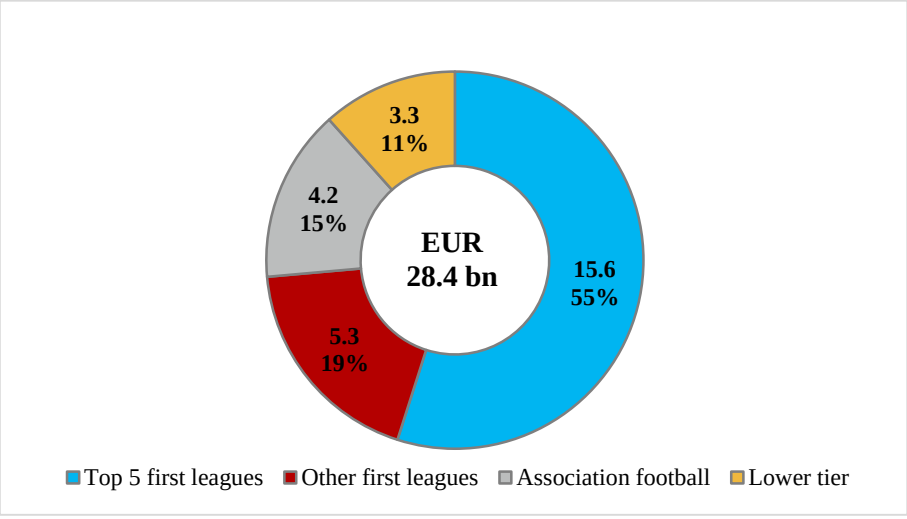
In September 2008, United Arab Emirates based Abu Dhabi United Group (ADUG) acquired 90% ownership stake in Manchester City Football Club in a deal valued around EUR 260 mn (Mergermarket Limited, 2008; Milmo, 2008). The new owners made a bold statement when announcing they plan to make the club bigger than Real Madrid or their city rivals Manchester United (Austin, 2008). In the following years the owners spent over one billion euros for attracting global football superstars (Conn, 2018) who have helped the club winning 12 major trophies (Manchester City, n.d.). The aspirations of the owners of becoming number one in the world came one step closer to reality by bringing on board former Barcelona executive Ferran Soriano in 2012. He completely changed the whole business model and strategy of the club with his daring idea of having a global brand (Tremlett, 2017). In 2013, City Football Group (CFG) was established, an entity that acts as

a holding company of multiple football clubs around the world, united under one brand. CFG has majority stakes in England based Manchester City, the US-based New York City and Melbourne City from Australia. On top of that, CFG has minority stakes in Yokohama F. Marinos in Japan, Club Athletico Torque in Uruguay, Girona in Spain and Sichuan Jiuniu in China (City Football Group, n.d.). Mr Soriano played the key role and was arguably the mastermind behind commercial success of the club that was ranked amongst top 5 clubs by revenues in the world in 2018 (Deloitte, 2019). Thanks to massive financial support from their owners the club evolved from a mid-table team in 2008 to one of the best clubs in Europe in 2019 (Ogden, 2018).

2.5 Financial analysis of the European football sector

Based on latest available data, the European football market amounted to EUR 28.4 billion (hereafter bn) in 2018. The market can be split into four categories, namely the Top 5 first leagues, Other first leagues, Association football competitions, and Lower tier divisions. The Top 5 first leagues category consists of English, German, Spanish, Italian, and French top tier leagues. This group heavily dominates the whole market by revenue generation as they had a market share of 55% in 2018. Other first leagues category, with 19% market share, includes the other top division competitions in the remaining 49 UEFA national associations. Association football with its competitions on national level, such as FIFA World Cup, UEFA international tournaments, generated 15% of the total market revenues in 2018. The smallest category, Lower tier divisions includes all competitions below the first divisions in the 54 UEFA national associations and it generated approximately 11% of total market revenues in 2018. Since 2014, the European football market grew by compounded annual growth rate (hereafter CAGR) of 5.5%. Figure 1 and Appendix 3 show the split of European football market revenues in 2018 and 2014 (Deloitte, 2018; Deloitte, 2014).

Figure 1: European football market revenues in 2018



Source: Deloitte (2019).

The Top 5 first leagues generated an aggregate of EUR 15.6 bn in 2018. Further breakdown of this category reveals that the EPL overshadows the other top 5 leagues by revenue generation, representing 35% of their combined revenues. The significant advantage of the EPL comes from its lucrative broadcasting agreements, representing almost 60% of the total revenues (Deloitte, 2019). These agreements are generally concluded on a rolling basis in packages for three consecutive seasons. According to media reports, the 2019/20-2021/22 broadcasting deal will bring in even more in revenues for the EPL clubs (c. 8.0% increase), where the decline in domestic revenues (-7.7%) will be offset thanks to overseas broadcasting revenues increase for approximately 30%. Skysports, BT Group, and Amazon are the firms that secured broadcasting rights for the next three seasons (Sweney, 2018; Ziegler, 2019).

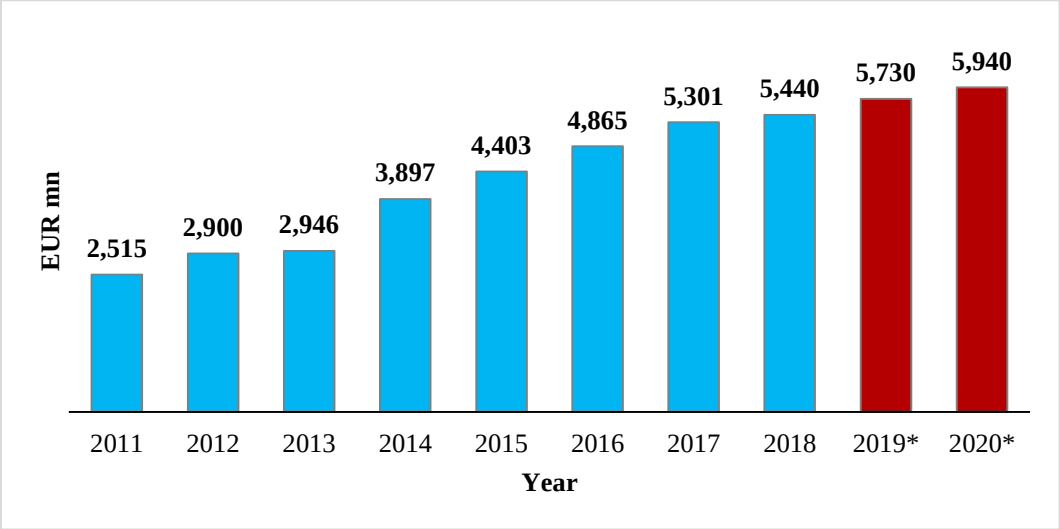
Appendix 4 shows 2018 revenues breakdown by country and type. Please note that only clubs in Germany and France further disaggregate revenues into "Other commercial" category whereas this category is included in sponsorship/commercial and broadcasting categories for the other three countries (Deloitte, 2019).

When analysing football clubs' income statements, it is evident that wages for playing and non-playing staff represent a huge chunk of expenses for the clubs. It is therefore important to keep the right control mechanisms in place to avoid financial problems. Wage to revenue ratio (hereafter WtR) appears to be useful key performance indicator for the purpose of wage control for football clubs (UEFA, 2019). Supported by leading revenue generation ability, the EPL clubs can afford to spend the most in absolute terms on wages for their staff. In 2018, the EPL clubs spent EUR 3.2 bn on wages, allowing them to attract some of the best player talents and management experts in the market. However, in relative terms, the EPL is second only to German Bundesliga with the WtR ratio level fluctuating between 58% and 63% in the 2014-2018 period, before settling at 59% in 2018. Based on this it is possible to conclude the EPL clubs, if supported with future revenues growth, will be able to keep attracting top football talents in the coming years. In the 2014-2018 period, the clubs from Italian Serie A have demonstrated a stricter approach to wage control with WtR ratio slowly decreasing, thanks to revenue growth. On the other hand, French Ligue One saw its combined WtR ratio rise to 75%, particularly due to expensive signings of Paris Saint Germain (Deloitte, 2019). WtR ratios for the Top 5 leagues in the recent years can be found in Appendix 5.

The EPL enjoyed double digit growth over 2011-2018 period with CAGR of 11.7%. The combined revenues of all clubs participating in top English division rose by more than double during this period, matched by no other top European competition. The first notable increase in revenues was driven by success of an English team in the European Champions League in 2012, with Chelsea winning the trophy (Deloitte, 2013). In 2014, revenues growth of 32% relative to the year before was sparked by the new broadcasting deal that came into force starting in this season (Gibson, 2012). Additionally, in 2015 the EPL clubs were successful in negotiating sponsorship and commercial deals that drove the revenues up by

additional 11% in comparison to 2014 (Deloitte, 2016). Another lucrative broadcasting deal came into force in 2017, fuelling the combined EPL teams' revenues growth of 9%. Sector specialists estimate the revenues will grow with CAGR of 4% in the 2018-2020 period (Deloitte, 2019). Overview of historical and estimated revenues of the EPL is shown in Figure 2.

Figure 2: EPL historical and projected revenues overview



Source: Deloitte (2014, 2015, 2016, 2017, 2018, 2019).

UEFA states on its website the ECL is football's top club competition which may explain why the competition is so popular in football society (UEFA, n.d. b). The top players want to play for clubs that participate in this competition (Smith, 2019). It is also beneficial for teams to participate in the ECL from the financial point of view, mainly because of the prize money that is complemented by incremental broadcasting and commercial revenues. Teams participating in the 2017/18 version of the ECL earned incremental revenues between EUR 16.8-88.7 mn. Every win in the group stage of competition is rewarded by additional EUR 1.5 mn, whereas each draw resulted in EUR 0.5 mn (UEFA, 2018a). Second tier European club competition is the Europa League where participants in the 2017/18 format of the competition earned from EUR 3.1 mn up to EUR 37.8 mn (UEFA, 2018b). Every win in the group stage was worth EUR 0.4 mn and every draw EUR 0.1 mn. Additionally, the winner of the group stage was awarded with EUR 0.6 mn and the runners-up with EUR 0.3 mn (UEFA, 2018b). Appendix 6 provides an overview of prize money for each stage of both European club competitions in 2017/18.

3 CLUB ANALYSIS

Building on the top-down approach from the previous chapter, this chapter presents the reader with in-depth analysis of Newcastle United Football Club. Starting with a brief overview of the club's history and recent performance results in the EPL, I continue with

operational benchmarking, followed by using strategic tools to provide detailed picture of the club's current stature among its closest competitors, from both financial and sports performance perspectives.

3.1 About Newcastle United Football Club

Founded in 1892 through a merger of two local teams, Newcastle United is a professional football club based in Newcastle, England. The club is competing in the top tier English football competition, the EPL, and has been part of this competition for 24 seasons since the league's inception in 1992. St. James' Park stadium has been the team's home since 1982 and has undergone several developments since then. According to the latest official information, the stadium has capacity of 52,354, making it the league's 7th largest stadium. The team's traditional colours are a combination of black and white stripes. The club is also known under its nickname, the Magpies, and has a very loyal supporter base called the Toon Army. Their long-standing rivalry with Sunderland, famously known as the Tyne-Wear derby (or the North East derby), is one of the fiercest local derbies in English football (Newcastle United Football Club, n.d.).

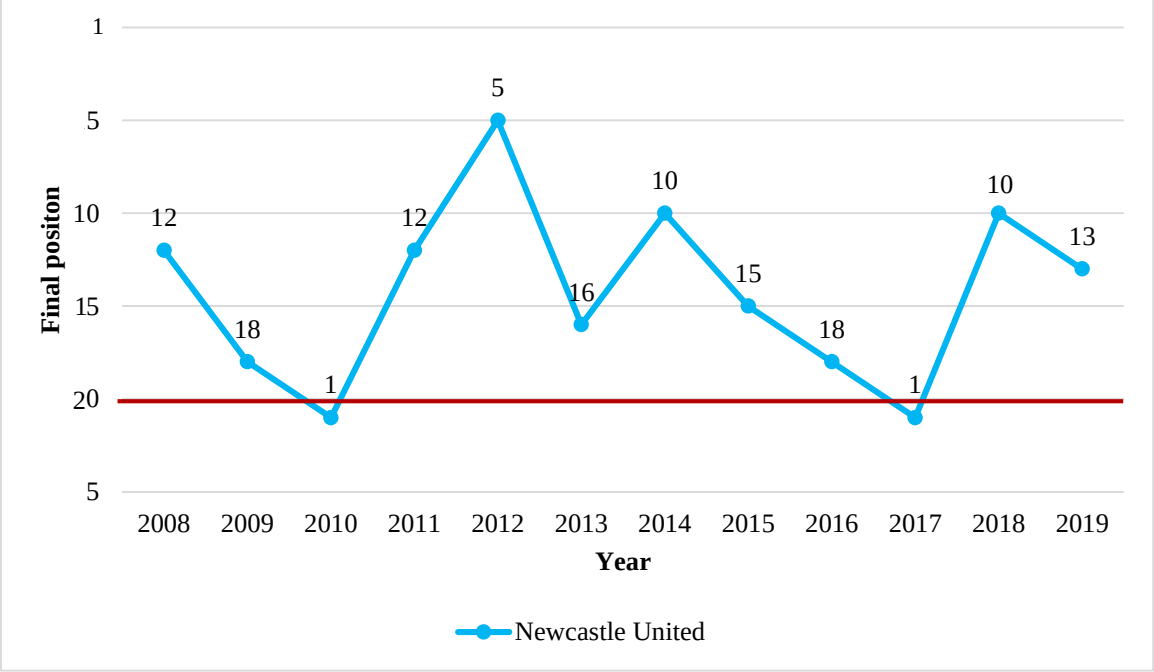
Newcastle United ranks among the top teams in England, winning the top tier competition on four occasions (last time in 1927) and finishing second in 1996 and 1997. Additionally, the club won the FA Cup on 6 occasions, with the last win against Manchester City in 1955. The club also has one notable record in the European competitions, having won the UEFA Intertoto Cup in 2006. Some of the greatest names from the world of football are associated with the club, including the likes of Kevin Keegan who was successful for the club as a player and a manager, Paul Gascoigne who was recognised as one of the most talented English players of his generation, Andrew Cole who scored a record of 41 goals in one season for Newcastle, and last but not least, Alan Shearer who is as of 2019 still the EPL's all-time top scorer with 260 goals, as well as Newcastle's all-time best scorer with 206 goals (Newcastle United Football Club, n.d.).

In May 2007, a significant minority stake in club was purchased through company named MASH Limited whose ultimate beneficiary is English businessman Mike Ashley. He has subsequently acquired the remaining shares and delisted the club from the stock exchange. His takeover offer valued the total equity share at EUR 196 mn (Mergermarket Limited, 2007) at the time of announcement. Mr Ashley's takeover was perceived positively among the club supporters, especially when he joined them in the stands during matches and reinstalled a popular name, Kevin Keegan, as team's manager. However, the initial good relationship between the key stakeholders and the new owner did not last long. Shortly after Mr Ashley was involved in series of disputes with the fans and managers, mostly due to different vision on club's operations, investments in the first team, performances on the pitch, etc. Ever since Mr Ashley has taken over, Newcastle United has been relegated to the second tier of English football twice. In addition, he declared on multiple occasions he is

looking to sell the club but each time failed to come in agreement with potential bidders. According to the media reports, the latest takeover attempt was in May 2019 (De Cosemo, 2019). Latest rumours are the owner is seeking to recoup what he paid for the club on top of the funds he provided in form of interest-free loans.

The Figure 3 below shows final league positions of Newcastle United from season 2007/08 onwards which coincides with Mr Ashley's reign over the club. Please note that values below the red line represent the team's final position in the second tier competition, the Championship. As it is possible to observe in the Figure 3, the club's achievements were very volatile since the takeover. Considering supporters' expectations and the club's reputation it is possible to conclude the club has underperformed since the change in ownership.

Figure 3: Newcastle United's final position per season since Mr Ashley's takeover



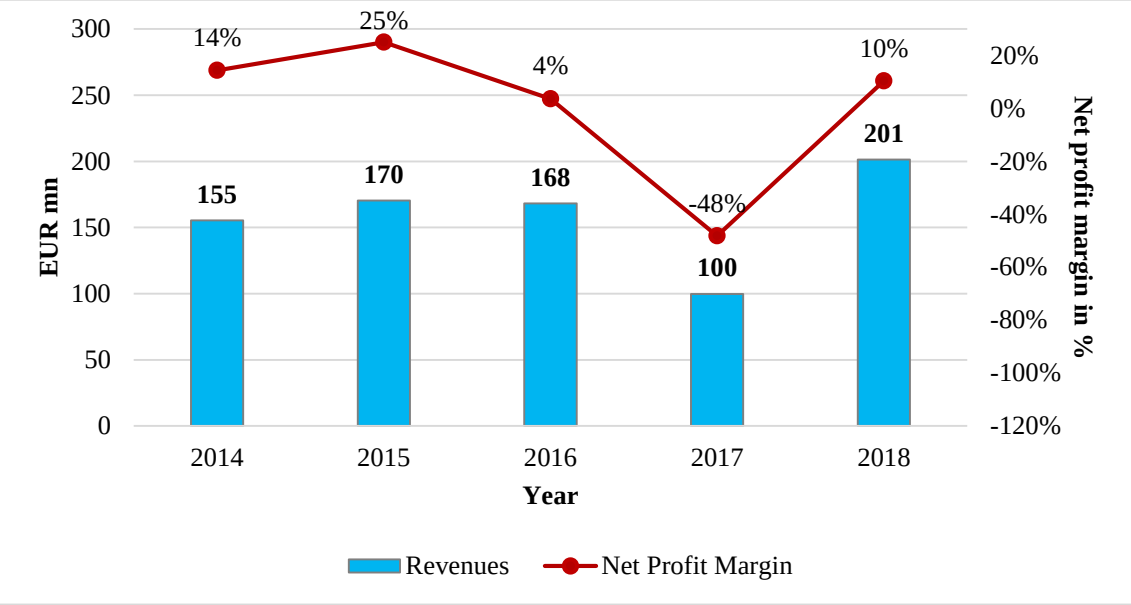
Source: Transfermarkt (2019).

3.2 Analysis of revenues

Most of the EPL football club report their revenues by source and are normally split in three categories, namely Broadcasting, Matchday, and Commercial revenues. Broadcasting revenues include all distributions from the EPL broadcasting agreements, cup competition broadcasting rights, European competitions broadcasting rights and radio broadcasting rights. Matchday revenues include ticket, catering and hospitality sales. Commercial revenues consist of sponsorship agreements, merchandise sales, and similar commercial activities.

Figure 4 shows total revenues of Newcastle United and net profit margins in respective seasons during the 2014-2018 period. Financial impact of playing in second tier competition is evident at the end of 2017 season when the club missed on large amount of broadcasting revenues that the EPL teams were entitled to in that season. Furthermore, the club finished the season with a net loss of EUR 48.1 mn. The revenues grew by CAGR of 6.7% during the analysed period which is less than 15[1] of their competitors achieved in the same period (after translation from local currency GBP to EUR, the average revenue CAGR of the sample was 9.0%).

Figure 4: Newcastle United's 2014-2018 total revenues and net margins



Source: Newcastle United Limited (2014, 2015, 2016, 2017, 2018).

3.2.1 Broadcasting revenues

Broadcasting revenues are the main source of funds for the EPL clubs and on average represent more than 60% of their total revenues. As previously mentioned, EPL is one of the most popular football competitions in Europe which is reflected in value of the broadcasting deals. EPL strives to fair distribution of the broadcasting revenues which is done in the following manner (Premier League, 2018):

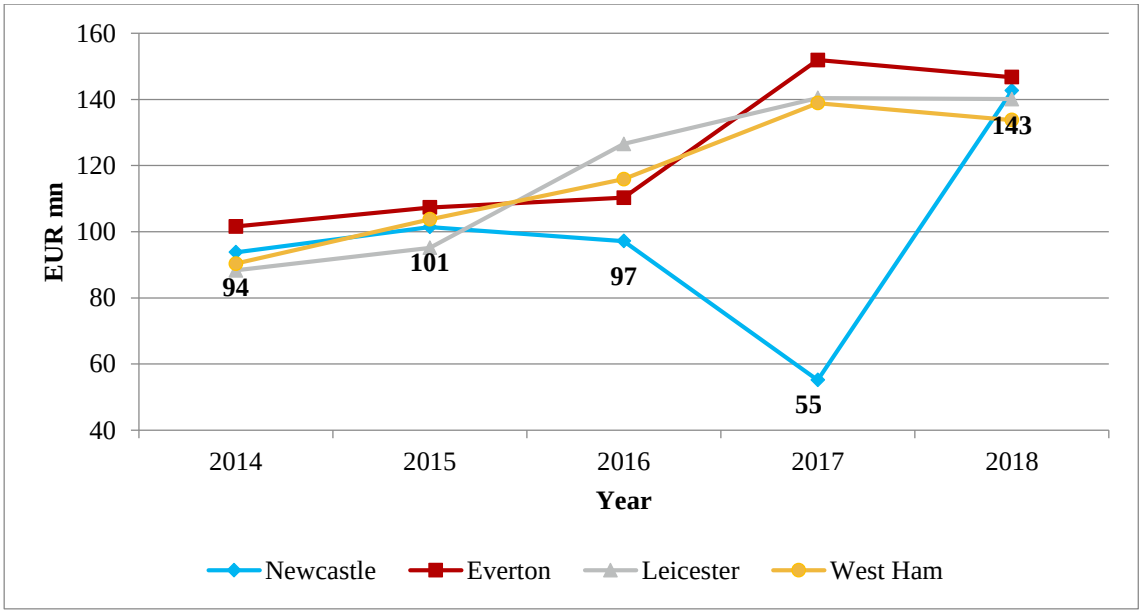
- UK broadcast revenues: 50% equally shared, 25% based on broadcasted matches of each club and 25% based on final position in the competition
- Central commercial revenues: 100% equally shared
- International broadcasting revenues: 100% equally shared

[1] 28 different clubs participated in at least one season of the EPL during the analysed period, however only 15 of them were EPL participants in the first and last season of the analysed period (required for CAGR)

Appendix 7 shows the 2017/18 payments derived from broadcasting rights to clubs in the EPL. Additionally, the clubs that participate in the European competitions have the possibility to further increase their broadcasting revenues through prize and media rights funds distribution. In the 2017/18 season of the ECL the clubs that participated at least in the group stage of the competition earned between EUR 17.5-46.6 mn, depending on their performance and market interest. Real Madrid who won the competition in that season earned EUR 88.7 mn (UEFA, 2018a). In the same season of the UEL the clubs that participated at least in the group stage of the competition earned between EUR 3.1-14.1 mn and it was Everton, one of Newcastle's close competitors, who earned the highest amount of EUR 14.1 mn in the group stage. The winner of 2017/18 season of the UEL, Atletico Madrid, earned EUR 47.8 mn. (UEFA, 2018b).

Newcastle United's historical broadcasting revenues, realized between 2013/14 and 2017/18 seasons, are benchmarked to their closest competitors (Everton, Leicester City, West Ham United) in the Figure 5 below. The closest competitors were selected based on sporting performance during the analysed period and their financial profile. The effect of the new broadcasting agreement that came in force in the 2016/17 season is visible in year 2017 when all competitors received a significant uplift in their broadcasting revenues. Newcastle have on the other hand suffered substantial decrease in their broadcasting revenues, largely due to performing in the Championship that season. Overall, the broadcasting revenues of Newcastle grew by CAGR of 11.1% over the analysed period, outperforming the league average of 10.2%.

Figure 5: Historical broadcasting revenues of selected EPL clubs

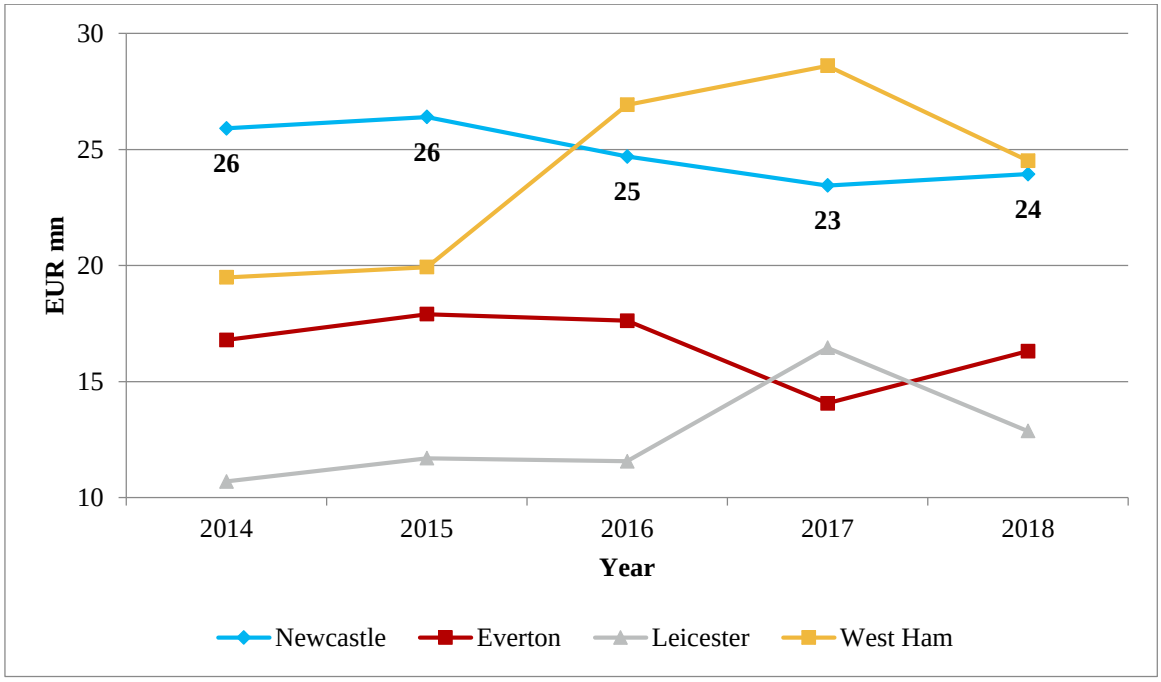


Source: Newcastle United Limited (2014, 2015, 2016, 2017, 2018); Own work.

3.2.2 Matchday revenues

Matchday revenues are earned from ticket sales, hospitality and food services. These revenues are closely tied to stadium capacity of a football club. Manchester United has the largest stadium in the EPL and are therefore able to generate the most revenues of this type, whereas Newcastle United was ranked 7th by stadium capacity and matchday revenues in the 2017/18 season. Average attendance, stadium capacity and utilization rates of EPL clubs during season 2017/18 can be found in the Appendix 8. EPL clubs on average generate around 10% of their total revenues through matchday revenues, with exception of Arsenal, Chelsea, Manchester City, Manchester United, Liverpool, Tottenham (hereafter Big 6) that generate up to 20% of their total revenues through matchday revenues. Historical matchday revenues of Newcastle and their closest competitors between 2014 and 2018 seasons are shown in Figure 6. Newcastle's matchday revenues decreased by CAGR of 3.4% (unadjusted for exchange rate by 2.0%) between 2013/14 and 2017/18 seasons which could be attributed partially to unfavourable exchange rate movements and lower value of services sold (tickets, food, hospitality…). On positive note, the average attendance increased by 3.2% since the 2013/14 season.

Figure 6: Historical matchday revenues of selected EPL clubs

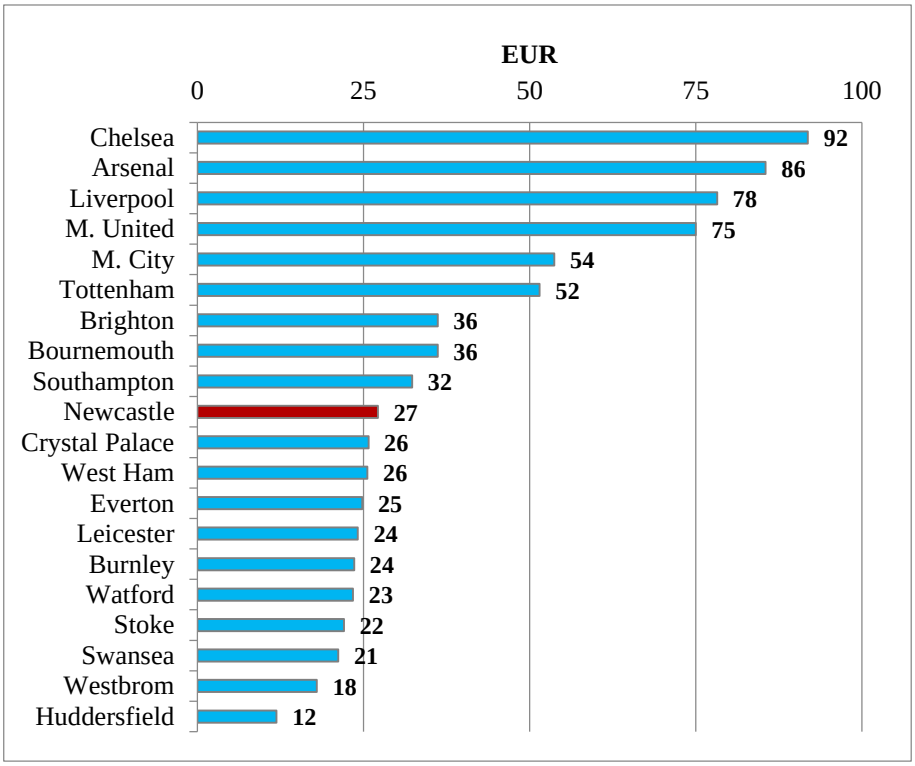


Source: Newcastle United Limited (2014, 2015, 2016, 2017, 2018); Own work.

Since clubs have stadiums with different capacities relative comparison of matchday revenue per fan generated offers better understanding of the clubs' pricing strategies. EPL clubs play 19 home matches per season, however those participating in the ECL can increase this number by 6 (7 in case of UEL) if they reach the semi-final stage of the competition. Consequently, the big 6 clubs have better platform in place for generating these revenues.

Findings on average matchday revenue generation per fan in 2017/18 season under the assumption that average EPL club plays 19 home matches and those participating in the continental competitions play at least 22 (by qualifying for the group stage) home matches are presented in the Figure 7 below. Newcastle generated on average EUR 27.2 per fan per home match, whereas the top 6 clubs generated at least EUR 51.5 per fan per home match. Should Newcastle be successful in the next seasons, they have a substantial potential to increase the matchday revenue per fan that would be justified by offering their supporters better matchday experience from their players on the pitch and participation in continental competitions.

Figure 7: Matchday revenues per fan of EPL clubs in 2017/18 season



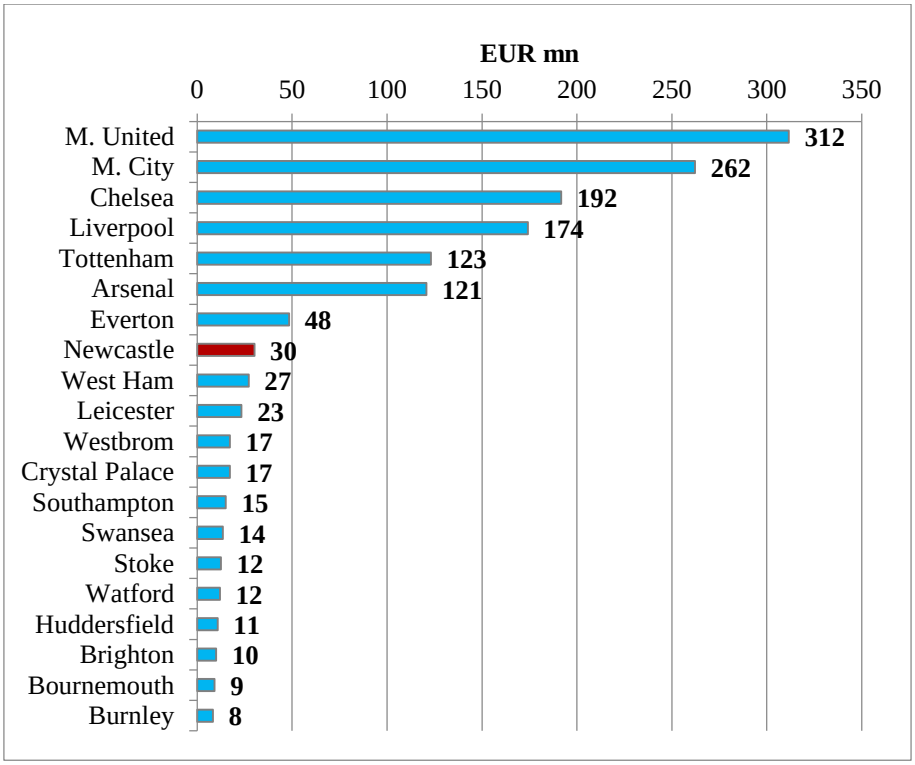
Source: Newcastle United Limited and other annual reports (2018).

3.2.3 Commercial revenues

Sponsorship agreements that come in form of kit supplier agreements, kit advertising, stadium naming rights as well as merchandise, retailing, apparel & product licensing are the main sources of the commercial revenues stream. Manchester United have historically dominated in their ability of generating commercial revenues, ranking number one every year since the 2013/14 season. Thanks to their lucrative sponsorship agreements with brands including Adidas, Aon, Chevrolet they were able to generate EUR 285 mn in the 2017/18 season while other commercial revenue sources generated additional EUR 27 mn (Manchester United, 2018). On the other hand, Newcastle was able to generate only a total

of EUR 30 mn in the same season through the commercial revenues stream. Average for commercial revenues of the EPL clubs in season 2017/18 was EUR 72 mn, showing Newcastle has a lot of potential to do better in this aspect. Commercial revenues of EPL clubs in 2017/18 season are presented in Figure 8.

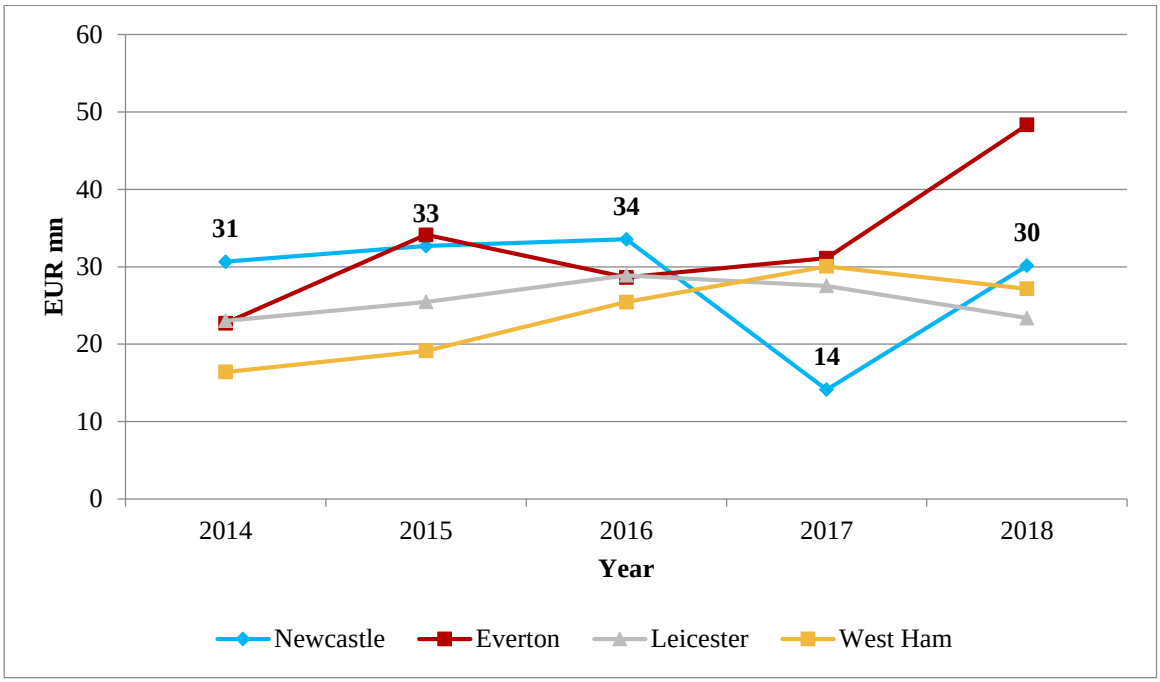
Figure 8: Commercial revenues of EPL clubs in 2017/18 season



Source: Newcastle United Limited and other annual reports (2018).

Since the current kit supplier and kit advertising deals with Puma and Fun88 are set to expire at the end of the 2019/20 season (Douglas, 2019), Newcastle will soon have the opportunity to negotiate deals that would reflect the current market values. However, in order to be able to do so, Newcastle must increase their brand value in domestic and international markets by focusing on achieving better sport results in the first place. Analysis of commercial revenue stream between 2013/14 and 2017/18 seasons has shown Newcastle's commercial revenues remained relatively flat (CAGR of 1.1%, unadjusted for exchange rate) whereas the average commercial revenues of the EPL clubs during the same period grew by CAGR of 10.9% (unadjusted for exchange rate by CAGR of 12.5%). Historical commercial revenues of Newcastle and its competitors are displayed in Figure 9 below.

Figure 9: Historical commercial revenues of selected EPL clubs



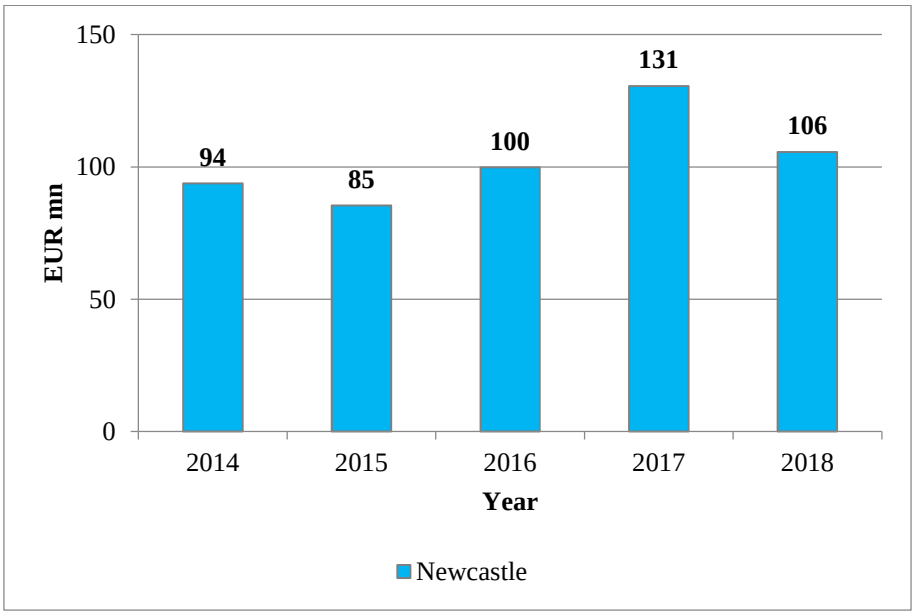
Source: Newcastle United Limited (2014, 2015, 2016, 2017, 2018); Own work.

3.3 Analysis of expenses

Financial statements of football clubs show the largest proportion of their expenses come from wages of football staff, namely players and the coaching team. The better the skills of these individuals the stronger is their bargaining power in compensation contracts for their services. If clubs want to retain their key staff, they need to provide them with compensation that matches their skills.

I analysed expenses for compensation of football and non-football staff (clubs only report the aggregate of both, however the latter are insignificant in size in comparison to former) of the EPL clubs between seasons 2013/14 and 2017/18. In the first year of the analysed period the clubs spent on average EUR 113 mn on wages per season. This number grew to EUR 160 mn at the end of 2017/18 season, an increase for 42% or CAGR of 9%. The increase was driven by revenues growth that allowed the EPL clubs to spend more on their staff compensation without suffering any major consequences. Newcastle was no exception to increase in wage expenses, however they maintained strict control of wages throughout these years. The club spent some EUR 94 mn in wages in the 2013/14 season and approximately EUR 106 mn in the 2017/18 season, representing an increase for 13% or CAGR of 3%. Figure 10 shows historical development of Newcastle wage expenses through the analysed period.

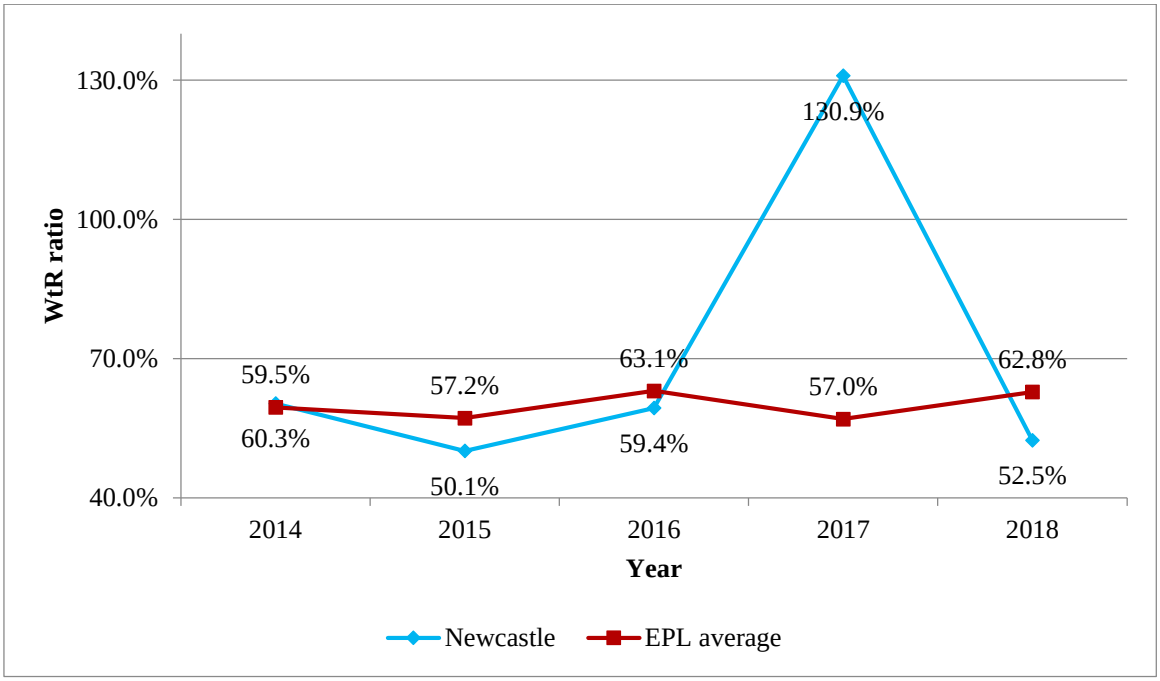
Figure 10: Historical wages development of Newcastle



Source: Newcastle United Limited (2014, 2015, 2016, 2017, 2018).

Since there are big differences in financial profiles of the EPL clubs in absolute terms, the WtR ratio provides with better picture of their expense control. Figure 11 represents Newcastle's WtR in comparison to average EPL WtR between 2013/14 and 2017/18 seasons.

Figure 11: Historical WtR ratio of Newcastle in comparison to the EPL clubs average

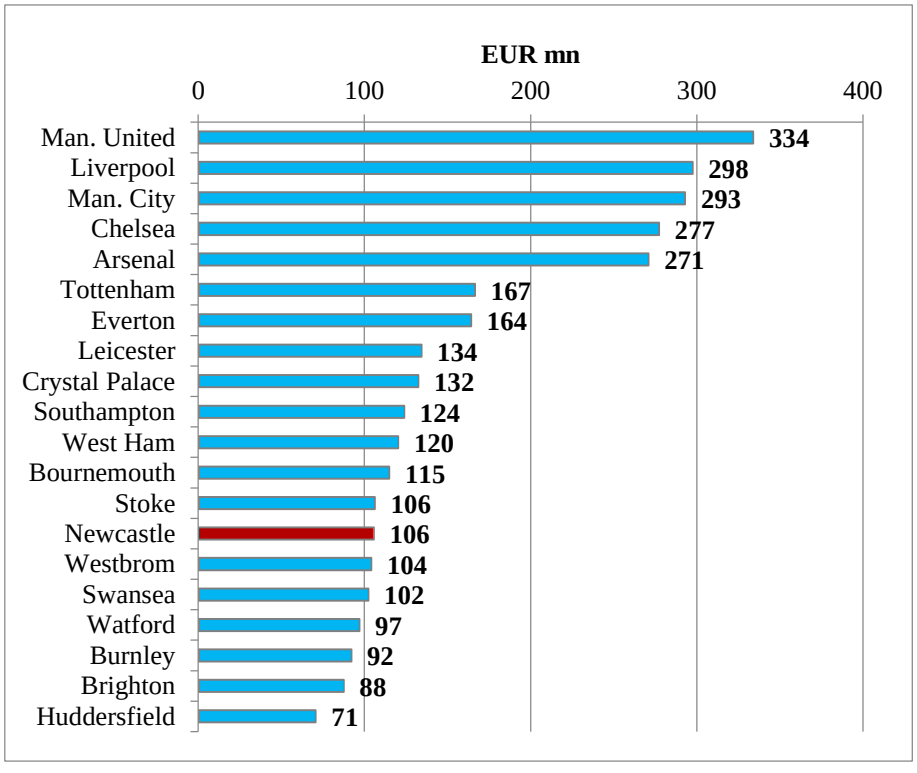


Source: Newcastle United Limited (2014, 2015, 2016, 2017, 2018).

EPL clubs had an average WtR of 59.5% at the end of the 2013/14 season, as can be observed in Figure 11. The value of this ratio increased to 62.8% at the end of the 2017/18 season. Newcastle managed to cut down these expenses on relative terms as their WtR decreased from 60.3% in 2013/14 to 52.5% in 2017/18 thanks to growth in revenues. The major outlier is visible in the 2016/17 season when the club played in the second tier English competition and generated less in revenues. Since the big 6 clubs have superior revenue generation ability their WtR ratios are kept at low levels. Newcastle's financial profile is significantly different from the profile of these clubs and lower WtR could actually mean they tend to employ cheaper human capital to stay competitive in the EPL.

Furthermore, Newcastle was among the clubs that spend the least on staff wages in the 2017/18 season, being ranked the 14th. Three out of six clubs that spent less on wages than Newcastle actually got relegated from the EPL in the same season. Consequently, if the club keeps focusing on cost efficiency of the first team and do not attract any talented players, this could represent a problem in the coming years, especially when considering the club has not won any trophies lately and has played in the second tier English competition in the 2016/17 season. Tight costs control is of course in the best interest of the club's management and the owner, however the supporters are expecting to see top football entertainment in exchange for the money they pay for the match tickets. Based on this information I can conclude that their protests are justified in case of Newcastle United. Data on wage expenses of EPL clubs in the 2017/18 season are presented in Figure 12.

Figure 12: Wage expenses of EPL clubs in the 2017/18 season



Source: Newcastle United Limited and other annual reports (2018).

3.4 Player registrations

Player registrations are an item that involves movements in all three of the main financial statements. Profit on disposal of players is recorded in the income statement, intangible assets in the balance sheet reflect the recorded book value amount of purchased player registrations, whereas cash outflows regarding purchase of intangible fixed assets are included in the cash flow statement. In this section I explain the framework of typical transfers of football players from regulatory and accounting perspectives, analyse recent developments of Newcastle's player acquisitions and compare them to other teams competing in the EPL.

3.4.1 Accounting framework and transfers of player registrations

Football clubs can raise their own players through their youth academies or alternatively acquire them from other football clubs. Transfer fees need to be paid in cases when a certain player is under a valid contractual relationship with the club that controls (seller club) his registration rights and there is interest from all involved parties (selling and buying clubs, the player) to change the control of registration rights to another club. The buying and selling clubs need to reach an agreement that is in compliance with the relevant regulations before the buying club is allowed to discuss the terms with the player and his representative. FIFA, with support of the national football associations, regulates the player transfer market with extensive set of rules explained in the Regulation on the Status and Transfer of Players (FIFA, 2019).

Football player transfers can be done only within two transfer windows per season that are pre-defined by the national football association. Generally, in most of the European football associations transfer windows take place during summer (from the beginning of July to mid-August) and during winter (January). Furthermore, Article 20 of the Regulation on the Status and Transfer of Players (FIFA, 2019) states that training compensation shall be paid to player's training club when this specific player signs a professional contract with some other club and each time a professional player is transferred to other clubs until the season of his 23rd birthday. Moreover, if a professional player is transferred before the expiry of his contract, solidarity mechanism defined in Article 21 of the Regulation the Status and Transfer of Players ensures that the training club shall receive a proportion of transfer fee paid to the selling club (FIFA, 2019). Agreements on control of player registration rights can be signed for a minimal duration from its effective date until the end of current season (typically 1 year) to a maximum of 5 years (FIFA, 2019). Additionally, Bolčina (2009) identified that significant changes occurred in the football players transfer market following the implementation of the Bosman rule in 1995. The rule increased market competitiveness, improved the mobility of players and sparked other regulatory changes in respect to transfer of football players, including free movement of players to other clubs when their contract

with current club expires. In these cases, no transfer fee needs to be paid to the former club (Bolčina, 2009).

As stated in the publication prepared by PwC (2018), player registration rights meet the recognition criteria set in the International Accounting Standards (IAS) 38 regarding the definition of an intangible asset. When a football player permanently switches clubs, control rights over their registration are also transferred. Since it is highly probable that economic benefits attributed to the player (asset) will flow to the controlling club and the cost of acquisition of player registration can be measured reliably, the asset will be recognised in the controlling club's balance sheet. The costs directly attributable to acquisition of the registration rights are capitalised, including the fixed amount of the transfer fee paid and the agent fees paid to the player's representative. In line with paragraphs 97-99 of IAS 38, the capitalised costs of player registration are then amortised each year for the duration of their contracts with the club. Normally, this is done on a straight-line basis (PwC, 2018). For example, registration of a player who was acquired for EUR 10 mn and signed a 4-year contract (no agent fees assumed) will be amortised by EUR 2.5 mn each year. If the original contract is renewed before expiry, the amortisation period may be revisited.

In accordance with IAS 38, the selling club derecognises from its balance sheet the player's registration rights that were previously recorded and amortised as an intangible asset. Any difference arising from transfer fee received from the purchasing club and the carrying value of the player's registration rights represents a gain (or loss) on disposal of player's registration. This item is recorded in the selling club's income statement. (PwC, 2018).

Football clubs often agree to settle transfer fees in several instalments instead in a lump sum (both are fixed payments) and add some performance based clauses (contingent considerations), e.g. when the player scores certain amount of goals or achieves a milestone of playing certain number of matches for the new club. Unconditional and fixed payments are included in the cost of recognition rights as the purchasing club has the obligation to make these payments, regardless of whether they are defined to be made on the transfer date or at some later date (instalments). If payment will be done, for example, 1 year after the transfer date, the corresponding amount is credited as a financial liability. Contingent considerations are only due to if conditions regarding goal scored and/or matches played are met. Cost accumulation and financial liability models were observed in accounting practices in such situations. Cost accumulation approach does not require to recognise a liability before the contingent payments are triggered, however further consideration is added to cost of the acquired registration rights once the conditions are met. Alternatively, PwC (2018) identified two variants of financial liability model that as per IFRS 9 require recognizing a financial liability measured at fair value at the time of initial registration rights recognition. At each reporting date, the changes in the expected cash flows would afterwards change the amortised cost of the liability and would either be recognised in the income statement, without an impact on the cost of the intangible asset, or would be adjusted against the cost of the registration rights (PwC, 2018).

Accounting standards (including IAS 1, 10, 19, 32, 36, 37, 38, IFRS 3, 5, 9, 16) also cover specific situations in the football transfer market that arise when permanent transfers are agreed at a balance sheet date but executed in the future, players are loaned (temporarily, loaned with obligation or option to buy), or when a player suffers a significant injury and his registration rights need to be tested for impairment (PwC, 2018). As the above topics are very specific and exceed the scope of this thesis, they can be further explored in the PwC (2018) publication.

3.4.2 Current team and past profit on disposal of players' analysis

As per data available on Transfermarkt, the leading publicly available database on football clubs and players, current Newcastle United first team consists of 28 players. The team's average age is approximately 27 years. Only 4 players included in the first team came through the ranks of the clubs' youth academy. The estimated total market value of the first team is EUR 274 mn. During the 2019 summer transfer window several players were added to the team, including former youth academy player Andy Carroll (joined on a free transfer) who was in 2011 sold to Liverpool for an estimated club record transfer fee of EUR 41 mn. Since the majority of the football clubs do not disclose financial details on transfer fees paid for the acquisition of player's registrations, the book value of these player registrations cannot be reliably estimated. However, the book values of players coming through the youth ranks is close to zero since no transfer fee was paid for their acquisition and potentially only agent fees can be capitalised as intangible assets. Moreover, it is possible to make an assumption that services of players like Joelinton, Allan Saint-Maximin, Miguel Almirón, Sean Longstaff, Jamaal Lascelles would be interesting for other clubs if they manage to produce quality performances and avoid any major injuries. Such assumption is based on the estimated market values of players as they are particularly higher than those of the other team members as well as on their current age that indicates they can still develop and improve as players in the coming years. Information on current Newcastle United first team can be found in Appendix 9.

As mentioned in the accounting framework sub-chapter, profit on disposal of players' registrations is recorded whenever a player is sold for an amount that exceeds its book value in the balance sheet. I analysed reported historical profits on disposal of players' registrations (expressed in % of total revenues) of selected EPL clubs between 2014-2018, where I excluded those that have not competed in the 2017/18 season or played less than 2 seasons in the EPL over the analysis horizon. Median value was fluctuating between 5.3% and 18.3% during this period. Newcastle United managed to beat the peer median in 3 out of 5 analysed years, having a remarkable 49.4% profit on disposal of player's registration in 2017 when they were relegated to tier two competition and had to optimize their books through numerous player sales. Southampton were particularly successful in player disposals by achieving abnormal profits in every year of the analysis horizon. Results of the analysis are presented in Appendix 10.

3.4.3 Acquisitions and disposals of players' registrations

Player transfer arrangements make it virtually impossible for an outside analyst to determine what was the transfer fee paid or received for each player solely based on the information available in the annual financial statements. As an alternative, Transfermarkt provides approximate financial information concerning players' transfers. Similar to previous wage analysis, I collected the information for the 19 EPL clubs that participated in at least 4 out of 6 seasons between 2013/14 and 2018/19 on received and spent transfer fees (combined into net transfer spent). Data is presented in Appendix 11. The combined net transfer spent amount of the EPL clubs was almost EUR 3.3 bn during the observed period. Manchester City is the leading club in this respect with approximately EUR 661 mn net transfer spent in the past 6 seasons.

On contrary, it was Swansea City who managed to make a net profit of EUR 30 mn during the same period. Newcastle's cumulative net transfer spent was EUR 93 mn in the analysed period which is substantially less than the cumulative EPL average of EUR 173 mn. Except for 2015/16 season, when they had net transfer spent of EUR 93 mn, the club was rather conservative in the transfer market, spending less on average than their opponents. This provides support to claims of Newcastle fans the club is not investing enough in the first team to be competitive in the EPL. For comparison, Manchester City spent EUR 661 mn in net terms over the same time period and won 9 trophies while Chelsea had net transfer spent amount of EUR 258 mn over the analysed horizon and won 8 trophies. Table 1 includes benchmark of Newcastle United in comparison to the league's average.

Table 1: Newcastle's net transfer spent analysis and the EPL average

In EUR mn	Purchases	Sales	Net Transfer Spent	Average EPL Net Transfer Spent
2013/14	3.4	23.3	-19.9	18.2
2014/15	40.5	21.3	19.3	20.6
2015/16	97.1	4.2	93.0	35.1
2016/17	57.4	90.8	-33.4	30.2
2017/18	39.9	17.6	22.3	33.3
2018/19	59.8	48	11.8	35.5
Total	**298.1**	**205.2**	**92.9**	**173.0**

Source: Transfermarkt (2019).

However, spending large amounts in transfer fees does not guarantee success. Moreover, learning on the past examples, including Leeds United (Michie & Oughton, 2005), reminds us of devastating consequences of reckless spending from the financial point of view. On the other hand, by reaching the semi-finals stage of the competition during the 2018/19 season of the ECL, AFC Ajax has proven that quality youth academy, supported with international scouting network and clear strategy can bring success as well (Macguire, 2019). Furthermore, Newcastle's competitors in the EPL, Watford, developed an interested strategy that focuses on acquiring international young talents at lower prices, developing them and

potentially selling them at profit that can be re-invested in the first team (Ahmed, 2018). If Newcastle wants to close the gap between them and the big 6 clubs, they would need to deploy a similar strategy sooner than later otherwise the only alternative left would be aggressive (and very risky) approach in the transfer market.

3.5 Other important items

3.5.1 Working capital analysis

Net working capital, a difference between current assets and current liabilities is of particular interest of this analysis since it enables determining the liquidity position of the firm. Newcastle United and other football clubs as well, are operating in an environment where negative working capital is nothing unusual, meaning they collect a lot of revenues in cash immediately (sponsorships, annual tickets sales) but deliver their contractual obligations throughout the season and delay the payment of their liabilities to their suppliers (e.g. other football clubs) for extended period and thus finance their current needs with the working capital. The business model of football clubs does not include inventories. Historical days of sales outstanding of Newcastle United between 2014 and 2018 were on average 114. In 2014, days of sales outstanding were 69 and gradually increased to 181 in 2017 when the club played in the Championship. This is in line with the fire sale of best players, implying that many of the transfer fees may have been agreed to be paid in instalments instead in a lump sum. Days of payables outstanding were on average 198 during the same period. Sharp spikes in days of payables outstanding can be identified in 2016 (year when the club got relegated) when the value was 234 and 2018 (first year after promotion to the EPL) when the value was 264. These events can be largely attributed to longer payment terms in respect to transfer fees paid for acquired players' registrations. Appendix 12 presents working capital analysis of Newcastle United between 2014 and 2018.

3.5.2 Debt

As of the latest balance sheet date, 30.6.2018, Newcastle United had one short-term (GBP 33 mn) and one long-term debt (GBP 111 mn) recording. Both were related to the shareholder loans provided by Mr Ashley through other companies under his ownership. Both loans are interest-free, a feature that would not be available to companies in the debt markets. Therefore, it would be realistic to assume that in case of potential acquisition of the club, Mr Ashley would demand the outstanding shareholder loan to be repaid in full. This could be achieved by obtaining financing in the debt markets or capital injection from the potential new owner. In the notes of the 2018 annual report it is stated the short-term loan in amount of GBP 33 mn has been fully repaid after the balance sheet date.

3.6 SWOT analysis

SWOT analysis framework is one of the most commonly used tools in strategic analysis. The main purpose of this tool is to identify internal strengths and weaknesses of the company and compare them to external, industry factors in shape of opportunities and threats (Hill & Jones, 2008).

Newcastle United is known within the football society for its loyal and numerous fan base, the Toon Army, which is surely one of its strong points. The fans stood by the club even during the less pleasant times when the team competed in the second tier football competition in England, supporting the team in large numbers (McCormick, 2016). Additionally, the club's stadium has large capacity, enabling solid platform for matchday revenue generation. The club also enjoys good reputation in England due to trophies won and the legendary players, such as Alan Shearer, that used to play for the club in the past. Another strength of the club is its participation in the most popular football league in Europe and as outlined in the Sector analysis chapter, the league with the best financial profile in Europe. Disciplined approach to financial management, especially the cost control aspect is another factor that should be included to the list of club's internal strengths.

Numerous reports in the media have described the relationship between the current owner of Newcastle and its fan base. Common topic to all of them is that the fans no longer want Mr Ashley as the club's owner, predominantly because they believe he does not invest enough in the club (BBC, 2018). Moreover, in June 2019, world-class manager Rafael Benitez left the club after refusing to extend his contract since he received no clear assurances on available funds for first team investments (McNulty, 2019). Additionally, the youth academy setup is one of the club's weaknesses since there is only 1 player involved in England international youth squads (Transfermarkt 2019), complemented with the fact that only 4 first team players came through the youth academy ranks. Poor youth academy setup means the club will need to find talent elsewhere and pay transfer fees for players under contracts with other clubs in order to remain competitive in the EPL. Last but not least, the top football clubs have nowadays global brand recognition which provides them with additional commercial revenues inflow, however Newcastle United is relatively weak in this particular field as previously shown in the commercial revenues analysis.

Newcastle United's one and only participation in UEFA competitions since Ashley's takeover was in 2012/13 season when they were knocked out in the quarter-finals by Portuguese side Benfica (McKenna, 2013). As outlined in the Sector analysis chapter, European competitions provide with significant opportunities to generate stronger revenues as well as other non-financial benefits, such as stronger brand recognition. Therefore, the club must aim to perform better and finish at least 7th in the EPL which would enable them to qualify for the European competitions. Furthermore, increased international presence could improve bargaining power with suppliers, especially in sponsorship negotiations that would enhance the commercial revenues. Additionally, following the example of their

competitors (Ahmed, 2018), the club could establish an international scouting network that would improve the intake of young talents from overseas.

Limited availability of funds for first team investments and the inability of retaining top talents in the club could lead to relegation from the EPL which is the biggest threat to the club. Moreover, the lack of ambition of Mr Ashley has already led to some top managers distancing themselves from leading Newcastle United and this threat may become even more evident in future attempts of attracting new players (Skysports, 2019). In terms of financial capabilities, first team strength and achievements, the big 6 clubs have created significant advantages over other clubs. There is a threat that Newcastle United, even if they show the ambitions to do so, would struggle to challenge these teams in the short term.

Key aspects of SWOT analysis of Newcastle United are presented in the Appendix 13.

4 VALUATION CASE STUDY

This chapter is the core part of this thesis. It begins with an overview of assumptions used in the financial model with projected financial statements. Valuation tools, presented in the first chapter, are applied on case of Newcastle United. After obtaining the valuation results and presenting them in the football field chart, the answer regarding the EV of Newcastle United is presented at the end of the chapter. With purpose of avoiding the distortion of figures due to movements in exchange rates, valuation was done in local currency, with final result being translated to EUR at 12.9.2019 EUR/GBP exchange rate of 1.11, obtained from the Bloomberg L.P. Terminal platform.

4.1 Projected financial statements

Projected income statement is shown in Table 2. Following the top-down approach, the aggregate market broadcasting revenues were modelled to reflect the new broadcasting agreement that assumes 8% growth in total broadcasting revenues in the 2020-2022 period. The projected 2019-2023 total sales CAGR is 3.7% (Deloitte's estimate for 2018-2020 growth is 4.0%). Secondly, these revenues were split in line with the EPL distribution scheme to derive the broadcasting revenues of Newcastle United. The main underlying conservative assumption was that Newcastle United will be consistently being ranked 16th and will not get relegated again in the next years. Matchday revenues were increased in 2020 for 5.0% to reflect the announced tickets price increase (Newcastle United, 2019) and afterwards for 0.5% with respect to commercial cross-selling opportunities. Commercial revenues were projected with rather modest assumption of 0.5% growth, reflecting current poor international brand awareness of Newcastle United. Other revenues are expected to remain relatively flat with respect to historical 2018 accounts.

Salary expenses are projected to be well under control in 2019, however are expected to rise up to 60% of sales in 2021 due to higher than average player acquisitions in 2020. In line with the identified historical strong wage control the salary expenses are predicted to decline to 55% in 2023. Investments in tangible assets are predicted only for maintenance purposes, therefore the depreciation of these assets will remain in harmony with the historical movements. Amortisation of players' registrations is predicted to increase in coming year to up to 25% of total sales to mirror increased investments in acquisitions of intangible assets. Profit on disposal of players item takes into account the information on player disposals in 2018/19 and 2019/20 seasons (Mitrović, Pérez) from Transfermarkt database and figures were estimated accordingly. I do not see Newcastle United selling many players at high profits as they would want to retain the talent they current have in the squad, otherwise their participation in the EPL may be put under threat. Disposal of star players would only be a matter of last resort in case of liquidity issues. Interest on cash and cash-like items is projected at 0.6% and interest expense is related to hire purchase agreements. The effective tax rate, equal to the announced 2020 corporate income tax rate in the United Kingdom of 17% (19% in 2019) was used for tax expense projections.

Table 2: Projected income statement of Newcastle United

Income statement (in GBP mn)	**2019P**	**2020P**	**2021P**	**2022P**	**2023P**
Sales	**173.1**	**187.6**	**188.3**	**189.8**	**199.8**
Broadcasting	120.7	133.8	134.3	135.5	145.2
Matchday	24.1	25.3	25.4	25.5	25.6
Commercial	26.8	27.0	27.1	27.2	27.4
Other	1.5	1.5	1.5	1.5	1.6
Cost of sales	**(115.9)**	**(135.7)**	**(139.4)**	**(134.4)**	**(137.7)**
Salary expenses	(92.6)	(108.8)	(113.0)	(108.2)	(109.9)
Operating lease	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
Other operating expenses	(22.7)	(26.2)	(25.8)	(25.6)	(27.1)
Gross profit	**57.2**	**51.9**	**48.8**	**55.4**	**62.1**
Amortisation	(40.1)	(46.9)	(45.2)	(47.4)	(46.4)
Depreciation	(2.0)	(2.6)	(2.4)	(2.3)	(2.4)
Profit/(loss) on disposal of players	17.3	32.8	1.9	4.9	8.0
EBIT	**32.4**	**35.2**	**3.1**	**10.5**	**21.4**
Interest receivable	0.2	0.4	0.5	0.6	0.7
Interest payable	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Profit / (loss) before tax	**32.5**	**35.4**	**3.6**	**11.0**	**22.0**
Tax	(6.2)	(6.0)	(0.6)	(1.9)	(3.7)
Net profit	**26.4**	**29.4**	**3.0**	**9.1**	**18.2**

Source: Own work.

Projected balance sheet is shown in Table 3. Cash position is determined after all movements in the cash flow statement and is a result of circularity in the model due to interest expenses. Account receivables consist largely of receivables from player transfers and to smaller extent trade debtors. This item was modelled in respect to days of sales outstanding which are expected to decrease from 57 in 2019 to 55 in 2023. Other account receivables are related to intra-company transactions and were projected in a similar manner, however are expected to

increase from 38 in 2019 to 45 in 2023, in line with levels before the relegation to Championship. Account payables include amounts owed due to player transfer fees. Taking into consideration weak transfer market activity in 2019, I estimate on average 140 days for the club to pay their account payables, nonetheless this figure is expected to increase to 190 days in 2020 due to increased player purchases. Similar approach was previously already used by the club. Newcastle United is afterwards expected to improve its payment discipline in regard to transfer liabilities and decrease the days of account payables to 170. Other account payables are modelled to decrease from 33 to 30 days. The sum of the two account payables items is 200 which is the historical average value of the two items.

Intangible assets (players' registrations) are expected to remain relatively flat during the projected period. Tangible assets are projected to decrease as only maintenance investments were projected and I do not see the possibility that current owner would be keen on building a new training ground or stadium. Other long term assets are expected to increase due to player sales in 2019 and 2020 (20%) but afterwards gradually decrease to historical average of 16% of total sales. Other long term liabilities are believed to decrease in 2019 due to weaker activity in the transfer market, however there will I predict slight increase in the coming years, largely due to belief that Newcastle United would negotiate some performance based clauses in acquisitions of player registrations and provisions related to these clauses would be reflected within the other long term liabilities accordingly. Shareholder loan provided by Mr Ashley is expected to remain interest free. I assumed that after 2023 the shareholder can decide on whether the outstanding cash balance will be used to repay the shareholder debt or it will be invested in first team improvements.

Table 3: Projected balance sheet of Newcastle United

Balance sheet (in GBP mn)	2019P	2020P	2021P	2022P	2023P
Current assets	**91.1**	**136.9**	**146.6**	**158.7**	**183.2**
Cash	46.0	87.3	96.0	107.7	128.5
Inventories	0.0	0.0	0.0	0.0	0.0
Account receivables	27.0	29.0	28.9	28.9	30.1
Other account receivables	18.0	20.6	21.7	22.1	24.6
Non-current assets	**153.7**	**170.8**	**159.7**	**153.6**	**150.5**
Intangible assets	65.1	74.5	67.0	63.2	64.8
Tangible assets	60.9	58.8	57.0	55.3	53.5
Other long term assets	27.7	37.5	35.8	35.1	32.2
Total assets	**244.8**	**307.6**	**306.3**	**312.2**	**333.7**
Current liabilities	**82.0**	**114.6**	**109.4**	**107.1**	**109.5**
Account payables	66.4	97.6	92.9	91.0	93.1
Other account payables	15.6	17.0	16.5	16.1	16.4
Non-current liabilities	**128.1**	**129.0**	**129.9**	**128.9**	**129.8**
Shareholder loan (long term)	111.0	111.0	111.0	111.0	111.0
Other long term liabilities	17.1	18.0	18.9	17.9	18.8
Total liabilities	**210.2**	**243.6**	**239.3**	**236.1**	**239.3**

(Table continues)

(Continued)

Balance sheet (in GBP mn)	2019P	2020P	2021P	2022P	2023P
Shareholders' equity	**34.6**	**64.1**	**67.0**	**76.2**	**94.4**
Common stock	76.4	76.4	76.4	76.4	76.4
Retained earnings	(41.8)	(12.4)	(9.4)	(0.3)	18.0
Total liabilities & equity	**244.8**	**307.6**	**306.3**	**312.2**	**333.7**

Source: Own work.

4.2 Discounted cash flows approach

Detailed walkthrough of all important steps of the DCF model is provided in the subsequent chapters. Firstly, FCFF is computed based on inputs from the financial model. Secondly, WACC of Newcastle is computed and the thesis' sub-question on Newcastle's cost of capital is answered. Thirdly, terminal value of future cash flows is computed, followed by EV calculation. Last but not least, sensitivity analysis is performed to show the model's sensitivity to changes in key variables.

4.2.1 Free Cash Flow to Firm

FCFF was determined according to the approach described in the Valuation theory chapter. Based on projected financials for the next 5 years I computed NOPLAT in each year, where estimated profits on player disposals were drivers behind the figures in 2019 and 2020. The corporate income tax rate in the UK was 19% in 2019, however due to change in the legislation it is expected to decrease to 17% in 2020 (PwC, 2019). Capex includes investments in tangible (maintenance purposes) and intangible assets (net of player sales), whereas the latter represent the majority of invested funds. Projected working capital movements predict improved collection of receivables and lower days of payables outstanding in 2019. Furthermore, mainly due to player purchases, the club is expected to stretch the days of payables outstanding, similar to what they already did in 2016. From year 2021 the club is assumed to decrease the outstanding account payables which is reflected in negative changes in working capital. Detailed FCFF calculation is presented in Table 4.

Table 4: FCFF calculation based on DCF approach

FYE 30.6.; in GBP mn	Forecast				
	2019	2020	2021	2022	2023
EBIT	**32.4**	**35.2**	**3.1**	**10.5**	**21.4**
% margin	*18.7%*	*18.7%*	*1.7%*	*5.6%*	*10.7%*
- Tax adjustment	(6.2)	(6.0)	(0.5)	(1.8)	(3.6)
NOPLAT	**26.3**	**29.2**	**2.6**	**8.7**	**17.7**
+ Depreciation	2.0	2.6	2.4	2.3	2.4
+ Amortisation	40.1	46.9	45.2	47.4	46.4
– Capex	(11.9)	(56.8)	(38.3)	(44.3)	(48.6)
– Δ Working Capital	(1.9)	28.0	(6.2)	(2.7)	(1.4)
Free Cash Flow To Firm	**54.5**	**49.9**	**5.7**	**11.6**	**16.5**

Source: Own work.

4.2.2 Weighted average cost of capital

I used the average capital structure of the peer group as proxy for target weights of equity (73.2%) and debt (26.8%) since Newcastle's debt and equity are not traded in organized markets. Additionally, I extracted historical 5 year weekly levered betas (adjusted for beta drift) of the following comparable publicly traded clubs: Borussia Dortmund, Celtic, Manchester United, Juventus, AS Roma, SS Lazio, Olympique Lyonnais. The data is presented in Appendix 14. The levered betas of the respective clubs were first adjusted for capital structures and afterwards the average unlevered beta was used for computing the Newcastle's beta. Based on this information, Newcastle's levered beta is 0.7. I used the 30-year UK government bond with yield of 1.0% as of 12.9.2019 as the closest approximation of the risk-free rate since the duration matches the long term investment horizon. According to Damodaran's website with data on country ERPs, the ERP for UK-based companies is 6.7% ("Damodaran online," 2019). Consequently, Newcastle's cost of equity is 5.7% under the CAPM.

I estimated 2018 interest rates (expressed as interest expense divided by total debt) of following publicly traded comparable clubs: Manchester United (MUN), Juventus (JUV), AS Roma (ASR), SS Lazio (SSL), Olympique Lyonnais (OLG); and used their average of 4.3% as a synthetic estimate of Newcastle's cost of debt. Taking into consideration that Manchester United is the only close peer to Newcastle as they compete in the same league and they are one of the biggest football clubs in the world with strong brand name and revenue generation ability, the assumption regarding the cost of debt for Newcastle being slightly higher than Manchester United's cost of debt (bond yield of 3.8%) is reasonable. Taking into account the 2020 UK corporate tax rate of 17.0%, the WACC of Newcastle is 5.2%.

Calculations of cost of equity, cost of debt and the WACC are presented in the equations 18, 19, 20 below.

$$Cost\ of\ equity = r_f + ß_L * ERP = 1.0\% + 0.7 * 6.7\% = 5.7\% \quad (18)$$

$$Cost\ of\ debt = \frac{(MUN\ r_d + JUV\ r_d + ASR\ r_d + SSL\ r_d + OLG\ r_d)}{5} = \frac{(3.2\% + 2.0\% + 8.3\% + 3.8\% + 4.4\%)}{5} = 4.3\% \quad (19)$$

$$WACC = \frac{E}{E+D} * k_e + \frac{D}{E+D}\ k_d(1-t) = 73.2\% * 5.7\% + 26.8\% * 4.3\% * (1 - 0.17) = 5.2\% \quad (20)$$

4.2.3 Terminal value

I understand the PGR largely depends upon the main revenue source growth, the broadcasting revenues. As described in the Sector analysis chapter, broadcasting revenues are expected to grow in the coming years (2020-22 CAGR of 0.7%), however at a slower rate than in the past (2017-19 CAGR of 1.2%), with overseas payments being the main driver behind the growth. Other revenue sources are also expected to grow at similar modest rates, therefore I estimated the PGR to be 0.5%. As presented in the equation 21 below, by adjusting the 2023 FCFF for PGR and dividing it by the difference between the WACC and PGR the TV is approximately GBP 355 mn.

$$TV = \frac{FCFF_{2023} * (1+g)}{(r_{WACC} - g)} = \frac{16.5 * 1.005}{(0.052 - 0.005)} = 354.6 \qquad (21)$$

4.2.4 Enterprise value

The calculation of present values of FCFF between 2020 and 2023 and the terminal value is presented in Table 5 below. The discount factors are adjusted for mid-year discounting in order to reflect the valuation date of 30.9.2019.

Table 5: Calculation of present value of future FCFF

FYE 30.6.; in GBP mn	**2019**	**2020**	**2021**	**2022**	**2023**	**TV**
FCFF	54.5	49.9	5.7	11.6	16.5	354.6
Discount factor	*0.0%*	*98.1%*	*93.3%*	*88.7%*	*84.4%*	*84.4%*
Present Value of FCFF	**0.0**	**36.8**	**5.4**	**10.3**	**13.9**	**299.2**

Source: Own work.

The final step of the DCF model is summing up all FCCF and TV present values. EV of Newcastle United as of 30.9.2019 based on the DCF model is approximately EUR 408 mn, implying an EV/EBIT 2020 multiple of 10.4x. Calculation is presented in Table 6.

Table 6: EV of Newcastle United based on DCF approach

Enterprise value (in GBP mn)	365.5
Implied EBIT 2020E multiple	*10.4x*
Enterprise value (in EUR mn)	**407.5**

Source: Own work.

4.2.5 Sensitivity analysis

Due to DCF model's sensitivity to changes in key inputs, such as the discount rate and the PGR I prepared sensitivity analysis for changes in these two variables. Enterprise values based on different discount rates and PGR are presented in Table 7.

Table 7: WACC and PGR sensitivity analysis

PGR \ WACC	3.2%	4.2%	5.2%	6.2%	7.2%
-0.5%	524.5	416.0	345.8	296.8	260.6
0.0%	598.1	458.9	373.7	316.2	274.8
0.5%	699.2	513.5	407.5	339.0	291.1
1.0%	847.2	585.4	449.4	366.2	310.0
1.5%	1,084.1	684.2	502.8	399.3	332.3

Source: Own work.

4.3 Residual income approach

Once the projected financial statements are prepared, the residual income model approach is fairly straightforward to apply. The first step is to compute the equity charge for each period. Secondly, the residual income is derived after deducting the equity charge from the net profit. Terminal value was computed under the assumption of persistence factor 1, implying the RI level will persist forever. The next step was to determine the discount factor where the cost of equity of 5.7% was used. Furthermore, the RI values are discounted to present value. Present value of RI calculation is shown in Table 8.

Table 8: Calculation of present values of projected residual incomes

FYE 30.6.; in GBP mn	Forecast					Terminal value
	2019	2020	2021	2022	2023	
Net profit		29.4	3.0	9.1	18.2	
Book value FYE	34.6	64.1	67.0	76.2	94.4	
Equity charge (k_e*BV_{t-1})		2.0	3.7	3.8	4.4	
Residual income		27.4	(0.7)	5.3	13.8	241.4
Discount factor		*94.6%*	*89.4%*	*84.6%*	*80.0%*	*80.0%*
Present value	**34.6**	**25.9**	**(0.6)**	**4.5**	**11.1**	**193.1**

Source: Own work.

Since the sum of present values of future residual incomes implies only the equity value, total net debt must be added in order to determine the EV of the firm. Considering the shareholder loan as total outstanding debt leads to implied EV of Newcastle of EUR 372 mn. EV calculation under residual income model approach is presented in Table 9.

Table 9: EV of Newcastle United based on Residual income approach

Equity value	268.6
+ Net debt	65.0
Enterprise value (in GBP mn)	333.6
Enterprise value (in EUR mn)	**371.9**

Source: Own work.

4.4 Relative valuation – Comparable public companies

4.4.1 Peer group selection

There are 20 publicly traded clubs in Europe, as summarized in Appendix 15. Majority of them are based in other countries and compete in different competitions than Newcastle. Consequently, they also have different financial profiles. The closest publicly traded peer to Newcastle United is Manchester United since they compete in the same competition, however they are much larger in terms of revenue generation. Forward looking financials estimates were available only for Borussia Dortmund, Celtic, Manchester United, Juventus, and Olympique Lyonnais due to very limited sector coverage by equity research analysts. Although some of these clubs are regular participants in the European competitions, unlike Newcastle, they have relatively similar revenue generation potential and were therefore selected into comparable peer group.

4.4.2 Enterprise value to revenues multiple

Appendix 16 provides information extracted from the Bloomberg L.P. Terminal on 12.9.2019 on 1-year forward looking multiples of the peer group (for FYE 2020). In favour of eliminating the bias of outliers I computed the value of median multiple which is 1.8x. Applying this multiple on projected Newcastle 2020 revenues implies the EV of Newcastle United of EUR 371 mn as presented in Table 10.

Table 10: EV of Newcastle United based on EV/Revenues multiple (Public peers)

Median EV/Revenues 2020 multiple	1.8x
Newcastle Revenues 2020E	187.6
Enterprise value (in GBP mn)	332.4
Enterprise value (in EUR mn)	**370.6**

Source: Own work.

4.4.3 Price to book value multiple

I computed the median P/BV multiple of 4.2x (forward-looking 2020 multiple) of the peer group based on the inputs obtained from Bloomberg L.P. Terminal. Detailed information on peers' P/BV multiples can be found in the Appendix 16. Implied EV of EUR 373 mn was obtained after adding the net debt (shareholder's loan less cash) to the product of median peers' P/BV multiple and the projected Newcastle 2020 shareholder's equity. Calculation of Newcastle's EV is highlighted in the Table 11 below.

Table 11: EV of Newcastle United based on P/Book value multiple (Public peers)

Median P/BV 2020 multiple	4.2x
Newcastle Shareholder's equity 2020E	64.1
Implied Equity value	269.2
+ Net debt	65.0
Enterprise value (in GBP mn)	334.2
Enterprise Value (in EUR mn)	**372.6**

Source: Own work.

4.5 Relative valuation – Comparable past transactions

4.5.1 Relevant transactions selection

Financial details of M&A transactions are often not publicly disclosed and are sometimes also subject of estimates of football insiders and various journalists who are covering such matters. Under assumption the reported deal values in Mergermarket database are accurate, I selected comparable past transactions between July 2013 and June 2019 (July-June corresponds to the usual fiscal year of EPL football clubs). Only majority stake acquisitions in the United Kingdom were taken into consideration. Overview of 11 transactions that meet this screening criteria can be found in Appendix 17.

4.5.2 Enterprise value to sales multiple

The median EV to sales multiple of the comparable past transactions was 1.6x during the 2013-2019 period. Estimated sales in 2020 of Newcastle are EUR 209 mn. As shown in the equation below, based on comparable past transactions enterprise to sales multiple, the implied EV of Newcastle United is EUR 326 mn.

$$EV = Median\ EV/Sales * Newcastle\ 2020E\ Sales = 1.6 * 209.1 = 325.8 \quad (22)$$

4.5.3 Enterprise value to EBIT multiple

Basic financial statements of the UK-based football clubs can be easily obtained from the national company register. Even though player trading is normal activity for football clubs, problem arises in respect to treatment of profit on disposal of player registrations item as some clubs report it as a recurring item, whereas other consider this item as non-recurring. As a consequence, the interpretation of EBITDA item is rather subjective. Therefore, for the purpose of simplification, I focused on computing the EV to EBIT multiple where profit on disposal of players is already included. The median EV to EBIT multiple of comparable past transaction was 10.3x, as stated in Appendix 17. Based on the estimated 2020 EBIT of

Newcastle of EUR 39 mn, this approach implies that the EV of Newcastle is EUR 405 mn. The calculation is presented in the equation.

$$Enterprise\ value = Median\ EV/EBIT * Newcastle\ 2020E\ EBIT = 10.3 * 39.2 = 404.6 \quad (23)$$

4.6 Multivariate approach

Since Markham's multivariate approach to valuation of football clubs was designed specifically for EPL clubs it should be directly applicable in case of valuation of Newcastle United. Financial inputs for computing the EV are based on projected financials, whereas the information regarding stadium attendance and capacity is based on actual data for 2018/19 season (The FA Premier League Ltd, 2019). All required inputs for calculation of EV are presented in Table 12.

Table 12: Required inputs for multivariate approach valuation

FYE 30.6., in GBP mn	Forecast
	2019
Revenues	173.1
Net Assets	34.6
Net Profit	26.4
Stadium attendance[2]	51,121
Stadium capacity[2]	52,354
Wage expenses	92.6

Source: Own work.

Final result is derived in accordance with equation 17 and is afterwards translated to EUR. The EV of Newcastle United based on the Markham's multivariate approach is EUR 487 mn. It may be the case the statistical relationships between key parameters have changed since 2013 when this model was developed and its forecasting ability may not be strong enough for valuation purposes. The calculation of EV under this approach is shown in Table 13.

Table 13: Enterprise value of Newcastle United based on Multivariate approach

Revenues + Net Assets	207.7
(Net Profit + Revenues) / Revenues	1.15
Stadium utilisation ratio	0.98
Wages to Revenues ratio	0.54
Enterprise value (in GBP mn)	436.9
Enterprise value (in EUR mn)	**487.2**

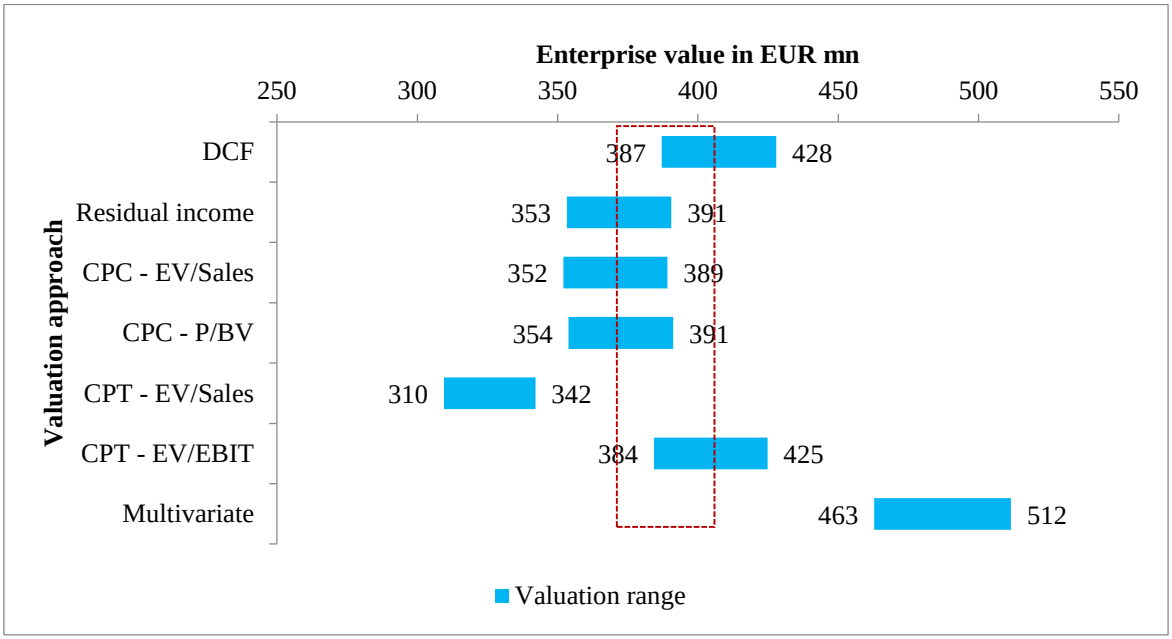
Source: Own work.

[2] Actual 2018/19 season data

4.7 Valuation results summary

Enterprise values of Newcastle United, derived under different valuation approaches are presented in the football field chart (Figure 13) below. The valuation ranges are provided as ±5.0% deviation from the computed EV. The estimated fair value of Newcastle United is within the area marked with dotted red rectangle which is equal to values between EUR 371-406 mn that correspond to the 1st and 3rd quartiles.

Figure 13: Football field chart with EV under different valuation approaches



Source: Own work.

Valuation based on comparable past transaction median EV/Sales multiple implies the lowest EV of EUR 326 mn. Highest implied EV is computed under the multivariate approach and is approximately EUR 487 mn. There is an overlap of enterprise values computed under the DCF, Residual income, comparable public companies EV/sales and P/BV multiples and comparable past transactions EV/EBIT multiple approaches. I estimate fair value of Newcastle United to be in amount of EUR 391 mn which is the average value of all computed enterprise values. Descriptive statistics of the valuation results are presented in Appendix 18. Based on the football field chart it could be possible that the multivariate approach overstates the enterprise value, whereas the comparable past transaction EV/Sales multiple may understate it.

5 LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to acquaint the reader with limitations of the valuation case study and recommend potential future research efforts with similar scope.

5.1 Limitations

Projected financial statements and valuation models include subjective assumptions that reflect my own understanding of the sector and Newcastle United football club. Therefore, I would like to inform the reader that findings do not necessarily reflect the actual financial position of this football club and cannot be used as an investment advice. Additionally, the results might also be distorted due to possibility that databases such as Mergermarket or Bloomberg L.P. Terminal do not include accurate data. Moreover, due to observed trend of low interest rates in the past years, the current yield of 1.0% of the UK government 30-year bond may not represent the risk-free rate accurately going forward. In case of major changes in the debt capital markets WACC should be recalculated accordingly. Majority of used comparable past transactions multiples (6 out of 11) were related to transactions of clubs that competed in the 2nd tier competition at the time of acquisition, hence the investors may have valued them at a discount. Furthermore, the multivariate model was published in 2013 and the statistical relationships between the key inputs may have changed until September 2019 when I used it for valuation. Even though it was prepared specifically for valuation of EPL clubs there is no appropriate option available to test it since there is only one publicly listed club in England.

In practice, parties that would be interested in valuation of a private company would request additional information and engage a third-party to perform due diligence to confirm that the financial statements are accurate and that there are no hidden risks arising from tax, legal, or other points of view. Consequently, the accuracy of valuation results could be further improved with additional information disclosure. For instance, access to audited 2019 financial statements, discussions with the board of directors regarding anticipated material events in the future, supplemented with a business plan would lead to better forecasting ability of the analyst and impact the final valuation result.

5.2 Recommendations

Since the owner of Newcastle United publicly declared his willingness to sell the club, it would be useful to obtain the deal value when this transaction would eventually be completed and compare it to the indicated fair value in this thesis. Additionally, the accuracy of individual valuation approaches used in this thesis could be tested for suitability in case of football club valuation with respect to the deal value. Furthermore, when the 2019 annual report will be publicly disclosed, the accuracy of the projected financial statements for Newcastle could be compared to actual results in order to test the validity of assumptions used in projections. These findings may improve future valuation efforts in football sector and provide potential investors with better information when assessing new investment opportunities.

CONCLUSION

In the light of recent media reports regarding the potential sale of an England-based football club, the main objective of this thesis was to provide the reader with enterprise value of a private company through the case study of Newcastle United Football Club. Since there is no universal approach to valuation I decided to apply different valuation methods, namely the DCF model, residual income model, relative valuation based on comparable public companies and comparable past transactions, and the unconventional multivariate model that was developed specifically for valuation of EPL football clubs. Additionally, my goals (other than that covered in the main objective) were to estimate the weighted average cost of capital and offer support (or evidence to the contrary) for the supporter's claims that the club is being poorly managed.

Since it is important to understand sector trends and company profile before engaging in the valuation of a company, I analysed key information in this regard. FIFA and UEFA are organizations that regulate the sector on international level, whereas the FA is the national governing body in England that oversees the rules and regulations together with the 20 clubs participating in the EPL. The European football clubs are mostly organized as private limited companies, few as public limited companies whose shares are traded on organized markets and particularly in Germany there are clubs organized as Members' associations, a form that prevents concentration of private ownership.

Motivation behind investing in football clubs is fairly unknown given the low returns and extreme share price sensitivity of public firms, however some research papers offer evidence that motivation may arise from synergies with combined businesses, social and political acceptance motives, or purely personal happiness that a football club could bring to the owner. Between June 2008 and June 2019 there were 137 transactions in football sector, showing the demand exists for this kind of investments. Approximately 39% of transactions were related to England based football clubs. Following the most notable acquisitions of Chelsea, Manchester United, and Manchester City football clubs, an increasing trend of Asian investors has been identified recently.

The EPL is the most popular national top-tier competition in Europe which is reflected in its superior revenue generation, arising from its lucrative broadcasting agreements. English football clubs can thus afford to attract the top talent that provide entertainment to their supporters. During the 2011-2018 period the aggregate revenues of top English clubs grew at CAGR of 11.7%. Sector experts estimate the market will continue to grow in the coming years which is also reflected in the most recent (2020-2022) broadcasting agreement.

Financial analysis of Newcastle United has shown the club is amongst top 10 when it comes to their revenues generation ability, especially from matchday and commercial revenue sources. In addition, the club's expenses are firmly controlled and are amongst the lowest in the league. However, too stringent control of wages and underinvestment in the first team

could imply the current playing squad consist of players of less quality which might be the reason of the club's underperformance from the sporting achievements perspective since Mr Ashley has acquired the club. From the owner's point of view, the club is run efficiently from the cost control perspective, however the supporters' claims are justified since the team is not achieving its potential that they believe they could.

The DCF model is based on many assumptions regarding cost of capital and financial performance in the future. Answer to one of the sub-objective regarding weighted average cost of capital of Newcastle United was provided during preparation of inputs for the DCF model. WACC of Newcastle United is estimated to be 5.2%. This valuation approach implied the enterprise value of Newcastle United in amount of EUR 407 mn. The valuation is supported with sensitivity analysis that reflects the enterprise value with changes in key variables, i.e. the discount rate and the perpetuity growth rate.

Unaffected by volatile free cash flows to the firm, the valuation based on the residual income approach is derived from the relationship between the cost of equity and return on equity. The implied enterprise value of Newcastle United under residual income approach is EUR 372 mn, assuming the existing residual income level will persist forever.

Relative valuation based on comparable public companies was performed on EV to sales and P to BV multiples. The two approaches show implied enterprise values in amounts of EUR 371 mn and EUR 373 mn, respectively. Relative valuation based on comparable past transactions was performed on EV to sales and EV to EBIT multiples. The first approach implied enterprise value of EUR 326 mn which was the lowest valuation result amongst all chosen approaches. The reason behind it may be attributed since some tier two clubs were also included in the peer group and the investors may have purchased these clubs at discounts. The second approach implied enterprise value of EUR 405 mn.

Multivariate approach implied the enterprise value in amount of EUR 487 mn, the highest amongst all used methods. The method was developed in 2013 and it is possible the statistical relationships between the parameters have changed since then and the forecasting ability of the model is not the strongest. Testing for accuracy of this method may not be reliable since there is only one publicly traded club in England.

Fair value of Newcastle United was determined as average value of all used approaches, attributing equal weights to the obtained results. The answer to the main research question of this thesis is therefore the following: the estimated fair value of Newcastle United Football Club is EUR 391 mn as of valuation date 30.9.2019.

The reader needs to be aware of research limitations and that the findings do not necessarily reflect the actual financial position of this football club and cannot be used as an investment advice as the projected financial statements and valuation models include certain subjective assumptions that reflect my own understanding of the sector and Newcastle United football club. Additionally, there is a risk that statistical relationships between the key inputs of the

multivariate model have changed since it was developed and the model does not estimate values accurately anymore.

Last but not least, should Newcastle United be really sold in the near future as indicated in the recent media reports, it would be interesting to compare the actual deal value to my estimated fair value of the club. The comparison could be furthermore expanded by testing the validity of assumptions that were used throughout the thesis. I would recommend further research efforts that could improve valuation efforts in football sector and provide potential investors with better information when assessing new investment opportunities.

REFERENCE LIST

1. Aglietta, M., Andreff, W. & Drut, B. (2010). Floating European football clubs in the stock market. *Economix working papers, 2010*(24).
2. Ahmed, M. (2018, 1 November). How to scout a football team. *Financial Times*. Retrieved May 30, 2019, from https://www.ft.com/content/4bb66cd4-dc9b-11e8-8f50-cbae5495d92b
3. Atletico Madrid. (2018, 14 February). *Quantum Pacific Group acquires Dalian Wanda Group's shares in Atlético de Madrid*. Retrieved June 17, 2019, from https://en.atleticodemadrid.com/noticias/quantum-pacific-group-acquires-dalian-wanda-groups-shares-in-atletico-de-madrid
4. Austin, S. (2008, 2 September). Arabian might at Eastlands. *BBC*. Retrieved June 20, 2019, from http://news.bbc.co.uk/sport2/hi/football/teams/m/man_city/7593936.stm
5. BBC. (2003, 2 July). *Russian businessman buys Chelsea*. Retrieved on June 15, 2019, from http://news.bbc.co.uk/2/hi/business/3036838.stm
6. BBC. (2018, 1 December). *Newcastle United fans protest with 11th-minute walk-in*. Retrieved June 30, 2019, from https://www.bbc.co.uk/news/uk-england-tyne-46413047
7. Bell, A. R., Brooks, C., Matthews, D. & Sutcliffe, C. (2012). Over the moon or sick as a parrot? The effects of football results on a clubs share price. *Applied Economics, 44*(26), 3435–3452.
8. Berk, J. & DeMarzo, P. (2011). *Corporate finance* (2nd ed.). Boston: Pearson.
9. Bloomberg L.P. (2019). *Information on publicly traded companies in football sector, 30-year UK government bond and EUR/GBP exchange rate.* Retrieved September 12, 2019 from Bloomberg Terminal.
10. Bodie, Z., Kane, A. & Markus, A. J. (2011). *Investments* (9th ed.). New York: McGraw-Hill/Irwin.
11. Bolčina, J. (2009). *Finančna nesorazmerja in njihov vpliv na športno uspešnost: Primer Bosman v Premier League.* Ljubljana: School of Economics and Business.
12. Bond, D. (2010, 20 August). Manchester United owners hit by debt payment rise. *BBC*. Retrieved from http://news.bbc.co.uk/sport2/hi/football/teams/m/man_utd/8931026.stm
13. Brealey, R. A., Myers, S. C. & Allen, F. (2011). *Principles of Corporate Finance* (10th ed.). New York: McGraw-Hill/Irwin.

14. Brigham, E. F. & Daves, P. R. (2007). *Intermediate financial management* (9th ed.). Mason: Thomson/South-Western.
15. Bundesliga. (2017, 21 December). *German soccer rules: 50 1 explained*. Retrieved from https://www.bundesliga.com/en/news/Bundesliga/german-soccer-rules-50-1-fifty-plus-one-explained-466583.jsp
16. Chelsea Football Club. (n.d.). *Trophy Cabinet*. Retrieved June 17, 2019, from https://www.chelseafc.com/en/about-chelsea/history/trophy-cabinet
17. City Football Group. (n.d.). *Our Story*. Retrieved from https://www.cityfootballgroup.com/our-story/
18. Conn, D. (2012, 4 July). Manchester United tackle debt by floating on New York Stock Exchange. *The Guardian*. Retrieved June 20, 2019, from https://www.theguardian.com/football/2012/jul/04/manchester-united-debt-cayman-islands
19. Conn, D. (2018, 13 September). Manchester City accounts show Sheikh Mansour has put £1.3bn into club. *The Guardian*. Retrieved June 20, 2019, from https://www.theguardian.com/football/2018/sep/13/manchester-city-accounts-sheikh-mansour
20. Damodaran Online. (2019, January). *My data on ERP & CRP by country*. Retrieved August 1, 2019 from http://pages.stern.nyu.edu/~adamodar/
21. Damodaran, A. (2002). *Investment valuation* (2nd ed.). New York: Wiley.
22. Damodaran, A. (2008). What is the Riskfree Rate? A Search for the Basic Building Block. *SSRN Electronic Journal*.
23. De Cosemo, H. (2019, 22 August). What Needs To Happen For A Takeover To Go Through At Newcastle? *Forbes*. Retrieved August 23, 2019, from https://www.forbes.com/sites/harrydecosemo/2019/08/22/what-needs-to-happen-for-a-takeover-to-go-through-at-newcastle/#490bb40a25d3
24. Dechow, P. M., Hutton, A. P. & Sloan, R. G. (1999). An empirical assessment of the residual income valuation model. *Journal of Accounting and Economics*, *26*(1-3), 1–34.
25. Deloitte. (2013, June). *Annual Review of Football Finance 2012*. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/sports-business-group/deloitte-uk-sbg-arff-2013-highlights-download.pdf
26. Deloitte. (2014, June). *Annual Review of Football Finance 2014*. Retrieved from https://www.slideshare.net/deloitteuk/annual-review-of-football-finance-2014
27. Deloitte. (2015, 4 June). *Annual Review of Football Finance 2015*. Retrieved from https://www2.deloitte.com/sg/en/pages/about-deloitte/articles/annual-review-of-football-finance-2015-report.html
28. Deloitte. (2016, June). *Annual Review of Football Finance 2016*. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/sports-business-group/deloitte-uk-annual-review-of-football-finance-2016.pdf
29. Deloitte. (2017, July). *Annual Review of Football Finance 2017*. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-deloitte-annual-review-of-football-finance-2017.pdf

30. Deloitte. (2018, June). *Annual Review of Football Finance 2018.* Retrieved from https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/sports-business-group/deloitte-uk-sbg-annual-review-of-football-finance-2018.PDF
31. Deloitte. (2019, May). *Annual Review of Football Finance 2019.* Retrieved from https://www2.deloitte.com/uk/en/pages/sports-business-group/articles/annual-review-of-football-finance.html
32. Douglas, M. (2019, 1 May). NUFC Puma deal coming to a close and interest in kit deal is high. *Chronicle Live*. Retrieved from https://www.chroniclelive.co.uk/sport/football/football-news/newcastle-united-puma-fun88-deals-16210445
33. Easton, J. (2018, 5 July). Ronaldo Bid Reports Send Juventus Shares to Four-Month High. *Bloomberg L.P.* Retrieved June 15, 2019, from https://www.bloomberg.com/news/articles/2018-07-05/ronaldo-rumors-spur-juventus-shares-as-bid-reports-gather-pace
34. Feltham, G. A. & Ohlson, J. A. (1995). Valuation and Clean Surplus Accounting for Operating and Financial Activities. *Contemporary Accounting Research, 11*(2), 689–731.
35. FIFA. (2010, 26 February). *They said it: Bill Shankly*. Retrieved from https://www.fifa.com/news/they-said-bill-shankly-1174048
36. FIFA. (2019). *Regulations on the Status and Transfer of Players.* Zurich: FIFA.
37. FIFA. (n.d.). *Governance - How FIFA Works*. Retrieved June 19, 2019, from https://www.fifa.com/governance/how-fifa-works/index.html
38. Franck, E. (2010). Private Firm, Public Corporation or Member's Association Governance Structures in European Football. *International Journal of Sport Finance, 5*(2), 108–127.
39. Garcia-Del-Barro, P. & Szymanski, S. (2009). Goal! Profit Maximization Versus Win Maximization in Soccer. *Review of Industrial Organization, 34*(1), 45–68.
40. Gibson, O. (2012, 12 November). Premier League TV rights set to top £5bn for first time. *The Guardian.* Retrieved from https://www.theguardian.com/football/2012/nov/12/premier-league-tv-rights-5-b
41. Goldblatt, D. (2008). *The ball is round: A global history of soccer*. New York: Riverhead Books.
42. Graham, B. & Dodd, D. L. (2009). *Security analysis* (6th ed.). New York: McGraw-Hill.
43. Grant, R. M. (2007). *Contemporary strategy analysis: Concepts, techniques, applications* (5th ed.). Oxford: Blackwell.
44. Higgins, R. C. (2012). *Analysis for financial management* (10th ed.). Boston: McGraw-Hill.
45. Hill, C. W. L. & Jones, G. R. (2008). *Strategic management: an integrated approach*. Boston: Houghton Mifflin.
46. Hitchner, J. R. (2011). *Financial valuation: Applications and models* (3rd ed.). Hoboken: J. Wiley & Sons.

47. IFAB. (n.d.). *History of Laws of the game*. Retrieved June 16, 2019, from http://www.theifab.com/history/laws
48. Johnson, M. (2018, 14 August). Football clubs become a big draw for investors. *Financial times.* Retrieved from https://www.ft.com/content/9a430c10-9ef5-11e8-85da-eeb7a9ce36e4
49. Koller, T., Goedhart, M. & Wessels, D. (2015). *Valuation: Measuring and managing the value of companies* (6th ed.). Hoboken: Wiley.
50. Leach, S. & Szymanski, S. (2015). Making Money Out of Football. *Scottish Journal of Political Economy*, *62*(1), 25–50.
51. Macguire, E. (2019, 30 April). How Ajax upset Champions League rich boys. *CNN*. Retrieved from https://edition.cnn.com/2019/04/29/football/ajax-tottenham-hotspur-champions-league-semifinal-spt-intl/index.html
52. Manchester City. (n.d.). *Club History.* Retrieved June 30, 2019 from https://www.mancity.com/fans-and-community/club/club-history
53. Manchester United. (2018). *Annual report 2018.* Retrieved June 30, 2019, from https://ir.manutd.com/financial-information/annual-reports/2018.aspx
54. Manchester United. (n.d.). *History by Decade*. Retrieved June 19, 2019, from https://www.manutd.com/en/history/history-by-decade
55. Markham, T. (2013). What is the Optimal Method to Value a Football Club? *SSRN Electronic Journal*.
56. McCormick, M. (2019, 9 May). Ajax shares shed more than a fifth after Champions League exit. *Financial Times*. Retrieved June 15, 2019, from https://www.ft.com/content/e7344a64-722d-11e9-bbfb-5c68069fbd15
57. McCormick, S. (2016, 28 October). Despite playing in the Championship, Newcastle United still boast 14th highest attendance in Europe. *Chronicle Live*. Retrieved June 17, 2019, from https://www.chroniclelive.co.uk/sport/football/football-news/despite-playing-championship-newcastle-united-12092806
58. McEnally, R.T. & Kim, K. (2007). *Corporate Governance - CFA® Program Readings*. Boston: Pearson.
59. McKenna, C. (2013, 11 April). Newcastle 1-1 Benfica (agg 2-4). *BBC*. Retrieved June 30, 2019, from https://www.bbc.com/sport/football/22023554
60. McNulty, P. (2019, June 24). Rafael Benitez leaves Newcastle: What next & why fans are the biggest losers. *BBC*. Retrieved from https://www.bbc.com/sport/football/48750789
61. Mergermarket Limited. (2003, 1 July). *Chelsea deal report.* Retrieved from http://www.mergermarket.com/Common/Mergermarket/Deals/DealsSearchResults.aspx?currencyCode=EUR
62. Mergermarket Limited. (2005, 12 May). *Manchester United deal report*. Retrieved from http://www.mergermarket.com/Common/Mergermarket/Deals/DealsSearchResults.aspx?currencyCode=EUR

63. Mergermarket Limited. (2007, 23 May). *Newcastle United deal report*. Retrieved from http://www.mergermarket.com/Common/Mergermarket/Deals/DealsSearchResults.aspx?currencyCode=EUR
64. Mergermarket Limited. (2008, 21 September). *Manchester City deal report*. Retrieved from http://www.mergermarket.com/Common/Mergermarket/Deals/DealsSearchResults.aspx?currencyCode=EUR
65. Mergermarket Limited. (2019, 30 June). M*&A transactions in the European football sector between 1.6.2008 and 30.6.2019*. Retrieved June 30, 2019 from http://www.mergermarket.com/Common/Mergermarket/Deals/DealsSearchResults.aspx?currencyCode=EUR
66. Michie, J. & Oughton, C. (2005). The Corporate Governance of Professional Football Clubs in England. *Corporate Governance: An International Review, 13*(4), 517–531.
67. Milmo, C. (2012, 11 December). The girl from Doncaster behind the Manchester City takeover. *Belfast Telegraph*. Retrieved from https://www.belfasttelegraph.co.uk/sport/football/premier-league/the-girl-from-doncaster-behind-the-manchester-city-takeover-28445884.html
68. Newcastle United Limited. (2014). *Annual report 2014*. Retrieved from https://beta.companieshouse.gov.uk/company/02529667/filing-history
69. Newcastle United Limited. (2015). *Annual report 2015*. Retrieved from https://beta.companieshouse.gov.uk/company/02529667/filing-history
70. Newcastle United Limited. (2016). *Annual report 2016*. Retrieved from https://beta.companieshouse.gov.uk/company/02529667/filing-history
71. Newcastle United Limited. (2017). *Annual report 2017*. Retrieved from https://beta.companieshouse.gov.uk/company/02529667/filing-history
72. Newcastle United Limited. (2018). *Annual report 2018*. Retrieved from https://beta.companieshouse.gov.uk/company/02529667/filing-history
73. Newcastle United. (2019, 13 June). *Supporters can now renew their season tickets for 2019/20.* Retrieved from https://www.nufc.co.uk/news/latest-news/supporters-can-now-renew-their-season-tickets-for-201920/
74. Newcastle United Football Club. (n.d.). *Newcastle United – history*. Retrieved from https://www.nufc.co.uk/club/history/
75. Ogden, M. (2018, 31 August). How Man City changed football forever. *ESPN*. Retrieved from http://www.espn.com/espn/feature/story/_/id/24453863/how-man-city-changed-football-forever
76. Palomino, F., Renneboog, L. & Zhang, C. (2008). Information Salience, Investor Sentiment, and Stock Returns: The Case of British Soccer Betting. *SSRN Electronic Journal*.
77. Penman, S. H. (2013). *Financial statement analysis and security valuation* (5th ed.). New York: McGraw-Hill Irwin.
78. Pinto, J. E., Henry, E., Robinson, T. R. & Stowe, J. D. (2010). *Equity asset valuation* (2nd ed.). Hoboken: Wiley.

79. Pitel, L. (2019, 7 January). Turkish football club shares soar on debt-restructuring deal. *Financial Times.* Retrieved from https://www.ft.com/content/a1a36470-12a7-11e9-a581-4ff78404524e
80. Plenborg, T. (2002). Firm valuation: Comparing the residual income and discounted cash flow approaches. *Scandinavian Journal of Management, 18*(3), 303–318.
81. Premier League. (2018, 17 May). *Premier League value of central payments to clubs 2018/19.* Retrieved from https://www.premierleague.com/news/691073
82. Premier League. (n.d.). *About the Premier League.* Retrieved June 16, 2019, from https://www.premierleague.com/about
83. PwC. (2018, October). *Accounting for typical transactions in the football industry: Issues and solutions under IFRS.* Retrieved from https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-9/accounting-for-typical-transactions-in-the-football-industry.pdf
84. PwC. (2019, 28 June). *United Kingdom – Taxes on corporate income.* Retrieved July 15, 2019 from http://taxsummaries.pwc.com/ID/United-Kingdom-Corporate-Taxes-on-corporate-income
85. Skysports (2019, 26 June). Jose Mourinho distances himself from Newcastle manager's job. Retrieved from https://www.skysports.com/football/news/11678/11749131/jose-mourinho-distances-himself-from-newcastle-managers-job
86. Smith, J. (2019, April 28). Hazard: I want to play in the Champions League. *MSN*. Retrieved June 19, 2019, from https://www.msn.com/en-gb/sport/football/hazard-i-want-to-play-in-the-champions-league/ar-BBWnyHt
87. Stone, S. (2015, May 12). Man Utd: 10 years of the Glazers - is Old Trafford club better off? *BBC*. Retrieved June 20, 2019, from https://www.bbc.com/sport/football/32615111
88. Sweeney, J. & Head, A. (2010, 7 June). Manchester United owner's debts hit £1.1bn. *BBC.* Retrieved June 20, 2019, from https://www.bbc.com/news/10237268
89. Sweney, M. (2018, 7 June). Amazon breaks Premier League hold of Sky and BT with Prime streaming deal. *The Guardian.* Retrieved from https://www.theguardian.com/media/2018/jun/07/amazon-breaks-premier-league-hold-of-sky-and-bt-with-streaming-deal
90. The Economist. (2012, 13 July). *Glasgow Ranger's bankruptcy*. Retrieved May 31, 2019 from https://www.economist.com/blogs/gametheory/2012/07/glasgow-rangers%E2%80%99-bankruptcy
91. The FA Premier League Ltd. (2019). *Premier League Handbook.* London: The FA Premier League Ltd.
92. The FA. (2015). *A Guide to Club Structures For National League System and other Football Clubs.* London: The FA.
93. Transfermarkt. (2019). *Newcastle United.* Retrieved from https://www.transfermarkt.com/newcastle-united/startseite/verein/762/saison_id/2019
94. Tremlett, G. (2017, 15 December). Manchester City's plan for global domination. *The Guardian.* Retrieved from https://www.theguardian.com/news/2017/dec/15/manchester-city-football-group-ferran-soriano

95. UEFA. (2018a). *2017/18 UEFA Champions League financial distribution.* Retrieved from https://www.uefa.com/insideuefa/about-uefa/news/newsid=2578222.html
96. UEFA. (2018b). *2017/18 UEFA Europa League financial distribution.* Retrieved from https://www.uefa.com/insideuefa/about-uefa/news/newsid=2578219.html
97. UEFA. (2019). *Club licensing benchmarking report: 2017*. Nyon: UEFA.
98. UEFA. (n.d. a). *The history of UEFA.* Retrieved June 16, 2019, from https://www.uefa.com/insideuefa/about-uefa/history
99. UEFA. (n.d. b). *UEFA Champions League - History*. Retrieved June 30, 2019, from https://www.uefa.com/uefachampionsleague/history/background/index.html
100. Wilson, J. (2013, 29 June). How Chelsea owner Roman Abramovich changed the face of football in England. *Telegraph.* Retrieved from https://www.telegraph.co.uk/sport/football/teams/chelsea/10149386/How-Chelsea-owner-Roman-Abramovich-changed-the-face-of-football-in-England.html
101. Yueh, L. (2014, 27 February). Why on earth buy a football club? *BBC.* Retrieved June 11, 2019, from https://www.bbc.com/news/business-26365955
102. Ziegler, M. (2019, 1 February). Premier League to make record £9bn from TV deals. *The Times.* Retrieved June 30, 2019, from https://www.thetimes.co.uk/article/premier-league-to-make-record-9bn-from-tv-deals-dr6fhkk9h

APPENDICES

Appendix 1: Povzetek (Summary in Slovene language)

Predmet tega magistrskega dela je vrednotenje podjetij, ki delujejo v panogi nogometa, oziroma natančneje profesionalnih nogometnih klubov v Evropi ter Veliki Britaniji s primerom na nogometnem klubu Newcastle United.

Začetki profesionalnega nogometa segajo v leto 1863, ko so se zbrali predstavniki lokalnih klubov, da bi določili pravila igre. Nekaj desetletij pozneje pa se je ta šport spremenil v večmilijonski posel, ki v želji po uspehih na športnem področju zahteva ogromna finančna vlaganja. V zvezi z nedavnimi govoricami glede prodaje omenjenega kluba ter lastnikovih izjav, da je pripravljen prodati klub, je glavni namen tega magistrskega dela predstaviti bralcu študijo primera vrednotenja nogometnega kluba z uporabo različnih metod vrednotenja podjetij. Rezultati tega dela ter podatek o vrednosti podjetja bi lahko koristil številnim deležnikom v nogometu, od navijačev pa vse do potencialnih vlagateljev, ki bi tako pridobili informacijo o pošteni vrednosti kluba. Ker je klub Newcastle United organiziran kot zasebno podjetje, je razpoložljivost javno objavljenih informacij omejena, analiza pa posledično temelji na uporabi sekundarnih virov kot so strokovna gradiva s področja vrednotenja in podjetniških financ, novinarskih člankov iz sveta športa, baze transakcij s področja združitev in prevzemov Mergermarket in pa iz Bloomberg Terminal-a, platforme s finančnimi podatki.

Pri vrednotenju nogometnega kluba Newcastle United sem uporabil metodo diskontiranih denarnih tokov, metodo preostalega dobička, primerjalno metodo na podlagi primerljivih podjetij, ki kotirajo na borzi ter preteklih primerljivih transakcij in pa splošno manj uveljavljeno metodo multivariatnega vrednotenja, ki jo je razvil Tom Markham leta 2013.

Prvo poglavje vsebuje pregled strokovne literature, ki se uporablja pri vrednotenju podjetij in tako ponudi bralcu razlago teoretičnega ozadja. Sledi poglavje o evropskem nogometnem sektorju, kjer predstavim tematike kot so: glavni regulatorji trga, korporativno upravljanje nogometnih klubov, motivacijo potencialnih vlagateljev, finančna analiza evropskega nogometnega sektorja. V naslednjem poglavju je nogometni klub Newcastle United analiziran s strateškega in finančnega vidika, kjer so skozi primerjalno analizo primerjani finančni rezultati z ostalimi klubu v angleški Premier ligi. V četrtem poglavju je prikazana študija primera vrednotenja kluba Newcastle United po prej omenjenih metodah. Poglavje se zaključi s predstavitvijo vseh rezultatov in oceno vrednosti, ki vključuje lastniški in dolžniški kapital. Sledi diskusija glede omejitve opravljene analize in pa priporočil v zvezi z nadaljnjimi raziskavami na tem področju. Naloga se zaključi s povzetkom.

Ob raziskovanju odgovora na raziskovalno vprašanje sem razrešil tudi pod-vprašanje v zvezi s tehtanim povprečjem stroškov kapitala nogometnega kluba Newcastle United ter na podlagi finančne analize potrdil trditve zvestih navijačev, da je upravljanje kluba pod trenutnim lastnikom neučinkovito.

Appendix 2: M&A transactions in the European football sector (2008-2019)

Announced	Target Company	Country	Purchaser	Type	Country	Stake	Value[3]
27.06.19	Hertha Berlin	Germany	Tennor Holding	Financial sponsor	The Netherlands	38%	125
10.06.19	Deportiva Alcorcon	Spain	D. Blitzer; I. Bravo	Private investor	USA; Spain	100%	n.a.
06.06.19	Fiorentina	Italy	R. B. Commisso	Private investor	USA	100%	n.a.
03.05.19	Huddersfield Town	UK	P. Hodgkinson	Private investor	UK	75%	n.a.
18.02.19	KV Oostende	Belgium	F. Dierckens	Private investor	Belgium	82%	n.a.
25.01.19	Internazionale Milan	Italy	LionRock Capital	Financial sponsor	Hong Kong	31%	150
06.11.18	Girondins de Bordeaux	France	Great American Capital Partners	Financial sponsor	USA	100%	100
28.09.18	Numancia	Spain	M. I. Garzon; F. Velazquez	Private investor	Spain	100%	n.a.
01.09.18	Real Valladolid	Spain	Ronaldo Nazario	Private investor	Brazil	51%	32
07.08.18	Arsenal	UK	S. Kroenke	Private investor	USA	33%	673
31.07.18	Bari	Italy	A. De Laurentiis	Private investor	Italy	100%	n.a.
20.07.18	Aston Villa	UK	W. Edens; N. Sawiris	Private investor	USA; Egypt	55%	95
10.07.18	AC Milan	Italy	Elliott Capital	Financial sponsor	USA	100%	n.a.
28.06.18	Istra 1961	Croatia	Baskonia Alaves Group	Football club	Spain	85%	n.a.
21.05.18	Wigan Athletic	UK	International Entertainment	Financial sponsor	Hong Kong	86%	14
29.04.18	Sunderland	UK	S. Donald	Private investor	UK	100%	n.a.
14.02.18	Atletico Madrid	Spain	I. Ofer	Private investor	Israel	17%	50
08.02.18	KV Oostende	Belgium	P. Callant	Private investor	Belgium	91%	n.a.
20.12.17	Anderlecht	Belgium	M. Coucke; J. Ide	Private investor	Belgium	70%	106
19.12.17	Barnsley	UK	A consortium led by Chien Lee	Private investor	China	99%	n.a.
16.11.17	Atletico Madrid	Spain	I. Ofer	Private investor	Israel	15%	50
14.08.17	Southampton	UK	Gao family	Private investor	China	80%	185
14.08.17	Girona	Spain	City Football Group	Football club	UK	89%	12
03.08.17	Portsmouth	UK	M. Eisner	Private investor	USA	100%	6
28.07.17	Real Betis	Spain	Real Betis	Buyback	Spain	51%	32
17.07.17	Albacete	Spain	Skyline International	Financial sponsor	Canada	96%	n.a.
21.06.17	Parma	Italy	Desports Group	Financial sponsor	China	60%	6
23.05.17	Leeds United	UK	A. Radrizzani	Private investor	Italy	50%	n.a.
18.05.17	Nottingham Forest	UK	E. Marinakis; S. Kominakis	Private investor	Greece	100%	58
17.05.17	Reading	UK	D. Xiu Li; D. Yongge	Private investor	China	75%	n.a.
07.04.17	Basel	Switzerland	B. Burgener	Private investor	Switzerland	91%	n.a.
19.03.17	Legia Warszawa	Poland	D. Mioduski	Private investor	Poland	40%	n.a.

(Table continues)

[3] In EUR mn

Announced	Target Company	Country	Purchaser	Type	Country	Stake	Value[3]
26.01.17	LOSC Lille Metropole	France	G. Lopez	Private investor	Luxembourg	95%	n.a.
04.01.17	Leeds United	UK	A. Radrizzani	Private investor	UK	50%	n.a.
17.10.16	Olympique de Marseille	France	F. McCourt	Private investor	USA	100%	45
13.09.16	Pisa	Italy	Equitativa Group	Financial sponsor	UAE	100%	6
06.08.16	AJ Auxerre	France	ORG	Financial sponsor	China	60%	7
05.08.16	AC Milan	Italy	L. Yonghong	Private investor	China	100%	740
05.08.16	West Bromwich Albion	UK	L. Guochuan	Private investor	China	100%	177
21.07.16	Wolverhampton Wanderers	UK	Fosun International	Financial sponsor	China	100%	54
10.06.16	OGC Nice	France	Consortium of investors	Private investor	China	80%	n.a.
06.06.16	Internazionale Milan	Italy	Suning	Financial sponsor	China	69%	329
05.06.16	Swansea City	UK	J. Levien; S. Kaplan	Private investor	USA	100%	142
23.05.16	RC Lens	France	Atletico Madrid; Solferino	Football club	Spain	100%	6
18.05.16	Aston Villa	UK	T. Xia	Private investor	China	100%	77
10.03.16	Bolton Wanderers	UK	K. Anderson	Private investor	UK	95%	10
27.02.16	Everton	UK	F. Moshiri	Private investor	UK	50%	107
15.02.16	Valencia	Spain	P. Lim	Private investor	Singapore	12%	100
04.01.16	Mallorca	Spain	R. Sarver	Private investor	USA	77%	21
17.12.15	Crystal Palace	UK	J. Harris; D. Blitzer	Private investor	USA	100%	137
15.12.15	Nordsjaelland	Denmark	Pathway Group	Financial sponsor	UK	97%	n.a.
01.12.15	City Football Group*	UK	CMC; CITIC	Financial sponsor	China,Hong Kong	13%	378
02.11.15	Espanyol	Spain	Rastar Group	Financial sponsor	China	45%	14
04.09.15	Slavia Prague	Czech Republic	CEFC China Energy; J. Simane	Financial sponsor	China;Czech R.	100%	n.a.
03.09.15	Derby County	UK	M. Morris	Private investor	UK	78%	n.a.
04.07.15	Wil 1900	Switzerland	MNG Holding	Financial sponsor	Turkey	100%	n.a.
01.07.15	Antwerp	Belgium	P. Decuyper	Private investor	Belgium	100%	n.a.
24.06.15	Standard Liege	Belgium	B. Venanzi	Private investor	Belgium	100%	n.a.
20.06.15	Le Havre	France	V. Volpe	Private investor	USA	90%	10
02.06.15	Istra 1961	Croatia	V. Smith	Private investor	USA	100%	9
18.05.15	Sochaux	France	Ledus	Financial sponsor	Hong Kong	100%	10
30.01.15	Sheffield Wednesday	UK	D. Chansiri	Private investor	Thailand	100%	40
21.01.15	Atletico Madrid	Spain	Dalian Wanda Group	Financial sponsor	China	20%	45
07.12.14	Parma	Italy	Dastraso Holdings	Financial sponsor	Russia	100%	7
16.10.14	Bologna	Italy	J. Saputo	Private investor	USA	100%	18
06.10.14	Atletico Madrid	Spain	W. Jianlin	Private investor	China	20%	45
19.09.14	Reading	UK	Group of investors	Private investor	Thailand	100%	n.a.
12.08.14	A.S. Roma	Italy	AS Roma SPV LLP	Financial sponsor	Italy	24%	33
24.07.14	Real Zaragoza	Spain	Fundación Zaragoza 2032	Private investor	Spain	100%	n.a.

(Table continues)

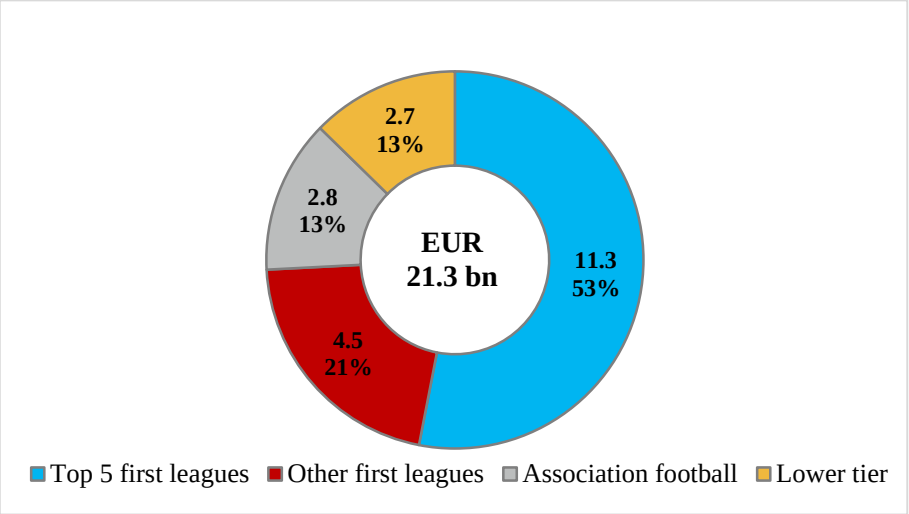
Announced	Target Company	Country	Purchaser	Type	Country	Stake	Value[3]
02.07.14	FC Midtjylland	Denmark	M. Benham	Private investor	UK	60%	9
12.06.14	Sampdoria	Italy	M. Ferrero	Private investor	Italy	100%	n.a.
11.06.14	Cagliari	Italy	T. Giulini	Private investor	Italy	100%	45
23.05.14	Bari	Italy	G. Paparesta	Private investor	Italy	100%	5
17.05.14	Valencia	Spain	P. Lim	Private investor	Singapore	70%	320
11.02.14	Bayern München	Germany	Allianz	Financial sponsor	Germany	8%	110
10.01.14	Alcorcon	Spain	R. Duchatelet	Private investor	Belgium	100%	n.a.
09.01.14	Legia Warszawa	Poland	D. Mioduski; B. Lesnodorski	Private investor	Poland	100%	n.a.
27.12.13	Charlton Athletic	UK	R. Duchatelet	Private investor	Belgium	100%	n.a.
22.11.13	LASK Linz	Austria	Consortium of local businessmen	Private investor	Austria	100%	6
15.10.13	Internazionale Milan	Italy	E. Thohir	Private investor	Indonesia	70%	250
03.09.13	Bournemouth	UK	M. Demin	Private investor	Russia	50%	n.a.
03.09.13	Sheffield United	UK	A. bin Mosaad bin Abdulaziz Al Saud	Private investor	Saudi Arabia	50%	12
12.07.13	Fulham	UK	S. Khan	Private investor	USA	100%	173
05.07.13	RC Lens	France	G. Martel; H. Mammadov	Private investor	France;Azerbaijan	100%	n.a.
30.06.13	Leeds United	UK	International Investment Bank of Bahrain	Financial sponsor	Bahrain	100%	n.a.
28.06.13	Padova	Italy	D. Pennocchio	Private investor	Italy	49%	n.a.
10.04.13	Portsmouth	UK	Pompey Supporters Trust	Fans	UK	100%	n.a.
21.12.12	FC Metalist	Ukraine	S. Kurchenko	Private investor	Ukraine	100%	n.a.
21.11.12	Leeds United	UK	GFH Capital	Financial sponsor	UAE	100%	55
11.08.12	PAOK	Greece	I. Ignatyevich Savvidi	Private investor	Russia	51%	10
10.07.12	Nottingham Forest	UK	Al-Hasawi Family	Private investor	Kuwait	100%	n.a.
22.06.12	Lecce	Italy	S. Tesoro	Private investor	Italy	100%	n.a.
18.06.12	Watford	UK	Pozzo Family	Private investor	Italy	100%	n.a.
29.05.12	Reading	UK	A. Zingarevich	Private investor	Russia	51%	44
13.05.12	Rangers	UK	C. Green	Private investor	UK	100%	11
31.03.12	Lierse	Belgium	Wadi Degla Holding	Financial sponsor	Egypt	100%	25
07.03.12	Paris Saint Germain	France	Qatar Sports Investments	Financial sponsor	Qatar	100%	30
14.02.12	Sparta Prague	Czech Republic	D. Kretinsky	Private investor	Czech Republic	40%	n.a.
18.08.11	Queens Park Rangers	UK	T. Fernandes	Private investor	Malaysia	66%	57
03.08.11	Slavia Prague	Czech Republic	A. Rebicek	Private investor	Czech Republic	68%	n.a.
14.07.11	Beitar Jerusalem	Israel	A. Levin; D. Adler	Private investor	USA	100%	n.a.
04.07.11	Real Valladolid	Spain	C. Suarez	Private investor	Spain	58%	5
23.06.11	Standard Liege	Belgium	R. Duchatelet	Private investor	Belgium	100%	40
01.06.11	Portsmouth	UK	Convers Sports Initiatives	Financial sponsor	UK	100%	n.a.
31.05.11	Paris Saint Germain	France	N. Al-Khelaifi	Private investor	Qatar	70%	52
31.05.11	1860 München	Germany	H. Ismaik	Private investor	UAE	60%	18

(Table continues)

Announced	Target Company	Country	Purchaser	Type	Country	Stake	Value[3]
06.05.11	Rangers	UK	C. Whyte	Private investor	UK	85%	n.a.
05.05.11	Rayo Vallecano	Spain	R. Martin Presa	Private investor	Spain	100%	n.a.
21.04.11	Getafe	Spain	Royal Emirates Group	Financial sponsor	UAE	100%	70
17.04.11	A.S. Roma	Italy	DiBenedetto AS Roma	Financial sponsor	USA	78%	89
11.04.11	Arsenal	UK	S. Kroenke	Private investor	USA	66%	714
22.01.11	Racing Santander	Spain	A. Ali Syed	Private investor	India	100%	40
31.12.10	Charlton Athletic	UK	T. Jimenez; M. Slater	Private investor	UK	100%	n.a.
17.12.10	Hull City	UK	A. Allam	Private investor	UK	100%	67
15.12.10	Beerschot Antwerpen	Belgium	P. Vanoppen	Private investor	Belgium	54%	7
29.11.10	Sheffield Wednesday	UK	M. Mandaric	Private investor	UK	100%	n.a.
19.11.10	Blackburn Rovers	UK	Venkateshwara Hatcheries	Financial sponsor	India	100%	52
06.10.10	Liverpool	UK	Fenway Group	Financial sponsor	USA	100%	342
17.08.10	Vitesse	Netherlands	Merab Jordania	Private investor	Georgia	100%	n.a.
12.08.10	Leicester City	UK	A. Raksriaksorn	Private investor	Thailand	100%	25
05.07.10	West Bromwich Albion	UK	J. Pearce	Private investor	UK	100%	15
21.06.10	Bologna	Italy	S. Porcedda	Private investor	Italy	80%	n.a.
03.06.10	Atalanta	Italy	A. Percassi	Private investor	Italy	70%	15
01.06.10	AZ Alkmaar	Netherlands	Stichting AZ Alkmaar	Financial sponsor	Netherlands	100%	n.a.
29.05.10	Malaga	Spain	A. bin Nasser Al-Thani	Private investor	Qatar	100%	36
23.02.10	Galatasaray	Turkey	Galatasaray Futbol A.S	Buyback	Turkey	14%	62
04.02.10	Portsmouth	UK	Balram Chainrai	Private investor	Hong Kong	90%	n.a.
19.01.10	West Ham United	UK	D. Sullivan	Private investor	UK	50%	107
26.08.09	Portsmouth	UK	Sulaiman Al-Fahim	Private investor	UK	100%	123
21.08.09	Birmingham City	UK	Birmingham Sports Holdings	Financial sponsor	Hong Kong	70%	71
04.07.09	Valencia	Spain	V. Soriano	Private investor	Spain	41%	n.a.
30.06.09	Paris Saint Germain	France	Colony Capital	Financial sponsor	USA	33%	n.a.
08.06.09	West Ham United	UK	CB Holding	Financial sponsor	Iceland	100%	178
27.05.09	Sunderland	UK	E. Short	Private investor	USA	70%	n.a.
08.02.09	Rapid Bucuresti	Romania	I. Negoita	Private investor	Romania	100%	12
30.11.08	Sunderland	UK	E. Short	Private investor	USA	30%	n.a.
21.09.08	Manchester City	UK	Sheikh Mansour	Private investor	United Arab Emirates	90%	260

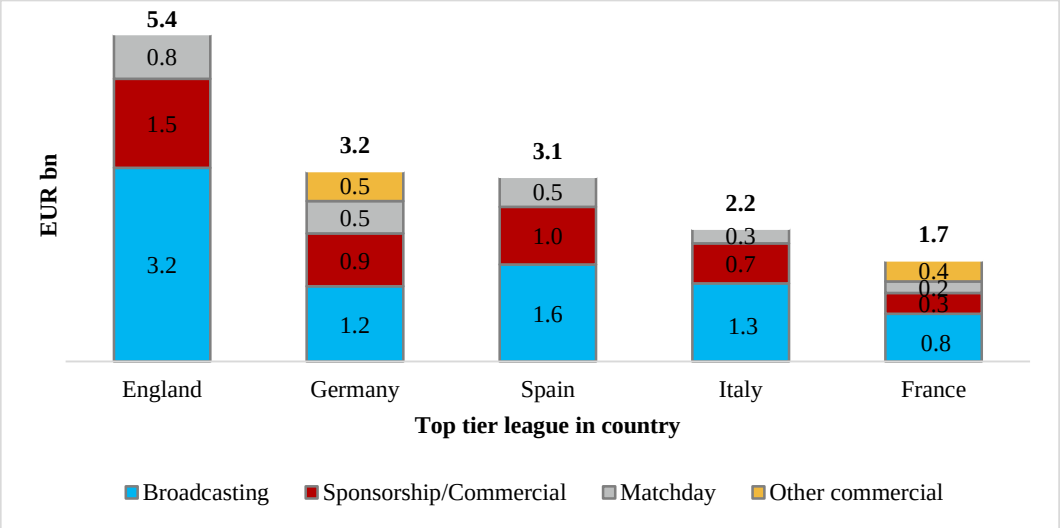
Source: Mergermarket (2019).

Appendix 3: European football market revenues in 2014



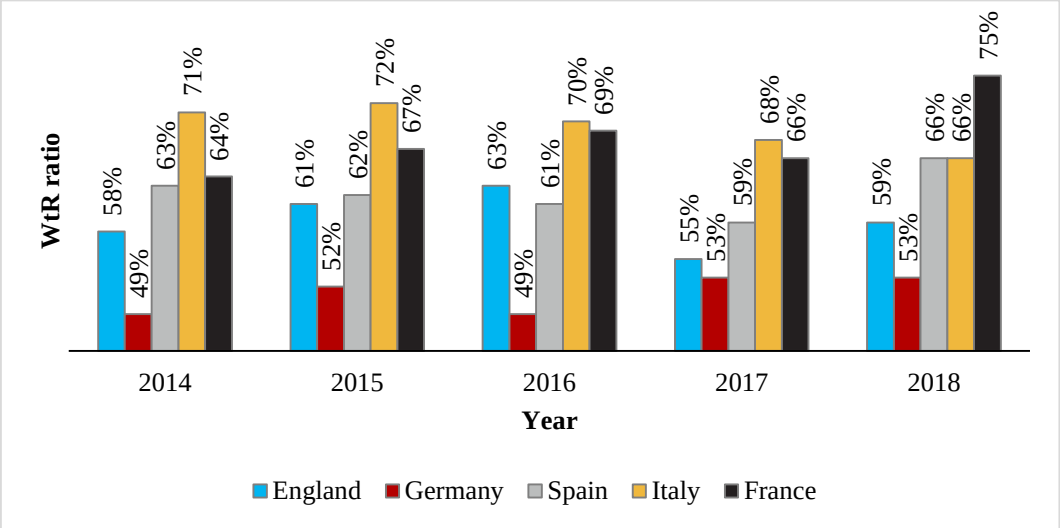
Source: Deloitte (2015).

Appendix 4: Top 5 leagues by revenue type in 2017/18 season



Source: Deloitte (2019).

Appendix 5: Historical wage to revenue ratio in Top 5 leagues



Source: Deloitte (2016, 2017, 2018, 2019).

Appendix 6: Prize money distribution in 2018 European club competitions

UEFA Champions League

Stage	Prize (EUR mn)
Group Stage	12.7
Win	1.5
Draw	0.5
Round of 16	6.0
Quarter Final	6.5
Semi Final	7.5
Final Winner	15.5
Final Loser	11.0

UEFA Europa League

Stage	Prize (EUR mn)
Group Stage	2.6
Win	0.4
Draw	0.1
Group 1st	0.6
Group 2nd	0.3
Round of 32	0.5
Round of 16	0.8
Quarter Final	1.0
Semi Final	1.6
Final Winner	6.5
Final Loser	3.5

Source: UEFA (2018a, 2018b).

Appendix 7: EPL 2017/18 payments to clubs (in EUR mn)

Club	UK live matches	Equal share	Facility Fees	Merit Payment	International TV	Central Commercial	Total Payment
Man. City	26	39.3	34.3	43.6	46.0	5.5	**168.7**
Man. United	28	39.3	36.8	41.4	46.0	5.5	**169.0**
Tottenham	25	39.3	33.0	39.2	46.0	5.5	**163.0**
Liverpool	28	39.3	36.8	37.1	46.0	5.5	**164.7**
Chelsea	26	39.3	34.3	34.9	46.0	5.5	**159.9**
Arsenal	28	39.3	36.8	32.7	46.0	5.5	**160.3**
Burnley	10	39.3	13.9	30.5	46.0	5.5	**135.2**
Everton	19	39.3	25.4	28.3	46.0	5.5	**144.5**
Leicester	12	39.3	16.4	26.2	46.0	5.5	**133.4**
Newcastle	18	39.3	24.1	24.0	46.0	5.5	**138.8**
Crystal Palace	12	39.3	16.4	21.8	46.0	5.5	**129.0**
Bournemouth	11	39.3	15.2	19.6	46.0	5.5	**125.6**
Watford	17	39.3	22.8	17.4	46.0	5.5	**131.0**
West Ham	10	39.3	13.9	15.3	46.0	5.5	**119.9**
Brighton	13	39.3	17.7	13.1	46.0	5.5	**121.6**
Huddersfield	10	39.3	13.9	10.9	46.0	5.5	**115.6**
Southampton	16	39.3	21.5	8.7	46.0	5.5	**121.0**
Swansea	10	39.3	13.9	6.5	46.0	5.5	**111.2**
Stoke	12	39.3	16.4	4.4	46.0	5.5	**111.6**
Westbrom	10	39.3	13.9	2.2	46.0	5.5	**106.8**
TOTAL		**785.8**	**457.7**	**457.7**	**920.3**	**109.2**	**2,730.7**

Source: Adapted from Premier League (2018).

Appendix 8: Stadium attendance and capacity statistics of EPL clubs in 2017/18 season

Club	Average attendance	Stadium capacity	Utilization rate
Arsenal	59,323	59,867	99.1%
Bournemouth	11,105	11,360	97.8%
Brighton	30,397	30,666	99.1%
Burnley	20,692	21,944	94.3%
Chelsea	41,281	41,631	99.2%
Crystal Palace	25,063	25,456	98.5%
Everton	39,043	39,572	98.7%
Huddersfield	24,012	24,169	99.4%
Leicester City	31,631	32,273	98.0%
Liverpool	52,958	53,394	99.2%
Man. City	54,073	55,017	98.3%
Man. United	75,102	75,811	99.1%
Newcastle	52,297	52,354	99.9%
Southampton	30,781	32,384	95.1%
Stoke	29,280	30,089	97.3%
Swansea	20,623	21,088	97.8%
Tottenham	70,642	90,000	78.5%
Watford	20,181	21,000	96.1%
West Ham	56,896	60,000	94.8%
Westbrom	24,534	26,688	91.9%

Source: Adapted from the FA (2018).

Appendix 9: Current Newcastle United first team

Name	Position	Age	Market value (EUR mn)	Youth academy
Martin Dubravka	Goalkeeper	30	7.0	No
Karl Darlow	Goalkeeper	28	3.5	No
Rob Elliot	Goalkeeper	33	1.0	No
Jamaal Lascelles	Defender	25	18.0	No
Fabian Schär	Defender	27	12.0	No
Florian Lejeune	Defender	28	8.0	No
Federico Fernández	Defender	30	7.0	No
Ciaran Clark	Defender	29	6.0	No
Paul Dummett	Defender	27	7.0	Yes
Jetro Willems	Defender	25	5.0	No
DeAndre Yedlin	Defender	26	8.0	No
Emil Krafth	Defender	25	5.0	No
Javier Manquillo	Defender	25	5.0	No
Jamie Sterry	Defender	23	0.8	Yes
Isaac Hayden	Midfielder	24	10.0	No
Sung-yong Ki	Midfielder	30	6.0	No
Jack Colback	Midfielder	29	3.0	No
Sean Longstaff	Midfielder	21	18.0	Yes
Jonjo Shelvey	Midfielder	27	15.0	No
Matt Ritchie	Midfielder	30	12.0	No
Miguel Almirón	Midfielder	25	20.0	No
Henri Saivet	Midfielder	28	1.0	No
Christian Atsu	Winger	27	6.0	No
Allan Saint-Maximin	Winger	22	25.0	No
Joelinton	Forward	23	35.0	No
Dwight Gayle	Forward	28	15.0	No
Yoshinori Muto	Forward	27	9.0	No
Andy Carroll	Forward	30	6.0	Yes

Source: Adapted from Transfermarkt (2019).

Appendix 10: Profit on disposal of players in % of revenues of selected EPL clubs

Club	2014	2015	2016	2017	2018
Arsenal	2.3%	8.4%	0.6%	1.6%	29.8%
Bournemouth	n.a.	n.a.	12.2%	-0.9%	1.0%
Burnley	n.a.	0.2%	29.8%	1.1%	22.1%
Chelsea	13.0%	12.8%	14.6%	18.8%	25.2%
C. Palace	0.1%	0.4%	9.5%	24.3%	1.6%
Everton	23.4%	2.6%	6.4%	30.3%	46.4%
Liverpool	-0.3%	18.2%	14.0%	10.5%	27.2%
Leicester C.	0.9%	0.1%	8.4%	16.7%	24.1%
Man. City	0.1%	5.9%	8.8%	7.3%	7.9%
Man. United	1.6%	6.0%	-1.9%	1.9%	3.1%
Newcastle	10.8%	13.2%	2.5%	49.4%	2.0%
Southampton	30.9%	37.1%	24.0%	23.6%	46.4%
Stoke	-1.2%	1.7%	13.8%	2.7%	17.5%
Sunderland	4.8%	4.0%	4.9%	26.8%	n.a.
Swansea	5.3%	17.6%	6.3%	28.9%	36.3%
Tottenham	57.6%	10.8%	12.9%	12.9%	19.2%
Watford	9.0%	39.6%	5.9%	18.0%	2.3%
Westbrom	11.1%	5.5%	2.9%	10.1%	6.8%
West Ham	1.2%	2.6%	2.9%	15.5%	17.1%
Median	***4.8%***	***5.9%***	***8.4%***	***15.5%***	***18.3%***
Average	***10.0%***	***10.4%***	***9.4%***	***15.8%***	***18.7%***

Source: Own work.

Appendix 11: Selected EPL clubs' net transfer activity

Club	13/14	14/15	15/16	16/17	17/18	18/19	SUM
ARS	33.4	82.1	21.6	92.4	-3.0	71.8	298.2
BOU	4.1	1.1	49.0	13.7	30.9	68.9	167.6
BUR	-4.7	11.4	5.0	40.0	12.8	25.0	89.5
CHE	47.6	-6.4	2.7	22.0	53.9	138.3	258.0
CRY	29.7	25.6	21.1	45.7	41.4	11.5	174.9
EVE	-12.9	34.4	34.1	22.6	69.1	71.2	218.6
LEI	-0.6	20.6	36.4	23.0	36.0	18.8	134.1
LIV	23.0	47.0	31.4	-4.9	-18.6	141.1	218.9
MCI	94.2	51.9	126.8	160.3	203.5	24.5	661.3
MUN	67.8	131.5	48.5	124.1	137.6	52.2	561.7
NEW	-19.9	19.3	93.0	-33.4	22.3	11.8	93.0
SOU	31.9	-25.0	6.7	-14.5	-33.4	38.5	4.0
STK	6.3	-1.8	27.4	16.3	20.3	1.2	69.7
SUN	10.4	13.8	50.0	-28.6	-31.7	-1.5	12.4
SWA	24.0	-18.3	4.5	8.6	-6.9	-42.6	-30.7
TOT	-12.2	3.9	-14.9	28.2	15.9	-5.4	15.5
WAT	-2.1	8.5	66.4	10.7	47.4	-21.7	109.1
WBA	3.9	20.3	27.0	9.8	46.3	-13.9	93.4
WHU	21.1	-27.7	30.8	38.3	-11.0	86.0	137.5
Mean	**18.2**	**20.6**	**35.1**	**30.2**	**33.3**	**35.5**	**173.0**

Source: Adapted from Transfermarkt (2019).

Appendix 12: Historical (2014-2018) working capital analysis of Newcastle United

FYE 30.6.; in GBP mn	2014	2015	2016	2017	2018
Inventory	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Account receivables	**8.0**	**20.1**	**29.2**	**27.5**	**28.1**
Receivables from player reg. sales	5.3	10.5	21.6	22.0	20.0
Trade debtors	2.7	9.6	7.7	5.5	8.2
Other account receivables	**16.4**	**14.8**	**15.0**	**15.1**	**18.0**
Other debtors	5.8	5.8	4.9	6.1	6.1
Group companies	5.1	4.9	6.0	5.4	5.4
Prepayments and accrued income	5.6	4.0	4.1	3.6	6.6
Account payables	**33.1**	**34.6**	**52.6**	**58.5**	**69.0**
Trade creditors	5.6	3.3	2.6	14.6	19.2
Accruals	12.9	14.6	35.7	25.4	32.6
Deferred income	14.6	16.7	14.3	18.5	16.9
Finance leases and hire purchases	0.0	0.0	0.0	0.0	0.3
Other account payables	**6.7**	**7.5**	**7.6**	**5.0**	**16.0**
Taxation and social security	0.0	7.1	6.3	3.3	11.7
Corporation tax	0.0	0.0	0.0	0.0	2.2
Amounts owed to group undertakings	0.0	0.3	1.2	1.6	1.3
Other creditors	6.7	0.1	0.1	0.1	0.9
Net working capital	**-15.4**	**-7.3**	**-15.9**	**-21.0**	**-38.9**

Source: Newcastle United Limited (2014, 2015, 2016, 2017, 2018).

Appendix 13: SWOT analysis of Newcastle United

Strengths	Weaknesses
• Loyal and strong fan base with proud tradition • St. James' Park stadium is one of the largest venues in the EPL • Member of top tier English competition with strong revenue generation potential • Disciplined approach to financial management of the club	• Current owner does not enjoy support among the fans • Lost top quality manager due to disagreements with the owner • Poor youth academy setup could hinder development of own first team players • Weak brand name recognition on global stage
Opportunities	**Threats**
• Significant upside potential through regular participation in UEFA competitions • Stronger bargaining power in sponsorship negotiations and other commercial revenue generation thanks to improved international presence • Establishment of international scouting network that could improve intake of young talents from abroad	• Risk of relegation due to missing clearly defined long term strategy • Current owner's lack of ambition could have adverse effect on attracting top quality football staff • The big 6 clubs may not be challenged in the short term due to significant advantage over Newcastle United in terms of financial and first team strength

Source: Own work.

Appendix 14: Peer group for beta calculation

Club	Levered beta	Debt/Total capital	Equity/Total capital	Unlevered beta
Borussia Dortmund	0.70	2.3%	97.7%	0.69
Celtic	0.32	6.3%	93.7%	0.30
Manchester United	0.69	18.6%	81.4%	0.56
Juventus	0.84	21.9%	78.1%	0.66
AS Roma	0.63	44.8%	55.2%	0.35
SS Lazio	0.84	35.2%	64.8%	0.54
Olympique Lyonnais	0.67	58.4%	41.6%	0.28
Average	**0.67**	**26.8%**	**73.2%**	**0.48**

Source: Bloomberg L.P. (2019).

Appendix 15: Publicly traded European football clubs

Football club	Country	Market Capitalization[4]
AaB	Denmark	4.6
Aarhus	Denmark	15.1
AIK	Sweden	4.6
Ajax	Netherlands	335.5
Benfica	Portugal	65.8
Beşiktaş	Turkey	70.1
Borussia Dortmund	Germany	849.2
Brøndby	Denmark	29.2
Celtic	Britain	170.9
Fenerbahçe	Turkey	160.4
Galatasaray	Turkey	151.7
Juventus	Italy	1,440.6
København	Denmark	146.2
Lazio	Italy	88.5
Manchester United	Britain	2,556.8
Olympique Lyonnais	France	193.3
Porto	Portugal	15.3
Roma	Italy	322.6
Sporting	Portugal	50.3
Trabzonspor	Turkey	57.4

Source: Bloomberg L.P. (2019).

[4] As of 12.9.2019; in EUR mn

Appendix 16: Comparable public companies

Club	Country	EV[4]	EV/Sales 2020	P/BV 2020
Borussia Dortmund	Germany	870	1.8x	2.2x
Celtic	United Kingdom	134	1.7x	n.a.
Juventus	Italy	1,825	3.1x	112.0x
Manchester United	United Kingdom	2,973	4.2x	6.2x
Olympique Lyonnais	France	450	1.4x	0.6x
Median			**1.8x**	**4.2x**

Source: Bloomberg L.P. (2019).

Appendix 17: Selected relevant past transactions

Announced Date	Target club	Stake	Deal Value[5]	Implied EV[5]	Revenue[5]	EBIT[5]	EV/ Revenue	EV/ EBIT
Jul 2018	Aston Villa	55%	85	155	64.6	-32.2	2.4	nmf
May 2018	Wigan Athletic	86%	12	16	25.1	4.0	0.6	4.1
Aug 2017	Southampton	80%	168	210	178.3	43.9	1.2	4.8
May 2017	Nottingham For.	100%	50	50	18.4	-19.5	2.7	nmf
Aug 2016	Westbrom	100%	150	150	96.3	3.6	1.6	41.4
Jul 2016	Wolverhampton	100%	45	49	27.2	7.6	1.8	6.5
Jun 2016	Swansea City	100%	110	125	103.9	1.5	1.2	86.3
May 2016	Aston Villa	100%	60	80	112.5	-56.6	0.7	nmf
Dec 2015	Crystal Palace	100%	100	111	102.4	7.8	1.1	14.2
Jan 2015	Sheffield Wed.	100%	40	41	13.9	-5.1	3.0	nmf
Jul 2013	Fulham	100%	150	150	74.2	-2.4	2.0	nmf
Median							**1.6x**	**10.3x**

Source: Mergermarket (2019).

[5] In GBP mn

Appendix 18: Valuation results descriptive statistics

Measure	EUR mn
1st quartile	371
Median	373
Average	**391**
3rd quartile	406

Source: Own work.