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Business analysis and valuation of Manchester United

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Master thesis, MSC in Economics and Business administration

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Executive summary

The purpose of this thesis is to estimate the equity value, thereby estimating value per share of Manchester United Plc, henceforth referred to as Manchester United or United. Valuation date is June 30th, 2019, and by comparing with market share price the same day, an investment recommendation is issued.

The framework for this thesis is based on Palepu, Healy and Peek's textbook *Business analysis and valuation*. A presentation of Manchester United and the football industry is followed by a strategic and financial statement analysis, serving as basis for a prospective analysis including forecast and valuation.

A look into Manchester United and the football industry uncovers a growing multi-billion industry driven by increasing broadcasting revenues. The strategic analysis reveals industry profitability faces threats from increasing player wages and illegal streaming. With brand awareness and organizational structuring, United maintain a competitive advantage through capitalizing on a strong brand. Investment in scouting network and homegrown players, is expected to positively affect future earnings and cashflows. Homegrown players, controversially carry book value of zero, reducing amortization and employee benefits compared to buying established star players.

The financial statement analysis discloses Manchester United as a well driven business compared to their peers. In spite of mediocre sporting results, the club has maintained a profitable level. Forecasted financial statements are influenced by diminishing broadcasting revenue growth and an increasing NOPAT margin due to reduction of amortizations and player wages.

In direct valuation methods based on the dividend discount model, expected future earnings and cashflows are discounted at estimated cost of equity. Equity value is calculated at 2221 million GBP, translated into an estimated value per share of 17.19 USD. Comparing with market share value of 18.25 USD concludes Manchester United's equity is fairly priced, hence a "hold" recommendation is issued.

Preface

Ever since my older brother gave me a Manchester United jersey kit as a young kid, I have been a loyal supporter. Knowing the club as a large business unit, I was intrigued by performing a valuation of Manchester United, as it would be a summary of the master's programme studies, as well as getting insights into an organization I truly care about.

During the time of writing this thesis, a pandemic hit the world in the form of the coronavirus Covid-19. Hundreds of thousands have died and many more are dying as these words are written. My deepest condolences go to those suffering losses.

Large parts of society, including the football industry, are put on hold and the extent of the consequences are still unknown. In terms of affecting the valuation, my choice is to ignore any consequences from the pandemic. This is based on the amount of unknown consequences and an assumption that unless it causes significant changes to the industry structure, future long-term profitability will not be affected. History shows the world economy always bounce back from a crisis. A short-term reduction in growth rates and profitability is bound to be replaced by higher measures later on, not changing the overall picture for the underlying value of the company.

The process of writing this thesis has been a challenging and educational process. I would sincerely like to thank my supervisor Simone Traini for useful and encouraging feedback. Also, thanks to my therapist Merete Torvanger for support through a difficult period. Last and foremost thanks to my family, especially my daughter Daniela, for their support and loving kindness.

18.06.2020, Bergen
Kim Rætta

Table of Contents

1 Introduction

1.1 Purpose

The purpose of this master thesis is to estimate the value of Manchester United's equity from a neutral investor's perspective, thereby estimating the value per share. Valuation date is June 30th, 2019, the end date of their last financial statement. The valuation is based on a business analysis and fundamental valuation techniques and aims to reflect the underlying values of the company. Estimated share value will be compared to market share value and an investment recommendation will be issued.

1.2 Limitations

Analysis in this thesis are based on external information available to the public. As the club distinguishes itself as a single operating unit, analysis will be on group level only. The main product is the entertainment of watching a football match, either live at the stadium or on a media platform. The industry is limited to football clubs in the European countries' top leagues with a realistic chance to win national and international titles. The geographic limitation falls natural as they are all under the same organizational umbrella of UEFA and connected through the race for winning the Champions League, which is widely respected as the most prestigious event on club level. Time frame limitations and comparative peers will be accounted for in section 4.1 *Framework for financial analysis.*

1.3 Structure

The structure of the thesis is based on the framework of the textbook *Business analysis and valuation* by Palepu, Healy and Peek. Chapter 2 includes a presentation of Manchester United and the football industry. Chapter 3 is a strategic analysis. In the strategic analysis an industry analysis gathers insights on factors affecting the industry profitability, a competitive analysis looks into how Manchester United capture that profitability and a corporate analysis covers economic synergies at corporate level. At the end of the chapter follows a section on risks Manchester United are exposed to.

Following the strategic analysis is a financial statement analysis in chapters 4-6, consisting of accounting analysis and financial analysis. In the accounting analysis critical accounting policies and estimates is looked into and Manchester United's financial statements is

reformulated and adjusted for analytical purposes. The financial analysis consists of ratio analysis of profitability, leverage and sustainable growth, in addition to a cash flow analysis.

The strategic and financial statement analysis serves as basis for the prospective analysis in chapter 7 and 8. Chapter 7 presents forecasted financial statements for Manchester United. In chapter 8, valuation method is chosen, and associated discount rate is estimated, before the valuation is performed.

THE FOOTBALL INDUSTRY & MANCHESTER UNITED
STRATEGIC ANALYSIS
FINANCIAL STATEMENT ANALYSIS Accounting analysis → Financial analysis
PROSPECTIVE ANALYSIS Forecast → Valuation
CONCLUSION
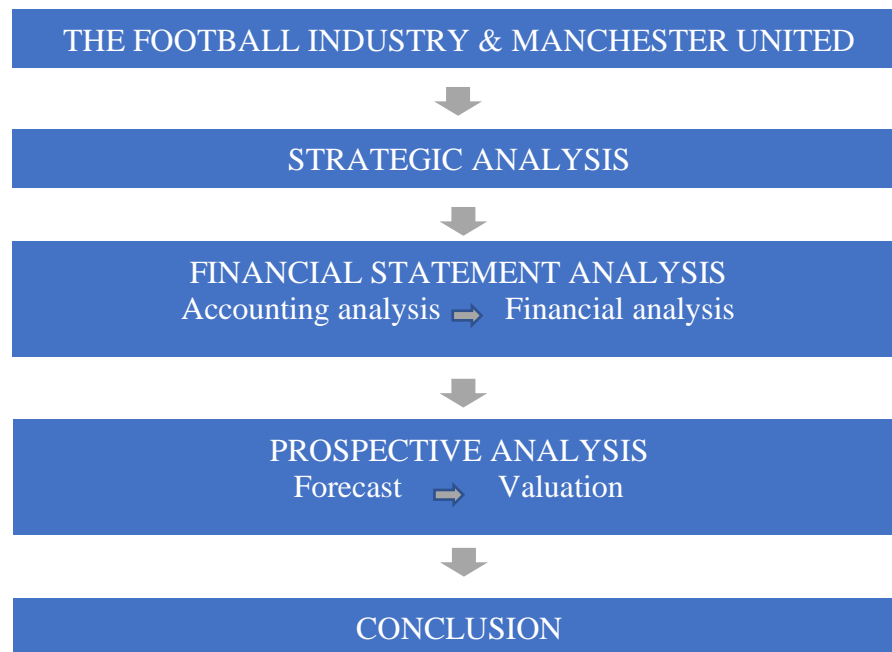
Figure 1.1 Structure of the thesis

2 The football industry and Manchester United

Football is commonly recognized as the world's most popular sport and it has become a multi-billion industry. With revenues of more than £ 600 million in 2019, Manchester United is one of the top actors in the industry. This chapter contains a presentation of the football industry and Manchester United Football Club.

2.1 The football industry

2.1.1 The beginning

The game of football has its spring from Chinese military exercises dating back to the second century BC. The game consisted of kicking a leather ball into a small net connected to long bamboo canes. However, the modern organized football as known today, found its place when Rugby split into Football and Rugby the year of 1863 (FIFA, n.d.). That same year the

Football Association of England (FA) was formed and is today widely acknowledged as the beginning of the football history. By 1872 the FA Cup was established, considered the first football tournament, and by 1888 the first league championship started (FIFA, n.d.). The first international game was held in 1872 in a game where Scotland and England drew 0-0.

Since the beginning, football has steadily grown to become the world's most popular sport (Sawe, 2018). The governing head of international football, Fédération Internationale de Football Association (FIFA) was founded in 1904 by seven initial member countries. By 1930, the year of the first World Cup, the number had grown to 36. After the Second World War in 1950, the number had reached 73. By September 2019, the number of member countries is 211 (FIFA, n.d.).

2.1.2 Organizational structure

The 211 member countries are divided into six confederations, one for each continent. The European confederation UEFA is the organizer of the European club tournaments Champions League and Europa League, which plays an important part in the industry because of large prize money pools and worldwide broadcasting exposure.

In addition to FIFA and UEFA, each country has their own footballing governing body dealing with domestic tournaments and regulations. In England the head of football is the English Football Association (FA). In 1992 the Premier League was founded, as the top division in England decided to make their own organization. The Premier League is still governed by the FA and needs to submit to FA's rules and regulations.

Fig. 2-1 Organizational structure of football

2.1.3 Todays football industry

European dominance

Europe is considered the footballing center both from a sporting and an economic point of view. It is commonly known the European top clubs buy the best players and pay the highest wages. Statistics from the World Club Championship, where continental tournament winners from all the confederations compete, illustrates the European domination. Of the last 13 winners only one is non-European, Corinthians in 2013 (Transfermarkt, n.d.-a). In addition, all four semi-finalists of the 2018 FIFA World cup in Russia were European, underlining the European domination. A sole factor stirring up the European supremacy is Brazil's record breaking five World cup trophies.

The last few years China has invested vast amounts of money into developing their league. Renowned players and managers are attracted through high wages. Whether the effort will be rewarded into sporting success and worldwide popularity competing with the likes of Manchester United is yet to see. A similar approach in the 70's in North America did not create the expected results, in spite of attracting superstars like Cruyff, Best and Pelé.

Revenue growth

Today's football industry is a growing industry, driven by increasing commercial and broadcasting revenues. This growth can be connected to the introduction and expansion of digital media. Social media on digital platforms has brought the clubs and players closer to the fans and strengthened the bonding between the parties, while at the same time stimulating worldwide interest for the club. A feature to illustrate the growth is the top-5 clubs' revenue as shown in figure 2-2. Regulars in top-5 include Manchester United, Real Madrid, Barcelona and Bayern München. From figure 2-2 we see no noticeable effect of the worldwide recession 2008-09, which could be due to the clubs mainly operating on long term contracts with its' stakeholders while at the same time showing a strong deep-rooted popularity of football.
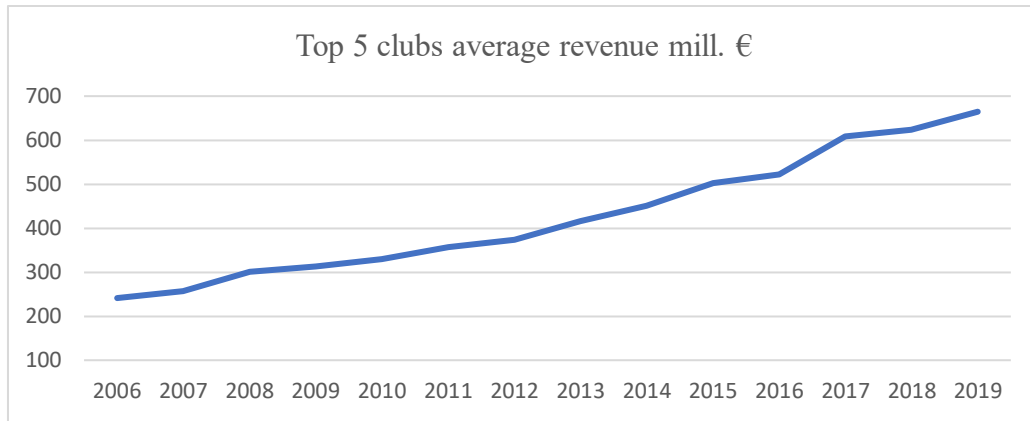
Figure 2-2 Average revenue top-5 (Deloitte, 2019)

Profitability

In spite of being a multi-billion industry, the football industry is also known as an industry chasing trophies and glory at almost any cost, often resulting in hazardous investments and red numbers for the accountants. Only since 2017 the European clubs have shown an aggregate bottom line profit. Figure 2-3 illustrates a change in the footballing profitability landscape for the Europe's top division clubs.
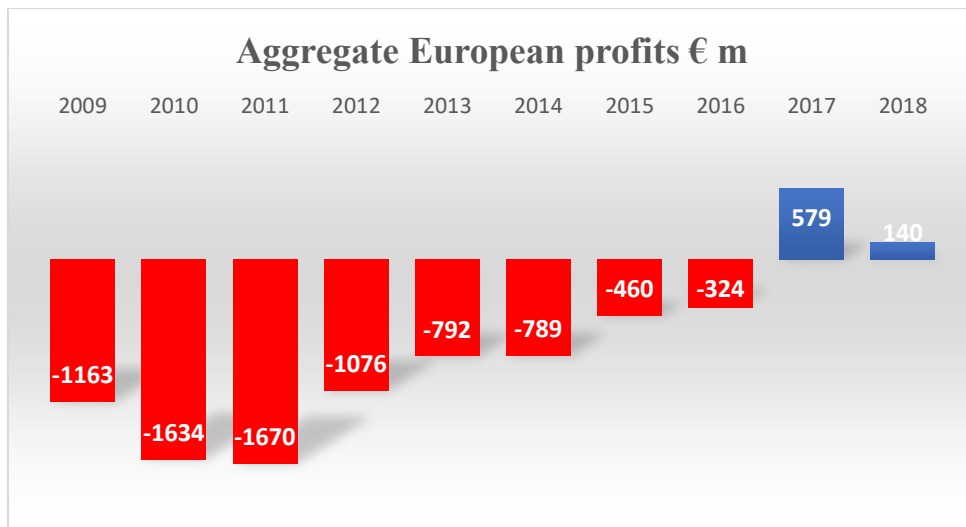
Figure 2-3 Aggregate European club's profit (UEFA, 2020, p. 111)

2.1.4 The elite

The elite of European football and Manchester United's main competitors are clubs
with a realistic chance to win domestic and international league and cup titles on a regular
basis. Included here are the top-13 teams (fig.2-4) from KPMG's list of the 32 most valuable
European football clubs (KPMG Sports Advisory Practice, 2019). KPMG have estimated the

clubs' enterprise value influenced by five key metrics. These five parameters include profitability, popularity, sporting potential, broadcasting rights and stadium ownership. To support KPMG's results, Deloitte have the same 13 clubs as the most revenue generating clubs in their 2019 Money League Report (Deloitte, 2019). These clubs compete for much of the same players, coaching staff, prize pool and commercial deals.

From a sporting level of view, 24 of the last 28 Champions League semi-finalists are from this top-13 elite group (UEFA, n.d.), indicating small chances for other teams to be regular contenders for the Champions League title. The Champions league is widely accepted as the world's biggest club tournament. The collection of the best players in the world, high prize money and large international media exposure makes it a prestigious goal for Europe's most ambitious clubs.
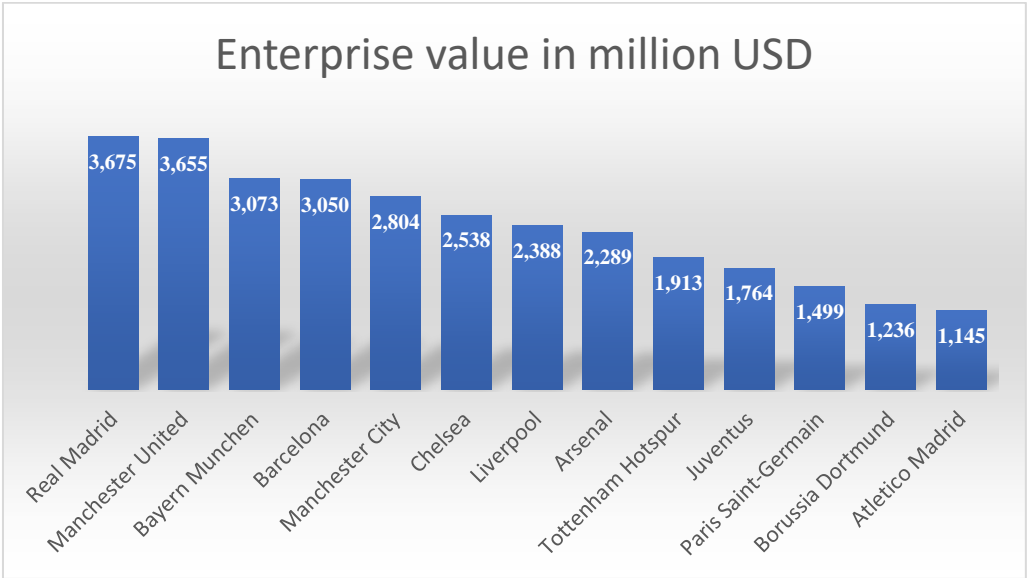
Figure 2-4 Top-13 European clubs by Enterprise value by January 1, 2019 (KPMG Sports Advisory Practice, 2019)

2.1.5 Football and television

A growing demand for televised football has led to a significant growth in income from broadcasting rights (fig.2-5) for the Premier League. From a domestic deal worth GBP 192 million for the years 1992-97, the sum for the 2016-19 rights is GBP 5.136 million (Gazapo, n.d.). The growing trend is similar throughout Europe with the big five leagues (England, Germany, France, Italy and Spain) more than doubling their revenue from broadcasting rights in the past decade (Deloitte, 2017).
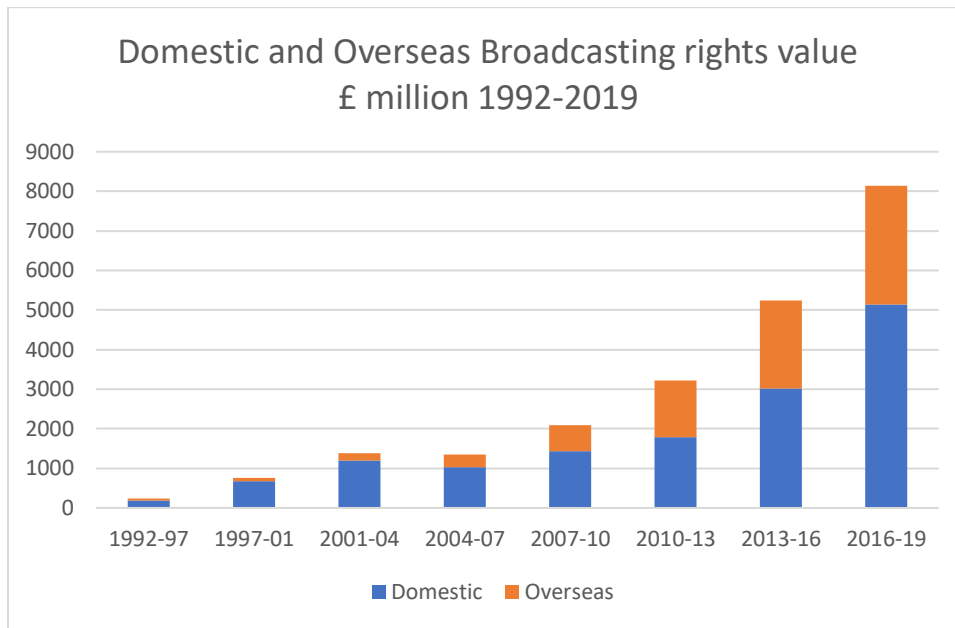
Fig 2-5 Premier League broadcasting rights

Comparing broadcasting revenue with other big leagues, the English Premier League is in a league of its own. Figure 2-6 illustrates differences with revenues of almost two-fold per season and three-fold per match. Broadcasting companies pays the national league associations for rights to broadcast live matches and league content. The league associations then distribute the funds to the domestic clubs in accordance with agreed upon terms and conditions.
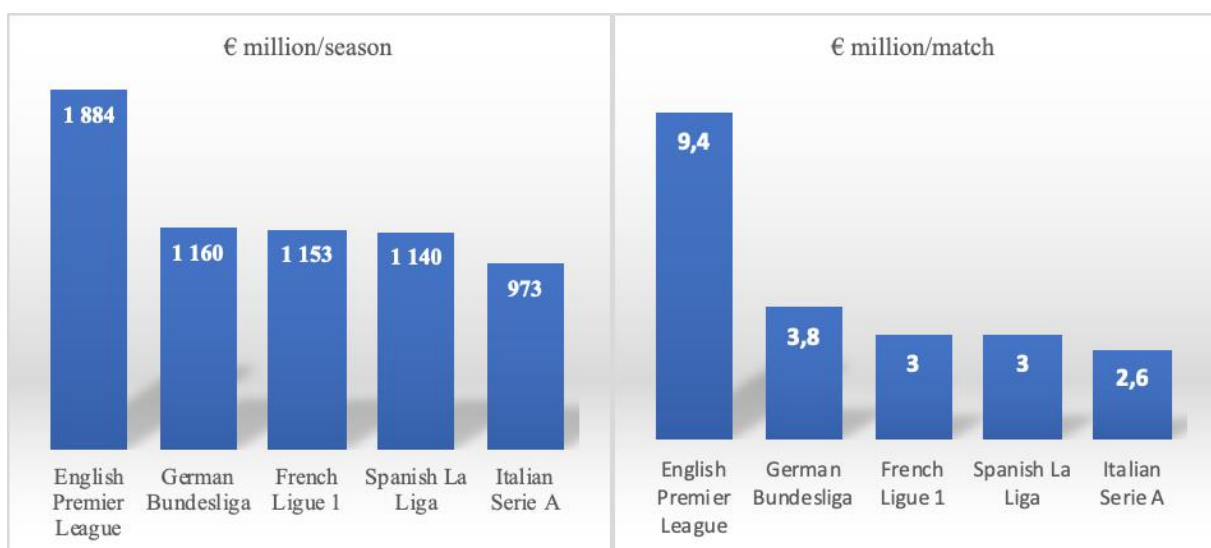
Figure 2-6 Revenues from current domestic broadcasting deals (KPMG, 2019)

2.2 Manchester United Football Club

A 140-year long history of triumphs and tragedies has made the club into one of the world's most iconic sports teams. It all started in Northern England.

2.2.1 History

The early years

Manchester United was founded as Newton Heath Lancashire & Yorkshire Railway Football Club in 1878. Twenty-four years later in 1902 the club changed its name to Manchester United Football Club. The early years of the club were affected by economic hardships and varied success on the field (Manchester United, n.d.-a). After 30 years Manchester United won their first league title in 1908. This was the first of a total of 20 league champion trophies, with the last one captured in 2013. The total of 20 league titles makes Manchester United the most successful team in England, in terms of winning the national league championship, followed by Liverpool's 18 and Arsenal's 13 (Gough, 2019a).

First half of the 20-th century was impacted by war and the team was struggling to stay in the top division (Manchester United, n.d.-a). The club hit a low point with the German bombing of their stadium Old Trafford in 1941. The main stand, dressing rooms and offices were destroyed and it was a devasting blow to the club. However, within a few years, and with the introduction of a man named Matt Busby, optimism would again be roaring at Old Trafford.

Sir Matt Busby 1945-69

As a previous Manchester City and Liverpool player, Busby was hired by Manchester United because of his leadership qualities. By combining young local talent with experienced players Busby set his marks on the club for 25 years. Busby's team, known as "the Busby Babes", established themselves among the top English teams winning several league and cup titles. After building one of the greatest English teams ever, Busby had to start all over again after another disaster hit the club. On February 6th, 1958, eight of the players were killed in a plane crash in Munich. The team and fans were yet again devastated. Busby himself, recovered from severe injuries and immediately started rebuilding another great title-winning team, culminating in winning United's first European cup title in 1968. The year after, Busby retired and will always be remembered for his impact on the club. Some of the players he created, like Bobby Charlton, Dennis Law and George Best are still considered among the best British

players of all times. These players represented the style of football Busby promoted, entertaining the fans and keeping the crowd at the edge of their seats.

Sir Alex Ferguson 1986-2013

After Busby's retirement, for an extended period, United were unable to win the league and only three FA cup titles saved the club from a disastrous period. Different managers struggled to make their impact, but that would change when the scot Alex Ferguson was hired November 1986. With thirteen Premier league titles (fig.2-7), five FA Cups and two UEFA Champions league titles, Ferguson is considered the most successful manager in English football's history. Like Busby, Ferguson combined young local talent with experienced players. Another Busby similarity was Fergusons love for players that made the crowd buzzing and excited. Ryan Giggs, Eric Cantona and Cristiano Ronaldo are a few examples of players representing the typical Manchester United way of playing football. After Fergusons retirement in 2013, United have struggled to win titles and different managers have failed to make a long-term impact. Whether the hiring of previous player and manager apprentice of Ferguson, Ole Gunnar Solskjær in December 2018 will bring the club success again is yet to see.
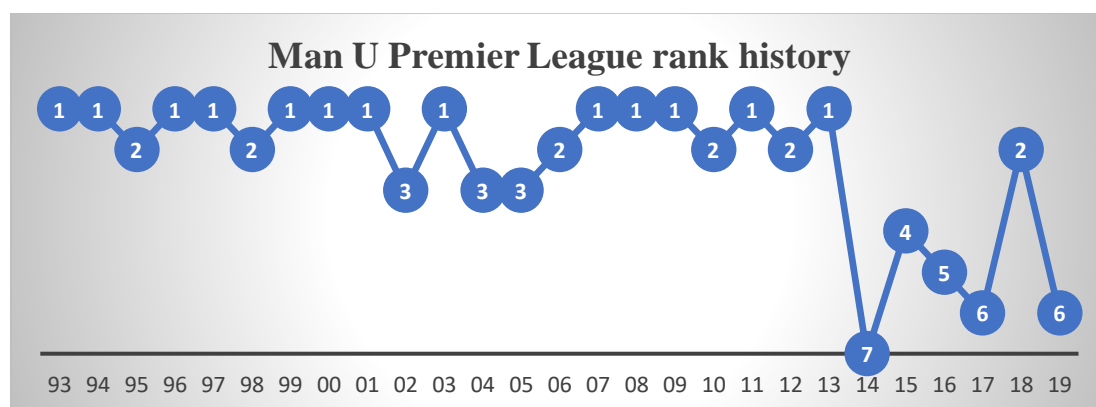
Figure 2-7 Manchester United league rank since start of the Premier League (Transfermarkt, n.d.-b). Ferguson's last season was in 2013 (1).

2.2.2 The business

The Glazer acquisition

From being a privately owned club, Manchester United Football Club went public on the London Stock Exchange in 1990. Fifteen years later in 2005 the club was acquired by the American Glazer family and made private again, before being publicly offered on the New

York Stock Exchange (NYSE) in August 2012. Class A shares are sold to the public and Class B shares are held by the six Glazer siblings. The Class B shares have concentrated voting power counting for 10 votes per share, whereas Class A shares count for one vote per share. Through ownership of all Class B shares, the Glazers represent 97% of the total voting power of the capital stock.

The Glazer takeover has met some controversy from the United fans, as the new owners have been accused of prioritizing financial results to sporting results. Being a debt-free club until 2005, fans were worried the club would be paying off debt obligations instead of funding new players. Irregular protests from fans are still ongoing. A group of hardcore fans even started their own new Manchester United named FC United of Manchester. However, starting at the bottom of the 10-tier league system will be a long ladder to climb.

Business structure

Manchester United Plc, the Group, is a public limited company registered on Cayman Islands. It is a holding company, where its subsidiaries are wholly owned and operating in England, Wales, Ireland, Delaware (US) and the Cayman Islands. As a publicly traded company on the New York Stock Exchange (NYSE), the corporation reports as a US domestic corporation and pays US federal income tax on the Group's worldwide income.

The Group operates as a single unit, in the form of a professional sports club. It is a single cash-generating business unit, even though revenue streams are divided into commercial, broadcasting and matchday segments. The commercial segment consists of sponsorship, retail merchandizing and licensing. Broadcasting revenue include domestic and international broadcasting contracts. Matchday revenue is basically the revenue from all games hosted at Old Trafford, including ticket sales, catering and other activities. For the fiscal year ending 30th June 2019, the commercial part contributed to 44%, broadcasting 38% and matchday 18% of total revenue (Manchester United, 2019).

3 Strategic analysis

A firm's value is determined by its ability to earn a return on its capital in excess of the cost of capital (Healy, Palepu, & Peek, 2019, p. 46). Since the cost of capital is set by the capital markets, what determines the firm's current and sustainable profit potential, is its own

strategic choices. A strategic analysis is a qualitative assessment of the firm's business reality, on which, together with financial statement analysis, realistic future forecast is based on. In this chapter, section 3.1 is an *industry analysis* looking at the strategic choices the football industry is facing in regard to profitability. Section 3.2 is an analysis of the optimal *competitive strategy* for the firm to capture that profitability. Section 3.3 is a *corporate strategy analysis* on creating and exploiting synergies across the range of businesses Manchester United operates in. Lastly, section 3.4 looks at some of the *business risks* and *industry risks* Manchester United are exposed to.

3.1 Industry analysis

Strategy literature suggests that the average profitability of an industry is influenced by the "five forces": *Rivalry among the existing firms*, *Threat of new entrants, Threat of substitute products, Bargaining power of buyers* and *Bargaining power of suppliers* (Healy et al., 2019, pp. 46-47).

3.1.1 Rivalry among existing firms

Rivalry is well-known to be fierce in the football industry. However, the competition appears more visibly on the sporting level than at the economic level. Nevertheless, Deloitte's Money League Report (Deloitte, 2020), rating the highest revenue-generating football clubs, indicates a strong connection between sporting and economic success. The top revenue-generating clubs coincides with successful title-winning clubs such as Real Madrid, Barcelona and Manchester United. A winning team generates popularity and attracts supporters and sponsors. Higher prize money, more positive worldwide media exposure and better commercial deals are all effects of being successful on the pitch, explaining a strong connection between the sporting and the economic level. On that basis, a strong rivalry, driven by desire to reach success and glory, is present in the football industry. In spite of fierce competition, a distinct industry growth, especially revenue streams from broadcasting rights (Deloitte, 2017), reduce the rivals' need to grab market shares from each other to foster own growth.

Geographically, national league systems balance the competition. For Champions League and Europa League, a country and performance-based quota system secures participants to be spread fairly between the different countries.

3.1.2 Threat of new entrants

With a fixed number of teams in each league, the threat of new entrants is somewhat rule based and constant. Even though the number of teams is sometimes adjusted domestically, the barrier to enter the industry is theoretically to promote from the second highest level. However, to become a title contender on both national and international level, is considered to be challenging. History shows its often the same teams in the likes of Real Madrid, Barcelona, Bayern München, Juventus and a few more, reappearing in the final stages of the Champions League, underlining difficulties of challenging the industry elite.

For season 2017/18 the 20 highest revenue generating clubs in Europe were averaging 475 million USD in revenues (Kidd, 2019), indicating a high entry barrier in the form of large economies of scale. The established clubs often have an iconic stadium, a well-established scouting network and modernized training facilities. These are elements new entries will need to obtain to compete, emphasizing the high entry barrier.

When UEFA implemented their Financial fair play policy (UEFA, 2011) in 2010, the bar for new entries was raised a notch further. Clubs were no longer allowed to recklessly spend money to reach success. Several standards and laws were made to secure a more economic sustainable future for the football clubs. An important rule is the break-even rule (UEFA, 2019a, p. 38), aiming to balance a club's income and expenses. The break-even rule prevents clubs from buying its way to the top, as their income is required to match their costs within boundaries, protecting the established well driven clubs from new entries.

3.1.3 Threat of substitute products

Near substitutes would be other team sports like ice hockey, basketball and US sports like baseball and American football. More peripheral substitutes would be other sports and entertainment venues like athletics, concerts and movies. Assuming people's preferences for entertainment to be constant, in regard to the spread between cultural and sporting events, non-sports substitutes will not be a considered a relevant threat to the industry.

Threat from substitutes depends on relative price on substitute products and customers willingness to substitute, which again depends on the demand and popularity of the product.

Football's status as the world's biggest and most popular sport is uncontested (Nielsen Sports, 2018). Even though football is popular there is no guarantee it will continue to engage the masses. However, with the last couple of decades' seemingly growth in broadcasting rights and commercial revenues, there seems to be no serious signs of other sports overtaking football as the number one sports globally.

A possible threat appearing with acceleration the last decade is the ongoing revolution of women's football. The worldwide interest in women's football are notably increasing (The Economist, 2019). This would normally be a potential threat. However, most of the big clubs in Europe have included the women's team as part of the club, strategically disarming the threat.

Not only competition from other sports must be considered as threats, but also the possibility of customers finding ways to get the product experience without benefits falling to the clubs. Examples are illegal streaming and falsified merchandize. Especially illegal streaming of matches seems to be a potential harming threat. A study by GumGum Sports (GumGum, 2019) found that on average 7.1 million people were watching matches from illegal streaming, causing a potential loss of sponsorship revenue of £1million per match. Illegal streaming and sharing are well-known threats for the entertainment industry, and it will most likely continue to be a threat to the football industry, until clearer legislations and better surveillance mechanisms are in place.

3.1.4 Bargaining power of buyers

The power of the buyers is determined by price sensitivity and relative bargaining power (Healy et al., 2019, p. 50). The main product, a football match of 2x45 minutes, as a homogenous product would normally mean low switching cost for buyers. However, a football match contains more than just 11 vs 11 on a pitch for 90 minutes. Football fans are usually geographically and emotionally connected to their clubs, and their support for the club is often grounded in history and a sense of community. The fans' geographical and emotional bond with the clubs increase their switching costs and reduce the price sensitivity, diminishing the fans' relative bargaining power. In addition, the clubs seem to focus more on building and promoting their brand names, giving more prestige and value to their brand, leaving fans with less bargaining power.

Although it might look as if the fans are left with no bargaining power, this is not completely true. In particular one area, the clubs are aware of and try to avoid challenging the fans' bargaining power. Matchday ticket prizes can be a tricky part. Even if the clubs often could have charged higher prices for match tickets due to high demand, the clubs seem to avoid becoming too greedy in this area. Throughout history football has been known as the sport of the working class. The games are a place where the hard workers can get a break from their often-struggling everyday life. If the prices get too high, the hardcore fans will not afford it and stadiums will be left with mostly tourists and wealthier people. This is likely to affect the atmosphere and induce a less passionate crowd with weaker bonds to the club, which again will affect the TV and overall experience. Therefore, clubs often distribute a large number of season tickets to members of the club, to benefit the loyalty of members and ensure a passionate crowd, instead of a stadium filled with selfie-absorbed tourists. As an example, 52000 seats of Old Trafford's 75000 seat capacity are reserved for season ticket holders (Manchester United, 2019). And to be eligible for a season ticket an official membership of Manchester United football club is required (Manchester United, n.d.-b), illustrating how a loyal fanbase are of importance to the business of a football club.

3.1.5 Bargaining powers of suppliers

Categorizing the football players and their agents as suppliers of services, the bargaining power naturally depends on the quality of the player and the negotiation skills of the agent-player team. High media exposure and transparency facilitates assessing quality of the players. As the main actors of the industry, especially the most attractive players, have relatively high bargaining power resulting in high wages and transfer fees. Below is outlined a few topics affecting the bargaining powers of the players.

The Bosman ruling

When the European Union Court of Justice ruled in favour of Jean-Marc Bosman on the 15th December 1995 (Bogaert, 2013), football players were given more bargaining power. The ruling which prevented clubs to charge a transfer fee for players without a contract, has had a huge impact on players bargaining power since then. The players can now negotiate better contracts in light of being free to change clubs when the contract is expired. Also, as free players, they become more attractive as the acquiring clubs don't have to pay a transfer fee. And when no transfer fee is involved, the player is positioned to negotiate better contracts. The Bosman ruling have played an important part of increasing the players bargaining power.

Social and digital media

The last decade's growth of digital media has enforced the clubs to increase their brand awareness. By increasing their brand awareness suppliers get more benefits from being associated with a popular brand, flipping the bargaining power in favor of the football clubs. The same goes for the players. By increasing their personal brand awareness in social media, players become more popular and gain bargaining power versus the club. A seemingly current trend is that fans, because of social media, become more connected to the players instead of the clubs. Some fans are now more likely to follow their favorite player no matter what club he plays for. This way the popular players with a large follower base, increase their overall value and are in a stronger position negotiating personal contracts, hence increasing their bargaining power.

Increased supply

An argument against the increasing bargaining power of the players, is a seemingly growth in the supply of players. With growing popularity and football being spread geographically, talented players come from all corners of the world. New markets emerge and a scouting network has become an important part of a football club. The accessibility to new undiscovered talent, enhances the clubs' bargaining power, as the established players are facing risks of being replaced by new and less demanding talent.

3.1.6 Summary of the industry analysis

To sum up, a significant growth in the broadcasting and commercial sections, dampens profitability to be drowned by fierce rivalry. The growth gives the rivals enough cake to share. Large economies of scale make the entry barrier high. Large fan bases and established facilities built through decades of history enforces the difficulties to enter the industry. Illegal streaming is a threat and will be challenging to prevent. For how long fans will continue to pay a premium to watch football on TV is unknown. The recent growth will most likely diminish, but as by now and the nearest future, lucrative broadcasting deals indicates low bargaining power for the buying TV-viewer. Increased bargaining power to the players due to the growing individual player focus, increases costs and threatens the industry profitability. Overall, the industry growth and high entry barrier combined with threats from higher wages and illegal streaming, indicates modest threats from the five forces and a moderately high profit potential for the industry.

Threat	Rivalry	New entries	Substitutes	Buyers	Suppliers
High					
Moderate	X		X		X
Low		X		X	

Table 3-1 Summary of industry analysis

3.2 Competitive strategy analysis

A firm's profitability is limited to the profit potential within the industry framework. A way to work around this is to make strategic choices to change the industry structure. An example of this is when the teams of the English First division decided to create their own league and formed the Premier League in 1992. Manchester United was a forerunner in this process and it eventually enabled the Premier League to negotiate their own broadcasting deals resulting in better terms and higher profitability. An alternate approach is taking the industry framework for granted and rather focus its strategic choices on capturing the profitability offered within this framework. In the latter case, Healy et al. (2019, p. 53) states there are two generic competitive strategies in the forms of *cost leadership* and *differentiation.* Strategy literature suggests mixing the two strategies can harm profitability as the firm can be "stuck in the middle", neither attracting the price-conscious customers nor providing adequate differentiation.

3.2.1 Cost leadership or differentiation

With a brief look at Manchester United and the football industry, cost leadership is excluded as United's competitive strategy. The club's main cost drivers are employee benefits and amortization. Aiming to lower costs on either of these seems counterproductive to running a successful sports club. Low wages will scare off good talent, and likewise buying low-priced players to reduce amortization is not resonating well with developing a trophy winning club. Unlike the commodity industry where cost leadership often is the main option to gain competitive advantage, the football industry is mostly driven by differentiation. Do they want to play football based on an attacking or defensive strategy? Do they rely on buying established players or developing their own through youth academies? These are just some of the strategic choices the club is facing.

3.2.2 Achieving and sustaining competitive advantage through differentiation

Since Alex Ferguson's retirement in 2013, Manchester United's success on the pitch has been below expectations. Failing to win the English Premier League and the Champions League since then, is below par for a club with two Champions League and 13 Premier League titles under Ferguson's 26 years as manager. The club even failed to qualify for the Champions League for two consecutive seasons in 2015 and 2016, resulting in reduced revenues. Still the club has remained one of the top-3 revenue generating clubs (Deloitte, 2019) with an average annual growth of 11% for the years 2014-2018 (Gough, 2019b). This suggests the club has some competitive advantage. Following below, I will look into some core competencies or key resources allowing Manchester United to achieve and sustain competitive advantage.

Mission statement

Manchester United's differentiating strategy starts at the level of their mission statement. Rival Arsenal's mission is to "make fans proud" (Arsenal, 2013), Juventus want to "provide enjoyment to their supporters by winning" (Juventus, n.d.) and Real Madrid want to "fulfil expectations of their members and supporters" (Real Madrid, n.d.). Manchester United's proclaimed mission is "to be the best football club in the world both on and *off* the pitch" (Manchester United, 2018b). The off-pitch mission is rare in the football industry and can be interpreted as importance and priority to economic and commercial success alongside winning trophies. Another interpretation of off-pitch supremacy can be related to club image and behavior of club representatives off the pitch in public settings. However, United's business strategy including expansion of brand, global community and marketing infrastructure (Manchester United, 2018c) reflects the commercial interpretation of the off-pitch mission statement.

Brand name and business strategy

In their business strategy, Manchester United state they want to expand their brand, global community and marketing infrastructure. They do this actively and visibly by emerging into new markets by placing their pre-season preparation to different parts of the world. USA, Kina, Japan and Australia are all commercially potent areas that have seen visits from United in recent past. Especially China, has been an expansion target and according to Brand Finance, Manchester United is the most popular foreign team in China (Brand Finance, n.d.). This is likely a consequence from United's strong presence in Chinese social media, which is

another strategy the club uses to expand their global community. United aim to make an impact on social media, by communicating with global fans on a daily basis.

Kantar Media, a global market research company, conducted in 2012 and 2019 surveys revealing Manchester United had a worldwide fan/follower base of 1.1 billion in 2019, an increase from 659 million in 2012 (Manchester United, 2019a). This survey not only reveals the club has a huge fanbase, but also shows how their strategy is to exploit their brand name. A documented fanbase of 1.1 billion is useful support when dealing with potential sponsorship and commercial deals. Though this kind of survey is likely to contain errors and biases, it does give a brief view of Manchester United's worldwide popularity, on which they purposefully work to capitalize on. No other teams in the industry are known to have conducted a comparable survey of this level, underlining the differential level of United's competitive strategy in regard to exploiting their brand.

Old Trafford stadium

Manchester United's iconic stadium, Old Trafford, is the club's most valuable asset. A nearly fully utilized crowd capacity of 75000 is 15000 more than their English rivals (Transfermarkt, n.d.-c) and opens up for a unique fan experience. The attendance supremacy adds to a competitive advantage through a higher matchday revenue potential.

The footballing staff

The people responsible for providing success and glory on the pitch is mainly the players, the coaching staff and other key personnel like medical and analytical experts. A possible indicator of competitive advantage is the sporting results. Success on the pitch naturally increases revenue. The mediocre results since Ferguson's retirement in 2013, suggest a competitive disadvantage. However, it should be considered that the frequent manager changes, with Ole Gunnar Solskjær being the fifth manager in six years, left the club with a varied mix of players and impacts from different managers. Since Solskjær was hired, the club has on numerous occasions stated in media it wants to reorganize and rebuild a new team, and that it will take 2-3 years. The new club philosophy, influenced by Ferguson's era, includes an attacking and entertaining style of football, devoted players willing to put the club ahead of themselves and an extended belief in and use of talented homegrown youth players. The rebuilding might result in a short term disadvantage, but the changes can also fuel a future successful team. By having a clear sporting strategy and way of playing football,

everyone involved can work with the same things in training and towards the same goals. Successful examples of this strategy are Barcelona and Ajax, who both begin implementing their football strategy at a young age. Another advantage by having a clear club philosophy is that it facilitates the job for the scouting network. They know they are looking for passionate attack-minded players, which facilitates a refined and effective search.

Organization

Head of sporting matters, including player transfers, and Executive vice-chairman of Manchester United since 2012, Ed Woodward, has taken a lot of critics since his appointment. As a previous businessman and banker, Woodward has been accused of failing in the transfer market due to his lack of sports and industry knowledge. He is also held accountable for the failed manager hirings. In spite of the critics, Woodward is still head of the club's sporting matters. Surely, fans have been disappointed with the club's ability to attract desired top players, but evidently the club has harvested from Woodward's background as a businessman. Growing revenues in spite of mediocre results indicate some organizational advantage at the club. A recent example of the club's ability to attract lucrative commercial deals is their partnership with Chinese online giant Alibaba, granting access to 700 million consumers across Alibaba's digital platforms (Manchester United, 2019c). After all, it looks like having a businessman leading a sports club pays off, *off* the pitch.

3.2.3 Summary of competitive advantage analysis

The combination of poor results on the pitch and increased revenues, indicates a competitive advantage for Manchester United. The club's differentiating mission and business strategy reveals they want to capitalize on their popularity and fully exploit the commercial potential of their brand. The brand awareness and openly eager approach to pursue economic success alongside sporting success is rare in the football industry and have positioned the club to continue increasing revenues and sustaining competitive advantage.

3.3 Corporate strategy analysis

Differing from the competitive strategy analysis, which is on the individual business level, a corporate strategy analysis looks at "positive and negative consequences of managing different business under one corporate umbrella" (Healy et al, 2019, p. 57). Since Manchester United operate and manage their business of running a professional football club as a single

reporting segment, a corporate strategy analysis is of less importance for the strategy analysis in this thesis. Still there are some synergies worth mentioning as sources of possible value creation at corporate level.

Asset sharing

The Old Trafford stadium is housing guided tours and a museum with the long and rich history of the club on display. Owning their own stadium allows the club to create synergies from different usage of the stadium and also strengthens bond with the supporters. Other potential synergies at corporate level are the inclusion of the women's team, allowing better utilization of the training facilities, organizational structure and other necessary resources to run a professional football club. By including a women's team, the club positions itself to capitalize on another potential growth area.

The Manchester United group consists of several subsidiaries such as Manchester United Merchandizing, Manchester United Catering and Manchester United TV. All subsidiaries are wholly owned by the group and they benefit from being under the Manchester United brand umbrella. On the other hand, an arguable question is whether the corporation could take advantage of the brand popularity by entering new businesses. However, that strategy run the risk of diluting the strength of the brand.

3.4 Risks related to the industry and the business

Numerous risk factors are affecting the football industry and the business of Manchester United. Some of them, such as illegal streaming and increased player wages, are mentioned in the previous sections. While some of these factors are within the club's control, and can be acted upon accordingly, some are outside of their control and will "influence future estimates and forward-looking statements" (Manchester United, 2018a, p. ii).

3.4.1 Risks related to the industry

3.4.1.1 Broadcasting rights

Broadcasting contracts have made up for about one third of Manchester United's total revenue since 2014 (Manchester United, 2018a, p. 1). The club recognizes broadcasting and media contracts may change and affect future revenue streams. Contracts with the broadcasting industry are negotiated by Premier League and UEFA, leaving the individual

clubs side-lined without much power to influence the broadcasting contracts. On a worldwide level, it is uncertain for how long the average viewer will continue to pay a premium to watch football on TV. Illegal streaming is already a well-known problem in the industry. In addition, big actors like Facebook and YouTube are entering the live broadcasting segment and could possibly challenge the existing model of protected broadcasting rights.

3.4.1.2 Laws and regulations

With United Kingdom's withdrawal from the European Union, known as "Brexit", there is uncertainty in various areas affecting the football industry. The biggest uncertainty may be the uncertainty itself. Nobody can really predict the specific consequences Brexit will have for the Premier League. It is currently work in progress waiting for the government's handling of the Brexit.

Financial elements such as asset valuation, interest rates and credit rating could see changes and increased volatility, but probably the most notable impact is the withdrawal of the basic principle of "free movement of workers". According to BBC, more than 100 players in the Premier League would be affected (Slater, 2016). Brexit means the players from the EU will be treated as non-EU players, meaning they would need a work permit to be eligible for playing in the Premier League. The acceptance of a work permit depends on conditions such as number of games played for their national team. This will lead to fewer EU-players in the Premier League. On the flipside, Brexit make more room for British talents to make their appearance, which could make a positive long run impact on British football. Overall, the fact that all 20 Premier League clubs voted against Brexit (Yeung, 2016), indicate Brexit is not favorable for English football clubs.

Other changes in laws and regulations can change the circumstances for the football industry. Being governed by Premier League, FA, UEFA and FIFA, Premier League clubs are constantly subject to laws and regulations outside of their control. An example is the "Home grown player rule", requiring clubs to include at least eight homegrown players in their squad (UEFA, 2019b). UEFA defines a homegrown player as a player who has been trained minimum 3 years between the age of 15-21 in the relevant country. This type of rules will affect the clubs' the ability to freely choose the composition of their squad. Another example is ongoing rumors about a European Super league, exclusively for the biggest clubs in Europe (Goal, 2018). Such great upheaval of the existing tournament formats could possibly make

dramatic impacts on the industry, and the consequences of being left out could severely affect the second-tier clubs falling short of qualification.

3.4.1.3 Other factors

A global recession can generally harm the industry. An economic downturn could possibly affect most revenue streams. Though, the last global recession a decade ago, did not affect the football industry remarkably, which can be written on the account of the underlying growth in the industry. Increased terror activity, especially against sports targets, could affect matchday sales negatively and scare people off, hence reducing football's popularity. A natural disaster or a pandemic virus outbreak shutting down large parts of society, are a possible threats that could harm the industry severely, depending on the scale and duration of the incident.

3.4.2 Risks related to the business

3.4.2.1 Brand and reputation

Manchester United states that "The success of our business depends on the value and strength of our brand and reputation" (Manchester United, 2018a, p. 4). A natural connector to the club's brand and reputation is the first team's performance. A successful team will generate more interest and strengthen the brand, whereas the opposite will weaken the brand. Therefore, any risks of affecting the first team performance negatively must be taken into consideration by the club. Injuries for key players, poor management and a collective decline of form are risks the club is facing, which can affect the brand and reputation.

3.4.2.2 Financial factors

Indebtedness

Since the Glazer takeover in 2005 the club has carried significant amounts of debt. This was the first time since 1931 the club had carried any debt (Investopedia, 2020). The club states the indebtedness may "affect our financial health and competitive position" (Manchester United, 2018a, p. 16). The club acknowledges the risk of carrying debt as interest payments and repayments can limit their financial flexibility. To compare, privately owned rivals like Manchester City and Paris St. Germain, carries no debt, giving them more financial flexibility in areas such as player transfers and player wages.

Interest and exchange rates fluctuations

Manchester United, from their indebtedness, is exposed to risk from interest rate changes. Approximately two thirds of their borrowings have a fixed coupon rate (Manchester United, 2018a, p. F44), and the remaining third has variable interest rates. Interest rate risk is managed by interest rate swaps where the club finds it appropriate. For the years 2016-18, about 7% of total yearly revenue is generated in Euros and slightly above 20% in USD (Manchester United, 2018a, p. 12). Risk from exchange rate fluctuations is mainly hedged by using future and forward contracts.

Tax legislation

As a Cayman Islands registered company, operating in the United Kingdom and listed on the New York Stock Exchange, the firm faces a complex tax regime. There is always the risk of tax rate changes affecting the club. However, this goes both ways and in the long run not expected to affect profitability, apart from extra resources required to optimize tax strategy.

3.4.2.3 Ownership

United, as any other club, always carries the risk of changing owners. In spite of no official statement from the Glazers about wanting to sell the club, it is evident they are businesspeople and are likely to sell if the price is right. There have been ongoing rumors in media about interested buyers from Saudi Arabia (Hutchinson, 2019). However, just being rumors, it will not affect forthcoming analysis.

3.4.2.4 Risks of failing to comply with national and international laws and regulations

If breaking UEFA financial fair play requirements or other severe infringements, consequences could be devastating. Relatively recent examples are Juventus and Rangers. Juventus were convicted of corruption in 2006. The club was relegated to Serie B in addition to being stripped of their two previous league titles (Hafez, 2019). For Rangers it was even worse. In 2012 the club was liquidated due to unpaid taxes and failure to comply with national accounting regulations (Weir, 2012). The club was kicked out of the league system and had to restart at the 4th tier at the bottom of the league system. Though, both clubs have managed to recover, financial consequences of non-compliance with laws and regulations can be critical.

4 Financial statement analysis

4.1 Framework for financial statement analysis

The next three chapters will focus on financial statement analysis and create a foundation for forecasting future financial statements. In chapter 4 the choice of time frame and comparable peers is made, before presenting Manchester United's Income statement and Balance sheet as disclosed in their financial statements for the analysis period 2014-2019. First part of the financial statement analysis in chapter 5 is an *accounting analysis*. The purpose of an accounting analysis is to evaluate whether the accounting reflect the underlying business reality. In this section I highlight key accounting policies and estimates. To mitigate the impact of possible distortions on *financial analysis* in the second part, I make several adjustments of various accounting items. Among the adjusted items are gains/losses on disposals of assets, currency exchange and deferred tax. The financial analysis in chapter 6 consists of a ratio analysis, analyzing *profitability, leverage and growth* ratios, in addition to a *cash flow* analysis. The financial statement analysis will add to the strategic analysis in chapter 3 and serve as basis for the prospective analysis in chapter 7 and 8.

4.1.1 Time frame

The time frame of the analysis is the period of which historical financial statements are included. The length of the period depends on various factors, such as the stability of the industry and where the firm is in its growth cycle. For instance, a volatile and cyclic industry such as the steel industry, will normally require a longer time frame to ensure capturing trends. The football industry has been, as previously described in chapter 2, a continuously growing industry. From figure 2-2 we notice that not even the worldwide recession 2008-09 made a noteworthy impact on the top clubs' revenue. The industry's apparent short-term immunity to a macroeconomic factor such as a worldwide recession, indicates a stable non-cyclic industry and a shorter analysis time frame is suggested. In addition, strong growth and industry changes regarding digital media and broadcasting rights, indicates a shorter time frame, as historical and current situation is less likely to give an accurate prediction of the future financial performance. To sum up, the non-cyclic nature, together with the growth and changes in the football industry, supports a choice of a relatively short time frame. On that basis, the choice of six years is made. In this thesis the fiscal years of 2014-2019 will be included. Each fiscal year end on June 30th.

4.1.2 Comparable peers

To evaluate the results from the analysis, a basis for comparison can be useful. For the comparable clubs to serve as good comparison basis, they need to be exposed to the same market and economic conditions and have approximately similar size and risk level. On that ground, Arsenal is chosen as main comparable peer. Arsenal, like Manchester United, own their own relatively large stadium, come under the same English legislations, and recently parted ways with a long serving successful manager in Arsene Wenger. Wenger, like Ferguson, kept his club fighting at the top for more than two decades winning several titles. And similar to United, Arsenal have struggled to keep the same competitive level after the loss of their high profiled manager.

As a comparable peer group, Real Madrid and Juventus is added to Arsenal. While Real Madrid is owned by the club members, Juventus and Arsenal, are publicly owned and traded on the stock market. The reason behind the choice of Real Madrid and Juventus is to include successful clubs from "big five" countries. The considered "big five" countries include England, Spain, Italy, Germany and France. Arguably, Paris SG and Bayern München could be comparable peers as well, but they are left out together with city rival Manchester City mainly because of their different ownership structure. As mentioned in chapter 3, clubs with private owners like Paris SG and Manchester City are not debt financed and hence compete under different conditions and is therefore left out of the peer group.

4.2 Manchester United Income statement and Balance sheet 2014-2019

4.2.1 International Financial Reporting Standards (IFRS)

As the European clubs' governing body, UEFA presents prescriptive accounting guidelines in their "Club and Financial fair play" report (UEFA, 2019a). UEFA allows the clubs to issue and apply own accounting policies as long as they are in accordance with national and international accounting regulations. As a foreign company listed on the NYSE, Manchester United have the option to report by IFRS as issued by the International Accounting Standards Board (IASB) or the US General accepted accounting principles (GAAP). Historically United have reported in compliance with IFRS and its predecessor International Accounting Standards (IAS), and a change to GAAP is likely to require extra resources and would change the conditions for this analysis. It is therefore assumed the club will continue reporting under IFRS.

4.2.2 Income statement

Inome statement Manchester United £ '000						
	2014	2015	2016	2017	2018	2019
Revenue	433 164	395 178	515 345	581 204	590 022	627 122
Operating expenses	- 372 240	- 387 179	- 436 709	- 511 315	- 564 006	- 602 936
Net disposal player reg.	6 991	23 649	- 9 786	10 926	18 119	25 799
Operating profit	67 915	31 648	68 850	80 815	44 135	49 985
Finance costs	- 27 668	- 35 419	- 20 459	- 25 013	- 24 233	- 25 470
Finance income	256	204	442	736	6 195	2 961
Net finance cost	- 27 412	- 35 215	- 20 017	- 24 277	- 18 038	- 22 509
Profit before tax	40 503	- 3 567	48 833	56 538	26 097	27 476
Tax	- 16 668	2 672	- 12 462	- 17 361	- 63 367	- 8 595
Profit	23 835	- 895	36 371	39 177	- 37 270	18 881

4.2.3 Balance sheet

Manchester United Balance sheet £ '000						
	2014	2015	2016	2017	2018	2019
Goodwill	421 453	421 453	421 453	421 453	421 453	421 453
Property, plant and equipment	254 859	250 626	245 714	244 738	245 401	246 032
Intangible assets	204 572	238 944	244 181	296 091	378 187	347 404
Trade and other receivables	41	3 836	11 223	15 399	4 724	9 889
Investment property	13 671	13 559	13 447	13 966	13 836	24 979
Deferred tax	129 631	133 640	145 460	142 107	63 974	58 415
Derivative financial instruments	-	-	3 760	1 666	4 807	30
Non-current assets	1 024 227	1 062 058	1 085 238	1 135 420	1 132 382	1 108 202
Inventories	-	-	926	1 637	1 416	2 130
Trade and other receivables	125 119	83 627	128 657	103 732	168 060	77 601
Tax receivable	-	124	-	-	1 347	643
Derivative financial instruments	-	27	7 888	3 218	1 159	312
Cash and cash equivalents	66 365	155 752	229 194	290 267	242 022	307 637
Current assets	191 484	239 530	366 665	398 854	414 004	388 323
Total assets	1 215 711	1 301 588	1 451 903	1 534 274	1 546 386	1 496 525
Share capital	52	52	52	52	52	53
Share premium	68 822	68 822	68 822	68 822	68 822	68 822
Merger reserve	249 030	249 030	249 030	249 030	249 030	249 030
Hedging reserve	25 918	4 729	- 32 989	- 31 724	- 27 738	- 35 544
Retained earnings	154 828	155 285	173 367	191 436	135 099	132 841
Total equity	498 650	477 918	458 282	477 616	425 265	415 202
Trade and other payables	42 464	48 078	41 450	83 587	104 271	79 183
Deferred revenue	15 631	21 583	38 899	39 648	37 085	33 354
Deferred tax liabilities	28 837	17 311	14 364	20 828	28 559	31 865
Derivative financial instruments	-	2 769	10 637	655	-	2 298
Borrowings	326 803	410 482	484 528	497 630	486 694	505 779
Non-current liabilities	413 735	500 223	589 878	642 348	656 609	652 479
Tax liabilities	2 999	2 105	6 867	9 772	3 874	2 859
Trade and other payables	102 232	131 283	199 668	190 315	267 996	230 386
Deferred revenue	180 613	186 608	188 844	207 245	183 567	190 146
Derivative financial instruments	2 477	2 966	2 800	1 253	-	-
Borrowings	15 005	485	5 564	5 724	9 074	5 453
Current liabilities	303 326	323 447	403 743	414 309	464 511	428 844
Total liabilities	717 061	823 670	993 621	1 056 657	1 121 120	1 081 323
Equity and liabilities	1 215 711	1 301 588	1 451 903	1 534 273	1 546 385	1 496 525

5 Accounting analysis

The purpose of an accounting analysis is to "assess the degree of distortion in a firm's accounting numbers" (Healy et al., 2019, p. 78). By detecting and adjusting accounting distortions the financial analysis will be more reliable and creating a more realistic basis for future forecasting. In this chapter I look into management's incentives to "misreport", key areas of possible distortions and lastly a reformulated and adjusted income statement and balance sheet is presented.

5.1 Incentives for accounting distortions

The financial statement is based on a significant amount of subjectivity and the use of estimates. This opens up for management to influence the numbers. To get a better understanding of which areas possible distortions may appear in, it can help to understand which incentives management has to influence the accounting. Like most companies, it is assumed Manchester United want to lower taxes and increase profits. High profitability is likely to attract sponsors and commercial partners in the prospects of possessing financial power to invest in high profiled players to fuel sporting success and popularity. A strong financial position would also facilitate negotiating better debt terms. In addition, tax savings, management bonuses and debt covenants are areas for possible accounting noise. An example is Manchester United's revolving facility, giving the club instant credit access to £125 million. This revolving facility includes a financial maintenance covenant requiring the club to maintain an EBITDA of minimum £65 million (Manchester United, 2019, p. note23). If the club should get close to that amount, incentives would increase for management to "adjust" EBITDA drivers.

5.2 Key accounting policies and critical estimates

By identifying key accounting policies and critical estimates an analyst can get a better understanding of areas and specific accounting matters where actual numbers can deviate significantly from prospected numbers. Below follows an outlining and discussion of some of Manchester United's significant accounting policies.

5.2.1 Player registrations (intangible assets)

The players, forming the football team, is the most important aspect of a football club. Without the team, other parts of the club would not have a reason to exist. Considering the

importance of the players, the recognition of player registrations could be worth looking into. A player registration is defined as a contract that gives the club the right to use the player's services. When a club buys a player, it does not own the player, but rather the right to use the player for the purpose of contributing to the cash generating unit, the football club. In this respect, the right to use the player, derived from the contract, player registrations are recognized as intangible assets in accordance with IAS 38. The asset recognition and capitalization of the players' contracts appear as important aspects of intangible assets and warrants a closer look into.

5.2.1.1 Capitalization or expense

Player registrations can according to UEFA (2019a, p. 69) be treated as "capitalization and amortization" or "income and expense". The industry norm is the method of capitalization and amortization (UEFA, 2011, p. 92). For football clubs, capitalization is likely to inflate assets and increase profitability ratios early on, in opposition to expensing, which keeps asset base lower and decrease short term profitability ratios. Expensing might also make it difficult to assess the success of the business model as operating profit measures will be skewed. Considering the large amounts involved in the football transfer market, expensing would cause extreme fluctuations into an already highly varying industry profitability, possibly explaining why most clubs prefer the capitalization method.

5.2.1.2 Valuation of player registrations

In line with IAS 38, book value of Manchester United's player registrations 2019 is cost less accumulated amortizations totaling £340 million. The player registrations are required to be amortized for the contract period. When contracts are renewed before expiration, remaining book value will be amortized for the length of the existing contract added the new extension. Is the book value of £340 million reflecting "true and fair" value of the Manchester United squad? Academic literature on this subject suggests otherwise. In a study about impairment tests for football players, Maglio and Rey (2017) points out three areas where book value of football players possibly can defer from fair value. The valuation of homegrown players, the acquisition of "free agents" and the process of impairment tests are all worth looking into when estimating the value of footballers.

Youth academy and homegrown players

The definition of a homegrown player is "a player who, regardless of nationality, have been trained by their club or by another club in the same national association for at least three years between the age of 15 and 21" (UEFA, 2019b). Since IAS 38 forbids capitalization of costs for internally generated intangible assets, homegrown players acquired from their own youth academy carry the book value of zero. Scholars argue this is wrong. Kulikova and Goshunova (2014, pp. 47-48) argue that investments in youth players represent an asset, as they are developed through systematic training and are able create future economic benefits to the club as part of the club's squad and cash generating unit. In the same line, Maglio and Rey (2017, p. 3) state that the cost of a youth academy can be compared to research and development because they have long-term rewards. An example of misfit between book value and fair value is six-time FIFA player of the year winner Lionel Messi. Messi, as a homegrown player, carries the book value of zero. Unofficial market value is according to Transfermarkt (n.d.-d) €150 million. Obviously, he has contributed to FC Barcelona's inflow of economic benefits and illustrates challenges of valuating player registrations.

Acquisition of free agents

A player without an existing contract, is considered a free agent (Bosman-player), and a transfer fee is not required to acquire the right to use the player's services. With no transfer fee, acquisition cost will be zero, except from some agency and other transaction costs. As discussed in chapter 3, the lack of transfer fee increases the bargaining power of free agents. An example is United's acquisition of Chilean striker Alexis Sanchez in January 2018. As a free agent, Sanchez negotiated his way to become the highest paid player in the history of Premier League (Voakes, 2018). Since there is no credible ground for valuation, instead of being capitalized as an asset, he affects the income statement directly through higher employee benefits cost. A club wanting to acquire Sanchez would need to consider his huge salary as part of the cost, and it would naturally lower potential transfer fees. Possibly, to lower employee benefits cost, United could actually want to pay a transfer fee to rid of Sanchez, illustrating a complicated valuation matter.

Impairment tests of footballers

Maglio and Rey (2017) concludes that football clubs' financial information about impairment tests is inadequate. Only a few of the clubs in their sample revealed any information about impairment tests in the notes of their financial statements. Maglio and Rey suggest

impairment tests to be performed by an external part, which could lead to more frequent impairment adjustments. However, evaluation basis such as poor form, is not an adequate impairment indicator since a single player is not a cash generating unit (Deloitte, n.d.). This is where a functional transfer market can be useful. The market value already reflects the player's form and development, and it is arguably an indicator for a player's true value.

5.1.2.3 Book value vs Market value of squad

Comparing book value with average market value estimates from Transfermarkt (n.d.-e) and KPMG (2018), reveals that the squad of seven European top clubs, market value is on average nearly double the book value.

Comparison of book value and market value 2018 (€ million)

	Man U	Real M	Barcelona	Man C	Arsenal	Liverpool	Juventus
Est. market value	694	788	865	922	563	522	552
Book value	417	316	442	551	269	308	331
Difference € mill.	277	472	423	371	294	213	221
Difference %	66	149	96	67	109	69	67
Average diff. %	**89**						

Table 5-1 Squad value

The possible undervaluation of intangible assets may have analytical implications. It may inflate rates of return on capital, implicating long term performance forecast. Healy et al. (2019, p. 129) suggests a way to deal with this is leave the book values as they are and keep in mind the underlying bias when forecasting. It also risks inflating operational profit measures when undervalued players are sold, as profit from sales affects the income statement directly. The valuation of the player registrations is a complex matter that preferably could have been discussed more. However, within the limited scope of this thesis, the biased valuation of the player registrations is acknowledged and kept in consideration for the prospective analysis in chapter 7 and 8.

5.2.3 Goodwill (Intangible assets)

Goodwill of £421 million, originating from the Glazer acquisition in 2005 (Manchester United, 2019, p. note 15), is not subject to depreciation, but is tested yearly for impairment as required by IAS 36. When book value is higher than recoverable amount, based on value-in-use calculations, an impairment loss is recognized. Value-in-use calculations contain various

assumptions for forecasting values including discount rate for cash flows and first team performance. This is a complex process and illustrates the importance and frequent use of managements own policies and estimates. A question arising is whether the origin of the goodwill was a result from undervaluation of the club's assets back in 2005. By undervaluing assets, and recognizing goodwill instead, future depreciation is reduced, since goodwill is not subject to depreciation. If other assets are undervalued and goodwill inflated, it will inflate profitability measures and affect future forecasting.

5.2.4 Property, plant and equipment (PPE)

Property, plant and equipment comprises mainly of the Old Trafford stadium and the AON training complex. Of other assets for 2019 fixtures and fittings made up for 10% and plant and machinery for 2% of total value of the asset group (Manchester United, 2019). Recognition of PPE is made in accordance with IAS 16. The club use the cost model and book value for 2019 is £216 million, which is cost less accumulated depreciation.

Whenever circumstances change indicating a possible impairment, tests are conducted to see if the asset is eligible for an impairment. Non-current assets, including PPE, are subject to impairment when book value exceeds recoverable amount, with the recoverable amount being the highest of fair value and value in use. Fair value of Old Trafford and AON training complex is difficult to estimate since there is no official market for such assets. Equally challenging it can be to estimate value in use. Both the stadium and the training complex is part of the whole of Manchester United's single cash generating unit. To estimate its future cash flow individually demands critical estimates of the management and is likely to include an unknown amount of uncertainty.

5.2.4 Revenue recognition

Changing from IAS 18, the club implemented IFRS 15 "Revenue from contracts with customers" at the start of fiscal year 2019. The main effect of switching to IFRS 15 is commercial contracts are recognized earlier. This implementation has impacted their financial statements, and prior years including 2015 have been restated (Manchester United, 2019). Normally, this would affect this financial statement analysis, as the numbers used are collected from the yearly reports. However, the minor adjustments are considered

insignificant for this analysis, and therefore original numbers as disclosed in the yearly statements will remain.

Manchester United's revenue streams are divided into three sections consisting of commercial, broadcasting and matchday revenues.

Commercial revenue

The commercial part includes sponsorship, retailing and licensing of Manchester United branded merchandise. For some contingent sponsorship agreements, the accounting management's critical judgement comes into consideration. For example, their current most valuable sponsorship contract, a 10-year Adidas deal worth £750 million, is subject to adjustments depending on first team performance. The payments may increase if winning titles, but also decrease if failing to qualify for the Champions League. In this case, if failing to qualify for the Champions League for two consecutive seasons, yearly payments will be reduced by 30%, until passing the threshold of qualifying again. This is an example of how critical the management's estimates can be. If failing to qualify for the Champions League for two or more consecutive seasons, sponsorship payments diminish and affect future cashflow and value-in-use calculations. And not only will sponsorship revenue decrease, but as seen below also broadcasting revenue will be reduced. Failing to qualify for the Champions League is likely to have a significant impact on revenues and affect a prospective analysis.

Broadcasting revenue

Broadcasting revenue is received from broadcasting contracts with Premier League (60%) and UEFA (35%) (Manchester United, 2019, p. 5). Both Premier League and UEFA operates on three-year contract cycles with the broadcasting corporations. This affects the revenue growth analysis in the forecast chapter, as broadcasting revenue receive a bump every third year when new and more valuable contracts are signed.

Common for both UEFA and Premier League broadcasting contracts are the part contingency, as it consists of a fixed sum and a sum based on performance. Of the 150 million Manchester United earned from participating in the Premier League in 2018, £ 37 was performance based (Premier League, 2018). That is £ 35 million more than the last placed club, West Bromwich Albion, who only received £2 million. Though, it is unlikely Manchester United will go from

second to last place in the Premier League, the difference in achievement-based broadcasting payments, underlines the importance of estimates and how it can affect a prospective analysis.

Matchday revenue

Matchday revenue includes revenue from their home game activities, such as ticket sales and catering. Revenue from season tickets paid in advance is recognized as deferred revenue and released as revenue as matches are played. The number of matches can vary every year and depends on the first team performance. In 2015, when the club was absent from European competitions, the number of home games was 21. The 2017 season, culminating with the Europa League victory, was the most successful with 31 home matches.

From the above sections, it appears the club's revenue streams are connected to the team's performance. Better performance and winning titles lead to more popularity, increased attractiveness for sponsors and higher prize money from UEFA and Premier League. A successful team will attract better players and key staff, which again will lay a better foundation for even more success both on and off the pitch. Main concern about revenues and accounting policies is estimating future revenues and cashflows based on team performance. Since this is a financial statement analysis and not a sporting analysis, team performance predictions will not be explored.

5.2.5 Foreign currency

Being a United Kingdom based company, Manchester United's functional and reporting currency is pound sterling, hence all foreign currency transactions are translated into pound sterling for the purpose of presentation and reporting. The company is exposed to Euro through broadcasting revenue from participation in European tournaments, and through occasional transfer agreements with other clubs which are payable in euro. Exposure to USD comes mainly from sponsor revenue and US debt securities. Currency exchange rate of the transaction day or year-end rate when revaluating is used.

Foreign exchange gains or losses are recognized in the associated part of the income statement, which means exchange amounts from financial instruments is recognized in net financial costs and amounts from operational activities like player transfers, broadcasting and sponsorship, is recognized in operational costs. Peers Arsenal, Juventus and Real Madrid have similar policies regarding foreign currency exchange. All peers, according to their financial

statements, recognize currency exchange gains or losses in their income statement. Lack of detailed information in the statements, makes it difficult to make nuanced policy comparisons. Without exact numbers, it is assumed Manchester United in general is exposed to more currency risk than their peers. Involvement in US denoted financial instruments, foreign denoted prize pools and broadcasting revenue, and a prioritized strategy of international expansion supports the assumption and is taken into consideration for the prospective analysis in chapter 7 and 8.

Since the beginning of the analysis period, the pound sterling GBP has weakened 4.5% against Euro and 17% against the US dollar (Pound Sterling Live, n.d.). A weakened pound increase value of debt as it is carried in US dollar, and the currency fluctuation influence debt-to-capital ratios.

5.2.6 Current and deferred tax

Manchester United, a Cayman Islands registered company, reporting as a US domestic corporation and with its principal subsidiaries operating in the UK, make ground for complicated taxation matters. Ideally, the corporation would through creative tax planning, shift profits to tax haven Cayman Islands and debt to high tax country US to maximize tax debt shield and overall profit. However, as a US domestic corporation listed on the New York Stock Exchange, they are subject to US federal tax on their worldwide income, and the transparency and strict requirements following being a publicly traded company diminish the opportunities for creative tax planning. The US connection differs from other clubs in the industry and is likely to demand extra resources dealing with the complex taxation matters.

A tax treaty between US and UK liberates the club from double taxation (UK Governement, 2005). For taxes paid in UK, a tax credit can be utilized against US taxes. For fiscal year 2018 weighted US tax rate was 28%. A US federal tax rate change from 35% to 21% in 2017, has impacted the club's debt policy, reducing debt tax shield and deferred tax assets. Current statutory tax rates for Manchester United are 21% for the US and 19% for the UK.

5.3 Reformulations of historical financial Income statement and Balance sheet

5.3.1 Reformulated and adjusted income statement

The purpose of accounting reformulations is to create a basis for forecasting future levels of earnings. To get a better understanding of the firm's underlying performance, it is needed to look into what the firm "normally" generates of profit through its core business activities. What is a sustainable level the firm's core business can perform at? To answer that, it is necessary to separate operational items from investing and financing items, as they have different implications for the valuation. While the operational business activities affect the firm's creation of value, financing activities affect the allocation of value among the firm's capital providers (Healy et al., 2019, p. 87). Throughout this financial statement analysis end of fiscal year values are used. Maybe a different approach with an average of starting and ending balance would yield different results. However, for simplicity year-end values are used consistently.

Reformulated Income statement Manchester United £ '000						
	2014	2015	2016	2017	2018	2019
Revenue	431 888	393 916	514 009	579 944	588 651	625 373
Operating expenses	- 371 665	- 386 571	- 435 931	- 510 593	- 563 905	- 602 520
Net disposal player reg.	6 991	23 649	- 9 786	10 926	18 119	25 799
Operating profit	67 214	30 994	68 292	80 277	42 865	48 652
Net investment income	701	654	558	538	1 270	1 333
Finance costs	- 27 668	- 35 419	- 20 459	- 25 013	- 19 281	- 25 470
Finance income	256	204	442	736	1 243	2 961
Net finance cost	- 27 412	- 35 215	- 20 017	- 24 277	- 18 038	- 22 509
Profit before tax	40 503	- 3 567	48 833	56 538	26 097	27 476
Tax	- 16 668	2 672	- 12 462	- 17 361	- 5 740	- 8 595
Profit	**23 835**	**- 895**	**36 371**	**39 177**	**20 357**	**18 881**

Table 5-2 Reformulated income statement

5.3.1.1 Adjusted elements of reformulated income statement

Gain/loss on disposals of assets

Net gains on disposals of Property, plant and equipment is moved from operating costs to Net investment income, as disposals of PPE is not considered part of Manchester United's core business of running a football club. Normally, Net disposal of intangibles would also be removed from operating results. However, selling and buying players is an obvious part of a football club's operational activities. Manchester United have even expanded their scouting network lately to capitalize more on player trading (Fay, 2019). Gains/losses on player registrations will therefore remain in the calculation of operating profit.

Investment properties

Income and costs from Investment properties (Manchester United, 2019, p. note 14) is moved from operational results to Net investment income. Investment properties are held by the club for rental yields and capital appreciation (Manchester United, 2018a, p. note 2.13), and they are not occupied by the group or its subsidiaries. An argument for keeping Investment property as part of operations is that all properties are located in the local Manchester area. It could possibly be a strategic element for future expansion. In addition, the club do not recognize Investment properties as a seperate business segment. However, in this analysis Investment property will be treated as an investment item.

Foreign currency exchange 2018

Foreign exchange gains of £ 4.9 million on retranslation of unhedged US dollar borrowings 2018 is recognized in finance income, opposite other years. Exchange gains/losses related to financing activities is normally recognized in finance costs. It could be a random accounting error and it has been adjusted to avoid distortion of cost of debt calculations in analysis later on.

Write-off deferred tax asset 2018

On December 22, 2017, the US federal corporate tax rate was reduced from 35% to 21%. This led to a revaluation of the US deferred tax position resulting in a write-off of £49 million (Manchester United, 2018a, p. note 10), affecting the profit for the year accordingly. Considering this as a one-time incident, the effect will be ignored as it is not representative of the club's long-term profit generating ability. In relation to the write-off an unrealized foreign exchange loss of £8.8 million has also been removed. It can be argued, that with the complex tax arrangements and involvement with several tax jurisdictions, these types of tax changes will occur from time to time and should be incorporated into the analysis. However, such large tax rate change is considered rare, and therefore the choice of ignoring the effect is made in this thesis.

Exceptional items

Exceptional items, would normally be considered one-time events and removed from the "normalized" income statement. However, as this part mainly comprises of compensation for terminated contracts with dismissed managers and coaching staff, it can be argued to be part of a football club's operational activity. Manchester United have since 2014 dismissed three

managers, Jose Mourinho, Lois Van Gaal and David Moyes, resulting in compensation payments. Frequent manager changes is a common trait of the industry. A total of 14 Premier League clubs changed managers during the 2018/19 season (Transfermarkt, n.d.-f), emphasizing the trend. In addition, for a company of Manchester United's size and complexity it is likely to incur a certain level of execptional items, hence the lack of adjustment in this analysis.

5.3.2 Reformulated balance sheet

For analytical purposes, the balance sheet will be reformulated and regrouped into operational, non-operational investments and financing items. This will be useful for the ratio analysis in the next chapter, as it will facilitate evaluating different functional areas of the firm. To calculate operating cash, an average cash-to-revenue ratio for the peer group including Manchester United, is used. The average cash-to-revenue ratio for the group was approximately 30% for period 2014-18 and will be implemented in the analysis. There are other ways of estimating operating cash. Nonetheless, assuming the football industry as cash heavy, with paying employees' wages as a significant part, the choice fell on average cash-to-revenue ratio.

Reformulated balance sheet Manchester United £ '000						
	2014	2015	2016	2017	2018	2019
Operating cash	66 365	118 175	154 203	173 983	176 595	187 612
Inventories	-	-	926	1 637	1 416	2 130
Trade and other receivables	125 119	83 627	128 657	103 732	168 060	77 601
Tax receivable	-	124	-	-	1 347	643
Derivative financial instruments	-	27	7 888	3 218	1 159	312
Tax liabilities	2 999	2 105	6 867	9 772	3 874	2 859
Trade and other payables	102 232	131 283	199 668	190 315	267 996	230 386
Deferred revenue	180 613	186 608	188 844	207 245	183 567	190 146
Derivative financial instruments	2 477	2 966	2 800	1 253	-	-
Operating working capital	**- 96 837**	**-121 009**	**-106 505**	**-126 015**	**-106 860**	**-155 093**
Goodwill	421 453	421 453	421 453	421 453	421 453	421 453
Property, plant and equipment	254 859	250 626	245 714	244 738	245 401	246 032
Intangible assets	204 572	238 944	244 181	296 091	378 187	347 404
Trade and other receivables	41	3 836	11 223	15 399	4 724	9 889
Net derivatives	-	- 2 769	- 6 877	1 011	4 807	- 2 268
(-)Net deferred tax liabilities	-100 794	-116 329	-131 096	-121 279	- 35 415	- 26 550
Trade and other payables	42 464	48 078	41 450	83 587	104 271	79 183
Deferred revenue	15 631	21 583	38 899	39 648	37 085	33 354
Net non-current oper assets	**923 624**	**958 758**	**966 441**	**976 736**	**948 631**	**936 523**
Net operating assets	**826 787**	**837 749**	**859 936**	**850 721**	**841 771**	**781 430**
Excess cash	-	37 577	74 991	116 284	65 427	120 025
Investment property	13 671	13 559	13 447	13 966	13 836	24 979
Non-operating investments	**13 671**	**51 136**	**88 438**	**130 250**	**79 263**	**145 004**
Total business assets	**840 458**	**888 885**	**948 374**	**980 971**	**921 034**	**926 434**
Current debt	15 005	485	5 564	5 724	9 074	5 453
Non-current debt	326 803	410 482	484 528	497 630	486 694	505 779
Interest-bearing debt	**341 808**	**410 967**	**490 092**	**503 354**	**495 768**	**511 232**
Equity	**498 650**	**477 918**	**458 282**	**477 616**	**425 265**	**415 202**
Invested capital	**840 458**	**888 885**	**948 374**	**980 970**	**921 033**	**926 434**

Table 5-3 Reformulated Balance sheet

6 Financial analysis

Healy et al. (2019, p. 175) presents four levers that managers can use to achieve their growth and profit targets. These levers are Operating management, Investment management, Financing management and Dividend policy. An analysis of profitability, leverage and growth ratios (section 6.1-4) and a Cash flow analysis (section 6.5) can be helpful in getting insights on how effective the firm's policies are in these areas and support the forecast in chapter 7.

Item	Definition
Income statement items	
Interest expense after tax	Interest expense X (1–Tax rate)
Net investment profit after tax (NIPAT)	(Investment income + Interest income) X (1–Tax rate)
Net operating profit after tax (NOPAT)	Profit or loss – NIPAT + interest expense after tax
Balance sheet items	
Operating working capital	(Current assets – Excess cash and cash equivalents) – (Current liabilities – Current debt and current portion of non-current debt)
Net non-current operating assets	Non-current tangible and intangible assets + (Net) derivatives – (Net) deferred tax liability – Non-interest-bearing non-current liabilities
Non-operating investments	Other non-operating investments + Excess cash and cash equivalents
Net operating assets	Operating working capital + Net non-current operating assets
Business assets	Net operating assets + Non-operating investments
Debt	Total interest-bearing non-current liabilities + Current debt and current portion of non-current debt
Invested capital	Debt + Group equity

Table 6-1 Definitions of accounting items in ratio analysis

6.1 Overall profitability

Return on equity (ROE) is a comprehensive indicator of how well the management employs the funds invested by the shareholders. ROE is calculated by dividing profit with shareholder equity.

ROE %	2014	2015	2016	2017	2018	2019	Average
Arsenal	2,3	6,1	0,5	9,7	13,5	-6,9	4,2
Juventus	-15,7	5,1	7,6	45,4	-26,7	-127,7	-18,6
Real Madrid	10,5	10,2	6,8	4,5	6,3	7,2	7,6
Peer average	-0,9	7,1	5,0	19,9	-2,3	-42,5	-2,3
MUFC	4,8	-0,2	7,9	8,2	-8,8	4,5	2,7

Table 6-2 ROE for Manchester United and the peer group

From table 6-2 it is noticeable Juventus' ROE varies significantly, while Real Madrid have a steadier return on equity. Juventus' massive 45% ROE for 2017 is mainly due to selling Paul Pogba to Manchester United for €97 million after signing him for free in 2012. The negative ROE of 128% in 2019 is related to buying star player Ronaldo, causing increased wages and

amortizations (Juventus, 2020). Without going further into details, it's worth to mention the player trading and player wages can cause a huge impact on a club's financial results from year to year. Also, noticeably from table 6-2 is Manchester United's negative ROE of 8.8% in 2018. This was mainly due to the deferred tax write-off of £49 million mentioned in section 5.3.1. In general, it appears shareholders of football clubs experience highly varying returns both between clubs and from year to year. Numbers in table 6-2 is calculated before any accounting reformulations. From now on the reformulated statements in section 5.3 will be used.

6.2 Profitability decomposed

By decomposing Return on equity (ROE), performance evaluation can be allocated to three functional areas management can influence by their policies and strategies. The areas of operations, non-operating investments and financing is looked into and historical levels and trends is utilized for future forecasting. Return on equity is by Healy et al. (2019, p. 181) defined as follows:

ROE = Return on invested capital (ROIC) + Spread x Financial leverage   (Equation 1)

6.2.1 Return on invested capital (ROIC)

Return on invested capital is a profitability ratio reflecting how well management utilizes its operating and non-operating assets to generate profit. ROIC would be the company's ROE if it was financed with equity only. ROIC can be split into return on net operating assets (RNOA) and return on non-operating investment (RNOI). Table 6-3 shows ROIC is close to RNOA for both United and Arsenal. That is foremost because of a small portion of invested capital is non-operating investments, implying non-operating investments are a less important component of the clubs' profitability. For both clubs return on non-operating investments (RNOI) decreases ROIC slightly, which is in line with most firms having RNOI lower than RNOA (Healy et al., 2019, p. 182).

6.2.2 Return on net operating assets (RNOA)

RNOA is a measure of the operating component of ROE. Arsenal's varying returns are due to player trading, and in line with section 6.1 it confirms the significant effect player trading can have on a club's profitability. In 2015 and 2018 Manchester United had their lowest NOPAT

and RNOA. This is mainly because of the structure of broadcasting revenues. As explained in section 5.2.4, broadcasting contracts work on a three-year basis, and 2015 and 2018 were the years when neither Premier League nor UEFA contracts were renewed. With no increase in the broadcasting revenue base these years, operating ratios suffered. The importance of these three-year cycles is affecting the forecasting in the chapter 7.

6.2.3 Spread

Spread is explained as "the incremental economic effect from introducing debt into the capital structure" (Healy et al., 2019, p. 181). When ROIC is above the cost of borrowing, spread is positive and borrowing has a positive economic effect, and vice versa when ROIC is below cost of debt, borrowing decreases ROE. A common benchmark for ROIC is Weighted Average Cost of Capital (WACC). For 2015 Manchester United had a negative spread of 3.1%, caused mainly by two reasons. Firstly, 2015 is the only year of the analysis period United did not participate in European tournaments, affecting operating profitability ratios negatively. Secondly, associated with re-negotiation of the terms of their loans (Manchester United, 2015, p. note 24), extra costs incurred, increasing cost of debt for the year. The consequence was a ROIC lower than cost of debt, hence a negative spread causing a negative ROE for the year. With a borderline average spread of 0,3% United's financing policy is close to being optimized, indicating a well-functioning component of the club's financing strategy. Comparing with Arsenal, the effect of player trading causes a high degree of fluctuations, making it difficult to make sound comparisons.

Ratio	Manchester United						Arsenal		
	2014	2015	2016	2017	2018	2019	2017	2018	2019
Net operating profit margin %	9,5	5,5	9,5	9,4	5,5	5,7	11,0	15,6	-4,4
x Net operating asset turnover	0,5	0,5	0,6	0,7	0,7	0,8	0,8	0,7	0,6
(=) Return on net oper. assets %	5,0	2,6	5,7	6,4	3,9	4,6	9,4	10,5	-2,8
x Net operating assets/invested cap	1,0	0,9	0,9	0,9	0,9	0,8	0,9	1,0	1,1
(+)Return on non-Oper. Invest. %	4,6	1,1	0,7	0,6	2,3	2,3	1,1	0,9	1,1
x Non-op invest/invested capital	0,0	0,1	0,1	0,1	0,1	0,2	0,1	0,2	0,1
(=) Return on invested capital %	5,0	2,5	5,2	5,7	3,7	4,2	8,4	10,4	-2,9
Spread %	-0,3	-3,1	2,5	2,4	0,9	0,3	2,3	6,6	-8,4
x Financial leverage	0,7	0,9	1,1	1,1	1,2	1,2	0,6	0,5	0,5
(=) Financial leverage gain %	-0,2	-2,7	2,7	2,6	1,1	0,3	1,3	3,0	-4,0
ROE=ROIC+Fin.leverage gain %	4,8	-0,2	7,9	8,2	4,8	4,5	9,7	13,5	-6,9

Table 6-3 Distinguishing operating, investment and financing components of ROE (Manchester United, 2019) and (Arsenal, 2020)

6.2.4 NOPAT margin decomposed

As the starting point for the profitability decomposition in table 6-3, a NOPAT margin decomposition can give more insights on how Manchester United maintain their level of profit. NOPAT, defined as net operating profit after tax, is a measure of a firm's core operating performance, net of taxes, reflecting operating policies and eliminitating effects of debt policies. NOPAT is calculated by profit of the year plus interest expense after tax, minus investment profit after tax. NOPAT margin is NOPAT divided by revenue. A decomposition of NOPAT margin will be compiled when forecasting NOPAT margin in the next chapter.

6.3 Financial leverage analysis

Financial leverage allows firms to increase their asset base in excess of equity. In line with the previous section, ROE will increase as long as cost of liabilities is lower than return on investing these funds. It must be taken into account that with liabilities also comes risk. If failing to meet the liability obligations it could cause financial distress. Financial leverage ratios are a way to measure the firm's degree of risk from financial leverage.

6.3.1 Liquidity

A key indicator of a firm's short-term liquidity is the *current ratio*. Current ratio (current assets/current liabilities) of more than 1 is indicating the firm is able to meet their short-term liability obligations. If some current assets are hard to liquidate, such as difficulties to collect trade receivables, the firm might still face liquidity problems in spite of a current ratio above 1. Another indicator of the firm's ability to cover short-term liabilities is the *cash ratio*. The cash ratio captures the firm's ability to cover its current liabilities with highly liquid assets as in cash and cash equivalents. Analysts consider a cash ratio between 0,5-1 to be healthy.

From table 6-5 it appears both United and Arsenal have relatively healthy liquidity ratios, with United slightly below their London rivals. A quick glance at their foreign peers, Juventus (0,03) (Juventus, 2020) and Real Madrid (0,4) (Real Madrid, 2019), it stands out they have significantly lower cash ratios for 2019 than their English peers. This could possibly originate from the English domestic broadcasting revenue supremacy (table 2-2).

Some features of the football industry ease the clubs' liquidity challenges. Season tickets are paid in advance, and also parts of broadcasting revenue are paid pre-season, which can equip

the clubs to better meet their short-time financial obligations. Lastly, an indication that Manchester United is not facing severe liquidity problems, is that their revolving facility with instant credit access, has remained untouched since the recession in 2009 (Manchester United, 2019, p. 59).

	Manchester United						Arsenal		
	2014	2015	2016	2017	2018	2019	2017	2018	2019
Current ratio	0,6	0,7	0,9	1,0	0,9	0,9	1,2	1,4	1,0
Cash ratio	0,2	0,5	0,6	0,7	0,5	0,7	0,8	0,9	0,7

Table 6-5 Liquidity ratios

6.3.2 Solvency

Whereas liquidity focus on short-term risk, a solvency analysis sheds light on long-term risk of failing financial obligations and the ability to withstand economic downturns and possible bankruptcy. A solid *equity-to-capital ratio* gives the firm a buffer through challenging times. What is considered a solid ratio, varies between industries, and normally stable industries with steady cashflows require less equity percentage of total capital. With the football industry's complexity and instability, it is challenging to find an appropriate benchmark. From table 6-6 it appears both United and Arsenal have presumably solid solvency ratios. Comparing equity share of capital with peers Juventus and Real Madrid, Juventus (0,03) appear as riskier than Real Madrid (0,5) who is slightly above their English rivals.

A measure of the firm's ability to meet their long-term debt obligations is *interest coverage ratio*. Earnings based interest coverage is defined as (Profit or loss + Interest expense after tax) divided by Interest expense after tax. It indicates at what ease the firm can meet its interest payments. The higher the coverage ratio, the greater the cushion the firm has to meet interest obligations.

	Manchester United						Arsenal		
	2014	2015	2016	2017	2018	2019	2017	2018	2019
Equity-to-capital	0,4	0,4	0,3	0,3	0,3	0,3	0,4	0,4	0,4
Interest coverage	2,3	1,0	3,7	3,4	1,8	1,9	3,9	8,6	-1,6

Table 6-6 Solvency ratios

6.4 Sustainable growth

A comprehensive manner of assessing the firm's ratios, is the concept of sustainable growth. (Healy et al., 2019, p. 194). The *sustainable growth rate* is defined by Healy et al. as ROE – (1 – Dividend payout rate) and it reflects the rate at which the firm can grow, keeping their operating, investing, financing and dividend policies unchanged (Healy et al., 2019, p. 195). Since none of United's peers pays dividends, their basis for comparison will be their ROE, naturally resulting in Manchester United on average having a lower sustainable growth rate then their peers. Because of their abnormally fluctuating results, Juventus have been left out of this ratio comparison.

	2014	2015	2016	2017	2018	2019	Average
MUFC	4,8	-0,2	3,6	3,3	-0,4	-1,1	1,7
Arsenal	2,3	6,1	0,5	9,7	13,5	-6,9	4,2
Real Madrid	10,5	10,2	6,8	4,5	6,3	7,2	7,6

Table 6-7 Sustainable growth rate

6.5 Cash flow analysis

The purpose of a cash flow analysis is to get further insights into the operating, investment and financing policies of the firm.

6.5.1 Cash flow statement preparation

Healy et al. (2019, p. 198) differs between two formats of reporting cash flows. The main difference is in the way operating cash flow is reported. The direct format, not commonly used, reports operating cash receipts and disbursments directly. The indirect format, used by Manchester United, starts with Profit before tax and makes adjustments to arrive at the operating cash flow before changes in working capital. First adjustment is adding back depreciation and amortisation, because they are non-cash charges. Second adjustment is subtracting taxes paid adjusted for debt tax shield. This adjustment is made to ensure cash flow from operations is independent from the firm's financing structure. Other adjustments include deferred taxes, gains or losses from non-operating investments and other items not considered part of the operating cash flow.

Reformulated Cash flow statement Manchester United £ million							
	2014	2015	2016	2017	2018	2019	Avg.
Profit before tax	40,5	- 3,6	48,8	56,5	26,1	27,5	32,6
Depreciation and amortisation	64,0	110,0	98,1	134,7	149,1	140,9	116,1
Tax paid and debt tax shield	- 11,1	- 19,7	- 6,7	- 12,1	- 11,9	- 6,7	- 11,4
Other adjustments	21,8	13,1	32,1	18,2	18,1	4,7	18,0
Operat.CF before changes in WC	**115,2**	**99,9**	**172,4**	**197,3**	**181,4**	**166,4**	**155,4**
Changes in Working Capital	- 24,6	75,5	21,8	42,3	- 73,8	90,5	22,0
Operat.CF before invest. activities	**90,6**	**175,4**	**194,2**	**239,6**	**107,7**	**256,9**	**177,4**
Interest received	0,3	0,5	0,5	0,7	1,2	2,9	1,0
Net cash used in investing activities	- 89,7	-102,3	-104,8	-151,0	-121,3	-161,3	-121,7
Free CF available to Debt&Equity	**1,1**	**73,6**	**89,9**	**89,4**	**- 12,4**	**98,4**	**56,7**
Interest paid after tax	- 18,1	- 31,9	- 8,6	- 12,7	- 13,6	- 15,0	- 16,6
Net repayments of borrowing	- 5,0	44,6	- 0,4	- 0,4	- 0,4	- 3,8	5,8
Free CF available to Equity	**- 21,9**	**86,3**	**80,9**	**76,3**	**- 26,4**	**79,7**	**45,8**
Dividends paid	-	-	- 20,1	- 23,3	- 22,0	- 23,3	- 22,2
Net change in cash	**- 21,9**	**86,3**	**60,8**	**53,0**	**- 48,4**	**56,4**	**31,0**
Exchange gains on cash	- 6,1	3,1	12,6	8,1	0,2	9,2	4,5
Cash at beginning of year	94,4	66,4	155,8	229,2	290,3	242,0	179,7
Cash at end of year	66,4	155,8	229,2	290,3	242,0	307,6	215,2

Table 6-8 Cash flow statement

6.5.2 Analysis of cash flow information

The cash flow statement in table 6-8 highlights a few key cash flow measures. Operating cash flow before changes in working capital focus on whether the company is able to generate a cash surplus from their operating activities. From table 6-8 we see Manchester United have a relatively stable cash flow from operations the last four years. The lowpoint of 2015 is mainly due to previously mentioned circumstances in regard to re-negotiated debt and lack of participation in UEFA-tournaments. Changes in working capital varies significantly. Part of the reason for this is large cash movements from the player trading. A common industry practise is to divide payments for player over several financial periods, adding to accounting complexity in regards to player trading. Operating cashflow before investing activities, signals the club's ability to invest in foremost new players. This is an important measure for Manchester United as they have had to go through some changing of their squad, due to frequent managerial changes. Also, if the expected continuation of squad renewal the next couple of years will be realized, the importance of maintaining their level of operating cash flow before investing activities is important.

The club have averaged a free cash flow of £57 million available to debt and equity and £ 48 million available to equity for the analysis period. This indicates their financing and dividend policies are sustainable. With an yearly average net increase of cash of £ 31 million, cash at hand has increased from £ 66 million in 2014 to £ 308 million in 2019. Since interest-bearing debt has been stable after 2015, the club's internal cash flow has been sufficient to sustain both operating and investment policies. It appear as a healthy sign they create enough cash from their operations to sustain their operating and investment strategies and policies.

Free cashflow available to debt and quity and free cashflow available to debt are critical input for the cashflow based valuation of firm's assets and equity respectively (Healy et al, 2019, p. 201).

7 Prospective analysis: Forecast

A prospective analysis with two main tasks, forecasting and valuation, is made with an forward looking view. In this chapter a forecast summarize insights from the previous chapters. A comprehensive approach will be taken to guard against unreasonable implicit assumptions such as out of proportion levels of working capital, plant assets and leverage. The forecast is for an explicit period of 2020-2029 with 2029 as the terminal year, and it will contain detailed earnings, balance and cashflow predictions for each year. The terminal year is when it is assumed steady state is reached. In steady state, continuing values from fixed growth rates and ratios are estimated. Continuing values are assumed being constant for the reminding lifespan of the company, which is assumed "eternal".

7.1 Explicit forecast period 2020-2029

A good starting point is according to Healy et al. (2019, p. 235) earnings benchmarks based on historical results without further information. They claim research shows these benchmarks are almost as accurate as forecasts performed by professional analysts with access to rich information. In that respect, initial benchmarks in this analysis will be historical average for the company, with adjustments grounded in strategic, accounting and financial analysis. The more relevant and reliable information obtainable, the less emphasis will be put on the initial benchmarks. The forecast follows the ROE decomposition of operating, non-

operating investments and financing drivers. For a comprehensive forecast, eight forecast
drivers (table 7-1), is needed. These will be outlined in the sections to follow.

Ratio %	Manchester United								Arsenal	
	2014	2015	2016	2017	2018	2019	Avrg	Trend	Avrg	Trend
Revenue growth		-8,8	30,5	12,8	1,5	6,2	8,5	N/A	N/A	N/A
NOPAT margin	9,5	5,5	9,5	9,4	5,5	5,7	7,5	-1,6	6,7	26,3
Oper. WC/Revenue	-22,4	-30,7	-20,7	-21,7	-18,2	-24,8	-23,1	-5,9	-11,7	-83,5
Net non-cur oper assets/rev	213,9	243,4	188,0	168,4	161,2	149,8	187,4	-6,2	144,9	3,3
Non-oper. invest./revenue	3,2	13,0	17,2	22,5	13,5	23,2	15,4	81,1	31,0	-6,2
A/tax ret. non-op.invest/rev	4,6	1,1	0,7	0,6	2,3	2,3	1,9	27,9	1,0	4,8
After tax cost of debt	-5,3	-5,6	-2,7	-3,2	-2,8	-3,9	-3,9	-0,2	-5,3	-10,0
Debt-to-capital	40,7	46,2	51,7	51,3	53,8	55,2	49,8	6,4	36,9	-5,9

Table 7-1 Historical Forecast driver ratios

Forecasting assumptions

A ten year explicit forecast period is the time expected for Manchester United to reach an
assumed steady state. The relatively long timeframe is mainly due to the growth in
broadcasting revenues. With recent signs of diminishing growth, a few three-year cycles to
capture an estimated development is required. A disadvantage of a ten year forecast horizont
versus a shorter one is that measures such as earnings, cashflows and operating working
capital often can be accurately predicted the next year or two, but the amount of
uncertaintanty increases for each year. Towards year 9 and 10 it is more of a long shot.
Another assumption is that the beginning balance sheet values 2020 is equal to ending values
2019 and so forth for each forthcoming year.

7.1.1 Revenue growth analysis

For the historic analysis period 2014-19, Maanchester United's revenue has seen an average
annual growth of 8,5 %, on par with an industry growth of 8.6% (table 7-2). The growth can
probably be linked to a growing demand for televised football, and an increasing worldwide
exposure through digital media, enhancing commercial revenues. It is difficult to predict how
long this growth will continue and at what strength. Kantar media's latest report (Manchester
United, 2019a) on United's fan/follower base indicate a possible connection to the emergence
of the Asian middle class, as United's fanbase have more than doubled in Asia since 2012.
However, more reliable indicators will be needed to draw such conclusion. A likely more
reliable indicator is the principle of mean reverting. Historically, European firms tend to

revert to a "normal" level of 5-7% revenue growth within 3-10 years (Healyet al., 2019, p. 236). Whether an English football club can be compared with European firms is arguable. Nevertheless, more relevant is the principle of growth returning to a "normal" level.

To forecast future revenue growth rates, main revenue drivers is looked into historically and predicted for both the forecasting and continuing period. Table 7-2 shows decomposed annual revenue growth rates for Manchester United 2014-19, and the average annual growth rate for United and the industry for the same period. The industry numbers are collected from Deloitte's Money League report ((Deloitte, 2020), and it includes the 20 highest revenue generating clubs in Europe.

Revenue growth (%)	Manchester United					Average	
	2015	2016	2017	2018	2019	MU	Industry
Commercial	4,1	36,4	2,7	0,2	-0,5	10,8	8,0
Broadcasting	-20,7	30,4	38,2	5,2	18,2	13,3	11,0
Matchday	-16,2	17,7	4,7	-1,7	0,9	1,1	4,0
Total revenue MU	-8,8	30,5	12,8	1,5	6,2	8,5	N/A
Total revenue Industry	7,6	11,9	6,5	5,6	11,3	N/A	8,6

Table 7-2 Historical revenue growth rates

Since no company can outgrow the world economy long term, a terminal growth rate of 3% will be used. The 3% is anchored in International Monetary Fund's (IMF) GDP real growth rate from 1980-2019 (IMF, n.d). IMF's rate of 3.47% has been reduced to 3% because less developed countries grow at a faster pace influencing overall rate. Additionaly, Healy et al. (2019, p. 242) argue for a world economic average growth rate of 3%. An alternate option often used in valuation is the relevant, in this case the UK, long term inflation rate. An argument for favoring worldwide GDP growth in this analysis, is Manchester United's worldwide exposure and connection to international markets, including large fanbases on all continents.

7.1.1.1 Commercial revenue

For the commercial section, the 36 % growth from 2015 to 2016 stands out (table 7-2). The reason behind this abnormal growth is that up until July 2015, all of Manchester United's retail, merchandising, apparel and product licensing business was managed by Nike. After July 2015, the club took control of all of its own commercial business, hence the increase in

commercial revenues for 2016 (Manchester United, 2016, p. 30). In light of this restructuring, an annual growth rate of 10.8% as base for predicting future growth, seems too high. The apparent struggle to keep the same level after the restructuring, could be caused by some organizational startup problems. For the sponsorship part of the commercial section, ideally it could have been separated and decomposed to a detailed report. However, since the club has numerous sponsors and partnership deals, some of which are contingent, it will be too complicated and the sponsorship part will remain part of the commercial section.

Manchester United's commercial revenue is stimulated by their global expansion strategy, expanding their fanbase, and there is no clear indication this will change in spite of mediocre sporting results. As an example, the Alibaba contract gives the club direct access to advertise club content on Alibaba's media platforms and its 700 million users. Another example is Kantar Media's aforementioned report showing United's worldwide fan/follover base has increased by 70% since 2012. A larger fan base fuels commercial revenue growth and for 2020 the 3-year trend of a slight diminishing growth is expected to turn around. With this in mind, it is assumed that United will gradually increase the commercial growth for the next 4 years approaching historical industry average of 8%, before competitive market forces drive the growth back to an expected continuing rate of 3%.

7.1.1.2 Broadcasting revenue

Varying broadcasting revenues depend on numerous factors. The 3-year broadcasting deal cycles and first team performance both presumably have significant impact. Both Premier League and UEFA have historically made contracts of 3-year cycles with the broadcasting companies. When the deals increase in value, more money falls to the participating clubs, giving the clubs' broadcasting revenue a bump every third year.

Premier League

Premier League's new broadcasting deal for 2020-22 is up 8% from its previous period. While the domestic rights slightly decline in value, the international broadcasters are paying 30% more this period (Associated Press, 2019). The domestic stagnation could signal the market has matured, or it can be a correctional adjustment from two previous high growth periods, as described in section 2.1.5. Predicting the period 2023-29 is difficult due to big variations the previous periods. However, indications the international market still has growth potential, the Premier League broadcasting rights is expected to continue growing by 8% in

2023-25 . After that, a growth rate of 5% is expected in 2026, due to the recent numbers for 2020-22 are signalling a lower growth rate, before landing on 3% terminal growth in 2029. The years with no renewal of broadcasting contracts, a 3% "normal" growth is expected.

UEFA

UEFA's last two broadcasting deals have seen an increase of 50% in 2016 and 40% 2019 (UEFA, 2020). This explains part of United's growth these years. In 2015 the team wasn't qualified for any European competition, hence the negative growth of 20%. The highest growth year of 2017 can be explained by the Premier League entering a new 3-year period of broadcasting rights with a 65% value increase, in addition to the club winning the Europa League, resulting in increased revenue from UEFA as well.

In their Club licensing benchmarking report for financial year 2018, UEFA stated revenues for participants of European club tournaments could expect "large increases at all levels" (UEFA, 2020, p. 74). This is confirmed by Manchester United more than doubling their UEFA-revenue from 2018 to 2019 (Manchester United, 2019b, p. 51). Assuming the trend from UEFA's broadcasting cycles with previous 50% and 40% growth continues, an estimated growth reduction of 10% every third year is expected for 2022-29, before ending on a terminal growth rate of 3%

Manchester United Television (MUTV)

Accounting for only 5% of Manchester Uniteds broadcasting revenue, MUTV is less relevant, and a simplified approach assuming 3% yearly growth will be applied, reflecting expected economic worldwide growth.

7.1.1.3 Matchday revenue

Matchday revenue depend on number of homegames played, attendance percentage and general price level. Since most games are usually sold out, what matters most is the number of homegames played, which again is linked to the level of sporting success. Manchester United have 1% average growth for 2014-19, compared to industry growth of 4% (table 7-2). The difference is partly due to several clubs expanding or changing stadiums, allowing larger attendance increasing matchday revenue. Instead of expanding attendance capacity, Manchester United's strategy is to change the composition of the stadium. With recent developing of hospitality facilities like VIP boxes, which sell at a higher price, matchday

revenue is expected to increase and margins improved (Manchester United, 2019b, p. 44). For the forecast period 2020-29 previous growth rate of 1% will be used and added 2% for the hospitality suites strategy, adjoining the terminal rate of 3%.

7.1.1.4 Summary revenue growth forecast Manchester United

Manchester United Expected revenue growth %									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Commercial	4	5	6	7	8	7	6	5	4	3
PL broadcasting	8	3	3	8	3	3	5	3	3	3
UEFA broadcasting	3	3	30	3	3	20	3	3	10	3
MUTV	3	3	3	3	3	3	3	3	3	3
Matchday	3	3	3	3	3	3	3	3	3	3
Implied growth rate	4,6	5,9	5,8	5,9	5,2	7,4	4,8	3,9	4,6	3,0

Table 7-3 Revenue growth forecast

7.1.2 NOPAT margin

Expressing key NOPAT drivers as percentage of revenue (table 7-4), is helpful when forecasting NOPAT margin. Trend is the average annual growth rate and an indicator for the future growth development. The factors influencing changes of NOPAT margin are in italics and is considered when forecasting NOPAT margin.

Manchester United NOPAT margin decomposed								
	2014	2015	2016	2017	2018	2019	Average	Trend
Revenue	100	100	100	100	100	100	100	
Disposal of intangibles	*1,6*	*6,0*	*-1,9*	*1,9*	*3,1*	*4,1*	*2,5*	*7,5*
Employee benefits	*49,7*	*51,4*	*45,2*	*45,4*	*50,3*	*53,1*	*49,2*	*1,6*
Amortization	*12,8*	*25,3*	*17,1*	*21,5*	*23,5*	*20,7*	*20,1*	*17,6*
Other operating costs	*23,5*	*21,4*	*22,5*	*21,2*	*22,0*	*22,5*	*22,2*	*-0,7*
Total operating costs	86,1	98,1	84,8	88,0	95,8	96,3	91,5	2,7
Operating profit before tax	15,6	7,9	13,3	13,8	7,3	7,8	10,9	
Invest. and interest income	0,2	0,2	0,2	0,2	0,4	0,7	0,3	
Interest expense	-6,4	-9,0	-4,0	-4,3	-3,3	-4,1	-5,2	
Tax expense	*-3,9*	*0,7*	*-2,4*	*-3,0*	*-2,5*	*-1,4*	*-2,1*	*-122,7*
Profit	5,5	-0,2	7,1	6,8	2,0	3,0	4,0	
(-)After tax inv & int income	0,1	0,1	0,1	0,1	0,3	0,5	0,2	
After tax interest expense	4,2	5,8	2,6	2,8	2,4	3,2	3,5	
NOPAT Margin	**9,5**	**5,5**	**9,5**	**9,4**	**4,0**	**5,7**	**7,3**	3,0

Table 7-4 NOPAT margin decomposed

Disposals of intangible assets (Player trading)

As discussed in the strategic analysis in chapter 3, Manchester United is considered to develop a competitive advantage, due to investement in scouting network, comprehensive statistics analysis and prioritizing creating homegrown talent. The player trading profit-to-revenue ratio is on average 2.5 % for 2014-2019 (table 7-4) with an inclining trend. Considering the rebuilding, as mentioned in chapter 3, will take "a few years" and investment in established key players is still needed, the profitability of player trading is expected to be stable the next 3 years and then increase as a result of being self-sufficient with talent, before declining because of competitive market forces. Departing from and arriving at 3%, with a more profitable period of 5% profit in the middle years 2023-25 seems reasonable with respect to average levels and competitive strategy. Estimated effect on NOPAT margin is displayed in table 7-5.

Employee benefits

The largest cost group in the industry is employee benefits, often referred to as wage costs. Employee benefits includes wages, bonuses and other benefits paid to employees. It is assumed that the main portion of the cost group is the players' and managing staff's salaries. Detailed information about the wage costs is not publicly available, hence the assumption. An example of wage distribution is that more than 90% of Juventus' wage costs for 2019 were to their players and technical staff (Juventus, 2020).

Manchester United's wage costs-to-revenue ratio has on average been 5% lower than the peer group (table 7-5). The increase the last two seasons, can be connected to the previously mentioned Alexis Sanchez, who came as a free agent and became the highest paid player in the Premier League's history. His contract expires in July 2022, and is likely to affect overall wages. Not only does his wages disappear from the payroll, but the signal effect of United paying such high wages will be diminshed and could reduce future wage levels. The strategy section concludes players currently are moderately increasing their bargaining power, implying higher wage costs. However, the increasing wages must be seen in conjunction with the broadcasting "revolution" and also expect to slow down as the broadcasting growth slows down. On that basis, in addition to the Sanchez effect, employee benefits-to-revenue ratio is expected to gradually decrease from their 2019-level of 53% towards a 50% level, more in line with their average level of 49%.

Amortization

A similar measure to NOPAT, often used for valuation, is EBITDA, earnings before interest, tax, depreciation and amortization. The main argument for favoring NOPAT instead of EBITDA in this thesis, is that amortization is a real operating expense and too important part of a football club's consumption of resources to ignore. Amortization, one of two main cost drivers in the industry, together with employee benefits account for approximately ¾ of operating costs, hence they are two key elements of changes in the NOPAT margin.

Manchester United's amortization-to-revenue ratio seem to have stabilized around 20% (table 7-4), slightly above the peer group average of 18%. United'a high amortization costs could be seen in relation to the frequent manager changes since 2013, with every new manager buying new high-prized players to build their own squad. Because of the club's strategy of investing in youth players, amortization-to-revenue is expected to diminish after the reshaping of the squad is complete in "a few years". Since the restructure period will likely see a few profiled high-priced players coming in, amortizations will remain at 20% until 2022 and from there decline to 19%, in between own average and peer average.

Other operating costs

As the most stable cost group, other operating costs is expected to continue at average 22%. Effect on NOPAT will be +0,5% for 2020 and zero after than.

Effective tax rate

The trend of declining tax expenses is due to the previously mentioned reduction of the US statutory tax rate from 35% to 21%. Manchester United's average effective tax rate for 2014-2019 has been 29,7%, based on calculations from the reformulated income statement in chapter 4. With their average statutory tax rate being 31,5% for the period, it indicates effective tax rate is relatively close to statutory rate. Kaldestad and Møller (2017, p. 83) claims it is acceptable to use statutory tax rate when it does not differ significantly from effective tax rate. Whether the difference of 1.8% is significant is arguable. However, a complex taxation regime and to simplify the estimation of effective tax rate, the statutory US rate of 21% is used during upcoming forecasting and valuation processes. With no expected change to the statutory rate, the effective tax rate will not have a material impact on NOPAT margin for the forecasting period.

Predicting NOPAT margin

With 2019 ratios as base, table 7-5 summarize above discussed factors' predicted effects on NOPAT margin. To compare, Manchester United and Arsenals average historic NOPAT margins are respectively 7.5% and 6.7%. In spite of uncertainties and challenges of predicting accurate NOPAT margins, United's strategy of investing in their home-grown talent and its' effect on various NOPAT drivers, seems to be the main reason the club will hover above historic NOPAT margin level. And as shown in table 7-5 it will take "a few years" for the strategy to yield results.

		Effect on NOPAT margin			
	2019	2020-22	2023-25	2026-28	2029
Player trading	4,1	-1.1	2,0	-1,0	-1,0
Employee benefits	53,1	1,1	1,0	1,0	0,0
Amortization	20,7	0,7	1,0	0,0	0,0
Other oper. Costs	22,5	0,5	0,0	0,0	0,0
Effective tax	1,4	0,0	0,0	0,0	0,0
NOPAT margin	**5,7**	**6,9**	**10,9**	**10,9**	**9,9**

Table 7-5 Expected effect on NOPAT margin

7.1.3 Working capital to revenue

Manchester United's working capital consists of operating cash, trade and other receivables, trade and other payables, deferred revenue, and other current assets and liabilities. In valutation, it is generally acceptable to assume level of working capital to grow proportionally to revenue (Kaldestad & Møller, 2017, p. 77). Historically, average working capital to revenue ratio has been -23% with a slight declining trend of 6% (table 7-2). With relatively small fluctuations compared to Arsenal, historic level will of -23% is carried on and used for the forecasting period. The slight declining trend will be neglected due to expectations of less working capital required as a result of more favorable player trading exposure. Creating and developing more home-grown talent, reduce the need for buying high-priced players.

7.1.4 Non-current assets to revenue

The value of Manchester United's non-current operating asset base has basically been unchanged since 2014 and not grown in line with revenues. An adding factor to the asset group value is the increasing value of the player squad. Subtracting factors are increased trade payables and the deferred tax write off. Consequently, the non-current operating assets-to-

revenue ratio has seen an yearly average decline of 6% with an average ratio of 187% (table 7-2). This development is consistent with the club's strategy of growing from global commercial expansion, and not from asset investment, and it is expected to continue for the forecasting period. Another factor potentially influencing the future ratio, is a major renovation of Old Trafford. Though yearly capital expenditures are spent on both Old Trafford and the AON training complex, the club has been publicly critizised for their stadium being in strong need of a refurbishment. Unofficial numbers in media indicate it will cost at least £ 200 million to renovate their stadium (Forrester, 2020). In spite of being just speculations and rumours, it does not undermine the fact that a significant capital expenditure is expected during the forecasting period, and it will contribute against the declining asset to revenue ratio. Another predicted influencing factor of the non-current operating asset-to-revenue ratio, is the reshaping of the player squad. With a bigger portion of homegrown players at book value of zero, intangible assets is likely to be reduced.

With respect to abovementioned factors, the non-current operating asset-to-revenue ratio is expected to continue decreasing, but at a slower rate than previous years. With the 2019 1evel of 150%, as starting point, the ratio is expected to decrease by 2% per annum ending up at the terminal rate of 130%. Though, there is a significant amount of uncertainty in the continuing ratio, it is assumed a certain level of assets is needed to run a football club.

7.1.5 Non-operating investments

Non-operating investments consists of investment property and cash and cash equivalents in excess of operating cash. With investment property not changing much, except from in 2019, the non-operating investments-to-revenue ratio changes mainly due to changes in excess cash. Assuming investment property portfolio to remain stable, and that the club will avoid too much excess cash because of a low return rate, a 18% non-operating investments to revenue ratio is expected for the forecasting period. This is historic average excluding 2014 when the club had no excess cash, which seems unlikely to repeat considering the level of excess cash and cash equivalents since 2016.

After tax return on non-operating investments is expected to be 2.5% for the forecasting period. This is higher than average rate of 1.9% (table 7-2). A higher forecasted estimated return rate is due to reduced tax rate (2018) and higher proportion of investement property (2019). According to numbers from Manchester United's financial statements 2014-19,

investment property have yielded on average a 5.4% profit. If comparing with Arsenal's after tax return on non-operating investments it is historically only 1%. This is because their financial statements do not disclose profit on investment properties, and therefore the rate is not comparable.

7.1.6 After tax cost of debt and capital structure

When calculating average cost of debt and debt-to-capital ratio for the analysis period 2014-19, the years 2014 and 2015 is excluded. This is because of a reissuance and increase of their debt facilities at the end of fiscal year 2015 (Manchester United, 2015, p. F40), reducing their cost of debt and changing their capital structure as shown in table 7-6. The current loan terms agreed upon will remain the same until 2025. It can be argued this kind of debt refinancing is common and will happen also during the forecast period. However, due to common expectancy of lower future interest rates, the years of 2016-19 serves as a more credible basis for predicting future cost of debt.

	2014	2015	2016	2017	2018	2019	Avg.16-19
After tax cost of debt %	-5,3	-5,6	-2,7	-3,2	-2,8	-3,9	-3,2
Debt-to-capital %	40,7	46,2	51,7	51,3	53,8	55,2	53,0

Table 7-6 Debt ratios

After tax cost of debt

Debt, also referred to as borrowings, is defined as interest bearing liabilities. Cost of debt includes all costs associated with the debt financing. The club's interest bearing debt are Senior secured notes of USD 425 million and Secured term loan facilities of USD 225 million (Manchester United, 2019b, p. F44). The Senior secured notes bear an interest rate of 3.79% and matures in 2027. The Secured term loan facility carries the interest rate of LIBOR plus 1.25-1.75% annually and is payable in 2025. With numbers from Global-rates (n.d.), the average annual USD LIBOR rate for the analysis period 2014-19 has been 1.6% , steadily increasing from 0,56% June 2014 to 2.76% June 2018 before a drop to 2.37% June 2019. Both Caixa Bank (Caixa Bank Research, n.d.) and The Economic Forecast Agency (n.d.) predict a decreasing LIBOR rate for the next 2-3 years.

For the forecasted after tax cost of debt, the historic average of 3.2% (table 7-6) will be used in spite of a growing trend. This is supported by the assumption of reduced interest cost for the secured loan facility as a result of a expected decreasing LIBOR rate.

Debt-to-capital

Debt-to-capital is defined as interest bearing debt divided by invested capital. Historically, approximately half of United's invested capital has been debt. The increasing debt-to-capital ratio seen in table 7-6 can be partly explained by three factors. Firstly, the reissuance of debt in 2015 added to the debt portion. Secondly, exchange rates favoring USD to GBP has increased the debt value in GBP. Thirdly, the deferred tax write off in 2018 reduced invested capital. If ignoring the tax write off the ratio for 2018 would have remained at 51%. Considering the three factors, in addition to no known public statement from the management about planned capital structure, the historic growth is not expected to be sustainable, and the average 53% debt-to-capital ratio (table 7-6) for the forecast period will be implemented.

7.1.7 Summary of forecasting

Forecasting assumptions for Manchester United									
%	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Revenue growth rate	4,6	5,9	5,8	5,9	5,2	7,4	4,8	3,9	4,6	3,0
NOPAT margin	6,9	6,9	6,9	10,9	10,9	10,9	10,9	10,9	10,9	9,9
Op WC/revenue	-23,1	-23,1	-23,1	-23,1	-23,1	-23,1	-23,1	-23,1	-23,1	-23,1
Net non-cur op assets	148,0	146,0	144,0	142,0	140,0	138,0	136,0	134,0	132,0	130,0
Non-op inv/revenue	18,0	18,0	18,0	18,0	18,0	18,0	18,0	18,0	18,0	18,0
After tax ret non-op i	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5
After tax cost of debt	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2
Debt-to-capital	53,0	53,0	53,0	53,0	53,0	53,0	53,0	53,0	53,0	53,0

Table 7-7 Predicted forecast drivers

7.2 Terminal year

Terminal year 2029 is the year expected for United to have reached its steady state. Terminal value is the present value of either abnormal profits or free cash flows occurring beyond the terminal year (Healy et al., 2019, p. 324). Terminal value, often referred to as continuing value, reflect excpectations of continuing earnings or cash flows lasting "forever". For it to last "forever" it depends on efficient markets, on which forecasting can be based on, and the firm needs to remain in steady state. Expected terminal value is calculated in the next chapter.

8 Prospective analysis: Valuation

The final stage of the prospective analysis is the valuation. Valuation is the process of converting a forecast into an estimate of the value of the firm's assets or equity (Healy et al. 2019, p. 274).

8.1 Valuation method

From finance theory it is acclaimed that for shareholders, the value of their equity, is equal to the present value of expected future dividends. Discounting dividends at cost of equity capital (r_e) gives following formula:

Equity value$_0$ = Dividend$_1$/(1+ r_e) + Dividend$_2$/(1+ r_e)$_2$ + … Dividend$_n$/(1+ r_e)$_n$ + PV of dividends beyond year n (Terminal value)   (Eq.2)

Because dividends are more a by-product of operating and investment activities, hence not revealing much about a firm's equity value, the dividend discount model is not commonly used for valuation. However, the model can be rearranged into other models often used for valuation. *The discounted cashflow model, the discounted abnormal profit model and the discounted abnormal profit growth model* can all be derived from the dividend discount model. The transformations from the dividend discount model to the other three models, produces the equations as follows (Healy et al., 2019, pp. 276-280):

8.1.1 The discounted cash flow model

Free cash flow to equity (FCFE) can be written as Profit or loss less change in book value of business assets plus change in book value of debt. It is assumed constant growth g beyond terminal year n.

Equity value$_0$ = PV of free cash flow to equity = FCFE$_1$/(1+ r_e) + FCFE$_2$/(1+ r_e)$_2$ + … Dividend$_n$/(1+ r_e)$_n$ + PV of FCFE beyond year n   (Eq.3)

8.1.2 The abnormal profit model

Abnormal profit can be defined as profit or loss adjusted for a capital charge equal to the opportunity cost of equity used and can be written as follows: Abnormal profit (AP) = (Profit

or loss) – r_e x BVE, where BVE is book value of equity. Equity value from abnormal profits gives following equation:

Equity value$_0$ = BVE$_0$ + PV of furture abnormal profits = AP$_1$/(1+ r$_e$) + AP$_2$/(1+ r$_e$)$_2$ + …
AP$_n$/(1+ r$_e$)$_n$ + PV of AP beyond year n (Eq.4)

8.1.3 The discounted abnormal profit growth model

The abnormal profit growth(APG) is benchmarked against normal profit growth and equity value equation is :

Equity value$_0$ = (Profit or loss$_1$) / r$_e$ + APG$_1$/(1+ r$_e$) + APG$_2$/(1+ r$_e$)$_2$ + … APG$_n$/(1+ r$_e$)$_n$ +
PV of APG beyond year n (Eq.5)

8.1.4 Asset or equity valuation

The above listed models are direct methods for valuation of equity. An indirect method is to derive equity value from an asset-based valuation approach as described in table 8-1. The models for equity valuation can easily be switched to asset (enterprise) valuation by exchanging equity measures with business asset measures. Free cash flow to equity and debt (eq.3), abnormal NOPAT (eq.4) and abnormal NOPAT growth (eq.5) replace the corresponding equity measures in the equations and produce Value of net operating assets. Accordingly, discount rates must be changed. For net operating assets discount rate is return on net operating assets (RNOA). Since RNOA is basically only dependant on systematic risk, and insensitive to changes in leverage and investment asset portion, asset valuation avoids the problematic aspect of a equity discount rate sensitive to changes in leverage and investment asset portion. An asset-based valuation approach has the advantage when comparing companies, that the leverage component can be ignored.

Value of net operating assets
(+) Value of investment assets
(+) Value of net assets held for sale
(+) PV of tax shield on debt
(=) Enterprise Value
(–) Value of debt
(–) Value of minority interests
(=) Equity value

Table 8-1 From asset valuation to equity valuation

In this thesis, the direct equity valuation method is used. Leverage is predicted to be constant for the forecasting period, and the investment portion of business assets is relatively small and stable, allowing for the use of a constant discount rate for equity.

8.2 Discount rate: Cost of equity capital

One of the most common used model to estimate cost of equity (r_e) is the Capital asset pricing model (CAPM) (Kaldestad & Møller, 2017, p. 154). CAPM, used in this thesis, consists of the three components riskless rate (r_f), systematic risk of the equity (ß) and the market's risk premium ($[E(r_m) - r_f]$) and it is defined as:

$$r_e = r_f + \beta \ [E(r_m) - r_f] \quad (Eq.6)$$

8.2.1 Riskless rate (r_f)

Kaldestad and Møller (2017, p. 156) defines riskless rate as a hypotethical return on an asset or portfolio that carries no risk of bankruptcy or default. The closest real alternative is government bonds. Kaldestad and Møller supports the use of a long term rate, and analysts often use expected rate of return on intermediate-term bonds that presumably includes expected inflation. Because government bond yields have been driven abnormally low the last few years, it is questionable whether current expected return on intermediate-term to long-term bonds are a good measure for the long term riskless rate. To capture both the historic and current level of the riskless rate an average of two measures will be used. The first measure, capturing the historical level, is the riskless rate calculations of Healy et al. (2019, p. 315). They add up historical (1900-2017) average worldwide return on government bonds of 2.1% and European inflation of 1.9% to a total riskless nominal rate of 4%. The second measure, capturing the current level, is 10-year UK government bonds. July 1 2019 the rate was 0.81% and the trend is falling. After tax average of the two measures gives a riskless rate of 1.9%.

8.2.2 Systematic risk (ß)

Beta (ß) risk reflects the stock's sensitivity in relation to the stock market. A beta of 1 means the stock fluctuates in line with the stock market. One way to calculate beta mathematically is to divide covariance of stock and market portfolio with market portfolio. Nevertheless, since Yahoo finance presents assumably reliable numbers, their 5-year monthly beta calculations will be used for a beta estimate of 0.84 for Manchester United (Yahoo Finance, n.d.). To

support Yahoo finance's calculations Infront Analytics shows a 3-year levered (equity) beta of 0.87.

8.2.3 Market risk premium [E(r_m) − r_f]

The market risk premium (MRP) is expected return on market index in excess of riskless rate. It is the premium demanded by investors for carrying the beta risk (Healy et al., 2019, p. 314). Various opinions exists about best estimate for future MRP, and there seems to be a general consensus in line with Zenner, Hill, Clark, & Mago (2008) who estimates future MRP within the range of 5-7%. Kaldestad and Møller (2017, p. 171) and Healy et al. (2019, p. 314) both arguments for a MRP of approximtely 5%. On that basis, a 5% market risk premium will be used for estimating the cost of equity for Manchester United (equation 6).

8.2.4 Illiquidity risk premium (IRP)

To compensate an investor for the risk of not being able to sell or needing to sell at a lower price because of low liquidity, an illiquidity risk premium can be added to the cost of equity. With daily volumes above 100K, the risk of illiquidity is considered low and IRP is set to zero for Manchester United's equity.

8.2.5 Cost of equity calculated

Inserting the above measures into CAPM (eq.6):

Cost of equity r_e = 1.9% (r_f) + 0.84 (ß) x 5% (MRP) = 6.1% *(Eq.7)*

8.3 Cost of equity adjustments

8.3.1 Adjusting the cost of equity for changes in leverage

Since ROE can be written as a function of its leverage: ROE = ROIC+(ROIC-Effective interest rate) x Debt/Equity, the equity beta changes as a function of its leverage. The beta of a firm's business assets is equal to weighted average of its debt and equity betas (Healy et al., 2019, p. 316):

$$\text{ß}_{BUSINESS} = \frac{(1 - taxrate) x Debt}{(1 - taxrate) x Debt + Equity} \text{ß}_{DEBT} + \frac{Equity}{(1 - taxrate) x Debt + Equity} \text{ß}_{EQUITY}$$

(Eq.8)

Since Manchester United can be considered to have a low probability of bankruptcy, interest rate will be close to riskless rate and debt beta will be zero, simplifying the equation:

$$\text{\ss}_{\text{EQUITY}} = \left[1 + (1\text{-tax rate}) \times \frac{Debt}{Equity}\right] \text{\ss}_{\text{BUSINESS}} \quad (Eq.9)$$

8.3.2 Adjusting the cost of equity for changes in non-operating investments

Business assets normally consists of operating assets and non-operating investments. With beta of an asset portfolio still equal to weighted average of the individual betas, Business asset beta can be formulated as follows:

$$\text{\ss}_{\text{BUSINESS}} = \frac{NetOperatingAssets}{BusinessAssets} \text{\ss}_{\text{NOA}} + \frac{NonOperatingInvestments}{BusinessAssets} \text{\ss}_{\text{NOI}}$$

$$= \frac{(1 - taxrate) \times Debt}{(1 - taxrate) \times Debt + Equity} \text{\ss}_{\text{DEBT}} + \frac{Equity}{(1 - taxrate) \times Debt + Equity} \text{\ss}_{\text{EQUITY}}$$

By rearraning the above equation ß_{EQUITY} can be expressed as follows:

$$\text{\ss}_{\text{EQUITY}} = \left[1 + \frac{(1 - taxrate) \times Debt - NonOperatingInvestments}{Equity}\right] \text{\ss}_{\text{NOA}}$$

$$+ \left[\frac{NonOperatingInvestments}{Equity}\right] \text{\ss}_{\text{NOI}} + \left[\frac{(1 - taxrate) \times Debt}{Equity}\right] \text{\ss}_{\text{DEBT}} \quad (Eq.10)$$

The measures of equity, non-operating investments and debt are all in economic values. Lack of access to economic values and for simplicity, economic values will be set equal to book values in this paper. Healy et al. (2019, p. 317) state for a normally healthy firm it is reasonable to assume betas for non-operating investments and debt is equal to zero. Under that assumption, the next section presents a simplified equation for equity beta.

8.3.3 Calculating adjusted cost of equity

From the economic principle of the beta of an asset portfolio is equal to the weighted average of the individual betas, Healy et al. (2019, p. 321) have derived the following equation for equity beta:

$$ß_{EQUITY} = \left[1 + \frac{(1 - taxrate) \, x \, Debt - Investment\,Assets}{Equity} \right] ß_{NOA} \quad (Eq.11)$$

Debt and investement assets are to-equity ratios for 2019, assuming it will remain at the same level for the future cf. the forecasting section. Assuming non-operating investment beta and and debt beta both equalling to zero because of low risk, beta for Net operating assets (ß$_{NOA}$) can be written as:

$$ß_{NOA} = \left[\frac{Equity}{(1 - taxrate) \, x \, Debt + Equity - NonOperating\,Investments} \right] ß_{EQUITY} \quad (Eq.12)$$

Calculating numbers from Manchester Uniteds financial statement 2014-19 finds an average after-tax debt-to-equity ratio of 0.7 and an average non-operating investment-to-equity ratio of 0.19. Inserting the ratios together with previously estimated equity beta, resulted in a ß$_{NOA}$ equal to 0.56. Inserting ß$_{NOA}$=0.56 into the first equation gives ß$_{EQUITY}$ = 0,91. Recalculation of CAPM with adjusted Beta gives Cost of equity (r$_e$) equal to 6.45% , which will be used for discounting equity measures in the valuation of Manchester United's equity.

8.4 Terminal value

The terminal growth rate (g) has previously been set to 3% in the revenue growth forecasting section. Cost of equity (r$_e$=rE) was calculated to 6.45 % and T=explicit forecasting period of 10 years. With values from the terminal year 2029, Healy et al. (2019, p. 329) defines terminal values for abnormal profit (TV$_{AP}$), abnormal profit growth and free cash to equity (TV$_{FCFE}$) as follows:

$$TV_{AP} = \frac{(1 - g) \, x \, AP\,2029}{(rE - g) \, x \, (1 + rE)^T} \quad (Eq.13)$$

$$TV_{APG} = \frac{1}{rE} \times \frac{g \, x \, AP\, 2029}{(rE - g) x (1 + rE)^T - 1} \qquad (Eq.14)$$

$$TV_{FCFE} = \frac{(1 + g) x \, FCFR\, 2029}{(rE - g) x (1 + rE)^T} \qquad (Eq.15)$$

Results from calculations of terminal values are found in the valuation summary (table 8-3).

8.5 Performance forecast for Manchester United

Having estimated cost of equity for Manchester United, abnormal profit, abnormal profit growth and free cashflow to equity can now be estimated for the forecast period. Calculated numbers are shown in table 8-2.

Performance forecast Manchester United £ '000										
Equity valuation	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Abnormal profit	-6533	-2483	432	35485	36750	42031	35105	35203	37285	28603
Abnormal ROE (%)	-1,6	-0,6	0,1	8,4	8,5	9,5	7,6	7,3	7,5	5,6
Free CF to equity	46125	34154	20201	63255	71224	62305	59121	67286	64724	61812
Abnormal profit growth		4050	2915	35053	1265	5281	-6925	98	2082	-8682
Present value factor	0,91	0,83	0,76	0,70	0,64	0,58	0,53	0,49	0,44	0,40
Present value AP	-5968	-2072	330	24718	23387	24436	18646	17082	16529	11584
PV FCF to equity	42139	28506	15403	44063	45326	36224	31402	32650	28692	25033

Table 8-2 Performance forecast

8.6 Risk assessment of cashflows and earnings

Because most prognosis fail in the aftermath, the "base case" with expected business as usual of earnings and cashflows usually needs to be risk assessed to better present a more realistic prognosis of the future. Key profitability drivers, revenue growth and NOPAT margin can be adjusted for different scenarios. In the case of Manchester United, the most apparent risk factor is the sporting performance. The "bad" year of 2015 with no European participation and only placing seventh in the Premier League the previous season, was the only year of the analysis period with negative revenue growth and negative ROE. The "good" year of 2017, winning Europa League and finnishing second in the Premier League, had the highest revenue growth and ROE. Most likely the club will vary between the good and the bad and it seems necessary to proceed with caution when predicting different scenarios.

8.6.1 The "good" scenario

In the "good" scenario the club will start winning titles again on a regular basis, as they used to under Ferguson. Revenue growth and NOPAT margin will be affected positively. Accurately how much, is difficult to estimate. Revenue growth difference between a "bad" year (2015) and a "good" year (2017) was 20%. Obviously 10% revenue growth increase compared to base case seems excessive. A mere 2% increase to an 6.8% average annual growth rate, is closer to historic industry average of 8.6% and will be implemented for the explicit forecast period. For the terminal value, growth rate will not be adjusted as it is unlikely any firm will outgrow the world economy. NOPAT margin will be adjusted up 2%. The choice of 2% because the NOPAT margin difference between 2015 and 2017 was approximately 4%. Since historically, United have been a winning and successful team. The probability of a good scenario is estimated at 35%. This percentage is based on United winning 13 Premier League titles last 30 seasons (43%), adjusted down for a negative trend of not winning the league since 2013.

8.6.2 The "bad" scenario

In this scenario, the club will struggle to qualify for European tournaments, which means they will not place top 4-6 in the Premier League. Revenue growth effect from the good scenario will be reversed, implying a 2% decline for the forecasting period 2020-29. For the terminal value a growth rate of 2% will be implemented as this is in the lower fragment of analysts estimation of world economy growth. NOPAT margin effect will be reversed and reduced by 2%. Probability of a "bad" scenario is estimated at only 5%, which is based on only one "bad" season, falling out of top-6 in the Premier League, last 27 years (figure 2-7). It is adjusted up to 5% for it being rather recently. Numbers from both scenarios in addition to base case will be presented in table 8-3.

8.7 Valuation of Manchester United

All three valuation methods result in the same estimated equity value. This is because the same underlying assumptions are used to forecast profits and cashflows. On the valuation date, June 30th 2019, the estimated weighted value of Manchester United's equity is 2221 million GBP. With number of shares outstanding 164.57 million, estimated value per share is 13.49 GBP. The associated GBP to USD exhange rate is 1.27, resulting in a estimated value per share, of 17.13 USD.

Valuation summary Manchester United Equity value £ million							
	Beg. book value	Value forecast period 2020-29	Terminal value	Total value (base) 60%	The "good" 35%	The "bad" 5%	Weighted value	Value per share £
Abnormal profit	415	376	1119	1910	2890	1259	2221	**13,49**
Abnormal profit growth		1373	538	1910	2890	1259	2221	**13,49**
Free CF to equity		475	1435	1910	2890	1259	2221	**13,49**

Table 8-3 Valuation summary

9 Conclusion and recommendation

The purpose of this master thesis is to estimate the value of Manchester United's equity from a neutral investor's perspective, thereby estimating the value per share. Estimated value per share is 17.19 USD. This is 6% lower than opening market share price of 18.25 USD on July 1, 2019, concluding the market share value is fairly priced, hence a "hold" strategy is recommended.

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