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Equity Valuation: Manchester United Plc

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Department of Finance

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Resumo

O objetivo desta dissertação é fazer uma avaliação global do Manchester United Plc, com o intuito de calcular o preço da ação recorrendo à previsão dos seus Cash Flows futuros. Assim, para a avaliar a empresa, foi efetuada uma análise da própria empresa e da indústria onde está inserida, bem como a previsão da sua evolução.

A Manchester United Plc é a empresa que gere o Manchester United Football Club, um dos maiores clubes de Inglaterra, bem como um dos maiores e mais famosos clubes do Mundo, com um grande número de fãs e apoiantes em todos os continentes. Tal como todos os clubes de futebol, o clube opera através de três principais segmentos: Comercial, Transmissões Televisivas e Bilheteira.

Para avaliar o valor da empresa foram utilizadas duas metodologias, DCF e Múltiplos. No entanto, tendo em conta que a ação do clube é transacionada a um valor muito superior aos seus pares e que não existem muitos clubes cotados em bolsa, a avaliação de Multiplos não foi considerada significante.

De acordo com o método DCF o preço da ação calculado foi \$11,86, tendo sido comparado com o preço do mercado em dois momentos diferentes. Em 21/11/2022, antes da Direção anunciar a sua intenção de venda, o valor representava uma depreciação de 9%, para a qual recomendamos manter a ação. Por outro lado, após o anúncio a recomendação é vender a ação, visto representar uma desvalorização de 44%.

Em conclusão, considerando os recentes acontecimentos, é obtida uma recomendação de venda.

Palavras-Chave: Manchester United Plc; Avaliação de Empresas; Discounted Cash Flow; Múltiplos; Preço da ação; Clubes de Futebol

JEL Classification: G3 - Corporate Finance and Governance

G30 – General

G32 - Financing Policy, Financial Risk and Risk Management, Capital and Ownership Structure, Value of Firms, Goodwill

Abstract

This project's principal goal is to perform an Equity Valuation of Manchester United Plc, in order to determine an implied share price resorting to forecasting future cash flows. Hence, to be able to perform this valuation, a company and industry analysis was conducted, as well a projection of its evolution.

Manchester United Plc is the company which runs Manchester United Football Club, one of England's biggest clubs and also one of the most well-known clubs in the World, with a great amount of supporters and followers in every continent. Like every football club, its business is conducted through three main segments: Commercial, Broadcasting and Matchday.

To assess the company's enterprise value, there were utilized two different methodologies, DCF and Multiples Valuation. However, due to Manchester United trading at a clear premium and the small number of publicly traded football clubs, Multiples Valuation was deemed not significant.

With the Discounted Cash Flow method, the implied share price was \$11,86, which was compared with the stock price at two different moments. Comparing with the market in 21/11/2022, before the Board's announcement that they are looking to sell the club, it represented a depreciation of 9%, to which we recommend holding the stock. Inversely, comparing with the share price in 25/11/2022, we recommend selling it, due to a downside of 44%.

In conclusion, considering the latest development, a recommendation to buy is made.

Keywords: Manchester United Plc; Company Valuation; Discounted Cash Flow; Multiples; Share Price; Football Clubs

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List of Abbreviations

CAGR - Compounded Annual Growth Rate **CAPEX** - Capital Expenditures **CAPM** - Capital Asset Pricing Model **CRP** - Country Risk Premium **D** - Debt **DCF** - Discounted Cash Flow **D/E** – Debt to Equity **E** - Equity **EBIT** - Earnings Before Interest and Taxes EBITDA - Earnings Before Interest, Taxes, Depreciation and Amortization **EPS** - Earning per Share EV - Enterprise Value FCFE - Free Cash Flow to Equity FCFF - Free Cash Flow to the Firm g - Growth Rate GILT - UK Government Liability in Sterling MRP - Market Risk Premium NOPLAT - Net Operating Profit Less Adjusted Taxes NWC - Net Working Capital PER - Price to Earnings Ratio **PPE** - Property, Plant and Equipment **PV** - Present Value Rd - Cost of Debt Re - Cost of Equity **Rf** - Risk-Free Rate SG&A - Selling, General and Administrative t - Tax Rate TV - Terminal Value WACC - Weighted Average Cost of Capital βL - Levered Beta βu - Unlevered Beta β – Beta

1. Introduction

The stock market is an ever-changing ecosystem, with every detail having the power to influence its landscape in either a positive or negative way. So, to make accurate decisions regarding the market, investors must be well informed and master the topic at hand. In that sense, this project will try to help, by focusing on estimating what the future will hold for Manchester United.

This project is divided in three major groups: Literature Review, Company and Industry Company Overview and Company Valuation.

The first group is the Literature Review. In this section of the project, the most important concepts are explained and characterized, as well as the valuation models chosen to estimate the company's value.

In the second group, the Company and Industry Overview, it will be given context about the company that is being analyzed, as well as the industry in which it is involved and its business segments and determining assumptions for its future.

The last section is the Company Valuation. In this part, it will be presented the applicability of the chosen models, the Discounted Cash Flow (DCF) Model and the Relative (Multiples) Valuation Model, as well as an analysis of the results, finishing with a recommendation for the investor to buy, hold or sell the share's position.

In conclusion, this project will be a comprehensive study about the valuation of Manchester United Plc, the company operating Manchester United Football Club, one of the biggest football clubs in the world, considering different methodologies in order to best evaluate and forecast the company being aware of its conjecture.

2. Literature Review

The purpose of this section is to describe the possible methodologies to evaluate a company and chose the best approaches to use in order to predict the likely outcomes of future events.

However, there is no consensus among scholars, researchers and professionals about the right method towards evaluating a company. Every model has its positives and negatives, and every company has its peculiarities and unique characteristics. So, to fight this problem, a mixed approach using more than just one method is commonly used to estimate a company's value.

As per Damodaran (2012), "the problem in valuation is not that there are not enough models to value an asset, is that there are too many".

There are numerous methods to evaluate a company. In this project, the author will focus on the DCF and Relative Valuation approaches, as these are the two standard models and the most used by corporate analysts.

The DCF model will be based in a forecasting process and assumptions by the author about what could potentially happen in every aspect of the chosen company, since the valuation depends on some subjective factors. On the other hand, the Multiples approach is simpler since it does not require all the assumptions made in the DCF, where we must forecast future cash flows. Therefore, the relative valuation can be used has an alternative to confirm the result given by the DCF model.

2.1. Discounted Cash Flow (DCF) Method

According to Luehrman (1997), "discounted-cash-flow analysis (DCF) emerged as best practice for valuing corporate assets" and has been the standard model to corporate valuation in the past few decades. This model is then a tool utilized to determine the value of an investment through the Present Value (PV) of all its future cash flows, discounted at an appropriate rate. As per Havnaer (2013), "the intrinsic value of a business is the present value of the cash flows the company is expected to pay its shareholders in the future."

Miller and Modigliani (1958) also back this claim, noting that the value of a firm can be written as the PV of its after-tax operating cash-flows, as shown in the expression below:

Present Value =
$$\sum_{t=0}^{n} \frac{E(CF)^{t}}{(1+k)^{t}}$$
(1)

There is a number of different ways to do DCF analysis, but the basic idea is always the same: the starting point is "estimating the cash flows associated with the company and then discounting those cash flows by a discount rate commensurate with their risk level" (Lie & Lie, 2002).

The result is the value of the investment and is not based in past results or activities, rather being fundamentally rooted in the company's ability to generate future cash flows. Therefore, the assumptions made regarding a specific company have a relevant influence on the final valuation. Usually, this analysis is done for a period of 5 to 10 years.

2.1.1. Free Cash Flow to the Firm

To calculate the cash flows, one must compute the Free Cash Flow to the Firm (FCFF). The FCFF is the difference between the cash's inflow and outflow, consequences of the company's operational activity. Therefore, it can simply be said the FCFF represents the resources the company has available to face the total capital invested in its operation, "is the cash flow available to the company's suppliers of capital after all operating expenses (including taxes) have been paid and necessary investments in working capital (e.g., inventory) and fixed capital (e.g., equipment) have been made." (Pinto *et al.*, 2010)

The way to accomplish that is by subtracting the amount spent in capital expenditures (CAPEX) and the variation in Working Capital to the Net Operating Profit Less Adjusted Taxes (NOPLAT) and the period's depreciation, since it is just an accounting item, and it does not generate any cash outflow. The value for the NOPLAT can be calculated from the Earnings Before Interest and Taxes (EBIT), deducting it the taxes.

$$FCFF = NOPLAT + Depreciation - CAPEX - \Delta Working Capital$$
(2)

$$NOPLAT = EBIT * (1 - Tax rate)$$
(3)

2.1.2. Free Cash Flow to Equity

According to Pinto et al. (2010), "Free Cash Flow to Equity is the cash flow available to the company's holders of common equity after all operating expenses, interest, and principal payments have been paid and necessary investments in working and fixed capital have been made". By this, we can assume the FCFE as the cash flow available to pay as dividend to shareholders.

As per Koller *et al.* (2010), in opposition to models which are based in the enterprise, "this method makes no adjustments to the DCF value for nonoperating assets or debt. Rather, they are embedded as part of the equity cash flow". In any case, both methods are related, and it is possible to compute FCFE through manipulation of the FCFF formula:

$$FCFE = FCFF - Interest * (1 - t) + \Delta Net Debt$$
(4)

This method estimates the firm's value as the PV of future FCFE discounted at the rate of return on equity (r):

$$Equity \, Value = \sum_{t=1}^{\infty} \frac{FCFE_t}{(1+r)^t}$$
(5)

2.1.3. Discount Rates

There are several different discount rates that can be used in DCF analysis. Depending on the evaluation model chosen, the discount rate could be the Weighted Average Cost of Capital (WACC) or the Cost of Equity. In the section below will be discussed how each of the rates are computed.

2.1.3.1. Weighted Average Cost of Capital (WACC)

The FCF by the firm's perspective is discounted at the Weighted Average Cost of Capital, since it represents a weighted average between the cost of debt after adjusting for the effect of taxes and the cost of equity (Fernandez, 2004).

Since the WACC is a discount rate that encompasses both debt and equity in proportion to their use, therefore it represents a company's average after-tax cost of capital from all sources, and it can be written as follows:

$$WACC = \frac{E}{E+D} * Re + \frac{D}{E+D} * Rd * (1-t)$$
(6)

The cost is calculated using the firm's capital structure, estimating the rate of return required by debt holders, where the debt cost is reduced by the marginal tax rate, since interest tax shields are excluded from the free cash flow, and by equity holders. The tax shield possesses value, hence its incorporation in the rate's computation. (Koller et al., 2010)

The cost of equity represents the rate of return required by shareholders in order to be attractive for them to buy or hold a particular company's stock. "It reflects the inherent risk in the company's business and in the cash flows it generates." (Havnaer, 2013)

The cost of equity can be estimated using the Capital Asset Pricing Model (CAPM), which will be described below.

2.1.3.2. Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model (CAPM) is a method that enables analysts to calculate a shareholder's rate of return of a given asset or investment. Fama and French (2004) argue that the CAPM model is attractive due to its ability to measure risk and its relation to the expected return.

Its general formula is given by the following expression:

$$R = Rf + \beta * (E(Rm) - Rf) + CRP$$
(7)

Where *R* is the expected return on equity; β is the systemic risk; E(Rm) the expected return for the market; *Rf* is the risk-free rate and CRP is the Country Risk Premium. Also, the difference between the expected market return and the risk-free rate (E(Rm) - Rf) is designated as the Market Risk Premium. Below, the components that constitute the formula will be broken down individually.

2.1.3.2.1. Beta (β)

The Beta (β) is a measure of systemic risk. It is, as argued by Faiteh and Aasri (2022), a vital component of the model, representing the sensitivity of a stock to the market, swaying expected returns.

It can be divided in two groups, the levered and the unlevered beta. The unlevered beta is different to the levered beta because it assumes a company is totally financed by equity, whereas the levered beta reflects a firm's risk when assuming a mixed capital structure, with both debt and equity.

$$\beta_L = \beta_U * \left(1 + \frac{(1-r) * Debt}{Equity} \right)$$
(8)

$$\beta_U = \frac{\beta_L}{\left(1 + \frac{(1-r) * Debt}{Equity}\right)} \tag{9}$$

2.1.3.2.2. Risk-Free Rate (Rf)

The risk-free rate is a merely theoretical rate wherein, when used to compute the expected return, the return is equal to the real investment's return. Therefore, it can be stated that the risk-free rate is the rate of return of an investment with zero risk. The risk-free rate, as well as the Market Risk Premium, is given by the market.

In this project, it will be assumed as the risk-free rate the 10-year GILT rate (the United Kingdom's Government Bond) because Manchester United Plc is a UK company.

2.1.3.2.3. Market Risk Premium

As previously established, the Market Risk Premium (MRP) is obtained by subtracting the Risk-Free Rate to the Expected Market Return.

$$MRP = (E(Rm) - Rf) \tag{10}$$

Hence, the Market Risk Premium can be described as the additional return an investor receives when compared to a risk-free investment in the same market.

In the following valuation, it will be considered as the Market Risk Premium the value Fernandez et al. (2020) concluded as the average value of the Market Risk Premium in the United Kingdom in 2020.

2.1.3.2.4. Country Risk Premium

The Country Risk Premium can be understood as the additional return for an investor for assuming the risk of investing in a foreign country.

Since the risk-free rate assumed in this project is the United Kingdom's Government Bond, the country risk premium is already being taken into account, because it is already reflected in the bond's risk. Hence, there is no need for consideration in the cost of equity computation.

2.1.4. Terminal Value

Since the DCF predicts a finite number of future cashflows, the years after the end of the forecast should be considered. The valuation, if it does not take into account the post-forecasted period beyond the discount period, would be incomplete.

To estimate the Terminal Value (TV), Damodaran (2012) suggests 3 different approaches: the Liquidation Value, the Multiple Approach, and the Stable Growth Model.

The first approach assumes that the company will close its operations at a given point in the future, selling its assets. Hence, its Terminal Value could be determined by subtracting the value of the company's liabilities at the time of the sale to the total value of its assets at the time. However, this method does not consider the earning power of the assets.

The second method consists in calculating TV through applying multiples to its expected earnings or revenues in a specific year.

The Stable Growth Model, contrary to the Liquidation Value method, assumes the firm has the ability to reinvest its cashflows, extending its life beyond the terminal year.

In order to calculate the Terminal Value this way, one should assume a constant growth rate till perpetuity (g). By applying the FCFF method, the Terminal Value could be calculated as such:

$$Terminal \, Value = \frac{FCFF_{n+1}}{WACC - g} \tag{11}$$

2.1.5. Enterprise Value

To calculate the Enterprise Value (EV) is to calculate the business value of the analyzed company. The EV is computed by discounting the Free Cash Flow to the Firm (FCFF) and the Terminal Value (TV) at the rate explained above, the Weighted Average Cost of Capital (WACC), as described in the equation below:

Enterprise Value =
$$\sum_{t=1}^{n} \frac{FCFF_t}{(1+WACC)^t} + \frac{TV_n}{(1+WACC)^n}$$
(12)

2.1.6. Price per Share

A company's price per share is its market value divided by the total number of shares. In this case, it can be calculated through the Equity Value, which was touched upon previously:

$$Price \ per \ Share = \frac{Equity \ Value}{Number \ of \ Shares}$$
(13)

2.1.7. Equity Value

Touched upon in the section regarding Free Cash Flow to Equity, the Equity Value can also be calculated, if related to the Free Cash Flow to the Firm, through the following expression:

Equity Value = Enterprise Value - Debt + Cash & Equivalents(14)

2.2. Relative Valuation (Multiples)

Relative or Multiples Valuation is a method of company's valuation based on comparing similar companies or companies that share the same market to estimate its value. The fundamental idea behind this approach is that comparable firms have similar value. So, its principal objective is to value assets, relative to the assets' price already in the market.

As Damodaran (2006) stated, "In relative valuation, we value an asset based upon how similar assets are priced in the market.". Therefore, to evaluate a company through this method, the first thing to accomplish is to identify a set of companies with similar cashflows, risk and growth potential to compare the assets of those companies with its own. This set is called a Peer Group.

After that, the next step is to estimate a company's value using the ratios of the companies in the peer group. Some of the most commonly used multiples among professionals, are the Price to Earnings Ratio (P/E) and Enterprise Value to Earnings Before Interest, Taxes, Depreciation and Amortization (EV/EBITDA).

The P/E ratio is an equity based multiple and it measures the share price of a company relative to its earning per share (EPS) value:

$$P/_E = \frac{Price\ per\ Share}{Earning\ per\ Share}$$
 (15)

The EV/EBITDA ratios are multiples based on the value of the company (Enterprise Value), eliminating the debt financing effects.

$$\frac{EV}{EBITDA} = \frac{Enterprise \, Value}{EBITDA} \tag{16}$$

This is a valuable method to estimate the value of a company. However, its drawback lies in the possibility of being significant differences between companies within the group chosen to compare and even within the same industry.

3. Company and Industry Overview

3.1. Company Description

Manchester United Plc. was founded in 1878 and its headquarters are based in Manchester, United Kingdom. The football club was firstly named Newton Heath LYR Football Club, after the Lancashire and Yorkshire Railway depot in Newton Heath, and it was composed by their works team, until 1892. In 1902, following their bailout, the club changed its name to Manchester United Football Club.

Manchester United Football Club is run by Manchester United Plc along with connected and additional activities, such as its media network, foundation, fan zone, news and sports features, and team merchandise. Its first and reserve teams, both male and female, youth academy, international scouting networks, and other operations, such as its sport science, medical, and fitness operations at the Aon Training Complex, make up the majority of its football operations.

Manchester United Football Club is one of the most popular and successful sports teams in the world, playing one of the most popular spectator sports on Earth. Through the heritage of their more than a 140-years old football team, Manchester United won 66 major honors, including a record 20 English First Division Titles, allowing them to develop one of the biggest and most recognizable sports brands in the world, supported by a global community and a base of fans and followers of more than 1 billion people (approximately 1.1 billion).

A community of this magnitude offers them a worldwide platform to generate significant revenue from multiple sources, including sponsorship, merchandising, product licensing, broadcasting, and matchday-related revenue such as ticket sales.

Additionally, Manchester United is able to attract leading global companies such as adidas, DHL, General Motors (Chevrolet), Canon, Marriott and, more recently, TeamViewer that want assess and exposure to their community of followers and association with their brand.

3.1.1. Company Structure

The club operates through the following principal sectors: Ticketing, Broadcasting and Commercial.

3.1.1.1. Ticketing

Ticketing refers to the Matchday activities regarding the club such as tickets and concession sales. Manchester United plays in Old Trafford stadium, one of the biggest venues in England

with capacity for nearly 75.000 fans. The "Theatre of Dreams", as it is affectionally named by the club's supporters, has been consistently near 100% capacity throughout its recent history, where reportedly Premier League games have reportedly been sold out since the 1997/1998 season, which cedes almost no room to increasing revenue in this segment. Manchester United has an extended waiting list for new members to join the club, meaning all season tickets and home games are always sold out.

Having little possibility to sell additional tickets per match, increased revenue comes from the positive fluctuation of games played in Old Trafford. Premier League games are consistent every year, each team playing 19 games home and away. Therefore, any additional games played come from participation in cup competitions, either domestic or international.

In England, in addition to the Premier League games, each team can participate in the following competitions:

- Domestic Cup Competitions: There are two cup competitions for the teams playing in the English Football League, the FA Cup (sponsored by Emirates) and the EFL Cup (Carabao). These cups include clubs from the Premier League, but also lower league teams based in England. The cups use an elimination knock-out format. In these cups, there is a revenue sharing agreement whereby Manchester United gets revenue from away games and must share home game revenue with the away club
- European Cup Competitions: Clubs are eligible to play in these competitions (Champions League, Europa League and Conference League) through their standing in the league table in the previous season. In either of these competitions, Manchester United has 3 home games guaranteed, in the group phase. After that, the three of them are played in a 2-leg knock-out format, each round having a home and an away match until the finals. To play more home games – and sell more tickets – Manchester United must advance far in domestic cups, qualify for European cups through a good campaign in the league, and advance far in European cups.

Thus, the more games Manchester United plays at home in a given season, the higher its Matchday revenue will be in the end of the fiscal year. It is intrinsically linked with performance in the field of play, with sporting success.

3.1.1.2. Broadcasting

The broadcasting segment includes the revenue streams from television broadcasting agreements. In Manchester United's case, it generates revenue through contracts signed by the

Premier League with the broadcasters such as Sky, BT, and Amazon, in this case domestically, as well as the agreements signed with broadcasters worldwide.

Consumers pay a premium for live sports. Football leagues, such as the Premier League, have been able to negotiate for even more lucrative TV deals. In the 2022 3-year renewal of the Premier League's broadcasting agreement, international rights will reach an amount valued at £5.05 billion, an increase of 30%, while UK broadcasting rights will be worth £5 billion in this 3-year period.

With this renewal, Premier League clubs will see an upgrade of 16% in their broadcasting revenue package, totaling a sum of just over £10 billion, earning higher merit payments according to their final league position.

The way Premier League's broadcasting revenue distribution works, half (50%) of total league's revenue is equally distributed between every club, 25% is awarded based on final league position and the remaining 25% is distributed as a facilities fee for televised matches. In addition to this, the higher is a club's league position in the table, the bigger the revenue it can get. In England, top 4 finishes in the league guarantees a spot in the UEFA Champions League in the following season, between 5th and 6th place warrants a place in the 2nd tier of European Competitions, the UEFA Europa League and if a club finishes in 7th place, it will play in the recently created UEFA Conference League.

These additional competitions draw large audiences and pay out additional broadcasting revenue to participating teams. In contrast, smaller teams have a significantly harder job to attract sponsorship revenues and are reliant on their share of broadcasting revenues. As a result, commercial/sponsorship and broadcasting revenues have been the primary growth drivers for top teams.

This shows the significant size of the Premier League in the world of sports, specifically its weight in the live sports broadcasting universe, highlighting its global value and displays the fact it has become a worldwide brand.

Adding to this, participation in European Competitions qualifies Manchester United for additional revenue from UEFA, the governing body of European Football.

In European Competitions, the prize money received by the clubs is divided into fixed payments based on participation and results, and variable amounts that depending on the value of their TV market.

Given the potential payouts from the Champions League, it is important for broadcasting revenues that Manchester United qualify for either the Champions League (finish 1st-4th), the Europa League (5th-6th) or the Conference League (7th). Despite the growing internal

competition, Manchester United almost always qualifies in the top 7 places, 7th place being the lowest in 30 years. Prior to the inception of the UEFA Conference League, a 7th place finish in the league meant the team did not qualify for European Football. In 2015 that happened and as a result, it earned nothing from UEFA and broadcast revenues fell 20%. There are also potential payouts related to how well the club does in Europe, which we highlight below:

		-	
Payout for	Champions League	Europa League	Conference League
Group Stage	€15.64m	€3.63m	€2.94m
Per Group Stage Win	€2.8m	€630k	€500k
Per Group Stage Draw	€930k	€210k	€166k
Group 2 nd Place	N/A	€550k	€325k
Group 1 st Place	N/A	€1.1m	€650k
Knockout Round Playoff	N/A	€500k	€300k
Round of 16	€9.6m	€1.2m	€600k
Quarter-Finals	€10.6m	€1.8m	€1m
Semi-Finals	€12.5m	€2.8m	€2m
Runner-up	€15.5m	€4.6m	€3m
Winner	€20m	€8.6m	€5m
Maximum	€85,14m	€19,76m	€15,19m

Table 3.1. - UEFA Prize Money

If Manchester United can perform at the best-case scenario in the Champions League, its performance in the competition alone would reward them an additional \in 85 million in revenue. The same case for the Europa League and Conference League, where the same assumption would repay almost \in 20 million and \in 15 million respectively in bonus.

Other revenues within the Broadcasting segment include Manchester United TV which offers internal content to regions across the globe. However, as its content is single-focused, both prospective growth and revenue is limited and otherwise of low relevance.

3.1.1.3. Commercial

The commercial segment encompasses sponsors; merchandise, apparel, and retail; and mobile and content. As previously stated, Manchester United is one of the most popular football clubs

Source: UEFA Circular No. 47/2022

not only in Europe but internationally as well. It has one of the biggest supporter followings, it being in the form of traveling fans from every part of the globe to watch its matches or in social media, where the club has more than 150 million followers and subscribers combined through social media platforms such as Facebook, Twitter, Instagram, YouTube and also Sina Weibo (with 9,4 million followers), an Asian social media network, a continent which gathers a great number of fans of the club.

The club's presence in Asia is nurtured through its annual Pre-Season Tours in the continent, where local fans can experience first-hand the club and see its players play against local teams, and it has an impactful effect in revenue. In 2021, the fact that no pre-season tour was organized due to Covid-19 resulted in a drop in commercial revenue. This success is not a coincidence. The signing of Ji-Sung Park (an established and top quality player in its own right), in 2005, shot the club's popularity in the continent tremendously.

However, in the last few years, it has been the segment with the most growth in the club. Manchester United's Investor Relations office underlines this trend, where in the 10-year span from 2009 to 2019, the commercial revenue grew from constituting just shy of a quarter of the club's revenue (24%, in 2009) to almost half (44%) 10 years later.



Figure 3.1: Manchester United's Revenue Evolution

Source: Manchester United Plc's Investor Relations

Naturally, the results Manchester United manages to achieve are an important driver of its revenues, both positively and negatively. And these results, when positive, are able to eventually attract more supporters and potential sponsorship agreements, since the visibility the

club gets when reaching a great degree of success is rather advantageous to the companies who are looking to sponsor Manchester United, benefitting themselves from the improved exposure.

In the commercial revenue is included the kit-supplying sponsoring agreement with Adidas, which will which pays the club £750 million over 10 years, one of the biggest in history, as well as the shirt-sponsoring deal with TeamViewer, worth £235 million over 5 years.

Additionally, Manchester United is one of the most popular football clubs in social media platforms.





As per the figure above from Deloitte's Football Money League, a yearly report profiling the highest revenue generating clubs in world football, Manchester United (as of March 2022), has over 74 million connections in Facebook, more than the NBA, NFL, NHL, and MLB (the four major American sports leagues) combined, and more than 175 followers throughout the major social media platforms.

Source: Deloitte Football Money League 2022

3.1.2. Shareholder Structure and Board of Directors

	Ordinary Shares	%	Ordinary Shares	%	Voting Power(1)
Lindsell Train Limited(2)	10,847,340	20.55%			0.94%
Ariel Investments, LLC(3)	10,934,059	20.71%			0.95%
Massachusetts Financial Services Company(4)	3,166,867	6.00%			0.27%
Avram Glazer(5)			16,606,979	15.07%	14.38%
Joel M. Glazer(6)	1,707,614	3.23%	21,899,366	19.87%	19.11%
Kevin Glazer(7)			15,899,366	14.43%	13.77%
Bryan G. Glazer(8)			19,899,365	18.06%	17.23%
Darcie S. Glazer(9)	603,806	1.14%	20,899,365	18.96%	18.15%
Edward S. Glazer(10)			15,003,172	13.61%	12.99%

Figure 3.3: Manchester United's Shareholder Structure

Source: Manchester United Annual Report 2022

Manchester United's stock is divided into two classes, A and B shares. Each Class B share is entitled to 10 votes per share and is convertible into one Class A share at any time.

As per the figure above, Manchester United is majority owned by the Glazer family. The six descendants of Malcolm Glazer collectively own 4,4% of outstanding Class A shares and 100% of Class B shares, representing 95,6% of the voting power.

Free float amounts to 4,4% of the total voting power, most of which sits with three institutional shareholders: Ariel Investments, Lindsell Train and Massachusetts Financial Services (MFS) with 20,7%, 20,6% and 6,0% of total free-float, respectively, amounting collectively to 2,2% of voting power.

The fact that so little of the voting power of the club and free float sits in the hands of the general public via free float, creates an overhang for the shares. Any news flow of a potential move by the Glazers on the control of the club creates volatility for Manchester United share price as witnessed in recent weeks and as it will be addressed in the coming chapters.

3.1.3. SWOT Analysis

In order to assess Manchester United's competitive position within the market, i.e., the Football world, a SWOT analysis was made to determine the Strengths, Weaknesses, Opportunities and Threats.

Figure 3.4: Manchester United's SWOT Analysis



Source: Own Analysis

Manchester United biggest strength is its name in the footballing world. It is one of the best clubs, the one with the most titles, in the biggest and most popular league in the world. For this reason, it attracts many supporters and business partners willing to do business with the club due to its global reach.

However, it is not without its weaknesses. In recent years, its on-field performances have lagged behind some of its competitors, leading to lower classifications on the league table. A major setback that can occur from this is an incapability to qualify for the UEFA Champions League or even any European competition, which can lead to missing out on broadcasting and sponsor revenue. Additionally, since results are not great, in order to attract top players and

coaching staff the club has to sometimes pay fees above their actual market value to be able to sign them, leading to smaller margins.

In terms of opportunities, if the team is able to achieve good results, especially in Europe, it receives additional revenue from ticket sales and broadcasting, in addition to the prize money for reaching later-stages of the competition. Its presence in emerging markets such as Asia can also further enhance its visibility and brand awareness, and with it bring new potential sponsorship deals.

On the other hand, regarding the threats to the company, the biggest one is the inability to catch up with the teams above them can cause setbacks detrimental to them, such as diminished revenue and less fan and business partners' support. Additionally, there is a growing rumor that the Glazers, Manchester United's owners, are exploring financial options, not excluding the club's outright sale. That can obviously cause instability within the team and the club as a whole.

3.2. Competitors

Manchester United's competitors can be segmented in two different groups: their direct competitors for sporting success, who tussle for titles such as the Premier League, the Domestic Cups and European trophies; and competitors in the finance and management world.

The first group includes the teams Manchester United faces weekly, every year, in their quest for championships, as are the case for Manchester City, their city rivals, Liverpool, their most historied rival with decades of dispute for the most varied accolades, and London clubs such as Arsenal, Chelsea and Tottenham, as well as European Clubs with ability to accomplish success in continental competitions like Real Madrid, Barcelona and Bayern Munich.

The second group is made up by the clubs that comprise the peer set chosen to help evaluate the company.

As explained in the Literature Review section, one of the key inputs when valuing a business or a company is the peer group. The selection of this group is of vital importance as it can have a significant impact on the valuation of the company. Some of the factors worthy of consideration when choosing the peer set are the insurance that the selected companies ply their trade in the same industry, to guarantee they face similar risks, have comparable size, and are publicly traded, so information can be readily available.

In this project, we chose as the peer group to perform a Multiples Valuation the football clubs with a Market Capitalization of over \$100M. These clubs turn out to be Juventus Football

Club, from Turin, Italy; Amsterdamsche Football Club Ajax, from Amsterdam, Netherlands; Borussia Dortmund, from Dortmund, Germany; and Celtic Football Club, from Glasgow, Scotland.

All these football clubs are historic clubs, with great success throughout their history.

3.3. Company Performance

This section will focus on analyzing Manchester United Plc's performance over the last 5 years to understand and contextualize the company's position. It will be a general overview of the company's past and present, before a more detailed and objective analysis carries out further on in the Valuation chapter.



Figure 3.5: Manchester United Plc's Historical Revenue

Revenue dropped in 2020 and 2021, by consequence of the Covid-19 pandemic, where most notably Matchday and Broadcasting revenue sunk to unprecedented levels, due to fewer games being played in that period and those who were played were played behind closed doors.

However, there was an upsurge in revenue last year, due to the fact that Old Trafford, the Museum and the Megastore operations (ancillary activities) were finally open to visitors, which resulted in a significant increase in revenue, as we can observe in the figure above.

Source: Manchester United Plc Annual Report 2022



Figure 3.6: Manchester United Plc's Historical Staff Costs

Source: Manchester United Plc Annual Report 2022

With regards to staff costs, a very important driver for the club's profitability since it represents the biggest percentage of the club's expenditure, there was a slight decrease in 2020, largely with responsibility awarded to the layoffs executed during the pandemic. In 2021, though, costs with staff were back in line with the pre-pandemic level, in 2019.

Nevertheless, in 2022 there was a great increase in this metric. This amount is greatly influenced by the signing of new players, more specifically Cristiano Ronaldo, whose wages are the biggest in club's history.



Figure 3.7: Manchester United Plc's Historical EBITDA

Source: Manchester United Plc Annual Report 2022

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) is vital in order to determine the company's efficiency in running its business. In Manchester United's case, it has progressively been decreasing, due to the rise of its costs, preeminently the staff costs as we explained above and the punctual drop in revenue in the past two years. It is a concerning landscape which can inform investors of growing difficulty to generate free cash flow.



Figure 3.8: Manchester United Plc's Historical Share Price

Source: Yahoo Finance

Additionally, its share price, despite being extremely volatile as football club's stock typically are, has been in a steady downward trajectory in the past few years. This is due to its lack of results in the field in line with the club's history, pedigree and fan demands and consequently to instability in the boardroom, with board members stepping down (most notably Ed Woodward, former CEO and Director of Football) and the owner's position under pressure and scrutiny.

4. Valuation

4.1. Introduction

As stated in the Literature Review, this chapter is dedicated to value Manchester United Plc using two different methodologies: the Discounted Cash Flow Method, where we will project the company's Cash-flows in the future; and the Multiples Valuation, where the company will be compared against the chosen peer set.

This valuation will be done with the reference date of 30 June 2022, the fiscal-year end for Manchester United Plc. All data regarding subsequent periods will be based on projections according to market expectations and trends. The forecasting period for this project will be the ensuing five years (2023-2027).

This analysis is done in order to achieve a valuation with the goal of giving a recommendation to buy, hold or sell Manchester United's stock.

In the following pages, the assumptions made will be explained within the context of the company and the market where it operates as well as the computations performed to reach the recommendation we will give at the end of this project.

All monetary figures should be understood in £ Million.

4.2. Discounted Cash Flow (DCF) Method

4.2.1. Capital Structure

Capital structure is the mix between the company's debt and equity. This relates to how much capital is supporting a business to finance its operations and shows how company's acquisitions and capital expenditures influences the business's bottom-line, i.e., profit. A highly levered company has an aggressive capital structure (its debt to equity ratio is higher than 1), whilst a more conservative capital structure trends towards a smaller value.

To calculate Manchester United's capital structure, this project utilized information from the last four years and the value used as input to compute the WACC will be the average Debt to Market Capitalization for the analyzed period.

Debt to Equity Ratio							
<u>2019</u> <u>2020</u> <u>2021</u> <u>2022</u>							
Total Debt	590,4	581,3	602,1	742,9			
Market Capitalization	2343,8	2105,2	1812,6	1504,4			
Debt to Equity Ratio	25,2%	27,6%	33,2%	49,4%			
Average	33,9%						

Table 4.1: Average D/E Ratio

Source: Bloomberg (28.10.2022)

As calculated above, the average debt to equity value stood at 33,9%.

4.2.1.1. Beta

Beta is the slope for a stock regressed versus a benchmark market index. A key component of Beta is leverage, the debt-to-equity ratio. Unlevering the Beta clears any benefit of detriment of adding debt to a firm's capital structure, which for an investor gives a clear picture of the risk assumed by a company to run its business. Increasing debt means a larger percentage of a company's profits will be used pay down debt.

Firstly, we have to estimate β_U because the observation of Manchester United and its peers gives us the levered beta which is skewed by the firm's debt policy. To calculate the unlevered beta, it was sourced from Bloomberg the predicted levered betas and Debt and Equity values for Manchester United and its chosen peers. With those values, the debt-to-equity ratio was calculated as well to allow us to compute the unlevered beta using the following formula:

$$\beta_{U} = \frac{\beta_{L}}{\left(1 + \frac{(1-t) * Debt}{Equity}\right)}$$
(17)

Comparable Companies Unlevered Beta								
Company	Predicted Levered Beta	Market Value of Debt (in m)	Market Value of Equity (in m)	Debt/ Equity	Marginal Tax Rate	Unlevered Beta		
Manchester United	0,649	\$742,9	\$1 504,4	49,4%	19,0%	0,46		
Ajax	0,481	\$145,2	\$211,0	68,8%	25,8%	0,32		
Juventus	0,852	\$234,1	\$693,6	33,8%	24,0%	0,68		
Borussia Dortmund	1,228	\$19,0	\$416,0	4,6%	15,8%	1,18		
Celtic	0,355	\$8,1	\$119,7	6,8%	19,0%	0,34		
Mean	0,73			32,7%		0,60		
		Courses I	D_{1} and $ang (29.1)$	0 2022)				

Source: Bloomberg (28.10.2022) and Own Computations

To calculate the relevered beta, we will use the mean of the market's unlevered beta. So, for the unlevered beta, we will assume a value of 0,60, such as computed above.

Therefore, to calculate β_L , we can use the use the following formula by deconstructing the formula to calculate β_U , as detailed below, giving us a relevered beta of 0,76.

$$\beta_L = \beta_U * \left(1 + \frac{(1-t) * Debt}{Equity} \right)$$
(18)

4.2.1.2. Cost of Equity

The Cost of Equity (*Re*), as explained previously in this project, is computed by applying the Capital Asset Pricing Model (CAPM). Thus, we calculated it by using the resulting formula:

$$R = Rf + \beta * (E(Rm) - Rf) + CRP$$
(19)

For the Risk-free rate (Rf), we assumed the latest United Kingdom's 10-year GILT rate (3,5%) and the beta (β) was already previously calculated (0,76). For the Market Risk Premium ((E(Rm) - Rf)), we assumed the values found by the study conducted by Pablo Fernández, Eduardo de Apellaniz and Fernández Acín (2020), where they concluded that the Market Risk Premium for the United Kingdom in 2020 was 5,8%, which is in line with the historic market return (situated between 4% and 6%).

Therefore, calculating the cost of equity (*R*e) should be as follows.

Re = 3,5% + 0,76 * 5,8%

So, the Cost of Equity is 7,9%.

4.2.1.3. Cost of Debt

Lastly, so as to calculate the WACC, we need to compute the After-Tax Cost of Debt, which we can by discounting the tax rate, i.e., the country's corporate tax rate (19% in the United Kingdom) to the Cost of Debt: (Rd * (1 - t)).

In this project, we assumed the value for the cost of debt as being the coupon on Manchester United's only in-issue corporate bond.

Figure 4.1: Manchester United Cost of Debt



Source: Bloomberg. Retrieved at: 30/10/2022

Therefore, by discounting the tax rate to the cost of debt:

$$Rd * (1 - t) = 3,79 * (1 - 19\%)$$

The After-Tax Cost of Debt is 3,1%

4.2.1.4. WACC

By applying the formula to calculate the Weighted Average Cost of Capital:

$$WACC = \frac{E}{E+D} * Re + \frac{D}{E+D} * Rd * (1-t)$$
 (20)

Where,

$$WACC = 67\% * 7,9\% + 33\% * 3,1\%$$

The Weighted Average Cost of Capital is therefore 6,3%.

4.2.2. Revenue

The economic performance of a football club is fundamentally bound to its performance on the field. So, in this particular case, one of the biggest drivers for the economic success of Manchester United is their sporting results.

In addition to that, the reputation of the club being one of the best in the world and its brand awareness can generate bigger and more profitable sponsorship and broadcasting agreements.

However, those agreements tend to be intrinsically linked with on-field performance, which means that if Manchester United cannot challenge in the next few years for the Premier League and reach the latter stages of European Competitions (specially the UEFA Champions League), these revenue streams could suffer some setbacks in terms of their contract values, skewing Manchester United's revenue negatively.

As previously studied, Manchester United operates through 3 major segments: Commercial, Broadcasting and Matchday.

As we can see, the Commercial segment is historically responsible for almost half (47%) of the company's revenue, closely followed by the Broadcasting revenue stream (38%). Matchday revenue comprises all activities related to the game, being ticket sales and ancillary activities within the matchday.

	Historical Period					
(£ in million, FYE 30/06)	2018	2019	2020	2021	2022	
Revenue	£589,76	£627,12	£509,04	£494,12	£583,20	
Commercial	£275,84	£275,09	£279,04	£232,21	£257,82	
Broadcasting	£204,14	£241,21	£140,20	£254,82	£214,85	
Matchday	£109,79	£110,82	£ 89,79	£ 7,10	£110,53	

Table 4.3: Manchester United's Historical Revenue

Source: Manchester United Annual Report 2022

So, we projected future revenues for every segment of the business, as seen in the following Table:

	Projection Period				
(£ in million, FYE 30/06)	2023E	2024E	2025E	2026E	2027E
Revenue	£603,13	£600,86	£624,66	£652,41	£684,19
Commercial	£255,24	£234,82	£239,52	£245,51	£252,87
	-1,0%	-8,0%	2,0%	2,5%	3,0%
Broadcasting	£226,31	£238,38	£251,09	£266,15	£282,12
	5,3%	5,3%	5,3%	6,0%	6,0%
Matchday	£121,59	£127,67	£134,05	£140,75	£149,20
	10,0%	5,0%	5,0%	5,0%	6,0%

Table 4.4: Manchester United's Projected Revenue

We believe that the commercial revenue will slightly drop in 2023, due to the beginning of a new sporting project, where in the early stages the club is bound to suffer some growing pains and in 2024, this drop would be significantly higher due to the fact that Cristiano Ronaldo, their best-known player and one of the biggest stars of the sporting world, is leaving the club and, with him social media following, and merchandising sales will drop.

However, there is a risk factor to the commercial segment that is very much present. In the Adidas sponsorship contract is included a clause that states if Manchester United fails to qualify for the Champions League, i.e., finish in the top 4 teams in the Premier League, Manchester United can incur in a possible reduction of 30% of its contract revenue. This would be an amount of $\pm 22,5$ million. In any case, we believe that such setback will not occur.

It is projected then a steady rise in revenue, since it is believed the new project will be successful, bringing success to the club.

The renewal of the Premier League's broadcasting agreement brings an uprise in revenue close to 16% in the following 3-year period and by that reason the club's revenue would have a steady rise in this segment. After 2025, period where a new broadcasting agreement would have to be negotiated, we argue that, due to the popularity of the Premier League and the success of the club in every competition, the total amount of the contract will be higher, and so is the prize money received by the club for reaching later stages of cup competitions and better sporting results.

The matchday revenue is predicted as to having little variation, since in almost every game the stadium is at its full capacity. However, we are confident that Manchester United will have better results in the future, resulting in more games being played at Old Trafford, bringing additional revenue, added to the rate of inflation the future holds in the coming years.

Source: Own computations

4.2.3. Costs

In the past 5 years there has been a progressive increase in the proportion of the business's costs in relation to its revenue, with a steeper incline happening in the past two years because of the Covid-19's pandemic, since the costs remained more or less constant, but the revenue dropped, more clearly in the Matchday segment, because the supporters became unable to attend games.

In the table below we can clearly see the evolution of selling, general, and administrative expenses through the years:

	Historical Period					
(£ in million, FYE 30/06)	2018	2019	2020	2021	2022	
SG&A	£414,87	£460,93	£376,91	£399,07	£526,74	
Staff Costs	£295,94	£332,36	£284,03	£322,60	£384,14	
Other Operating Expenses	£117,02	£108,98	£ 92,88	£ 76,47	£117,91	
Exceptional Expenses	£ 1,92	£ 19,60	£ -	£ -	£ 24,69	
(% of Revenue)	70%	73%	74%	81%	90%	

Table 4.5: Manchester United's Histo	rical	SG&A
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Source: Manchester United Annual Report 2022

Since Manchester United's success rests on its ability to recruit and maintain the highest level of players and coaching staff, Staff Costs are undoubtedly the greatest expense for the company. As a result, either domestically or globally, the club must pay wages that are comparable to or higher than those of its rivals.

However, as we believe there will be an uprise in revenue in the next few years, the percentage of cost in relation to the business's revenue will drop. Additionally, with the more than likely departure of Cristiano Ronaldo, who has the biggest wage in the history of the Premier League, the staff costs will see a slight decrease.

Other exceptional expenses are expected to maintain at the average rate of the historical period and exceptional expenses, as per its name, will not be considered in this forecast.

Table 4.6: M	<i>lanchester</i>	United's	Projected	SG&A
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	Projection Period								
(£ in million, FYE 30/06)	2023E	2024E	2025E	2026E	2027E				
SG&A	£440,17	£431,90	£442,13	£454,60	£469,22				
Staff Costs	£331,72	£324,47	£331,07	£339,25	£348,94				
Other Operating Expenses	£108,44	£107,43	£111,06	£115,34	£120,28				
Exceptional Expenses	£ -	£ -	£ -	£ -	£ -				

Source: Own computations

4.2.4. Capital Expenditures (CAPEX)

To calculate CAPEX, there are a few assumptions to be made. As for Manchester United, PPE (Property, Plant and Equipment) mostly encompasses the Old Trafford Stadium and the Aon Training Complex, for whom there is no expectation of major renovations in the future. Old Trafford is packed with supporters most games and the tickets for the games are in high demand.

However, being the second biggest stadium in the country, it is highly unlikely that plans for an increase in capacity or for renovations are being put in place. Thus, it is safe to assume that depreciation will be maintained at the current rate, and it was assumed in our computations at the average rate of the last five years.

	Historical Period					Projection Period					
(£ in million, FYE 30/06)	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	
CAPEX	£121,30	£161,30	£212,90	£ 99,30	£ 93,40	£170,41	£146,34	£152,13	£158,89	£166,63	
PPE	£ 13,20	£ 13,70	£ 21,30	£ 6,20	£ 8,30	£ 13,61	£ 13,56	£ 14,10	£ 14,73	£ 15,44	
Payments for intangible assets	£155,00	£178,20	£220,60	£138,20	£115,40	£199,03	£174,85	£181,78	£189,85	£199,10	
Proceeds from sale of intangible assets	-£ 46,90	-£ 43,00	-£ 29,00	-£ 46,00	-£ 30,30	-£ 42,23	-£ 42,07	-£ 43,74	-£ 45,68	-£ 47,91	
Source: Manchester United Annual Report 2022 and Own Computations											

Table 4.7: Manchester United's Historical and Projected CAPEX

New players (intangible assets) are signed and are registered at acquisition cost. However, that cost is amortized for the duration of their contract. As Manchester United will continue to strive to be in the top of the sport, these acquisitions of expensive, top players will continue, so it is reasonable to assume that, in the short term, this amount will rise, before flattening as the sporting project reaches a more settled stage.

As the club is looking to sign new players, the need to offload some of the current ones also arises. It could be a way to balance the books or could derive from the player wanting to have more playing time now that some other player took his place. As a big club, it does not rely on player sales to run its business as smaller clubs do. Therefore, we believe that the proceeds from player sales will continue to develop at the current rate.

4.2.5. Net Working Capital

Net Working Capital is a measure of short-term liquidity, being the difference between its operating assets and liabilities.

Historically, Manchester United has been posting negative Net Working Capital. While the company normally generates significant cashflows from its revenues, it additionally receives a good amount of cash paid in advance, such is the case of season tickets or the case of the

anticipated recognition of contracts (sponsors and merchandising). Thus, this deferred revenue normally results in negative working capital.

By having a low Working Capital, Manchester United is capable to allocate more resources, to have more cash-flow available, to undertake long-term investments.

Taking into account its business model, we believe that the evolution of its operating assets and liabilities will be maintaining a rate aligned with its previous 5 years' average.

	Historical Period				Projection Period					
(£ in million, FYE 30/06)	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E
Operating Assets	_									
Trade Receivables	£119,07	£ 23,85	£115,99	£ 50,37	£ 49,21	£ 78,90	£ 81,90	£ 88,56	£ 96,07	£104,50
Inventories	£ 1,42	£ 2,13	£ 2,19	£ 2,08	£ 2,20	£ 2,04	£ 2,01	£ 2,05	£ 2,11	£ 2,18
Prepayments	£ 10,86	£ 13,03	£ 6,50	£ 7,41	£ 15,53	£ 11,29	£ 12,89	£ 15,12	£ 17,57	£ 20,31
Contract Assets - Accrued Revenue	£ 38,02	£ 39,53	£ 45,97	£ 40,55	£ 36,24	£ 43,67	£ 45,15	£ 48,65	£ 52,60	£ 57,04
Other Receivables	£ 0,11	£ 1,19	£ 0,24	£ 0,46	£ 1,57	£ -	£ -	£ -	£ -	£ -
Total Current Operating Assets	£169,48	£ 79,73	£170,88	£100,87	£104,75	£135,91	£141,95	£154,38	£168,36	£184,02
Operating Liabilities	_									
Trade and Other Payables	£268,00	£230,39	£216,09	£192,66	£220,59	£230,71	£221,64	£222,05	£223,33	£225,37
Contract Liabilities - Deferred Revenue	£180,51	£190,15	£171,57	£117,98	£165,85	£177,26	£173,59	£177,34	£181,96	£187,40
Provisions	£ -	£ -	£ -	£ 0,65	£ 1,06	£ -	£ -	£ -	£ -	£ -
Total Current Operating Liabilities	£448,51	£420,53	£387,67	£311,29	£387,49	£407,97	£ 395,23	£ 399,39	£405,28	£412,76
Net Working Capital	-£279,03	-£ 340,80	-£216,79	-£210,42	-£ 282,74	-£ 272,06	-£ 253,28	-£245,00	-£ 236,92	-£ 228,74
Δ NWC		-£ 61,77	£124,01	£ 6,37	-£ 72,32	-£ 10,68	-£ 18,78	-£ 8,28	-£ 8,08	-£ 8,18

Table 4.8: Manchester United's Historical and Projected NWC

Source: Manchester United Annual Report 2022 and Own Computations

4.2.6. Free Cash Flow to the Firm

After computing all the elements above, it is necessary to calculate all the Free Cash Flows, as was done in the table presented below:

				Pro	jec	tion Pe	riod			
(£ in million, FYE 30/06)	2	023E	20	024E	2	025E	20)26E	2	027E
Revenue	£6	03,13	£6	00,86	£	624,66	£6	52,41	£€	684,19
Commercial	£2	255,24	£2	34,82	£2	239,52	£2	45,51	£2	252,87
Broadcasting	£2	26,31	£2	38,38	£2	251,09	£2	66,15	£2	282,12
Matchday	£1	21,59	£1	27,67	£	134,05	£1	40,75	£1	49,20
SG&A	£4	40,17	£4	31,90	£	142,13	£4	54,60	£۷	69,22
Staff Costs	£3	31,72	£3	24,47	£	331,07	£3	39,25	£3	848,94
Other Operating Expenses	£1	08,44	£1	07,43	£	111,06	£1	15,34	£1	20,28
Exceptional Expenses		n.a.	r	n.a.		n.a.	1	า.a.		n.a.
EBITDA	£1	62,97	£1	68,97	£	182,53	£1	97,81	£2	214,98
Depreciation	£	13,07	£	13,02	£	13,53	£	14,13	£	14,82
Amortization	£1	44,75	£1	32,37	£	137,61	£1	43,72	£1	50,72
EBIT	£	5,15	£	23,58	£	31,39	£	39,96	£	49,43
Taxes	£	0,98	£	4,48	£	5,96	£	7,59	£	9,39
NOPLAT	£	4,17	£	19,10	£	25,42	£	32,37	£	40,04
Plus: Depreciation & Amortization	£1	57,82	£1	45,38	£	151,14	£1	57,85	£1	65,54
Less: CAPEX	£1	70,41	£1	46,34	£	152,13	£1	58,89	£1	66,63
PPE	£	13,61	£	13,56	£	14,10	£	14,73	£	15,44
Payments for intangible assets	£1	99,03	£1	74,85	£	181,78	£1	89,85	£1	99,10
Proceeds from sale of intangible assets	-£	42,23	-£	42,07	-£	43,74	-£	45,68	-£	47,91
Others (Investment Properties, Derivative Financial Instruments)		n.a.	r	n.a.		n.a.	1	า.a.		n.a.
Less: A Net Working Capital	-£	10,68	-£	18,78	-£	8,28	-£	8,08	-£	8,18
Unlevered Free Cash Flow	£	2,25	£	36,93	£	32,71	£	39,41	£	47,13

Table 4.9: Manchester United's projected FCFF

Source: Own Computations

4.2.7. Terminal Value

To calculate the Terminal Value, it was assumed that the Free Cash Flow of (n+1), which is 2028E, has a growth rate in line with the revenues for the projected period and a perpetuity growth rate (g) of 4%, assuming it as the world economy growth rate in the future. This assumption is rather ambitious.

However, we believe since football is a global game and has an overachieving reach and growing popularity particularly in emerging markets (i.e., Economies growing in excess of 6%), we can assume the rate of 4%. So, calculating the FCFF for 2027E and projecting it one year in the future was done by multiplying it by 1 plus the Compounded Annual Growth Rate for the revenues:

$$CAGR = \left(\left(\frac{684,19}{603,13} \right)^{\frac{1}{5}} - 1 \right) * 100$$

Which gives us a growth rate of 2,55%. Therefore,

$$FCFF_{n+1} = 47,13 * (1 + 2,55\%)$$

$$FCFF_{n+1} = \pounds 48,34$$

Lastly, computing the Terminal Value using the following formula:

$$Terminal Value = \frac{FCFF_{n+1}}{WACC - g}$$

$$Terminal Value = \frac{48,34}{6,3-4}$$
(21)

In conclusion, the Terminal Value for this project is $\pounds 2.110,17$.

4.2.8. Present Value of FCFF

To calculate the present value of the Cash Flows, first we need to discount them to the discount rate, in this case the WACC.

Assuming the discount factor as:

$$Discount Factor = \frac{1}{(1 + WACC)^n}$$
(22)

We can compute the Present Value of all the future Cash Flows, as described in the table below:

	Projection Period								
(£ in million, FYE 30/06)		2023E	2024E		2025E	2026E	2027E		
Unlevered Free Cash Flow	£	2,25	£ 36,93	£	32,71	£ 39,41	£ 47,13		
WACC				6,3	8%				
Discount Period		1	2	3		4	5		
Discount Factor		0,94	0,89	0,83		0,78	0,74		
Present Value of Free Cash Flow	£	2,12	£ 32,68	£	27,24	£ 30,87	£ 34,74		
∑ FCFF	£	127,66							
					Source	: Own Cor	nputations		

Table 4.10: Manchester United's projected PV FCFF and $\sum FCFF$

4.2.9. Enterprise Value

Finally, computing the Enterprise Value:

Enterprise Value =
$$\sum_{t=1}^{n} \frac{FCFF_t}{(1+WACC)^t} + \frac{TV_n}{(1+WACC)^n}$$
(22)
Enterprise Value = £127,66 + £2 110,17
Enterprise Value = £2 237,83

4.2.10.Implied Price per Share

Manchester United's shares are divided in two classes: Class A shares and Class B shares. As of 30 June 2022, the Company's issued share capital comprised 54,537 million Class A ordinary shares and 110,207 million Class B shares, bringing them to a total 164,74 million shares.

By applying the formula of the Price per Share:

$$Price \ per \ Share = \frac{Equity \ Value}{Number \ of \ Shares}$$
(23)

We need to establish the equity value. However, we know that the equity value can be computed through the following equation:

$$Equity \ Value = \ Enterprise \ Value - Debt + Cash \ \& \ Equivalents$$
(24)

Consequently, we should be able to calculate the implied share price and its potential upside or downside, giving us the necessary information for us to give a recommendation regarding this stock, having this valuation as its basis.

Implied Price per Share							
Enterprise Value	£	2 237,83					
Less: Total Debt	-£	742,90					
Plus: Cash & Equivalents	£	121,20					
Implied Equity Value	£	1 616,13					
Diluted share count		164,74					
Implied Share Price	£	9,81					
1 USD = 0.827147 GBP (25/1	1/20	022)					
Implied Share Price (in USD)	\$	11,86					

Table 4.11: Manchester United's implied Price per Share and Equity Value (per DCF)

This way, we conclude Manchester United Plc's share should trade for \$11,86 a share.

Source: Bloomberg (20/11/2022) and Own Computations

4.3. Relative Valuation

Relative Valuation is the method of determining a company's value based on how its peer set is trading in the market. For this section of the work, we focused on EV to EBITDA exclusively. The reason for that is EV to Revenue is typically inflated and is a more appropriate metric to analyses non-profitable and growth companies. Other methods such as Price to Earnings (PER) and EV to EBIT are also not suitable as all publicly traded football clubs are projected to post a negative profit in the coming two years.

Figure 4.2: Comparable Multiples

Name	Mkt Cap (USD)	Currency Adjusted	BEst EBIT:2022	BEst EBIT:2023	BEst EBIT:2024	BEst EBITDA:2022	BEst EBITDA:2023	BEst EBITDA:2024	BEst Curr EV/BEst	BEst Curr EV/BEst	BEst Curr EV/BEst	BEst Curr EV/BEst
Modian	200 04M	A00 90M	-24 EOM	753 041	4 6014	20 704	00 7/11	107 (0)	EBITUA:2021	EBITDA:2022	EBITDA:2023	EBITDA:2024
MANCHESTED	2 16P	2 028	-54.591	752.918	-4.00M	38./91	92./01	107.09M	12.42	8.33	1.4/	8.68
TIMENTUS FOO	726 04M	972 674	-141 534	-11.241	-50.724	_5.71M	75 224	154.001	22.02	21.40	22.83	18.79
AFC ATAX	210 75M	310 66M	-34 50M			39.704	75.231	90.991	4.74	0.22	11.19	0.06
BORUSSTA DO	300 04M	400 80M	-34 56M	752 01	8 884	84 81M	110 200	119 304	10.10	6.55 4.01	3 74	2/10
CELTIC PLC	122.39M	91.83M	-7.44M	27.61M	-4.60M	-4.06M	30.55M	-1.66M			2.88	

Source: Bloomberg, Retrieved at:20/11/2022

We thus looked at EV to EBITDA to ascertain Man U's relative valuation. Importantly, Celtic is also projected to post negative EBITDA numbers in the future and therefore we could only look at Dortmund, Ajax, and Juventus. Clearly, these two teams trade at a material discount to Manchester united, in excess of a 50% discount.

(Local cry in million, FYE 30/06)*	Current	Current	EV /			
Company	Equity Value (EqV)	Enterprise Value (EV)	2023E EBITDA	2024E EBITDA		
Selected comparable companies						
Manchester United	\$1 821	\$2 441	21,4x	22,8x		
Juventus	\$726	874	n.m.	11,2x		
Borussia Dortmund	\$400	410	4,9x	3,5x		
Ajax	\$220	320	8,3x	3,7x		
Celtic	\$122	92	n.m.	2,9x		
Mean Median			11,5x 8,3x	10,3x 7,5x		

 Table 4.12: Manchester United's and Comparable companies 's Projected EV/EBITDA

Source: Bloomberg and Own Computations

	2023E EBITDA		: E	2024E BITDA
EBITDA	£	162,97	£	168,97
Implied EV (Mean)	£1	881,76	£1	742,46
Less: Total Debt	-£	742,90		
Plus: Cash & Equivalents	£	121,20		
Implied Equity Value	£1	260,06	£1	120,76
Diluted share count		164,74		164,74
Price per Share	£	7,65	£	6,80
1 USD = 0.827147 GBF	° (25	/11/2022)	
Price per Share (in USD)		\$9,25		\$8,22
Diluted share count Price per Share 1 USD = 0.827147 GBF Price per Share (in USD)	£ £ ? (25	164,74 7,65 //11/2022 \$9,25	£1 £)	164,74 6,80 \$8,22

Table 4.13: Manchester United's Projected Price per Share (per Multiple Valuation)

Source: Own computations

Therefore, if we apply Man U's trading peers EV to EBITDA multiples, we arrive at an implied price per share of \$9,25 and \$8,22 based on 2023E and 2024E multiples.

Manchester United trades at a clear premium to other football clubs which one could argue is due to its larger size in terms of revenues, profits, and overall reach. Additionally, since there is a low number of publicly traded football clubs and there is a need to account for structural differences between their base countries, a Multiples valuation is hard to perform.

For this reason, we deem it as not significant for Manchester United and focus on the DCF method only.

4.4. Valuation: Final Recommendation

Normally, the recommendation to buy a stock is linked to its potential. The implied potential of a stock can be calculated by dividing the valuation result share price by the current share price minus one.

If its implied price is 10% higher than its current price, an investor should by that stock.

Inversely, if it is 10% below the price for what is currently being traded, the recommendation should be to sell that stock.

However, if the implied potential of a particular stock falls between -10% and 10% of its current trading price, an investor should hold that stock.

Implied Price per Sha	re	
Enterprise Value	£	2 237,83
Less: Total Debt	-£	742,90
Plus: Cash & Equivalents	£	121,20
Implied Equity Value	£	1 616,13
Diluted share count		164,74
Implied Share Price	£	9,81
1 USD = 0.827147 GBP (25/1	1/2	022)
Implied Share Price (in USD)	\$	11,86
Share Price as of 21/11/2022	\$	13,10
Share Price as of 25/11/2022	\$	21,31
Potential up/downside (Scenario 1)		-9%
Potential up/downside (Scenario 2)		-44%

Table 4.14: Manchester United's Price per Share Comparison

Source: Own Computations

In this analysis, two different scenarios were considered. The first scenario (Scenario 1) considers only the fundamental drivers, the company's assets, liabilities, revenues, profitability, and growth potential.

In opposition, Scenario 2 reflects the latest news, on the same day (November 22nd) it announced the departure of Cristiano Ronaldo, regarding the Company Board's intention to commence a process to explore strategic alternatives for the club, non-excluding the outright sale of the club.

Hence, Scenario 1 compares the Implied Share Price to the stock price on November 21st, the last closing date before the Board's statement and Scenario 2 compares our valuation to the stock price on November 25th, the last reference date considered. Between these two dates, the company's stock price surged by 63%.

Manchester United Plc's share value as of 21/11/2022, i.e., before any statement from Manchester United's Board of Directors, was \$13,10. When compared to our implied share price of \$11,86, that gives us a potential downside of 9%.

However, the company's share value in 25/11/2022, the last reference date used, was \$21,31, which entails a 44% downside against the stock.

We argue that in Scenario 1, at current price levels there is no upside. However, its downside is not significant either, thus we recommend holding the stock.

On the other hand, if we consider Scenario 2, after the Owner's statement of intent reflecting the news around the potential sale of the club, rallying the stock, we believe it is a case for an investor to sell the stock as the latter does not reflect fundamentals and is impacted by a takeover premium.

5. Conclusion

The goal of this Project was to present, as accurately as it is possible, a valuation of Manchester United Plc making use of different methodologies and consequently make a recommendation to investors in order to buy, hold or sell the company's stock.

We believe Manchester United is a top-quality asset among football clubs, benefitting from a clear consumer trend towards premium live sports such as the Premier League and the Champions League while also leveraging on its global reach and notoriety.

Current and recent performance has been nonetheless lackluster as the team missed out again on the Champions League or even in the years it pulled through, it was quickly knocked out. This is a notable risk for future revenue growth as the Adidas partnership has the sales claw-back but also from sponsors potentially withdrawing or not renewing contracts, or even the club failing to renegotiate better sponsorship deals in the future.

Whilst merchandising and broadcasting revenues tend to be stable and flow through predictable cash flows, we believe there is material risk associated with how the men's team performs in a pitch. "Valuation is an art, not a science" and when it comes to football one could argue is similar to looking at a crystal ball.

We think though, that Manchester United is undergoing the right strategic moves to improve its on-field performance by sticking slashing down investments in lofty player contracts while investing in a new management for the football team, and the youth potential of its squad as witness by recent hirings. Albeit these are still ongoing changes, and one could argue it is still too early to see and may require a couple of more years of sustained improvement in sporting success.

The recommendation was segmented for two different scenarios. In the first scenario, we compared the implied share price of \$11,86 with the stock price as of 21st of November 2022, since it does not consider the latest news regarding the potential sale of the company and, despite its limited downside, we sanction holding the stock.

Inversely, Scenario 2 compares the result given by our analysis with the stock price as of the 25th of November 2022, which is biased by the speculation in relation with the Glazer's intention to look for financial options. In that case, it is recommended that investor sell the stock, since it clearly overperforms its actual value due to the latest developments.

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