INSTITUTO
UNIVERSITÁRIO
DE LISBOA

EQUITY VALUATION: SPORT LISBOA E BENFICA – FUTEBOL, SAD

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Master in Management

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September, 2024

BUSINESS
SCHOOL

Department of Marketing, Operations and General Management

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Acknowledgments

With the conclusion of this work, I feel extremely fulfilled and grateful for all the roads I havve had the opportunity to travel. It has been a journey of struggles and ongoing progress that has led me to where I am now. I'd like to thank everyone who has given me strength and motivated me to become the person I am today.

To my mother and father, who are the foundations of this long trip and provide me with encouragement every day. I am honored by their relentless efforts to ensure that I never lacked anything and that I always received the best education and training available, which is something of exceptional worth. To my younger brother, thank you for all your support and companionship, you were one of the main reasons I saw this project through to the end, to show you that sometimes no matter how afraid we are, if we want something badly enough and work hard enough, nothing can stop us from achieving what we want.

To my girlfriend, who has always supported me during this journey. She was always there for me when I needed her, had the perfect words at the right time, pulled me up, and refused to let me give up. Thank you for believing in me.

To each of my grandparents, to whom I am immensely grateful for accompanying me on this journey, and who have inspired me since I was a child. To the entire family, thank you for not only following me on this journey but also for all the energy you carry on to me; it's a fantastic blessing to be surrounded by individuals like you all.

My gratitude to my friends for all the adventures and memories we have shared that journeyed me to where I am now.

Finally, I would like to thank Professor Luis Laureano, who was with me throughout this study, for his availability and suggestions that improved my work.

Resumo

A avaliação do capital próprio da Sport Lisboa e Benfica - Futebol SAD a 30 de junho de 2023 é providenciada por este estudo. Os principais objetivos são encontrar o justo valor das ações da empresa e determinar se estão a um preço justo, sobrevalorizadas ou subvalorizadas.

No processo de avaliação, são utilizadas duas abordagens comuns: a abordagem dos fluxos de caixa atualizados e a avaliação relativa, que recorre a múltiplos.

De acordo com a análise efetuada, o preço de mercado de 3.630 euros a 30 de junho de 2023 é significativamente superior ao valor de 1.190 euros das ações da Benfica SAD, o que sugere que as ações estão sobrevalorizadas. Além disso, de acordo com a análise de sensibilidade, as ações só estariam subavaliadas nos cenários mais otimistas, aqueles em que a Taxa de Crescimento perpétua aumenta consideravelmente e o Custo Médio Ponderado do Capital diminui drasticamente. No entanto, as ações continuam a estar sobrevalorizadas na maioria dos casos.

De acordo com os resultados da avaliação, os investidores devem ser cautelosos na compra de ações da Benfica SAD, uma vez que o preço atual de mercado pode não refletir totalmente o valor real da empresa. O relatório alerta para a crescente dependência da empresa em relação ao endividamento e as possíveis consequências para a sua viabilidade financeira a longo prazo.

Palavras-Chave: Benfica SAD; Avaliação Patrimonial; Fluxo de Caixa Descontado; Modelo de Negócio do Futebol; Avaliação Relativa; Fluxo de Caixa

Classificação JEL: G30 – Finanças e Governação das Empresas: Geral; G32 – Finanças e Governação das Empresas: Valor das empresas

Abstract

Sport Lisboa e Benfica - Futebol SAD equity valuation as of June 30, 2023, is provided by this study. Finding the company shares fair value and determining if they are fairly priced, overpriced, or undervalued are the main objectives.

Two commonly used approaches are used in the valuation process: the discounted cash flow approach and relative valuation, which makes use of multiples.

According to the analysis, the market price of 3.630 euros on June 30, 2023, is significantly higher than the intrinsic value of 1.190 euros for Benfica SAD shares, suggesting that the shares are overpriced. Furthermore, the sensitivity analysis indicates that the shares are only undervalued in the most optimistic scenarios, in which the Terminal Growth Rate rises significantly and the Weighted Average Cost of Capital declines drastically. Nonetheless, the shares are still overpriced in the majority of cases.

Investors should exercise caution when purchasing Benfica SAD shares, according to the valuation results, since the present market price might not fully reflect the company real value. The report also draws attention to the company growing reliance on debt and the possible consequences for its long-term financial viability.

Keywords: Benfica SAD; Equity Valuation; Discounted Cash Flow; Football Business Model; Relative Valuation; Cash Flow

JEL Classification: G30 – Corporate Finance and Governance: General; G32 – Corporate Finance and Governance: Value of Firms

Glossary

€	Euros
%	Percentage
β	Beta
β_L	Levered Beta
β_u	Unlevered Beta
APV	Adjusted Present Value
CAPEX	Capital Expenditures
CAPM	Capital Asset Pricing Model
CF	Cash Flow
COGS	Cost of Goods Sold
CRP	Country Risk Premium
D	Debt
D&A	Depreciation and Amortization
D/E	Debt to Equity Ratio
DCF	Discounted Cash Flow
E	Equity
ECB	European Central Bank
EBIT	Earnings Before Interests and Taxes
EBITDA	Earnings Before Interests, Taxes, Depreciation and Amortization
EBT	Earnings before taxes
EQV	Equity Value
EU	Europe Union
EV	Enterprise Value
EV/EBITDA	Enterprise Valued/Earnings Before Interests Taxes and Amortization
EVA	Economic Value Added
FCFE	Free Cash Flow to Equity
FCFF	Free Cash Flow to the Firm
GDP	Gross Domestic Product
IMF	International Monetary Fund
MRP	Market Risk Premium
n	Period
NI	Net Income
NOA	Non-operating assets
NOPAT	Net Operating Profit After Taxes
p.p.	Percentage Points
P/E	Price to Earnings Ratio
PV	Present Value
R_d	Cost of Debt
R_e	Cost of Equity
R_f	Risk-Free Rate
ROA	Return on Assets
ROE	Return on Equity
ROIC	Return on Invested Capital
RV	Residual Value
T	Corporate Tax Rate
TV	Terminal Value

WACC	Weighted Average Cost of Capital
WC	Working Capital

Table of Contents

List of Figures

List of Tables

Introduction

In the areas of corporate finance, mergers and acquisitions, and portfolio management, Corporate Valuation plays a vital role in supporting managers and investors. More precisely, Equity Valuation enables the determination of a company's fair value by evaluating its potential for growth, potential sources of value creation, past performance, underlying risks, and macroeconomic and market outlooks.

Sport Lisboa e Benfica – Futebol, SAD is a sports club founded in 1904, based in Lisbon, and is one of the three great national Portuguese teams and a very well-recognized club in Europe. The club primary senior men's sport is football, and the team was national football champion in 38 seasons and won the champions league title twice. It also distinguishes itself from other sports and has senior female sports and training levels in both genders in different sports. The club is also listed in Euronext Lisbon with a common share price of 3.63 euros (EURONEXT, 2024).

This master project's main goal is to provide an equity valuation of Benfica SAD, as of June 30, 2023. This valuation is projected to evaluate the fair value of the shares, determine whether they are overvalued, and compare them to the company's primary competitors. The starting point for this project is to choose the valuation method. There is a long list of methods to do a business valuation, some more complex and others more straightforward, but in this study, we will use the two most used among different authors and consultant (Alfadilla et al., 2023; Fernández, 2019), which are the discounted cash flow and valuation using multiples.

To proceed with the valuation process, all assumptions that are going to be assumed are going to be supported by the analysis of the current and expected macroeconomic conditions, the industry forecasts, and the company's historical performance and future strategy.

This project will include four main sections, beginning with the introduction. The following section is the Literature review, where an introduction of the Football Business model is made, and the main methods of valuation are shown and the most suitable ones for this case are identified. The next section will have the macroeconomic assessment, and the industry analysis, followed by the company analysis chapter. The fourth section presents an in-depth valuation of the company, using the Discounted Cash Flow and the Relative Valuation method. Lastly, a conclusion will be presented and a recommendation for investors on whether to buy, hold, or sell the company's shares will be given.

CHAPTER 1

Literature Review

The aim of this literature review is to provide some theoretical background from previous authors on the subject and to analyze which are the main and most suitable company valuation theories that will be applied in this work.

1.1. Football Business Model

To assess the value of a football club, it is important to understand how the soccer industry creates value for its shareholders and what its main sources of income are.

The football industry has a huge impact on the economic growth of economies with a well-established business model in a constant balance between costs and various sources of revenue (Aygün et al., 2023).

According to Maguire (2021), the three main sources of revenue for major European soccer clubs are, in addition to the sale of players, i.e., the so-called assets, the sale of television rights, tickets sold for matches, and revenues and funding obtained through sponsorship and other commercial activities.

Benfica is present in one of the main European Leagues, the Liga Portugal, which differs from the others in some aspects. While, for example, in a German or in a Spanish league, the revenue sources are equally divided by television rights, ticket sales and merchandising, and sponsoring sales, in the Portuguese league there is a bigger focus on obtaining revenue by selling players to other clubs, investing more in training and in a capacity to search for new assets that can produce possible investments in the long term. Another specific business model is the example of the English league, where more than half of the revenue source comes from the sale of television rights (Litvishko et al., 2021).

The football business is a very stable business financially and economically and with great capacity to produce positive results (Pittz et al., 2021; Huth, 2020). A proof of that is the way some clubs have turned around the main sources of revenue, investing more in television rights and sponsorships and cutting some costs such as salaries, maintenance of establishments, and obtaining players' loans as an alternative to buying them (Litvishko et al., 2021).

1.2. Introduction to Valuation

Initially, it is essential to understand the relationship that corporate finance has with the creation and enhancement of the value of firms. With that said, the main objective of corporate finance is to assess and maximize the value of companies. For this, it is necessary to delineate the relationship between financial decisions, corporate strategy, and the correct value of the company. Management consulting firms help companies from a wide range of industries to leverage their entire structure and increase value. Their suggestions have often provided the basis for the restructuring of most company's activities (Šperanda, 2012).

Fernández (2002) contends that a company's decisions can have a direct impact on its value. This relates to its dividend policy, the projects it embraces and the way it finances them. Comprehending this correlation is vital for making judgments that enhance potential value and wisely restructure finances.

In this way, valuation contributes to many areas of finance and is seen as a beneficial instrument for investors. Examples of these areas include corporate finance, where it helps determine the best way to allocate resources, mergers and acquisitions, where a bidding firm and a target firm conduct a company valuation to determine a price, and portfolio management, where investors decide which position to take in a company stake—buy, sell, or hold. (Damodaran, 2012).

Understanding the sources of value and how to incorporate them into different valuation methodologies is critical when investing in or maintaining an asset, even more so than recognizing its initial value. Wherever the company, the same reasoning should be used in corporate valuation (Koller et al., 2015).

In practice, analysts adopt a broad variety of models, from the most basic to the most complex. These models can be categorized more broadly even if they frequently make very diverse assumptions (Damodaran, 2012).

1.3. Discounted Cash Flow Method

There are several different categorizations and a significant amount of literature on the valuations process. In the same sense, there is a wide range of valuation methods advocated by different authors.

Janiszewski (2011) claims that there are three principal techniques to value a business that are commonly used, which are the multiple approaches, the discounted cash flow approach, and the adjusted net book value approach.

Damodaran (2012) indicates that there are three different methods to valuation: discounted cash flow, relative or multiples valuation, and contingent claim valuation.

As it is possible to see, the Discounted Cash Flow method is commonly used among the authors, being the most widely used and trusted approach among analysts of investment and consulting firms that seek to estimate the value of any asset (Šperanda, 2012). Fernández (2007) claims that there are ten main methods for valuing a company that are included in the discounted cash flow approach. These methods include the following: the adjusted present value (APV), the economic value added (EVA), the free cash flow to the firm discounted at the weighted average cost of capital (WACC), and the free cash flow to equity discounted at the required return to equity.

There is an array of DCF models in total, and the user can adjust each one. Nevertheless, Damodaran (2012) claims we can divide them into three different categories. The first one is the valuation of the company's equity share, which simply takes equity holders value into account. The value to bondholders, common stockholders, preferred stockholders, and so on is included in the valuation of the entire company, which is the second step. The third approach involves valuing the business in segments, starting with its activities and then include the impact of its debt and other non-equity claims. The applicable cash flows and discount rates are the primary distinctions amongst these three methods.

1.4. Equity Value – Free Cash Flow to Equity (FCFE)

Janiszewski (2011) appoints that Free Cash Flow to Equity is the amount of cash left over after all debts are settled off, further capital expenditures are covered and working capital requirements are met. The author promotes the FCFE measure:

$$FCFE = Net\ Income - (Capex - Depreciation) - (Changes\ in\ noncash\ WC) + (New\ debt\ issued - Debt\ repayments) \quad (1)$$

where

Capex = Capital Expenditures

WC = Working Capital

Equation (1) shows that to estimate how much can the firm provide in returns to its stockholders, the method begins with the net income and adjust it to a cash flow by subtracting out the firm's reinvestment needs. The first step is to subtract capital expenditures since they represent cash outflows. Then, depreciation and amortization are added back in because they are not cash expenses. The gap between capital expenditures and depreciation typically serves as a proxy for the company's potential for growth. Second, a company's cash flows are reduced by increases in working capital, but equity investors receive an increase in cash flows when working capital is decreased. Finally, a measure of the cash flow consequences of debt is obtained by netting the payback of existing debt against the new debt issues (Damodaran, 2012).

In addition, Damodaran (2005) says that the predicted FCFE is discounted at the cost of equity, which is the rate of return that equity investors demand, to determine the value of equity. A firm that is predicted to develop significantly faster than a stable firm in the first phase and at a stable rate after that is valued using Equation (2) the two-staged model for the FCFE.

$$V_{FCFE} = Present\ Value\ of\ FCFE + Present\ Value\ of\ Terminal\ Value \quad (2)$$
$$= \sum_{t=1}^{n} \frac{FCFE_t}{(1+r_E)^t} + \frac{\frac{FCFE_{n+1}}{r_E - g_{\square}}}{(1+r_E)^n}$$

where,

FCFE = Free cash flow to Equity

r_E= Cost of equity

$g_{\square}$= Growth rate required

1.4.1. CAPM – Capital Asset Price Model

While performing the equity valuation, the discount rate shall be equal to the cost of equity of the company. The Capital Asset Pricing Model (CAPM) is assumed to be the discount rate to be used since it says that the risk of a given equity to an investor is composed of diversifiable and non-diversifiable risk (Janiszewski, 2011).

According to Damodaran (2012), this expected return for the equity includes the compensation for the market risk in the investment and for risk-free rate. In Equation (3) is possible to see that these inputs are used to deliver the expected return on an equity investment:

$$E(r_E) = R_f + \beta \times \left(E(R_M) - R_f\right) + \text{CRP} \quad (3)$$

where,

$E(r_E)$ = Expected Return

R_f = Risk-Free Rate

β = Return sensivity of a security to changes in the market return

$E(R_M) - R_f$ = Expected market risk premium

CRP = Country risk premium

The CAPM model, in essence, shows that the rate on a risk-free asset plus the risk premium equals the projected return on a company's stock or portfolio. Investments should not be realized if the predicted return does not surpass or at least match the desired return.

1.4.1.1. Risk Free Rate

One of the inputs to the CAPM formula is the Risk-Free Rate, which, as Damodaran (2008) points out, is the guaranteed rate of return on an investment in an asset with zero risk, i.e. the current return is equal to the expected return. According to the author, there are two conditions to consider an asset risk-free. First, since this value is typically connected to government securities, there cannot be a default risk. Second, there cannot be any risk associated with reinvestment; that is, the asset that needs to be considered is the anticipated return on a government zero coupon bond that is default-free.

According to Koller et al. (2015), when valuing companies based in Europe, it is advisable to use 10-year German government bonds, because they have a lower risk than other European bonds and because they are widely traded. He also states that bond yields should be used in the same currency as the company's cash flows.

1.4.1.2. Market Risk Premium and Country Risk Premium

Another important factor in the CAPM formula is the Market Risk Premium, which is the difference between $E(R_M)$ and R_f (Koller et al., 2015).

For Damodaran (2009), the Market Risk Premium consists of the extra return, i.e. the premium that investors demand for investing in a riskier portfolio as opposed to a portfolio with risk-free assets. The author states that the Expected Market Return ($E(R_M)$), can be calculated using an arithmetic average return, which measures the simple average of annual returns, or using a geometric average return, which uses a compound return calculated by taking the investment's value at the beginning and end of the period and computing the following:

$$Geometric\ Average = \left(\frac{Value_N}{Value_0}\right)^{1/N} - 1 \quad (4)$$

The Country Risk Premium refers to the additional return required by investors when selecting an investment from a company located in a country where factors such as political instability, exchange rate risk, regulatory and legal risk, economic risk, and sovereign credit risk may affect its performance (Damodaran A. , 2009).

1.4.1.3. Beta (β)

When comparing an investment or portfolio to the overall market index, Beta indicates how volatile or risky it is overall. A beta greater than 1.0 indicates that a stock moves more than the market over time. If the beta of a stock is less than 1.0, it moves less than the market. Consequently, a firm with a higher beta is thought to be exposed to more risk and offer a greater expected return.

According to Damodaran (2012), the three primary techniques for determining an investment's Beta are: (1) estimating betas using the investment's fundamental characteristics; (2) utilizing accounting data; and (3) using historical values at market prices for individual investments.

The process of calculating Fundamental Betas involves considering the choices the company has made regarding its operations, including the type of market it operates in, the amount of operational leverage it employs, and the degree of financial leverage it engages.

The Bottum-Up Betas is the most commonly utilized approach amongst authors like Damodaran (2012) and Koller et al. (2015). According to Damodaran (2012), this method enables one to estimate the values of the company's beta by distributing the risk present in the business using the components mentioned in the fundamental betas, rather than relying on past values in the company's assets or even past betas already calculated on the company's business. The steps listed below are recommended by the author for this calculation:

First step: Identify the business or business in which the company operates.

Second step: Identify listed public companies whose business or business is of the same nature and obtain their regression betas to calculate the weighted average beta of these companies.

Third step: Utilizing the following Equation (5), determine the average unlevered beta for these firms that are comparable to the company:

$$\text{Unlevered Beta} = \frac{Beta_{Comparable\ firms}}{1 + (1 - t)\left(\frac{D}{E} ratio_{Comparable\ firms}\right)} \quad (5)$$

Fourth step: Calculate the company's unlevered beta using the average weighted unlevered beta calculated in the previous step for the matched businesses and the weight that these businesses have in the analyzed company's business share. If by chance the business is the same, this step is not necessary, and the average weighted unlevered beta of the comparable firms will be the same as the analyzed company.

Fifth and last step: Utilizing the variables above, use the following method to determine the examined company's levered beta:

$$\text{Levered Beta} = \beta_u(1 + (1 - t)\left(\frac{D}{E}\right)) \quad (6)$$

where,

β_u= Unlevered Beta

E = Market value of equity

D = Market value of debt

t = Corporate tax rate

Accounting Betas offer an assessment of an organization's risk in relation to shifts in accounting factors like cash flow and operating performance, among others. As stated by Damodaran (2012), these betas can be used to calculate a company's cost of equity instead of the more conventional market betas. They quantify the effect that adjustments to accounting variables have on the company's results by capturing the risk of its operations from an accounting standpoint.

Regressing an investment's returns against the returns of a market index is the last and most prevalent approach to determining an investment's beta. The formula below is suggested by Damodaran (2012):

$$\beta = \frac{Cov\ (R_j, R_m)}{\sigma_m^2} \quad (7)$$

where,

R_j= Stock returns

R_m= Market returns

σ_m^2 = Variance of the market return

1.4.2. Dividend Discount Model

The simplest approach that may be applied is the dividend discount model. The dividend and the expected price at the conclusion of the holding period are the only two cash flows that an investor has to consider in order to move forward with this valuation(Damodaran, 2012). In this instance, the future dividends dictate the expected price.

It is implicitly assumed that all profits are reinvested in the company, with dividends being the only payments made. The cash asset and operational income serve as a proxy for the anticipated growth. Additionally, marketable securities and cash revenue are incorporated into earnings, which are then translated into dividends. It is not necessary to include cash or marketable securities as such (Damodaran, 2012).

So, the only inputs needed for this model are the dividends and the discount rate, that is the cost of equity.

Damodaran (2012) affirms that the value of a firm is the present value of expected dividends generated by the firm. The growth rate is used to forecast future revenues and earnings. The author defends three basic aways to estimate this input. The first step is to examine the historical growth rate of a company's previous earnings growth. The second is to place confidence in the data that analysts project, and the third is to project growth from a firm's fundamental principles.

1.5. Firm Value – Free Cash Flow to the Firm (FCFF)

Janiszewski (2011) claims that after paying for all working capital requirements and capital expenditures, the Free Cash Flows to the Firm are the cash flows that remain accessible to all capital providers, including creditors and shareholders. To avoid interest expense, FCFF are predicted on an unlevered basis. Regardless of how the assets are financed, FCFF represents the total cash generated by the company's assets.

In essence, the method translates the cash created through operating activity after meeting all operating expenses and taxes, since it disregards the company's financing structure (Damodaran, 2012). The following equation (8) illustrates the previous computations:

$$FCFF = EBIT \times (1 - Tax\ rate) + Depreciation - CAPEX - \Delta WC \quad (8)$$

where,

CAPEX = Capital Expenditures

ΔWC = Changes in Working Capital

By discounting operational cash flows and subtracting investment requirements at a rate that accounts for the risk to the company, the weight average cost of capital, or WACC, is used to determine the business's value (Damodaran, 2012).

1.5.1. Weighted Average Cost of Capital (WACC)

The WACC is the discount rate used to discount the expected future cash flows for all investors. This means that it consists in the weighted average of two key inputs: the cost of equity and the after-tax cost of debt (Kumar, 2016). As can be seen from equation (9), the general formula is as follows (Janiszewski, 2011):

$$WACC = R_e \times \frac{E}{E+D} + R_d \times \frac{D}{E+D} \times (1 - Tax\ Rate) \tag{9}$$

where,

R_e = Cost of equity

R_d= Cost of debt

E = Market value of equity

D = Market value of debt

Fernández (2007) states that for obtaining the value of the WACC, it is necessary to calculate the cost of equity, that is, the rate of return required by investors on an equity investment. According to Damodaran (2005), two methods could be used to estimate it: With the Capital Asset Pricing Model (CAPM), which is the risk and return model that analysts utilize the most, developed by Sharpe (1964), Lintner (1965), and Mossin (1966); or applying the Arbitrage Pricing Model (APM), developed by Ross (1976).

Although WACC is widely employed in project valuation, Packey et al. (2018) claim it does not completely account for technical and economic risks suggesting a risk-adjusted discount rate that considers long-term financing changes, such as debt and equity. The authors advocate for a less subjective selection of discount rates and more precise WACC estimates, stating that a single discount rate throughout a project's life cycle may be insufficient.

1.5.2. Enterprise Value and Terminal Value

The overall value of the company is one of the final elements in this analysis to be assessed. According to this method, the FCFF value of each year is discounted to the WACC for the first n years, up until a year when the company's growth rate stabilizes is reached. The final component in this approach is the Terminal Value, which reflects the business's potential in perpetuity by using a Terminal Growth Rate. According to Damodaran (2012), the following approach is employed:

$$Enterprise\ Value = \sum_{t=1}^{t=n} \frac{FCFF_t}{(1+WACC)^t} + \frac{Terminal\ Value_n}{(1+WACC)^n} \quad (10)$$

where,

WACC = Weighted Average Cost of Capital

$FCFF_t$= Free Cash Flow to the Firm at period t

This Terminal Value assumes that the company will grow at a constant rate, maintaining stable growth in the following years, without major variations. According to Mota et al. (2015), the method for this calculation should be:

$$Terminal\ Value = \frac{FCFF_{n+1}}{WACC - g} \quad (11)$$

where,

WACC = Weighted Average Cost of Capital

$FCFF_{n+1}$= Free Cash Flow to the Firm at the end of the period

g = Growth Rate perpetuity

Regarding the Growth Rate perpetuity, Koller et al. (2015) says that the company's growth rate should typically be defined by how quickly its industry is growing. Continuous businesses are unlikely to see growth rates that are higher than those within their host economies. Consequently, it is critical to understand that this Terminal Growth Rate needs to be well-founded because it will significantly affect the final results. The Terminal Growth Rate formula is as follows:

$$Terminal\ Growth\ Rate = (1 + Expected\ Inflation\ Rate) * (1 + Expected\ GDP\ Growth\ Rate) - 1 \quad (12)$$

1.5.3. Equity Value

According to Mota (2020), equity value (EQV), the final component to be computed, represents the total value of the business and is determined by deducting debt and adding non-operational assets. This is calculated by deducting the amount the company owes its creditors from the value of the business plus any assets it holds that are not required for operations (Damodaran A. , 2002). Following is the formula that is used to determine EQV:

$$EQV = Enterprise\ Value + NOA - Debt \tag{13}$$

where,

NOA = Non-operating Assets

Non-operational assets are any assets—current or not—that are registered in the name of the business but are not used by it in its daily business. Examples could be properties that they own but do not utilize or a financially purely invested interest in another business. They are, in other words, assets that don't improve the way the company performs.

Debt, on the other hand, refers to all liabilities of the company except the items that are included in the working capital.

1.6. Adjusted Present Value (APV)

The valuation model known as Adjusted Present Value is derived directly from the theories of economists Modigliani and Miller (1958), who posited that a company's choice of financial structure would have no impact on the value of its economic assets in a market absent of taxes. The only factors affecting the company's worth are market defects like taxes and distress costs (Koller et al., 2015).

Equation (14) shows that this approach separates the values of the firm operations in two parts: the value of operations as if the business is 100% equity financed and the value of tax shields that arise from debt financing.

$$APV = Enterprise\ Value\ as\ if\ the\ firm\ is\ all\ Equity\ Financed + Present\ Value\ of\ Tax\ Shields \tag{14}$$

The method starts with the debt-free valuation of the company. The net effect on value is calculated by summing the expenses and benefits of borrowing when adding debt to the company. Then, the value of the leveraged company may be calculated at various debt levels; the optimal debt ratio is the debt level that maximizes firm value (Damodaran, 2012).

1.7. Relative Valuation - Multiples

When using Relative Valuation, the objective is to value assets based on how similar assets are currently priced in the market (Damodaran, 2012). This brings us to the two main components of relative valuation. First, prices need to be standardized to evaluate assets relative to one another. This is typically accomplished by converting prices into multiples of sales, book values, or earnings. The second is identifying similar companies, which is challenging because no two companies are alike and companies in the same industry can nevertheless have different cash flows, risk profiles, or prospects for expansion.

To compare the values of similar firms in the market it is needed to standardize the values in some way. To do so, Damodaran (2012) proposes that standardizing company values in relation to earnings, revenues, book value or replacement value of employed assets, or metrics unique to individual firms within a sector can help achieve this objective.

1.7.1. Multiples based on the company's earnings

Due to its simplicity, the Price-to-earnings (P/E) ratio is the multiple that is employed the most frequently out of all of them. However, due to fluctuations in earnings per share, it can occasionally be overused and is susceptible to manipulation by adjustments to the capital structure of a company (Damodaran, 2012). Equation (15) illustrates this ratio:

$$\text{P/E ratio} = \frac{Market\ Capitalization}{Total\ Net\ Income} = \frac{Share\ Price}{Earnings\ per\ Share} \tag{15}$$

1.7.2. Multiples based on the company's book value

Another equity-based multiple is the Price-to-book-value (PBV) ratio, which is calculated by subtracting the book value of liabilities from the book value of assets. As can be seen in Equation (16), PBV is a fundamentally consistent multiple (the numerator and denominator are both equity values), but there is a potential for inconsistency linked to multiple classes of shares outstanding and the inappropriate addition of preferred stocks (Damodaran, 2012).

$$\text{PBV} = \frac{Market\ Value\ of\ Equity}{Book\ Value\ of\ Equity} \tag{16}$$

1.7.3. Multiples based on the company's revenue

An alternative measure, which is less affected by accounting choices as are the company's earnings and book value, it is the measure through revenue. It can be scaled either on equity or firm value. For equity investors, this ratio is known as the price-sales ratio, which is calculated by dividing the market value of equity by the revenue. For enterprise value, this ratio can be shifted as the value-sales ratio, with the numerator being the firm's enterprise value (Damodaran, 2012).

According to Koller et al. (2015), some investors use a P/E-to-growth ratio to assess the value of the company, taking in consideration the growth rate in the estimation of company's revenues.

The Price-to-earnings ratio to growth (PEG), represented in Equation (17), is composed by computing the P/E ratio, used as a relative measure.

$$\text{PEG} = \frac{P/E\ Ratio}{Expected\ Growth\ Rate} \tag{17}$$

Because this is an equity multiple, the growth rate utilized should be the same as that used in earnings (Damodaran, 2012).

1.7.4. Multiples based on Sector-specific multiples

While earnings, book value, and sales multiples may be calculated for firms in any sector and throughout the entire market, some multiples are sector-specific.

Damodaran (2012) says that there are three reasons to use this type of multiples. The first one is that they link firm value to operating details and output. Then, these sector-specific multiples can often be computed with no reference to accounting measures, having no dependence on those values. Lastly, these multiples are often used in desperation times when other multiples cannot be applied.

This can be demonstrated, for instance, by comparing the market value of steel firms based on the quantity of steel they manufacture, and valuing energy generators based on the number of kilowatt hours of power they generate.

1.7.5. Peer Group

Peer firms' valuation multiples are one of the most popular methods of valuation in consulting and investment banking (Eaton et all., 2022)

Koller et al. (2015) say that to get reasonable valuation using multiples, selecting the right peer group is critical. The main objective is to choose comparable firms to the one being analyzed. There must be common characteristics between the firms, and they should be from the same industry or sector.

1.8. Economic Value Added

The Economic Value Added (EVA), which is an estimation of the financial surplus value produced by an investment or a portfolio of assets, is one of the most popular techniques for calculating Value Enhancement (Damodaran, 2012).

This method is calculated as can be seen in Equation (18):

$$\text{EVA} = (ROIC - WACC) \times Capital\ invested \tag{18}$$

The EVA method, which determines the firm's value using the present value rule, is founded on the same ideas as the Discounted Cash Flow framework. Instead of using market values that reflect the capital invested in the current assets, it employs book values in this method. Furthermore, the total capital spent in the current assets, the present value of the EVA these assets create, and the present value of the EVA that will be contributed by future investments will make up the firm value (Damodaran, 2012).

CHAPTER2

Market Overview

Based on some general economic and financial indicators, this chapter gives context on the macroeconomic and financial situation in the current period, in the past, and on some forecasts, whose values impact the activity of the football industry, and more specifically, of Sport Lisboa e Benfica – Futebol SAD.

2.1. Macroeconomic Outlook

With the world economy still recovering from the COVID-19 pandemic and suffering from an energy crisis generated by Russia's invasion of Ukraine, which has resulted in a generalized increase in prices, especially in energy and food, inflation is high at European and world levels. According to the International Monetary Fund (IMF, 2024) as it is possible to see in Figure 2.1, in 2022 world inflation reached 8.7% and in 2023 it had already fallen to 6.9%. From 2024 onwards, the outlook is for a continued fall, thanks to the expected drop in energy prices and the appreciation of the euro.

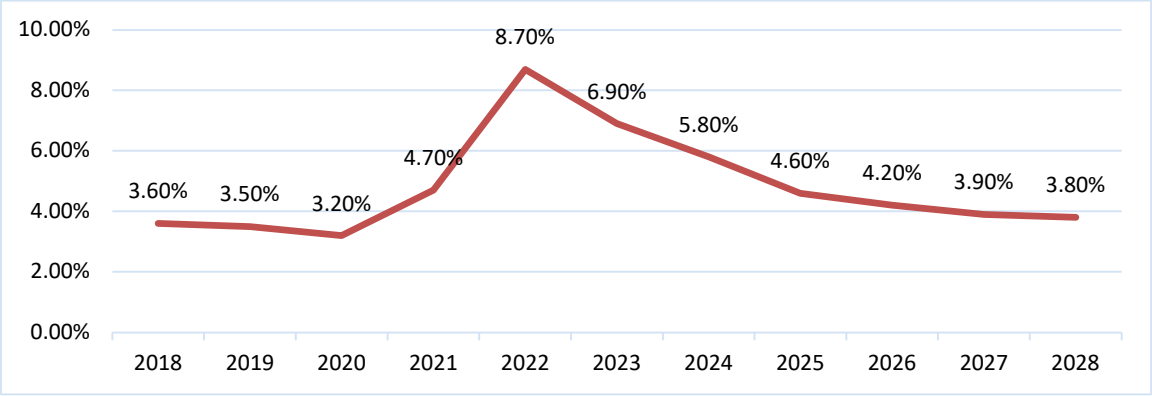

Figure 2.1. Inflation Rate, Average World Consumer Prices. Adapted from IMF (2024).

In Portugal and Europe, inflation levels are in line with the global trend and are higher than these figures because they are relatively close to the war in Ukraine. Figure 2.2 reveals a strong correlation between inflation in Portugal and the Eurozone, particularly evident in the last quarter of 2022 when inflation peaked at 8.1%. The Pearson correlation coefficient of 0.974, close to 1, indicates that inflation rates in Portugal and the Eurozone are closely linked, with changes in one region's inflation being highly associated with changes in the other. This strong correlation suggests that the two economies are closely aligned regarding inflation, likely due

to shared economic policies. On the same Figure, it should be noted that the trend in 2023 has been downwards, with inflation standing at 5.26% in Portugal and 5.5% in the Eurozone in 2023.

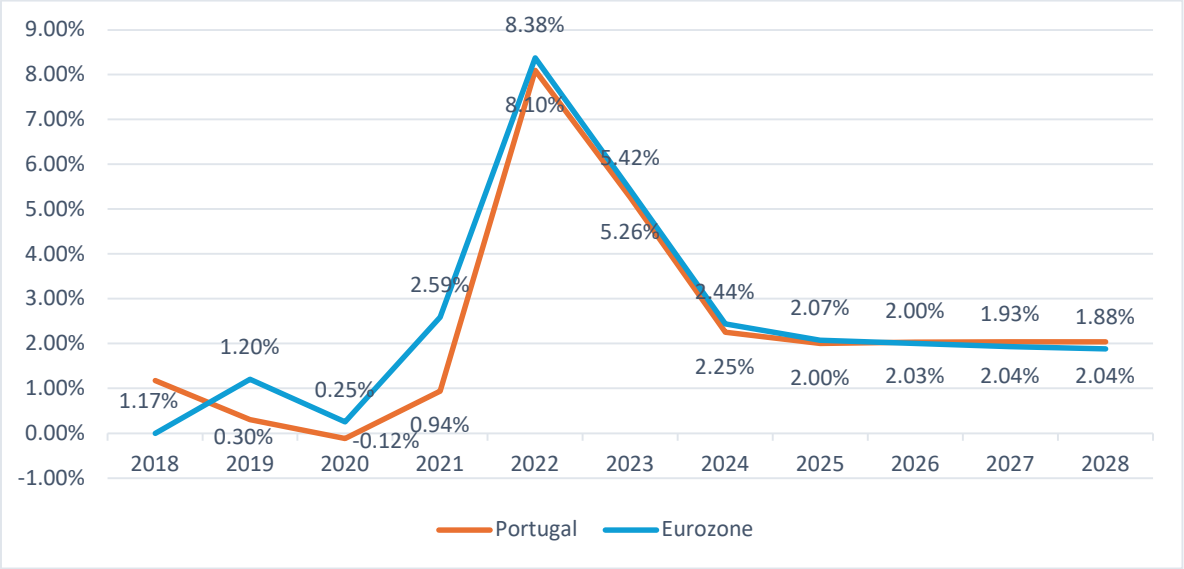

Figure 2.2. **Portugal and Eurozone Inflation Rate**. Adapted from Statista (2024).

According to the Bank of Portugal (2024), the projections for 2024 and 2025 are for these figures to continue to fall, reaching an average of 2.5% in both Portugal and Eurozone in 2024 and 2.1% in Portugal and 2.2% in the Eurozone in 2025. This means that prices are expected to fall, allowing companies to regain financial power and consumers the power to consume.

To achieve these projected figures, governments, the Eurozone, the Federal Reserve and other global organizations are trying to fight inflation by constantly raising interest rates, as it is possible to see in Figure 2.3. In June 2024, the European Central Bank cut key interest rates in response to a considerable decline in inflation, which still is above the 2% objective. Housing purchase rates have marginally fallen, but borrowing conditions remain tight, and the ECB is closely monitoring economic data for future policy decisions.

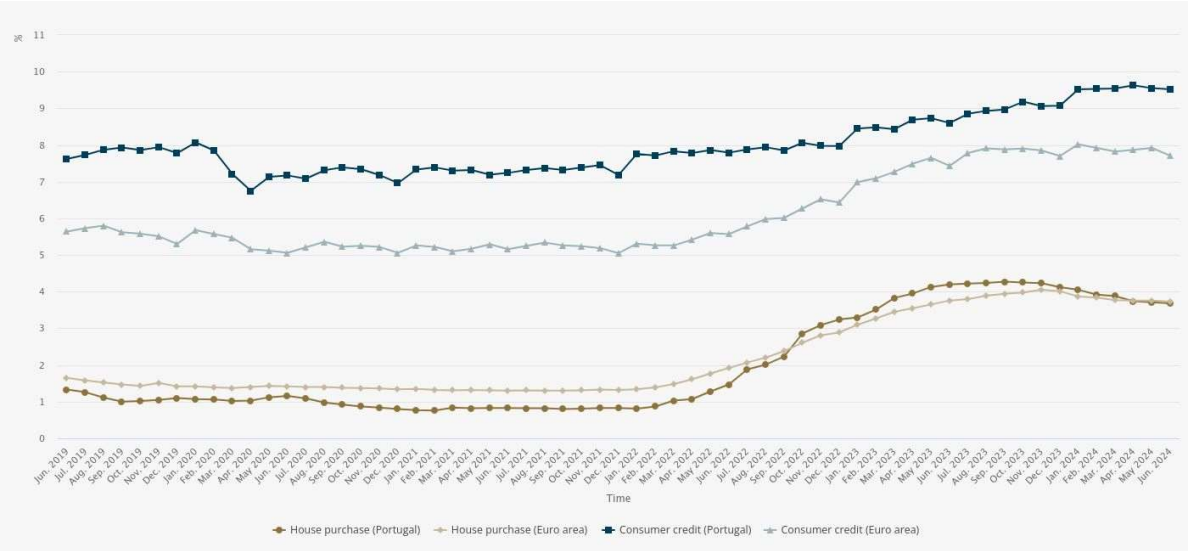

Figure 2.3. **Consumer & Housing Interest Rates in Portugal and the Euro Zone**. Adapted from Bank of Portugal (2024).

The third indicator to consider is GDP, which measures the additional value created through the production of goods and services in each region or country. In other words, it translates the income obtained from production after deducting the costs to realize it. As it is the most widely used indicator for comparing and measuring the wealth and development of various economies, its values will be analyzed.

Analyzing Figure 2.4, we can see that GDP growth fell sharply in 2020 thanks to the impact of the pandemic.

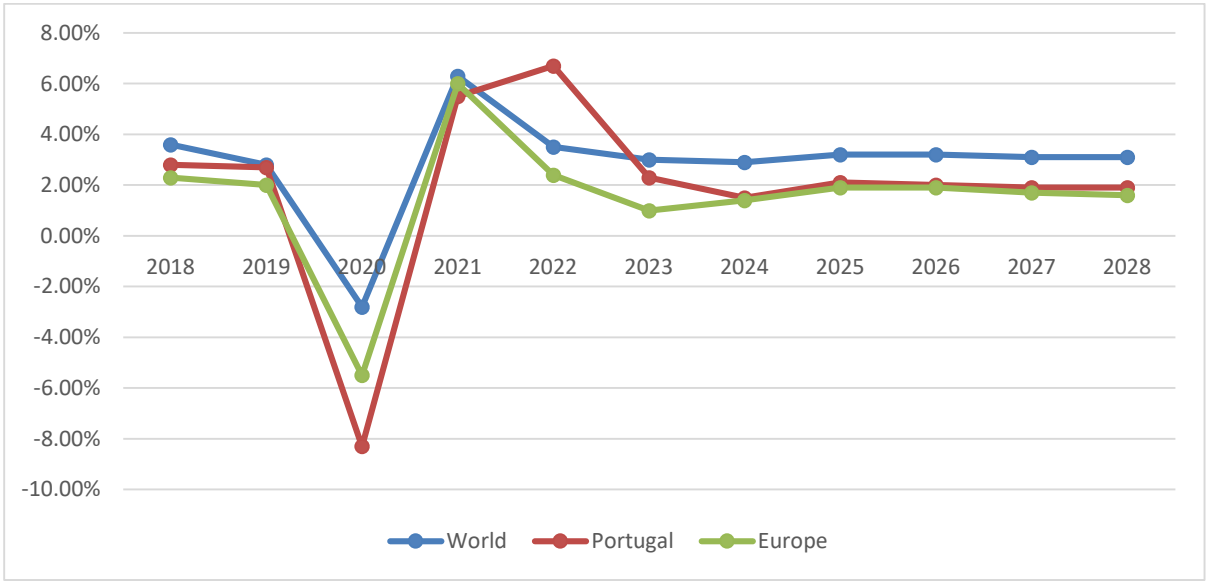

Figure 2.4. **Real GDP Growth.** Adapted from IMF (2024).

The Figure 2.4 highlights Portugal's negative figures in 2020, which were even lower than the European and world average, thus emphasizing the impact of the pandemic on the Portuguese economy. Despite recovering to an average of 2.3% by 2023, the trend is to fall slightly and stagnate, also due to the increase in foreign direct investment in Portugal, which already represents 172 billion euros in the first quarter of 2023, and the increase in tourism and the fall in the unemployment rate, which according to the Bank of Portugal (2024) stood at 6.1% in the second and third half of 2023.

Thus, the economic climate has stabilized and is following a path of resilience, recovery, and balance. This allows the reintroduction of liquidity for families and businesses, contributing to social, economic, and territorial cohesion.

2.2. Industry Overview

This chapter gives some context and an overview of the Football Industry in Portugal and worldwide, the main sources of revenue and the general results of all the players/clubs present in the Portuguese industry, as well as challenges and forecasts for its future.

According to Figure 2.5, on a study for the 2021-22 football season, carried out by consultancy firm EY Portugal in conjunction with the Portuguese Football League, confirms that the football industry has a positive impact on the country's economy. After the challenges caused by the pandemic, the Liga Portugal Bwin and its associated sports societies contributed 617 million euros to the Portuguese economy, or 0.29% of GDP, with a year-on-year increase of 12.22%. This growth is justified by the return of fans to the stadiums, with more revenue from ticket sales and successful participation in the Champions League.

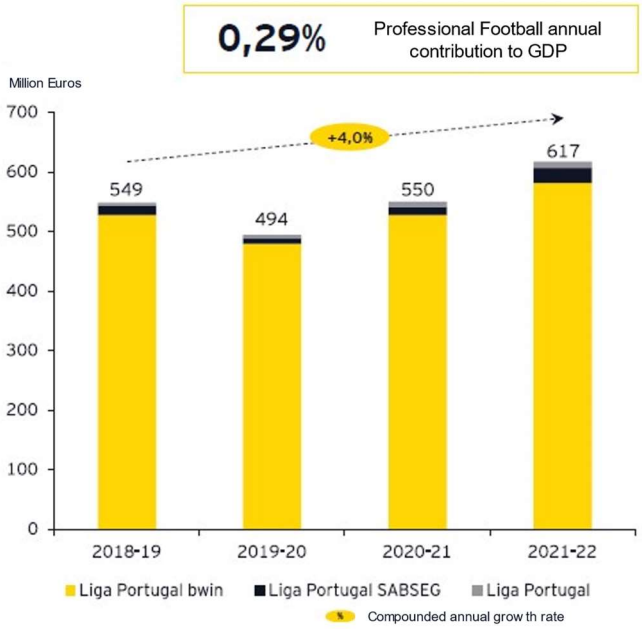

Figure 2.5. **Evolution of the Football Industry contribution to GDP of Portugal**. EY Portugal report (2022).

The report highlights that in the 2021/22 season, football in Portugal generated a record turnover of 917 million euros and was responsible for 3595 jobs, with most jobs concentrated in sports companies. Salaries totaled 319 million euros, with players being the main beneficiaries with an aggregate total of 238 million euros. Another very important point was the industry's tax contributions, which according to consultants EY totaled 214 million euros in the 2021/2022 season, an increase of 11.5% on the same period last year.

Liga Portugal ended its 2021/2022 season with its seventh consecutive year of positive results, achieving profits of almost 1.2 million euros. The organization distributed 8.2 million euros among the sports societies. Despite initial restrictions in the 2021/22 season, the return of fans to the stadiums and a substantial television audience have consolidated Professional Football as a mass phenomenon with great potential, with a total media exposure of 1.86 billion euros. The yearbook also highlights the growing internationalization of Portuguese football, with 55% of player departures and 50% of player arrivals in the Liga Portugal Bwin involving foreign clubs.

In general, it has been proven that football clubs are not just sporting representatives, but a large economic group with a much wider remit than just sport, and a club's main sources of income represent just that, advertising and sponsorship, merchandising, all strong sources of income for a club.

Despite the sporting success of Portuguese football in recent years, its evolution has been slower when compared to the main European leagues. Proof of this is the importance of UEFA's Financial Fair Play and Licensing Regulations, introduced in 2011, which require clubs to prove the absence of debt in various areas, promoting the diversification of club financing, including debt and bank loans, to reduce the cost of liabilities. Therefore, more balanced, and sustainable financial management is needed, allowing football clubs to raise other types of finance, such as issuing debt, financial products, and loan guarantees.

From a Deloitte (2024) study, at the European level, the football market experienced significant growth in the 2022/23 season, with revenues reaching a record €35.3 billion, a 16% increase over the previous season. This expansion was mostly driven by increased matchday and commercial revenue, particularly in the 'big five' leagues—Premier League, Bundesliga, Serie A, LaLiga, and Ligue 1—which together contributed 19.6 billion euros, or 56% of total market revenue. Matchday revenue in these leagues surged by 35% to 2.8 billion euros, while commercial revenues jumped by 19% to 7.6 billion euros, due to the end of COVID-19 restrictions, the 2022 FIFA World Cup, and increasing sponsorship and commercial activity, particularly in the Bundesliga and Serie A. The Premier League achieved new financial records, with revenues exceeding 6.1 billion pounds. Despite the success, there are concerns about increasing polarization, prompting calls for measures to promote strong competitions and protect fan interest. The introduction of new regulations in England and Europe is seen as timely, given the challenges posed by emerging leagues. The involvement of various organizations globally emphasizes the need for a balancing act between investors, owners, and governments to ensure the success and financial sustainability of European football, a crucial cultural asset.

Overall, this financial recovery points out the robust demand for European football, both nationally and abroad. Leagues continue to recover and increase their commercial potential.

CHAPTER3

Company Overview

The aim of this chapter is to provide the reader with an overview of Sport Lisboa e Benfica - Futebol SAD, through a historical context and profile of the company, the shareholder structure and the company's operational and financial performance.

3.1. Sport Lisboa e Benfica - Futebol SAD Overview

3.1.1. History and Profile

Sport Lisboa e Benfica – Futebol SAD, most known by the brand name SL Benfica, is a prestigious Portuguese football club based in Lisbon, and it was founded in 1904, being one of the oldest and most successful clubs in the country, accumulating a rich history of achievements at national and international levels. As of June 2024, it has an impressive record, including 38 Portuguese Primeira Liga titles, 26 Portuguese Cups and 2 Champions League trophies.

Over the years, Benfica SAD has consolidated its reputation as a renowned institution on the global football scene, standing out not only for its sports success, but also for its fervent legion of fans around the world and for the iconic Estádio da Luz. In addition, the club invests in training young talent, contributing to the development of world-class players such as Bernardo Silva or João Cancelo.

The rivalry between Benfica SAD and other Portuguese Football giants, such as FC Porto and Sporting CP, is one of the most intense and historic on the European scene. These clashes, known as "classics" or “derby”, are eagerly awaited by fans. SL Benfica also shine in European competitions, being a regular presence in the UEFA Champions League and the Europa League.

In the 2022/2023 season, represented by the 2023 accounts report, Benfica SAD achieved its main objective by winning the 38th national championship title, reinforcing its lead as the club with the most titles in Portugal. In addition, in the Champions League, they reached the quarterfinals for the second time in a row, taking 1st place in the group stage.

The 2022/2023 season was a transitional phase, with a major restructuring of Benfica SAD sporting assets for greater efficiency in the following seasons. The hiring of coach Roger Schmidt and the restructuring of the squad were aimed at a more attacking and competitive style of play, which proved to be the good choice given the results achieved throughout the 2022/2023 season. The squad was restructured gradually, without increasing costs for Benfica SAD.

Another achievement in the 2022/2023 season was the attendance figures in the stadium. All attendance records were broken with an average of over 57 000 spectators at the Estádio da Luz (close to 90% occupancy) per match. Season tickets also sold out with more than 15 thousand members queuing to try and secure a seat for the coming seasons.

It maintains a global presence through its Houses, Branches and Delegations, totaling around 300 locations in Africa, America, Asia, and Europe. With more than 25,000 athletes in more than 45 sports, these entities stand out for their social, cultural, and sporting mobilization. At the national level, there are 130 Casas do Benfica, including the islands, 56 of which offer all of SL Benfica services and products. The club's communication strategy is centered on four axes: positivity, alignment, proximity, and affirmativeness, with the aim of strengthening reputation, increasing notoriety, and involving fans, especially by promoting the activities of the men's and women's teams.

In the terms of results, in the last Account Report from Sport Lisboa e Benfica - Futebol SAD (2023), the turnover by type of revenue is broken down into three main revenue types, the sale of audiovisual rights (64%), commercial revenues (19%) from sponsorships, the sale of advertising spaces and royalties, and gaming revenues (17%) from the sale of tickets for matches, organization of sporting events and the transfer of players. Figure 3.1. shows this distribution of revenue.

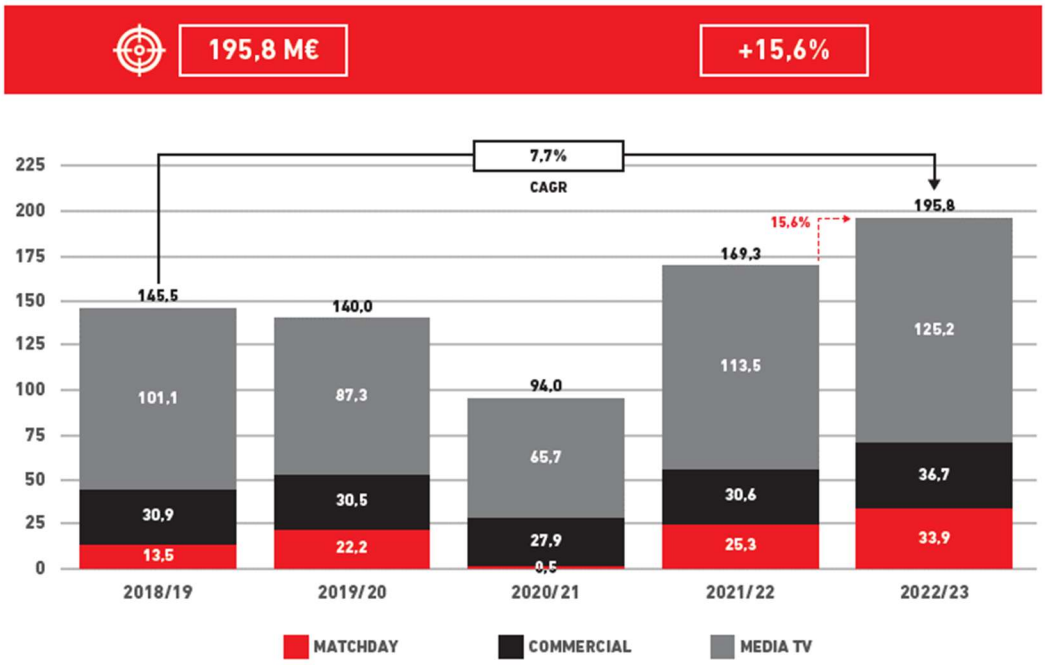

Figure 3.1. **Operating Income in Millions of Euros (Excluding Athlete Rights Transactions).** Adapted from Annual Report Benfica SAD (2023).

The future strategy is focused on several points, starting with the commitment to training, as the Board of Directors is convinced that it is the only possible way to retain talent and improve the sporting performance. That will lead to increasing the operating revenue and will follow the expenses control and capitalizing on player rights sales. The company aims to maintain positive economic results, rebuild equity, strengthen ties with banks, and prioritize bond loans as the primary source of funding to sustain its current approach.

3.1.2. Shareholder Structure

Sport Lisboa e Benfica is the only shareholder that owns more than 50% of Benfica SAD's share capital, thus exercising shareholder control over the company. As of 30 June 2023, the club holds 9,200,000 shares directly and 5,439,551 shares indirectly, through Sport Lisboa e Benfica, SGPS, S.A., which it controls exclusively. In addition to the voting rights of these shares, Sport Lisboa e Benfica also has voting rights related to the shares held by the members of the club's management and supervisory bodies, as well as by the Benfica Foundation. Additionally, due to a pre-emptive right granted by Luís Filipe Ferreira Vieira to Sport Lisboa e Benfica on the transfer of his shares, the club also holds voting rights relating to 753,615 shares. Therefore, in accordance with article 20 of the Securities Code, Sport Lisboa e Benfica is attributed the voting rights relating to 6,204,926 shares, of which the club is not the direct holder.

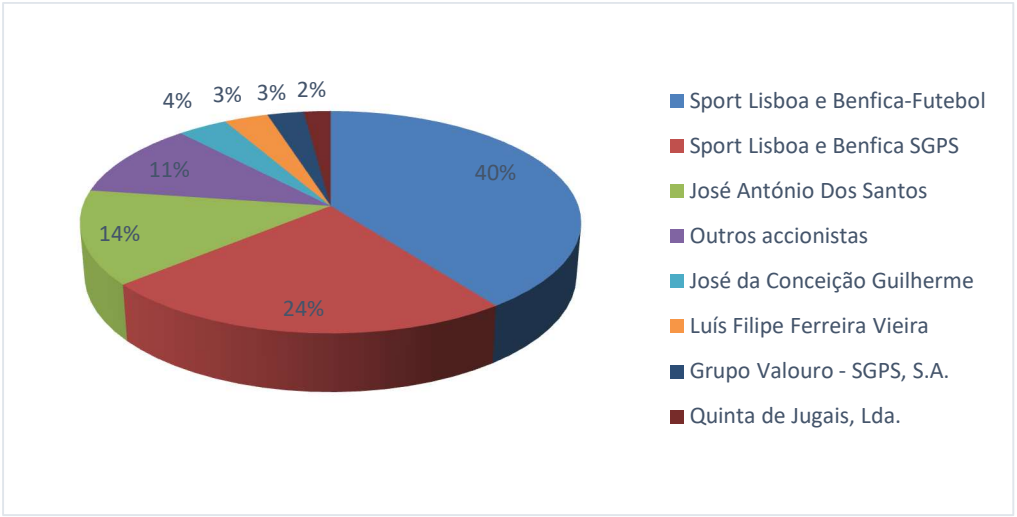

Figure 3.2. Shareholder structure. Adapted from Annual Report Benfica SAD (2023).

In the market, Benfica SAD's share capital is 115 000 000 euros, represented by 23,000,000 nominative shares, with book-entry shares with a nominal value of 5 euros each, divided into A and B categories. Category A shares, which represent 40% of the capital, have privileges such as immunity from judicial seizure, the right to veto important decisions and the ability to appoint at least one member of the Board of Directors. These shares can only be held by Sport Lisboa e Benfica. Category B shares, which represent the remaining 60%, are ordinary and have no special rights. The General Meeting cannot function without the full representation of category A shares. All shares are listed on Euronext Lisbon.

3.1.3. Financial Analysis

Despite negative net profits in 2020/2021 and 2021/2022 of 17.4 million euros and 35 million euros, respectively, Benfica SAD reported a positive net profit of 4.2 million euros in 2022/2023, largely influenced by increased operating income and transactions in athletes' rights.

Looking at the indicators of operating activity in the Table 3.1, we can see that despite the sharp drop in revenue in 2020/2021 of 31.94%, as we have already seen, due largely to the pandemic, the trend is for growth in the indicator, and in both 2021/2022 and 2022/2023, the growth rate was between 20% and 22%. Including transactions with athletes, revenue in the 2022/2023 season reached 284.7 million euros, thus reaching pre-pandemic revenue levels.

Table 3.1. **Operating Activity Indicators.** Adapted from Benfica SAD Annual Reports (2023)

Operating Activity Indicators				
	2019/2020	**2020/2021**	**2021/2022**	**2022/2023**
Revenues (Thousands of €)	**285 108**	**194 047**	**233 548**	**284 712**
Revenue Growth %	16.66%	-31.94%	20.36%	21.91%
Operational Costs (Thousands of €)	**177 762**	**155 725**	**202 878**	**222 002**
Operational Costs Growth %		-12.40%	30.24%	9.43%
EBITDA (Thousands of €)	**107 346**	**38 322**	**30 670**	**62 710**
EBITDA Margin %	**37.65%**	**19.75%**	**13.13%**	**22.03%**
EBITDA Growth %	47.41%	-64.30%	-19.97%	104.47%

If transactions with the sale of athletes are not included, operating revenue reached 195.8 million euros, an increase of 15.6% on the previous year, setting a historic high for the company. Transactions in athletes' rights contributed 88.9 million euros, representing a significant 21.9% increase compared to the same period in the previous year. The total operating income,

including athlete rights transactions, amounted to 284.7 million euros, the second-best result in Benfica SAD's history.

Operating costs have increased steadily since 2020/2021, by almost 30.28% in 2021/2022 and 9.43% in 2022/2023. These figures are due to external supplies and services and personnel costs, which increase with each period analyzed. In the year of 2021/2022, the Supplies and external services item increased the most due to the investments made in the Estádio da Luz, in terms of new LED lights, giant screens, sound and lighting systems, Wi-Fi coverage, and the increase in travel and accommodation costs, which were significantly penalized by the general price increases in the travel and accommodation sector.

Regarding the EBITDA Growth, despite its high drop of -64.30% in 2020/2021, there is a recovery of 104.47% in 2022/2023, reinforcing that the company's activity generates sufficient revenue to meet its operating costs.

Another important factor to consider when choosing an investment is the company's liquidity ratios. This consists of translating for the investor the company's ability to pay its requirements in the short term without taking external capital into account. In other words, whether the revenue generated by the company can directly cover its obligations. Therefore, the higher these ratios are, the better.

From Figure 3.3, a direct conclusion can be drawn that short-term liabilities are not immediately covered by current assets because all the ratios are below 1.

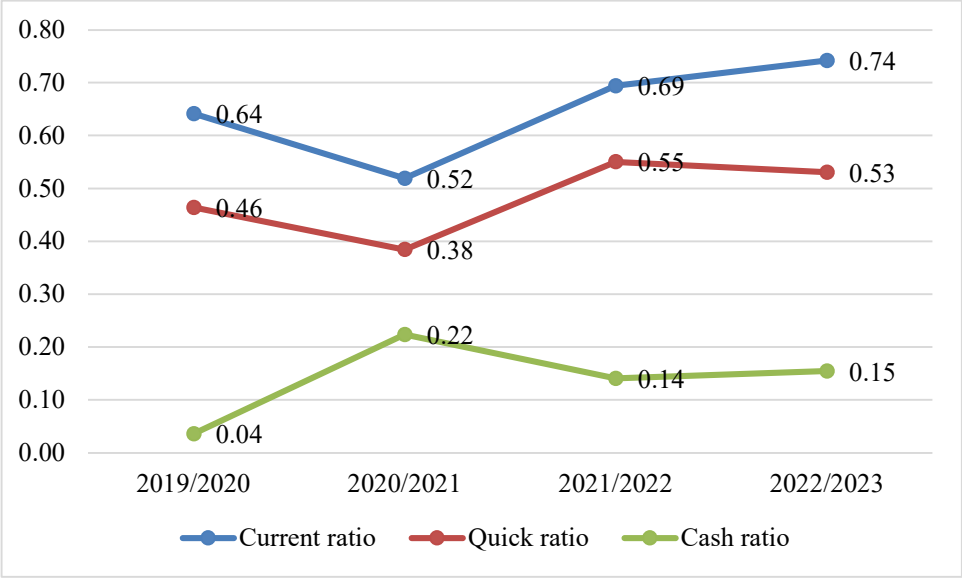

Figure 3.3. **Liquidity Ratios. Own estimates;** Benfica SAD Annual Report *(2023).*

The current ratio, which measures the company's ability to cover its short-term liabilities with its current assets, has been on an upward trend since the year of the pandemic, getting closer and closer to 1, so current assets are close to meeting the immediate needs of liabilities.

The quick ratio, which measures the capacity of cash, accounts receivable and marketable securities to meet current liabilities, follows the trend of the current ratio, but is partially lower. It should be noted that in the last two years of the analysis this ratio even fell by 2 percentage points, influenced by the reduction in accounts receivable.

The last liquidity ratio, the cash ratio, which only reflects the company's cash or cash equivalent capacity to meet short-term liabilities, shows the opposite trend to the other two. In this case, 2020/2023 was the year in which this ratio peaked, at 0.22, and in the following years, despite falling, the ratio remained at 0.15. Despite the low values, it is normal for the company not to have very high values in these ratios since it makes sense for the money it has available to flow through the company, its shareholders and opportunities that generate growth for the business.

Following on from the analysis, another important factor to consider is the company's capital structure. In the case of Benfica SAD, in recent years there has been a drop in the amount of equity compared to the amount of debt.

Table 3.2. **Capital Structure and Solvency.** Adapted from Benfica SAD Annual Reports *(2023).*

Capital Structure and Solvency				
	2019/2020	**2020/2021**	**2021/2022**	**2022/2023**
Equity (Thousands of €)	161 149	143 654	109 014	113 215
Debt (Thousands of €)	98 080	144 979	171 157	169 446
Net Financial Debt (Thousands of €)	92 754	100 907	147 088	140 823
Average Cost of Debt	13.70%	10.20%	7.80%	9.80%
Debt/Equity	0.61	1.01	1.57	1.5
Interest Coverage Ratio	4.03	-1.7	-2.36	0.83

As Table 3.2 shows, in 2019/2020 equity had much more weight than debt in the capital structure. In 2020/2021, the capital structure is divided into half debt and half equity. Between 2021/2022 and 2022/2023, the structure changes and becomes mostly made up of debt. Thus, over the last 4 years, the level of debt has risen from 98.08 million euros to 169.45 million euros, an increase of 71.37 million euros. This increase is mainly due to the increase in bond loans and the reduction in bank loans, paying less interest and reducing the cost of borrowed capital. Nevertheless, Debt-to-Equity Ratio has jumped substantially from 0.61 in 2019/2020

to 1.50 in 2022/2023. This suggests a greater reliance on debt than equity, which increases financial risk and could endanger the company's long-term stability.

Despite the lower value of Shareholders' Equity in 2022/2023, it grew by almost 4% compared to the same period last year, because of the positive result for the period. Even so, the company has reversed the trend of the last two financial years and resumed its growth in equity. Net debt decreased by 4.3% to 140.8 million euros, and the company's equity reached 113.2 million euros, the fourth highest in its history.

Over time, the company's solvency, or its capacity to pay interest, showed a marked decline. The Interest Coverage Ratio of 4.03 for 2019/2020 suggested a stable financial situation. However, due to the operating losses that prohibited interest coverage, the ratio turned negative in 2020/2021 (-1.70) and 2021/2022 (-2.36). The ratio increased to 0.83 in 2022/2023, indicating improvement. However, the company's operating profits remain insufficient to cover interest expenses in full, and it continues to be financially uncertain.

Concerning Profitability, Figure 3.4 gives a picture of how the efficient use of the resources by the club produces returns, namely the Return on Assets (ROA), the Return on Equity(ROE), and the Return on Invested Capital(ROIC).

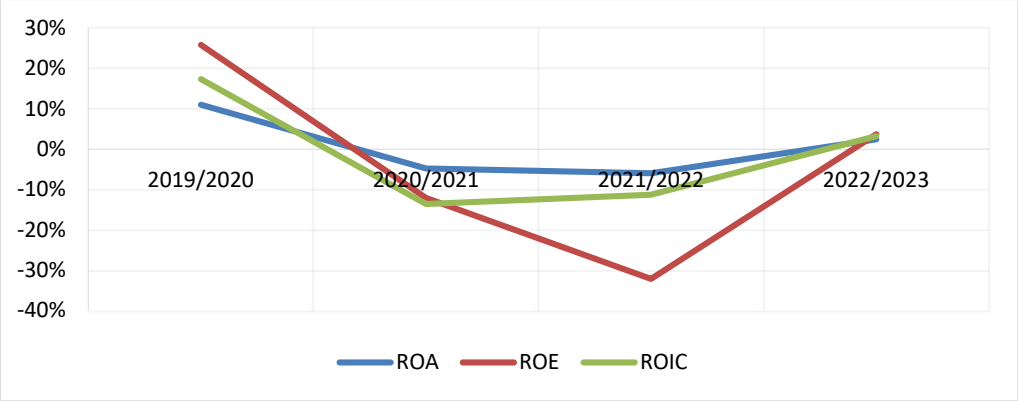

Figure 3.4. **Profitability Ratios. Own estimates;** Benfica SAD Annual Report *(2023)*.

At first glance, the sharp drop in these ratios in the 2020/2021 and 2021/2022 seasons, represented by the 2020 and 2021 accounts reports, is remarkable, as they even registered negative figures, highlighting the impact that the pandemic has had on the club's returns. Despite the events of the previous seasons, in 2022/2023 all the profitability ratios recovered and recorded positive figures.

ROA was the one with the least marked variation in the period analyzed, reflecting stable revenue generation from these assets.

Following the ROA trend, ROIC also registered negative figures during the pandemic years and a sharp recovery from -11% to 4% last season.

Finally, as can be seen in Figure 3.4, ROE is the profitability ratio that has seen the sharpest drop between 2019 and 2022. From 26% in the 2019/2020 season, it fell to -32% in 2021/2022 and in the last season it returned to a positive figure of 4%, reinforcing that all the money invested by shareholders in the club produces a return.

Following two years of significant declines, Benfica SAD achieved a turnaround in 2022/2023, generating a positive net profit of 4.2 million euros. Athlete transactions and higher operating income were the main drivers of this recovery and total revenue was near pre-pandemic levels at 284.7 million euros. Debt-to-Equity ratio reached from 60.9% in 2019/2020 to 149.7% in 2022/2023 as a result of rising operational expenditures and Benfica SAD's growing reliance on debt. Overall, Benfica SAD's financial stability is in doubt because operating profits aren't high enough to pay interest costs, even though EBITDA and profitability ratios have improved.

CHAPTER4

Valuation

This chapter analyses the valuation of SLB Benfica SAD using the valuation methods mentioned in the first chapter. The order will be, firstly, the analysis and verification of the assumptions to be used in the methods, followed by the analysis of the share value at the end of 2023 using the Discounted Cash Flow approach, performing the Free Cash Flow to the Firm, and the second method, valuation through Multiples, in other words, Relative Valuation. In addition, a Sensitivity Analysis will be carried out to understand how changes in critical variables could affect the final share price of Benfica.

4.1. Valuation Assumptions

To move forward with the establishment of the assumptions, historical data from the accounts reports for the last 5 years were used, using as a basis all the figures from the balance sheets, income statements, and cash flow statements for the period from 2018 to 2022 to estimate the future cash flows. The aggregated historical data tables can be found in *Appendix C*, *Appendix D* and *Appendix E*.

An important factor that was considered was the period of the COVID-19 pandemic, a macroeconomic event adverse to the company's normal activity, the consequences of which results were high and should have nothing to do with future growth prospects. Since this situation had an impact on the company’s accounts, operational income and results in general, the 2020/2021 period was not considered when calculating the growth rate for the following items. A growth rate will then be used for the years of 2023 to 2027.

The following sections will list all the assumptions that served as the basis for the valuation methods used in this work.

4.1.1. Revenue

The company's revenue is the first significant assumption to consider. We will be able to anticipate future income figures based on a growth rate provided by the average operational income from 2018 to 2022.

Thus, considering the recent growth in revenues from advertising and sponsorship, broadcast revenue, UEFA prizes and ticketing, and corporate, the average annual growth rate was 23.5%.

Table 4.1 shows the forecasted values of revenues for the next 5 years, considering an annual growth rate of 23.5%.

Table 4.1. **Benfica Revenue Forecast**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of euros €	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Revenues (Includ. Income from Athlete Rights Transactions)	237 088	285 108	194 047	233 548	284 712	351 529	434 028	535 887	661 651	816 930
% Growth Rate	31.4%	20.3%	-31.9%	20.4%	21.9%	23.5%	23.5%	23.5%	23.5%	23.5%

4.1.2. Operating Costs

Operating costs have increased in recent years in proportion to operating revenue. To determine the cost estimates based on operating revenue for each forecast year, a historical average % between the weight of costs and revenue in prior years was computed. This was done considering the correlation that historically exists between these two variables. These values are displayed in Table 4.2 considering an average historical weight of Operating Costs as of Revenue of 75.1%.

Table 4.2. **Benfica Operating Costs Forecast**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of euros €	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Operating Costs (Includ. Expenses from the sale of Athletes Rights)	-164 265	-183 146	-158 659	-206 722	-223 403	-264 088	-326 065	-402 587	-497 068	-613 722
% of Revenue	69.3%	64.2%	81.8%	88.5%	78.5%	75.1%	75.1%	75.1%	75.1%	75.1%

4.1.3. Depreciation & Amortization

Depreciation and amortization of tangible assets are recorded in the income statement on a monthly basis, using the straight-line approach, based on the different periods of projected useful life for each class of tangible asset.

The components having the most weight in Depreciation are Depreciation of Buildings and Other Constructions, which refers to the costs associated with the Benfica Campus facilities, and Rights of Use, which refers primarily to the use of the Sport Lisboa e Benfica stadium.

Depreciation and Amortization were forecasted using the same methods as described in the previous Operating Costs method. To determine the average historical weight of depreciation and amortization as a percentage of revenue, an average was calculated for the years 2018, 2019, 2021, and 2022, with 2020 excluded. The average value to be utilized when calculating forecasted years is 18.9% (see Table 4.3).

Table 4.3. **Benfica Depreciation & Amortization Forecast**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of euros €	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Depreciation and Amortization	40 205	47 995	60 505	58 408	47 569	66 359	81 932	101 160	124 901	154 213
% of Revenue	17.0%	16.8%	31.2%	25.0%	16.7%	18.9%	18.9%	18.9%	18.9%	18.9%

4.1.4. Corporate Tax Rate

Forecasting the corporate tax rate and estimating tax expenses are required to move forward with the computation of the Free Cash Flow to the Firm and WACC. According to Note 9 of the 2022/2023 Benfica SAD accounts report, the income tax rate of 22.5% was applied to most deferred taxes, except for tax losses and tax benefits, where the rate of 21% was used. The income tax rate to be considered for the projected period will be the one set by the Portuguese Government for 2024, which is 21%.

Table 4.4. **Benfica Tax Rate Forecast**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of euros €	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
EBT	24 648	46 493	-34 021	-41 533	1 803	7 362	9 090	11 224	13 858	17 110
Tax Expense	3 389	-4 788	16 641	6 516	2 410	1 546	1 909	2 357	2 910	3 593
Tax Rate	13.7%	-10.3%	-48.9%	-15.7%	133.7%	21.0%	21.0%	21.0%	21.0%	21.0%

4.1.5. Earnings before Interest and Taxes (EBIT) and Operating Cash Flow

To calculate the value of Free Cash Flow to the Firm, it is important to comprehend the values of EBIT and of Operating Cash Flow as shown in the Income Statement.

We can calculate EBIT using all the values listed above. During the review period, EBIT is expected to demonstrate sustainable growth and development, driven by the rise in revenue and operational activity. Table 4.5 shows that Operating Cash Flow will increase gradually between 2023 and 2027 due to the projected increase in operating performance, particularly in the sales of players' rights, television rights, and matchday ticket sales.

Table 4.5. **Benfica EBIT, NOPLAT and Operating Cash Flow Forecast**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of euros €	2023F	2024F	2025F	2026F	2027F
Revenues (Including Income from Athlete Rights Transactions)	351 529	434 028	535 887	661 651	816 930
Operating Costs (Including Expenses from the sale of Athletes Rights)	-264 088	-326 065	-402 587	-497 068	-613 722
EBITDA	87 441	107 962	133 299	164 583	203 208
Depreciation and Amortization	-66 359	-81 932	-101 160	-124 901	-154 213
EBIT	21 083	26 030	32 139	39 682	48 995
Taxes	1 546	1 909	2 357	2 910	3 593
NOPLAT	22 629	27 939	34 496	42 592	52 588
Depreciation and Amortization	66 359	81 932	101 160	124 901	154 213
Operating Cash Flow	**88 987**	**109 871**	**135 656**	**167 493**	**206 801**

4.1.6. CAPEX

CAPEX refers to all expenses incurred while investing in tangible and intangible assets, as well as other assets. Investments in tangible assets over the last year have included unfinished works and other renovations to Benfica Campus, as well as the installation of LEDs, new speakers, and new displays at Estádio da Luz. Intangible asset investments mostly involve the acquisition of various athletes athletic and economic registration rights.

Apart from the 2020 period related to the COVID-19 pandemic, the annual report demonstrates consistent investment spending. So, to anticipate future capital expenditure, a historical average CAPEX based on revenue was calculated. The derived value of 27.4% was used in Table 4.6 projections.

Table 4.6. **Benfica Capex Forecast**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of euros €	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
CAPEX	64 297	78 696	73 395	50 276	95 115	96 368	118 984	146 908	181 385	223 953
% of Revenue	27.1%	27.6%	37.8%	21.5%	33.4%	27.4%	27.4%	27.4%	27.4%	27.4%

4.1.7. Working Capital

Working capital is the gap between the company's operating current assets and the operating current liabilities necessary for its operations. This item represents the company's short-term balance. Table 4.7 shows the items that were extracted from the balance sheets.

Table 4.7. **Benfica Working Capital**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of Euros	2018	2019	2020	2021	2022
Operational Cash	20 387	26 172	26 595	24 545	39 138
Accounts Receivable	123 518	87 314	54 982	121 826	117 520
Inventory	119 684	26 172	26 595	24 545	39 138
Operating Current Assets	**263 589**	**139 658**	**108 172**	**170 916**	**195 796**
% of Revenue	111.2%	49.0%	55.7%	73.2%	68.8%
Accounts Payable	54 603	67 484	109 415	134 905	176 787
Short term Debt	52 401	31 903	91 285	25 815	25 608
Operating Current Liabilities	**107 004**	**99 387**	**200 700**	**160 720**	**202 395**
% of Revenue	45.1%	34.9%	103.4%	68.8%	71.1%
Working Capital	156 585	40 271	-92 528	10 196	-6 599
Changes in Working Capital		-116 314	-132 799	102 724	-16 795

There has not been a clear trend in working capital growth or decline between operating current assets and operating current liabilities in recent years, even though there were more negative than positive fluctuations in working capital over the review period. As a result, operating current assets and operating current liabilities were given historical average weights of gross revenue, which came out to be 75.5% and 55%, respectively, for current assets and liabilities. Table 4.8. illustrates how the corresponding weights were utilized to forecast the future values of the working capital categories.

Table 4.8. **Benfica Working Capital Forecast.** Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of Euros	2023F	2024F	2025F	2026F	2027F
Operating Current Assets	**265 505**	**327 815**	**404 748**	**499 735**	**617 015**
% of Revenue	75.5%	75.5%	75.5%	75.5%	75.5%
Operating Current Liabilities	**193 250**	**238 603**	**294 599**	**363 737**	**449 100**
% of Revenue	55.0%	55.0%	55.0%	55.0%	55.0%
Working Capital	72 255	89 212	110 149	135 999	167 915
Changes in Working Capital	78 854	16 957	20 937	25 850	31 917

4.1.8. Weighted Average Cost of Capital

The FCFF must take into account a discount rate, in this case, the Weighted Average Cost of Capital, which accounts for the cost of all additional resources, debt, and equity since it represents the cash flow available to pay the company's creditors and shareholders. To this purpose, this chapter will build all the variables required to determine the WACC value, beginning with the cost of debt and progressing to the cost of equity.

4.1.8.1. Cost of Debt

The cost of debt was calculated using all current and non-current loans, as well as the interest costs mentioned in the notes on financial expenses and losses in Benfica SAD's annual reports.

The cost of debt was computed in a very basic manner, by assessing the weight of interest on the company's total debt for each year.

Despite the general market trend of rising interest rates covered in the sector analysis chapter, Benfica SAD reinforced its debt issue on May 17, 2023. This new debt issue was done at an interest rate of 5.75%, lower than previous periods. As a result, assuming the same debt issuance strategy throughout the forecast period, the cost of the debt to be considered will be the 5.75% of the last issuance until June 30, 2023.

Table 4.9. **Benfica Cost of Debt Forecast**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of euros €	2018	2019	2020	2021	2022
Current Debt	52 401	31 903	91 285	25 815	25 608
Non-Current Debt	92 940	66 177	53 694	145 342	143 838
Interest Expenses	14 341	13 399	14 732	13 354	16 648
Cost of debt	9.9%	13.7%	10.2%	7.8%	9.8%

4.1.8.2. Capital Structure

Determining the capital structure allows us to understand how the company's capital is divided into debt and equity, allowing us to proceed with the calculation of the cost of equity and WACC. In this case, the market value of equity was calculated by multiplying the number of outstanding shares recorded in Benfica Sad's annual financial statements by the share price on the closing date of each annual financial statement (June 30). The market value of the debt was computed by totaling all financial debt documented in the company's records over those years.

There is no mention of the company's future debt strategy but given the low volatility in debt in prior years, we will use the Debt-to-Equity ratio from the previous year to determine the cost of equity.

Table 4.10. **Benfica Capital Structure**. Adapted from Benfica SAD Annual Reports (2023), & Own Estimates.

In Thousands of euros €	2018	2019	2020	2021	2022
Number of Outstanding Shares	23 000 000	23 000 000	23 000 000	23 000 000	23 000 000
Share Price at the end of the period	3.080	2.800	3.150	3.450	3.630
Market Value of Equity	70 840	64 400	72 450	79 350	83 490
Market Value of Debt	145 341	98 080	144 979	171 157	169 446
D/E Ratio	2.05	1.52	2.00	2.16	2.03

4.1.8.3. Cost of Equity

4.1.8.3.1. Risk Free Rate

All the values that go into the CAPM calculation that Damodaran (2012) refers to must be obtained to calculate the cost of equity.

To begin with, the Risk-Free Rate shows the interest rate that an investor would anticipate over a certain time frame from a completely risk-free investment. The selection was a European economy's 10-year government bond with an AAA rating from Moody's from the World Government Bonds Website (2023). In this specific scenario, it was selected the German 10-year government bond yield on June 30, 2023, which was 2.397%.

4.1.8.3.2. Country Risk Premium

The additional return investors seek when investing in a country with elevated risks, such as political unpredictability, exchange rate fluctuations, and economic uncertainty, is known as the country risk premium, as described in Chapter 1 and by Damodaran (2022).

Given that Benfica SAD is headquartered in Portugal and generates most of its revenue there, Portugal's Country Risk Premium should be applied. This information was obtained from the Damodaran NYU Stern website (2024). As of June 30, 2023, the value achieved is 1.75 %.

4.1.8.3.3. Market Risk Premium

When an investor chooses to invest in a market over a risk-free asset, they expect to receive an additional return, which is also referred to as the market risk premium. Parallel to the Country Risk Premium, the Market Risk Premium was obtained from the Damodaran NYU Stern website (2024), where the author used variables such as Portugal Moody's Rating, estimating a value of 6.35%.

4.1.8.3.4. Betas

The last variable needed to compute the cost of equity is the beta, which, as explained in Chapter 1, quantifies the risk and volatility of investment concerning the market; this means that the beta value shows how the market could influence the value of the investment or portfolio.

The Levered Beta was retrieved from the Bloomberg Terminal (2024) from July 1, 2018, to June 30, 2023. This resulted in a Levered Beta of 0.454, showing that Benfica SAD's shares were less volatile throughout this period than the overall market. A Beta of less than one, like in this example, indicates that the company is less sensitive to market changes, implying that its shares bear less systemic risk. More information on the Bloomberg Betas for Benfica SAD can be found in *Appendix A*.

4.1.8.3.5. Cost of Equity Value

Following determining all the necessary inputs to establish the Cost of Equity, the Capital Asset Price Model (CAPM) approach is employed. Equation (3) from Chapter 1 is then used, resulting in an Expected Return for Equity of 7.03%.

Table 4.11. **Benfica Cost of Equity Elements**. Own Estimates.

Cost of Equity Elements - CAPM	
Country Risk Premium	1.75%
Market Risk Premium	6.35%
Risk-Free Rate	2.40%
Beta Levered	0.45
Expected Return for Equity	**7.03%**

4.1.8.4. WACC Value

After assessing the cost of equity, the cost of debt and Benfica SAD capital structure, equation (9) is applied to calculate the Weighted Average Cost of Capital, resulting in a value of 5.36%.

Table 4.12. **Benfica WACC Elements**. Own Estimates.

Elements	
Cost of Equity	7.03%
Cost of Debt	5.75%
Equity (In Thousands of euros €)	83 490
Debt (In Thousands of euros €)	169 446
Tax Rate	21.00%
Weighted Average Cost of Capital	**5.36%**

4.2. Discounted Cash Flow Approach

As stated in Chapter 1, after defining all the assumptions in point 4.1 of Chapter 4, the FCFF for the years 2023 through 2027 can be computed. The values for each period are displayed in Table 4.13. using equation (8).

Table 4.13. **Benfica Free Cash Flow to Firm**. Own Estimates.

In Thousands of euros €	2023F	2024F	2025F	2026F	2027F
EBIT	21 083	26 030	32 139	39 682	48 995
Taxes	1 546	1 909	2 357	2 910	3 593
NOPLAT	22 629	27 939	34 496	42 592	52 588
Depreciation and Amortization	66 359	81 932	101 160	124 901	154 213
Operating Cash Flow	**88 987**	**109 871**	**135 656**	**167 493**	**206 801**
Capex	96 368	118 984	146 908	181 385	223 953
Changes in Working Capital	78 854	16 957	20 937	25 850	31 917
FCFF	**264 210**	**245 813**	**303 501**	**374 728**	**462 671**

4.2.1. Terminal Value e Enterprise Value

Benfica SAD's Terminal Value is a key component of Enterprise Value, as it indicates the company's expected value at the end of the forecasted time. To determine the Terminal Value, a Terminal Growth Rate must be estimated, which is a projected perpetual growth rate that describes the behavior of free cash flows after 2027.

As stated in Chapter 1, this TGR is calculated using the expected behavior of the economy in which the company operates. For this calculation, we obtained an Expected Inflation Rate of 2.04% and an Expected GDP Growth Rate of 1.93%, as estimated by the Statista Website (2024). Applying equation (12), the TGR is 4.01%.

Next, it is possible to estimate a Terminal Value of 34 166 million euros using equation (11) from Chapter 1.

It is possible to compute all the Discounted Cash Flows for the Forecasted Period using this Terminal Value input, leading to the Enterprise Value, which is displayed in Table 4.14. This will be the total future cash flows generated by Benfica SAD, quantified by present value.

Table 4.14. **Benfica Enterprise Value**. Own Estimates.

In Thousands of euros €	2023F	2024F	2025F	2026F	2027F
FCFF	264 210	245 813	303 501	374 728	462 671
Discounted FCFF	250 760	221 424	259 471	304 057	26 311 421
Enterprise Value	27 347 133				

4.2.2. Equity Value

Once the Enterprise Value has been projected, the Equity Value, the company's overall market value, must be determined. It is calculated by adding up all of the non-operating assets and deducting the debt from the enterprise value, as explained in Chapter 1.

When it comes to debt, the combined value of the long-term and short-term debts in 2022 totaled 169 446 thousand euros.

In Non-Operating Assets, the following items from Benfica SAD's balance sheet on the date of the 2022 accounts report were considered: Other Intangible Assets composed mainly of rights to use the brand and computer programs for 47 426 thousand euros, Other Non-Current Assets composed essentially of group companies and related parties totaling 72 800 thousand euros, Other Currents Assets composed essentially of Accrued Income and amounts receivable from the State of 39 138 thousand euros and, lastly, the item Cash and Cash Equivalents in the amount of 28 623 thousand euros.

Equation (13) determines that the Equity Value is 27 365 million euros, as Table 4.15 demonstrates.

Table 4.15. **Benfica Equity Value**. Own Estimates.

Equity Value Inputs	
Enterprise Value	27 347 133
Non Operating Assets	187 987
Debt	169 446
Equity Value	27 365 674

4.2.3. Share Price

After applying the Free Cash Flow to Firm approach to establish the Equity Value, the next stage involves estimating the target price of Benfica SAD's shares by dividing the Equity Value by the total number of outstanding shares in 2022. The result of the computation is 1.190 euros for the share price. Considering that the share's value in 2022 was 3.630 euros, it is reasonable to conclude that Benfica SAD's share is overpriced over the analyzed time.

4.2.4. Sensitivity Analysis

A sensitivity analysis of the share price to important variables like the Terminal Growth Rate and the WACC is performed to enhance the analysis performed using the FCFF method. This analysis is based on other unstable factors as the cost of Debt that affects the WACC or the Expected Inflation Rate Portugal that affects the Terminal Growth Rate that have the potential to affect the behavior of these variables as well as the share price. Previous estimations produced a price per share of 1.190 euros using a Terminal Growth Rate of 4.01% and a WACC of 5.36%.

As Table 4.16 illustrates, both variables were subject to positive and negative fluctuations. Variations of 0.20% will be observed by the Terminal Growth rate, which is less volatile since it depends only on two variables. Conversely, the WACC will experience more noticeable fluctuations of 0.50% because it is influenced by more unpredictable variables that may cause larger fluctuations.

Table 4.16. **Benfica Sensitivity Analysis**. Own Estimates.

Weighted Average Cost of Capital	Terminal Growth Rate							
	1.190	3.01%	3.21%	3.41%	3.61%	3.81%	4.01%	4.21%
	4.86%	0.902	1.006	1.138	1.312	1.552	1.904	2.474
	5.36%	0.704	0.765	0.839	0.929	1.043	1.190	1.389
	5.86%	0.575	0.615	0.662	0.717	0.782	0.861	0.960
	6.36%	0.485	0.513	0.545	0.581	0.623	0.672	0.731
	6.86%	0.419	0.439	0.462	0.488	0.517	0.550	0.588
	7.36%	0.368	0.383	0.400	0.419	0.441	0.464	0.491
	7.86%	0.327	0.339	0.353	0.367	0.383	0.401	0.420

Table 4.17 gives investors the ability to see the influence that various scenarios have on the DCF Benfica SAD share price in these uncertain times. Within the given scenarios, the WACC fluctuates between 4.86% and 7.86%, while the Growth Rate ranges from a minimum of 3.01% to a maximum of 4.21%. Throughout the set of scenarios and variations, the share price can

increase by 107.9% or decrease by 72.5% relative to the DCF valuation price, with a maximum of 2.474 euros per share and a minimum of 0.327 euros per share.

Table 4.17. **Values in % of the Share Price.** Own Estimates.

Weighted Average Cost of Capital	Terminal Growth Rate							
	1.190	3.01%	3.21%	3.41%	3.61%	3.81%	4.01%	4.21%
	4.86%	-24.2%	-15.5%	-4.4%	10.3%	30.5%	60.0%	107.9%
	5.36%	-40.8%	-35.7%	-29.5%	-21.9%	-12.3%	0.0%	16.7%
	5.86%	-51.6%	-48.3%	-44.4%	-39.8%	-34.3%	-27.6%	-19.3%
	6.36%	-59.2%	-56.9%	-54.2%	-51.1%	-47.6%	-43.5%	-38.6%
	6.86%	-64.8%	-63.1%	-61.2%	-59.0%	-56.6%	-53.8%	-50.6%
	7.36%	-69.1%	-67.8%	-66.3%	-64.8%	-63.0%	-61.0%	-58.7%
	7.86%	-72.5%	-71.5%	-70.4%	-69.1%	-67.8%	-66.3%	-64.7%

Essentially, the value of the share price rises as the WACC falls and the TGR rises. Thus, the main conclusion that should be formed, as can be seen from the figures highlighted in green, is that Benfica SAD shares are only a good investment—that is, undervalued—when there is a maximum decrease in the WACC and a maximum increase in the Terminal Growth Rate. It is also possible to conclude that the share is still overvalued in most of the remaining scenarios.

4.3. Relative Valuation

As presented in Chapter 1, Relative Valuation is an alternative method to Discount Cash Flow Valuation that analyzes a company's valuation to other comparable valuations using multiples of companies in the same industry or sector.

This methodology's initial step is to determine the peer group by identifying a benchmark of organizations that have a business model identical to Benfica SAD. The second stage is to determine which multiples will be used in this relative valuation, which will be the Price-to-Earnings Ratio, Enterprise Value/EBITDA, and Price-to-Book Value.

A Peer Group consisting of nine organizations was selected for analysis using this methodology, as indicated in Table 4.18. The Bloomberg Terminal (2024) was the source of all the information for these companies, and it pertains to the years 2022–2023. More information on the Bloomberg Peer Group for Benfica SAD can be found in *Appendix B, Appendix F, Appendix G* and *Appendix H*. For some companies, it was not possible to obtain the values of some multiples.

Table 4.18. **Peer Group and Multiples analysis**. Bloomberg & Own Estimates

Company	Country	P/E Ratio	EV/EBITDA	PBV
Futebol Clube do Porto	Portugal	-	21.61	-
Sporting Clube de Portugal	Portugal	4.61	3.01	13.03
Sporting Clube de Braga	Portugal	1.19	0.87	0.39
Celtic PLC	Scotland	-	-	1.30
AFC Ajax NV	Netherlands	-	3.80	0.70
Eagle Football Group	France	-	30.10	3.90
Juventus Football Clube SpA	Italy	-	14.10	10.30
Manchester United plc	England	-	13.80	13.50
Borussia Dortmund GmbH & Co KG	Germany	13.40	4.10	1.20
Average		6.40	11.42	5.54
Standard Deviation		6.30	10.41	5.75
Average + Standard Deviation		12.70	21.84	11.29
Average - Standard Deviation		-6.30	-10.41	-5.75
Average Excluding Outliers		2.90	8.76	2.97

Proceeding with the analysis, a range of values was determined for each multiple, allowing for the identification of outliers, or values outside of this range, by defining an average and a standard deviation of that average for each multiple. This allowed the definition of a new average for each multiple.

For the Price-to-Earnings Ratio multiple, there is no 2022 data for six of the nine businesses, and one outlier was eliminated from the research, generating a ratio of 2.90. For the EV/EBITDA multiple, one of the nine firms has no data for 2022, and one was excluded from the research, yielding an 8.76 multiple. Lastly, the Price-to-Book Value multiple was adjusted to exclude two outliers, providing a multiple of 2.97.

Table 4.19. **Relative Valuation**. Own Estimates

	P/E Ratio Valuation	EV/EBITDA Valuation	PBV Valuation
Peer Group Multiple	2.90	8.76	2.97
Benfica SAD: Net Income (In Thousands of euros €)	4 213	-	-
Benfica SAD: EBITDA (In Thousands of euros €)	-	61 309	-
Benfica SAD: Equity (In Thousands of euros €)	-	-	113 215
Enterprise Value (In Thousands of euros €)	-	536 804	-
Equity Value (In Thousands of euros €)	12 217	536 822	335 682
Outstanding Shares	23 000 000	23 000 000	23 000 000
Benfica SAD Share Price	0.53	23.34	14.59

According to the data presented in Table 4.19, it is evident that out of the three multiples examined, two imply a significant undervaluation of the stock, and the other suggests an overvaluation. With a share price of 0.53 euros according to the Price-to-Earnings Ratio, the stock appears to be 3.10 euros overpriced in comparison to its real June 2023 share price. This suggests that the present stock price is inflated concerning earnings, which is consistent with the valuation outcome obtained by the Discounted Cash Flow approach.

On the other hand, the Price-to-Book and EV/EBITDA multiples present an entirely different scenario. At 23.34 euros, the EV/EBITDA multiple displays a share price that is 542% above the actual price in June 2023. Given its enterprise value, this implies a significant undervaluation and suggests that investors could not properly appreciate the company's earnings potential. Comparing the share's market value to the book value of its assets, the Price-to-Book ratio also reveals a price of 14.59 euros, which is 302% greater than the price noted in June 2023. This data further supports the perception that the shares are undervalued.

4.4. Discussion of Results and Final Recommendations

Benfica SAD was valued using two separate methodologies: the Discounted Cash Flow approach and Relative Valuation, both of which provide different takes on the company's and its shareholders' value. The different results are illustrated in Figure 4.1.

The DCF approach offers a comprehensive and well-founded understanding of Benfica SAD's intrinsic value by considering the company's capacity to generate future cash flows. A Terminal Value of 34 166 million euros might be estimated by using a Terminal Growth Rate of 4.01%, which was determined based on projections for GDP growth and inflation. A critical Enterprise Value was produced by adding this value to the projected cash flows for the forecast period. An equity value of 27 365 million euros was determined by deducting the debt and adding the non-operating assets. The equity value divided by the total number of outstanding shares generates a share price of 1.190 euros. This is a significant decrease from the market price of 3.630 euros per share that was recorded in 2022, which result indicates that Benfica SAD's shares were overvalued in the period analyzed.

Mixed results were obtained from the Relative Valuation, which used market multiples to compare the company to comparable businesses. In contrast to the price of the shares in June 2023, the Price-to-Earnings multiple of 0.53 euros per share suggested that the shares were overvalued. However, the Price-to-Book Value and EV/EBITDA multiples showed the opposite picture. Both the P/B multiple and the EV/EBITDA multiple pointed to prices for the shares that were far below the market price, 23.34 euros and 14.59 euros, respectively, and significantly higher than the market price. Results suggest that Benfica SAD's shares may be cheap from certain market views, but the multiples are unable to come to a unanimous conclusion.

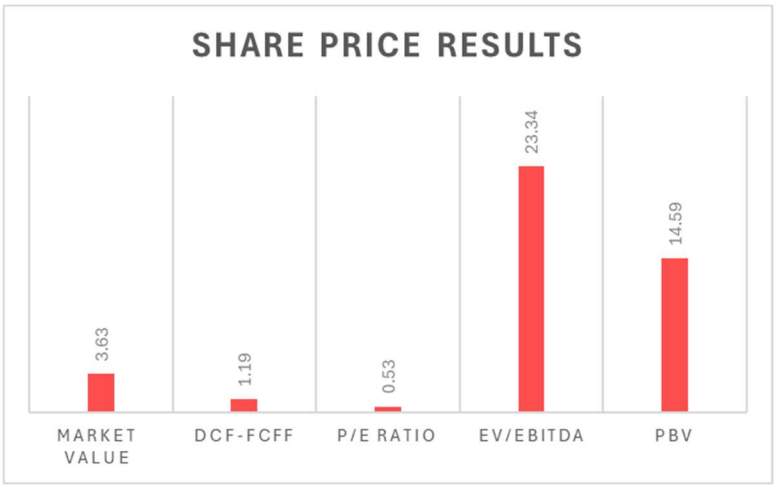

Figure 4.1. **Share Price comparison between different approaches and Market Value**. Own Estimates

The final recommendation should consider each method's advantages and disadvantages based on the examination of the two valuation techniques. The DCF approach should be given greater consideration in the end because it determines intrinsic value based on evidenced cash flow projections. The different results across the multiples indicate that there is an array of market uncertainty regarding the accurate value of Benfica SAD's shares, even though the Relative value provides insightful comparisons with the market.

Therefore, caution is advised based on the DCF analysis, which indicates a significant overvaluation of the shares in 2022. A cautious approach should be taken when providing advice, recommending either selling or retaining existing shares instead of making new purchases, until the market price more closely matches the projected intrinsic value of 1.190 euros per share. The underlying assumption of this proposal is that the market will eventually correct these disparities and bring the share price back on track with its intrinsic worth.

Conclusion

The primary goal of the document detailed equity valuation of Benfica SAD was to determine the shares fair value as of June 30, 2023. Two methods were used, the Discounted Cash Flow approach, which determines the value of the shares based on Benfica SAD future cash flows discounted at a rate that reflects the company risk, and Relative Valuation, which utilizes multiples of businesses with comparable characteristics to understand the value of Benfica SAD. Therefore, the main objective was to evaluate and determine whether the shares were overvalued, undervalued, or fairly valued.

Additionally, an overview of the company business during the previous five years was provided, as evidenced by the rise in revenues following the epidemic. The company financial health, however, was under considerable strain because of a corresponding increase in operational expenses and increased reliance on debt. This debt growth indicated some fragility in the capital structure of Benfica SAD.

As for the limitations, cash flows were forecasted using the FCFF approach in the DCF method based on assumptions that were adjusted to reflect Benfica SAD's actual situation and the present trajectory of the world economy. The subjectivity of the assumptions, which are all speculative inputs and have a significant influence on the result, should be taken into account. The study's difficulties originated from the COVID-19 pandemic, which affected previous years' data, such as 2018 and 2019. Furthermore, the oil crisis and the invasion of Ukraine contributed to economic instability, with soaring inflation.

Regarding the valuation, the shares were overpriced in the market since the value determined using the Discounted Cash Flow technique was 1.190 euros per share, much less than the market price of 3.630 euros on June 30, 2023. Two of the three multiples in the relative valuation provided a significant valuation for the shares of Benfica SAD, while the third multiple matched the outcome of the Discounted Cash Flow approach. The sensitivity analysis also showed that the shares would only have been undervalued in scenarios where the WACC decreased considerably, and the terminal growth rate increased.

Benfica SAD shares were overvalued, and investors were advised to exercise caution regarding investments at present market levels unless there are advantageous adjustments in the economic environment and particularly in the company strategic approach.

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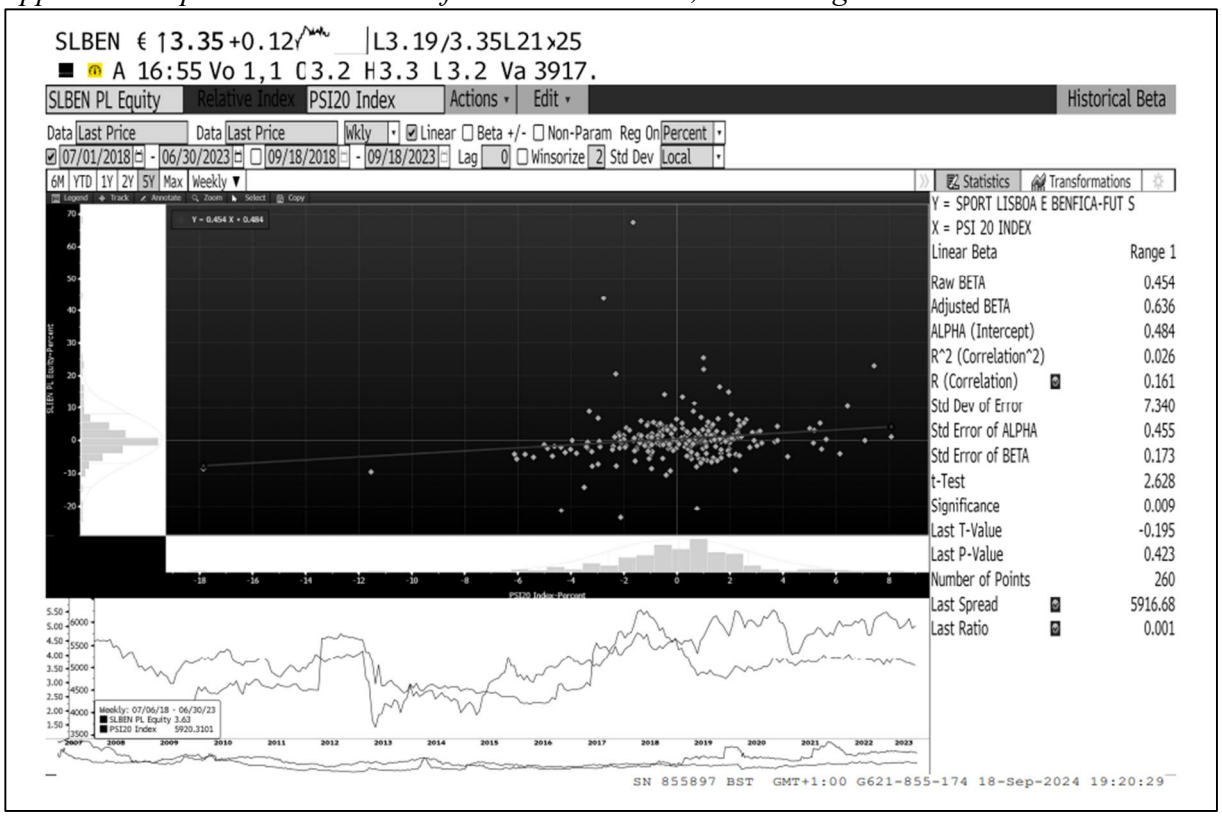
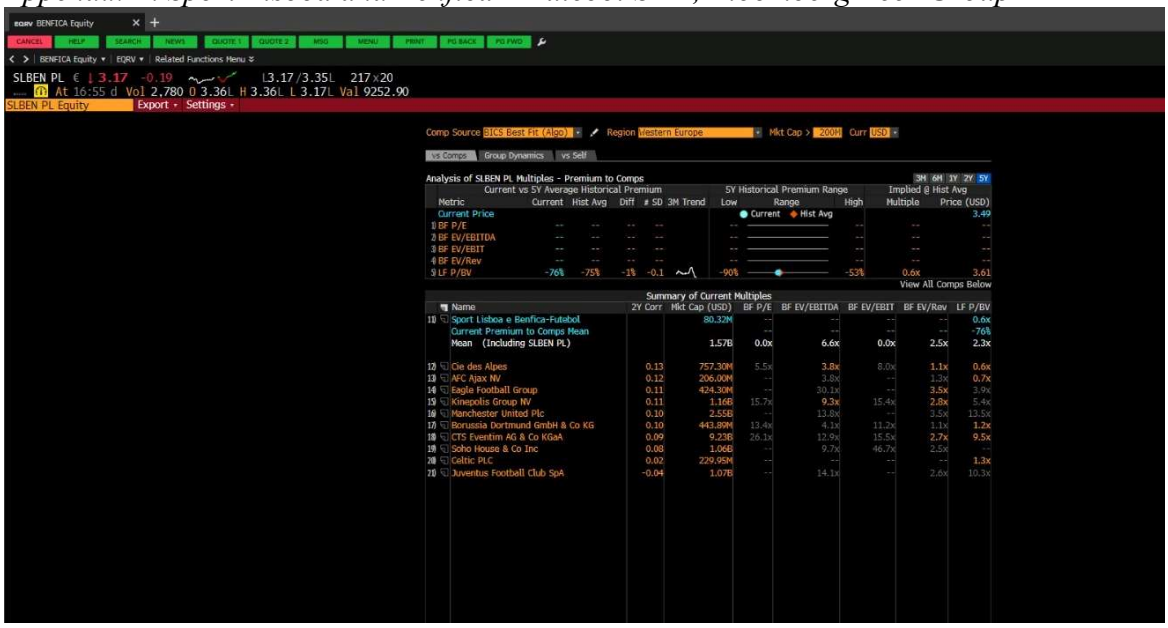
Appendixes

Appendix A. Sport Lisboa and Benfica – Futebol SAD, Bloomberg Betas



Appendix B. Sport Lisboa and Benfica – Futebol SAD, Bloomberg Peer Group



Appendix C. Historical Balance Sheet 2018, 2019, 2020, 2021, 2022

Balance Sheet					
In Thousands of euros €	**2018**	**2019**	**2020**	**2021**	**2022**
Non-Current Assets					
Tangible Assets	34 529	108 771	108 108	103 469	98 359
Intangible Assets - Football Squad	80 426	102 884	146 162	111 866	126 462
Other Intangible Assets	53 774	52 166	50 438	48 843	47 426
Accounts receivable	48 844	24 168	23 329	51 769	47 948
Other Non-Current Assets	51 309	103 083	74 694	74 280	72 800
Deferred Taxes	4 317	1 350	18 209	24 834	27 504
Total Non-Current Assets	273 199	392 422	420 940	415 061	420 499
Current Assets					
Accounts receivable	74 674	63 146	31 653	70 057	69 572
Other Current Assets	20 387	26 172	26 595	24 545	39 138
Cash and Cash Equivalents	16 295	5 326	44 072	24 069	28 623
Non-Current assets held for sale	99 297	0	0	0	0
Total Current Assets	210 653	94 644	102 320	118 671	137 333
Total Assets	483 852	487 066	523 260	533 732	557 832
Non-Current Liabilities					
Provisions	1 415	2 967	1 480	1 025	25
Post-employment benefits liabilities	2 381	2 045	2 162	198	190
Borrowings (Long term Debt)	92 940	66 177	53 694	145 342	143 838
Derivative financial instruments	1 470	858	383	45	0
Accounts Payable	8 390	17 243	51 071	49 873	73 538
Other Non-Current Liabilities	103 492	89 077	73 813	57 228	41 956
Total Non-Current Liabilities	210 088	178 367	182 603	253 711	259 547
Current Liablities					
Borrowings (Short term Debt)	52 401	31 903	91 285	25 815	25 608
Derivative financial instruments	739	612	480	233	15
Accounts Payable	46 213	50 241	58 344	85 032	103 249
Other Current Liabilities	55 178	64 794	46 894	59 927	56 198
Total Currents Liabilities	154 531	147 550	197 003	171 007	185 070
Total Liabilities	364 619	325 917	379 606	424 718	444 617
Equity					
Share Capital	115 000	115 000	115 000	115 000	115 000
Capital issued premium	122	122	122	122	122
Legal Reserves	0	205	2 290	2 290	2 290
Accumulated Earnings	-23 926	4 117	43 622	26 619	-8 410
Net Income	28 037	41 705	-17 380	-35 017	4 213
Total Equity	119 233	161 149	143 654	109 014	113 215
Total Equity and Liabilities	483 852	487 066	523 260	533 732	557 832

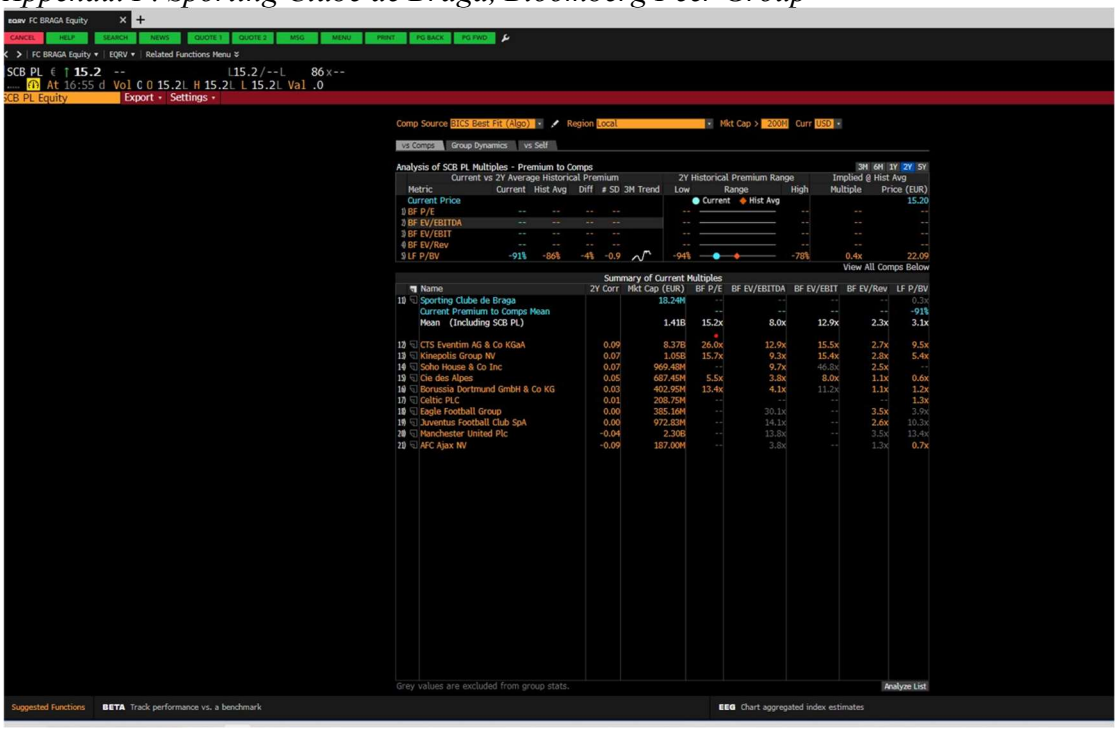
Appendix D. Historical Income Statement 2017, 2018, 2019, 2020, 2021, 2022

Income Statement					
In Thousands of euros €	**2018**	**2019**	**2020**	**2021**	**2022**
Revenues					
Television Rights	101 054	87 281	65 686	113 520	125 197
Commercial Activities	30 886	30 518	27 886	30 554	36 682
Game Revenues	13 530	22 155	459	25 263	33 918
Total Turnover	145 470	139 954	94 031	169 337	195 797
COGS					
Supplies and External Services	-54 110	-72 663	-46 206	-67 692	-82 106
Wages and Salaries	-88 253	-85 660	-97 061	-112 576	-114 698
Depreciation and Amortization	-4 038	-8 208	-8 266	-8 280	-8 156
Provisions and Impairment Losses	267	-2 968	-1 420	-1 892	-306
Other Operating Losses	-596	-2 416	-1 514	-1 952	-1 095
Total Costs	-146 730	-171 915	-154 467	-192 392	-206 361
Operating Profit without athletes rights	-1 260	-31 961	-60 436	-23 055	-10 564
Income from athlete rights transactions	91 351	145 154	100 016	64 211	88 915
Expenses from the sale of athletes rights	-21 306	-19 439	-12 458	-22 610	-25 198
	70 045	125 715	87 558	41 601	63 717
Amortisation and impairment losses of athletes rights	-36 167	-39 787	-52 239	-50 128	-39 413
Operating Profit	32 618	53 967	-25 117	-31 582	13 740
Financial Income and Gains	4 823	9 319	9 876	6 648	5 521
Financial Expenses and Losses	-15 580	-16 793	-18 780	-16 599	-17 458
Profit from investments in subsidiaries	2 787	0	0	0	0
Financial result	-7 970	-7 474	-8 904	-9 951	-11 937
Profit before tax	24 648	46 493	-34 021	-41 533	1 803
Income Taxes	3 389	-4 788	16 641	6 516	2 410
Net Profit for the Period	28 037	41 705	-17 380	-35 017	4 213
Earnings per share basic/diluted (euros)	1.22	1.81	-0.76	-1.52	0.18

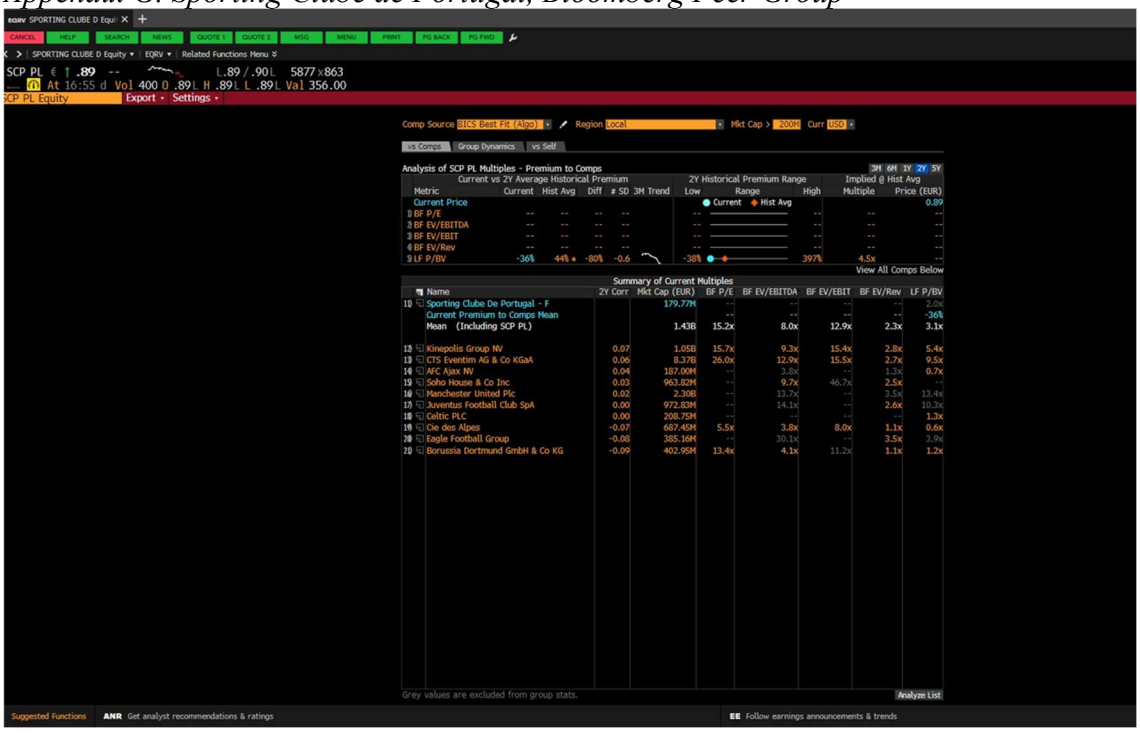
Appendix E. Historical Cash Flow Statement 2018, 2019, 2020, 2021, 2022

Cash Flow Statement					
In Thousands of euros €	**2018**	**2019**	**2020**	**2021**	**2022**
Operating Activities					
Collections from clients	103 175	70 355	71 104	78 896	85 622
Payments to suppliers	-79 167	-106 991	-79 749	-61 106	-92 609
Payments to Employees	-84 530	-74 203	-95 365	-103 231	-108 906
Cash generated by operations	**-60 522**	**-110 839**	**-104 010**	**-85 441**	**-115 893**
Payments/Receipts relating to income taxes	625	-24	506	238	92
Other Cash Receipts /Payments related with Operating Activities	44 773	51 275	20 583	52 098	70 334
Cash Flow from Operating Activities	**-15 124**	**-59 588**	**-82 921**	**-33 105**	**-45 467**
Investing Activities					
Cash Receipts resulting from:					
Intangible Assets	84 247	201 242	126 080	43 332	154 821
Other Financial Assets	28	2 787	27 497	0	0
Payments resulting from:					
Tangible Assets	-11 488	-5 101	-2 783	-1 998	-1 293
Intangible Assets	-51 888	-72 796	-69 948	-47 744	-93 505
Other Financial Assets	-921	-799	-664	-534	-317
Cash Flow from Investing Activities	**19 978**	**125 333**	**80 182**	**-6 944**	**59 706**
Financing Activities					
Cash Receipts resulting from:					
Borrowings	0	5 000	50 000	95 000	22 141
Interest	112 438	28 115	0	0	0
Payments resulting from:					
Interest and related expenses	-9 393	-6 079	-6 002	-8 718	-9 826
Borrowings	-96 285	-74 750	-2 513	-66 189	-22 000
Lease Rentals	-61	-29 000	0	-47	0
Cash Flow from Financing Activities	6 699	-76 714	41 485	20 046	-9 685
Change in Cash and Cash Equivalents	11 553	-10 969	38 746	-20 003	4 554
Cash and Cash Equivalents at the beginning of the period	4 742	16 295	5 326	44 072	24 069
Cash and Cash Equivalents at the end of the period	16 295	5 326	44 072	24 069	28 623

Appendix F. Sporting Clube de Braga, Bloomberg Peer Group



Appendix G. Sporting Clube de Portugal, Bloomberg Peer Group



Appendix H. Futebol Clube do Porto, Bloomberg Peer Group