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Equity Research:
Borussia Dortmund GmbH & Co KGaA



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Statement of authorship of the work

I declare to be the author of this work, which is unique and unprecedented. Authors and works consulted are properly cited in the text and are included in the listing of references.

Dennis Dudek

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RESUMO

Este trabalho oferece uma análise abrangente do valor do Borussia Dortmund, uma empresa de destaque no cenário internacional do futebol, com o objetivo de fornecer insights cruciais a potenciais investidores. Integrando metodologias qualitativas e quantitativas, este estudo destaca a robustez financeira do clube e sua posição no mercado.

No contexto dinâmico da indústria do futebol, caracterizada pela era digital e globalização, o Borussia Dortmund posicionou-se de forma estratégica através do desenvolvimento de marca e alcance internacional. As principais forças do Borussia Dortmund – desempenho competitivo consistente, solidez financeira, uma base de adeptos leal e abrangente, e uma forte identidade de marca – são examinadas minuciosamente. A análise também aborda desafios como dinâmicas competitivas de mercado e incertezas regulatórias que exigem visão estratégica e adaptabilidade.

A marca consolidada e a presença global do Dortmund delineiam seu panorama estratégico, contrabalanceados pela volatilidade do mercado de transferências e pela intensa rivalidade. Este trabalho explora ainda áreas estratégicas, como as oportunidades apresentadas por novos formatos e competições internacionais. A discussão dessas oportunidades é apresentada no contexto das restrições impostas pela "regra 50+1" da Alemanha, uma característica específica do futebol alemão. Este projeto explora as peculiaridades econômicas e financeiras do setor do futebol, destacando a característica única do Dortmund em estabelecer parcerias internacionais enquanto preserva sua identidade central.

A análise de desempenho e os dados financeiros subjacentes são baseados em diversas métricas financeiras, incluindo a análise do balanço patrimonial, demonstração dos resultados e demonstração dos fluxos de caixa. A utilização de abordagens de avaliação intrínseca e relativa oferece uma perspectiva holística sobre a posição financeira do Dortmund, permitindo uma compreensão aprofundada de seus riscos e oportunidades a longo prazo. A metodologia robusta utilizada neste estudo fornece uma base sólida para as decisões de investimento, destacando a importância da gestão estratégica num ambiente competitivo e em constante evolução.

A análise SWOT do Borussia Dortmund revela pontos fortes significativos, como um histórico consistente de desempenho em campo, uma base de fãs global e sólida gestão financeira. No entanto, também são identificadas fraquezas, incluindo a dependência do sucesso desportivo e a volatilidade do mercado de transferências. As oportunidades para o Dortmund incluem a

expansão internacional, especialmente nos mercados asiáticos e norte-americanos, e o aumento do envolvimento digital e de e-sports. As ameaças envolvem mudanças económicas e regulatórias globais, além da intensa competição de clubes com forte poder financeiro, particularmente na Premier League.

A adaptação às novas formas de competição, como a “Kings League” na Espanha e a “Ballers League” na Alemanha, apresenta caminhos inovadores para engajar audiências mais jovens e diversificar as fontes de receita. A presença em novas competições internacionais, como a Copa do Mundo de Clubes da FIFA, especialmente com a edição inaugural nos EUA, alinha-se aos objetivos estratégicos do Dortmund para penetração no mercado americano, apoiados pelo seu escritório estabelecido em Nova York e histórico de jogos particulares bem-sucedidos nos EUA.

A diversificação das fontes de receita é um aspecto crucial da estratégia do Borussia Dortmund, abrangendo áreas como merchandising, direitos de transmissão, patrocínios e eventos. O clube tem investido significativamente na infraestrutura digital, visando aumentar o engajamento dos fãs e criar novas oportunidades de monetização. As plataformas digitais permitem ao Dortmund alcançar um público global, oferecendo conteúdos exclusivos e experiências interativas que reforçam a lealdade dos adeptos.

O estudo destaca a importância das práticas sustentáveis e da responsabilidade social, que não só atendem às expectativas dos investidores, mas também reforçam a imagem de marca do Dortmund. A adoção de práticas sustentáveis pode abrir novas oportunidades de patrocínio e aumentar a atratividade da marca, contribuindo para um crescimento sólido e sustentável a longo prazo. O Borussia Dortmund está comprometido com a redução de sua pegada de carbono, o uso de energia renovável e iniciativas comunitárias que promovem a inclusão social e o desenvolvimento local.

O Borussia Dortmund também explora parcerias estratégicas com empresas tecnológicas para inovar em áreas como análise de dados e saúde dos atletas. O uso de tecnologias avançadas para monitorização de desempenho e prevenção de lesões não só melhora os resultados desportivos, mas também protege os ativos mais valiosos do clube – seus jogadores. Além disso, a análise de big data permite ao Dortmund otimizar operações e estratégias de marketing, proporcionando uma vantagem competitiva no mercado global.

A participação ativa em ligas e federações de futebol também oferece ao Borussia Dortmund uma plataforma para influenciar políticas e regulamentos que afetam a indústria. Ao colaborar

com outras entidades, o Dortmund pode ajudar a moldar um ambiente mais justo e sustentável para todos os clubes de futebol. Este papel de liderança reforça a posição do Dortmund como uma organização respeitada e influente, comprometida com a melhoria contínua e a inovação.

Além disso, o Borussia Dortmund está continuamente explorando novas oportunidades para expandir sua marca globalmente. Isso inclui iniciativas de desenvolvimento de jovens talentos em academias internacionais e parcerias com clubes locais para fomentar o crescimento do futebol em diferentes regiões. Essas iniciativas não apenas fortalecem a base de talentos do clube, mas também ampliam sua influência e presença global, consolidando sua posição como um líder no cenário mundial do futebol. A dedicação à formação de jovens talentos e ao desenvolvimento das academias também reflete o compromisso do clube com o crescimento sustentável e a continuidade de seu legado no futebol.

Os dados quantitativos e qualitativos permitem sustentar os pressupostos de uma avaliação do valor do Borussia Dortmund tendo por base a técnica dos fluxos de caixa descontados (DCF). O cenário base desta avaliação assenta em rendimentos previstos de 435 milhões de euros em 2024 e uma taxa de crescimento esperada de 4% nos próximos cinco anos, entre outros pressupostos considerados conservadores. Neste cenário base, o valor justo estimado para o Borussia Dortmund é de aproximadamente 420 milhões de euros, ou 3.82 euros por ação. Esta avaliação está em conformidade com a atual cotação das ações de 3.60 euros em 14 de março de 2024, mas representa uma ligeira diminuição em relação aos últimos números relatados no relatório financeiro do ano que terminou em 30 de junho de 2023.

Palavras-chave: Borussia Dortmund; Avaliação de Empresas; Fluxos de caixa descontados (DCF); Análise Comparativa; Indústria do futebol; Finanças desportivas; Sustentabilidade; Estratégias de mercado; Desenvolvimento de talentos; Expansão global; Formação de jovens.

ABSTRACT

This master project provides a comprehensive equity analysis of Borussia Dortmund, a distinguished figure in the international football arena, aimed at enlightening potential investors with critical insights. By integrating qualitative and quantitative methodologies, this study sheds light on the club's financial vitality and standing in the market.

Amid the evolving landscape of the football industry, characterized by digital engagement and globalization, Borussia Dortmund has adeptly positioned itself through strategic brand development and international outreach. The core strengths of Borussia Dortmund - consistent competitive performance, financial solidity, a wide-reaching loyal fan base, and a potent brand identity - are thoroughly examined. The analysis also addresses challenges such as competitive market dynamics and regulatory uncertainties that require strategic vision and adaptability. Dortmund's established brand and global presence outlines its strategic landscape, counterbalanced by its susceptibility to the volatile transfer market and intense rivalry. The analysis also shows strategic domains like the potential the opportunities presented by new formats and international competitions. The exploration of these opportunities is set against the backdrop of the constraints imposed by Germany's "50+1 rule", a distinctive feature of German football. Therefore, this project also sheds light on the economic and financial peculiarities of the football sector, illustrating Dortmund's unique skill in establishing global partnerships while preserving its core identity.

The quantitative and qualitative data support the assumptions of a valuation of Borussia Dortmund based on the discounted cash flow (DCF) technique. The base scenario of this valuation relies on projected revenues of €435 million in 2024 and an expected growth rate of 4% over the next five years, among other conservative assumptions. In this scenario, the estimated fair value for Borussia Dortmund is approximately €420 million, or €3.82 per share. This valuation is consistent with the current share price of €3.60 as of March 14th, 2024, yet represents a slight decrease from the last reported figures in the financial report for the year ending June 30, 2023.

Keywords: Borussia Dortmund; Equity research; Valuation; Discounted-cash-flow (DCF); Comparative Analysis; Football industry; Sports finances.

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ABBREVIATIONS LIST

AG	A company limited by shares in Germany (“Aktiengesellschaft”)
APV	Adjusted Present Value
BVB	Ballspielverein Borussia 09 e. V. Dortmund
CAPEX	Capital Expenditures
CAPM	Capital Asset Pricing Model
COGS	Cost of Goods Sold
D&A	Depreciation and Amortization
DCF	Discounted Cash Flow
DFB	German Football Association (“Deutscher Fußball-Bund“)
DFL	German Football League (“Deutsche Fußball Liga“)
EBIT	Earnings Before Interests and Taxes
EBITDA	Earnings Before Interest Taxes Depreciation and Amortization
EPS	Earnings per Shares
EV	Enterprise Value
EVA	Economic Value Added
FCFF	Free Cash Flow to Firm
FCFE	Free Cash Flow to Equity
FIFA	Fédération Internationale de Football Association
NWC	Net Working Capital
OCF	Operating Cash Flow
OOE	Other Operating Expenses
P/E	Price/Earnings Ratio
P/S	Price/Sales Ratio
ROA	Return on Assets
ROE	Return on Equity
SWOT	Strengths Weaknesses Opportunities and Threats
TV	Terminal Value
UEFA	Union of European Football Associations
WACC	Weighted Average Cost of Capital
WC	Working Capital
YOY	Year-over-year

1 INTRODUCTION

"The valuations of football clubs on the stock market are mainly linked to the brand, and this is built over the long term. [...] Its objective is to maximize the revenues [...] and, ultimately, to reduce dependence on simple sports results."

(Francese & De Leudeville, 2021)

Equity analyst De Leudeville, in his 2021 assessment, highlighted that football, despite its enduring gameplay, has transformed into a formidable entertainment phenomenon. The financial aspects of this "beautiful game" have surged to prominence. De Leudeville pointed out that a club's value is closely tied to its brand, which mirrors the industry's trend towards reduced reliance on weekly match outcomes.

For instance, consider the European football market's remarkable growth in revenue, surging by 48% from the 2011/12 to the 2018/19 season (Deloitte, 2022). Despite the challenges posed by the COVID-19 pandemic and fluctuating attendance, the industry demonstrated resilience, with revenues rebounding by 10% from 2019/20 to 2020/21.

Borussia Dortmund, a pioneer in embracing financial strategies beyond the pitch, offers a captivating example. By going public, the club started a journey that involves reporting on its financial health, akin to other listed companies. This transformation highlighted a new era where clubs must navigate the complexities of brand management, player investments, and diversified revenue streams. As Tottenham Hotspur led the way as the first football club to issue shares in 1983, others soon followed suit, setting the stage for an industry that blends athleticism with financial acumen (Renneboog & Vanbrabant, 2000).

This project conducts a thorough analysis of Borussia Dortmund's financial performance and valuation, offering a detailed examination of its equity. The objectives encompass a valuation based on robust assumptions, performance measurement, and understanding the multifaceted relationships within financial metrics. Beyond the numbers, there are managerial dynamics, explaining the intricate structures and processes that shape Borussia Dortmund's financial landscape.

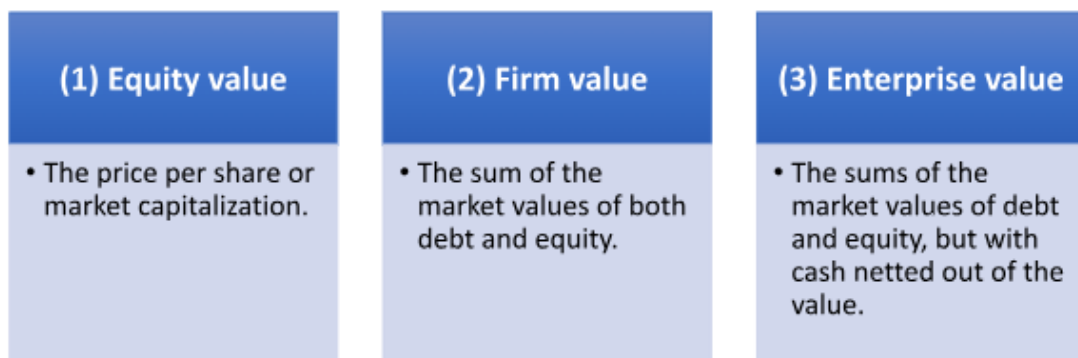
This project is organized as follows. Chapter two provides a comprehensive valuation overview, focusing on the football industry and establishing a robust technical and theoretical foundation. Chapter three outlines the data collection process, allowing for an understanding of Borussia Dortmund's competitive environment and presenting the methodology that underpins this project. Chapter four analyses both financial and non-financial data to assess long-term business risks and opportunities, aiming to elucidate the core of the football club as a thriving economic entity. Additionally, this chapter utilizes various valuation methods, including intrinsic and relative approaches, to offer a holistic perspective on Dortmund's financial standing and to assess the business's value. The findings are presented through a comparative analysis, shedding light on the research's contributions and implications. Chapter five presents the project's discussion and conclusions.

2 VALUATION OVERVIEW

2.1 Importance of Valuation on Management

The valuation of a football club requires identifying and employing different approaches to assess the business's worth. According to Damodaran (2011: 49), three different types of financial values are used to compare businesses.

Figure 2.1: Types of Financial Values



Source: own illustration based on Damodaran (2011)

The Equity value (1) is calculated by multiplying the current market price per share by the number of shares outstanding. In addition, it includes expectations of the future, as it reflects investors' expectations about the company's future performance. In contrast, the

Firm value (2) considers all the company's liabilities and assets and is used to measure the performance and potential of a company. The Enterprise value (3) does not include the cash compared to the Firm value (Koller et al., 2020).

For Harper (2024), the actual price of a company is determined by the forces of supply and demand in the stock market. When investors exhibit high demand for a company's stock, the stock price will rise, whereas a decrease in demand will lead to a decline in the stock price. The stock price also reflects the market's perception of a company's current and future performance, including earnings, revenue, and growth prospects. A famous quote by Warren Buffet is, "price is what you pay, value is what you get" (Pöhner, 2019). The renowned investor means that the value of a company does not have to correspond to its share price and that the value of a company does not have to be the share price. Buffet implies that the share price is the price an investor must pay to get the share, but the share's value may differ.

In a favourable scenario, an example of how a company's stock price can change is when the company announces positive financial results or a significant acquisition. For instance, if a football club announces a significant increase in ticket sales or the signing of a star player, it can lead to a rise in demand for the club's stock and a consequent increase in the stock price (Cunha & Hagen, 2019: 39). In an unfavourable scenario, an example of how a company's stock price can change would be if the company is adversely affected by external factors such as economic downturns, political instability, or natural disasters. For instance, in 2020, with the COVID-19 pandemic, a worldwide health crisis suddenly arrived. An illustrative case is that of Juventus Football Club, whose stock price was adversely affected by the COVID-19 pandemic. According to a Forbes report, the Italian football giant's stock price plummeted by nearly 15% in the initial stage of the pandemic due to the suspension of sports events and the resulting negative impact on revenues (Galardini, 2020).

Many other factors can affect companies' stock prices, including market sentiment, interest rates, and other economic indicators. Furthermore, the market is not always rational, so the stock price does not always reflect the company's performance and is subject to fluctuations (Graham, 2003).

A manager needs to understand the stock value as it can provide valuable information on the company's performance and be used to make decisions such as fundraising, mergers, and acquisitions, as well as to attract potential investors. Additionally, a manager should be aware of the stock value as it can indicate how well the company performs in the stock market and how investors perceive it. Finally, as a business manager, it is crucial to understand the company's value to make informed decisions (Ting et al., 2021).

There are several reasons a manager should be aware of their company's valuation: First, it can be used as a benchmark to measure performance and identify areas for improvement. A company with a higher valuation is generally considered more successful and profitable than one with a lower valuation (Damodaran, 2011).

Additionally, a firm's valuation is essential when raising capital. Investors and lenders will often use a company's valuation to determine the amount of funding they are willing to provide. A higher valuation can also lead to more favourable terms for the company, such as lower interest rates or a higher share of ownership for the same amount of funding. Furthermore, a company's valuation is essential in mergers and acquisitions. A higher valuation can make the company more attractive to potential acquirers and can be used to negotiate more advantageous conditions in the event of a purchase. It is also essential to be aware of the company's valuation in the stock market as it can benefit shareholders. In addition, a higher valuation can also signal to potential investors that the company is a good investment opportunity (Koller et al., 2020).

All of this is critically important for managers of football clubs that are publicly traded on the stock market. They need to understand the firm's valuation for several reasons: First, a firm valuation can be used as a benchmark to measure the club's performance. The club's valuation can be compared to other football clubs in the same league or similar size to see if it performs well relative to its peers. For example, if the club has a higher valuation than other clubs in the league, it may indicate that more successful or profitable. Additionally, the club's valuation is essential for raising capital. The club may need to raise funds for various purposes, such as player transfer, stadium expansion, or general operation. If the club has a higher valuation, it may be able to raise more capital on more favourable terms. This could involve obtaining lower interest rates or securing a larger

share of ownership for the same amount of funding. This can help the club to improve its performance and become more competitive (Renneboog & Vanbrabant, 2000).

Furthermore, the club's valuation is also essential in mergers and acquisitions. If the club has a higher valuation, it may be more attractive to potential acquirers. For instance, according to Whitwell (2022), Manchester United was an "attractive proposition [...] for potential buyers due to the scale of Old Trafford [the Stadium, ed.] and their worldwide commercial pull." The case of Manchester United indicates that a higher valuation could show that the club has a strong brand, a dedicated fan base and owns valuable assets, such as property. These attractive attributes could make the club more appealing to potential acquirers.

In summary, it is crucial to understand the firm's valuation. As a football club manager, it can provide valuable information on the club's financial performance, funding options, and potential acquisition opportunities and attract more investors. This project employs various valuation models to establish a realistic valuation range for Borussia Dortmund. It's crucial to acknowledge that valuations are susceptible to rapid shifts due to corporate earnings and economic factors, necessitating periodic revaluation (Damodaran, 2011). Additionally, valuation, though quantitative, inherently involves subjective assumptions. These subjective elements are explored further in Section 4.5, emphasizing the need to consider these factors in the analysis.

2.2 Valuation Methods

Valuation, a critical aspect of management and investment decision-making, combines quantitative analysis with qualitative judgment. It is influenced by the analyst's biases and preconceptions, which significantly shape the valuation outcome. Damodaran (2012: 9) aptly notes, "Valuation is not an objective exercise and any preconceptions and biases that an analyst brings to the process will find their way into value". This statement underscores the inherent subjectivity in valuation, particularly in entities like football clubs where emotional and brand values play a significant role.

Valuation's inherent subjectivity is emphasized by various experts. Lundén & Ohlsson (2007: 7) highlight, "Business valuation is not a precise science; the value of a company

determines subjectively...”. This perspective aligns with Fernández’s observations on common valuation errors, where biases and misconceptions lead to value misinterpretations. Fernández (2007: 85-91) argues that valuation processes often overlook the dynamic nature of businesses, especially in industries like sports.

In contemporary finance, a variety of valuation methods exists, each tailored to specific contexts and objectives. However, as outlined by Soffer & Soffer (2003), the business valuation process integrates various disciplines including business analysis, accounting, financial analysis, forecasting, and the application of specific valuation models to ascertain the intrinsic value of a business.

Business Analysis

The initial phase of business valuation is a thorough business analysis, where both quantitative and qualitative evaluations are employed. This extensive examination covers the company's operational environment, including industry dynamics, competitive landscape, product offerings, research and development, human resources, and marketing strategies. The objective of this phase is to uncover all elements that contribute to value creation within the company, setting the stage for a detailed valuation.

Accounting Analysis

Following the business analysis, the accounting analysis phase scrutinizes the company's financial health through an in-depth review of its accounting records and financial statements. This step is pivotal in laying the groundwork for understanding the financial position and historical performance of the company, which are critical for accurate valuation.

Financial Analysis

Building on the accounting numbers, the financial analysis phase further examines the company's financial data. By analysing operating metrics and financial ratios, this phase aims to comprehensively evaluate the company's financial performance and health, focusing on profitability, liquidity, leverage, and operational efficiency.

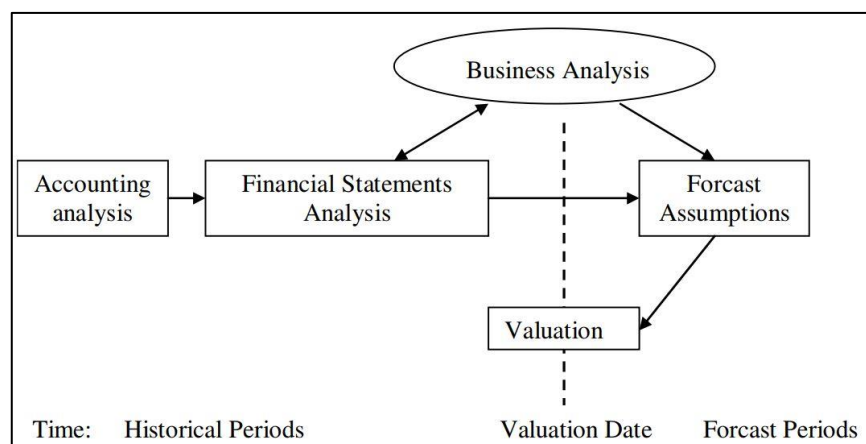
Forecasting

The forecasting phase involves projecting the company's future financial performance. Utilizing historical data, current trends, and comprehensive industry analysis, this phase is crucial for estimating potential future earnings and cash flows, which are essential components of the valuation process.

Valuation

The culmination of the business valuation process is the application of one or more valuation models to estimate the company's value. Depending on the nature of the business and the valuation's purpose, models such as the asset-based approach, income-based approach (including the DCF method), and market-based approach are considered. This phase is essential as it integrates insights gained from the preceding phases to establish a reliable and robust valuation of the business.

Figure 2.2: Process of Business Valuation



Source: Sjöqvist & Stepanovych (2008)

Throughout the valuation process, a balance between broad analysis and focused evaluation is advocated to minimize inaccuracies and biases in the final valuation outcome. The range of opinions on the scope of analysis highlights the necessity for a customized approach that considers variables unique to the type of business (Sjöqvist & Stepanovych, 2008; Soffer & Soffer, 2003). This comprehensive overview of the business valuation process, drawing on Soffer & Soffer's (2003) foundational structure and further elaboration, emphasizes the importance of a meticulous, phased approach that integrates business analysis, accounting insights, financial scrutiny, forward-looking forecasts, and the strategic application of valuation models.

In the business valuation literature, the pursuit of comprehending a company's intrinsic value is regarded as a complex science. According to Damodaran (2006), four approaches stand out due to their widespread application and foundational significance: Balance Sheet-based methods, Relative Valuation, Option Pricing, and Discounted Cash Flow (DCF) valuation.

Beyond the four approaches to business valuation, the academic and professional fields recognize the existence of additional methodologies, such as Mixed Methods. However, these alternative methods, while valuable, do not command the same level of ubiquity or consensus regarding their relevance or application across varied valuation contexts

Table 2.1: Main Valuation Approaches

	Discounted Cash Flow Valuation	Balance Sheet-based Methods	Relative Valuation	Option Pricing
Key Methods	FCFF; FCFE; WACC; APV; EVA	Book Value; Liquidation Value; Replacement Cost	Multiples; Comparable Company Analysis	Black Scholes Model; Binomial Option Pricing Model
Characteristics	Projects future earnings and discounts them to present value.	Focuses on company's net assets (assets minus liabilities).	Values company based on market prices of similar companies.	Treats certain financial situations as options.
Pro	Provides intrinsic value; detail-oriented.	Ideal for companies with significant tangible assets.	Utilizes real-time market data for valuation.	Useful for complex financial structures.
Contra	Relies on accurate forecasting of future cash flows.	Often overlooks intangible assets and future growth potential.	Challenging to find suitable comparables for unique entities.	Requires specific conditions to be accurate.
Suitable for	Companies with significant future growth prospects.	Businesses considering liquidation or with minimal operations.	Entities where sufficient, similar, and recently traded comparables are available.	Companies with significant flexibility or risky assets.

Source: own illustration based on Sjöqvist, Stepanovych (2008), Fernández (2007), Damodaran (2012), Koller et al. (2020)

The **Discounted Cash Flow** (DCF) approach, notably championed by Damodaran (2006, 2011), is premised on forecasting the company's future cash flows and discounting them to their present value, factoring in the risk and time value of money. This method is intrinsically forward-looking and is valued for its depth and attention to future earnings potential. It employs calculations that integrate Free Cash Flow to the Firm (FCFF) and Free Cash Flow to Equity (FCFE) to ascertain the intrinsic value of the company (Damodaran, 2011). The primary advantage of the DCF method lies in its detailed and intrinsic analysis, making it suitable for companies with predictable and stable cash flows, such as established technology firms or utilities. However, its complexity and the multitude of assumptions involved - regarding growth rates, discount rates, and future economic conditions - pose significant challenges. These factors make the DCF method both time-consuming and susceptible to errors arising from incorrect assumptions (Fernández, 2007).

Balance Sheet-based Methods focus on the company's current assets and liabilities. Key methods such as Book Value and Liquidation Value are used to estimate the net asset value by subtracting liabilities from the assets (Koller et al., 2020). This approach is straightforward and offers a clear snapshot of a company's material worth at a specific point in time. While simple and direct, it may not capture the total value of companies with substantial intangible assets or future growth potential, particularly relevant in sectors like sports. (Koller et al., 2020: 302).

Relative Valuation approaches value a company based on the market prices of similar companies or assets. It involves using multiples and ratios (like price-to-earnings) derived from comparable companies. Although practical and frequently utilized because of its simplicity and use of real-time data, finding suitable comparables can pose a challenge. This method's reliance on perfect market conditions can also lead to valuation discrepancies during market volatilities (Koller et al.: 32). As Sjöqvist & Stepanovych (2008: 6) note, "The best standard of value is the market value. [...] However, applying of "fair value" requires a perfect market without external and internal disturbance which is impossible to achieve in reality." This statement highlights the difficulty in finding comparable entities due to the uniqueness of each football club, which encompasses aspects like fan loyalty, brand value, and historical significance. Moreover, the football

market is not a perfect market, and the lack of sufficient comparable publicly traded football clubs complicates the application of this method.

Option Pricing models, such as the Black-Scholes and Binomial models, are used to value companies with complex financial structures or those that can be treated as having option-like characteristics (Damodaran, 2012). This method is particularly valuable for assessing companies with significant operational flexibility, strategic options, or in special situations like start-ups and distressed companies. While offering a unique perspective by treating parts of the business as options, this approach requires specific conditions for accuracy, including volatility and other market factors that can significantly affect the valuation. The complexity and the specialized nature of these models often limit their use to specific business circumstances (Fernández, 2007).

In conclusion, each of these methods provides different perspectives on valuation, with their respective strengths and limitations. The income-based approaches, especially the Discounted Cash Flow method, are favoured for their forward-looking nature, focusing on future earnings and cash flows. Damodaran (2011) and Fernández (2007) both highlight the DCF method's conceptual correctness, as it considers the time value of money and future cash flow potentials (Damodaran 2011; Fernández 2007). This work will focus on the DCF approach, which provides a comprehensive framework for valuing dynamic entities like Borussia Dortmund. The DCF method, with its emphasis on future cash flows, emerges as particularly suitable for sports clubs, capturing their growth and earnings potential. The insights from Damodaran (2011), Lundén (2007), and Fernández (2007) collectively enrich this understanding, highlighting the complexities and nuances in business valuation.

2.3 Definitions concerning Sector and Industry

A clear distinction between sectors and industries is crucial for this project. This distinction is particularly important for contextualizing Borussia Dortmund within its relevant business categories. By doing so, one can effectively assess the potential advantages and challenges associated with its sector and industry classification. This framework is instrumental in grouping enterprises based on shared economic pursuits or parallel business models, with the terminology “sector” and “industry” as the foundation

for this classification. The term “sector” encapsulates a broader economic division, potentially covering many business operations within the economy. Typically, an economy is partitioned into a limited number of sectors, each representing a wide spectrum of business activities (Pratt, 1997). In contrast, “industry” refers to a more narrowly defined group of companies or business entities engaged in closely related economic activities. This further division of sectors into industries allows for a more refined examination of economic activities, enabling detailed analysis and comparison. The concept extends further into specific industry segments, offering even more precise categorization.

Understanding this distinction is crucial for this project as Borussia Dortmund can be classified within the wider sports sector and, more specifically, within the football industry. This classification aids in a structured analysis of the economic dynamics, opportunities, and risks unique to the football sector, mirroring the methodical approach used to analyse companies in other industries. This foundational understanding establishes a strong basis for a more detailed examination of financial management practices, valuation techniques, and the economic impacts specific to football clubs. This examination involves drawing parallels and highlighting distinctions when compared to the broader sector and industry analysis framework (Ecer & Büyükaslan, 2014).

2.4 Characteristics of the Valuation of Football Shares

To understand the importance of sporting success and the financial performance of a club, it is crucial to explain the different ways clubs are financed. As stated in the Introduction, football clubs have transcended their traditional role as social entities to become full-fledged commercial enterprises. Consequently, maintaining a robust financial situation is paramount for their ongoing success (Ekkenga, 2019). Thus, this chapter is divided into three sub-chapters: the value, the assets, and the financing. It is essential to understand all three dimensions, as they are of fundamental importance for the financial existence of a football club.

The Value

The valuation of football clubs is a complex process considering various unique features. As Fernández (2007) points out, “Value can vary from buyer to buyer, whereas price

represents the agreed-upon quantity between the buyer and seller.” This distinction is critical in the football industry, where the value of a club may include factors like historical significance, fan base, and potential for future success, which may not always be reflected in the market price.

The "Football Benchmark" report (2022) introduces the "Five Pillars of Value." These include five general terms for a football club's value: Profitability, popularity, sporting potential, broadcasting rights, and stadium ownership. In his illustration of a football club's value, Francese & De Leudeville (2021) adds two more pillars: the player transfer market and the league or competition. Thus, the author can identify the seven key indicators for a football club's value.

Figure 2.3: Valuation of Football Clubs



Source: own illustration based on Football Benchmark (2022) and Francese & De Leudeville (2021)

It's important to note that it's not just the valuation that determines the attractiveness of a club, but also other factors such as its location, the size of its fan base, the quality of its players, the quality of its management, and the overall strength of its business operations. Finally, according to Francese (2021), there is always an "uncertainty about future income linked in particular to sports results."

The Assets

Now that the generic terms for the valuation of a football club have been defined, it is possible to take a closer look at the individual and specific asset classes of a football club that are ultimately decisive for its valuation. According to Markham (2013), "asset valuation is the lifeblood of financial world. [...] Therefore, being able to value an asset properly is imperative to every rational investor."

Perechuda and Cater (2021) highlight the significance of intangible assets on a football club's overall value, such as player contracts. According to James (2022), one way to value players is through their transfer market value, which can fluctuate based on their performance, age, contract length, and other factors. This value can be used as a basis for the cost of purchasing or selling a player. However, James clarifies that the market price of the player and the actual transfer fee might be different. Players can also be considered assets in terms of their contribution to the club's on-field performance and ability to generate revenue.

Tangible assets are physical assets with a measurable value and can be owned or controlled by a football club. Examples of tangible assets at football clubs include stadiums and training facilities, equipment and vehicles, merchandise, and other retail items.

Intangible assets are non-physical assets with measurable value that cannot be owned or controlled. Examples of intangible assets at football clubs include brand and reputation, fan base, or intellectual property, such as legal protection for the club's name or logo. Players' image rights, contracts, and further employment agreements are also considered intangible assets (PwC, 2024).

Both tangible and intangible assets are essential for the value of a football club. While tangible assets are more concrete and easier to measure, intangible assets such as reputation and fan base can significantly impact the club's ability to generate revenue.

The Financing

According to Nagy (2012), the possibilities football clubs have, to raise their capital, can be classified into two main categories: internal sources and external sources.

Nagy (2012) describes the **internal sources** of financing as funds that a club generates from its own operations. Examples of internal sources include revenues from ticket sales and merchandise, broadcasting rights, sponsorship deals, or player transfer fees.

According to Nagy (2012), **external sources** of financing refer to the funds that a club raises from external sources such as investors, banks, or other financial institutions. Examples include four main categories: **Equity financing** involves issuing shares in the club to investors in exchange for capital. Second, **Debt financing** involves borrowing money from banks or other financial institutions, typically in the form of loans. Third, **private equity** is an investment made by private equity firms, usually involving significant control over the club's operations. Finally, **Crowdfunding** is a way of raising capital through small investments from many people, typically via online platforms.

It's important to note that some financing options may have restrictions and regulations that clubs must comply with, such as Financial Fair Play regulations in Union of European Football Associations (UEFA) competitions. Also, the opportunities and terms of financing will vary depending on the country and league the club is playing in (Alaminos, Fernández, 2019).

Football Accounting Basics

Player registration rights represent a crucial aspect of football club operations, embodying the inherent value of talent acquisition and player contracts. It is imperative to note that, per legal and accounting principles, players cannot be treated as assets on the balance sheet. Instead, the club's ownership of the contractual rights to player services constitutes an intangible asset reflected in the club's financial statements. When a club values its players in its financial report, it considers the transfer fee paid for the player and the

remaining length of the player's contract. When a football club acquires a player through a transfer fee transfer, it effectively obtains the rights to the player's services for the duration of the contract. The acquisition cost of these player registration rights encompasses the transfer fee and ancillary expenses such as agent fees, medical checks, and signing bonuses. These costs are capitalized and recognized as intangible assets in the club's balance sheet, subject to subsequent depreciation over the contract period (Garstecki & Macuda, 2017).

Acknowledging the limitations inherent in the accounting treatment of player registration rights is important. Market fluctuations, player performance, and contractual complexities can all impact the valuation of these intangible assets. Moreover, the realization principle dictates that gains or losses from player transfers are recognized only upon actual sale, thereby necessitating cautious valuation practices to avoid overstating financial performance.

The transfer fee is spread out (amortized) over the contract's length using the "straight-line method." This means that the transfer fee is divided by the number of years of the contract, and the resulting amount is expensed each year. A player's "book value" is the remaining value of the player's contract after the amortization has been applied. This value is reported on the club's balance sheet under "Player's registration rights, net." For example, if a club buys a player for a transfer fee of €70 million and he signs a five-year contract, the club will spread out the €70 million transfer fee over the five-year contract using the straight-line method. This means they will expense €14 million per year ($€70 \text{ million} / 5 \text{ years}$) as amortization expense. At the end of the first year, the book value would be €56 million ($€70 \text{ million} - €14 \text{ million}$). At the end of the second year, the book value would be €42 million ($€56 \text{ million} - €14 \text{ million}$) and so on. The salary is recorded as an expense in the period in which it is incurred, not spread out over the length of the contract (Schmückle, 2008).

For example, when a player signs as a free agent, the club does not record any transfer fee in their financial statements. However, if he receives a signing bonus or a signing fee, this would be recorded as an expense in the income statement in the period it is paid. In selling a player, the transfer fee received is recorded as income. As Weichbrodt (2018) explains, the difference between the transfer fee received and the player's remaining book

value is recorded as a gain or loss. The difference between the transfer fee received and the present value of the transfer fee is capital gain or loss. The present value is the value of the money received in the present time, considering the effect of inflation. The net book value is the remaining value of the player's contract after the amortization has been applied, and the capital gain or loss is the difference between the transfer fee and the net book value.

Transitioning from the foundational elements of football club valuation, asset categorization, and financing mechanisms, this segment aims to bridge the gap towards understanding the temporal dynamics unique to football clubs' financial management. Unlike typical corporate fiscal years, football clubs often align their financial reporting with the season's schedule, leading to a fiscal year that may end at different times, typically around May or June. This alignment is primarily due to the operational cycle of football competitions, which usually commence in late summer and conclude by the following summer, encompassing the entirety of a competitive season. This temporal arrangement diverges from the standard corporate financial year-end for several reasons. First, it allows for the comprehensive capture of a club's financial performance across a season, incorporating all relevant revenues and expenditures tied to competitions. Second, this timing reflects the football transfer window periods, with significant transfer activities often concluding by the end of August, allowing clubs to accurately reflect the financial impact of transfers at the beginning and end of each season (Weichbrodt, 2018).

The rationale for comparing financial performance over a span of five years includes providing a robust temporal framework to assess trends, growth, and the impact of external variables such as, lately, the COVID-19 pandemic. As per Alabi & Urquhart (2023) this pandemic has significantly altered the financial landscape for football clubs, affecting revenue streams such as transfer fees, matchday revenues, broadcasting rights, and commercial partnerships. A five-year comparison enables the identification of anomalies or shifts in financial patterns caused by such extraordinary events, offering insights into clubs' resilience and financial management efficacy during periods of instability.

Valuing a football club requires a nuanced approach that diverges from conventional business valuation methods, reflecting the unique dynamics of the sports industry.

According to Francese & De Leuville (2021), the financial landscape of football clubs is marked by significant peculiarities. The high wage bills “can represent between 50 to 80%.” The unpredictability of income streams, particularly those from player transfers, cannot be relied upon as a consistent revenue. The volatility of sports results further compounds this uncertainty, with fluctuations in competition outcomes, such as qualification for the European competitions, such as the Champions League, significantly impacting a club's financial standing.

Francese & De Leuville (2021) value football clubs using their revenue multiple methods, with top-tier clubs valued at 4 to 5 times their income (excluding transfer revenues) and second-tier clubs at 2 to 3 times. This method appreciates the variability in clubs' management efficiency and financial health. For instance, "a small bonus for very well managed clubs, such as OL [Olympique Lyon] whose salary costs represent “only” 45% of income", highlights the impact of prudent financial management on valuation.

Though common, the Discounted Cash Flow method faces challenges due to the unpredictability of future incomes, heavily influenced by sports results. According to Francese & De Leuville (2021), the process involves "a normalization of long-term cash flows”, yet the volatile nature of match outcomes and player performance adds a layer of complexity to accurate future revenue projections.

In essence, valuing a football club involves a comprehensive understanding of its revenue streams, cost structures, and the broader market dynamics of the sports industry. The insights from Francese & De Leuville (2021) emphasize the intricacies of football club valuation, highlighting the need for specialized financial models that accommodate the unique aspects of sports management and economics. Stock valuation in football clubs also reflects investor sentiment and market perceptions. The market price of a football club’s stock may be influenced by short-term events like match outcomes or player transfers, necessitating careful analysis beyond just the financial metrics.

2.5 Discounted Cash-Flows (DCF)

In the expansive domain of corporate finance, the Discounted Cash Flow (DCF) methodology emerges as a fundamental tool for determining the intrinsic value of companies. This approach, deeply rooted in the axiom that a company's worth is essentially the present value of its anticipated future cash flows, provides a rigorous and structured framework for valuation. This principle, which underscores the time value of money, posits that a dollar today is inherently more valuable than a dollar in the future due to its potential earning capacity. Such insight is principal for comprehending the inherent value propositions of firms, including those as dynamic and strategically nuanced as Borussia Dortmund, where operational efficiencies and strategic investments are crucial for long-term growth and competitive advantage.

The essence of the DCF methodology is succinctly captured by Damodaran (2012: 12), who states, "Investment decisions based on the DCF model are grounded in the view that the value of a company is the sum of its future cash flows, discounted back to their present value. This reflects the time value of money, acknowledging that a dollar today is worth more than a dollar in the future due to inflation, uncertainty, investment possibilities, and personal preferences for current consumption over future needs." This narrative encapsulates the DCF's core tenet and highlights its broad applicability across diverse corporate valuation scenarios.

Furthermore, the DCF model is predicated on the meticulous discounting of future cash flows, necessitating a deep dive into a company's financial forecast and the risks associated with those future earnings. The choice of the discount rate, therefore, becomes a critical component of the DCF methodology, as it must accurately reflect the investment's risk. The foundational equation of the DCF model, as per the synthesis of academic literature (Becker, 2021; Freixo, 2022; Mathews, 2019), is represented as:

$$V = \sum_{t=1}^n \frac{CF_t}{(1+k)^t} + \frac{CF_n(1+g)}{(k-g)} \times \frac{1}{(1+k)^n}$$

(equation 2.1)

where:

- V represents the firm's value
- CF_t is the cash flow in period t
- k is the discount rate reflecting the risk of the cash flows
- g is the perpetual growth rate beyond year n
- n is the number of years in the growth period

This equation elegantly bifurcates the valuation process into two distinct phases: the explicit forecast period and the terminal value phase, which assumes a perpetuity of growth at a stable rate. Such a bifurcation allows for a nuanced understanding of a company's value proposition both in the short term and its sustainable growth potential over the long haul.

Critically, while the DCF model offers a robust framework for valuation, it is not without its challenges and limitations. The accuracy of a DCF valuation is heavily contingent on the precision of the cash flow projections and the appropriateness of the discount rate—variables that can introduce a significant degree of uncertainty into the valuation process. As Damodaran (2012) articulates, the valuation journey can take two distinct routes: Equity Valuation and Enterprise Valuation, each leveraging different cash flows and discount rates to elucidate a company's worth.

The DCF methodology remains a cornerstone in corporate valuation, providing a comprehensive lens through which firms' intrinsic value can be discerned. Its application, underlined by rigorous academic and practical insights, continues to offer invaluable perspectives in the valuation of entities across the spectrum of industries, including the intricate and dynamic area of professional football clubs like Borussia Dortmund.

2.5.1 Free Cash Flow to the Firm (FCFF)

The Free Cash Flow to the Firm (FCFF) model offers a lens through which a company's financial vitality and strategic potential can be assessed. Central to this model is the estimation of cash available after accounting for capital investments, a critical indicator of a firm's capacity to reward investors and sustain operations. Such insights are invaluable for formulating strategies to bolster long-term growth and enhance profitability. Distinguishing between available cash flow methodologies, namely the FCFF and the Free Cash Flow to Equity (FCFE) approaches, is essential. The FCFF method evaluates cash flows available to debt and equity investors before financial obligations are met, thus providing a holistic view of financial health (Janiszewski, 2011).

Calculating FCFF is encapsulated by the formula:

$$FCFF = EBIT * (1 - tax\ rate) + D\&A - CAPEX - \Delta NetWC$$

(equation 2.2)

- *EBIT* represents earnings before interest and taxes
- *D&A* is depreciation and amortization costs
- *CAPEX* denotes capital expenditure
- *ΔNetWC* is the change in working capital

This formula is the foundation for assessing a firm's financial health by providing a holistic view of available cash flows before financial obligations (Freixo, 2022; Janiszewski, 2011).

Employing WACC in FCFF Valuation: The valuation heavily relies on the Weighted Average Cost of Capital (WACC) to discount future cash flows. WACC blends the costs associated with both debt and equity to reflect the overall risk. The valuation of a company using FCFF involves discounting its free cash flows by WACC to determine its intrinsic value over its lifespan (Damodaran, 2006).

$$WACC = k_e * \left(\frac{E}{(D + E)} \right) + k_d * \left(\frac{D}{(D + E)} \right) * (1 - T_c)$$

(equation 2.3)

where:

- k_e represents the equity cost
- k_d is the debt cost
- D stands for t the debt's market value of the enterprise
- E represents the equity's market value of the enterprise
- T_C signifies the marginal corporate tax rate.

Terminal Value in FCFF Valuation: Terminal value (TV) estimation is crucial for assessing anticipated cash flows beyond the explicitly projected period. It accounts for a significant portion of the DCF approach, underscoring the importance of precise determination (Freixo, 2022; Janiszewski, 2011).

For the company's valuation, it's necessary to tailor the foundational equations, with the **valuation formula** incorporating terminal value is:

$$\begin{aligned} \text{Firm Value} = & \frac{FCFF_1}{1 + WACC} + \frac{FCFF_1}{(1 + WACC)^2} + \dots + \frac{FCFF_n}{(1 + WACC)^n} \\ & + \frac{TV_n}{(1 + WACC)^n} \end{aligned}$$

(equation 2.4)

- TV_n represents the Terminal Value in period n

Where **TV** (*Terminal Value*) is calculated as:

$$TV_n = \frac{FCFF_{n+1}}{(WACC - g)}$$

(equation 2.5)

- g represents the perpetual growth rate

As outlined by Janiszewski (2011) and Damodaran (2006), this approach underlines the scientific underpinnings of FCFF valuation, emphasizing the importance of considering both the cash flows during the projected period and the terminal value for a comprehensive firm valuation.

Cost of Equity

The cost of equity represents the return investors expect from investing in a company's equity, reflecting the compensation for the risk they undertake. It is a pivotal element in determining a firm's WACC. The Capital Asset Pricing Model (CAPM) is often employed to estimate the cost of equity, which posits that the expected return on equity is a function of the risk-free rate of return plus the equity risk premium adjusted for the stock's beta (Fama & French, 2004).

$$R_S = R_f + \beta * (R_M - R_f)$$

(equation 2.6)

where:

- R_S represents the expected return on the stock
- R_f denotes the risk-free interest rate
- β corresponds to the stock's sensitivity to the market return
- $(R_M - R_f)$ signifies the market risk premium

Cost of Debt

The cost of debt refers to the effective rate a company pays on its incurred debt, integral to calculating the WACC. It is crucial to understand the financial leverage effects and the impact of debt on a company's overall cost of capital. The after-tax cost of debt is typically used in WACC calculations to reflect the tax deductibility of interest payments, enhancing the accuracy of capital cost assessments (Damodaran, 2012).

$$\text{Cost of debt} = \frac{\text{Interest expense}}{(\text{short term debt} + \text{long term debt})}$$

(equation 2.7)

where:

- *Cost of debt* represents a company's effective interest rate on its total debt
- *Interest expense* is the total amount of interest payments a company makes on its outstanding debt over a specific period
- *short term debt* refers to the company's debts that are due within the next year
- *long term debt* includes the company's debts with maturities exceeding one year

2.5.2 Free Cash Flow to Equity (FCFE)

Free Cash Flow to Equity (FCFE) is a pivotal financial metric that quantifies the cash flow available to a company's equity shareholders after all operational costs, capital expenditures, and debt obligations have been accounted for. This measure is instrumental in understanding the direct financial benefits that shareholders can expect to receive. FCFE calculation is crucial for investors and analysts to gauge the potential dividends and share buybacks a company can afford without raising additional capital or debt. (Becker, 2021; Janiszewski, 2011).

Defining FCFE

The meaning of FCFE is captured by its ability to measure the surplus cash flow after meeting the company's immediate financial commitments. It's defined as:

$$FCFE =$$
$$Net\ income + D\&A - CAPEX - \Delta NetWC + New\ Debt - Debt\ Repayment$$

(equation 2.8)

where:

- *Net income* represents the company's earnings after expenses and taxes,
- *D&A* stands for depreciation and amortization expenses
- *CAPEX* refers to capital expenditures
- *$\Delta NetWC$* is the change in net working capital
- *New Debt* denotes any debt incurred during the period
- *Debt Repayment* is the amount of debt paid off

Valuing Equity Through FCFE

To determine a company's equity value using FCFE, the future streams of FCFE are discounted back to their present value using the required return on equity, providing an estimation of the total value that is directly attributable to shareholders:

$$Equity\ Value = \frac{FCFE_1}{1 + k_e} + \frac{FCFE_2}{(1 + k_e)^2} + \dots + \frac{FCFE_n}{(1 + k_e)^n} + \frac{TV_n}{(1 + k_e)^n}$$

(equation 2.9)

where:

- $FCFE_n$ represent the Free Cash Flows to Equity over different periods
- TV_n is the Terminal Value at the end of the projection period
- k_e is in this formula the Required Return on Equity

The terminal value (TV_n) can be determined using various methods, including the perpetuity growth model, and represents a significant portion of the equity value in many cases.

The FCFE model offers a nuanced view of a company's financial health from the perspective of equity holders. It specifically highlights the cash flow that could be distributed to shareholders or reinvested into the company without necessitating additional financing. The formula facilitates investment decision-making and plays a critical role in the valuation of a company's equity. It underscores the importance of managing capital expenditures, debt levels, and working capital to maximize shareholder value. By employing FCFE in financial analysis, stakeholders can obtain a clearer picture of a firm's ability to generate shareholder value over time. Moreover, this approach emphasizes the role of strategic financial management in enhancing investor returns, providing a comprehensive framework for equity valuation. Free Cash Flow to Equity (FCFE) stands as a cornerstone metric in the assessment of shareholder value, offering detailed insights into the financial dividends a company can offer its shareholders. Through the systematic calculation and analysis of FCFE, investors and analysts can discern the intrinsic value of equity, informing strategic investment decisions and facilitating a deeper understanding of a company's financial dynamics (Becker, 2021).

2.5.3 Relative Valuation

Relative valuation contrasts the DCF method by valuing assets based on comparisons with similar market entities, employing market multiples as a key tool (Damodaran, 2012). This approach is instrumental for gauging market sentiment and industry standards. Despite its advantages, the method's reliance on market multiples like the Price to Earnings (P/E) or Price to Sales (P/S) ratio may lead to valuation discrepancies due to market volatility (Koller et al., 2020).

The P/E ratio, a critical metric in relative valuation, is calculated as:

$$\text{Price to Earnings} = \frac{\text{Price}}{\text{EPS}}$$

(equation 2.10)

where:

- *Price*: Current market price of a single share
- *Earnings per Share (EPS)*: Company's profit divided by outstanding shares

This ratio reflects how much investors are willing to pay per unit of earnings, offering insights into the market valuation of a company's profitability. However, the utility of the P/E ratio can be affected by accounting practices that influence EPS (Fernández, 2001).

The P/S ratio is calculated as:

$$\text{Price to Sales} = \frac{\text{Price}}{\text{SPS}}$$

(equation 2.11)

where:

- *Price*: Current market price of a single share
- *Sales per Share (SPS)*: Company's sales divided by outstanding shares

3 DATA COLLECTION AND METHODOLOGY

When exploring Borussia Dortmund's valuation, this project comprehensively blends internal strengths and external market dynamics. Initially, research is conducted on the landscape of the European football market, assessing its unique characteristics and trends that influence club valuations.

A SWOT analysis illuminates Borussia Dortmund's strategic position, identifying its core competencies, areas for improvement, opportunities for growth, and potential threats. This analysis serves as a cornerstone for devising robust strategies to navigate future challenges and capitalize on market opportunities. Furthermore, Porter's Five Forces framework and a PESTEL analysis are employed to dissect the competitive forces shaping the football industry's profitability and competitive intensity. This provides a nuanced understanding of the external factors that Borussia Dortmund must contend with.

For the club's valuation, Borussia Dortmund's financial statements over the past five years are analysed, leveraging publicly available data from the club's official website, financial databases, and investor relations portals. The analysis incorporates annual data from 2019 to 2023, with projections extending from 2024 to 2028. This approach enables the construction of a robust valuation model, integrating various methodologies discussed in the literature review to estimate Borussia Dortmund's market value accurately.

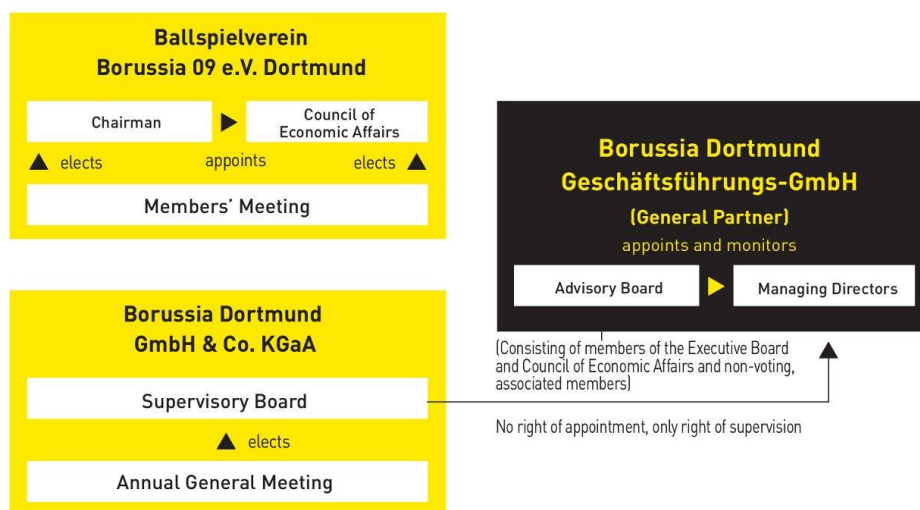
3.1 Company Overview

Borussia Dortmund, officially known as Borussia Dortmund GmbH & Co. KGaA, is an ideal of footballing excellence and pioneering in sports management and business. Founded in 1909, the club has become a central figure in German football, boasting a vast and dedicated fan base. As of 2023, its membership has swelled to 175,000, positioning it as the fifth-largest sports club globally (Wikipedia, 2024). This intense support is mirrored in the club's social media presence, with over 56.5 million followers across various platforms in 2023, highlighting its widespread appeal and global reach. The club has his headquarter in Dortmund, with international offices in Shanghai, Singapore, and New York City. According to Deloitte, BVB is the 13th biggest Football club in Europe

by revenue and ranks second in Germany, only behind Bayern Munich. (Deloitte, 2023). In 2023, the company employed 923 individuals. The club considers the iconic Signal Iduna Park its home, boasting a seating capacity of 81,365. Before the COVID-19 pandemic, from 2012 to 2020, the stadium consistently ranked as Europe’s most visited for league matches, with an average yearly attendance of around 80,000 visitors. This demonstration of fan loyalty underscores the club's deep-rooted community ties and significant impact on European football culture (BVB IR 2023).

The transition to a publicly traded entity in 2000 marked a strategic pivot for “Ballspielverein Borussia 09 e.V. Dortmund”, making it the first German football club to list on the stock market. This move birthed “Borussia Dortmund GmbH & Co. KGaA”, a unique legal structure blending the traditional sports club ethos with the financial acumen required for stock market operations. This structure allows for a distinctive model where the club operates with the agility of a corporate entity while retaining its foundational principles and decision-making processes through a registered association. The governance model includes a board of directors and a general assembly of members, ensuring that major decisions, including statutory changes and board elections, remain in the hands of its members. The management of Borussia Dortmund GmbH & Co. KGaA falls to its general partner, Borussia Dortmund Geschäftsführungs-GmbH, with BV. Borussia 09 e.V. Dortmund as its sole partner (BVB 2024a).

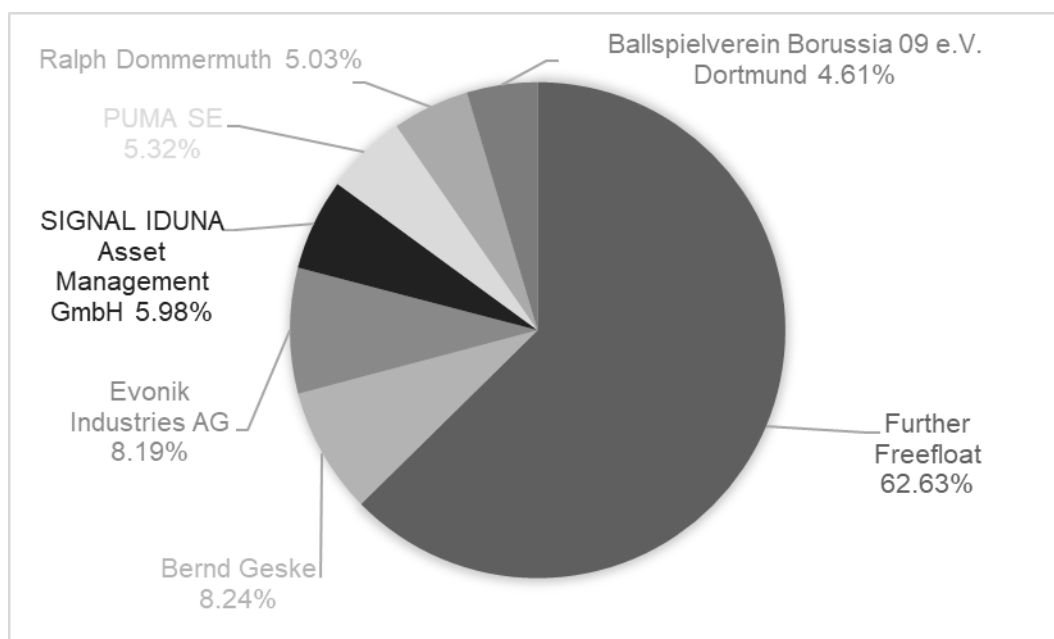
Figure 3.1: Company Structure



Source: BVB (2024a)

This public listing has provided the club with a viable pathway to capital and introduced a layer of transparency and corporate governance that distinguishes it within the footballing world. The shareholding structure balances financial flexibility and the club's cherished traditions, embodying a forward-looking approach to sports club management. Since July of 2023, Borussia Dortmund has been reinstated in the SDAX, an index representing Germany's 70 premier small-cap companies, highlighting the club's robust financial health and promising growth trajectory, positioning it among the 91st to 160th largest public entities in Germany by order book volume and market capitalization, following the elite ranks of the DAX and MDAX listed companies. As of 2023, BVB disclosed they had issued 110,377,320 ordinary shares with no par value, and the shareholding structure was as follows:

Figure 3.2: Shareholder Structure



Source: own illustration based on BVB (2024b)

*Borussia Dortmund's registered association "Ballspielverein Borussia 09 e.V. Dortmund" owns a share of 4.61%. By definition, this is also part of the free float. However, as this shareholder is of special interest here, the author has shown it in the diagram and marked the actual free float excluding the shares of "Ballspielverein Borussia 09 e.V. Dortmund" as "further free float".

According to an analysis from Swiss Ramble (2023) diversified revenue streams, including broadcasting rights, matchday sales, commercial partnerships, and player transfers, underscore the club's financial strategy. This multi-pronged approach ensures financial resilience and competitive prowess, allowing Borussia Dortmund to maintain its

status as a stalwart of German and international football. Innovation extends beyond financial management at Borussia Dortmund, strongly emphasizing youth development and fan engagement. The club's renowned academy secures its future on the pitch and fortifies its financial model through the development and potential sale of homegrown talent. This sustainable strategy is complemented by efforts to enhance the fan experience and expand the club's global footprint through digital initiatives and community engagement programs.

Borussia Dortmund stands as a beacon of excellence in football and sports management. The club's strategic vision, rich heritage, and community engagement position it uniquely in the sports industry. Borussia Dortmund not only aspires to achieve sporting success but also to inspire and unite people through the power of football, embodying its motto, "Echte Liebe" (True Love), in every facet of its operations (Bressell, 2023).

3.1.1 History

"Borussia" is the Neo-Latin name for Prussia, and Borussia Dortmund's football division holds a premier position within the club. BVB is one of Germany's most successful men's football clubs, boasting eight German championships and five DFB-Cup victories. BVB was the first German club to win a European trophy, securing the European Cup Winners' Cup in 1966. The first men's team was a founding member of the Bundesliga back in 1963, ranking second in today's all-time standings.

At the time of the IPO in 2000, the club was experiencing a period of success on the field, having won back-to-back Bundesliga titles in 1995 and 1996 and the prestigious Champions League in 1997. This, combined with a strong financial performance and a large fan base, made BVB an attractive investment opportunity. However, it faced financial difficulties in the early 2000s, leading to a significant drop in the stock price. This was partly due to the club's poor sporting performance, which saw the team fail to qualify for European competitions in several seasons. Additionally, the club's expenses, particularly player salaries, increased significantly, leading to financial difficulties and almost bankruptcy (DW, 2005).

However, the club turned things around both on and off the field in the following years, becoming Germany's second force behind Bayern Munich. The club's sporting performance improved on the field, with the team regularly qualifying for European competitions – reaching the Champions League final in 2013 - and winning the Bundesliga in 2011 and 2012. Off the field, the club implemented cost-saving measures and increased revenue through merchandise sales and sponsorship deals. As a result, the club's financial performance and stock price began to improve.

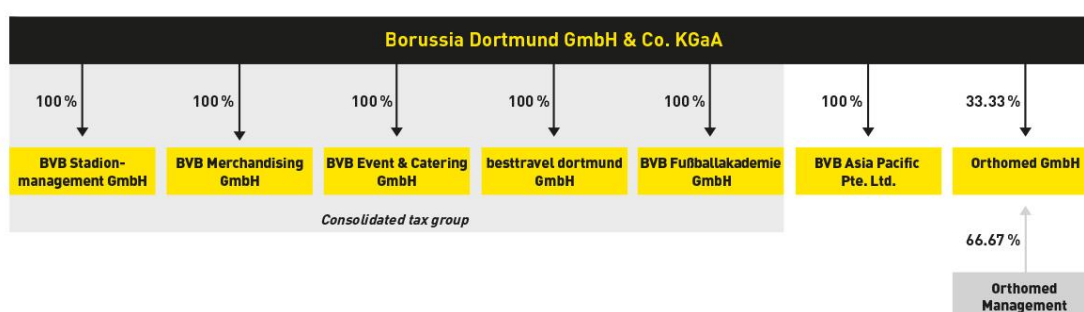
In recent years, the club's sporting performance has also been consistently strong, with the team regularly qualifying for European competitions and winning the DFB-Cup in 2017 and 2021. In 2023, Borussia Dortmund narrowly missed ending Bayern Munich's historic league-winning streak, conceding the title on the season's final day despite leading the race, marking a near triumph since their last victory in 2012 (BVB, 2024c).

In 2017, Borussia Dortmund experienced a tragic event when the team's bus was targeted by a bomb attack, leaving defender Marc Bartra injured. The attack was perpetrated by a man who had invested in BVB shares and wanted to profit from the negative impact the attack would have on the stock price. However, BVB shares rose after the attack (Scherbaum, 2017).

3.1.2 Business Segments

The company's primary business operations revolve around professional football and leveraging revenue opportunities, especially through the commercialization of Signal Iduna Park. Its main revenue streams include game revenues (ticket sales), marketing of TV broadcast rights, sponsorships, retail (merchandising), and player transfers. Beyond these, according to BVB (2024a), the club engages in football-related business ventures, owning 100% of shares in subsidiaries such as BVB Stadionmanagement GmbH, BVB Merchandising GmbH, BVB Event & Catering GmbH, besttravel dortmund GmbH, BVB Fußballakademie GmbH, BVB Asia Pacific Pte. Ltd., and holding a 33.4% share in Orthomed Medizinisches Leistungs- und Rehabilitationszentrum GmbH. The company also has profit transfer agreements with several of its subsidiaries.

Figure 3.3: Group Structure



Source: BVB (2024a)

BVB has established a reputation for its talent acquisition and development strategy. The club has a history of identifying and acquiring young, promising players from around the world at a young age, then integrating them into the first team and developing them into elite players. This approach has enabled BVB to maximize these players' value by selling them at peak market value (Maringa, 2020). This strategy has been a key factor in the club's ability to compete at a high level while maintaining financial stability. This approach is often referred to as a "selling club model," and it has been implemented by other clubs as well (Gallwey, 2019). A prime illustration of this strategy's success is evident in the club's top transfer dealings over the last years, which have yielded significant net profits:

Table 3.1: Top Transfer Net Profits

Player	Buying Price	Years at BVB	Selling Price	Transfer Profit	Transfer Date
Ousmane Dembélé	€ 35m	1.5	€ 135m	€ 100m	2017
Jude Bellingham	€ 30.15m	3	€ 103m	€ 72.85m	2023
Jadon Sancho	€ 20.59m	4	€ 85m	€ 64.41m	2021
Christian Pulisic	€ 0	4	€ 64m	€ 64m	2019
Piere-Emerick Aubameyang	€ 13m	4	€ 63.75m	€ 50.75m	2018
Erling Haaland	€ 20m	2.5	€ 60m	€ 40m	2022

Source: Transfermarkt (2024)

3.1.3 Company Mission

Borussia Dortmund GmbH & Co. KGaA aims to sustain its top-tier position in the Bundesliga, capitalizing on its sole Signal Iduna Park marketing rights and strategically enhancing its brand. The club's focus remains on the core activities of professional football. This includes key revenue sources such as TV marketing, sponsorships, game operations, transfers, and merchandising. The club firmly believes in the potential for further growth and consolidation, given its status as one of Germany's most prestigious and beloved football clubs. Additionally, economic success is seen as intertwined with consistent sporting achievements on both national and international scales. Furthermore, the club recognizes untapped potential in Germany's football market, particularly in media rights (Sim, 2023). Borussia Dortmund designs its business operations to serve best its main stakeholders: fans, members, and business partners. It aims to fully exploit the commercial opportunities in professional football on a global scale. The club commits to sustainable development, balancing economic efficiency, social responsibility, and environmental sustainability, ensuring its actions today do not compromise future generations.

BVB (2024d) describes its business strategy as follows:

- Sustainably adjusting athletic prospects
- Intensifying the promotion of up-and-coming talent
- Increasing fan involvement
- Utilising and maintaining the Borussia Dortmund brand
- Structuring our business activities and relationships sustainably

Acknowledging the unpredictable nature of sporting success, the club emphasizes the importance of responsible management to lay the groundwork for achieving sporting and economic objectives. Strategic decisions, including investments and player transfers, are made with immediate and long-term goals. Advertising has become a key revenue driver, with the club maintaining flexibility in its sponsorship strategy to adapt to changing circumstances. Long-term partnerships with major sponsors ensure stability in sponsorship revenue, while income from international competitions, directly tied to sporting performance, remains variable (BVB, 2024d; Edison, 2023).

3.2 Football Clubs Sector

Football is the world's premier sport, captivating hearts across the globe. Football is the world's most valuable sport in terms of global media rights, with a value of \$19.183 billion. Since 2020, the global value of sports media rights has recovered and grown yearly, up to \$55.986 bn in 2023. But the SportBusiness (2023) Global Media Report adds that “most European football leagues are struggling to grow their media revenues beyond current levels.” Europe is home to the finest football clubs, a testament to the continent's deep-rooted football culture and competitive excellence. Europe's dominance in football is evident through its clubs' performance in the FIFA Club World Cup, where, since the tournament's inception, European teams have clinched sixteen titles, significantly outpacing South America's four victories. Moreover, Europe is home to many of the sport's biggest stars and hosts the most dynamic and lucrative transfer market in the world of football. This underscores Europe's leading role in the global football arena.

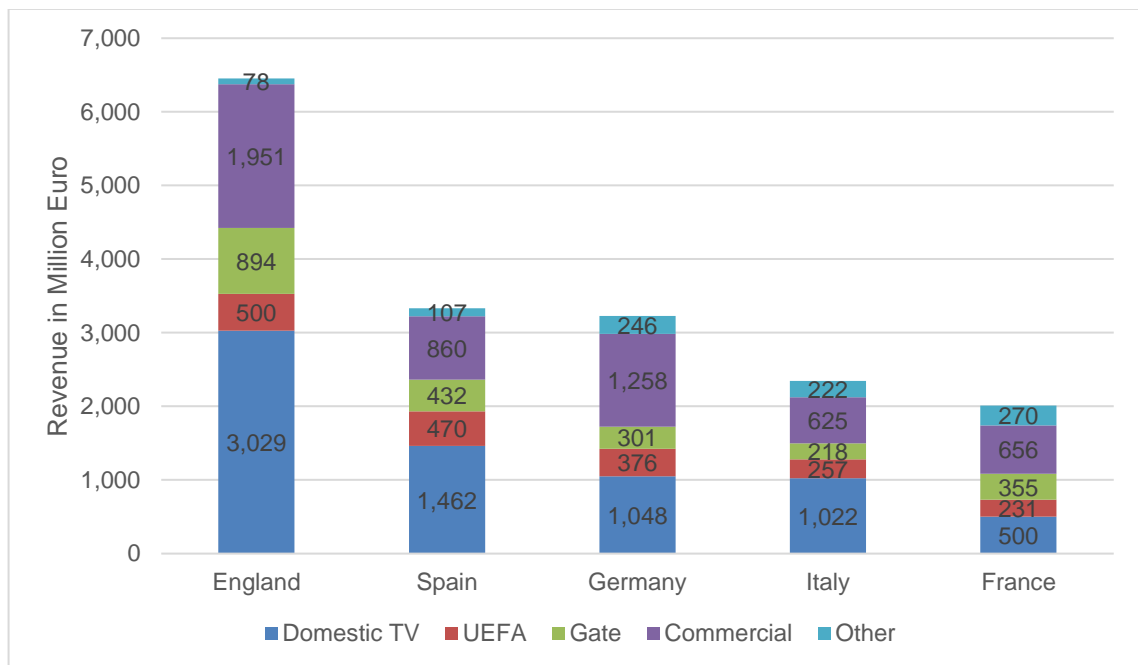
The COVID-19 pandemic has had a significant impact on the European football club market, affecting the finances and operations of clubs. The pandemic led to the suspension of domestic leagues and European competitions, resulting in a loss of matchday revenue for clubs. This loss of revenue has had a significant impact on the finances of many clubs, particularly those without significant financial reserves. Additionally, the pandemic has reduced the value of broadcast rights for domestic leagues and European competitions, further exacerbating the financial difficulties many clubs face. However, the leagues were able to return to action and complete the 2019/20 season, which helped to minimize the financial impact on clubs. In the following season, there were further restrictions and regulations for the admission of spectators, which meant that the entire stadium could not always be filled to capacity.

The European club football market is a highly competitive and dynamic industry characterized by various national leagues and cup competitions. Each league, like the Bundesliga in Germany, has unique characteristics, such as its level of competitiveness, revenue generation, and overall popularity.

3.2.1 Bundesliga

The Bundesliga is a highly competitive football league in Europe with many fans, high-quality stadiums, and competitive teams. The Bundesliga is considered to be among the strongest leagues in Europe.

Figure 3.4: Revenue Streams of Europe's Top 5 Leagues in 2022



Source: own illustration based on UEFA ECFIL Report (2023)

Figure 3.4 shows that the English Premier League clubs lead the revenues of European football, amassing €6.5 billion. Following are Spain's La Liga with €3.3 billion and Germany's Bundesliga in third place with €3.2 billion. Italy's Serie A and France's Ligue 1 round out the top five, generating €2.4 billion and €2 billion, respectively. The revenue breakdown reveals that Germany's football league excels particularly in commercial revenue, contributing 39% to its total, outperforming its counterparts in this sector. In contrast, domestic TV rights, which constitute 32% of its revenue, are lower compared to the Premier League's dominant 47% share, illustrating the English league's superior broadcasting deals. Gate receipts are another area where the Bundesliga, with 9% of its revenue, trails behind England's 14% and even France's 17.8%, possibly reflecting the Bundesliga's lower ticket prices.

Table 3.2: Financial data of Europe's Top 5 leagues in 2022, in Million €

	England	Spain	Germany	Italy	France
Wages	4.359	2.381	1.890	1.938	1.766
Wages ratio	68%	71%	59%	83%	89%
Net transfer result	-1.015	-525	-394	-369	-160
Net equity	3.725	866	1.667	545	369
Gross bank debt	2.885	2.807	294	1.552	981
Squad cost	9.822	3.794	2.635	5.042	2.613

Source: own illustration based on UEFA ECFIL Report (2023)

Table 3.2 suggests that Bundesliga presents a model of economic prudence and sustainability. The Bundesliga's wage bill reflects its sustainable approach, with a 59% wages-to-revenue ratio, the lowest among the top five leagues. This conservative wage policy starkly contrasts Italy's Serie A and France's Ligue 1, where the ratios climb to 83% and 89%, respectively, indicating a heavier financial burden relative to their revenues. With a net transfer result of -€394 million, Bundesliga clubs demonstrate moderate spending and investment in player acquisitions, compared to the Premier League's substantial -€1 billion, showcasing the English league's aggressive transfer market presence.

German clubs show a strong net equity position at €1.7 billion, suggesting robust financial health and an emphasis on building club value. This figure is nearly double that of La Liga's €866 million and significantly higher than Serie A's €545 million, underlining the Bundesliga's sound financial management. The Bundesliga's gross bank debt stands at a relatively modest €294 million, dwarfing in comparison to the Premier League's €2.9 billion and La Liga's €2.8 billion. This indicates a cautious approach to leveraging and a less debt-reliant operation within German football.

The squad cost for Bundesliga teams totals €2.6 billion, which is conservative when juxtaposed with the Premier League's towering €9.8 billion. This reinforces the Bundesliga's strategy of developing talent rather than procuring it at premium prices.

The financial figures paint the Bundesliga as a league that operates with financial discipline, prioritizing long-term stability over short-term success among the Top 5 leagues in Europe. This approach has allowed Bundesliga clubs to remain competitive while ensuring they are not over-leveraged. It maintains a solid foundation for sustainable growth within the volatile landscape of European football economics.

A distinctive feature that sets the Bundesliga apart from other European leagues is the "50+1 Rule." This regulation ensures that clubs must retain majority ownership by their members, preventing external investors from taking control. This rule aims to preserve club traditions and raises a closer connection between the clubs and their supporters. It distinguishes the Bundesliga by promoting financial stability and competitive integrity within the league. The 50+1 Rule is a sustainable economic model, encouraging clubs to invest in long-term development rather than short-term gains. It also maintains a level playing field, ensuring clubs compete based on their footballing prowess and community support rather than the depth of their investors' pockets. This regulation is a hallmark of the Bundesliga, setting it apart from other European leagues where external majority ownership is more common and underlining the league's commitment to preserving the sport's integrity and the fan experience. In recent years, Bundesliga clubs have evolved, navigating the modern football landscape through innovative structures like forming "Aktiengesellschaften" (AGs), or public limited companies, exemplified by Borussia Dortmund. This transformation allows clubs to tap into capital markets for funding while adhering to the 50+1 Rule, with the parent club retaining at least 50% plus one share. This model facilitates financial growth and national and international competitiveness, ensuring that while clubs can pursue commercial success, the core values and fan-centric nature of the club remain safeguarded by the majority ownership of the members (Ford, 2023).

3.2.2 European Competitions

One of the main characteristics of the European club football market is the importance of European competitions. The Union of European Football Associations (UEFA) is the governing body of European football. UEFA organizes several competitions for clubs, including the Champions League, Europa League, and Conference League.

The Champions League is the most prestigious competition in European club football, featuring the top teams from the top European leagues. Clubs qualify for the Champions League through their domestic league performance and a country's UEFA coefficient ranking. The top teams from the major European leagues automatically qualify for the competition's group stage. In contrast, the lower-ranked league teams must go through a qualifying round. The Europa League is the second-tier European club competition. The teams that finish outside the top positions in the major European leagues and those that don't qualify for the Champions League qualify for the Europa League. The Conference League is the newest European club competition, introduced in 2021; it's aimed at teams from lower-ranked European leagues and will feature teams that don't qualify for the other two competitions. The UEFA coefficient ranking is a system used to rank European football leagues based on the performance of their clubs in UEFA competitions over a five-year period. This ranking is used to determine the number of teams that each country can enter into the competitions, as well as the seedings for the draws (Bundesliga, 2024).

These competitions generate significant revenue for participating clubs and provide a platform for clubs to showcase their talent on a global stage and compete against the best teams in Europe. The financial landscape of UEFA club competitions is a significant component of the modern football economy. In the 2022/23 season, the Champions League was allocated €2.032 billion in prize money, highlighting its status as the most lucrative and prestigious club competition in European football. The Europa League and the Conference League were apportioned €465 million and €235 million, respectively, reflecting their positions as important, albeit less financially rewarding, competitions within the UEFA hierarchy (OneFootball, 2023).

The distribution of this prize money is a critical factor in the financial planning of football clubs, with the Champions League in particular providing a substantial boost to a club's revenue. These funds are pivotal in shaping club strategies, affecting everything from player acquisitions to infrastructural developments and day-to-day operational costs. Success in UEFA competitions can thus have a transformative impact on a club's fortunes, both on and off the pitch. The contribution that football clubs make to their respective countries' total revenue is encapsulated in the "UEFA" column of Figure 3.4, representing the prize money won through UEFA competitions.

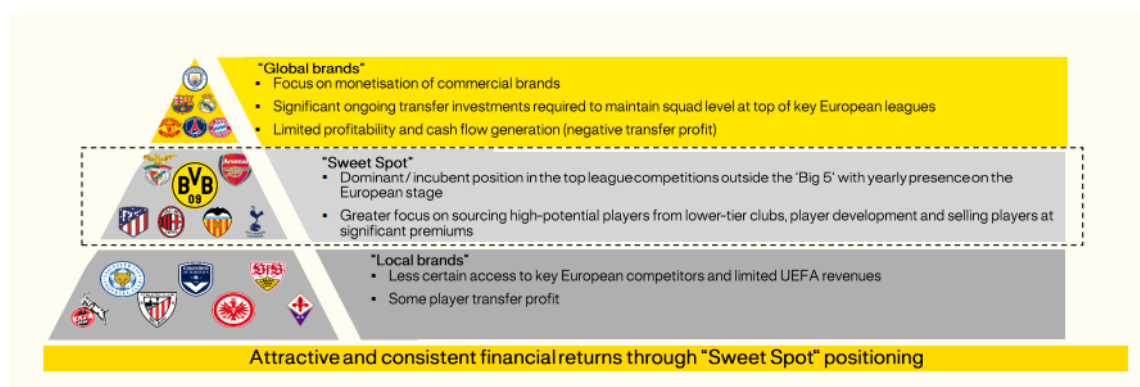
UEFA works closely with the clubs and national federations to ensure that the competitions run smoothly and that all teams have an equal opportunity to succeed. National Federations are responsible for ensuring that the clubs meet the eligibility criteria for the competitions and the proper registration of players.

The Financial Fair Play rules implemented by UEFA are also a key characteristic of the European club football market. These rules aim to ensure that clubs operate within their financial means and prevent them from spending more than they generate in revenue. This helps to promote a level playing field for all clubs and prevent clubs from gaining an unfair advantage through excessive spending (UEFA, 2024a).

3.2.3 Classification

Borussia Dortmund's strategic placement in the European football hierarchy is underlined by their 2023 revenue, ranking them 12th among European clubs. Their performance on the pitch aligns closely with their financial stature, as reflected in their 11th position in the UEFA club coefficient, which assesses success over a five-season span. On the domestic front, Dortmund consistently challenges for top positions, securing second place four times in five years in the Bundesliga, reinforcing their status just behind the perennial champions, FC Bayern Munich. This consistent performance over the last five years has ensured direct qualification for the Champions League group stages, with their most recent notable run reaching the quarterfinals in the 2020/21 season. Dortmund's approach yields a balance between sporting success and financial stability, carving a niche for themselves in European football's competitive landscape.

Figure 3.5: Positioning



Source: BVB IR (2023)

Borussia Dortmund (BVB IR, 2023) positions itself within the "Sweet Spot" of European football's financial ecosystem. This strategic positioning indicates that Borussia Dortmund maintains a dominant role, regularly featuring in European contests. The "Sweet Spot" positioning suggests that the club leverages its strong brand for sustainable growth, avoiding the high transfer spending of "Global brands" while enjoying better access to European competitions than "Local brands." Borussia Dortmund's positioning within the "Sweet Spot" is affirmed by its systematic approach to sustaining competitiveness and financial prudence. The club's methodology contrasts with "Global Brands" that command extensive commercial revenues and frequently engage in high-profile player acquisitions. Dortmund's focus on youth development and astute market transactions differentiates its strategy. To maintain this equilibrium, Dortmund must eschew the fiscal excess that characterizes some elite clubs while avoiding the limited market reach that typifies "Local Brands." Dortmund's current position lies in its ability to harness competitive success and operational sustainability, fostering a resilient model within the European football hierarchy.

3.3 Competitors and Competitive Position

Borussia Dortmund operates in the highly competitive European football market, where clubs compete on the field and in financial and commercial arenas. Analysts often argue that the club's growth potential and market value reflect its historical performance, fan base, and commercial partnerships (Deloitte, 2021). Although more commonly associated with publicly traded companies, market capitalization can be analogously applied to football clubs through their valuation, revenue streams, and investment activities. The market capitalization of Borussia Dortmund at the end of the fiscal year 2023, based on a share price of €4.37 on June 30, 2023, and a total of 110,377,320 outstanding shares, was approximately €482.35 million (Yahoo, 2024).

Deloitte's Football Money League report (2023) revealed that the collective revenue for the top 20 European football clubs reached €9.2 billion for the season of 2021/22, marking a 13% increase from the €8.2 billion reported in the 2020/21 season. Manchester City FC, from the Premier League, maintained its top position for the second consecutive year with revenue of €731 million. This placed the club ahead of Real Madrid CF from La Liga, which brought in €713.8 million, and Liverpool FC, which saw its revenues climb to

€701.7 million. Notably, for the first time, the Top 20 list was dominated by clubs from one league, with 11 out of the 20 clubs hailing from the English Premier League. Dortmund's most significant domestic rival, Bayern Munich, was sixth in the ranking of 2022 with revenues of €611.4 million. Financially and competitively, Borussia Dortmund has maintained resilience, leveraging its brand and operational efficiencies to navigate the football market's challenges. While Bayern Munich leads in revenue and global reach, Dortmund develops talent and maintains competitive performance levels, often surpassing other clubs with higher spending.

In the context of comparing the competitive landscape of Borussia Dortmund with its rivals, it's crucial to acknowledge the diversity in ownership and financial structures across football clubs. Not all clubs are listed on the stock exchange. While some operate as "Aktiengesellschaften" (AGs) or public limited companies, their shares are not publicly traded on the stock market. This scenario limits the ability of investors to buy and trade their shares openly.

Moreover, owners have delisted certain clubs from the stock market, removing them from the public trading arena, while others have never been publicly listed. This variance in financial and ownership structures complicates drawing direct financial comparisons with Borussia Dortmund's competitors. An illustrative example of this complexity is FC Bayern Munich. Despite operating as a public limited company (AG), its shares are not listed on any stock exchange, making it inaccessible for public investment in the same manner as publicly listed companies. In Germany, besides Borussia Dortmund, the only other football club whose shares are available for purchase and trading by retail investors on the stock market is SpVgg Unterhaching. However, this club competes in the third division, which places it outside the scope of direct relevance for this analysis. The diversity in football clubs' financial and structural organization presents challenges in comparing Borussia Dortmund against its competitors, affecting their economic and market position assessment (Schiemzik, 2023; Weidmann, 2023).

When assessing Borussia Dortmund's competitive landscape, it's essential to identify comparable entities within the football industry. Like Dortmund, the clubs with the highest market capitalization are listed on stock exchanges and serve as pertinent benchmarks. Manchester United, Juventus Turin, and Olympique Lyonnais stand out.

Each of these clubs is domiciled in a distinct country among the top five European leagues, providing a diverse yet relevant set of comparators for analysis (CompaniesMarketcap, 2024).

Manchester United, listed on the New York Stock Exchange, is one of the most prestigious and globally recognized football clubs, with a rich history of success both on and off the pitch. The club competes in the English Premier League, known for its intense competitiveness and widespread fanbase. Manchester United has excelled in securing numerous league titles and international trophies and has established a significant presence in the global sports market. Leveraging its brand, the club has engaged in lucrative sponsorship deals, merchandise sales, and media rights agreements. The strategic management of its operations and the cultivation of a global fan base have positioned Manchester United as a leading figure in the football industry, epitomizing the quintessence of a "global brand" and also setting the benchmark for how sports entities can transcend their core activity to become symbols of cultural and social identity worldwide (ManUtd IR, 2024).

Juventus Turin, traded on the Borsa Italiana and often known as Juventus, stands as a beacon of success and tradition in Italian football, participating in Serie A, Italy's top football division. The club's storied history is adorned with many domestic league titles and international honors, making it one of the most decorated clubs in Italy. Juventus has skillfully combined its footballing excellence with astute business strategies, enhancing its brand value through strategic partnerships, state-of-the-art stadium development, and a strong emphasis on digital innovation. Juventus traditionally qualifies as a "global brand" within the football community. The club's significant past achievements and iconic players have contributed to its substantial brand equity and recognition beyond Italian borders. However, recent challenges, including fluctuating on-field performances and financial controversies, have somewhat tempered its global brand perception, positioning Juventus in a "sweet spot" between its historical global brand status and the need to navigate contemporary challenges (Juventus IR, 2024).

Olympique Lyonnais, listed on the Euronext Paris and commonly referred to as Lyon, is a prominent club in French football with a consistent track record of competitive performances in Ligue 1 and European competitions. The club has distinguished itself

through its youth academy, producing several top-tier talents, and its strategic focus on gender equality, boasting one of the world's most successful women's football teams. Olympique Lyonnais's approach to club management extends beyond the pitch, with investments in a multi-purpose stadium hosting various events, thereby creating additional revenue streams. The club's innovative strategies in player development, fan engagement, and facility management have played pivotal roles in enhancing its financial health and market position, demonstrating a comprehensive approach to sustaining competitiveness and growth in the modern football era. Lyon has historically occupied the "sweet spot" in French football, renowned for its competitive spirit and innovative club management. However, compared to Europe's wealthiest leagues, a prolonged absence from top-tier European competitions and the relative financial limitations of Ligue 1 have gradually shifted Lyon's perceptions towards a "local brand" (Olympique Lyonnais IR, 2024).

Table 3.3: Competitors

Competitor	League	IPO	Workforce	Revenue 2023 (€)	Market Capitalization (€)
Manchester United	Premier League	2012	1.120	755	3.2b
Juventus Turin	Serie A	2001	870	499	859m
Olympique Lyonnais	Ligue 1	2007	621	199	264m

Source: own illustration based on SeekingAlpha (2024)

The comparison between Borussia Dortmund and its publicly traded counterparts, Manchester United, Juventus Turin, and Olympique Lyonnais, is based on their presence on the stock market, allowing for a clear assessment of their financial standings and market valuations. However, this methodology is inherently limited as it excludes clubs like FC Bayern Munich, which are not publicly listed, thus restricting a full-scale comparison across the football industry. Despite these limitations, analysing these clubs provides valuable insights into competitive positioning and financial strategies within Europe's top leagues. However, it must be noted that the exclusion of non-listed clubs narrows the scope of this benchmarking effort.

3.4 Market Trends

The business landscape of football clubs is undergoing significant transformation, driven by several key trends that are reshaping the industry at both a domestic and international level. These trends reflect the evolving nature of football as a sport and underline the growing importance of strategic management in navigating the complexities of the modern football business environment. Drawing insights from industry analyses and recent developments, the following trends are pivotal in the context of football clubs (Deloitte, 2023; Pfifer et al., 2018; UEFA ECFIL Report, 2023; Zion, 2024)

Digitalization and Fan Engagement: In an era of technological advancement, football clubs leverage digital platforms to enhance fan engagement and expand their global reach. This includes using social media for direct fan interaction, developing mobile applications for an enriched fan experience, and deploying advanced analytics to personalize marketing efforts and improve fan engagement strategies.

New Competition Formats: The football industry is evolving with novel competition formats like Spain's Kings League and the Ballers League in Germany, which blend traditional gameplay with entertainment, engaging younger demographics through social media and streaming. These leagues offer quick, fan-centric matches, opening revenue streams from sponsorships, digital content, and merchandising, reflecting the shift towards media-friendly sports consumption and showcasing innovation in football to meet modern consumer trends and tech progress.

Commercial Revenue Streams: With traditional revenue streams under pressure, particularly in the wake of global challenges such as the COVID-19 pandemic, football clubs are exploring new commercial opportunities. This includes diversification into e-sports, digital content monetization, and innovative sponsorship deals. The emphasis is on creating multiple revenue streams to sustain clubs financially beyond the conventional match-day and broadcasting income.

Sustainability and Social Responsibility: Football clubs are increasingly adopting sustainable practices and engaging in social responsibility initiatives, reflecting a broader societal shift towards sustainability. This trend is driven by regulatory pressures, investor

expectations, and a growing recognition of sports organizations' role in promoting environmental stewardship and social well-being. Initiatives range from eco-friendly stadium operations to community outreach programs and partnerships with non-profits.

Globalization of the Game: The global appeal of football continues to grow, with clubs looking to capitalize on international markets for both fanbase expansion and commercial partnerships. This includes pre-season tours in emerging markets, development of international academies, and strategic partnerships with local clubs. The digital era facilitates the globalization trend, allowing clubs to connect with fans worldwide more effectively than ever before.

Investment and Ownership Models: There is a notable shift in football's investment and ownership landscape, with an increase in foreign investments and the emergence of consortiums and private equity as significant players. This trend reflects the growing commercial value of football clubs and the potential for high returns on investment. However, it also raises questions about governance, fan involvement, and the long-term interests of the clubs.

Regulatory Changes and Financial Fair Play: The regulatory environment surrounding football is evolving, with governing bodies introducing measures aimed at ensuring financial sustainability and competitive balance. This includes the refinement of Financial Fair Play regulations and the exploration of salary caps and transfer fee regulations. These changes are significant for football clubs' operational and strategic planning, impacting how clubs approach player acquisitions, wage structures, and long-term financial planning.

4. Data analysis

Chapter 4 provides a comprehensive data analysis covering various dimensions critical to understanding the strategic, industry, athletic, and financial performance of the subject. This chapter employs a range of analytical tools, including Porter's Five Forces, PESTEL analysis, and financial performance metrics based on income statement analysis, balance sheet evaluation, and discounted cash flow (DCF) valuation. Through rigorous examination and interpretation of data, this chapter provides valuable insights into the subject's current standing and prospects.

4.1 Strategic Analysis

A SWOT analysis is a crucial tool in strategic management, allowing organizations to assess their internal strengths and weaknesses alongside external opportunities and threats. Originating from the 1960s research at the Stanford Research Institute led by Albert Humphrey, SWOT analysis aids in crafting strategic plans that leverage organizational capabilities and market opportunities while addressing limitations and external risks. Its simplicity and adaptability make it widely applicable across various business scenarios and sectors, enhancing decision-making and strategic planning processes (Porter, 1980).

The SWOT analysis of Borussia Dortmund, as detailed in Table 4.1, encapsulates the club's strategic positioning within the competitive landscape of football management.

Table 4.1: SWOT Analysis BVB

Strengths	Weaknesses
<ul style="list-style-type: none">• Strong team performance and successful track record in Germany and Europe• Global Brand and Fan Base• Strong Scouting and Youth Development• Financial Management• Strategic Sponsorships• Stadium Ownership	<ul style="list-style-type: none">• Sporting Success Dependency• Limited Revenue Diversification• Highly competitive Landscape• 50+1 rule in Germany with restrictions on external investors• Transfer Market Volatility• Dividends depending on financial & sporting Performance

Opportunities	Threats
<ul style="list-style-type: none"> ● International Expansion: There's potential for brand and commercial growth in untapped markets, notably in Asia and North America ● Digital and E-sports Ventures: Innovations in digital fan engagement and ventures into e-sports present new revenue avenues ● Sustainable Practices: Embracing sustainability can enhance brand appeal and open up new sponsorship opportunities ● Growth of the newly founded women's team ● Infrastructure Investments 	<ul style="list-style-type: none"> ● Economic and Regulatory Changes: Global economic instability and regulatory shifts could impact finances and strategic flexibility ● Competition Intensity: Rising financial clout of clubs, particularly in the Premier League, threatens Dortmund's competitive standing ● Technological Disruptions: The changing landscape of sports broadcasting and digital platforms may affect traditional revenue models

Source: own illustration, based on BVB IR (2023)

Dortmund's strengths lie in its impressive track record and strong team performance, pivotal in sustaining its global brand and expansive fan base. The club's strategic approach to youth development ensures a pipeline of talent to maintain competitive performance. It serves as a financial strategy by developing players who can contribute to the team's success or be sold for a profit. The club's acumen in financial management is demonstrated through strategic sponsorships and the ownership of Signal Iduna Park, which provides a steady revenue stream and enhances brand visibility (Sim, 2023).

Despite these strengths, Borussia Dortmund's operational model displays weaknesses, primarily in its dependency on sporting success for financial stability. The club's revenue streams lack diversification and rely heavily on the volatile transfer market, which can be unpredictable and risky. Operating in a highly competitive landscape, particularly against clubs with larger financial backing, poses a continual challenge to maintaining their status in domestic and European competitions (ODDO, 2023).

Growth opportunities are evident, particularly in international expansion. With significant potential in untapped markets like Asia and North America, Borussia Dortmund can enhance its brand and commercial presence. The digital world, including e-sports and

digital fan engagement innovations, offers new revenue streams and ways to engage globally with fans. Moreover, the club's commitment to sustainability and the growth of the women's team aligns with broader societal trends and can open doors to new sponsorship opportunities and fan demographics (Spobis, 2024).

However, threats in the external environment could impact Dortmund's strategic direction. Economic and regulatory changes globally, such as financial fair play regulations and shifts in the economic landscape, can affect the club's finances and strategic flexibility. The intense competition from financially robust clubs, especially in the Premier League, threatens Dortmund's ability to attract and retain top talent. Lastly, the sports industry is experiencing technological disruptions, with changes in sports broadcasting and digital platforms that could alter traditional revenue models (BVB IR 2023).

Addressing these strengths, weaknesses, opportunities, and threats requires Borussia Dortmund to adopt a proactive and innovative approach. Leveraging their strong brand and expanding internationally must be balanced with strategic initiatives to diversify revenue and reduce dependency on the transfer market. Embracing digital transformation and sustainability can open new revenue channels and strengthen the club's competitive position. Navigating these strategic dimensions will be crucial for Borussia Dortmund to maintain its prominence and financial health in the dynamic world of football.

4.2 Industry Analysis

Industry analysis is critical to strategic planning, providing businesses with the insights to navigate competitive landscapes, seize opportunities, and mitigate risks. The Five Forces and PESTEL analyses serve as complementary tools in this undertake, offering a micro and macro perspective of the industry environment.

4.2.1 Porter's Five Forces

In the context of the German and international football landscape, Porter's Five Forces Analysis offers a comprehensive framework to understand competitive dynamics and strategic considerations. The Five Forces model researches the competitive dynamics within an industry, helping firms understand the factors that directly influence

profitability and strategic positioning. It emphasizes the importance of analysing current competitors and considering the broader competitive forces at play (Bruijl, 2018). This analysis is tailored to reflect the unique aspects of football clubs.

Threat of New Entrants

The threat of new entrants in the football industry, especially at the level of Borussia, is relatively low. Establishing a new football club that can compete at the highest levels requires significant financial investment, a strong brand, and a loyal fan base.

- **German Perspective:** The Bundesliga is characterized by the "50+1 Rule," which ensures that clubs remain majority-owned by their members, ostensibly to protect clubs from being overtaken by external investors. This regulation presents a significant barrier to new entrants, fostering a competitive environment grounded in tradition and community engagement. Exceptional cases like RB Leipzig and TSG 1899 Hoffenheim, which have seen significant investment from corporate entities such as Red Bull and SAP co-founder Dietmar Hopp, respectively, illustrate the challenges and controversies surrounding new entrants in a traditionally structured league. These instances, though rare, highlight the complexities of navigating Bundesliga's regulations and the cultural fabric of German football (Ford, 2023).
- **International Perspective:** Contrasting the Bundesliga, the international football scene presents fewer regulatory barriers to new entrants, allowing clubs to benefit from substantial financial injections by wealthy owners or state-backed entities. Clubs like Manchester City, under the ownership of the Abu Dhabi United Group, and Paris Saint-Germain, owned by Qatar Sports Investments, exemplify how significant capital inflows can disrupt the competitive balance and rapidly elevate a club's status internationally (Pastore, 2018).

Bargaining Power of Suppliers

Suppliers include players, coaching staff, and other essential services in football. The bargaining power of top players and elite coaches can be high due to their critical role in the team's success and the high demand for their skills. On the one hand, Borussia Dortmund's strong scouting network and focus on internally developing talent through

their youth academy can somewhat mitigate this. This reputation facilitates easier persuasion of young talents to join, leveraging the promise of development and exposure in top-tier football. The ability to attract and develop talent is a crucial competitive advantage, reducing the reliance on expensive transfers and fostering a sustainable model of growth and success. But on the other hand, as Gallwey (2019) further points out: “Having seen Dortmund sell their star names regularly and replace them with lesser-known talents, a club being contacted by BVB over a player sale is inevitably going to ask for a larger transfer fee and possibly a sell-on clause to increase their profits.”

Bargaining Power of Buyers

The buyers in this context are fans, sponsors, and broadcast partners. Normally, fans have limited bargaining power as their loyalty is often tied to the club's identity rather than its price performance (Robinson, 2013). However, football clubs, particularly those with a strong tradition and fanbase like most in the Bundesliga, face unique constraints in their revenue strategies due to the bargaining power of fans. The tradition of affordable ticket prices, especially for standing areas, reflects a commitment to fan accessibility and community engagement. Any attempts to significantly increase prices could provoke fan protests and boycotts, threatening club stability and reputation. This dynamic underscores the importance of balancing commercial objectives with fan expectations and loyalty. Furthermore, sponsors and broadcast partners wield significant power due to the financial impact they can have on the club. The diversified revenue streams of Borussia Dortmund, including merchandise sales and matchday revenues, help balance this power dynamic.

Threat of Substitute Products or Services

The threat of substitutes for Borussia Dortmund includes other forms of entertainment and leisure activities. While various entertainment options are available, football's unique emotional attachment and community aspect provide a competitive edge. The club's successful engagement with fans through digital platforms and community initiatives also helps mitigate the threat of substitutes. The rise of new football-related projects and leagues, such as the “Kings League”, aimed at younger audiences, represents a growing threat of substitutes. These initiatives, leveraging digital platforms and innovative formats, cater to evolving consumer preferences and challenge traditional football consumption models. Goodman (2023) analyses: “The Kings League is reinventing football and set to redefine sports in the digital age.”

Competitive Rivalry

The competitive rivalry in the Bundesliga and European competitions is intense. Borussia Dortmund competes with several top-tier clubs with similar or greater financial resources. The club's strategy of developing young talent and competing in European competitions helps it maintain a competitive position, but the rivalry remains a significant challenge.

4.2.2 PESTEL Analysis

The PESTEL analysis offers a broader view of the external environment, examining how macro-environmental factors can shape industry trends and create opportunities or threats. This framework is essential for recognizing the broader societal, technological, and economic shifts influencing industry dynamics and strategic decision-making. By understanding these external factors, businesses can better anticipate changes in the market, adapt their strategies accordingly, and make informed decisions that ensure long-term sustainability and growth (Buye, 2021).

Borussia Dortmund, a club with a significant tradition and a unique market environment in the Bundesliga and European football, operates within a complex matrix of external factors. **Political elements**, including government regulations on sports broadcasting, taxation, and international trade policies, significantly influence Dortmund's operational and financial landscape. The Bundesliga's 50+1 rule showcases a unique regulatory approach, preserving club traditions and fan influence by limiting external investors' control. The club must navigate the political stability of competing regions, adjusting its market strategies accordingly.

Economically, Dortmund faces challenges and opportunities presented by global economic conditions, exchange rates, and inflation, which sway revenue streams from merchandise, sponsorships, and international competitions. The broader economic climate affects consumer spending on sports, impacting ticket sales and matchday revenues. The club's financial performance is strongly tied to the Bundesliga's economic environment, marked by solid yet sustainable financial growth. Unlike Premier League clubs, which benefit from highly lucrative broadcasting deals, Dortmund relies on matchday revenues, commercial partnerships, and player transfers to balance its books.

Sociocultural trends, such as shifting preferences towards digital content and social media, require Dortmund to adapt continuously to maintain brand appeal. Topics like gender equality and inclusion also shape the club's community and marketing strategies, reflecting societal values and expectations. Dortmund's identity as a traditional, fan-centric club shapes its social engagements. The club's renowned Yellow Wall, representing one of the largest terraces in European football, exemplifies its deep-rooted fan culture. This strong community bond influences the club's policies.

Technologically, advancements in broadcasting, online streaming, and sports analytics are pivotal. Dortmund's embracement of these technologies is essential for enhancing fan engagement, player performance, and operational efficiency, ensuring the club remains competitive. Adopting these technologies for better scouting possible transfer targets, game analysis, injury prevention, and digital fan experiences is critical.

Environmental factors compel Dortmund to consider its impact on local communities and its commitment to sustainability. Efforts to minimize its carbon footprint and engage in community development resonate with broader environmental goals. Dortmund's operations, from stadium management to merchandise production, are under scrutiny for their environmental impact. Adopting sustainable practices is a regulatory requirement in maintaining brand reputation and fan support.

Legal considerations, including sports governance, player contracts, and intellectual property rights, demand strict compliance to avert disputes and penalties. Labor laws and player transfer regulations further complicate strategic decisions, necessitating careful navigation.

In summary, navigating Porter's Five Forces and PESTEL factors is crucial for Borussia Dortmund to maintain its competitive edge and adapt to the dynamic sports industry landscape.

4.3 Athletic Performance Analysis

In analysing the sporting performance of Borussia Dortmund from the 2018/19 to 2022/23 seasons, it becomes evident that the club has demonstrated a remarkable level of consistency and ambition across domestic and European competitions.

The 2018/19 season heralded the beginning of Lucien Favre's tenure, setting a solid foundation that positioned Dortmund as a serious Bundesliga title contender. Despite leading the league at the halfway mark, the team ultimately secured a vice-championship, reflecting a potent start under Favre's strategic direction. The following season saw Dortmund finish as Bundesliga runners-up again, underscoring their consistent performance at the top of German football. However, their journey in the DFB-Cup was less successful, with early exits in the third round in both years, highlighting areas for potential improvement in domestic cup competitions. European competition during these seasons showcased Dortmund's competitive edge, with the team reaching the Champions League Round of 16 consecutively.

The 2020/21 season marked a pivotal moment with the appointment of Edin Terzić as head coach following a series of underwhelming results under Favre. Terzić's leadership reinvigorated the squad, leading to a significant DFB-Cup victory that season, a testament to his ability to motivate and strategically adapt amidst challenges. Additionally, a third-place finish in the Bundesliga and reaching the Champions League Quarterfinals underscored Dortmund's resilience and competitive spirit under Terzić's guidance.

Marco Rose's tenure in the 2021/22 season was marked by both highs and lows. Despite securing another second-place finish in the Bundesliga, Dortmund's Champions League campaign ended in the group stage, leading to a transition to the Europa League, where the team faced an early knockout. Moreover, an early exit in the DFB-Cup third round further highlighted the challenges faced during Rose's period at the helm. His departure at the end of the season reflected the club's ambition for more tremendous success and consistency.

The return of Edin Terzić for the 2022/23 season heralded a new phase of strategic refinement and ambition. Dortmund narrowly missed ending Bayern Munich's historic

league-winning streak, illustrating the club's potential to reclaim the Bundesliga title. Dortmund remained a formidable force in both German and European football, with a quarterfinal appearance in the DFB-Cup, alongside a return to the Champions League Round of 16.

Over these five years, Borussia Dortmund has established itself as a consistent force in German football, solidifying its position as the second force behind Bayern Munich. Despite not securing the Bundesliga title, the club's vice-championship finishes and DFB-Cup triumph highlight its competitive spirit and strategic management. Mixed results in European competitions, including reaching the Champions League Quarterfinals, reflect Dortmund's ambition on the continental stage despite facing early exits in some seasons. Currently, Dortmund ranks 14th in the UEFA five-year club rankings, a testament to its standing in European football, albeit behind Bayern Munich's second-place ranking (BVB Annual Reports, 2024).

4.4 Financial Performance Analysis

This financial review is relevant for evaluating Borussia Dortmund GmbH & Co. KGaA's valuation. It is a pivotal resource for investors, offering enhanced insights into the entity's financial health. Moreover, this analysis aids in understanding the firm's current standing, credibility, and dependability in the financial landscape. To provide a comprehensive perspective, this examination will also encompass a comparative analysis with a key rival in the sports sector, thereby spotlighting Borussia Dortmund's financial performance and contrast to a principal competitor.

The assessment is anchored in examining Borussia Dortmund's financial disclosures over the past five years (2019-2023), segmented into four critical areas: Profitability, Liquidity, Solvency, and Growth.

4.4.1 Income Statement

To analyse the annual Income Statement from 2019 until 2023 (Table 4.2), a horizontal and vertical analysis is performed (Tables 4.3 and 4.4). Looking at the revenue, there are fluctuations over the period. Revenues were steady at €370m in 2019 and 2020, then decreased to €334m in 2021. As previously mentioned, the COVID-19 pandemic had a significant impact on the dynamics of football clubs, resulting in financial challenges during that period. However, there was a significant recovery and growth in the following years, with revenues increasing to €352m in 2022 and further to €418m in 2023. The most notable growth occurred between 2022 and 2023, where revenues increased by approximately 19%.

Table 4.2: Income Statement Borussia Dortmund (2019-2023)

Annual Income Statement (All Values € Millions)					
	2023	2022	2021	2020	2019
Sales/Revenue	418	352	334	370	370
Cost of Goods Sold	24	23	20	22	21
Gross Income	394	329	315	348	349
SG&A Expense	281	271	249	267	257
Interest Expense	6	4	1	4	2
Income Tax	1	2	-0.3	-3	4
EBITDA	127	84	39	63	115
Net Income	10	-32	-73	-44	17

Source: own illustration, Yahoo (2024)

Borussia Dortmund's net income experienced a notable decline from €17m in 2019 to a low of -€73m in 2021, reflecting the broader impact of the coronavirus pandemic on the football industry, which faced matchday revenue losses and disrupted operations. The subsequent year showed some recovery with a reduced loss of -32m €, indicating the initial stages of overcoming pandemic-related challenges. By 2023, the club's net income turned positive at 10m €, despite the previous year's losses and ongoing market volatility. This suggests effective management strategies to mitigate the financial strains that are characteristic of the sports sector during such unprecedented times.

Table 4.3: Vertical Analysis of the Income Statement (2019-2023)

	Vertical Analysis					Average 2023 -2019
	2023	2022	2021	2020	2019	
Sales/Revenue	100%	100 %	100 %	100 %	100 %	100%
Cost of Goods Sold	6%	7%	6%	6%	6%	6%
Gross Income	94%	93%	94%	94%	94%	94%
SG&A Expense	67%	77%	75%	72%	69%	72%
Interest	1%	1%	0%	1%	1%	1%
Income Tax	0,5%	1%	0%	1%	1%	1%
EBITDA	30%	24%	12%	17%	31%	23%
Net Income	2.5%	9%	22%	12%	5%	10%

Source: own illustration

The **vertical analysis** of Borussia Dortmund's Income Statement from 2019 to 2023 provides a nuanced view into the club's financial stewardship over this period. Anchoring each line item as a percentage of total revenue reveals the club's operational efficiency and strategic cost management practices. Notably, the consistency in the Cost of Goods Sold at around 6% underscores a steady approach to managing direct costs, a critical factor in preserving the club's gross margin. This stability in direct costs is juxtaposed against the backdrop of fluctuating SG&A expenses. However, the most striking feature of this analysis is the volatility observed in Net Income, with a low of 2.5% in 2019 and a high of 22% in 2021, averaging 10% over the period. This volatility highlights the impact of operational performance and non-operating factors (such as interest and taxes) on the bottom line.

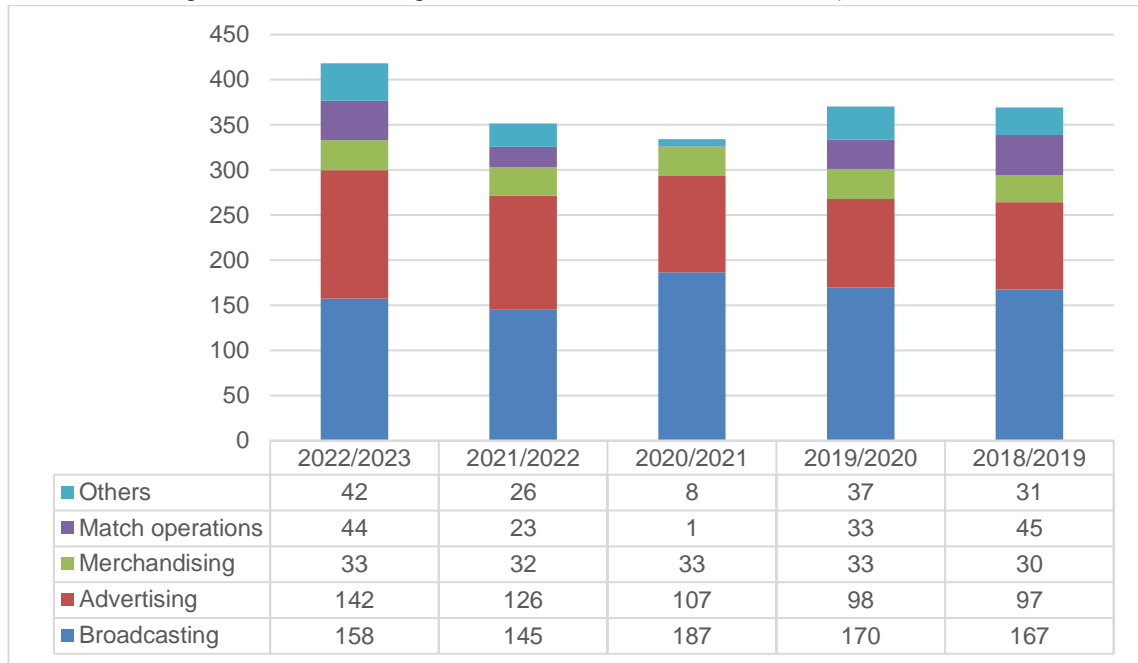
Table 4.4: Horizontal Analysis of the Income Statement (2020-2023)

	Horizontal Analysis				Average 2023 -2019
	2023	2022	2021	2020	
Sales/Revenue	19%	5%	-10%	0%	4%
Cost of Goods Sold	4%	15%	-9%	5%	4%
Gross Income	20%	4%	-9%	0%	4%
SG&A Expense	4%	9%	-7%	4%	2%
Interest	50%	300%	-75%	100%	94%
Income Tax	-50%	767%	90%	-175%	158%
EBITDA	131%	56%	-66%	-359%	-59%
Net Income	-69%	-56%	66%	159%	25%

Source: own illustration

Table 4.4 offers a detailed **horizontal analysis** of Borussia Dortmund's financial performance from 2020 to 2023, highlighting the dynamic shifts and trends over these years. The period under review shows Borussia Dortmund navigating through various operational and economic challenges yet demonstrating resilience and strategic adaptability. The club's Sales/Revenue experienced a cumulative growth of 19% by 2023, with a notable dip in 2021, where revenues fell by 10%, reflecting the broader impacts of global challenges on the sports industry. Despite these hurdles, the recovery and growth in the subsequent years underscore the club's robustness and ability to bounce back. Net Income and EBITDA present a vivid picture of the club's financial health, with Net Income showing a significant variance, culminating in an average growth of 25%. The dramatic 69% drop in Net Income in 2023 signifies the volatile economic conditions and their impact on profitability. Conversely, EBITDA's 51% growth in 2023 illustrates an improvement in operational profitability, emphasizing the club's ability to enhance its financial footing despite broader challenges.

Figure 4.1: Revenue Segments Borussia Dortmund (2019-2023), in Million €



Source: own illustration, BVB Annual Reports (2024)

Upon examining the table, the immediate impact of the COVID-19 pandemic on the financial landscape becomes apparent. In 2021, Borussia Dortmund's revenue experienced a dramatic decline. A closer inspection of the revenue segments reveals that in 2023, “Match operations,” principally ticket sales, and “Others,” predominantly composed of earnings from catering, each accounted for approximately 10% of the total revenue. In stark contrast, their combined contribution in 2021 amounted to a mere two percent. This significant discrepancy was, however, partially offset in the 2020/21 season, largely due to the team's commendable performance in the Champions League, which led to increased Broadcasting revenues.

Broadcasting

The governing body of the Bundesliga, the German Football League (DFL), which allocates media exploitation rights, emphasizes transparency and non-discrimination. Current media rights, spanning from the 2021/22 to 2024/25 seasons, promise the clubs an average income of €1.1 billion per season. Amidst a decline in national media rights and the consolidation of international markets, the distribution system aims to ensure stability and solidarity among Bundesliga clubs, providing a solid foundation for financial planning. During the fiscal year 2022/23, Broadcasting income once again constituted the most significant portion of Borussia Dortmund's revenue, accounting for 38%. A notable

increase of €13m from the previous year pushed the total to €158m, fuelled mainly by a larger share of the domestic income of TV rights. In the context of TV rights revenue and payouts from European competitions, Borussia Dortmund's inability to replicate their 2020/21 Champions League quarter-final achievement in the subsequent two years has reduced their share of TV money. This decrease is due to the performance-based distribution system of UEFA revenues, similar to the money distribution in the Bundesliga, where progressing further in the tournament typically results in higher financial rewards. The Champions League's new format for the 2024/25 season, expanding to 36 teams and eight matches, is poised to enhance the income from international TV marketing further. Furthermore, starting from the 2025 season, a new four-year media rights deal will commence in Germany. The DFL hopes to increase the clubs' revenues, from which Borussia Dortmund could also benefit (UEFA, 2024b).

Advertising

Borussia Dortmund's strategic diversification of its advertising revenue streams exemplifies an astute approach to leveraging brand equity in the global sports market. The club's adoption of variable jersey sponsorship, a pioneering move that designates different main sponsors for distinct sporting competitions, is a testament to its innovative revenue-generating tactics. 1&1 Telecommunication SE is the jersey sponsor for all Bundesliga matches, while Evonik Industries AG is on the jersey for all international club competitions, friendlies staged abroad, and DFB-Cup appearances. This segmentation allows for tailored marketing approaches that resonate with specific audiences and maximize exposure for sponsors, given the varied viewership dynamics of each competition. The reported increase in advertising revenue from €97m in the 2018/19 season to €142m in the 2022/23 season indicates a robust growth trajectory, potentially attributable to such strategic partnerships and digital internationalization efforts. Borussia Dortmund's advertising revenues have benefitted from digital overlays on international broadcasts, effectively regionalizing sponsor exposure and leveraging the global appeal of football. As the COVID-19 pandemic shifts to an endemic stage, Borussia Dortmund's fulfillment of contractual service obligations, especially in hospitality services, has been integral in boosting advertising revenue. The club anticipates continued growth in advertising income in the 2023/24 financial year, bolstered by new sponsorship contracts and extensions.

Merchandising

Over the past five financial years, merchandising has consistently contributed 8% to 10% of total revenue. Despite global economic challenges, the club managed to maintain its merchandising revenue over the COVID-19 pandemic. The fiscal year 2022/23 saw an increase in merchandising income by €1.5m, despite the high inflation rates that dampened retail sector demand. This resilience is partially attributable to the club's strategic response to market challenges, such as the departure of star player Erling Haaland, which initially caused a dip in jersey sales. BVB still was able to sell over 272,000 jerseys in 2022/23. Furthermore, Dortmund faced challenges with its special edition kit, which sold out and exceeded orders sixfold from the previous campaign, leading to a backlog to be fulfilled in the next financial cycle. Despite these issues, BVB anticipates increased merchandising revenue, acknowledging the impact of on-field performance and economic conditions on sales. The club is proactively enhancing its brand and merchandise range to diversify and stabilize this income. Dortmund operates six retail stores in western Germany, including a 2,000m² flagship store.

Others

This category, which includes revenue from sources like conferences and catering, has been highly volatile over the past five years. In 2022/23, income soared to €42m, up from just €8m in 2020/21, demonstrating the effects of the pandemic, as this category accounts for event-hosting at BVB facilities such as the stadium or stadium tours. This marks a rebound and growth in the club's capacity to capitalize on its stadium and amenities. With business restrictions lifted, prospects for this revenue stream are upbeat, especially with expected earnings from marketing activities during the 2024 European Championships at Signal Iduna Park. Borussia Dortmund is poised to benefit from the event through matchday operations, heightened tourism, and leveraging its facilities for related events.

Non-financial Performance Metrics

Borussia Dortmund has demonstrated a notable commitment to social engagement and environmental responsibility. Despite a substantial waiting list, the club's decision to limit the sale of season tickets for the 2022/23 season to 55,000 reflects a strategic approach to maintaining high demand and audience engagement. This decision did not diminish fan interest, as evidenced by the nearly full attendance at every home match, solidifying Borussia Dortmund's status as one of the most supported clubs in Europe. The club's

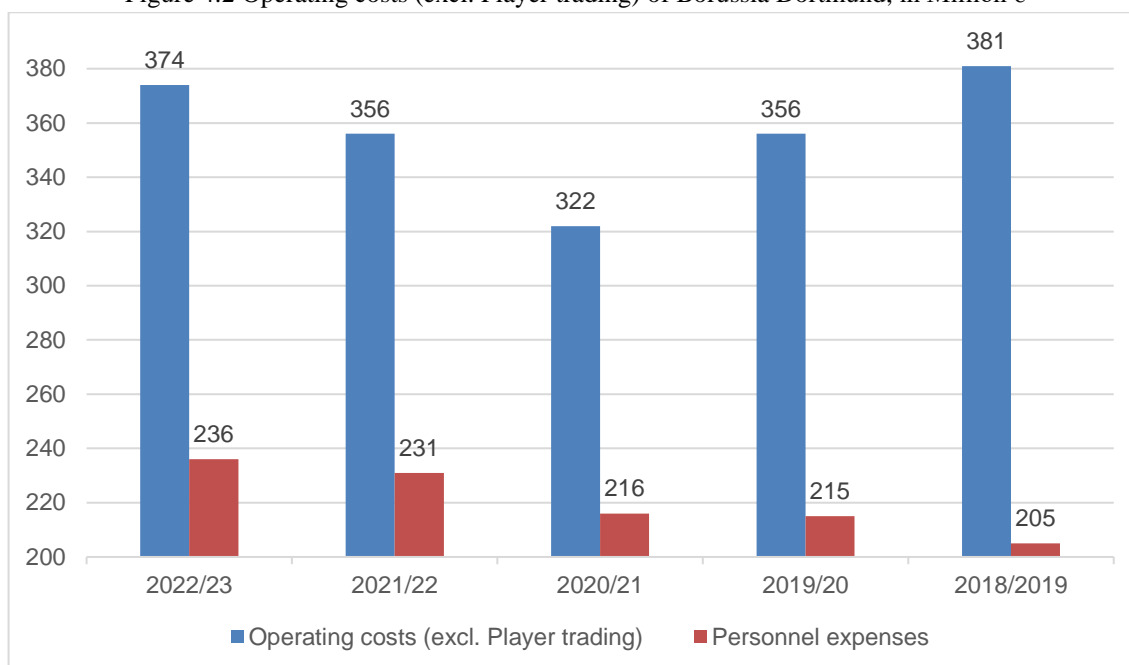
social media presence significantly drives its brand visibility, increasing from 52m to over 58m followers within a year. Platforms like Instagram and Facebook have been pivotal, with player activities, such as Marco Reus's personal following, further amplifying this reach.

The club's community engagement is embodied by the “Leuchte auf” foundation, which champions local non-profit initiatives, particularly in education, to combat discrimination and promote environmental and health awareness. This reflects a broader commitment to social responsibility, further illustrated by educational trips and active participation in campaigns against discrimination. Environmental stewardship is also a cornerstone of the club's sustainability efforts, with initiatives to implement environmental and energy management systems, aiming for “ISO 14001” certification by the third quarter of 2024. These initiatives extend to understanding and reducing CO2 emissions, focusing on fan travel, constituting a significant portion of the club's carbon footprint. Collaborative efforts with local authorities to expand public transportation options for match attendees highlight the club's proactive approach to environmental conservation (BVB IR, 2023).

4.4.2 Operating Costs

The wages-to-revenue ratio is one of the most significant metrics in analysing a football club's financial health and operational efficiency. This ratio clearly shows the proportion of revenue allocated to player salaries, providing insight into the club's spending discipline and financial sustainability. In Table 4.2a, player trading figures are deliberately omitted, as these amounts are earmarked for detailed analysis in a subsequent section of the text. Other components of the operating costs include the Cost of Goods Sold (COGS) and other operating expenses, such as the day-to-day expenses necessary to run a football club that are not tied directly to production, such as administrative and office expenses.

Figure 4.2 Operating costs (excl. Player trading) of Borussia Dortmund, in Million €



Source: own illustration, BVB Annual Reports (2024)

From the data provided, it is evident that personnel expenses constitute the largest portion of operating costs for the football club in question. Over the five-year period from 2018/19 to 2022/23, there has been a gradual increase in personnel expenses, rising from €205m to €236m. This growth in personnel costs stresses the upward trend in market-driven player wages, likely influenced by competitive pressures and the need to attract top talent to maintain or improve club performance.

Table 4.5 Wages-to-Revenue-ratio of Borussia Dortmund (2019-2023)

2022/23	2021/22	2020/21	2019/20	2018/2019
56%	66%	65%	58%	55%

Source: own illustration, BVB Annual Reports (2024)

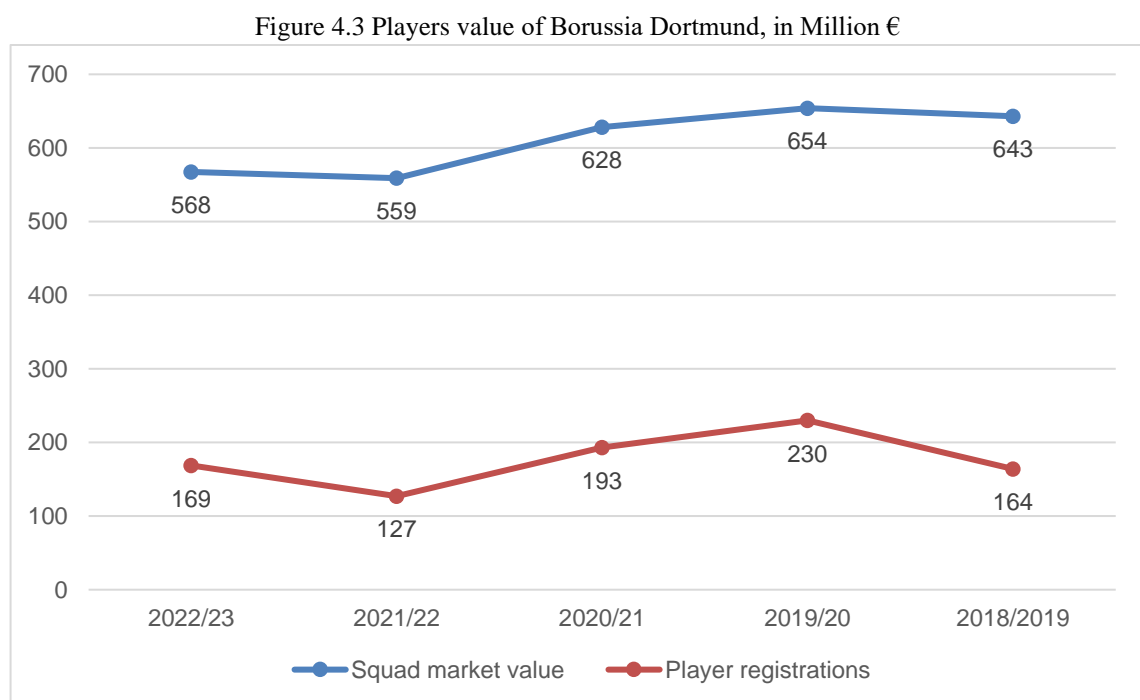
The wages-to-revenue ratio is a telling indicator, reflecting the club's commitment to its players regarding financial compensation. This ratio varied significantly between the 2018/19 and 2022/23 seasons, settling at 56% in the most recent year. The fluctuation can be attributed to various factors, including changes in club revenue streams, contract negotiations, and performance-related pay structures that may account for 15-25% of larger clubs' wage bills, as per the UEFA ECFIL Report (2023).

The wage-to-revenue ratio variation among the top 20 European clubs demonstrates the diversity of financial strategies employed across the footballing landscape. Clubs like

Tottenham Hotspur FC exhibit a more conservative ratio of just 46%, while Aston Villa FC reaches as high as 92%. The average wage-to-revenue ratio among the top 20 is 64%, with Borussia Dortmund below this mark, indicating a relatively disciplined wage policy. This disparity points to different managerial philosophies and the potential impact of on-pitch success on financial decision-making. Across these top clubs, the average increase in salary expenses to the previous season was 1.9%, with Dortmund's 2% rise aligning precisely with the average. Leading the pack, FC Barcelona pays 639m in salaries (78%), while Dortmund, at 263 million, ranks 13th in the European comparison. The wages-to-revenue ratio is a critical aspect of a football club's operating costs, reflecting its investment in human capital. As the most significant cost factor in operating expenses, clubs must manage this ratio effectively. Balancing competitive wages with sustainable revenue growth is essential for a football club's long-term success and financial health.

Players value & Transfers

Football clubs represent a unique blend of sporting prowess and financial intricacies. The value of the squad plays a pivotal role in shaping the club's on-field success and financial performance off the pitch.



Source: own illustration, BVB Annual Reports (2024), Transfermarkt (2024)

Figure 4.3 presents a comparative analysis of Borussia Dortmund's squad worth as depicted by the Player registration rights and the Squad market value. Player registrations, representing the book value of player registration rights in the balance sheet, showcase a progressive decrease of 27% from its peak in 2020 to 2023 over the reported periods. The Squad market value, recorded on the 15th of June each year, from Transfermarkt (2024), illustrates the same trend, with a reduction of 13% from 2020 to 2023. But in both cases, after the highest low, recorded in 2022, there's an upward trajectory in the last year. This comparison underscores the dynamic nature of squad valuations, influenced by factors such as player performance, market dynamics, and strategic acquisitions.

The squad's worth is intrinsically linked to Borussia Dortmund's financial statements and balance sheet, primarily under the category of intangible assets, as explained in Chapter 2.4. Notably, a higher allocation to player registrations reflects a club's significant talent acquisition and retention investment, signifying its commitment to strengthening the squad. Conversely, a lower allocation may indicate reduced investment in acquiring or retaining players, potentially impacting the overall quality and value of the squad.

However, it's crucial to acknowledge the limitations inherent in valuing player registrations solely based on book value. The book value of player registrations may not accurately reflect the market value of all players under contract, primarily due to player performance fluctuations, market demand, and contractual terms. Hence, comparing the book value of player registrations with the squad market value on platforms like Transfermarkt becomes imperative. Transfermarkt, renowned for its professionalism in assessing player valuations, provides a comprehensive overview of the market dynamics, enabling a more holistic evaluation of the squad's worth, which isn't accounted for in the same way in Dortmund's financial statements. Another issue that could negatively impact Borussia Dortmund's book value of players is the accounting treatment of internally generated intangible assets. Accounting rules generally do not permit companies to recognise the value of such internally developed intangible assets on their balance sheets. This means that for football clubs with many players developed internally, are recorded at zero value on the balance sheet. In 2023, Borussia Dortmund boasted the second-highest squad market value within the Bundesliga. Bayern Munich held the top position with a valuation of €980 million, while RB Leipzig trailed BVB in third place with a squad worth €487 million.

In the contemporary football economy, transfer activities are not merely a function of sports strategy but also a core component of a club’s financial model. A club like Borussia Dortmund, renowned for its market intelligence, often balances talent development with cautious economic actions. Their business model relies heavily on generating revenue through player sales while maintaining competitiveness on the pitch.

Table 4.6 Transfer Balance of Borussia Dortmund, in Million €

	2022/23	2021/22	2020/21	2019/20	2018/19
Revenue	82	109.5	5.5	132.25	114.2
Expenditure	104.6	45	55.15	148.5	90.5
Balance	-22.6	64.5	-49.65	-16.25	23.7

Source: own illustration, estimated by Transfermarkt (2024)

In an analysis of Dortmund’s financial data in Table 4.6., there is a landscape marked by volatility. For instance, the 2021/22 season showcases a robust revenue of €109.5 million against relatively modest expenditures of €45 million, resulting in a striking surplus of €64.5 million. This surplus likely indicates successful player sales at values exceeding their book valuations, which is emblematic of Dortmund's strategic prowess in player development and market timing. Conversely, the 2020/21 season paints a starkly different picture, with a paltry revenue of €5.5 million against expenditures of €55.15 million, culminating in a deficit of €49.65 million. This deficit could be symptomatic of an atypical season, perhaps influenced by external factors such as the global COVID-19 pandemic, which disrupted market dynamics. The financial narrative of Dortmund evolves as the 2022/23 figures denote a negative balance of €22.6 million, following an revenue of €82 million and expenditures of €104.6 million. This indicates a season where investment in the squad, perhaps to rejuvenate the team or to capitalize on market opportunities, exceeded the income from player sales.

In summary, Dortmund reinvests a significant portion of its earnings into the squad, allowing it the financial flexibility to acquire new talent without relying solely on surpluses. However, while the club has the means to invest in new acquisitions, the importance of player sales cannot be understated. The club must continually generate revenues from players’ transactions to facilitate new investments and maintain financial stability. Furthermore, when examining the value of the squad, one notices a decline despite relatively continuing investments in the squad. This indicates that the current

personnel are collectively less valuable than in previous years. From this, it can be inferred that either the club has not succeeded in making as many profitable deals in the transfer market or it has not been as successful in developing talents compared to its past accomplishments.

Profitability

In evaluating Borussia Dortmund's profitability, it is critical to discern the club's financial performance before and after player trading activities. These figures are integral to understanding the economic underpinnings of a club that is as reliant on the transfer market as it is on its performance in domestic and international competitions.

Table 4.7 Result of Operating activities of Borussia Dortmund, in Million €

	2022/23	2021/22	2020/21	2019/20	2018/19
Before Player Trading	37	7	10	9	21
<i>Player Amortisation</i>	-93	-96	-97	-92	-80
<i>Net transfer income</i>	73	63	15	40	83
Operating result	17	-26	-72	-43	24

Source: own illustration, based on BVB Annual Reports (2024)

Before accounting for player trading, Borussia Dortmund's operating profits offer a glimpse into the operational efficiency of the club. Over the last four years, there has been a marginal increase in operating profit before player trading, indicating a consistent ability to manage operational costs effectively. This increase, from €9 million in 2020 to €37 million in 2023, could be attributed to a strategic cost-cutting approach and optimizing revenue streams independent of transfer market dynamics, for example, the rise in matchday and events revenue, especially as fans return to stadiums post-pandemic restrictions. After player trading, the financial picture shifts significantly, highlighting the club's reliance on this aspect of its business model. The club saw a dip from a €24 million operating profit in the 2018/19 season to a €72 million loss in 2020/21. These figures underline the critical role transfer income, such as from lucrative player sales, plays in Dortmund's financial stability. The increased losses can be partially attributed to reduced transfer activity or perhaps lower-than-expected transfer incomes. This supports the relatively stable amount of amortisation of player registration rights compared to the more variable profit from player sales. However, the operating result for Borussia Dortmund rebounded from a loss in 2021 to a profit of €17 million in 2023, marking an increase of approximately 124%.

Borussia Dortmund's financial results have been severely impacted by a confluence of a less favourable transfer window and the lack of matchday revenue due to the pandemic. The financial year 2021 saw record losses, marking it as one of the most challenging periods in the club's recent history. The successful sale of key players afterward provided some financial relief. While the return of supporters to stadiums promised a boost in revenue, the club's financial performance will continue to be influenced heavily by its transfer market strategy and on-field success in European competitions.

Table 4.8 Financial ratios

	2023	2022	2021	2020	2019
Profit margin	30%	-9%	-22%	-12%	5%
Asset turnover	86%	77%	69%	73%	148%
Return on assets	2%	-7%	-15%	-9%	7%
Debt to equity ratio	81%	68%	94%	70%	41%
Return on equity	4%	-13%	-27%	-13%	10%

Source: own illustration, BVB Annual Reports (2024)

Analysing Borussia Dortmund's financial ratios from 2019 to 2023 gives us valuable insights into the club's financial health and operational efficiency. In some ratios, we can see periods of negative numbers during the COVID-19 pandemic.

The profit margin has increased significantly from 5% in 2019 to 30% in 2023. This suggests that Borussia Dortmund has improved its ability to convert revenue into net income. Such an improvement could be due to increased revenues from player sales, broadcasting rights, or matchday income, coupled with effective cost-control measures.

The asset turnover ratio has experienced fluctuations, with an exceptionally high turnover of 148% in 2019, which then normalized to hover around 69%-86% from 2020 to 2023. The initial high rate indicates that the club was able to generate a substantial amount of revenue relative to the value of its assets, perhaps due to extraordinary income or efficient asset use. The subsequent stabilization suggests a return to a more sustainable level of revenue generation from the club's asset base. The Return on Assets (ROA) shows a downward trend from 7% in 2019 to 2% in 2023, indicating a decline in the club's effectiveness in generating net income from its total assets.

The debt-to-equity ratio has varied, with a notable peak at 0.94 in 2021 before decreasing to 0.81 by 2023. The peak indicates that the club had almost as much debt as equity, which could have represented a higher financial risk during that period. The subsequent decrease suggests an improvement in the club's financial leverage, possibly due to an increase in equity, repayment of debts, or a combination of both. Return on Equity (ROE) has decreased from 10% in 2019 to 4% in 2023. The decrease to 4% indicates that the club's net income has fallen relative to the owners' equity, which might raise concerns about the club's ability to generate shareholder value in the long term.

In summary, the financial ratios reflect a club that has seen improvements in profit margins but is facing challenges in maintaining high returns on its assets and equity.

4.4.3 Balance Sheet

The asset composition of Borussia Dortmund in 2023 illustrates a strategic allocation that underlines the club's operational and commercial facets (Appendix 1). The most significant portions of the asset base are tangible and intangible fixed assets, accounting for 37% and 34%, respectively. Tangible assets, likely encompassing the stadium, training facilities, and equipment, reflect substantial investment in infrastructure critical to long-term success and daily operations. Borussia Dortmund's infrastructure supports the club's sporting success and financial performance. The ownership and strategic development of properties such as Signal Iduna Park and the comprehensive training facilities in Dortmund-Brackel provide the club with several advantages. The stadium, a central asset, acts as the home ground where matchday revenues are generated and serves as a key brand touchpoint for fan engagement and experience through the megastore ("BVB FanWelt service centre"). Investments in advanced training and youth development facilities underscore the club's commitment to nurturing talent, central to its sporting and financial strategies. Ownership of these assets affords Dortmund substantial marketing opportunities and potential revenue streams, especially significant during prestigious events like the UEFA European Championships 2024, enhancing the club's commercial and brand prominence (BVB Annual Report 2023).

Intangible assets, presumably dominated by player registrations, are pivotal in determining the club's competitive edge and potential future earnings through player sales and performance-related revenues.

Long-term financial assets constitute a minor 2% of the total, indicative of a conservative investment in long-term securities or equity interests. These can provide stability and potential income sources outside of football operations. The current assets, primarily composed of receivables and other assets at 26%, suggest a healthy pipeline of cash inflows from commercial deals, broadcasting rights, and owed transfer payments. The relatively low cash and bank balances, at merely 1%, could be seen as an efficient use of liquidity, though it might also suggest a limited buffer for unforeseen expenditures or a reflection of a strategy that leans towards investing available funds back into the club's operations and squad.

Equity & Liabilities

Borussia Dortmund's financial health can be evaluated through the lens of its equity and liabilities in 2023. The equity portion, which consists of subscribed capital and capital reserves - accounting for 21% and 40% respectively - indicates a robust capital structure that can provide financial stability and facilitate investment in club operations. The absence of revenue reserves and net accumulated losses reflects a clean balance sheet, possibly pointing towards cautious fiscal management and profitability in past years. The provisions set aside, although a smaller fraction at 2%, are necessary for any potential liabilities and indicate a measure of fiscal prudence. Liabilities form a substantial 32% of the equation, underlining the club's financial obligations and the importance of maintaining liquidity and solvency. Deferred income, at 4%, represents revenues received for services or benefits to be provided in the future, which can be attributed to season tickets and sponsorships, and must be managed strategically to ensure a steady flow of income across financial periods.

From 2019 to 2023, Borussia Dortmund's total shareholders' equity has shown a fluctuating trend, starting at €355m in 2019, decreasing to €222m in 2021, and recovering to €283m in 2023. This decrease over the period could be indicative of financial and operational challenges, such as increased liabilities, reduced revenue, or higher expenses, which have impacted the club's ability to maintain a steady equity value. The observed fluctuations suggest that Borussia Dortmund has faced varying economic conditions and strategic decisions that have influenced its financial stability and performance.

Table 4.9 Selected Balance Sheet items of Borussia Dortmund, in Million €

	2022/23	2021/22	2020/21	2019/20	2018/19
Transfer fees owed	105	87	22	33	33
Transfer fees owing	113	98	88	120	49
Cash and cash equivalents	4	11	2	3	56
Liabilities to banks	22	0	59	8	0
Other Liabilities	23	28	17	25	25
Net debt/profit	30	7	76	29	-44
Total Shareholders Equity	283	273	222	305	355

Source: own illustration, based on Alpha Spread (2024), BVB Annual Reports (2024)

The balance sheet of Borussia Dortmund reflects outstanding transactions from the transfer business as a critical component, delineated under “Trade receivable” and “Trade payable.” These represent the amounts owed and owing from player transfers, respectively. As of the 2022/23 season, Dortmund has €105 million in receivables and €113 million in payables. The relatively high numbers could be due to the installment-based nature of transfer payments, where fees are spread over several years, providing a deferred but predictable revenue stream and highlighting the club's commitment to future payments. The close balance between what is owed and owing indicates active transfer market participation, a key aspect of Dortmund's financial strategy, balancing incoming funds against financial commitments.

Dortmund's cash reserves declined to €4 million by the 2022/23 season from a high of €56 million in the 2018/19 season, indicating a significant depletion during the COVID-19 pandemic. This downturn indicates the operational pressures the pandemic has exerted on liquidity, highlighting the club's need for stringent cash management during periods of reduced revenue, particularly from matchdays.

In the 2020/21 season, Borussia Dortmund's “Liabilities to banks” stood notably at €59 million, a figure that reflected the club's financial commitments during a period of intense economic strain brought on by the pandemic. However, the following season saw a strategic transformation in the club's financial structure. This transformation was driven by a substantial capital increase, achieved through the issuance of 18m new no-par value ordinary bearer shares. This injection of capital, amounting to a rise in €18m, brought the club's share capital to €110m. The move significantly fortified Dortmund's financial

position, enabling the complete repayment of the aforementioned bank liabilities, reducing them to zero (BVB Annual Reports, 2024).

This decisive action had a twofold effect on the club's financial health. First, it bolstered the balance sheet, as the equity base expanded with increased capital reserves from €144m to €212m, reflecting a more robust financial foundation. Second, it released Borussia Dortmund from the constraints of bank-related debt, eradicating associated interest payments and future cash outflows, thus enhancing the club's financial flexibility and maneuverability.

The “Net debt/profit” metric offers insight into Borussia Dortmund’s financial leverage and profitability over time. In the 2018/19 season, the club was in a net profit position, with €44 million in surplus. This positive figure indicates that at that time, the club's financial activities, particularly in the transfer market and operational revenue, were managed to cover all liabilities and generate substantial profit.

Fast-forward to the 2022/23 season, and the situation has inverted to a net debt of €30 million. This shift from net profit to net debt signals a change in the club’s financial stance, implying that the club has more financial obligations than liquid assets. The shift to a net debt position highlights the need for careful financial planning and underscores the importance of the club's ability to generate future revenue to manage and repay its liabilities.

The amount of “Total Liabilities & Equity” has shown resilience, increasing to €512 million in 2022/23 from €454 million in 2020/21, despite the intervening economic challenges. This growth is a testament to the club’s ability to increase its equity, likely through the aforementioned capital increase and ongoing business operations, rather than relying on increasing debt levels. It underlines the club's strength in managing its financial structure and capacity to leverage its equity to navigate through challenging periods.

4.4.4 Cash Flow

Examining Borussia Dortmund's cash flow from 2019 to 2023 offers crucial insights into the club's financial management and liquidity status. Divided into operational, investing, and financing activities, the Cash Flow Statement delineates the club's cash management strategies over the observed period. These divisions are key to understanding how the club allocates and utilizes its cash, shedding light on its operational profitability and financial requirements.

Table 4.10: Cash Flow Statement Borussia Dortmund, in Million €

	2023	2022	2021	2020	2019
Net income	11	-33	-73	-47	22
Operating Cash Flow	54	35	16	0	29
Capital Expenditures	-148	-81	-92	-159	-139
Investing Cash Flow	-77	-51	-62	-51	-24
Financing Cash Flow	16	25	53	-9	-9
Net Cash Flow	-6	9	6	-61	-4
Free Cash Flow	-93	-46	-76	-159	-111

Source: own illustration based on Alpha Spread (2024)

Operating Cash Flow (OCF) represents the cash generated by the club's core business operations. For Dortmund, the OCF has shown resilience, increasing from €0 million in 2020 to €54 million in 2023. This impressive recovery suggests effectively transforming the club's operational activities into cash inflows post-2020. However, there was a dip in 2022, with OCF dropping to €35 million from €54 million in 2023, indicating potential changes in the operational efficiency or market conditions impacting the club's ability to generate cash.

Capital Expenditures (CapEx) indicate the club's investment in long-term assets and are key to understanding its growth and expansion strategies. Borussia Dortmund's CapEx has been significant, peaking at -€159 million in 2020, then a reduction to -€148 million in 2023. The high CapEx, particularly in 2020, signifies substantial investments, potentially in the club's infrastructure, such as stadium enhancements or training facilities, which are essential for long-term success.

The **Investing Cash Flow**, consistently negative, indicates ongoing investments, whereas **Financing Cash Flow** reveals the club's activities in securing funds. A notable financing cash flow in 2021 at €53 million, against a backdrop of economic challenges, points to

effective financial strategies, such as capital increases or loans, to sustain operations and pursue growth.

The Net Cash Flow experienced fluctuations, notably a dip to -€61 million in 2020 before recovering to positive figures in subsequent years. This suggests the club stabilized its cash flow after the significant investments in 2020. The **Free Cash Flow (FCF)** has been negative, indicating that the club’s cash from operations is being substantially reinvested into the club. Persistently negative free cash flows pose a significant challenge when valuing a company using the DCF method. This issue will be further addressed in the limitations chapter of this project.

The cash flow analysis for Borussia Dortmund over the past five years paints a picture of a club that has actively managed its liquidity through operational efficiency, strategic investments, and financial maneuvers. The evolution of OCF, investing and financing cash flows, net cash flow trends, and free cash flow reflect the club's response to changing conditions and strategic priorities, highlighting its dynamic financial management.

Liquidity & Solvency

The liquidity ratios of Borussia Dortmund demonstrate the club's ability to meet short-term financial obligations. The current ratio, representing the proportion of current assets to current liabilities, decreased from 1 in 2019 to 0.44 in 2023. Similarly, the quick ratio, which considers only the most liquid assets, declined from 1 in 2019 to 0.41 in 2023. Moreover, the cash ratio, indicating the proportion of cash and cash equivalents to current liabilities, experienced a substantial drop from 0.45 in 2019 to 0.03 in 2023. These declines suggest a diminishing ability of the club to meet its short-term obligations with its current assets, particularly cash and cash equivalents.

Table 4.11: Liquidity ratios of Borussia Dortmund

	2023	2022	2021	2020	2019
Current ratio	0.44	0.7	0.37	0.62	1
Quick ratio	0.41	0.67	0.33	0.57	1
Cash ratio	0.03	0.08	0.01	0.03	0.45

Source: own illustration based on WSJ (2024)

The solvency ratios of Borussia Dortmund provide insights into the club's long-term financial stability and ability to meet its debt obligations. The debt-to-equity ratio surged from 0.03 in 2019 to 0.34 in 2021 before declining to 0.12 in 2023. Similarly, the debt-to-asset ratio rose from 0.02 in 2019 to 0.17 in 2021, then decreased to 0.07 in 2023. Conversely, the equity-to-asset ratio declined steadily from 0.71 in 2019 to 0.55 in 2023. Furthermore, the interest coverage ratio, reflecting the club's ability to cover interest expenses, exhibited considerable variability, notably dropping from 9.31 in 2019 to 0 in subsequent years. These fluctuations may suggest changes in Borussia Dortmund's financial leverage and its capacity to service debt obligations over the years.

Table 4.12: Solvency ratios of Borussia Dortmund

	2023	2022	2021	2020	2019
Debt/Equity ratio	0.12	0.06	0.34	0.11	0.03
Debt/Asset ratio	0.07	0.04	0.17	0.06	0.02
Equity/Asset ratio	0.55	0.6	0.52	0.59	0.71
Interest coverage ratio	1.74	0	0	0	9.31

Source: own illustration based on Gurufocus (2024)

4.4.5 Dividends policy

Borussia Dortmund's dividend policy reflects a strategic balance between maintaining competitive sporting performance and rewarding its shareholders. This approach is grounded in two critical financial indicators: the club's earnings and free cash flow.

Historically, the club's dividend distributions have been influenced by its profitability, with net losses recorded during the COVID-19 years leading to the suspension of dividends. However, as the effects of the pandemic have subsided, Dortmund has pivoted back to profitability, reporting a net profit in the 2022/23 financial year. As underlined by CEO Hans-Joachim Watzke, the club's management anticipates resuming dividend payments in the 2023/24 fiscal year, signaling a return to pre-pandemic financial practices when the last dividend of €0.06 per share was issued.

Watzke's announcement at the annual general meeting of shareholders not only marked a reinstatement of shareholder returns but also reflected confidence in the club's financial recovery and operational normalcy. The club's judicious financial management facilitates the resumption of dividends during the pandemic and a return to profitability. Borussia

Dortmund intends to strategically allocate its net income and reserves for critical investments in the professional squad, the stadium's modernization and digitalization, and the training ground's expansion. The goal remains to consistently distribute dividends, evidenced by the reversal of revenue reserves and a partial reversal of capital reserves to offset previous years' losses. This cautious financial maneuver positions Dortmund to legally issue dividends in the future, contingent on generating the requisite net profits (BVB Annual Report 2023; Kufner, 2023;).

4.5 DCF Valuation

The Discounted Cash Flow (DCF) analysis uses historical financial data from the past five years to inform the assumptions required for future projections. This analysis incorporates Borussia Dortmund's financial reports and public disclosures to estimate the club's intrinsic value from 2024 to 2028.

The DCF analysis for Borussia Dortmund is structured around a five-year projection period, aligning with standard valuation practices. This framework applies a scenario-based method, encompassing worst-case, base-case, and best-case scenarios. This approach allows for a comprehensive risk assessment and a more nuanced understanding of potential financial outcomes.

Each scenario is carefully developed, considering key value drivers including revenue growth, EBITDA margins, and capital expenditures. The resulting range of valuations will offer insights into how sensitive Borussia Dortmund's value is to different operational and market conditions. This will enrich the decision-making process for potential investors and stakeholders.

4.5.1 Revenue and Revenues Growth Projection

The company witnessed a commendable fiscal recovery in 2022/23, surpassing pre-pandemic financial figures, marking a return to normalcy. Looking ahead, the incremental financial performance in the coming years is expected to be closely tied to on-pitch achievements.

Analysts project steady growth in operating revenue for Borussia Dortmund in the upcoming 2023/24 fiscal year, considering the endemic nature of COVID-19. However, the forecast must cautiously account for the indirect economic implications of the persisting war in Ukraine. The German economic climate, strained by inflation due to rising prices for commodities, energy, and food, could indirectly impact consumer spending power, potentially affecting the club's revenue streams.

On the sporting front, the club's track record of qualifying for the Champions League suggests robust matchday revenue. Suggesting consistent performance factored conservatively into forecasts underpins a stable financial base. Borussia Dortmund's strategic approach to global branding, through international tours and a tailored digital presence, is expected to support advertising and merchandising revenues, countering some of the potential economic downturn effects. The media rights agreements in place until 2025 are anticipated to ensure a predictable inflow of TV marketing revenues. However, there may be moderated growth due to revised national media rights and UEFA's pandemic-related adjustments. Merchandise sales are predicted to flourish, as evidenced by the high demand for special edition kits. Transfer market activities are acknowledged as a significant revenue component. Despite potential global economic shifts dampening the transfer market, it is reasonable to anticipate strategic player transactions, such as Jude Bellingham's transfer to Real Madrid - accounted for in 2023/24 - to contribute substantially to the club's finances.

Therefore, this analysis anticipates an increase in Borussia Dortmund's operating revenue for 2023/24. The club is expected to navigate the complexities of the current economic landscape by leveraging its sporting achievements and strategic market initiatives, albeit with an eye on the broader geopolitical and economic challenges that could influence financial outcomes. For the 2024/25 season, the Champions League will adopt the 36 clubs-format, playing two more guaranteed games in the new league stage. This change is expected to increase the profitability of revenues further from international TV broadcasting rights.

Based on the four analyst firms covering Borussia Dortmund regularly, Revenue and EBITDA projections for 2024 and 2025 encapsulate Dortmund's financial health.

Table 4.13: Earnings estimates by Analysts 2024-25, in Million €

Analyst	Revenue Estimate		EBITDA Estimate	
	2024	2025	2024	2025
Hauck Aufhäuser Lampe Privatbank AG	459	494	162	151
Edison Research Investment Ltd.	434	457	114	121
ODDO	427	447	113	115
GSC Research GmbH	425	458	110	117
Average	436	464	125	126

Source: own illustration based on BVB (2024e)

Table 4.13 shows a forecasted revenue growth from an average of €436 million in 2024 to €464 million in 2025. Hauck Aufhäuser Lampe Privatbank AG's estimates suggest the most substantial revenue, indicating confidence in Dortmund's financial performance. Meanwhile, EBITDA estimates indicate slight growth from €125 million to €126 million on average, with projections varying among the analysts.

ODDO (2023) published a further extended outlook with a share price estimate ranging from €3.55 to €5.88 in 2024, projected revenue of €459 million, and EBITDA of €118 million for 2026, showcases a positive long-term financial perspective for the club.

Table 4.14: Mean Earnings estimates by Analysts 2024-28, in Million €

Fiscal Period Ending	Revenue Estimate	YOY Growth	FWD Price/Sales	Low	High	# of Analysts
Jun 24	435	8.62%	0.89	428	444	3
Jun 25	457	5.02%	0.84	448	466	3
Jun 26	469	2.63%	0.82	455	483	2
Jun 27	487	3.75%	0.79	468	506	2
Jun 28	503	3.41%	0.77	480	527	2

Source: own illustration based on Seeking Alpha (2024), Currency exchange rate by 12.03.2024 was 0,9138 (USD/EUR)

These mean earnings estimates reflect short-term trading outlooks and market expectations and are supplemented by longer-term projections sourced from SeekingAlpha (Table 4.14). Here, the mean Year-over-year (YOY) revenue growth is seen to decelerate, and the mean forward price-to-sales ratio indicates a declining trend from 0.89 to 0.77 from 2024 to 2028, with a widening price target spread over the years.

While these forecasts are integral in evaluating the club's financial strategies, it is essential to acknowledge the uncertainties inherent in the football industry and the broader economic factors that could impact these predictions. Therefore, these financial projections should be contextualized within an extensive analytical framework, considering both the quantitative data provided by the analysts and the qualitative factors that influence the club's operational effectiveness and market valuation. Borussia Dortmund anticipates a revenue increase to €427 million in 2024, marking a 2.15% rise from €418 million in 2023 (BVB Annual Report, 2023). Even though Borussia Dortmund's revenue grew by 19% compared to 2022, the average growth rate over the past four years was 4%. Table 4.13 shows that the four analysts following Dortmund

forecast an average 2024 revenue of €436 million, reflecting a 4.31% growth from 2023, and project an average revenue of €464 million for 2025, indicating a 6.42% increase from their 2024 estimate. Analysts at Seeking Alpha predict an average revenue rise of 8.6% to €435 million for 2024 and a 5% growth to €457 million. Subsequent projections suggest an annual revenue growth rate declining to between 2.6% and 3.7%. It's crucial to highlight the variability in financial performance indicators for a football club like Borussia Dortmund compared to other public companies, mainly due to transfer activities or deviations from forecasted assumptions related to sports performance. Furthermore, as mentioned before, unforeseen escalations in the Ukraine conflict could also impact financial outcomes.

As mentioned, analysts covering BVB regularly and the firms included on Seeking Alpha forecast an average of €435 million in revenue for 2024. This refers to the initial 2024 revenue projection in the middle-case scenario. For the worst-case scenario, there is an estimated €422 million in revenue, the lowest of all projections from an analyst for that year. And for the best-case scenario, €447m is estimated, the highest projection from an analyst. For long-term growth, **revenue growth rates of 1%, 4%, and 7%** are applied to each respective scenario, as the middle point is also in line with the average YOY-growth estimate from the analysts on Seeking Alpha for the next five years and with the average growth rate over the last four years. Therefore, the analyst's expectation for the next five years is the middle point.

Operating Expenses

The forecast for Cost of Goods Sold, Other Operating Expenses, Depreciation & Amortization, and Interest Expenses has been derived through ratio analysis. This involved averaging the ratios from the previous five years and applying them to the projected revenues over the next four years to estimate future costs.

Table 4.15: Cost Ratios

Cost Ratios	2023	2022	2021	2020	2019	Average
COGS/Revenue	0.057	0.065	0.060	0.059	0.057	6%
OOE/Revenue	0.237	0.221	0.201	0.238	0.246	23%
D&A/Revenue	0.254	0.313	0.332	0.286	0.249	29%
IE/Revenue	0.023	0.015	0.004	0.010	0.006	1%

Source: own illustration

A notably low COGS/Revenue ratio reflects the service-oriented nature of the football industry, where direct costs such as player wages do not scale with revenue as they might in manufacturing or retail sectors. While consistent with the demands of maintaining sports facilities and club operations, operational expenses are more substantial, as represented by the OOE/Revenue ratio. The D&A/Revenue ratio underscores the considerable investment in long-term assets intrinsic to sports franchises that deal heavily in player transfers and infrastructural development. Lastly, the club's modest IE/Revenue ratio suggests a cautious approach to debt financing, a testament to strategic financial management within the fluctuating areas of football economics.

The historical average for total costs has been 57% relative to revenue. Given the club's trajectory of recovery post-COVID-19, a modest improvement in efficiency is expected, aligning with the club's internal projections outlined in the following. Hence, for the middle-case scenario, it's projected that total costs will represent 55% of revenues, while for the worst-case estimate, costs could be 60%, and the best-case places them at 50%. Upcoming tables will detail the COGS and other financial costs as proportions of the total costs and will be adjusted in line with these estimations.

Table 4.16: Total Cost Assumptions

	Worst Case	Middle Case	Best Case
COGS/TC	6%	6%	5%
OOE/TC	24%	22%	20%
TC/Revenue	60%	55%	50%

Source: own illustration

In the context of financial performance indicators, Borussia Dortmund displays distinct characteristics that diverge from typical corporate entities. The club's cost ratios, as analysed over a span of years, highlight the unique economic dynamics within the sports sector.

In projection for Borussia Dortmund, the club anticipates a reduction in significant operating costs through enhanced operational efficiency. The club's personnel expenses, a significant component of operating expenditure, are inherently aligned with its sporting success and, consequently, the associated income, establishing a variable cost structure tied to performance. This structure is being refined, especially for UEFA competitions,

ensuring personnel costs are commensurate with financial returns. Additionally, Dortmund's commitment to stringent cost management is evidenced by the institution of a central purchasing department, which indicates a proactive approach to streamlining procurement and reducing expenditures. While other operating expenses fluctuate with match frequency and on-field success, Dortmund's strategic cost optimizations will likely mitigate undue increases, enhancing profitability.

Despite the macroeconomic pressures expected from the Ukrainian conflict, particularly on commodities and energy, Dortmund's pursuit of operational efficiencies is projected to temper the impact on operating expenses, especially in catering and match operations. This holistic approach to operational management positions the club favourably for future financial performance (BVB Annual Report, 2023).

Fluctuations in EBITDA present challenges in establishing firm future projections. As shown in Table 4.13, analysts anticipate a modest decline in EBITDA from €127 million in 2023 to an average of €125 million in 2024 and €126 million in 2025. Excluding one outlier predicting a significant downturn between 2024 and 2025, the consensus points towards a slight rebound. Over the last decade, Borussia Dortmund's EBITDA has experienced an average annual change of 16%. This figure is therefore leveraged for forecasting future EBITDA, with an estimate of 10% growth for the middle-case scenario, a conservative 5% growth for the low-case scenario - reflecting the cautious stance of analysts - and an optimistic 15% growth for the best-case scenario, aligning with periods of strong performance.

4.5.2 Income Statement Projections

Borussia Dortmund's tax rate has fluctuated significantly over the past years. Data analysis up to the pandemic reveals an average tax rate of 12.2% from 2015 to 2019, nearly double the recent five-year average. This earlier period did not include the special tax effects associated with COVID-19, which have since ceased. In the subsequent projections within this analysis, the observed mean tax rate of the past five years is noted to be 6.2%, reflecting the impact of these various factors. However, considering the years before the pandemic and the conclusion of the special tax effects due to COVID, the forecast for future projections is adjusted upward, employing a **10% tax rate**. This adjustment accounts for the normalization of tax rates post-pandemic and aims to provide

a more accurate representation of Borussia Dortmund's expected tax obligations moving forward.

Table 4.17: Corporate Tax Rate Forecast

	2023	2022	2021	2020	2019	Average
tax rate	11.4%	5.6%	-0.5	-5.6%	20.3%	6.2%

Source: own illustration

Tables 4.18, 4.19, and 4.20 provide a detailed overview of Borussia Dortmund's Income Statement Projections and DCF Valuation under different scenarios.

Table 4.18: Income Statement Projections & DCF Valuation, Worst Case Scenario

Worst Case Scenario										
Million of €	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Revenue	370	370	334	352	418	422	426	431	435	439
Cost of Goods Sold	21	22	20	23	24	27	27	27	28	28
Gross Profit	349	348	315	329	394	395	399	403	407	411
Other operating expenses	91	88	67	78	99	101	102	103	104	105
EBITDA	115	63	39	84	127	133	140	147	154	162
Dep & Amort	92	106	111	110	106	122	124	125	126	127
EBIT	24	-43	-72	-26	17	11	16	22	28	35
Interest expenses	-2	-4	-1	-4	-6	-4	-4	-4	-4	-4
EBT	22	-47	-73	-30	11	7	12.1	18	24	30
Income Taxes	4	-3	-0.3	2	1	0.7	1.21	1.8	2.4	3.0
tax rate	20%	-6%	-1%	6%	11%	10%	10%	10%	10%	10%
Net Income	17	-44	-73	-32	10	6	10.9	16	21	27

Source: Author, BVB Annual Reports (2024)

The worst-case scenario shows Borussia Dortmund's income statement projections and DCF valuation, with the first estimated number provided in 2024. The estimated revenue for 2024 is €422 million, projected with a revenue growth rate of 1%. From 2024 to 2028, the club faces challenging conditions, with revenue gradually increasing to €439 million. Despite the uncertainties, Borussia Dortmund manages to maintain positive net income throughout the forecasted period.

Table 4.19: Income Statement Projections & DCF Valuation, Middle Case Scenario

Middle Case Scenario										
Million of €	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Revenue	370	370	334	352	418	435	452	470	489	509
Cost of Goods Sold	21	22	20	23	24	26	27	28	29	31
Gross Profit	349	348	315	329	394	409	425	442	460	478
Other operating expenses	91	88	67	78	99	96	99	103	108	112
EBITDA	115	63	39	84	127	140	154	169	186	205
Dep & Amort	92	106	111	110	106	126	131	136	142	147
EBIT	24	-43	-72	-26	17	14	23	33	44	57
Interest expenses	-2	-4	-1	-4	-6	-4	-5	-5	-5	-5
EBT	22	-47	-73	-30	11	9	18	28	39	52
Income Taxes	4	-3	-0,3	2	1	1	2	3	4	5
tax rate	20%	-6%	-1%	6%	11%	10%	10%	10%	10%	10%
Net Income	17	-44	-73	-32	10	8	16	25	35	47

Source: Author, BVB Annual Reports (2024)

In the middle-case scenario, the first estimated number begins with a projected revenue of €435 million in 2024. The revenue will steadily grow to €509 million by 2028, driven by a revenue growth rate of 4%. Borussia Dortmund strategically manages its expenses, resulting in steady positive net income over the forecasted period.

Table 4.20: Income Statement Projections & DCF Valuation, Best Case Scenario

Million of €	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Revenue	370	370	334	352	418	447	479	512	548	586
Cost of Goods Sold	21	22	20	23	24	22	24	26	27	29
Gross Profit	349	348	315	329	394	425	455	486	521	557
Other operating expenses	91	88	67	78	99	89	96	102	110	117
EBITDA	115	63	39	84	127	146	168	193	222	255
Dep & Amort	92	106	111	110	106	130	139	148	159	170
EBIT	24	-43	-72	-26	17	16	29	45	63	85
Interest expenses	-2	-4	-1	-4	-6	-4	-5	-5	-5	-6
EBT	22	-47	-73	-30	11	12	24	40	58	80
Income Taxes	4	-3	-0.3	2	1	1	2	4	6	8
tax rate	20%	-6%	-1%	6%	11%	10%	10%	10%	10%	10%
Net Income	17	-44	-73	-32	10	11	22	36	52	72

Source: Author, BVB Annual Reports

The best-case scenario commences with an estimated revenue of €447 million. With a robust revenue growth rate of 7%, the club's revenue surges to €586 million by 2028. Borussia Dortmund effectively controls its expenses, leading to substantial positive net income throughout the forecasted period, reflecting the potential benefits of favourable market conditions and strategic initiatives.

4.5.3 NWC and CAPEX Investment

The Net Working Capital (NWC), calculated by subtracting "Current Liabilities" from "Current Assets less Cash," offers an in-depth analysis of a company's immediate financial health and operational capability. This method highlights the significance of non-cash assets essential for revenue generation. It aligns with the operational cycle, offering a detailed view of the company's ability to meet short-term obligations. By focusing on assets critical for daily operations, this calculation provides a clearer insight into operational liquidity, as illustrated in Table 4.21, presenting a concise snapshot of the company's operational financial efficiency.

Table 4.21: Net Working Capital, Current Assets less Cash

Net Working Capital	2023	2022	2021	2020	2019	Average
(1) Current Assets less Cash	67	86	59	74	72	72
(2) Current Liabilities	161	137	174	123	128	145
(3) Net Working Capital	-94	-52	-115	-49	-56	-73
Formula: (3) = (1) - (2)						
In Millions €						

Source: Author

The NWC analysis for Borussia Dortmund over the past five years reveals a consistently negative position, with the NWC as a percentage of revenue averaging -20%. This value is applied for all scenarios. The negative NWC figures, with the lowest observed in 2021 at -€115 million, or -34% of revenue, highlight the club's liquidity management strategy, where current liabilities routinely surpass current assets, excluding cash.

Table 4.22: NWC (%) of Revenue

NWC (%) of Revenue	2023	2022	2021	2020	2019	Average
(1) Revenues	418	352	334	370	370	369
(2) NWC	-94	-52	-115	-49	-56	-73
(3) NWC (% of Revenue)	-22%	-15%	-34%	-13%	-15%	-20%
Formula: (3) = (2) / (1)						

Source: Author

This persistent negative NWC can be partially attributed to the nature of the football business, where there are significant upfront receipts from season ticket sales, broadcasting rights, and sponsorships, which are recorded as liabilities, and substantial outlays related to player acquisitions that are yet to be amortized. The club has a significant value tied up in non-current assets, particularly intangible assets, which is

typical for football clubs due to player registrations. These do not offer immediate liquidity and are not considered part of NWC. The fluctuating percentages year-over-year also reflect the impact of the football season's timing, transfer market activity, and possibly the effects of the COVID-19 pandemic on the club's financials, particularly in 2020 and 2021.

The initial Net Working Capital (NWC) is projected to be -€87 million, derived by applying the historical average NWC ratio of -20% to the projected revenue of €435 million for 2023 in the middle-case scenario. This estimate aligns with Borussia Dortmund's past financial results.

Capital Expenditure (CapEx) is fixed at -33% of revenues for all scenarios, aligning with the historical average of the past five years. Fixed assets encompass tangible and intangible assets. CapEx denotes investments in assets for both growth and maintenance purposes and is calculated as following.

$$CapEx = (Gross\ Fixed\ Assets_{n-1} - Gross\ Fixed\ Assets_n)$$

(equation 4.1)

where:

- *Gross Fixed Assets_{n-1}*: Value of fixed assets at the previous period's end.
- *Gross Fixed Assets_n*: Value of fixed assets at the current period's end.

This equation computes the change in fixed asset value over time, illustrating the impact of investments or disposals on the company's operations and growth potential. Table 4.23 illustrates SolarEdge's CapEx computation and CapEx/Sales Ratio from 2018 to 2022.

Table 4.23: CapEx Assumption

Gross fixed assets and CapEx						
	2023	2022	2021	2020	2019	Average
Gross fixed assets	441	362	390	441	372	
CapEx	-148	-81	-92	-159	-139	
CapEx/Sales	0.354	0.230	0.275	0.430	0.376	33.3%

Source: Author, based on BVB Annual Reports (2024)

4.5.4 WACC

To proceed with the Discounted Cash Flow Valuation model, calculating the weighted average cost of capital (WACC) is crucial. This helps establish continuity value, subsequent equity value, and implied share price. This section focuses on the WACC formula, starting with evaluating the cost of equity, followed by the cost of debt and its components.

4.5.4.1 Cost of Equity

This chapter uses the Capital Asset Pricing Model (CAPM) to estimate Borussia Dortmund's equity cost. The process involves three pivotal elements: the risk-free rate, the stock's beta, and the market risk premium. While methodologies can vary, this section will detail the approaches to derive these crucial values for our analysis. The formulation of the CAPM employed to ascertain Borussia Dortmund's equity cost is delineated according to fundamental finance principles.

Risk-Free Rate

In this work, the determination of the risk-free rate for Borussia Dortmund is based on the methodology suggested by Damodaran (2012), who utilizes the 10-year Treasury Constant Maturity Rate as a proxy for the risk-free rate. This approach is chosen because it provides a reliable estimate of the long-term, risk-free return that investors can expect, aligning with the time horizon of the investment analysis. Specifically, the risk-free rate is derived from the yield of 10-year German government bonds, reflecting the country where Borussia Dortmund is headquartered. As of July 1, 2023, the yield on these bonds was reported at **2.46%** by the Organisation for Economic Co-operation and Development (OECD, 2024).

Market Risk Premium

In this analysis, the market risk premium for Germany was **6.81%** as of June 30th, 2023. This figure is derived from calculations conducted by the Technical University of Munich (2024), lending academic credibility to the chosen value.

Adjusted Beta

The concept of beta is pivotal in assessing the sensitivity of Borussia Dortmund's expected excess asset returns to the expected excess market returns. Beta quantifies this sensitivity through a ratio derived by dividing the covariance of the stock's returns with the market's returns by the market's variance over a specific timeframe. GuruFocus (2024) bases its calculations on returns observed over a three-year period, yielding a raw beta of 1.53 as of June 2023. An adjustment formula is applied to refine the accuracy of this beta estimate and account for the long-term tendency of a security's beta to gravitate toward the market average of 1.0, as Damodaran (2012) suggested. This formula involves multiplying the raw beta by two-thirds and adding one-third of the market average (1.0). Consequently, the adjusted beta for Borussia Dortmund is estimated to be approximately **1.35**, reflecting a more nuanced alignment of the club's systematic risk with the market average over the long term.

CAPM Calculation

The computation of Borussia Dortmund's equity cost is articulated in Table 4.24, following the principles of the Capital Asset Pricing Model (CAPM). The model integrates three core components: the risk-free rate, adjusted beta, and the market risk premium specific to the German market.

Table 4.24: Cost of Equity Calculation

Cost of Equity Calculation	
(1) Risk free rate	2.46%
(2) Adjusted beta	1.35
(3) German market risk premium	6.81%
(4) Cost of Equity	11.65%
CAPM (cost of equity) = (1) + (2) * (3)	

Source: Author, BVB Annual Reports (2024)

The risk-free rate (2.46%) reflects the yield on long-term German government bonds. The adjusted beta (1.35) measures the stock's volatility relative to the market's systemic risk. The German market risk premium (6.81%) encapsulates the additional return investors demand for bearing the market's inherent risk. Through the CAPM equation, these elements are synthesized to produce a cost of equity of **11.65%**, representing the expected return on investment that accounts for the inherent risks associated with the equity of

Borussia Dortmund. This metric is crucial for evaluating the attractiveness of the investment in light of current market conditions and the company's risk profile.

4.5.4.2 Cost of Debt

Table 4.25 shows the cost of debt calculation, crucial for understanding the expenses associated with Borussia Dortmund's borrowings. It utilizes figures from the club's financials averaged from 2019 to 2023. This measure, representing the effective interest rate on the club's debt, is initially computed to be 1.72% by dividing the interest expense by the total debt, both short—and long-term.

Table 4.25: Cost of Debt

Cost of Debt Calculation (Averages 2019-2023)	
(1) Interest Expense	3
(2) Short term debt	142
(3) Long term debt	56
(4) Cost of Debt	1.72%
Cost of debt = (1) / ((2) + (3))	

Source: Author, BVB Annual Reports (2024)

This relatively modest rate suggests that the club has benefited from favourable borrowing conditions over the evaluated period, likely influenced by the low-interest-rate environment prevalent in Europe in recent years.

Moving to a more refined perspective, the adjusted cost of debt is presented in Table 4.26. This figure is fine-tuned to account for the tax shield that debt financing affords. By incorporating the marginal tax rate into the equation, the adjusted cost is recalculated to 1.55%, factoring in the tax benefit from the interest expense. This adjustment yields a more precise depiction of the actual cost of debt for Borussia Dortmund when tax considerations are taken into account, effectively lowering the expense due to tax deductibility of interest payments. These analyses are substantiated by data extracted from BVB Annual Reports, reflecting the club's financial engagements and obligations.

Table 4.26: Adjusted Cost of Debt

Adjusted Cost of Debt	
(1) Interest Expense	3
(2) Total debt	198
(3) Marginal tax rate	10%
(4) Adjusted Cost of Debt	1.55%
Adjusted cost of debt = (1) / (2) * (1 - (3))	

Source: Author, BVB Annual Reports (2024)

The market capitalization of Borussia Dortmund is calculated by the product of the total number of outstanding shares and the stock price as of the fiscal year-end 2023. With 110,377,320 shares outstanding and a closing share price of €4.37 on June 30, 2023, the club's market capitalization amounts to roughly €482.35 million. This value, alongside the summation of short-term and long-term debt to the total debt value, forms the basis for the equity and debt components used in the computation of the Weighted Average Cost of Capital (WACC), as outlined in Table 4.27.

Table 4.27: Weights

Weights		
Total debt	198	29.1%
Market Capitalization	482	70.9%
Total	680	100%
in Million €		

Source: Author, BVB Annual Reports (2024)

Recently, there has been a notable shift in the interest rate environment, reflected by the interest rate in Germany at 4% by June 2023. For Borussia Dortmund this rate is now adopted as a more practical estimation of the club's cost of debt. This revision considers the present economic conditions and policies of the European Central Bank, under which securing financing at rates as low as 1% over the coming five years seems increasingly improbable (TradingEconomics, 2024)

4.5.4.3 Final Calculation WACC

After calculating the necessary inputs, the Weighted Average Cost of Capital (WACC) for Borussia Dortmund is finalized (reflected in Table 4.28).

Table 4.28: WACC Calculation

WACC Calculation	
Cost of equity	11.65%
Cost of debt	4%
Tax rate	10%
Weight of equity	70.88%
Weight of debt	29.12%
WACC	9.31%

Source: Author

The WACC, which incorporates the cost of equity and debt, their respective weights, and the tax rate, is computed to be 9.31%. To evaluate the robustness of the valuation under different scenarios, it's important to adjust the discount rate for sensitivity analysis to reflect varying levels of risk and economic conditions across different scenarios: setting it a 9.5% for a more conservative, or "worst case" scenario, at 9% for the "base case", and reducing it to 8.5% for the "best case" scenario.

4.5.5 Other Issues

4.5.5.1 Terminal Growth Rate

The Terminal Growth Rate is significant in Discounted Cash Flow analysis as it reflects the perpetual growth rate beyond the explicit forecast period. Given Germany's current negative GDP growth rate of -0.3 in 2023, conventional approaches relying on economic indicators are limited. Instead, combining industry analysis and Borussia Dortmund's historical performance offers valuable insights.

Bundesliga's collective revenue growth averaged 7.9% over the past decade, while the top five European leagues averaged 6.6%. However, Borussia Dortmund's revenue growth was 5.7%, slightly below the Bundesliga average in that period. This underscores the necessity of assessing the club's performance in detail to its peers to derive a realistic Terminal Growth Rate. Despite the lower-than-average growth rate, Borussia Dortmund's status as one of Germany's most successful clubs warrants consideration. Its prominence in European competitions suggests the potential for growth beyond domestic boundaries.

The discrepancy between its revenue growth and the league average highlights factors such as investment strategies, commercial partnerships, and stadium capacity utilization, which influence club performance.

Considering that Germany's GDP growth rate was 1.2% on average over the last decade and the football business's higher growth rates, it is necessary to find a good balance in the assumption (TradingEconomics, 2024). Therefore, For the DCF analysis in this project, three percentage values are chosen for the terminal growth rate based on this assessment: a slightly higher estimate (**5.5%**) for the best-case scenario, a mid-range estimate (**5%**) for the middle-case, and a somewhat conservative estimate (**4.5%**) for the worst-case. These values provide a nuanced understanding of the club's growth potential and its implications for valuation.

4.5.5.2 Terminal Value

The terminal value of Borussia is calculated using equation 2.5, with the forecasted cash flow for 2028. Accordingly, the terminal value varies across scenarios. Specifically, the discounted terminal value is €169 million for the worst-case scenario, €462 million for the middle-case scenario, and €1,070 million for the best-case scenario.

4.5.6 Firm Valuation (FCFF)

Table 4.29 presents a detailed overview of the principal variables applied to Borussia Dortmund's projected valuation across three scenarios. Each column delineates the assumptions for worst-, middle-, and best-case projections, ranging from initial revenue figures to the anticipated terminal value growth rates and discount rates applied in the DCF model.

Table 4.29: Assumptions

Variable	Worst case	Middle case	Best case
First revenue	422	435	447
Revenues (% growth)	1%	4%	7%
First NWC change	-106	-87	-67
Net Working Capital (% of revenue)	-20%	-20%	-20%
Costs (% of revenues)	60%	55%	50%
Depreciation and amortization	29%	29%	29%
Taxes (% rate)	10%	10%	10%
CapEx (% rate)	-33%	-33%	-33%
% growth TV	4.5%	5%	5.5%
Discount rate	9.5%	9.0%	8.5%

Source: Author

To ascertain the firm's free cash flows (FCF), it's necessary to employ the following calculation mode from equation 2.2. Through this formula, it's possible to derive the net cash flows that Borussia Dortmund generates from its operational activities after considering necessary operational expenditures and capital investments. This indicates the liquidity available for reinvestment, debt repayment, or distribution to shareholders.

Table 4.30 illustrates the forecasted Free Cash Flow to the Firm (FCFF) for Borussia Dortmund from 2023 to 2028 across three different financial scenarios: worst, middle, and best case. Each scenario incorporates projections for EBIT adjusted for taxes, depreciation and amortization, capital expenditure investments, and changes in working capital, cumulatively resulting in the estimated FCFF for each year.

Table 4.30: FCFF Calculation, Worst, Middle, and Best-Case Scenario

FCFF Calculation						in Million €
WORST CASE						
Discounted Cash Flow Firm (millions)	2023	2024	2025	2026	2027	2028
EBIT (1-t)	15	10	15	20	25	31
Dep & Amort	106	122	124	125	126	127
CAPEX Investment	-138	-139	-141	-142	-144	-145
Working Capital Investment	-13	-1	-1	-1	-1	-1
FCFF	-30	-8	-3	2	7	13
MIDDLE CASE						
Discounted Cash Flow Firm (millions)	2023	2024	2025	2026	2027	2028
EBIT (1-t)	15	12	20	29	40	51
Dep & Amort	106	126	131	136	142	147
CAPEX Investment	-138	-143	-149	-155	-161	-168
Working Capital Investment	-13	-3	-3	-4	-4	-4
FCFF	-30	-8	-1	7	16	27
BEST CASE						
Discounted Cash Flow Firm (millions)	2023	2024	2025	2026	2027	2028
EBIT (1-t)	15	15	26	40	57	77
Dep & Amort	106	130	139	148	159	170
CAPEX Investment	-138	-148	-158	-169	-181	-193
Working Capital Investment	-13	-6	-6	-7	-7	-8
FCFF	-30	-9	1	13	28	46

Source: Author, BVB Annual Reports (2024), Seeking Alpha (2024)

In the worst-case scenario, the FCFF is negative in 2024, indicating that capital outflows still surpass the operating profit. However, the situation improves incrementally to a modestly positive cash flow by 2026, reaching €13 million in 2028. This suggests a gradual improvement in the firm's operational efficiency and an increasing ability to cover capital expenditures and working capital investments. For the middle case, the FCFF shows a negative value in 2024 but is projected to improve quickly, turning positive by 2026. The steady growth in EBIT and manageable increases in capital expenditures suggest that the firm is expected to optimize operations and control costs effectively, resulting in a positive FCFF of €27 million by 2028. In the best-case scenario, despite significant initial negative cash flows, reflecting heavy investments in 2024, the situation improves by 2025. The projection indicates a strong increase in EBIT over the period, with the firm reaching a FCFF of €46 million by 2028. This reflects an optimistic view of the firm's operational performance, assuming it can significantly grow profits while managing the increasing costs of investments and working capital.

The enterprise value in each scenario would be calculated by estimating the terminal value using the appropriate growth rate - 4,5% for worst, 5% for middle, and 5,5% for best cases - and discounting the projected cash flows back to the present value using the weighted average cost of capital (WACC). The different growth rates imply varying degrees of confidence in the firm's long-term growth potential.

Table 4.31 provides the calculations for Borussia Dortmund's share price based on the Free Cash Flow to the Firm (FCFF) for three scenarios. The table computes the discounted FCFF for each year from 2024 to 2028, including the discounted terminal value, determining the enterprise value. The market value of debt is then subtracted to find the equity value, which gives the implied share price for each case when divided by the number of outstanding shares.

Table 4.31: Share Price Calculation (FCFF)

WORST CASE		1	2	3	4	5
Discounted Cash Flow Firm (millions)		2024	2025	2026	2027	2028
FCFF discounted		-7.21	-2.65	1.40	4.97	8.11
Terminal Value discounted						169.58
Enterprise Value	174.20					
Market value of debt	67.92					
Equity Value	106.28					
Outstanding shares	110					
Implied Share Price	0.97					
MIDDLE CASE		1	2	3	4	5
Discounted Cash Flow Firm (millions)		2024	2025	2026	2027	2028
FCFF discounted		-7.77	-1.06	5.40	11.62	17.61
Terminal Value discounted						462.22
Enterprise Value	488.01					
Market value of debt	67.92					
Equity Value	420.09					
Outstanding shares	110					
Implied Share Price	3.82					
BEST CASE		1	2	3	4	5
Discounted Cash Flow Firm (millions)		2024	2025	2026	2027	2028
FCFF discounted		-8.32	0.72	10.18	20.07	30.43
Terminal Value discounted						1070.23
Enterprise Value	1123.32					
Market value of debt	67.92					
Equity Value	1055.40					
Outstanding shares	110					
Implied Share Price	9.59					

Source: Author, BVB Annual Reports (2024), Seeking Alpha (2024)

In analysing the results in the context of the current share price of €3.60 as of March 14th, 2024, the results are:

Worst Case: The implied share price of €0,97 significantly undercuts the current market price, reflecting a scenario where the club faces substantial challenges that could lead to underperformance relative to market expectations.

Middle Case: The calculated implied share price of €3.82 matches almost the current price, suggesting that the market's sentiment and expectations align with this scenario's assumptions. This unity indicates that the middle-case forecasts are perceived as a plausible trajectory given the club's current economic and operational conditions.

Best Case: The €9.59 implied share price represents a situation where the club's performance excels, possibly driven by successful strategic initiatives, superior operational efficiencies, or favourable market developments. This scenario's significant premium over the current share price indicates that, while optimistic, there is a considerable upside if Borussia Dortmund can capitalize on possible opportunities.

The middle-case projection's alignment with the current share price is particularly telling, suggesting that it may have already factored into the market's view of Borussia Dortmund's value. It implies that unless new, positive information comes to light or market conditions change markedly, the share price may not deviate significantly from this level soon. Conversely, should the worst-case risks materialize or the best-case potentials be realized, significant divergence from the current share price could occur, presenting different strategic considerations for investors.

4.5.7 Risks

In assessing Borussia Dortmund's valuation, it's crucial to integrate a robust risk analysis that encapsulates the various dimensions of potential uncertainties the club may encounter. The landscape within which Borussia Dortmund operates is riddled with multifaceted risks that can influence its financial projections and, consequently, its valuation. The six primary risk categories provide a comprehensive framework for understanding and managing potential adverse effects (BVB Annual Report, 2023).

Strategic Risk: The club faces the challenge of balancing financial planning with the uncertainty of sporting success. This risk is mitigated by regular updates to financial planning and proactive measures to increase the flexibility of personnel expenses.

Personnel Risk: The company's dependence on the expertise and performance of its team and staff highlights its personnel risk.

Economic Risk: Borussia Dortmund's macroeconomic risk stems from broader economic trends that could impact consumer purchasing power and, consequently, the club's revenues. Current economic assessments suggest a cautious economic recovery, with attention paid to the potential impacts of geopolitical tensions.

Competitive Risk: Competitive risks arise from disruptions to match operations, changes in income from TV marketing, and compliance with financial regulations like UEFA's Financial Sustainability Regulations.

Financial Risk: Comprehensive liquidity planning addresses the risk associated with the club's cash flow and financial obligations. Measures include maintaining solid relationships with financial backers and sponsors, ensuring diverse income streams, and cautiously managing personnel expenses.

Ecological Risk: Newly prioritized ecological risk considers the club's environmental impact and the necessity of complying with climate protection laws. Borussia Dortmund is implementing strategies to modernize infrastructure, promote renewable energy, and

educate about environmental protection, aligning its operations with broader sustainability goals.

In light of the complexities surrounding Borussia Dortmund's operational environment, the valuation process must be underpinned by meticulously scrutinizing the club's exposure to different risks. Acknowledging these uncertainties is crucial when developing a forward-looking investment thesis. A prudent investor should compare the club's strategic position and the intrinsic risks of the sports sector to determine a viable investment pathway.

4.5.8 Relative Valuation

Relative valuation is a fundamental method used in finance to assess the value of companies by comparing them to their peers within the same industry. This approach assumes that similar market participants offer a benchmark for valuation, thus facilitating an evaluation grounded in comparative analysis. Unlike absolute valuation, which seeks to determine intrinsic value through cash flow discounting or other individual metrics, relative valuation leverages market efficiency, positing that prices reflect collective wisdom and insights into company value. Deploying ratios such as EV/Revenue, EV/EBITDA, Price/Equity, and Price/Sales enables a nuanced understanding of how market participants value a company relative to its earnings, sales, and equity. In this chapter, there is a detailed relative valuation of Borussia Dortmund, employing data sourced from SeekingAlpha (2024) as of June 30, 2023.

Table 4.32: Relative Valuation, Financials in Million €

Company	Financials								Valuation			
	Share Price	Shares Outs.	Equity Value	Net Debt	Enterprise Value	Revenue	EBITDA	Net Income	EV/Revenue	EV/EBITDA	P/E	P/S
Borussia Dortmund	4.37	110.3	482	30	512	418	127	10	1.2	4.0	48.2	1.2
Manchester United	20.06	163.1	3,272	631	3,903	755	182	-33	5.2	21.4	-99.1	4.3
Juventus Turin	3.4	252.7	859	329	1,188	499	65	-124	2.4	18.3	-6.9	1.7
Olympique Lyonnais	2.95	89.4	264	468	732	199	-105	-98	3.7	-7.0	-2.7	1.3

Source: Author, Seeking Alpha – Data as of 30th June 2023

Borussia Dortmund exhibits an equity value (or market capitalization) of €482 million, considerably lower than Manchester United's €3.272 billion, reflecting the latter's global brand appeal and extensive revenue-generating capacities. Juventus Turin and Olympique Lyonnais present equity values of €859 million and €264 million, respectively, highlighting Juventus's more extensive scale and Lyon's smaller market footprint.

Dortmund's modest net debt of €30 million contrasts sharply with Manchester United's substantial €631 million and Olympique Lyonnais's €468 million, underscoring Dortmund's relatively healthy balance sheet. Juventus's net debt stands at €329 million, indicating a moderate leverage level but signaling financial stress relative to Dortmund.

With €418 million in revenue, Dortmund falls behind Manchester United's €755 million and Juventus Turin's €499 million, a testament to their expansive commercial operations. However, Dortmund outpaces Olympique Lyonnais (€199 million), asserting its competitive financial performance within the European football landscape. Dortmund's net income of €10 million, while modest, starkly contrasts with Manchester United's loss of €33 million and Juventus's significant loss of €124 million, highlighting operational efficiency and financial prudence. Olympique Lyonnais also reports a net loss (€98 million), further emphasizing Dortmund's relative financial health.

Examining the Enterprise Value (EV) to Revenue and EV to EBITDA ratios gives us a multi-dimensional perspective on football clubs' valuations. Borussia Dortmund, with an EV/Revenue of 1.2 and an EV/EBITDA of 4.0, is valued by the market in a way that suggests a balanced view of its revenue generation and operational efficiency. The modest EV/Revenue ratio implies that for every euro of revenue, the market assigns a value of €1.20 to the club, positioning it as potentially undervalued or at least not subject to the speculative premiums of its peers. The EV/EBITDA of 4.0, a proxy for the value placed on a club's profitability before financial and tax considerations, indicates a reasonable expectation of Dortmund's profitability compared to its current enterprise value. In stark contrast, Manchester United's EV/Revenue and EV/EBITDA ratios are significantly higher at 5.2 and 21.4, respectively. This disparity can be partly attributed to the club's higher brand valuation and its global commercial reach, which may inflate its revenue multiples despite recent profitability concerns. Such a high EV/EBITDA ratio also indicates the market's expectation of a strong rebound in Manchester United's operational performance or a strategic shift that could dramatically improve profitability. Juventus Turin and Olympique Lyonnais exhibit contrasting pictures. Despite recent operational losses, Juventus's higher EV/Revenue of 2.4 and EV/EBITDA of 18.3 might reflect market confidence in the club's ability to bounce back financially. The elevated EV/EBITDA ratio suggests that investors are factoring in a significant recovery or growth in EBITDA in the medium term. Olympique Lyonnais's ratios paint a complex picture

with a reasonable EV/Revenue of 3.7. Still, a negative EV/EBITDA of -7.0 indicates operational challenges that have led to a loss in profitability, making the EV/EBITDA less relevant until a return to positive EBITDA can be achieved.

The Price-to-Earning (P/E) and Price-to-Sales (P/S) ratios serve as lenses through which the market views a club's financial health and future prospects. Borussia Dortmund's P/E ratio of 48.2, compared to the opposing figures of its peers, highlights a market optimism about Dortmund's profitability. This stark contrast could suggest that the market is pricing in Dortmund's robust earnings potential, perhaps buoyed by efficient management and a strong brand identity. In contrast, Manchester United, Juventus, and Olympique Lyonnais, with their negative P/E ratios, are currently viewed as less profitable, reflecting recent financial struggles. However, their storied histories and brand presence might promise a turnaround that the market could anticipate. The P/S ratio of Dortmund stands at 1.2, pointing towards a market valuation that seems to strike a balance between sales volume and the stock price, possibly hinting at a perception of fair valuation. Manchester United's P/S ratio of 4.3 is the outlier, suggesting a willingness to pay a premium for its sales, likely reflecting its global brand strength and commercial prowess. Juventus and Olympique Lyonnais, with P/S ratios of 1.7 and 1.3, respectively, fall closer to Dortmund, but even these minor differences can be revealing. They suggest that while Dortmund is not undervalued, it is possibly more conservatively valued than Manchester United, indicating a steadier, perhaps less speculative investment.

The comprehensive analysis underscores Borussia Dortmund's favourable positioning within the football club landscape, even suggesting that Dortmund is undervalued compared to its peers. Its financial stability and reasonable market valuations position Dortmund as a potentially resilient investment in the face of the industry's inherent volatility. Relatively, Manchester United's premium valuations may reflect its global stature rather than financial health, offering a cautionary tale of brand overvaluation. Juventus and Olympique Lyonnais, grappling with financial and operational challenges, highlight the critical balance between leverage, revenue generation, and market expectations. Dortmund's relative valuation showcases its prudent management and operational efficiency and further shows pathways for strategic enhancements to solidify its market standing and investment appeal.

5 Conclusion and Discussion

This project presents an in-depth examination of Borussia Dortmund, a key player in the global sports and football business, to inform potential investment cases. Combining qualitative and quantitative elements, this analysis offers a well-rounded view of the club's financial health and market valuation.

Dortmund has positioned itself as a leader within the dynamic football industry, characterized by significant fan engagement and valuable commercial opportunities. Projected trends in the sports sector, with growing digitalization and international market penetration, bode well for Dortmund's expansion and influence. Challenges related to competition and market dynamics will likely be met with strategic management and innovation, securing Dortmund's role in transforming the football landscape.

The pillars of Dortmund's success are manifold: consistent on-field performance, financial robustness, broad international fan base, strong brand identity, and strategic partnerships. Its notable revenue generation and fan-centric approach have consolidated its standing in the industry. Nonetheless, Dortmund is not insulated from risks such as market fluctuations, competitive pressures, and the unpredictability of sporting success.

Borussia Dortmund could further exploit avenues like the growth of Women's football, tapping into new fan bases and emulating successful models like Olympique Lyonnais. While the contentious prospect of a Super League offers a potential financial windfall, it poses risks to traditional fan engagement and the integrity of European football's competitive balance. Emerging competitions and platforms, such as the Baller or Kings League, present innovative avenues for Dortmund to catch the attention of younger audiences, which is crucial for brand expansion in the digital era. Participation in new international competitions, like the FIFA Club World Cup, particularly with the inaugural edition hosted in the USA, aligns with Dortmund's strategic aims for American market penetration, supported by its established New York office and history of successful US tours. Despite Germany's 50+1 rule preserving club ownership for fans and preventing external majority control, Dortmund engages in the global football economy through strategic partnerships and the development of international networks. These strategies

demonstrate the club's agility in embracing the modern football club network building while adhering to the principles that keep the sport's essence intact at its core.

The analysis of the competitive landscape underlines the high stakes of the football industry, where, despite formidable entry barriers, the allure of market potential continues to draw competitors. Innovation and technology emerge as crucial determinants of success. As the sports industry evolves, a thorough comprehension of a club's strategic position and sector dynamics become vital for sound investment decisions.

Empirical evidence suggests that Dortmund has experienced commendable growth in recent years, with optimistic forecasts for its business trajectory. Revenue growth is anticipated to moderate over the coming years while margins are projected to improve, bolstering cash flow generation. For instance, this work hypothesizes €435 million in revenue for Dortmund in 2024 in the base case, with a revenue growth rate of 4% over the subsequent five years. These figures are cautiously estimated, aligning with the club's ambitious targets and harmonizing with expert financial analysis. It is posited that Dortmund could realize a free cash flow of between -€8 million and €27 million from 2024 to 2028.

The valuation analysis estimates Dortmund's equity value under the base case to be approximately €420 million, equating to €3.82 per share. This figure aligns with Dortmund's current market value of €3.60 per share (as of 14th of March 2024), implying that the valuation from the end of the financial year 2023 (30th of June 2023) slightly dropped. The conservative scenario points to an equity value of €0.97 per share, while an optimistic view raises the valuation to €9.59 per share.

In reflecting on the findings of this project, it is crucial to address the limitations inherent in the models used and the assumptions underpinning them. The unpredictable nature of the football industry, highlighted by potential market disruptions such as privately financed projects like the Super League and the impacts of geopolitical tensions, adds layers of complexity to any financial analysis. The challenge of accurately representing player transaction finances, complicated by the direct booking of transfer revenues versus the amortization of player acquisitions, further obscures clear financial portrayal.

The intensive effect of the COVID-19 pandemic on Dortmund's business model necessitates a broader historical lens, extending analyses to a decade to mitigate distorted views offered by shorter timeframes. However, this extended analysis may dilute the immediacy of recent strategic decisions. Additionally, the intricacy of forecasting Dortmund's revenues and expenditures, especially considering the club's reliance on broadcasting revenues akin to those in the "Movies & Entertainment" or "Communications" sectors, reveals the difficulty of pinning down precise financial forecasts in an industry where not all entities are publicly traded.

Acknowledging these challenges, this project underscores the need for refined methodologies in future studies that can more adeptly navigate the unique financial landscape of football clubs. A promising avenue for further research would involve a deeper dive into the valuation of intangible assets, specifically player valuations, to develop more nuanced models that reflect the volatile nature of the transfer market. Additionally, exploring alternative frameworks for revenue forecasting that can accommodate the sector-specific complexities of football clubs would enrich the analytical toolkit available to researchers and investors alike. Enhancing the precision of financial models and assumptions will be most important in advancing our understanding of football clubs' financial health and strategic positioning in an increasingly unpredictable global market.

Furthermore, a significant limitation arises from the club's historical negative Free Cash Flows to the Firm. Persistent negative FCFF complicates the application of DCF for several reasons. First, it challenges the fundamental assumption of DCF that a firm will generate positive cash flows in the future, which are necessary to justify current valuations. Secondly, it raises concerns about the sustainability of the business model, as ongoing negative cash flows may indicate underlying operational or strategic issues that could affect future viability. Given these concerns, it is prudent to consider alternative valuation methods, such as market multiples or asset-based approaches, which might provide a more realistic estimate of the company's worth in the absence of positive cash flows. Nevertheless, my projections indicate a shift towards positive FCFF by 2026 in all scenarios, suggesting a potential improvement in Dortmund's financial health, which could validate the use of DCF should these positive trends materialize.

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Appendix 1 – Annual Balance Sheet Borussia Dortmund

		Annual Balance Sheet (All Values USD Millions)				
	Assets	2023	2022	2021	2020	2019
Current Assets	Cash & Short-Term Investments	4	11	2	3	56
	Total Accounts Receivable	38	46	30	37	32
	Inventories	5	4	7	7	5
	Other Assets	23	36	23	30	36
	Total Current Assets	71	97	61	77	128
Non-Current Assets	Net Property, Plant & Equipment	182	172	183	193	184
	Total Investments and Advances	0	1	0	0	0
	Intangible Assets	170	128	193	230	164
	Other Assets	1	1	2	6	14
	Total Non-Current-Assets	441	362	390	441	372
	TOTAL ASSETS	512	458	451	518	500
		Liabilities				
Current Liabilities	Short-Term Debt & Current Portion of Long-Term Debt	0	0	0	0	0
	Accounts Payable	86	76	74	67	61
	Other Current Liabilities	63	47	95	41	56
	Total Current Liabilities	161	137	174	123	128
Non-Current Liabilities	Long-Term Debt	21	14	17	20	8
	Other Liabilities	47	34	41	70	9
	Total Non-Current Liabilities	68	48	58	90	17
	TOTAL LIABILITIES	229	185	232	213	145
		Shareholders Equity				
	Total Shareholders Equity	283	273	222	305	355
	TOTAL EQUITY	283	273	222	305	355
	LIABILITIES & SHAREHOLDERS EQUITY	512	458	454	518	500