# MASTER'S THESIS

Course code: BE305E Name: Magnus Dale Askeland

Valuation of SK Brann

Date: 31.08.2023 Total number of pages: 65



**Preface** 

This thesis has been written within the field of study Master of Science in Business and is a

compulsory assignment at the end of the master's degree at Nord University. The assignment

corresponds to 30 credits and is written in 2023.

I chose to conduct a valuation of a football club as I was keen to write about something that

interested me and contributed to motivation in the writing of the thesis. Hopefully this will

contribute to making the thesis better than if this had not been the case. The combination of

my love and passion for football, my interest in finance and my roots from Bergen made me

land on a valuation of SK Brann. Through my work on the assignment, I have learned a lot

and gained further knowledge on how to valuate a company.

I had problems getting hold of the annual report and accountings for the financial year 2019.

Therefore, I decided to replace that year with 2018. Nevertheless, I feel like the thesis will

grant a correct picture of how the situation has been like for SK Brann and how it will be for

the years to come. I take responsibility for any errors or omissions in the thesis.

Finally, I would like to thank my supervisor Øystein Gjerde for having been available for

questions. I would also like to thank the administration at SK Brann for granting me access to

annual reports and accountings.

Bergen, August 2023

-----

Magnus Dale Askeland

# **Summary**

The purpose of this master thesis was to valuate SK Brann per 01.01.2023 based on publicly available information. The valuation was conducted by using the fundamental valuation technique, which in this case involves using the discounted cash flow method. Based on this, I arrive at a value estimate of the equity capital of the club.

In the first part of the thesis, I present the history of SK Brann and how the club is organized. Furthermore, I introduce the valuation theory by going through three different methods of valuation. I then justify my choice of valuation method and EBITDA as performance goals.

The next step is to conduct a strategic analysis where I analyse the club's internal and external conditions. I have chosen to include the strategic analysis early in the valuation process since I can then make good assumptions and forecasts for the future based on this analysis.

Furthermore, I conduct an accounting analysis where I delve deeper into the financial and accounting conditions of SK Brann. This is based on historical accounts and certain key numbers are compared with other clubs and rivals within the football industry. I also conduct a regrouping for an investor-oriented analysis, which contributes to preparation of the future accounts.

After this, the capital value method is used to find the equity requirement. In addition, I calculate the weighted return requirement that is used to discount the future cash flow. The information that I have gathered provides a basis for the future forecasts of SK Brann's EBITDA. I have chosen a budget period of five years and the normal year is set for 2028.

In the end, I conduct the valuation itself and arrive at an equity value for SK Brann of NOK 134 055 514 per 01.01.2023.

# Table of contents

1.0 Introduction	1
1.1 Background and motivation	1
1.2 Problem statement	2
1.3 Delimitation	2
1.4 Structure	2
2.0 Introduction of SK Brann	3
2.1 History	3
2.2 Brann Stadion	5
2.3 SK Brann	5
3.0 Valuation method	8
3.1 Fundamental valuation	8
3.2 Comparative valuation	10
3.3 Option-based valuation	11
3.4 Choice of valuation	11
4.0 Strategic analysis	12
4.1 Introduction	12
4.2 Framework	13
4.3 Market appraisal	14
4.4 Macro analysis	15
4.4.1 Political and legal factors	15
4.4.2 Economic factors	16
4.4.3 Social factors	16
4.4.4 Technological factors	17
4.4.5 Societal factors	17
4.5 External analysis	17
4.5.1 Rivalry	
4.5.2 Intruders	20
4.5.3 Suppliers	21
4.5.4 Customers	21
4.5.5 Substitutes	22
4.6 Internal analysis	23
4.6.1 Financial resources	23
4.6.2 Physical resources	24
4 6 3 Human resources	25

4.6.4 Organizational resources	25
4.6.5 Summary of the VRIO-analysis	26
4.7 Summary of the strategic analysis	26
5.0 Accounting analysis	27
5.1 Introduction	27
5.2 Presentation of historical accounts	27
5.2.1 Income statement	28
5.2.2 Balance	29
5.3 Comparison with other clubs	30
5.3.1 Operating Revenues	31
5.3.2 Operating cost	32
5.3.3 Salary ratio	32
5.4 Regrouping	33
5.4.1 Regrouping of the income statement	34
5.4.2 Regrouping of the balance sheet	35
5.5 Normalization of the accounts	36
6.0 Financial analysis	36
6.1 Liquidity analysis	36
6.2 Solvency analysis	38
6.2.1 Equity ratio	38
6.2.2 Interest coverage ratio	39
6.3 Net return on operations	40
6.4 Synthetic rating	41
7.0 Return requirement	43
7.1 Risk-free rate	43
7.2 The market's risk premium	44
7.3 Beta	44
7.4 Liquidity premium	46
7.5 Calculation of equity requirements	47
7.6 Calculation of debt requirements	47
7.7 Required rate of return on total assets (WACC)	47
8.0 Future accounting	48
8.1 introduction	48
8.1.1 Budget horizon	48
8.1.2 Growth analysis	49

8.2 Income	50
8.2.1 Income from market deals	50
8.2.2 Ticket sales	51
8.2.3 Gains from player sales	51
8.2.4 Other operating income	53
8.3 Cost	53
8.3.1 Labour costs	54
8.3.2 Other operating costs	54
8.4 Forecast EBITDA	55
8.5 Investments	55
8.6 Working capital	56
9.0 Valuation of SK Brann	57
9.1 Terminal value	57
9.2 Tax-advantaged	58
9.3 Equity value	58
10.0 Conclusion	60
11.0 References	61

# Figure overview

Figure 2.1 Organizational chart SK Brann	6
Figure 4.1 The SWOT-model	. 13
Figure 4.2: PESTEL-model	. 15
Figure 4.3 Porter's Five Forces Model	. 18
Figure 4.4 Average spectators	. 19
Figure 4.5 SWOT-analysis of SK Brann	. 26
Figure 5.1 Operating Revenues	. 31
Figure 5.2 Operating cost	. 32
Figure 5.3 Salary ratio	. 33
Figure 6.1 Liquidity ratio	37
Figure 6.2: Equity ratio	. 39
Figure 6.3 Interest coverage ratio	. 40
Figure 6.4 Net return on operations	. 40

# **Table overview**

Table 5.1 SK Brann's historical income statemen	28
Table 5.2 SK Brann's historical asset balance	29
Table 5.3: SK Brann's historical equity and debt balance sheet	30
Table 5.4 SK Brann's net operating profit	34
Table 5.5: Regrouped balance sheet	35
Table 5.6 Normalized EBITDA	36
Table 6.1 Liquidity ratio 1	37
Table 6.2 Equity ratio	8
Table 6.3 Interest coverage ratio	39
Table 6.4 Net return on operations	11
Table 6.5 Standard & Poor's model for synthetic rating	2
Table 6.6 Synthetic rating SK Brann	2
Table 7.1 Stock market	5
Table 7.2 Beta value calculation for Aalborg BK	5
Table 7.3 Beta value calculation of Silkeborg IF	6
Table 8.1 Historical development GDP, CPI-ATE and nominal growth 2013-2022 4	9
Table 8.2 Forecasts for development of GDP, CPI-ATE and nominal growth 2023-2026 4	9
Table 8.3 Historical development SK Brann's market deals	0
Table 8.4 Forecasts for development in sponsorship income	0
Table 8.5 Historical development ticket sales	51
Table 8.6 Forecasts for development in ticket sales	51
Table 8.7 Historical development net player sales gains	52
Table 8.8 Forecasts net player sales gains	53

Table 8.9 Historical development other operating income	53
Table 8.10 Forecasts other operating income	53
Table 8.11 Historical development labour cost	54
Table 8.12 Forecasts labour cost	. 54
Table 8.13 Historical development other operation cost	54
Table 8.14 Forecasts other operation cost	55
Table 8.15 Forecasts EBITDA 2023-2028	55
Table 8.16 Historical investments 2018-2021	56
Table 8.17 Forecasts SK Brann investments in % of operating revenues	56
Table 8.18 Historical development working capital	57
Table 8:19 Forecasts for working capital	. 57
Table 9.1 SK Brann equity value	59

# 1.0 Introduction

In this chapter I will discuss the reason and motivation for the choice of subject for my master's thesis. Further, I will present my problem statement, and, in the end, I will go through the thesis' delimitation and structure.

#### 1.1 Background and motivation

The purpose of this thesis will be, as an independent financial investor, to appreciate the football club SK Brann using the fundamental valuation technique. The valuation will be based on a thorough analysis of both external, internal, and accounting conditions.

The master thesis symbolises the end of my five years education in economics and will cover the whole semester in spring. What the assignment should be about was a difficult choice. In the end I decided that something that interests me should form the basis for my thesis. I came up with something that let me combine my love and passion for football, with my master's degree specialization in finances. A valuation of SK Brann became the point of intersection between these interests.

Over the last decades football has developed from the clubs being run as sport teams to become large companies with many employees. In today's world of football, the clubs are no longer small sport teams, but large companies with high revenues. In the Norwegian football industry, you don't have to go far back in time to see many of the players playing in the first division, having a job outside of playing football. Football as an industry has had a huge growth over the years, and a great part of the reason for this is due to the TV and media industries increased focus on football. The possibilities for exposure to a larger and wider audience have increased in steps with the development of technology. Today, it is much easier to follow and watch your favourite football teams by using TV, the internet or mobile applications. As a result, the interest in football has grown, and investors are willing to pay more because of the increased exposure. With the players' high salaries and significant income from TV rights, the impact of football clubs' finances is not insignificant from a societal perspective. This development has made it more relevant than ever to know what a football club is worth, as it will be of interest to several groups and can be compared to other clubs.

#### 1.2 Problem statement

The problem statement I have chosen for my master's thesis is as follows:

What is the value of SK Brann as of 01.01.2023?

Through this problem statement I will try to come up with a value estimate of SK Brann, but at the same time gain deeper knowledge and insight into valuation as a subject area. The end product will be important, but I consider the process just as crucial, and it will help to give me a good interaction and a better understanding of the football industry. One could say that the road and the process will be the main goal. Also, the football industry is characterized by slightly different mechanisms than more traditional industries when it comes to valuation, which makes the thesis both interesting and demanding.

#### 1.3 Delimitation

The delimitation in my thesis follows naturally from the industry in which SK Brann operates. In Norway the football industry is small and none of the clubs are listed on the stock exchange. Because SK Brann is a sports team, the club does not have a shareholder/owner relationship corresponding to what is found in most other companies that are valued. This makes the basis for comparison more difficult and certain ratios in the measurements must be assumed through discretionary assessments. Optimally, a valuation of SK Brann would be based on several valuation methods, but due to the size of the industry and SK Brann, certain methods will naturally collapse. Therefore, I will rather focus on thorough and orderly sensitivity analysis of the value the chosen methods results in.

#### 1.4 Structure

I want to structure my thesis as orderly as possible so that it is simple for the reader to understand the essence of the thesis and to understand the way of my thinking process. In the first part of my thesis, I will present SK Brann and the club's history. Furthermore, I will present the theoretical framework with focus on valuation methods and here I will justify the choice of fundamental valuation as method. Apart from that, the thesis will be divided into five main parts:

- 1. Strategic analysis
- 2. Accounting analysis
- 3. Financial analysis
- 4. Future accounting
- 5. Valuation

In the end of my thesis, I will present analyses of the results that arise from the valuation. The goal will be to assess and further comment on the calculated values of SK Brann's equity, as well as to test different variables so that I can use the information to draw conclusions related to the problem statement.

#### 2.0 Introduction of SK Brann

#### 2.1 History

The history of SK Brann is built on Atle Nielsen's book "Sportsklubben Brann" (Nielsen, 2008). It all started 26. September in 1908 when Christen K. Gran and nine other young men gathered at a café in the city of Bergen. This was a time when most people cared little about sports and exercise. Very few of the city's 60,000-70,000 inhabitants went for a Sunday walk, for example. But in the years after the dissolution of the union, there was a growing interest in sports and outdoor activities. After some discussion, the young men concluded that their new club should be named "Ski- og Fotboldklubben Brann". The ten young men who were at the meeting and founded the club were Gran, Gjestland, Hans Larsen, Inggard Ellertsen, Hans K. Gran, Lars Gran, Chr. Borch, Erling Lothe, Herman Mathiesen and Sverre Sturlung.

In 1909 Brann played their first game against Bergen Fotballklubb and the result ended in a 1-1 draw. Brann had their breakthrough in 1916, where they won 20 games out of 24. This made Norway and other clubs of other parts of the country take notice in them. In 1918 a player from Brann was called up for the first time to represent the national team of Norway. His name was Sigurd Wathne, and he was a goalkeeper. Brann got their own stadium in 25. May 1919 and the Norwegian championship in athletics was hosted there, where Brann won three gold medals.

Brann played their first game outside of Norway in 1921 in Stockholm. They won 4-1 against Djurgården, but lost 1-4 against AIK. 1923 was a historic year for Brann when they got the gold medal and won their first Norwegian championship. In the final they played Lyn who

they beat 4-1. In 1905 a new offside rule was introduced to football and Brann had to adapt and change their playstyle. They still managed to win the Norwegian championship and got their second gold medal. In the final they beat Sarpsborg 3-0. By 1929 Brann was a well-established team and six of the players was called up to the Norwegian national team.

In 1948 a new league was introduced in Norway. Brann managed to qualify and played 27 games from autumn to spring. They won 11, six were draws, and 10 resulted in a loss. Brann got relegated for the first time in 1949 where they only won 1 game in the spring season. Next autumn they had to play in a lower division where the standard was much poorer. It took Brann five years, but they managed to achieve promotion to the first division in 1954. In 1960 Brann's best and most legendary player had his debut at only 17 years old. His name was Roald "Kniksen" Jensen and is considered by many to be one of the best Norwegian football players of all time. 1962 was a historical year for Brann, when they won their first league title. They finished at first place in the league, five points ahead of Steinkjer and Fredrikstad. Brann won their first league again just the year after in 1963 and got their back-to-back league title.

It took some years, but Brann won a title again in 1972 when they won the national cup. They went on to win the same cup in 1976 and 1982. The legendary player Kniksen died in 1987 from a cardiac arrest at the age of 44. This made a big impact not only on Brann, but the rest of the country as well. The whole football world of Norway mourned. The start of the 2000s was great for Brann. The former player Mons Ivar Mjelde was announced as manager in 2003. He went on to win the national cup in 2004 and the league title in 2007 with Brann.

2009 was a great year for the famous Norwegian player Erik Huseklepp. He played as a striker, scored 15 goals in that season and was a permanent player for the Norwegian national team (Natlandsmyr, 2023). Brann had a weak season in 2014 and got relegated to the first division, but they managed to achieve promotion and got back into Tippeligaen the season after in 2015. The same happened recently when they got relegated in 2021, but they had an amazing season in OBOS-ligaen in 2022, where they got 81 points, breaking the record of number of points achieved in a season in the league. They won 26 games, drew three and only lost one game the whole season. In total SK Brann has won the national league three times, in 1961-62. 1962-63, and 2007. They have won the national cup six times, in 1923, 1925, 1972, 1976, 1982, and 2004. (Historie Brann, 2023)

#### 2.2 Brann Stadion

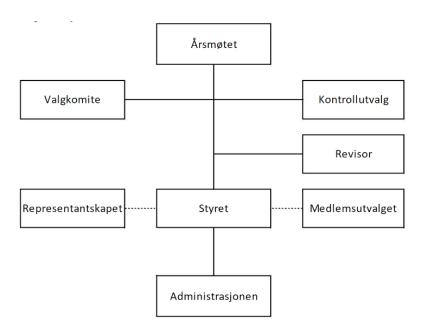
Brann Stadion is the home stadium of SK Brann. It has a capacity of 16,750 and is in the district of Årstad, south of downtown Bergen. The official record for number of participants in a match is 24,800. This was achieved in a cup game against Fredrikstad in 1961 and in a cup finale between Skeid Fotball and Viking FK in 1947. Brann Stadion is owned by the company Brann Stadion AS, which is a subsidiary of Sportsklubben Brann. The stadium has been upgraded and remodelled over the years. In 2006 "BOB-tribunen" was finished building. The costs of the building of this stand have been calculated to be around NOK 130 million and it has a capacity of 3,849 seats. "Frydenbø-tribunen" was finished in 1999 and has a capacity of 3,392 seats. The building costs is estimated to be around NOK 65 million. "SPV-tribunen" is SK Brann's VIP-stand. It was finished in 2007 and has 4352 seats. This is the stadium's main stand, where the locker room is and where the main cameras record from. (Wikipedia, 2023)

#### 2.3 SK Brann

SK Brann is self-owned and independent with exclusively personal members. The club aims to regularly win the most prestigious titles in front of packed stands and boiling commitment from their supporters. Their vision can be described by their popular saying: "Gullet ska hem!". SK Brann's mission is to be the pride of their city, Bergen, and they believe they achieve that when they:

- Care about the society and the people around them.
- Have packed stands and high commitment from their supports all over their city and the country.
- Win football matches at the top of Norwegian football and plays offensive and entertaining football.
- Make the dream come true for local players in the club's first team.
- Show openness and credibility and have a responsible operation in the club.

Their overall long-term goal is to be among the 15 best clubs in Scandinavia, who regularly fight for the most prestigious titles in Norway and regularly play in the group stage in Europe. (Sportsklubben Brann annual report, 2022)



**Figure 2.1:** Organizational chart SK Brann (Sportsklubben Brann annual report, 2022)

SK Brann's structure is taken from the organizational chart and the upcoming parts will be based on this (Organizational chart SK Brann, 2017). The club works strategically to prioritize key activities, measurement points and overall goals that are revised before each season. Continued evaluation of performance and development of culture is the main focus within all areas.

From SK Brann's organizational chart, you can see that the annual meeting is the club's highest authority. The meeting is for members of the club, i.e., those who have paid the membership fee. Here, proposals are presented, and the members of the club discuss how the club should be managed. The annual meeting lays the foundation for the board's tasks, and everyone who wants to influence how the club is ran should attend the meeting.

The board's job is to plan and look after the club's operation, including working with their strategy and goals, budget and accounting and making sure there are guidelines for the club's operation. The board is also responsible for:

- The club's day-to-day management:
- Representing the team externally.
- Implementing ideas and decisions made by the annual meeting or other superior authorities.
- Allocating the club's income and benefit these according to their plan and approved budget.

• Appointing committees as necessary and preparing instructions for these.

The auditor shall assess whether the annual accounts have been prepared and determined in accordance with the sport's accounting and auditing regulations, and whether the board has fulfilled their duty to ensure proper and clear registration and documentation of accounting information.

The control committee is elected through the annual meeting. Their tasks are to follow up on the club's accounts and the board's management, both financially and operational. The committee has the right, at any time, to carry out its control/audit.

The election committee has one of the club's most important tasks. They are responsible for personal and functional development of the club by recruiting new board members/employees, after careful assessment of the membership. Their tasks include assessing the activities of the board and committees, ensuring that the members' views on the board's work are taken up to processing, discussions with the board about any changes to their composition and presenting their proposals during the annual meeting.

The representative council consists of resigned chairmen of the club who have been elected at the annual meeting and has served for at least one year. In addition, the current chairman of the board is also a member. A valid membership in the club is required to participate in the council. The board can consult with the representative council if necessary.

SK Brann's committed fans and members is a key resource for the club. It is therefore natural that they seek to engage their members to grow and get more fans involved, in making the club great. The board and the administration also want a forum that contributes to both attention towards the members and which shares the members' views towards the club's management. This is the purpose of the membership committee. The committee consists of 7-9 members of the club (including leader) which is chosen by the board.

This organizational structure shall ensure that SK Brann is run as a sport team and that they follow their purpose, which is to run organized sports in Norway's sports federation and Olympic and Paralympic committee (NIF), through cooperation and camaraderie to promote football, both at amateur and professional level, and to create a good environment for all members. The work shall be characterized by volunteering, democracy, loyalty, and equality. All sport activity shall be based on basic values such as enjoyment of sport, community, health and honesty. (Sportsklubben Brann annual report, 2022)

# 3.0 Valuation method

The theories of valuation methods are built on books from Boye (1998) and Penman (2010). When evaluating a company there is different methods to choose from. The goal with the valuation will be to find the expected value of the equity capital of a company. It is common to group the valuation into three main techniques: *fundamental valuation, comparative valuation, and option-based valuation*. The different methods used to find the value of a company is not necessarily exclusive but can be used together. To find out which method is the most useful in a valuation of SK Brann, I will make a choice based on the context of these three methods.

#### 3.1 Fundamental valuation

Fundamental valuation is about valuation of a company based on an analysis of the company's accounting and strategy. Based on the analysis of the company's accounting and strategy, one can prepare a future account that will give a good indication of how the company will develop in the future. The goal with this analysis is to estimate the value of the equity of the company. The starting point for the fundamental valuation will be based on accounting figures and information spanning several years back in time, and it is therefore best to use this method on companies that are well established and where the investor has information on the figures from previous financial years.

To find the equity value of a company, one must discount the future cash flows. This can be done with the help of two different methods, the equity method and the total capital method. The equity method finds the value of the company by calculating the cash surpluses of the equity directly, while the total capital method finds the total value of the equity of the company by subtracting debt from the total capital. The process of the fundamental analysis can be divided into five parts: Strategic analysis, accounting analysis, budgeting, valuation and comparison.

#### 1) Strategic analysis: Getting to know the company

In the first part of a fundamental analysis, it is crucial to get to know the company's strategy and how it is organised. This information will be the base for the future analysis, and it is therefore necessary to have good knowledge of the company before it is possible to implement a valuation. To achieve knowledge of the company, one must analyse all the levels

in the organization. An external analyst will go through the various levels mentioned above and adjust the assessment according to how the company changes its strategy. An internal analyst is more involved in formulating the company's own strategy, but also goes through the various levels in the organization. In contrast to the external analyst, the strategy is continuously tested against alternative strategies in order to increase value. (Penman, p. 84-85, 2010)

#### 2) Accounting analysis: analyse the information

Based on the strategic analysis, it is possible to implement an analysis of quantitative and qualitative information to get an overview of the company's sales, cash flow and profitability. This information may be available in different formats and from different sources. The most common source of such information is the company's annual accounts and reports. It is crucial that the irrelevant information is separated here, and that the organization of the information happens as efficiently as possible, so that estimates can easily be developed for the future.

#### 3) Budgeting: preparation of future accounts

Furthermore, budgets are drawn based on the accounting analysis. This is carried out to predict how the results will develop in the years to come, and to get a reliable basis for the future valuation. This is done in two stages. In the first instance, estimates must be developed for specific accounting values. This is usually determined by the method of valuation that is chosen. After this is done, it is possible to carry out estimates on how these values will develop in order to eventually arrive at a future account that can be used in the rest of the valuation.

#### 4) Valuation: the future accounts are used for valuation

The analysist uses future accounting and selected valuation method to calculate the value of the company's equity. In order to get a reliable value, the accounts of the company are used over several years. Because the returns will happen in the future and investors always prefer money today rather than money in the future, the expected return must be discounted so that the time value of the money is included in the calculation. Returns and financial results are an uncertain variable, so there will always be a chance of a better or worse result than expected. The valuation is based on combining and discounting several observations of expected return

into a combined value and adjust for the time value of the money and risk. (Penman, p. 86, 2010)

5) Action: comparing value and strategy

Based on the company's value of equity, analysts can decide whether an investment is profitable or not. There are two different approaches to this process, external and internal analysis. In an external analysis, the analysis is based on the estimated value and a comparison between the value and the market value. Based on this, an investor can decide whether to sell, buy or hold the stock. In an internal analysis, a decision is made as to whether the strategy itself should be accepted or rejected, because one assumes that they are able to influence and test different strategies whose main objective is to maximize the owner's return. This is done by assessing the estimated value of the investment in relation to the costs.

#### **3.2** Comparative valuation

Comparative valuation is a method that compares key figures and other variables with other companies in the same industry. This is used to valuate the company that is being analysed. This method is often used in practice, because it is both easier to use and more cost effective than fundamental valuation.

The valuation using the comparative method can be carried out either directly or indirectly. The direct method is also called the multiplier method. This model is often used because it is referred to as the easiest one to use. The application of the multiplier model involves multiplying an accounting quantity by a multiplier that you find by dividing the share price for listed companies with the same accounting size. There are several types of multiplier models, but the most common ones are Price/Earnings ratio (P/E) and Price/Book ratio (P/B).

The indirect method is often mentioned as the net asset value model. The application of this model involves comparing the market value of assets and liabilities. The way this is calculated is based on market value of the assets and subtracting the market value of debt. This results in the market value of the equity.

One of the challenges with comparative valuation, is that for companies in large industries it can be possible to influence a multiplier to give a beneficial outcome. As the method has little focus on company-specific key figures and a strong connection to the industry, it could be a

problem that in the good times the company is overvalued, while in poor times it is undervalued. Despite some of the challenges associated with the method, it is relatively popular and can be a good provider for other analysis that are going to substantiate already achieved results.

#### 3.3 Option-based valuation

An option-based valuation is based on a fundamental valuation of a company, but the valuation also considers the value of flexibility. In some companies, stock options are issued to the management. In that regard, it is about real options as opposed to financial options. Such an option gives the holders a right, but no obligation to buy shares at a predetermined price within a given period. Since flexibility has a value, this value can be identified by option-based valuation. Option theory is used, among other things, in the valuation of mines and oil fields.

*Real options* are an opportunity to invest in or sell something you have rights to, that will make a direct impact on the creation of the value itself. Most companies have one or other form of such a real option.

*Financial options* involve paying for an opportunity to wait and see how a certain option changes in value in relation to a pre-agreed value. If the difference in value turns out to be advantageous, one will choose to redeem the option.

A challenge with option-based valuation is that the method is linked to a degree of uncertainty around the estimates of the probabilities for the various alternatives of the underlying asset.

#### 3.4 Choice of valuation

For well established companies with accounting data from several years back, fundamental valuation will be the best option, but since the method is a comprehensive process, it is worth noting that it is possible to use comparative and option-based methods as supplements. What, however, distinguishes the fundamental valuation from the other methods is that estimates, or measurements are required. The value of a stock in a well-established company is based on the future return, so that one cannot avoid estimates or measurements of the future return if one wants to make a thorough analysis of the company.

The choice of method depends on the conditions of the industry, the likelihood of imminent liquidation and the industry's life cycle. It is not likely of imminent liquidation of SK Brann any time soon. Football clubs in general rarely or never get put down. The reason for this is often strong local commitment, where different actors such as banks or investors step up and rescue vulnerable clubs. Furthermore, the football industry is modern where public information and accounting figures linked with the club goes several years back. These are factors that make me believe that a fundamental valuation is the most appropriate for the analysis of SK Brann. Comparative method is unsuitable as a result of a small and unlisted industry. Option-based valuation is also difficult since Norwegian top-level football is not an efficient industry, and therefore the value of the underlying asset is subject to excessive uncertainty. For football clubs, assets are based on high uncertain future value, such as the value of the players and the club's success.

The valuation of the total capital is based on future access to capital from operations. Interest-bearing debts and other liabilities are deducted, and any tax benefits are added. The resulting value will be the value of equity.

In order to estimate the cash flow from operations, I have chosen to base it on SK Brann's EBITDA (earnings before interest, taxes, depreciation and amortization). The reason I have chosen to focus on EBITDA is because it is one of the most widespread performance measures. It is true that it leaves out taxes, interest, depreciation and goodwill, but since most of investors are mainly looking to analyse the pure operating posts in the accounts, the choice of EBITDA as performance measures is natural because of the thesis' purpose.

# 4.0 Strategic analysis

#### 4.1 Introduction

The strategic analysis will be built upon the articles from Messineo (2023). Strategic analysis, together with the financial analysis, is the first step in a fundamental valuation. It implies an analysis of internal and external conditions of the club. It is useful to conduct a strategic analysis early in the valuation process in order to make good assumptions and predictions for the future.

A company's strategy is a plan of how the company will increase the value of their business. The goal of the strategic analysis is to get an overview of the organization's overall goals, policy and actions. The purpose is to get the company in the best possible competitive position in order to realize their goals, and thus create lasting competitive advantages. These advantages means that the company over time manages to maintain a return greater than the required rate of return. The strategy must be precise enough to provide good mobilization and distribution of the resources in the organization.

A financial investor will use the strategic analysis to assess earnings and any potential profitability in the future of a company. The strategic analysis therefore lays the foundation for the further valuation. The valuation is often influenced by various discretionary assessments, and therefore, the strategic analysis helps to make the assessment more reliable.

#### 4.2 Framework

The SWOT model (which stands for strengths, weaknesses, opportunities and threats) forms the framework for the strategic analysis and is the basis when assessing any threats, opportunities, strengths and weaknesses in a larger context, in terms of strategy and future profitability.



**Figure 4.1:** The SWOT-model (Wikipedia, 2023)

An external analysis of the industry will contribute to highlighting any challenges and threats SK Brann faces as a football club, both internally in the market and externally from actors, such as suppliers or customers. I have chosen to do this using Porter's factor model.

The internal analysis aims to examine a company's strength and weaknesses. Examples of this are surveys of a company's resources and characteristics. This analysis is often called a

resource-based analysis because it involves a review of the company's quantity and quality of their own resources. The goal is to uncover what resources the company has available, and in the extent to which these can help provide the company with temporary or permanent competitive advantages. I have chosen to use a VRIO-analysis to find the club's temporary or lasting advantages, and in order to identify which resources and qualities that are valuable.

First, I will perform a market appraisal, and then present a macroeconomic analysis. Both will serve as a foundation for both the internal and external analysis. The macroeconomic analysis aims to assess the economic conditions in which SK Brann operates. This is because these factors can have an impact on both SK Brann as a club directly or via actors who they depend on, such as customers or sponsors. I have chosen to do this by using the PESTEL-model.

The goal is ultimately to set the strengths and the possibilities against the weak points and the threats in order to be able to conclude whether it is likely to achieve a profit greater or lower than the required rate of return.

#### 4.3 Market appraisal

The market that SK Brann is currently in is the highest level of the Norwegian football league system. I will define this industry as the 16 teams that play at any given time in "Eliteserien". The are some arguments that the 16 teams in "OBOS-ligaen" could be included in this definition, but I believe that the difference between "Eliteserien" and "OBOS-ligaen" is too great for the clubs to be placed in the same industry. The clubs in "Eliteserien" have overall better financials, much better players, better stadium facilities and greater attendance than the clubs in the division below. A recent example for this is when SK Brann relegated to "OBOS-ligaen" in 2021. They won the league superiorly and lost only one game in the entire season. Therefore, I would rather look at the clubs outside of "Eliteserien" as potential intruders.

It would also be an argument to compare the highest level of Norwegian football with the international level. The level in Norway is very low in comparison with several of the big European leagues, and the foreign clubs' financials is at a completely different level. I have therefore chosen to disregard the foreign clubs and focus on the market of the first division in Norwegian football.

#### 4.4 Macro analysis

In order to gather knowledge of the environment in which SK Brann operates in, I will use the PESTEL-model. Here I will consider how demographic, technological, social, political and economic conditions affect both the club's possibilities for the use of internal resources, as well as the impact of the external forces in the industry.



Figure 4.2: PESTEL-model (Peterdy, 2023).

# 4.4.1 Political and legal factors

For a football club, it is primarily the legal matters that have the greatest influence. There is rarely any political involvement, apart from the desire of politicians to promote their favourite football team in the media. From the legal factors, which is most often represented by the Norwegian Football Association (NFF) or Fédération Internationale de Football Association (FIFA), there may be rules, statutes or orders affecting the operation of football clubs.

There are some guidelines and concepts in relation to football clubs and corporations in Norway. For example, it is not allowed for companies to own football clubs. The clubs shall be owned by the members, but the clubs can, in whole or in part own corporations. An example for this is SK Brann's ownership of Brann Stadion AS. However, it is important that the club and the corporations are considered as two independent legal entities. Even though it is the corporation who pays the salaries, the players must be contracted to the club. (Wahl & Austerheim, 2021)

#### **4.4.2** Economic factors

Football is a sport that engages many people, and where financial resources constantly plays a more important role. For SK Brann to maintain a good offer to their supporters, the club is dependent on good financial conditions.

The last few years have been challenging for SK Brann. The club has faced adversity in the form of loss of revenue due to Covid-19 and the restrictions this entailed, and as a result of the relegation to the "OBOS-ligaen". In terms of costs, Brann has tried to be prudent and to reduce where possible, but the general rise in prices, particularly in electricity prices and interest expenses, have made it challenging. Fortunately, SK Brann has had good support from their loyal supporters and partners, and from the authorities who also stepped up in 2021 to cover some of the revenue loss (SK Brann annual report, p. 10, 2021). Despite these challenges, SK Brann has managed well financially. The support from their supporters, partners and the government, and as well as the sale of the commercial space of Brann Stadion to Union Real Estate Fund in December 2022, has made the club achieve a solid financial profit. This has increased the equity, eliminated all bank debts and improved the liquidity significant. Without the sale of the commercial space, the financial situation of SK Brann would have been dramatic, and a refinancing and new borrowing of bank debt would have been difficult (SK Brann annual report, p. 15, 2022).

#### 4.4.3 Social factors

Social factors revolve around people's ethics, morals and values. A thing that comes to mind is that players of SK Brann is seen as role models by the youngest in our society. Through their football abilities and their performances on the field, the players are idolized and admired by football fans. Thus, the players have a responsibility to behave properly both on and off the field. Players who are not conscious of their responsibilities, may create consequences for themselves and the club they are associated with.

SK Brann is also a major ambassador of the MOT campaign. The campaign aims to attract people's attention to the fight against racism. The club has worked together with MOT to create a safe community, where young people dare to be themselves and where everyone is included (MOT, 2023).

#### 4.4.4 Technological factors

The technological aspect in football has gradually changed over the years. Video assistant referee (VAR) was first introduced in 2012 and is now used in the top leagues in Europe. NFF has decided to introduce VAR into "Eliteserien" as an aid for the referees and shall be used in the next season from season start 10. April 2023 (NFF, 2023).

Today there is great competition for TV rights and to be able to show the matches on the internet. The internet has helped to share football to more people. Most people now have the freedom of choice in terms of what game they want to watch, and they can watch the games live or in recording whenever it suits them, both on their smartphones, computers, etc, regardless of where in the world they are located. Football clubs is therefore more exposed in the digital media, and this is positive for the clubs in terms of acquiring new sponsors.

#### 4.4.5 Societal factors

Society affects all markets and is done without anyone necessarily being aware over it. The impact can be through living standards, wage differentials, population developments, ethnic distribution or gender role patterns. In Norway the general standard of living and level of income are very high. For most people here, they will easily buy a ticket if they want to attend a football match. This is not the case for some parts of the world. There are many extremely passionate supporters in poor parts of society who are willing to spend large portions of their monthly salaries to watch their favourite football team.

It is very social to attend football matches for people of all ages. You are happy to meet friends there and other like-minded people, who you can talk football with. People with a good standard of living tend to have a higher consumption and therefore consume more non-essential goods, such as purchase of supporter items from the club's stadium. This contributes to an increased income for the club, which in turn leads to a stronger and more well-functioning society.

#### 4.5 External analysis

Porters Five Forces Model are made up of five different factors that can influence and shape an industry's profitability and competitive situation in a specific market. Strong forces are a threat because they can limit the possibility of profit, while weak forces will be an opportunity for an increase in profitability.

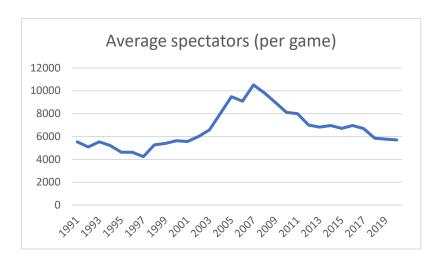


**Figure 4.3:** Porter's Five Forces Model (Oxford, 2023)

## **4.5.1 Rivalry**

The internal rivalry revolves around the internal struggle between companies in their struggle for market share and power within the market. The degree of this rivalry is impacted by three factors; competitive structure, demand and entry and exit barriers in the relevant industry (MTCT, 2023)

The football industry is structured in such a way that the battle for spectators and sponsors is crucial to ensure economic stability. Ticket sales is the most important source of revenue in the industry, as increased exposure can also lead to an increase in sponsorship revenue. Having good capital is critical for a club in the competition with other clubs and in the battle for the best players. The highest level of football in Norway as an industry and the demand for entertaining football as a product, can therefore best be measured by looking at the average number of spectators in "Eliteserien".



**Figure 4.4:** Average spectators (Wikipedia, 2023)

This shows how the average number of spectators have developed from 1991 to 2019. 2020 and 2021 is not included because of the impact of Covid-19 and the restrictions that followed. The average number had a steady increase until 2007. The reason for his increase is the increased exposure of top-level football in Norway by the media and television during this period. In addition, it can also be argued that the excitement around top-level football has increased, as the competition in "Eliteserien" has evened out over the years. The demand for top-level football as a product grew until 2007 and before that, the clubs did not have as much pressure on them to maintain their market share. In context, maintaining and increasing their market share is not as relevant as in the corporate market. Supporters are relatively loyal to their club, and it is extremely rare for them to change their favourite team. The battle for spectators is determined by regional affiliation, and it just the areas with several top teams in the same region that will have to fight for the same spectators.

Since 2007, the average attendance has decreased. That is probably due to technological development, where more supporters choose to watch the games at home in front of the TV or through internet. This does not necessarily mean that the demand has diminished, but the attendance at the games has decreased as a result of technological development. Here, costs can also play a role. If the tickets have become more expensive, people choose to watch the games at home for a cheaper price.

Entry barriers within the highest level of football in Norway, are relatively high because it is difficult to establish yourself as a top club. As mentioned, major financial and sporting commitment is required, and most likely you will need many years of experience from the lower divisions. Exit barriers are also high because many supporters have a strong sense of

belonging to their club. It is extremely rare for a top club to end up winding down their business, as they are often bailed out by private investors, the local community or the municipality.

In summary, the football industry is characterized by high demand, high costs and large entry and exit barriers. Several clubs have high wage costs as a result of the fight for the best players. This creates high pressure on their performance because they need to recover these costs during the season. Overall, this means that there is great internal rivalry in the football industry.

#### 4.5.2 Intruders

Profitability in a competitive market usually depends on the number of actors within a particular industry. Potential intruders are companies that are not in the industry, but which has an opportunity and a goal to establish themselves there. New companies that manage to establish themselves leads to a reduced profitability for the companies that are already in the industry. This poses a constant threat to existing companies, and one often think about how big the exit and entry barriers are in context to this. (MTCT, 2023)

The football industry in Norway is in many ways quite stable. It takes a reasonable amount to establish themselves at the top level and it is almost impossible to come in with a new team. Financial backing is required to be able to reach the top level with a relatively unknown team.

In other words, there is not a big threat of potential intruders in the highest level of Norwegian football. Every year two teams are promoted to "Eliteserien" from "Obos-ligaen", but at the same time two teams are relegated from "Eliteserien". The quality of the newly promoted teams is not all that great either. The threat here would be primarily related to whether the newly promoted teams could threaten the region and battle for spectators in the local areas. This has not been a problem in the past as the supporters of the already established clubs are strongly affiliated with their teams. The newcomers will therefore fall short at most fields such as spectators, sales and sponsorships.

#### 4.5.3 Suppliers

Suppliers often have crucial bargaining power within an industry and can in many instances directly impact the profitability of a company by increasing or decreasing supply, prices or quality of products and services. Industries with a smaller number of large suppliers are a greater threat than industries with a larger number of small suppliers (MTCT, 2023).

In the football industry, it is the players who are mainly seen as the suppliers. Factors that determine whether the players have bargaining powers are other clubs' interest in the player, performance on the pitch, salary, length of contract and the case of whether there is a star player or a big profile in the team.

Generally, individual players possess little, if any, bargaining power. Most clubs and supporters have a strong opinion that no player is bigger than the club. I agree, with a few exceptions. An example is players who are so good that the club is almost willing to do anything to keep them. Like when Real Madrid offered €200 million for Kylian Mbappe, but PSG turned them down and gave Mbappe a new contract which included a \$137 million signing bonus and \$25 million of annual net salary, in addition to being able to influence transfers for the club (Bonn & Borg, 2022). The problem with this is that the players themselves will become aware that they are heavily desired and thus attain great bargaining power. In the Norwegian football industry, there are no players who possesses such qualities, in my opinion. Therefore, the players as suppliers, are not a threat to the profitability of the industry.

#### 4.5.4 Customers

The customers' bargaining power is based on the number of customers and their size, and it can be decisive for the possibility of profit. If the industry consists of many and small customers, their bargaining power is not that impactful, but if there are few and large customers, they will have a certain bargaining power and profitability may be reduced as a result. In the football industry, one can divide customers into three main groups: supporters, sponsors and media. (MTCT, 2023)

The football industry's most obvious customers are the supporters, who basically are small customers who support their favourite team. Although the supporters are seen as small customers, their loyalty and general interest in football makes them engage and form larger

supporter clubs in order to have a greater impact. A support club with many members will of course, have a much greater bargaining power than individual supporters. Large supporter groups can be a threat to the club if they suddenly decide to boycott the club's games and purchases of supporter items, when the club is going through hard times. On the other side, having a large fan base can be a source for profit rather than a threat. A large customer base will lead to the club being seen as more attractive to both sponsors and players.

The media has become a major customer for the football industry because of the technological development. These are the institutions that buy TV-rights and decide which football matches should be shown. The deals we have seen in recent years have given them considerable bargaining power. There are few, but major actors, and thus they possess great bargaining power from a customer perspective.

Sponsors are a key customer for most football clubs. In Norway, the main sponsors are often locally affiliated, and many of them have invested and secured their name at the stadiums. The sponsors expect a certain exposure, as every year they buy advertising and invest large sums of money in the clubs. This makes the sponsors and private investors the customers with the greatest bargaining powers in Norwegian football. The media and sponsors have great bargaining powers in terms of the sums that is being invested. This leads to a lot of competition and tremendous pressure on the clubs to perform from season to season.

#### 4.5.5 Substitutes

Substitutes are products or services that can satisfy or replace a company's already existing products or services within a specific industry. If the customers can find similar products or services that cover the same needs for either a lower price or better quality, then this poses a threat (MTCT, 2023). The football industry's product is high level of football, that the players deliver in form of matches and other football-related events. Substitutes can be divided into direct and indirect substitutes.

Direct substitutes are entertainment that can directly replace or is equal to the entertainment from football. Such substitutes can be cinema, theatre or other social events. The loyal supporters are unlikely to choose these substitutes, as they believe that supporting their club is a must. The matches are also played only every week for a limited time, while there will always be new films and plays that are set up for a longer time. Prices of the tickets also play

a role. If the prices are high, individuals who are only concerned with the social aspect and entertainment will choose a different form over football. There is clearly pressure on the clubs and the players to perform well and deliver entertaining football that can compete with a good movie or play.

Indirect substitutes are entertainment that is experienced in the same way and which in many cases is of the same quality but supplied in a different form. The technological development has created an indirect substitute for buying a ticket and showing up at the game. Most of the games today are indirectly available both on the TV and the internet. This can be seen as a real threat for most clubs, as watching the games at home is often cheaper and more convenient for most people.

Football as an entertainment product faces a real substitution threat. This threat largely depends on how many spectators come to the games in addition to the faithful supporters. To attract these spectators, clubs rely on good results and entertaining football.

#### 4.6 Internal analysis

The internal analysis will be based on SK Brann's internal affairs. The goal is to identify the club's strengths and weaknesses. To achieve this goal, it is important to uncover the most crucial resources. These resources are tangible or intangible resources that can provide a lasting competitive advantage for the club. This competitive advantage is based on characteristics that allow the club to differentiate its products and services, allowing them to achieve lower cost than their competitors. (Messineo, 2023)

In order to find temporary or lasting competitive advantages that are valuable for SK Brann, I have chosen to use the VRIO framework as analysis tool. Using this tool, I will investigate whether the club's resources are valuable to customers, rare in the industry, hard to imitate and/or effectively organized in the club. In the VRIO framework, the resources are divided into four categories: financial, physical, human and organizational resources.

#### 4.6.1 Financial resources

Financial resources include equity, bond holders, financial capital from banking and share capital that companies use to develop and implement strategies. Retained profits or profits

from which the company has gained from previous periods, is also considered as a financial resource.

In the income statement for 2022, SK Brann had a profit of NOK 89, 7 million against a corresponding deficit of NOK 7,5 million in 2021. This is due to the sale of the commercial space in December 2022, which gave the club solid accounting profits, increase in equity, elimination of all bank debts and improvement of the liquidity. In the accounts of 2022, SK Brann had a book of record equity of NOK 149.241.525, compared to NOK 59.540.820 in 2021. The club's total assets in 2022 were NOK 192.494.454 and NOK 265.129.894 in 2021. This means that the club's equity amounted to 77,5 % of the total assets, while in 2021 the equity amounted to only 22,5 % of the total assets. This is a complete turnaround of the club's equity and debt. (SK Brann annual report, 2022)

SK Brann is in an industry where one constantly must make new investments in order to be competitive. Whether the club achieves a return on these investments are often uncertain. Good sales of players or a good season can give the club a significant boost in revenue. Financial resources are something all the clubs need to have to be competitive, but not all clubs have the same economy. In comparison to most of the other clubs, SK Brann has an economic advantage. Therefore, the club's financial resources are a temporary competitive advantage, since this can be imitated by the other clubs.

#### 4.6.2 Physical resources

The club's physical resources are all the physical assets that the club uses or can take advantage of. This includes the club's fixed assets, equipment, geographic location and access to raw materials (Messineo, 2023). For SK Brann, these will be the stadium Brann Stadion and its location, the customer base and the home spectators from Bergen and the region Vestland.

Brann Stadion has been developed over the years by the building of new and more spectator spaces, to attract more supporters and increase the well-being. The stadium has distinguished itself because of its good pitch conditions and central location in Bergen, which is one of Norway's largest cities. Because of several clubs in "Eliteserien" have built new stadiums or upgraded their facilities, the physical resources associated with the fixed assets in SK Brann are not unique and therefore only become a temporary competitive advantage.

The supporters in Vestland can be described as both committed and loyal to their team, but it has been challenging the last years in terms of relegation to "OBOS-ligaen" and Covid-19. Still, good home supporters that are both inspiring and stimulating is an important resource for SK Brann. This can be a deciding factor in helping the club to victory in their home games. The football culture and tradition of attending matches have been built up over time and doesn't just disappear. The geographical location of SK Brann is also a rare resource, since the club alone is the main actor in Vestland. It is important for a football club to be centrally located in terms of the number of spectators, local talent and sponsors. Therefore, the supporters in Vestland and the location is a lasting competitive advantage.

#### 4.6.3 Human resources

Human resources in the club are qualities, knowledge, and experiences that the employees of the club hold or whom they have acquired by working in there. The employees are crucial to the club's performance and achievement (Messineo, 2023). SK Brann is dependent on the level of football delivered on the pitch to achieve good results, and therefore, a good squad is one of the club's most important human resources. A large and capable staff around the players is needed to fulfil the players' potential. Thus, players, coaches, physical apparatus, administrative management and rest of the staff are all important human resources for the club.

SK Brann, like the other clubs, is dependent on good results to stay in "Eliteserien". In today's world of football, there is frequent replacement of both players and coaches over the course of a season. A good squad and staff are therefore impersonable for other clubs, and thus is only a temporary competitive advantage for SK Brann.

## 4.6.4 Organizational resources

The organization and investors are important to the club's performance. Having a stable management and continuity over a longer period often yield positive results. Recently, this has not been the case as there has been constant replacements in the management and from the recent investor Union Real Estate fund, who bought the spectator space at Brann Stadion (SK Brann annual report 2022). For SK Brann to be run without the help of private investors, the costs cannot be greater than the total turnover of the club. This is obviously an important

theme, but it is hard to be competitive without the help from private investors in a time of many economic challenges.

Basically, it is easy for a club to imitate the actions of other clubs, but to acquire and develop people who have knowledge and experience within management is a challenge. Management must, like the players, evolve over time. Therefore, this is a temporary competitive advantage as they are replaced after some time.

## 4.6.5 Summary of the VRIO-analysis

SK Brann has six resources that can give the club a competitive advantage. The club has two resources that can give them a lasting competitive advantage. These two resources are the supporters in Vestland and the geographical location of the club. In addition, SK Brann has four resources that can give them a temporary advantage in relation with the other clubs. In a shorter time, perspective, the financial resources, fixed assets, club employees and management can give SK Brann a significant advantage. The six resources are considered as strengths and helps to make SK Brann competitive in Norwegian football.

#### 4.7 Summary of the strategic analysis

	HELPFUL	HARMFUL
Internal analysis	Strengths	Weaknesses
	Financial resources	Decline in attendance
	Supporters	
	Geographical location	
	Employees	
	Management	
	Brann Stadion	
External analysis	Oppurtunities	Threats
	Large entry- and exit	Great internal rivalry
	barriers	Great bargaining power for
	Small bargaining power for	customers
	suppliers	

#### Figure 4.5: SWOT-analysis of SK Brann

Concluded, it is likely to achieve a greater profit than the required rate of return, because there are several potential competitive advantages uncovered from the internal analysis. However, most of these are temporary. This could mean that in the longer term, football clubs like SK Brann may find it more difficult.

# 5.0 Accounting analysis

#### 5.1 Introduction

The strategic analysis has now been conducted and I have mapped out SK Brann's internal strategy and how the club relates to its competitors and the industry in general. Further, I shall now conduct an accounting analysis where the goal will be to go deeper into SK Brann's financials and accounting.

The accounting analysis is a process of accounting data where the main purpose is to describe the economic position and the development of the club. The analysis is a key part of the valuation and is of interest to several actors. The fundamental valuation method itself is based on SK Brann's future EBITDA. Therefore, I find it expedient to focus on the accounting elements that are both directly included in EBITDA and that may influence my decisions in the forecasting of this.

The accounting analysis will be based on public accounting figures from annual reports. Due to SK Brann's organization, I have chosen to cover the entire corporation and valuate it as one. The reason for this is that I believe there is significant value in owning your own stadium for a football club. I have chosen a period of four years. As I did not get hold of the accounting numbers from 2019, I will cover the years 2018, 2020, 2021 and 2022. In these years SK Brann went through turbulent times, like the challenges from Covid-19.

#### 5.2 Presentation of historical accounts

Here I will present an overview of SK Brann's income statement. The accounts have been prepared in accordance with Norwegian accounting laws and complies with good accounting principles. The going concern assumption is deemed to be fulfilled.

#### **5.2.1 Income statement**

Income statement	2018	2020	2021	2022
Football activities	23 939 668	4 508 276	12 814 852	18 262 046
Marketing activities	77 008 128	68 313 080	70 468 211	64 436 969
Merchandising effects	0	0	236 205	2 161 641
Rental income	5 650 525	6 855 554	7 765 760	9 054 119
Net player sales gains	5 856 705	490 488	3 628 690	11 248 015
Support	5 500 000	22 448 640	13 481 342	727 691
Other operating revenues	165 341 587	3 437 811	3 604 571	3 146 585
Gain on building sale	0	0	0	97 446 359
<b>Total operating revenues</b>	283 296 613	106 053 849	111 999 631	206 483 425
Cost of goods sold	127 689 444	96 521	1 182 471	3 270 618
Labor cost	62 021 249	61 397 124	62 075 738	53 964 174
Depreciation	14 450 524	12 160 550	12 943 754	14 664 969
Write-down	0	5 895 642	1 725 623	0
Other operating costs	38 766 546	28 603 195	35 700 289	41 167 990
Total operating cost	242 927 763	108 153 032	113 627 875	113 067 751
Earnings	40 368 850	-2 099 183	-1 628 244	93 415 674
Interest income	108 053	305 525	908	500
Other financial income	3 719	5 907	253 540	166 416
Interest cost	6 206 080	5 365 470	5 468 362	7 963 884
Other finance cost	0	0	0	6 284
Net finance	-6 094 308	-5 054 038	-5 213 914	-7 803 252
Profit before tax	34 274 542	-7 153 221	-6 842 158	85 612 422
Tax expense	8 621 565	-491 511	686 183	-4 088 283
Net income	25 652 977	-6 661 710	-7 528 341	89 700 705

**Table 5.1:** SK Brann's historical income statement (SK Brann annual reports, 2018-2022).

The income statement for SK Brann in the period 2018-2022 shows a variable income and cost level. Especially if you look at the operating revenues from 2018 to 2021, there was a significant reduction. The reason for this is largely due to Covid-19 and the restrictions that followed. All the stadiums in "Eliteserien" were closed and no crowds were allowed. The club managed to achieve a significant increase in 2022, which is most due to the sale of the commercial space at Brann Stadion. Without the sale they would have been around the same level as in 2020 and 2021. At the same time SK Brann has managed to largely reduce their

operating costs from 2018. From their annual reports, one of their goals is to reduce the costs each year.

# 5.2.2 Balance

Assets	2018	2020	2021	2022
Player rights	10 487 823	3 919 377	9 392 992	10 565 535
Deferred tax assets	0	0	0	0
Total intangible assets	10 487 823	3 919 377	9 392 992	10 565 535
Plot, building and other real estate	174 416 979	226 527 482	228 338 341	133 167 074
Capitalised leases	3 844 658	2 937 770	6 824 648	6 142 766
Facilities without execution	50 937 900	0	0	0
Moveable property, inventory, tools,				
etc.	2 272 012	2 788 306	2 429 935	2 121 186
Total property, plant and equipment	231 471 549	232 253 558	237 592 924	141 431 026
Investment in shares	75 000	0	0	0
Total financial fixed assets	75 000	0	0	0
Total fixed assets	242 034 372	236 172 935	246 985 916	151 996 561
Goods	81 374	25 306	32 984	71 670
Accounts receivable	93 675 828	11 008 508	8 077 319	5 661 034
Other receivables	6 057 596	4 291 905	6 007 343	9 740 639
Total receivables	99 733 424	15 300 413	14 084 662	15 401 673
Means of payment	24 507 932	16 941 610	4 026 330	25 024 547
Total current assets	124 322 730	32 267 329	18 143 976	40 497 890
Total assets	366 357 102	268 440 264	265 129 892	192 494 451

Table 5.2: SK Brann's historical asset balance

From the assets balance, you can see that the largest values in SK Brann are related to the ownership of Brann Stadion and parts of the surrounding area. The reduction in total fixed assets in 2022 is due to the sale of commercial space at Brann Stadion.

Equity and liabilities	2018	2020	2021	2022
Equity	36 605 508		67 069 161	59 540 820
Net income	25 652 977		-7 528 341	89 700 705
Total equity	62 258 485	67 069 161	59 540 820	149 241 525
Deferred tax	688 323	6 369 617	7 055 800	3 330 146
Debt to credit				
institutions	142 210 156	155 945 220	162 063 029	0
Other long-term liabilities	14 755 737	0	4 896 382	5 316 488
Total long-term				
liabilities	156 965 893	155 945 220	166 959 411	5 316 488
Debt to credit				
institutions	54 555 597	0	0	0

Accounts payable	45 493 428	4 523 523	8 115 118	8 300 389
Government fees owned	5 724 781	6 708 078	3 864 856	9 141 122
Tax payable	0	0	0	0
Other current liabilities	40 670 595	27 824 667	19 593 889	17 164 784
<b>Total current liabilities</b>	146 444 401	39 056 268	31 573 863	34 606 295
Total liabilities	304 098 617	201 371 105	205 589 074	43 252 929
Total equity and				
liabilities	366 357 102	268 440 266	265 129 894	192 494 454

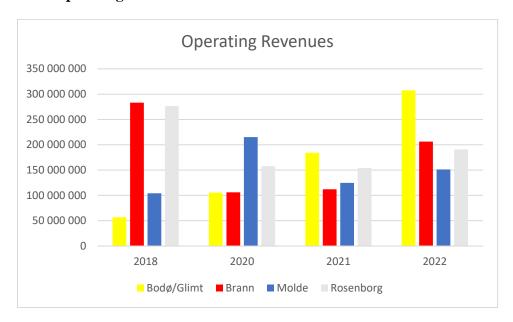
Table 5.3: SK Brann's historical equity and debt balance sheet

From the balance sheet you can see that SK Brann has had an increase in equity since 2018, apart from 2021 when the net income was negative. In 2022 they had a significant increase due to the sale of the commercial space as mentioned. The have also managed to reduce their liabilities over the years. The sale helped them to remove all debt to creditors in 2022, which resulted in a significant reduction in their long-term liabilities and total liabilities. Their current liabilities have also been significantly reduced since 2018, which is positively.

# **5.3** Comparison with other clubs

Since the football industry is relatively small and characterised by strong competition, it is natural to compare SK Brann's accounting figures against some of the clubs I see as their competitors. My selection of clubs is: Bodø/Glimt, Molde and Rosenborg. The reason for this selection is that Bodø/Glimt and Molde has been seen as the two best clubs in Norway for the last couple of years, and Rosenborg is one of SK Brann's greatest rivals. I want to investigate how the clubs' financial development has been in the period 2018, 2020, 2021 and 2022 in relation to SK Brann. The way this is done is by looking at key accounting variables such as operating revenues, costs and wage developments.

# **5.3.1 Operating Revenues**



**Figure 5.1:** Operating Revenues (annual reports from the clubs, 2018-2022).

As you can see from the operating revenues, SK Brann and Rosenborg had a significant lead in 2018, being two of the largest clubs in Norway. This comes naturally from the fact that they are located in two of the largest cities in Norway, and thus have the opportunity to attract more supporters and sponsors. Bodø/Glimt was newly promoted to "Eliteserien" in 2018 and had much lower operating revenues than the other clubs. Since then, they have had a significant increase, especially in 2022. They managed to win the league in 2020 and 2021 and came second to Molde in 2022. This suggests that financial resources are not always necessary to achieve success in football. At the same time, it is an indication of how unpredictable "Eliteserien" has become. The league has now a relatively large field of clubs that can win the league. Brann and Rosenborg were greatly affected by the restrictions followed by Covid-19.

# 5.3.2 Operating cost

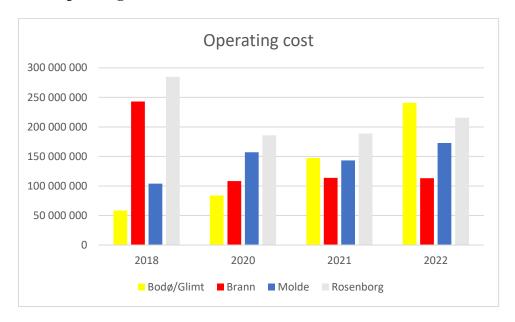


Figure 5.2: Operating cost

Not surprisingly, the operating costs mirror the operating revenues, in that an increase in revenue results in an increase in costs and vice versa. It is worth noting that Rosenborg has had negative earnings every year during the period. This is most likely due to their commitment and investment to achieve success, and the restrictions from Covid-19. Bodø/Glimt and Molde have had an increase in operating cost, which is due to the success they have experienced.

# 5.3.3 Salary ratio

Salary costs are a key accounting variable in relation to football clubs' economic development. It is natural that a large part of the costs at a football club are associated with labour costs since the football industry is a service-based industry where you work with human resources. I have chosen to do a calculation for the corresponding clubs, to find out how much of the revenues goes to salary costs.

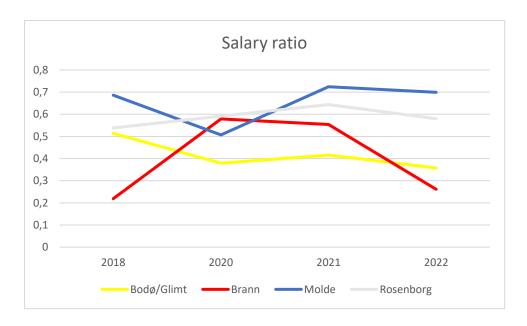


Figure 5.3: Salary ratio

From the figure above, you can see that Bodø/Glimt and SK Brann has had an advantage in terms of salary level in relation to total revenues. Yes, Brann had high levels in 2020 and 2021, but that's most likely due to lesser income as a result of Covid-19. Before and after they had really low numbers. This shows that Bodø/Glimt and Brann has a focus on healthy wage development. The salary levels for Molde and Rosenborg have been consistently high and above 50% throughout the period. Molde even had a ratio above 70% in 2021. When the salary level of Molde makes up for so much of the total revenue, it is virtually impossible to operate profitably for long periods of time without help from investors. Thankfully for them, they have private investors by the likes of Kjell Inge Røkke and Bjørn Rune Gjeltsen, who contribute large sums of money to them (Hustad, 2021).

The fact that clubs receive significant funds to cover high wage costs could lead to an increase in the general level of wages in football. Many believe that this is not an economically viable development and that it goes against fair play.

## 5.4 Regrouping

In order to use the accounts for the valuation, it must be regrouped. The accounts are mainly presented from a creditor perspective, whereas I would like to see it from an investor perspective. I want to regroup the accounting figures of SK Brann so that a potential investor gets a better understanding of what values exist in the club. The regrouping means that you

separate the assets into two groups, operational-related and outsiders. In addition, we distinguish between interest-bearing and interest-free debt and between abnormal and normal posts. The regrouping involves four different stages where you analyse the income statement, the balance sheet, equity statement and cash flow statement (Penman, 2010). Here I will focus on what I will use for the final valuation EBITDA. Thus, I will only use two of the four steps and regroup the income statement and balance sheet since they are relevant to EBITDA.

# **5.4.1** Regrouping of the income statement

The regrouping of the income statement distinguishes between operational and financial posts. By distinguishing the operational posts, I will find the source of value creation in the operation of the club. The regrouped accounts have been simplified so that it only shows operating related revenues and costs during the period 2018, 2020, 2021 and 2022. The tax rate has been set to 22% for 2020-2022 and 23% for 2018.

Income statement	2018	2020	2021	2022
Football activities	23 939 668	4 508 276	12 814 852	18 262 046
Marketing activities	77 008 128	68 313 080	70 468 211	64 436 969
Merchandising effects	0	0	236 205	2 161 641
Rental income	5 650 525	6 855 554	7 765 760	9 054 119
Net player sales gains	5 856 705	490 488	3 628 690	11 248 015
Other operating revenues	165 341 587	3 437 811	3 604 571	3 146 585
Total operating revenues	277 796 613	83 605 209	98 518 289	108 309 375
Cost of goods sold	127 689 444	96 521	1 182 471	3 270 618
Labor cost	62 021 249	61 397 124	62 075 738	53 964 174
Depreciation	14 450 524	12 160 550	12 943 754	14 664 969
Write-down	0	5 895 642	1 725 623	0
Other operating costs	38 766 546	28 603 195	35 700 289	41 167 990
Total operating cost	242 927 763	108 153 032	113 627 875	113 067 751
Earnings	34 868 850	-24 547 823	-15 109 586	-4 758 376
Operating Related Tax (22-				
23%)	8 019 836	-5 400 521	-3 324 109	-1 046 843
Net operating profit	26 849 015	-19 147 302	-11 785 477	-3 711 533

Table 5.4: SK Brann's net operating profit

The posts I have excluded are gain on building sale and the support from the government as a result of Covid-19, as these are abnormal and temporary, and do not follow normal

operations. SK Brann had a positive net operating profit in 2018 and has been negative the years after. A positive net operating profit is important to finance any new investments.

# **5.4.2** Regrouping of the balance sheet

When it comes to the regrouping of SK Brann's balance sheet, it is important to distinguish between operational-related and operational-outsiders. Non-operating assets is often financial and thus market values will be used to value these. Operational-related investments, on the other hand, are not as simple since market values are mostly absent. Therefore, this will be based on earnings and by looking at the return generated by investments. (Penman, 2010)

Balance	2018	2020	2021	2022
Assets				
Player rights	10 487 823	3 919 377	9 392 992	10 565 535
Deferred tax assets	0	0	0	0
Plot, building and other real estate	174 416 979	226 527 482	228 338 341	133 167 074
Capitalised leases	3 844 658	2 937 770	6 824 648	6 142 766
Facilities without execution	50 937 900	0	0	0
Moveable property, inventory,				
tools,etc.	2 272 012	2 788 306	2 429 935	2 121 186
Goods	81 374	25 306	32 984	71 670
Accounts receivable	93 675 828	11 008 508	8 077 319	5 661 034
Other receivables	6 057 596	4 291 905	6 007 343	9 740 639
Payment	24 507 932	16 941 610	4 026 330	25 024 547
Operational-related assets	366 282 102	268 440 264	265 129 892	192 494 451
Debt				
Deferred tax	688 323	6 369 617	7 055 800	3 330 146
Accounts payable	45 493 428	4 523 523	8 115 118	8 300 389
Government fees owned	5 724 781	6 708 078	3 864 856	9 141 122
Other current liabilities	40 670 595	27 824 667	19 593 889	17 164 784
Operational-related liabilities	92 577 127	45 425 885	38 629 663	37 936 441
Net working capital	273 704 975	223 014 379	226 500 229	154 558 010

**Table 5.5:** Regrouped balance sheet.

Above shows the balance sheet after I have distinguished between operating-related and non-operating assets and operating-related liabilities and financial liabilities. Financial liabilities are the sum of the club's long-term and interest-bearing debt. I have subtracted operational-related liabilities from operational-related assets and thus achieved net working capital. (Penman, 2010).

#### **5.5** Normalization of the accounts

When the goal behind the accounting analysis is valuation, it is important to distinguish between the performance elements that are durable and those that are temporary. This is especially important to be able to define a normal operating profit because this will be most appropriate when predicting further development. (Penman, 2010)

EBITDA	2018	2020	2021	2022
Earnings	34 868 850	-24 547 823	-15 109 586	-4 758 376
Depreciation	14 450 524	12 160 550	12 943 754	14 664 969
Write-downs	0	5 895 642	1 725 623	0
EBITDA	49 319 374	-6 491 631	-440 209	9 906 593
Normalized net player sales				
gains	-550 731	4 815 487	1 677 285	-5 942 041
Normalized EBITDA	48 768 643	-1 676 144	1 237 076	3 964 552

**Table 5.6**: Normalized EBITDA

As you can see from the table above, the only adjustment we have chosen to make is to adjust for player sales. This is a post that has had great variety and it is difficult to see that there any clear trends for the development of future player sales. The reason I only adjusted this post is that I implement an external accounting analysis where I do not have full insight into all the principles and assumptions that have been made as the basis for the internal accounting. I adjusted it by taking the average value of player sales in the period, which was NOK 5 305 975, then subtracted the value by the actual value in player sales each year.

I have achieved an EBITDA that is positive for all years in the period, execpt in 2020. The economic problems related to Covid-19 and the relegation in 2021, have made the results unusually poor between 2020 and 2022. This has also negatively affected the EBITDA. Even though the EBITDA has been poor, you can see that it is now improving.

# 6.0 Financial analysis

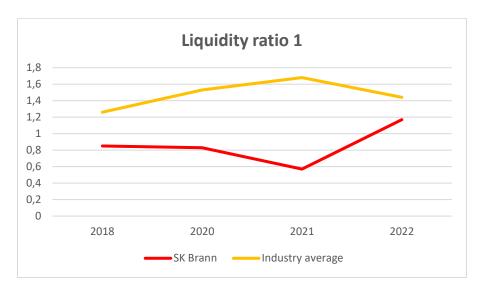
## 6.1 Liquidity analysis

The liquidity analysis aims to analyse the club's ability to pay its obligations as they mature. The liquidity ratio is obtained by comparing the current assets with short-term debt. The way the analysis is done is by comparing the development over time while comparing the numbers

with the industry. In any case, the liquidity ratio should not be below one, which indicates that there is a shortfall in the liquid assets of the enterprise. In the table below, I have first calculated the liquidity ratio for SK Brann in each year. I have then done the same for the other selected clubs and calculated the average figure for the industry based on these numbers. Liquidity ratio  $1 = \frac{Current\ assets}{Short-term\ debt}$  (Fiken, 2023).

Liquidity ratio	2018	202	20	2021	2022
SK Brann		0,85	0,83	0,57	1,17
Bodø/Glimt		1,49	2,48	2,55	2,10
Molde		1,22	1,54	1,57	1,41
Rosenborg		1,06	0,57	0,93	0,82
Industry average		1,26	1,53	1,68	1,44

**Table 6.1:** Liquidity ratio 1



**Figure 6.1:** Liquidity ratio 1

As shown in figure 6.1, SK Brann's liquidity ratio has been low in recent years as a result of increased short-term debt due to investment pressures. The club has financed, at least a part of the investments with short-term credit. This coincides with the high investment pressure in the football industry. Brann's increase from 2021 to 2022 is primarily due to an increase in bank deposits and means of payment. One can see that SK Brann has had a lower liquidity ratio than the industry's average in recent years, but it should be noted that Brann is here compared to clubs that have had great success in recent years. Also, one should take these numbers with a "pinch of salt", as it is not crucial for a club to have a low liquidity ratio for a period of time. However, if the numbers for the club differ too much in relation to the industry, it will be an indication of an abnormal development and increased liquidity risk.

# **6.2 Solvency analysis**

The purpose of performing a solvency analysis is to find out how the company can withstand longer periods of loss. This is important as several football clubs experience longer periods of deficit. I will analyse the solvency by looking at the development SK Brann has had when it comes to equity ratio and interest coverage ratio. I will build the solvency analysis on the article from "Estudie" (Sander, 2023).

## 6.2.1 Equity ratio

The most common expression of the club's solvency is by looking at the size of the equity in ratio to total assets. This is usually presented as a percentage and is referred to as equity ratio. The equity ratio shows how much of the total assets is financed by own funds, and it also tells you how much the club can lose before there is a loss on external capital.

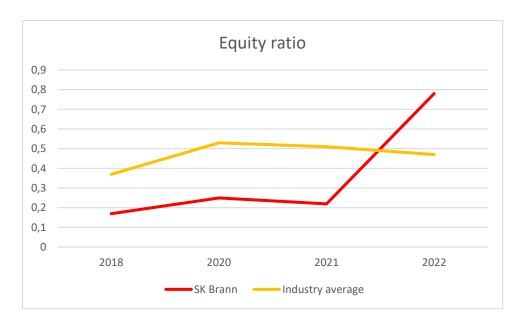
$$Equity\ ratio = \frac{Equity}{Total\ assets} * 100$$

I will now present SK Brann's equity ratio and compare it with the industry.

Equity ratio	2018	2020	2021	2022	
SK Brann		0,17	0,25	0,22	0,78
Bodø/Glimt		0,43	0,61	0,61	0,57
Molde		0,19	0,47	0,48	0,5
Rosenborg		0,48	0,51	0,44	0,33
Industry average		0,37	0,53	0,51	0,47

**Table 6.2:** Equity ratio

From the table you can see that SK Brann has mostly had an equity ratio that is lower than the industry average in this period. The exception is in 2022 when Brann had a large value of equity as a direct result of the sale of the commercial space at Brann Stadion and the surplus that year. So long as the equity ratio is below the industry average, the credit risk for Brann is higher than the other clubs.



**Figure 6.2:** Equity ratio

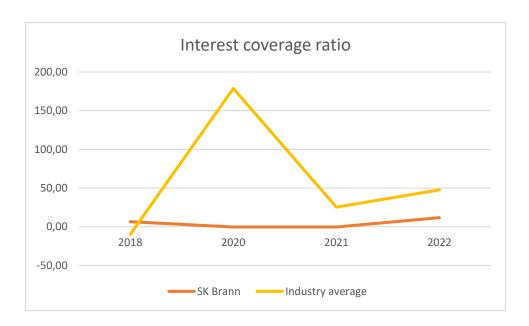
SK Brann's equity ratio is relatively solid in 2022 and is well above the industry. The industry has had a negative development since 2020. This may indicate that the credit risk in the future will be lower for Brann, and it may present more difficulties for the other clubs in "Eliteserien" than for Brann.

## **6.2.2** Interest coverage ratio

The interest coverage ratio gives me an understanding of SK Brann's financial strength and earnings. This ratio will tell me if the club's net operating profit and financial income is large enough to cover finance costs. If the club's interest coverage ratio is lower than 1 it must either cover the loss by reducing equity or by taking up loans.

Interest coverage ratio	2018	2020	2021	2022
SK Brann	6,52	-0,33	-0,25	11,74
Bodø/Glimt	-29,5	540,54	80,82	144,21
Lillestrøm	1,034	1,42	1,62	1,58
Rosenborg	-1,32	-5,7	-6,6	-2,75
Industry average	-9,93	178,75	25,28	47,68

**Table 6.3:** Interest coverage ratio



**Figure 6.3:** Interest coverage ratio

I could not find the right data for Molde so I decided to include Lillestrøm instead in this comparison. As you can see the interest coverage ratio has been variable in the period, both for SK Brann and for the industry. The industry is affected by the fact that Bodø/Glimt has some extreme values. Brann had negative values in 2020 and 2021 but ended up positive in 2022. In the football industry, it can be difficult to assess the interest coverage ratio at times, as the most important thing for many clubs is to prevent negative results. Covid-19 also gave the clubs many challenges with difficult economic times and negative operating profits.

## **6.3** Net return on operations

I have chosen to calculate net return on operations. This shows the return on operational-related assets of SK Brann. In this case, I will not compare with the industry since the key figure will only be used in context with the synthetic rating.

$$ndr = \frac{NDR_t}{NDK_{t-1} + (\Delta NDK_t - NDR_t)/2}$$

Figure 6.4: Net return on operations (Sander, 2021).

ndr = Net return on operations

NDRt = Net operating profit

NDKt-1 = Input net working capital

 $\Delta$ NDKt = Change in net working capital

Net return on operations	2018	2020	2021	2022
SK Brann	0,122	-0,074	-0,051	-0,019

**Table 6.4:** Net return on operations

As you can see from Table 6.4, SK Brann's return on operations has been negative all years except in 2018 as a result of weak operating profits. The numbers have also decreased in all years during this period. Since football clubs' assets largely consists of player contracts and fixed assets, it is natural that these will have significant depreciation each year, and thus lead to a low return on operations.

# 6.4 Synthetic rating

I wish to conclude my financial analysis by implementing a synthetic rating of SK Brann. I have chosen to follow Standard & Poor's guidelines. For the rating I will use figures from the liquidity analysis, solvency analysis, and net return on operations to assess the club's bankruptcy probability and credit risk factor. This analysis is particularly relevant for SK Brann since they are in an industry where no public credit ratings exist. Standard & Poor is one of the best-known credit rating agencies and classifies the various ratios on a scale that from AAA to D, where AAA is the best rating and D is the weakest. This system has been developed to give loan issuers an indication of whether the borrower will be able to service their debt. (Wikipedia, 2023)

Syntethic rating 💌	Kolonne1 💌	Kolonne2 ▼	Kolonne3 ▼	Kolonne4 <b>▼</b>	Kolonne5	Kolonne6
Rating	LR1	ICO	ER	NRO	Probability of bankruptcy	Credit risk factor
AAA	11,6	16,9	0,94	0,35	0,0001	0,1
	8,9	11,6	0,895	0,308		
AA	6,2	6,3	0,85	0,266	0,0012	0,15
	4,6	4,825	0,755	0,216		
Α	3	3,35	0,066	0,166	0,024	0,25
	2,35	2,755	0,55	0,131		
BBB	1,7	2,16	0,44	0,096	0,0037	0,4
	1,45	1,69	0,38	0,082		
BB	1,2	1,22	0,32	0,068	0,0136	0,6
	1,05	1,06	0,27	0,054		
В	0,9	0,9	0,22	0,04	0,0608	1
	0,75	0,485	0,175	0,026		
CCC	0,6	0,07	0,13	0,012	0,3085	3
	0,55	-0,345	0,105	-0,002		
CC	0,5	-0,76	0,08	-0,016	0,5418	9
	0,45	-1,17	0,03	-0,03		
С	0,4	-1,58	-0,02	-0,044	0,7752	27
	0,35	-1,995	-0,1	-0,058		
D	0,3	-0,241	-0,18	-0,72	0,9999	1000

**Table 6.5:** Standard & Poor's model for synthetic rating (Sexe, p.67, 2008).

Table 6.5 shows the layout for the rating of the classes based on liquidity ratio 1, interest coverage ratio, equity ratio and net return on operations. In addition, the table contains the probability of bankruptcy within one year and the risk in relation to how worthy of credit the club is. Each of the key figures is given equal weight and the results must be addressed according to what industry the club is in.

Synthetic rating	2018		2020	)	2021		2022	2	Ave	rage
Liquidity ratio 1		0,85		0,83		0,57		1,17		0,855
Interest coverage ratio		6,52		-0,33		-0,25		11,74		4,42
Equity ratio		0,17		0,25		0,22		0,78		0,355
Net return on operations		0,122		-0,074		-0,051		-0,019		-0,0055
Liquidity ratio 1	В		В		CCC		BB		В	
Interest coverage ratio	AA		CCC		CCC		AAA		BBB	
Equity ratio	В		BB		В		AA		ВВ	
Net return on										
operations	AA		D		С		CC		CCC	
Overall rating	BBB		CCC		CCC		BBB		ВВ	
Probability of										
bankruptcy		0,0037		0,3085		0,3085		0,0037		0,0136
Credit risk factor		0,4		3		3		0,4		0,6

Table 6.6: Synthetic rating SK Brann

The table above shows the summary of SK Brann's ratios for the synthetic rating. I will use the credit risk factor that I found in the average rating for my further analysis. The bankruptcy probability for SK Brann will thus be 1,36% and the credit risk factor will be 0,6.

# 7.0 Return requirement

The required rate of return for a company is a measure of the lowest return that is necessary for an investor to want to invest in the company. The required rate of return represents the expected return offered by the market on investments with the same risk as investing in the company. In other words, investments made are only profitable if the return on invested capital is equal to or exceeds the required rate of return (Roksvåg, 2022).

As my thesis is a valuation of SK Brann, I will find the required rate of return for the total capital by using WACC to discount the future cash flow. WACC is found by weighting the required rate of return on equity and debt with share equity and financial liabilities. First, I will calculate the required rate of return on equity by using the capital asset pricing model, and then we use the credit risk factor found in the synthetic rating to calculate the required rate of return on debt. Finally, I will use WACC to estimate the weighted required rate of return that will be used to discount the future cash flows in the future accounts. (Roksvåg, 2022)

#### 7.1 Risk-free rate

The risk-free rate is the interest rate you get without taking any kind of risks. In order to calculate the required rate of return, I need to find the risk-free interest rate. Which risk-free interest rate I should use depends on how long-term interest I have in the club. To set the risk-free interest rate, it is considered most correct to use the longest government bond yield of 10 years (Sander, 2022). In my calculations, I have chosen to use a long government bond with a duration of 10 years as measure of risk-free rate. At the time of this valuation, the risk-free rate is 3,137% (Norges Bank, 2023)

#### 7.2 The market's risk premium

The market's risk premium can be defined as the return the investor is left with in excess of risk-free rate. It measures the additional return than an investor requires to invest in the market portfolio rather than in a risk-free investment. It should reflect how risk-averse investors are, and how risky they think it is compared to a risk-free investment. Since every investor in a market has a different perception of what an acceptable premium is, the premium becomes a weighted average of each investor's acceptable premium. The most common approach in estimating risk premium is to use historical data. (Sander, 2022)

I will base the market's risk premium on a survey made by PWC in collaboration with FFN. They have found the risk premium for the period 2014-2022 and found the weighted averages in each year. The average weighted average in this period is 5%, which I will use as risk premium in the calculation of the required return. (PWC, 2022)

#### **7.3** Beta

When investing in equity, one must have a beta value that explains the degree of systematic risk that exists in companies. It is an important part of the CAPM model, where it indicates how much an investment increases the risk of the market portfolio. The beta that measures risk in financial models have two characteristics that are important to know. The first is that it measures the risk assigned to the diversification portfolio rather than the total risk. Therefore, it is possible for an investment to be risky on individual basis, but not in terms of market risk. The second characteristic is that the beta measures the relative risk of an asset and therefore is standardized around one. There are three ways to measure beta values. One can estimate the beta based on historical stock prices using regression analysis on the returns of the company and the market. One can calculate beta based on comparative companies, a so called "bottoms-up" beta. Or one can estimate equity beta for non-listed businesses based on the beta of comparative businesses. (Sander, 2022)

I have chosen to use the method that addresses the historical market beta. The problem here is that SK Brann is owned by the members and thus not listed on the stock market. This makes it impossible to calculate a beta value using historical return data related to Brann. The capital asset pricing model only compensates for systematic risk taken, since it is assumed that one can diversify away the unsystematic risk (Sander, 2022). Thus, one is only compensated for

market risk and not for company-specific risk since it is assumed that this can be diversified away.

This assumption does not hold when it comes to the football industry since the clubs are dependent on how the players perform. Here, form, injuries and player development come to play. These factors are hard to account for. In the football industry, investors are therefore more concerned with the total risk. The way this is considered is by adding a liquidity premium since the club is not publicly traded.

In order to estimate a reasonable beta value, I have analysed foreign clubs that are listed on the stock market. The clubs I have included face the same challenges as SK Brann when it comes to uncertainty about players and performances. For the analysis to be as precise as possible, I have chosen clubs that I believe are like Brann in terms of size and ambitions. I have chosen two clubs from the Danish "Superligaen", which is the highest division in Denmark. The clubs are Aalborg BK and Silkeborg IF. For comparison with the market, I have used the Danish top-tier stock market index OMX Copenhagen 25, which consists of the 25-most traded stock classes (Wikipedia, 2023). The data is taken from Yahoo Finance, and I have used monthly data for the last reported year from January 2022 to 31. Desember 2022.

Date	Adj Close** OMX Copenhagen 25	Adj Close** Aalborg Boldspilklub A/S	Adj Close** Silkeborg IF Invest A/S	Expected return (=In)		
Dec 01, 2022	1700,56	49,6	18,5	0,01	0,03	-0,07
Nov 01, 2022	1686,61	48,2	19,8	0,07	0,29	-0,05
Oct 01, 2022	1574,67	36,2	20,8	0,09	-0,11	0,21
Sep 01, 2022	1439,09	40,6	16,8	-0,14	0,00	-0,22
Aug 01, 2022	1652,65	40,6	21	-0,07	-0,09	0,01
Jul 01, 2022	1770,61	44,6	20,8	0,12	0,08	0,06
Jun 01, 2022	1574,67	41,2	19,5	-0,07	-0,20	-0,02
May 01, 2022	1682,19	50,5	19,9	-0,05	-0,19	0,19
Apr 01, 2022	1764,64	61	16,5	-0,01	0,26	-0,02
Mar 01, 2022	1786,11	47,2	16,9	0,01	0,02	0,02
Feb 01, 2022	1764,81	46,2	16,6	-0,01	0,14	0,09
Jan 01, 2022	1776,23	40,2	15,10			

**Table 7.1**: Stock market

	Koeffisienter	Standardfeil	t-Stat	P-verdi	Nederste 95%	Øverste 95%	Nedre 95,0%	Øverste 95,0%
Skjæringspunl	0,02220182	0,04874965	0,45542512	0,65959161	-0,08807756	0,1324812	-0,08807756	0,1324812
X-variabel 1	0,7831798	0,67410617	1,16180482	0,2751981	-0,7417543	2,3081139	-0,7417543	2,3081139

**Table 7.2:** Beta value calculation for Aalborg BK

The beta is calculated by using Microsoft Excel and an implementation of regression between the stocks and the market. As seen from Table 7.2, Aalborg BK has a beta value of **0,78**.

	Koeffisienter	Standardfeil	t-Stat	P-verdi	Nederste 95%	Øverste 95%	Nedre 95,0%	Øverste 95,0%
Skjæringspunl	0,02164563	0,03356631	0,64486181	0,53510671	-0,05428664	0,09757791	-0,05428664	0,09757791
X-variabel 1	0,80453788	0,4641522	1,73334925	0,1170679	-0,24544736	1,85452311	-0,24544736	1,85452311

**Table 7.3:** Beta value calculation of Silkeborg IF

Following the regression, you can see from Table 7.3 that Silkeborg IF has a beta value of **0,80**. This gives me an average beta of 0,79 for the two clubs. This means that if OMX increases by 1%, Aalborg increases by 0,80% and Silkeborg by 0,78% and vice versa if the stock market goes down. If I implement a Merrill-Lynch adjustment to the beta, I get:

$$\beta = \frac{2}{3} * 0.79 + \frac{1}{3} * 1 = 0.86.$$

The reason I make such an adjustment is that one assumes that all beta values will approach 1 over time, for lack of another appropriate future estimate (Sander, 2022). This is a beta value that increases 16% less than the market and it can thus be concluded that football clubs do not differ to any great extent in relation to the market. It should also be mentioned that the beta value has been calculated by an individual approach and this value is far from 100% certain.

## 7.4 Liquidity premium

The liquidity premium is used to adjust the beta value for companies that are not listed on the stock market. The reason for this is that the liquidity premium should compensate the investor for the fact that it may be relatively expensive or difficult to recover quickly out of the stock. The premium can also be explained by the fact that in smaller companies, information is close to the management, and therefore there is a risk of negative surprises. Dahl and Boye (1997) recommend liquidity premiums of 4-6% for unlisted, and especially smaller, unlisted companies. (Sander 2022)

Since SK Brann is owned by the members, I believe it is not natural to add a liquidity premium. The reason for this is that I think it is wrong to punish the owners of the club with something that is mainly intended for share speculators. The members own Brann for other businesses reasons. The liquidity premium is therefore set at 0. Instead, I have chosen to add a so-called small business premium (SBP). The premium is set at 4%, which is a good percentage for small businesses according to Professor Damodaran (Cook, 2019). SK Brann is a small company, and therefore dependent on key personnel. The small business premium will therefore replace the liquidity premium.

# 7.5 Calculation of equity requirements

The required rate of return on equity is found by using the capital asset pricing model. The first variable in the model is the risk-free interest rate, which I set to be 3,137%. The beta is the adjusted beta value I found earlier of 0,86. The market risk premium was set to 5%. Lastly, I need to add the small business premium (SBP) to the model, which was set to 4%. The tax rate is set to 22%. I then get a required return on equity of 11,3% for SK Brann

$$kE = Rft + \beta E * MPs + SBP$$
 
$$Rft = Rf * (1 - t) = 3,137\% * (1 - 0,22) \approx 2,45\%$$
 
$$MPs = Rm - Rft = Rm - Rf + t * Rf = MP + t * Rf = 5\% + 0,22 * 3,137 \approx 5,69\%$$
 
$$kE = 2,45\% + 0,86 * 5,69\% + 4\% \approx 11,3\%$$

## 7.6 Calculation of debt requirements

The debt requirements are calculated using three variables. The current tax rate, risk-free rate pre-tax, and a risk premium. The tax rate is 22% and the same risk-free rate of 3,137% is used. The risk premium is calculated using the credit risk factor that I found in the synthetic rating. The rating I got was BB, which gave me a credit risk factor of 0,6. I multiply this factor by the risk-free interest rate and the risk premium/loss premium for SK Brann is thus 18,82%.

SK Brann's total debt requirements =  $(1 - t) * (rf + Rp) = (1 - 0.22) * (3.137\% + 18.82\%) \approx 17.3\%$ .

## 7.7 Required rate of return on total assets (WACC)

I can now calculate the weighted required rate of return. I will use this to discount the budgeted future cash flow. WACC is found by taking SK Brann's equity ratio multiplied the equity requirement and the debt ratio multiplied by the debt requirement. By taking the sum of these variables, I get an expression of the weighted required return. First, I must look at how the capital structure is at the club. That is, how much of the club is financed by equity and how much is financed by debt. (Roksvåg, 2022)

The market value of SK Brann's equity as of 2022 is NOK 149 241 525. To find the market value of debt I take the total debt and subtract it by the total operating liabilities I have estimated at NOK 37 936 441. I then get a financial debt of NOK 5 316 488. This brings the total capital to NOK 154 558 013. The equity ratio is thus 96,56% and the debt ratio is 3,44%.

$$WACC = \frac{D}{V}Rd*(1-t) + \frac{E}{V}Re = 3,44\%*17,3\%*(1-0,22) + 96,56\%*11,3\% \approx 11,4\%$$

The weighted required rate of return for SK Brann, which I will use to discount the cash flow for the future accounts will thus be 11,4%.

# 8.0 Future accounting

#### 8.1 introduction

I shall now set up future accounts for SK Brann based on their accounting figures. It is important to choose the right time frame and specify the financial statements correctly. The future accounts are necessary in order to find the future cash flows that shall be discounted, and then to find a value estimate for Brann. The cash flow-based valuation of SK Brann can be distinguished in two parts. In the first part I will assess expected developments in incomes, costs, investments and in working capital for the coming years. For the second part, I will calculate a terminal value for Brann. This value is calculated at the end of the forecast period and from this point on, there is a perpetual constant growth. I will build the future accounting on the article about the framework of future accounting (Sander, 2022).

To ensure a terminal value that is as accurate as possible, it is important that the club is in in "steady state". A company that is in "steady state" will have a cash flow with constant growth and can therefore be valued using a formula that ensures perpetual growth. The budget period thus becomes a link between the current situation and the eternal growth in the future.

## 8.1.1 Budget horizon

My choice of budget horizon has been made based on a discretionary assessment. Future forecasts that are too long will be very uncertain as it is difficult to predict how the income and cost levels will develop so far into the future. The football industry can be seen as a mature and relatively stable industry and is therefore close to being in a situation with a

"steady state". I have chosen a budget horizon over a period of five years, from 2023 to 2027. 2028 will be the normal year that forms the starting point for the terminal value for SK Brann.

## 8.1.2 Growth analysis

It is important to determine the right long-term growth in order to calculate an accurate value of the club. It is also important to have a well-founded growth and it is crucial that the growth is not greater than the economy. To high growth will result in too high terminal value and thus lead to an excessively high estimate of the value. For the normal year, I assume that costs and revenues grow equally. I use growth in gross domestic product (GDP) and inflation (consumer price index) to measure overall growth in the economy (SSB. 2023).

Historic	<b>2013</b>	<b>2014</b>	<b>▼ 2015</b>	<b>2016</b>	<b>▼ 2017</b>	▼ 2018	<b>▼ 2019</b>	<b>▼</b> 2020	▼ 2021	▼ 2022	<b>▼</b> Aver	age 🔽
GDP		1	2	1,9	1,2	2,5	0,8	1,1	-1,3	3,9	3,3	1,64
CPI-ATE		2,1	2,4	3	2,5	1,4	2,1	1,8	3	1,8	5,8	2,59
Nominal growt	th	3,1	4,4	4,9	3,7	3,9	2,9	2,9	1,7	5,7	9,1	4,23

Table 8.1: Historical development GDP, CPI-ATE and nominal growth 2013-2022

In order to get a better understanding of what can be expected in the future, I have also included some forecasts from SSB of what the situation will look like over the next four years.

Forecasts	2023	2024	2025	2026
GDP	1,6	1,8	1,5	1,2
CPI-ATE	5,4	2,8	2,1	2,2
Nominal				
growth	7	4,6	3,6	3,4

Table 8.2: Forecasts for development of GDP, CPI-ATE and nominal growth 2023-2026

As seen in table 8.2, the forecasts show a decreasing nominal growth from 7% in 2023 to 3,4% in 2026. The nominal growth is closing in on 3%. Therefore, from these forecasts, I believe that a nominal growth of 3% is a good estimate to use in the formula for calculating terminal value. For the period 2023-2027, growth is more dependent on internal conditions and developments in the football industry. Thus, this will build further on the strategic analysis that I have gone through earlier.

I will now review the most important economic key figures that are included in the calculation of EBITDA to calculate the budgeted future cash flow of SK Brann. To calculate the cash

flows, I will look at the regrouped accounts. I believe that the accounts from 2018, 2020, 2021 and 2022 forms the best basis for forecasting the growth in the short-term.

#### 8.2 Income

In this chapter I will review the various income posts and discuss how they have evolved through the period for which I have regrouped the accounts. I am also going to prepare a forecast for expected developments in the various posts up to 2027. The growth of the budget period will deviate somewhat from the perpetual growth rate.

#### 8.2.1 Income from market deals

Income from sponsorships is one of the biggest sources of income for a football club, and SK Brann is no exception. At the club, income from sponsorships make up for a significant amount of the total revenues. Media revenue is also included in this section.

Historical	2018	2020	2021	2022
Market				
deals	51 300 000	48 000 000	51 000 000	47 000 000
Growth		-6,43 %	6,25 %	-7,84 %

Table 8.3: Historical development SK Brann's market deals

As we can see from the table above, SK Brann's market deals and income from sponsorships have decreased in the period. There was a decrease from 2018 to 2020 and from 2021 to 2022, but an increase from 2020 to 2021. The variations from year to year have not been big and indicates that SK Brann's sponsorship revenues has been relatively stable. It should be mentioned that Brann was faced with restrictions from Covid-19 and relegation in this period. Because Covid-19 is no more and Brann is back in "Eliteserien" for the next season, I have reason to believe that the clubs' income will grow in the future years. My forecasts of sponsorship revenue for SK Brann will thus have a growth 6,5% for the first year, and then a steady increase for the following years. In the long-term, growth will be equal to the perpetual growth rate of 3%.

Forecasts	2023	2024	2025	2026	2027
Market					
deals	50 055 000	53 558 850	57 575 764	62 181 825	67 467 280
Growth	6,50 %	7,00 %	7,50 %	8,00 %	8,50 %

**Table 8.4:** Forecasts for development in sponsorship income

#### 8.2.2 Ticket sales

Historical	2018	2020	2021	2022
Ticket sales	20 600 000	2 300 000	10 200 000	16 000 000
Growth		-88,83 %	343,48 %	56,86 %

**Table 8.5:** Historical development ticket sales

As expected, ticket sales in 2020 and 2021 were heavily impacted by Covid-19, which is shown in the unusual low numbers. Income from ticket sales were also lower than usual in 2022 due to the relegation in 2021, which resulted in SK Brann playing in "OBOS-ligaen". As mentioned earlier in sponsorships income, there is no longer restrictions from Covid-19 and Brann will be playing in the highest division in the 2023 season. I also believe that Brann is too strong of a team right now, to be relegated in the forecast period. Therefore, I assume SK Brann will be playing in "Eliteserien" for the whole period. Thus, I believe that SK Brann will experience a large increase in ticket sales in 2023.

Forecasts	2023	2024	2025	2026	2027
Ticket sales	24 000 000	24 840 000	25 833 600	26 996 112	28 345 918
Growth	50 %	3,50 %	4 %	4,50 %	5 %

**Table 8.6:** Forecasts for development in ticket sales

The table shows a growth of 50% in 2023 and then a steady growth from 3,50% in 2024 and onwards. The reason for this growth is that I believe that SK Brann has the chance to play European football in the coming years, and maybe even have a chance to win the league.

#### 8.2.3 Gains from player sales

Player sales are one of the most uncertain posts in the accounts, and probably one of the most difficult posts to predict. The reason for this is that it is very challenging to determine the exact value of a player at any given time, since this is affected by both the player's individual performances, and whether the club achieves success or not. The values that are tied up with the players are a result of widely varying magnitude, and often it is only coincidences that determines whether a player is sold or not. In addition, football clubs are usually not interested in revealing to their competitors what they believe is a fair price for a player. This

is because it could put the club in a disadvantageous position when it comes to negotiations of these players, and result in a lower price than expected.

Since 2018, player sales from Norway to foreign clubs have increased sharply and Norwegian football achieved a transfer record of NOK 504 million in the January transfer window in 2023. Players like David Datro Fofana was sold from Molde FK to Chelsea FC for NOK 130 million. This is a recognition of Norwegian talent development and the success Norwegian football clubs have achieved. The facts that clubs like Bodø/Glimt and Molde has had the success they have had, both in Norwegian football and European competitions, and big profiles like Erling Braut Haaland and Martin Ødegaard, have made Norwegian football more attractive. This results in more scouts and people in general watching. According to the football database Transfermarkt, the market value of Eliteserien's player squad is NOK 1,9 billion in 2023. (Hussain, 2023)

As you can see, it is sales to foreign clubs that are most sought after and which often give the greatest returns. Player sales within Norway are not as lucrative, and usually the transfer fees are at a completely different level compared to the foreign market. Therefore, number of player sales and the price of the players are often related to how foreign clubs perceive the quality of Norwegian football and the players. Many clubs are thus invested in young talent and player development in order to resell them to foreign clubs. You could say that all the clubs in Norway are "selling clubs". It must also be mentioned that there is always a certain risk associated with such player investments. If the players in question and the club are not achieving success, there is little suggestion that other clubs would be interested in buying.

A recent example of this, is the sale of former SK Brann player David Møller Wolfe to the Dutch club AZ Alkmaar. The transfer was around NOK 30 million and is the highest sum ever for a player in Brann. (Johannessen, 2023).

Historical	2018	2020	2021	2022
Net player sales gains	5 856 705	490 488	3 628 690	11 248 015
Growth		-91,63 %	639,81 %	209,97 %

**Table 8.7:** Historical development net player sales gains

As you can see from the table, this record varies widely. This makes it hard to forecast how it will develop in the future. In the long-term there is talent in the club that will be able to generate greater revenue in the years to come. If you look further ahead, the increased focus on talents will lead to increased revenue.

Forecasts	2023	2024	2025	2026	2027
Net player sales					
gains	30 369 641	12 147 856	13 970 035	15 017 787	15 768 677
Growth	270 %	-60 %	15 %	7,5 %	5 %

**Table 8.8:** Forecasts net player sales gains

I assume that gain from players sales will have a large increase in 2023 and then have a steady increase further along the period. In the long term, I assume that this record also increases by 3%.

## **8.2.4** Other operating income

This post accumulates the remaining revenue that SK Brann generates. The majority of these are linked to Brann Stadion. This includes football activities and rental income.

Historical	2018	2020	2021	2022
Other operating				
income	31 931 780	14 801 641	24 185 183	30 732 750
Growth		-53,65 %	63,40 %	27,07 %

**Table 8.9:** Historical development other operating income

This is a record that had a decrease in 2020 and 2021 compared to 2018. This can be linked to Covid-19 and declining attendance at Brann Stadion. They managed to come back and achieved almost the same number in 2023 as they had before Covid in 2018. As Covid is now over and Brann now play in the highest division of Norwegian football, I expect an increase in other operating revenues for the coming years.

Forecasts	2023	2024	2025	2026	2027
Other operating					
income	32 269 389	33 076 122	34 068 406	35 260 800	36 671 232
Growth	5 %	2,50 %	3 %	3,50 %	4 %

**Table 8.10:** Forecasts other operating income

#### **8.3** Cost

Here I will present my forecasts for how SK Brann's costs will evolve over the next five years. I have chosen to separate costs into two groups, labour costs and other operating costs. In operating costs, I have included costs of goods sold.

#### 8.3.1 Labour costs

This is usually the largest single cost that football clubs have, and SK Brann is no exception. I have chosen to look at this cost based on its proportion of the club's revenue.

Historical	2018	2020	2021	2022
Labour cost	62 021 249	61 397 124	62 075 738	53 964 174
Proportion of revenue	22,30 %	73,40 %	63,01 %	49,83 %

 Table 8.11: Historical development labour cost

If you look at the development from this table, SK Brann has had a steady development of labour costs, except in 2022 where they have managed to reduce it. Also, the revenue from operations have increased from 2020 to 2022, which have resulted in a decrease in labour costs' proportion of the revenue.

I assume that SK Brann will focus and invest in player talents and academy. This will result in the club getting more homegrown players in the years to come. These kinds of players will demand lower salaries than foreign players bought from other clubs. Therefore, this will slow down the development in labour cost growth in the years to come, and result in Brann having a better wage/revenue ratio. I also consider that Brann might be playing European football in the coming years, which may make them invest in more players with higher salaries if they are going to have somewhat of a chance in the competition.

Forecasts	2023	2024	2025	2026	2027	2028
Labour costs	59 360 591	62 328 621	65 445 052	67 081 178	63 727 119	65 638 936

Table 8.12: Forecasts labour cost

## **8.3.2** Other operating costs

Other operating costs include the costs for SK Brann, except for labour cost, depreciation and write-downs. The largest costs related to this post are related to matchday, travel and transport and sponsorship and ad costs.

Historical	2018	2020	2021	2022
Other operation cost	166 455 990	28 699 716	36 882 760	44 438 608
Growth		-82,76 %	28,51 %	20,49 %

Table 8.13: Historical development other operation cost

Seen from the table above, SK Brann had a significant decrease in other operations cost from 2018 to 2021. The same goes for the proportion of the revenue. The costs then increased from 2021 to 2022. For the future, I believe it will be difficult for the club to lower these costs. This is because I expect an increase in spectators, as a result of Brann now playing in the first division, Covid-19 is no more and European football. This will of course increase the operating costs.

Forecasts	2023	2024	2025	2026	2027	2028
Other operation cost	48 882 469	52 548 654	55 176 087	53 520 804	56 732 052	58 434 014
Growth	10 %	7,50 %	5 %	-3 %	6 %	3 %

**Table 8.14:** Forecasts other operation cost

#### **8.4 Forecast EBITDA**

I have now made forecasts for the income and cost that is included in EBITDA and can thus put them in a table to summarize what SK Brann's EBITDA have become based on my forecasts. The figures will also be used to calculate a normalised cash flow.

						2028
Column1	2023	2024	2025	2026	2027	(N)
Market deals	51 055 000	53 558 850	57 575 764	62 181 825	67 181 825	
Ticket sales	24 000 000	24 840 000	25 833 600	26 996 112	28 345 918	
Player sales gains	30 369 641	12 147 856	13 970 035	15 017 787	15 768 677	
Other operating income	32 269 389	33 076 122	34 068 406	35 260 800	36 671 232	
Total operating revenue	137 694 030	123 622 828	131 447 805	139 456 524	147 967 652	152 406 681
Labour cost	59 360 591	62 328 621	65 445 052	67 081 178	63 727 119	65 638 936
Other operating cost	48 882 469	52 548 654	55 176 087	53 520 804	56 732 052	58 434 014
Total operating cost	108 243 060	114 877 275	120 621 139	120 601 982	120 459 171	124 072 950
Normalised EBITDA	29 450 970	8 745 553	10 826 666	18 854 542	27 508 481	28 333 731

**Table 8.15:** Forecasts EBITDA 2023-2028

## 8.5 Investments

In order to find the final cash flow from operations, I must subtract investments from EBITDA. My forecasts will build on the historical data from the analysis for the years 2018, 2020, 2021 and 2022.

Historical investments	2018	2020	2021 🔻	2022
Net payout on player investments	-13 314 76	-8 982 153	-11 441 939	-7 380 215
Net inputs/payments on purchases of property, plant and equpmen	t -43 603 614	-1 456 112	-13 564 257	189 533 967
Net payments on the sale of players	7 369 76	11 747 475	3 903 690	16 315 324
Net investments	-49 548 61	1 309 210	-21 102 506	198 469 076
Total operating revenues	277 796 61	83 605 209	98 518 289	108 309 375
% of operating revenues	17,80 %	6 1,60 %	21,42 %	183,24 %

**Table 8.16:** Historical investments 2018-2021

Usually for football clubs, player investments are the main investments. In this case SK Brann has more investments on purchases of property, plant and equipment in 2018 and in 2022. The reason for this is because Brann had sale of student houses in 2018 and sale of commercial space at Brann Stadion in 2022. If you look at investments for 2020 and 2021, when the investments were not impacted by this, SK Brann had more in player investments than in property. In the future, it is important to develop more home grown players in SK Brann, as this will minimise the pay-out in terms of purchases, but still maintain the payments in terms of sales.

Forecasts	▼ 2023	<b>▼</b> 2024	▼ 2025	▼ 2026	▼ 2027	<b>▼</b> 2028	*
Investments		3 %	3 %	4 %	4 %	5 %	5 %

**Table 8,17:** Forecasts SK Brann investments in % of operating revenues

My forecasts for the future assume that SK Brann will generate sufficient revenues from player sales that they want to keep investment levels low relative to the revenue. Nevertheless, I expect somewhat of an increase because of the desire to play in European competitions and the player sales this will lead to. Thus, this growth is above the perpetual growth.

#### 8.6 Working capital

In addition to forecasting SK Brann's future investments, I must also provide a forecast of the change in working capital. Working capital is defined as such (Sander, 2022):

 $Working\ capital = current\ assets - current\ liabilities$ 

In my calculation, current assets will be operational-related, and the debt will be non-interest-bearing. An increase in working capital will lay claim on funds that could have been used in other areas, and thus have a negative effect on the club's cash flow, while a decrease will have the opposite effect.

Historical working capital	2018	2020	2021	2022
Current assets				
Goods	81 374	25 306	32 984	71 670
Accounts receivable	93 675 828	11 008 508	8 077 319	5 661 034
Other receivable	6 057 596	4 291 905	6 007 343	9 740 639
Payment	24 507 932	16 941 610	4 026 330	25 024 547
Non-interest bearing liabilities				
Deferred tax	688 323	6 369 617	7 055 800	3 330 146
Accounts payable	45 493 428	4 523 523	8 115 118	8 300 389
Government fees owned	5 724 781	6 708 078	3 864 856	9 141 122
Other current liabilities	40 670 595	27 824 667	19 593 889	17 164 784
Working capital	31 745 603	-13 158 556	-20 485 687	2 561 449
Working capital in % of operation				
revenue	11,21 %	-12,41 %	-18,29%	1,24 %

**Table 8.18:** Historical development working capital

From the table you can see that SK Brann experienced decrease in working capital from 2018 to 2021, while the last year shows an upbuilding. Thus, SK Brann ended up with a positive working capital in 2022. I assume that Brann will follow this trend and continue to build working capital for the years to come.

Forecasts	▼ 2023	▼ 2024	▼ 2025	▼ 2026	▼ 2027	<b>v</b>	2028 (N) 💌
Working capital in % of operational rev	enue	3 %	3,20 %	3,40 %	3,60 %	3,80 %	4,00 %

**Table 8:19:** Forecasts for working capital

# 9.0 Valuation of SK Brann

After carrying out a thorough analysis of the future forecasts, the next step is to determine the value of the equity capital. The value is determined by using the total capital as starting point, and then subtracting net financial debt and adjusting for any tax benefits. To arrive at the value of the total capital, I use the discounted cash flow in the forecast period from 2023 to 2027, in addition to finding an expression for the terminal value.

#### 9.1 Terminal value

The terminal value of the club will be the present value obtained by discounting the perpetual cash flow. In my thesis, the terminal value is based of the cash flow in 2028. As previously mentioned, this is SK Brann's normal year is and gives an indication of how the annual operation will look in the future (Ganti, 2023).

By using the terminal value, I get an expression for the club's total capital. At the same time, there is great uncertainty associated with the terminal value because the normal year is several years in the future, and the discounted value constitutes a large part of the club's total value. Another disadvantage with calculating the terminal value is that it is very sensitive to changes (Ganti, 2023).

The terminal value can be calculated by using an infinite growth series model. I have chosen to use the model below to calculate SK Brann's terminal value (Ganti, 2023).

$$Terminal\ value = \frac{Free\ cash\ flow}{WACC-growth\ rate}$$

As seen in the formula above, I take the cash flow in the normal year 2028 and discount this value with the required return of 11,4%, adjusted for the long-term growth rate of 3% as discussed in chapter 8.1.2. This gave me a terminal value of NOK 98 336 005.

# 9.2 Tax-advantaged

Deferred tax benefit is an asset that is entered in the balance sheet if it is overwhelmingly likely that the club in the future has an income base that will lead to a tax-advantage. This benefit must not exceed any deferred tax liabilities that is listed in the balance (Chen, 2023). SK Brann has in their annual accounts for 2022 listed a tax benefit of NOK 3 330 146, which I assume they will make use of in 2023. This gives me a present value of NOK 2 989 359.

## 9.3 Equity value

I started with finding the future cash flow for the budget period 2023 to 2027 and discounted these with the return requirement of 11,4%. This gave me a net present value of NOK 38 046 638. Next, I added the discounted terminal value of NOK 98 336 005. This gives me a total capital value of NOK 136 382 643. To find the equity value, I must subtract the financial debt of NOK 5 316 488 and add the value of the tax-advantage of NOK 2 989 359. This results in an equity value of NOK 134 055 514. The valuation is summarized in table 9.1 below.

Column1	2023	2024	2025	2026	2027	2028 (N) 🔻
Normalized EBITDA	29 450 970	8 745 553	10 826 666	18 854 542	27 508 481	28 333 731
Normalized investments	4 130 821	3 708 685	5 257 912	5 578 261	7 398 383	7 620 334
Change in working capital	1 569 372	-134 890	513 294	551 210	602 336	473 496
Normalized cash flow	23 750 777	5 171 758	5 055 460	12 725 071	19 507 762	20 239 901
Effective tax (22%)	5 225 171	1 137 787	1 112 201	2 799 516	4 291 688	4 452 778
Normalized cash flow after tax	18 525 606	4 033 971	3 943 259	9 925 555	15 216 074	15 787 123
Return requirement	1,114	1,241	1,382	1,540	1,716	1,911
Discounted cash flow	16 629 808	3 250 591	2 852 330	6 444 868	8 869 041	98 336 005

Total capital value	136 382 643
Financial debt	5 316 488
Present value of tax-advantage	2 989 359
Equity value	134 055 514

Table 9.1: SK Brann equity value

# 10.0 Conclusion

In my thesis, I have carried out a valuation of SK Brann. The aim of the assignment was to valuate the club using the fundamental valuation technique. Therefore, I analysed the club's external, internal and accounting conditions.

I used the Pestel-analysis in my macroanalysis, and it showed that the greatest challenges SK Brann and the football industry in general faces comes from legal factors and changes in the economy. The external analysis and Porters Five Forces model showed that the greatest threats are the high internal rivalry between the clubs and the media's great bargaining power, which continues to grow. The greatest advantages for the club from the external analysis, are the large entry- and exit barriers in the football industry and the small bargaining power from the players. It is very difficult for a small club to establish themselves within the football industry and generally the players in Norway have small bargaining power because none are seen as being bigger than the club they play for. The internal analysis and the VRIO-framework showed that SK Brann's supporters in Vestland and their geographical location gives them a lasting competitive advantage, while the financial resources, fixed assets, club employees and management grants them a temporary advantage. A disadvantage is the decline in attendance over the years.

The accounting analysis showed that SK Brann has faced some challenging times over the last years. They were heavily impacted by Covid-19 and the restrictions that came with, and by their recent relegation to "OBOS-ligaen". Nevertheless, they managed to turn this around in 2022 when they sold the commercial space. The sale helped them to remove all debt to creditors, which resulted in a significant reduction in their long-term liabilities and total liabilities. This has helped to give the club a brighter future.

With that, I conclude that SK Brann's value of equity per 01.01.2023 is NOK 134 055 514. Lastly, it must be noted that the strategic and accounting analysis has formed the basis for the future forecasts I have set for the club. Therefore, the value estimate is uncertain.

# 11.0 References

#### **Books**

Boye, K. (1998). Verdsettelse. Cappelen Akademiske Forlag AS.

Nielsen, A. (2008). Sportsklubben Brann – 100 år med tro, håp og kjærlighet. Schibsted

Penman, S.H. (2010). Financial Statement Analysis and Security Valuation (4th edition). Singapore: McGraw-Hill Education.

# **Annual reports**

Brann. (2018 - 2022). Sportsklubben Brann årsrapport.

Bodø/Glimt. (2018 – 2022). FK Bodø/Glimt Årsrapport.

Lillestrøm. (2018-2023). Lillestrøm SK årsrapport.

Molde. (2018 -2022). Molde FK årsrapport.

Rosenborg. (2018-2022). Rosenborg Ballklub årsrapport

# **Newspaper articles**

Bonn, K. & Borg, S. (23. May 2022). Kylian Mbappe picks PSG over Real Madrid: New contract details and salary as France star rejects La Liga move. *The Sporting News*. Gathered from: <a href="https://www.sportingnews.com/uk/Football/news/kylian-mbappe-psg-real-madrid-contract-details-salary-report/nsm5rf0gw9cpfzscqtffpmvd">https://www.sportingnews.com/uk/Football/news/kylian-mbappe-psg-real-madrid-contract-details-salary-report/nsm5rf0gw9cpfzscqtffpmvd</a>

Hussain, H. Fystro-Gjerde, Y. Lien, J. A. (9 feb. 2023). Millionene renner inn i norsk fotball: Knuste overgangsrekord på én måned. *NRK*. Gathered from:

https://www.nrk.no/sport/millionene-renner-inn-i-norsk-fotball\_-knuste-overgangsrekord-pa-en-maned-1.16279646

Hustad, T. (2021). De gir millioner til MFK – dette er klubbens ukjente støttespillere. *Aftenposten*. Gathered from: https://www.aftenposten.no/sport/fotball/i/yR2rlE/de-gir-

millioner-til-mfk-dette-er-klubbens-ukjente-stoettespillere

Johannessen, L.S. (2023). Brann-juvel solgt til nederlandsk klubb. *NRK*. Gathered from: <a href="https://www.nrk.no/vestland/david-moller-wolfe-solgt-til-nederlandske-az-alkmaar-1.16417930">https://www.nrk.no/vestland/david-moller-wolfe-solgt-til-nederlandske-az-alkmaar-1.16417930</a>

Wahl, S.T. & Austerheim, D. (2021). Delte meninger om utenlandske investorer: Fotball er ikke en vanlig forretning. *Nettavisen Sport*. Gathered from:

https://www.nettavisen.no/sport/delte-meninger-om-utenlandske-investorer-fotball-er-ikke-en-vanlig-forretning/s/12-95-3424212893

#### **Internet sources**

Brann. (2017). Organisasjonsplan Sportsklubben Brann. Gathered from:

https://www.brann.no/dokumenter/Organisasjonsplan%20pr%2006032017%20med%20foresl%C3%A5tte%20endringer.pdf

Chen. J. (2023). Tax-Advantaged: Definition, Account Types, and Benefits. *Investopedia*.

Gathered from: <a href="https://www.investopedia.com/terms/t/tax-advantaged.asp">https://www.investopedia.com/terms/t/tax-advantaged.asp</a>

Cook, Simon. (19. Feb, 2019) Business valuations: applying a small-cap premium? *Medium*.

Gathered from: <a href="https://lotusamity.medium.com/business-valuations-applying-a-small-cap-premium-d0718472649f">https://lotusamity.medium.com/business-valuations-applying-a-small-cap-premium-d0718472649f</a>

Fiken. (2023). Likviditets grad. Fiken. Gathered from:

https://fiken.no/forklarer/likviditetsgrad

Ganti, A. (2023). Terminal Value (TV) Definition and How to Find The Value (With Formula). *Investopedia*. Gathered from:

https://www.investopedia.com/terms/t/terminalvalue.asp

Historie Brann. (2023). Nedrykksåret. Gathered from:

https://historie.brann.no/sesonger/sesongen-2021/

Issuu. (2022). Sportsklubben Brann årsrapport. Gathered from:

https://issuu.com/makegraphics/docs/sportsklubben\_brann\_aarsrapport\_2022?fr=sNmM5YjU1NzMyNjc

Messineo, RJ. (2023, April 14). Explaining The VRIO Framework (With A Real-Life Example). *ClearPoint Strategy*. Gathered from:

https://www.clearpointstrategy.com/blog/vrio-framework

Messineo, RJ. (2023, 19. April). Strategic Analysis: What It Is & How To Do It Effictively. *ClearPoint Strategy*. Gathered from: <a href="https://www.clearpointstrategy.com/blog/strategic-analysis">https://www.clearpointstrategy.com/blog/strategic-analysis</a>

Mind Tools Content Team. (2023). Porter's Five Forces - The Framework Explained.

*MindTools*. Gathered from: <a href="https://www.mindtools.com/at7k8my/porter-s-five-forces">https://www.mindtools.com/at7k8my/porter-s-five-forces</a>

Mot. (2023). I Brann sier man hei til alle, sånn er det bare! MOT. Gathered from:

https://www.mot.no/2020/10/i-brann-sier-man-hei-til-alle-sann-er-det-bare/

Natlandsmyr, G. (2023). Huseklepps store år. Historie Brann. Gathered from: <u>Sesongen 2009</u> - SK Brann Historie

NFF. (2023). VAR. Fotball. Gathered from: https://www.fotball.no/dommer/var/

Norges Bank. (2023). Generiske statsrenter. Gathered from: <a href="https://www.norges-bank.no/tema/Statistikk/statsrenter/generiske-statsrenter/">https://www.norges-bank.no/tema/Statistikk/statsrenter/generiske-statsrenter/</a>

Oxford College Of Procurement & Supply. (2023). Porter's Five Forces Revisited: Are There Really Five Forces? *Oxford. Gathered from:* 

https://www.oxfordcollegeofprocurementandsupply.com/porters-five-forces-revisited-are-there-really-five-forces/

Peterdy, K. (2023). PESTEL Analysis. *Corporate Finance Institute*. Gathered from: <a href="https://corporatefinanceinstitute.com/resources/management/pestel-analysis/">https://corporatefinanceinstitute.com/resources/management/pestel-analysis/</a>

PWC. (2022). Risikopremien i det norske markedet. Gathered from: https://www.pwc.no/no/publikasjoner/risikopremien.html

Roksvåg, K.R. (30. nov, 2022). Avkastningskrav. *Finanssans*. Gathered from: <a href="https://finanssans.no/avkastningskrav">https://finanssans.no/avkastningskrav</a>

Sander, K. (28, Aug, 2022). Rammeverk for fremtidsregnskap. *Estudie*. Gathered from: <a href="https://estudie.no/fremtidsregnskap/">https://estudie.no/fremtidsregnskap/</a>

Sander, K. (18. Jan, 2023). Finansiering- og soliditetsanalyser. *Estudie*. Gathered from: https://estudie.no/finansierings-soliditetsanalyser/

Sander, K. (29. Aug, 2022). Kapitalverdimodellen (CAPM). *Estudie*. Gathered from: <a href="https://estudie.no/kapitalverdimodellen-capm/">https://estudie.no/kapitalverdimodellen-capm/</a>

Sander, K. (26. April, 2021). Rentabilitetsanalyse. *Estudie*. Gathered from: <a href="https://estudie.no/rentabilitetsanalyser/">https://estudie.no/rentabilitetsanalyser/</a>

Sexe, T. (2008). Regnskapsanalyse og verdsettelse av Media Norge. NHH. Gathered from:

https://openaccess.nhh.no/nhh-

xmlui/bitstream/handle/11250/170281/Sexe%202008.pdf?sequence=1&isAllowed=y

SSB. (2023). Fakta om Norsk økonomi. Statistisk sentralbyrå. Gathered from:

https://www.ssb.no/nasjonalregnskap-og-konjunkturer/faktaside/norsk-okonomi

SSB. (2023). Konjukturtendensene. Statistisk sentralbyrå. Gathered from:

https://www.ssb.no/nasjonalregnskap-og-

konjunkturer/konjunkturer/statistikk/konjunkturtendensene

SSB. (2023). Konsumprisindeksen. Statistisk sentralbyrå. Gathered from:

https://www.ssb.no/statbank/table/05327/tableViewLayout1/

Transfermarkt. (2023). SK Brann players market value. Gathered from:

https://www.transfermarkt.com/sk-brann/startseite/verein/1100

Wikipedia. (2023). Brann Stadion. Gathered from: Brann Stadion – Wikipedia

Wikipedia. (2023). OMX Copenhagen 25. Gathered from.

https://en.wikipedia.org/wiki/OMX\_Copenhagen\_25

Wikipedia. (2023). Tilskuertall i Eliteserien. Gathered from:

https://no.wikipedia.org/wiki/Tilskuertall\_i\_Eliteserien

Wikipedia. (2023). S&P Global Ratings. Gathered from:

https://en.wikipedia.org/wiki/S%26P\_Global\_Ratings

Wikipedia. (2023). SWOT analysis. Gathered from:

https://en.wikipedia.org/wiki/SWOT\_analysis

Yahoo! Finance. (2023). OMX Copenhagen 25 Index. Gathered from:

 $\underline{https://finance.yahoo.com/quote/\%5EOMXC25/history?period1=1640995200\&period2=1672}$ 

444800&interval=1mo&filter=history&frequency=1mo&includeAdjustedClose=true

Yahoo! Finance. (2023). Aalborg Boldspilklub A/S. Gathered from:

 $\underline{\text{https://finance.yahoo.com/quote/AAB.CO/history?period1=1640995200\&period2=16724448}}$ 

 $\underline{00\&interval=1mo\&filter=history\&frequency=1mo\&includeAdjustedClose=true}$ 

Yahoo! Finance. (2023). Silkeborg IF Invest A/S. Gathered from:

https://finance.yahoo.com/quote/SIF.CO/history?period1=1640995200&period2=1672444800 &interval=1mo&filter=history&frequency=1mo&includeAdjustedClose=true