Handelshøyskolen BI

BTH 36201 Bacheloroppgave – Økonomi og administrasjon

Bachelor thesis 100% - F

Predefinert informasjon

Startdato:	09-01-2023 09:00 CET	**Termin:**	202310
Sluttdato:	01-06-2023 12:00 CEST	**Vurderingsform:**	Norsk 6-trinns skala (A-F)
Eksamensform:	D		
Flowkode:	202310||10666||IN17||F||D		
Intern sensor:	(Anonymisert)		

Navn:

Mohammed Bahadin

Informasjon fra deltaker

Tittel *:	Valuation of XXL ASA
Navn på veileder *:	Tor Tangenes

Inneholder besvarelsen konfidensielt materiale?:	Nei	Kan besvarelsen offentliggjøres?:	Ja

---

Gruppe

Gruppenavn:	(Anonymisert)
Gruppenummer:	16
Andre medlemmer i gruppen:	Deltakeren har innlevert i en enkeltmannsgruppe

VALUATION OF XXL ASA

Disclosure Date:

17.01.23

Filing Date:

01.06.23

Exam Code and Name:

BTH 3620 – Bachelor Thesis Business Administration

Table of Content

Preface

This thesis is the final part of my bachelor's degree in business administration at the Norwegian Business School BI.

Valuation of XXL ASA has been challenging and rewarding, and I have realized that valuation requires broad expertise. Throughout these three years of my bachelor's study, I have completed many courses and acquired skills from different economic and strategic subjects. But I also realized that the knowledge from these courses was insufficient, so I had to gain more understanding and make my assumptions.

This thesis gave me knowledge that will benefit me in my upcoming studies for the MBA this fall of 2023.

I want to thank my supervisor Tor Tangenes who has given me advice and guided me throw the entire writing process. He also gave me good input and confidence in my writing process.

Lastly, I want to thank my mother and father, my wife, and my sisters for their support throughout these three years of my studies at BI Business School.

Mohammed Bahadin

Summary

I have performed a valuation for the XXL ASA company in this thesis. My research question has been about finding the company's fundamental value and suggesting to a fictive investor whether to buy, sell or hold the shares of XXL company.

This thesis is based on a group of analysis tools. First, starting from the financial statements analysis, I analyzed the annual reports using Excel to learn more about the company's financial position. Then, I have decided on the growth in each vital variable using this analysis together with the strategic analysis, where I have tried to find trends in the macroeconomic environments, market outlook, and external & internal factors that will affect the company. Research such as value chain, VRIO, PESTEL, Porter's five forces, and other types of analysis has been performed. Key findings are that XXL is losing market share, and the sports industry has a negative development. But at the same time, XXL has the potential to have positive growth with its internal strengths.

The forecasting period is set to 5 years. Therefore, the discounted cash flow model is the primary valuation approach for this thesis. Still, at the same time, I have performed the relative valuation, with multiples such as EV/EBIT, P/E, and EV/S, to compare XXL to its competitors. The result follows EV/EBIT median ratio = 2 929,4 - P/E median ratio = 4 479,9 - DCF approach EV = 5 306 - EV/S median ratio = 7 967. The median of these four values gave me the final result of the enterprise value equal to 4 893m NOK on 31.12.2022.

I have used the DCF approach to estimate the share price of XXL. I have taken the average FCFF and FCFE values and got a share price equal to 3,97 NOK per share on 31.12.2022. I suggest that a fictive investor buy XXL shares since we can expect higher future cash flows.

Key Numbers								
Year 31.12 (NOK)	2020	2021	2022	2023	2024	2025	2026	2027
Net Income (m)	126	193	-455	291	310	329	349	356
Revenue (m)	10 423	10 006	8 755	8 930	9 109	9 291	9 477	9 666
NOPAT (m)	260	307	-406	418	426	435	444	452
FCFF (m)				312	296	302	308	314
FCFE (m)				103	-87	-82	-77	266
ROIC	0,00 %	4,39 %	-6,08 %	6,47 %	6,48 %	6,48 %	6,48 %	6,48 %
ROE	0,00 %	4,86 %	-13,34 %	9,21 %	8,97 %	8,53 %	8,17 %	7,85 %

1. Introduction

1.1 Purpose

This thesis aims to perform a valuation of the XXL ASA stock traded at the Oslo Stock Exchange. The focus is on estimating the fundamental value of XXL ASA and finding out if the share price of XXL ASA is undervalued, correctly valued, or overvalued as of 31.12.2022. Then, using different analyses, it will be possible to compare the estimated share price with the share price at the Oslo Stock Exchange and be able to give a potential investor advice on buying, holding, or selling their XXL stocks.

1.2 Research Question

The author is interested in the sports industry and has sports as part of his lifestyle. Therefore, XXL, as a big company listed on Oslo Stock Exchange and highly respected in the sports industry, was chosen by the author to value in this thesis.

The research question or problem statement can be defined as "An accurate question that has a specific purpose, and social science methods can illuminate that" (Halvorsen, 2008, s. 35). The criteria for a problem statement is that it has to be specific, accurate and with a purpose. Formulating a problem statement must address two questions we must emphasize: what and who should be examined? (Johannessen, Christoffersen & Tufte, 2011, p. 63). When selecting the company for valuation, I had these questions in mind. I chose a listed company so that public sources would make every piece of information and data available to me. Furthermore, I was interested in a company that operates only in one industry. The next question is "who" in formulating the problem statement, and the answer to that is a fictive investor that needs a financial recommendation. We can also take into account that this investor has a well-diversified portfolio.

The definition of the problem statement is as follows:

‹‹What is the fundamental value of a share in XXL ASA, traded at the Oslo Stock Exchange as of 31.12.2022››?

With a sub-problem statement as follows:

‹‹Should the fictive investor buy, hold, or sell the XXL ASA stock when his objective is maximizing profit››?

1.3 Delimitations

The valuation is done for a listed ASA company in the Oslo Sock exchange; therefore, the author has focused on getting the available data and information to the public. The author has not contacted XXL because you will not get more details than information open to the public in an ASA-listed company. Historical data from the last three years have been used for the valuation. The valuation time and date are set to 31.12.2022, and the author has tried to update the data and information with the newest data released in late April when the annual reports for 2022 come out. Q1 2023 has also been analyzed, but overall, the valuation is based on the quarterly- and annual reports of the year 2022. The same is true for the data and information of the competitors. The data resources are publicly available in the quarterly and annual reports, news articles, company website, proof forvalt, SSB, governmental documents, and financial data from Bloomberg Terminal. The valuation of XXL is done on a concerning level, so we look at XXL in Norway, Sweden, and Finland combined.

1.4 Thesis Structure

Chapter One concerns the thesis's purpose, research question, and delimitations. Chapter tow will give an overview of the sports sector and its structure. It will also introduce the current situation and the history of XXL company. Chapter three introduces the theoretical section with both the strategic- and financial theories that can be relevant using it in this thesis. Chapter four presents the methodological approach involving analysis tools, data collection, and data analysis. Chapter five gets into the financial means and valuation methods. Discounted cash flow model will be used in this chapter. Each valuation method with its different components will be further explained and used. Chapter six is about financial analysis. XXL's historical data is used to perform profitability-liquidity analysis and to evaluate its solvency and leverage. The result is used to compare XXL with its competitors. Chapter seven gets into the strategic research and checks the external and internal factors using different models on a macro and micro level. Chapter eight is where we start the forecasting using what we have found in the analysis chapters and apply the estimations in the valuation process. Chapter nine is where the valuation is done, and we present the different results using different valuation methods in a summary. Chapter ten focuses on the uncertainties in these valuations. Chapters eleven, twelve, and thirteen will discuss the results and present criticism of this thesis. The final chapter is the conclusion with concern to answering the research question.

2. Overview of the company & industry

2.1 XXL ASA history and development

XXL was founded by the brothers Øivind and Tore Tidemandsen in 2000 (XXL, 2021). They own other businesses before XXL, like well-known Elkjøp and Living stores. After selling Elkjøp to the British company Dixons Group for 600 million in 1999, both brothers considered joining the sports industry (Nissen-Meyer, 2014). They wanted to benefit from the Elkjøp business model and use it with their long experience I this field to run the XXL ASA Sport og Villmark.

In 2001, XXL opened the first store in the NAF-huset area in Oslo, and it was the most significant warehouse, sized 3500 square meters. In 5 years, there were another six stores throughout Norway, and an online store was also established in Norway in 2002 (XXL, 2016). The company started with a high growth rate, but in 2005 the company began to get positive earnings. 2007 XXL reached a 10% significant share in the Norwegian marked (XXL, 2016). In 2013 there was a substantial development where XXL got the most critical market share in Norway, on the 03. In October 2014, XXL was listed on the Oslo Stock exchange with a stock price NOK 58. After that, the stock price peaked on 14.10.2016 at NOK 105,59 (XXL, 2016). In 2017 XXL joined the Austria marked. The total number of XXL stores is 84 (XXL, 2023).

The company's competitive advantage is holding the costs low and having a unique organizational culture in addition to its core values: results-oriented, enthusiasm, hard-working, quality, punctual, and open (Dagbladet, 2019).

In these recent years, XXL has been through some difficult periods affecting the stock price negatively, and some cases have been negative for XXL, like the NAV-saken and cheating on the product prices (E24, 2020).

2.2 The Company's Current Situation

XXL's current situation is terrible, the earnings are declining, and XXL is losing market share. There is also a press on liquidity (DN, 2023). Market share in Norway fell 5,3%, and earnings fell 11,9. In Sweden, market share fell 8,2%, and revenues fell 16,2%. In Finland, market share fell 4,4%, and profits fell 9,9%. The liquidity reserves fell from 1,1 billion in Q4 2021 to 700 million in Q4 2022 (DN, 2023).

XXL decided to exit Austria in 2023, after six years of being in Austria when XXL joined the marked in 2017. XXL has invested NOK 200 million to build its position in a competitive

marked. However, XXL has also suffered losses of nearly NOK 500 million because of Covid restrictions and the challenging market situation. Therefore, after evaluating all the options, XXL decided to terminate and exit the Austria marked (XXL, 2023).

Current financial ambitions are having a gross margin of 40%, OPEX at 30%, and EBITDA at 10% (XXL, 2023). Consumer confidence and inventory buildup in the sporting goods industry are historically low. XXL has had a target goal of gaining market share over time. In general, the earnings in the sports industry have been declining. XXL has also launched the most extensive and aggressive campaign in three years to eliminate the inventory buildup (XXL,2023).

To reduce costs, XXL has been installing 2,7 MW of solar energy at the central warehouse in Norway, reducing 540 tons in annual CO_2 emissions and making significant energy cost savings to help XXL in its current situation (XXL, 2022). Furthermore, XXL has also started with a new concept that involves selling second-hand products after carefully going through them and fixing potential problems, and reselling them again to customers, and this will make XXL part of the new trend where people buy more and more second-hand items (XXL, 2022).

2.3 Structure Of The Sport Industry

An industry is a group of companies that produce products that are similar or can be alternatives to each other (Porter, 1980, p. 5). The sports industry gets affected by many factors beyond the sports companies' control. For example, the weather in different seasons is a significant factor that brings a lot of uncertainty to the sports market. For example, a winter without so much snow or a summer without so much sun will affect each sports company's preparation before each season. These circumstances will raise questions about how many products the company should have each season and what to do if the weather is not as expected.

XXL operates its business through stores and online stores in Norway, Sweden, Denmark, and Finland (XXL, 2016). The markets in these different countries have a lot of similarities because of the culture, climate, and nature of these countries. That's why I will focus more on the Norwegian market and apply my findings to the other markets in these countries. The reason is the information limitations, and I don't have access to information about the sports industry in these other countries. Therefore the Norwegian market will, in this thesis, represent the sports industry in the countries where XXL operates.

The sports industry moves in contrast with business cycle movements. For example, under the Corona pandemic, the global sales of sports products increased by 11,3% (Norsk Sportbransjeforening, 2021).

The sports industry in Norway and the Nordic region has been going through extreme ups and downs these last few years. In the pandemic years 2020 and 2021, the revenue had a 21% growth. However, in 2022 the sports industry had a drawdown, and the revenue fell 9,3% compared to 2021 (Norsk Sportbransjeforening, 2023). This decline has been affecting all the companies in the industry, especially XXL. The year 2022 has been a disaster. The supplies from the suppliers have been delayed, and that causes significant problems because items that need to be sold in the spring season will be delivered in September month, and that will build up the inventory when these products don't get sold (Norsk Sportbransjeforening, 2023).

The winter in 2022-2023 was good, with a lot of snow and low temperatures, but that alone will not rescue the sports industry from its problems. Furthermore, there is a press on the private economy of the general people, which will make customers more conscious about the prices and affect the profit margins for the sports companies (Norsk Sportbransjeforening, 2023).

Omsetning per kvartal i sportskjedene:
(tall i tusen)

Kvartal / År	2018	2019	2020	2021	2022	Endring
1. kvartal	3 274,027	2 967,755	2 652,562	3 314,920	2 944,547	-11,17 %
2. kvartal	3 245,760	3 187,896	3 755,932	3 608,531	3 326,749	-7,81 %
3. kvartal	3 597,850	3 454,523	3 990,385	3 711,346	3 418,116	-7,90 %
4. kvartal	4 100,255	3 806,371	3 963,984	4 242,205		
Total kjedene	14 217,892	13 416,545	14 362,863	14 877,003		

Table 2.1

The data shows that Q3 2022 has a revenue of 3,4 billion NOK; comparing that with Q3 2021, we get a negative change of -7,9%. The same is true for Q2 and Q1 when comparing them with the same periods in 2021. This is because the sports and other industries are undergoing significant changes. The sports market had grown by a 25% in the pandemic years of 2020 and 2021, and it seems like 2022 was the end of that positive growth (Norsk Sportbransjeforening, 2022).

The sports industry also needs to focus more on sustainable development in everything they do. Things that sports companies can do is have a business model that adapts to sustainability; having a culture that focuses on sustainability is also essential. The costumers can also know where and how these products get produced and what material they are made of (Magasinet Sport, 2022).

3. Theoretical Foundation

3.1 The value concept

When trying to understand valuation, it is crucial to understand the difference between the concepts of "Price" and "Value." The price is preset in a transaction. It is an observable quantity of an asset and is not affected by the buyer's preferences. But the value, on the other hand, depends on the buyer's priorities, which means that value can be a subjective size, and that is why the value concept must be understood as a personal value perception. The observable market price of an asset can be valued differently depending on the value participants give to the particular asset (Dyrnes, 2011, p.80). Valuation is essentially about estimating the most likely price of a particular asset in a specified market, at a specific time, and under certain conditions. The market value does not always reflect the fundamental value of a company. Analysts who perform valuation may conclude with different company values because each analyst perceives the concept of valuation subjectively. However, all of them have access to the same information. That is why we cannot assume that an asset has only one correct value (Dyrnes, 2011, p.81).

When starting the valuation process, a definition of the prerequisites of the valuation is needed. First, we must ask if the company's calculated value is based on one person's subjective perception. Or if it is an equilibrium price in the market, the last one is the case then we have to ask further whether the hypothetical price is in an open and unrestricted market or if it is based on an agreement between some of the market players (Dyrnes, 2011, p.92). The valuation base and the valuation method have to be seen separately.

The international Valuation Standards Council (IVSC) operates with three different value types. Therefore, it may be a good idea to work with the following three value bases (Dyrnes, 2011, p. 93-94).

1. Open market value

The open market value estimates the most probable value that can be paid in a hypothetical transaction in an open and unrestricted market. But at the same time, it is essential to note that we may get different values depending on the market, the level of the value, and which value terms have been used as a base. That is why it is essential to understand the type and the extent of the market when using this type of value base (Dyrnes, 2011).

2. Closed transaction value

A closed transaction value is when estimating a reasonable price between two parties or a limited number of parties involved. Using this method, it will be possible to get a fair value when the open market value is impossible to apply. Another characteristic of this method is that some parts of the transaction exclude details that will affect the asset price if it is in an open market (Dyrnes, 2011).

3. Value in use

This value can be found due to owing and using a particular asset rather than the price we will get for a specific asset in a hypothetical transaction (Dyrnes, 2011).

Lastly, the "level of value" is crucial when estimating a value. The point of having different levels of value can be understood because other markets will give different equilibrium prices. Dyrnes wrote five typical value levels when valuing stocks: the *market for illiquid minority items*, the *illiquid market for financial control*, the *market for liquid minority items*, the *liquid market for financial control,* and the *market for strategic control*. This is based on a hypothesis that the price paid for a stock change depending on the level the stock is sold on (Dyrnes, 2011, p. 94-95).

The premise of value is the last thing to evaluate, which should be considered when choosing which value to estimate. This will help us to clarify which hypothetical circumstance the value will be calculated on (Dyrnes, 2011, p. 100). Here are some examples:

1. Is the firm a going concern, or will it liquidate?

2. If the company gets sold, is it voluntary? Well organized? Or forced?

3. Find if there is a limitation on the asset that we have to consider when calculating the value?

4. In case of settlement, shall it occur by issuing shares or cash settlement?

5. Is there a better alternative for using the asset than what it is used for at the time of valuation?

3.2 Reasons for competitiveness

In 1980 significant changes in strategy as a modern theory happened. In that year also, Michael Porter released his bestseller book Competitive Strategy. At that time, there was a shift in the priorities by moving from strategic planning as a process to having a competitive advantage that would give higher financial profits. This was later called the competitive positioning school, developed by Michael Porter. A group of theorists like Penrose, Rumelt, Wernefelt, and Barney developed the resource-based view (RBV). But we have to say that these two theories do not go against each other, so both can be used and get different perspectives when performing valuation for a company. Especially valuation done with discounted cash flow model needs a strategic analysis that will be very useful because we get to see the company's internal and external aspects, which will help us estimate the company's future cash flows.

3.2.1 Porter's Strategic Positioning

The competitive positioning school argues that some positions in the market give new possibilities for development and the creation of competitiveness to different firms. That is why every company needs to carefully analyze the market and take that position that fits their nature. But this theory argues that finding an attractive position in the market depends on factors such as an entry barrier, product differentiation, and concentration in the industry (Gjønnes & Tangenes, 2014, p. 184-185). According to Porter, the essential facts that create major entry barrier obstacles are *Economies of scale, capital requirements, cost disadvantages independent of size, access to distribution channels, and government policy.*

Economies of scale create disadvantages for new entries because that will force new companies to produce their products on a large scale or accept that they have a cost disadvantage compared to other companies. Capital requirement creates problems for new companies if the business needs significant investments to get to the same level as the competitors. Some advantages that some companies benefit from even if they have some entry barriers, like access to unique raw materials, the firm's location is critical, and having technology that the competitors don't have. The following entry barrier is cost disadvantages independent of size. The next is access to distribution channels, which is essential to enter the market because if there was no product distribution, the company could not continue for a

long time. Lastly, government policy can also create barriers to entering the industry if they give new strict regulations or license requirements for new entries (Porter, 1979, p. 138-140). There is a model Porter has developed, "The five competitive forces," I used today because of its effectiveness. Companies use this model when they analyze the market's competitiveness, and the model is built on positioning schools. The five forces are *Threats of new entrants*, *Bargaining power of buyers*, *Bargaining power of suppliers*, *Threat of substitute products or services,* and *Rivalry among existing competitors* (Porter, 1979). Michael Porter's theory has an "outside-in" approach concerning competitiveness.

3.2.2 The Resource-Based View

The resource-based view has an "inside-out" approach to the firm's competitiveness, and it argues that the company's competitiveness depends on the uniqueness and rareness of its resources. To develop this kind of competitive advantage, the company needs to acquire or create resources that are *valuable*, *rare*, *hard to imitate*, and *does not have substitutes*. This is called the VRIN framework (Gjønnes & Tangenes, 2016, s. 310). RBV theory considers that every resource the company has is also controlled by the company, for example, all assets, organizational culture, knowledge, capabilities, and expertise (Barney, 1991, p. 101). Barney explains to types of competitiveness, first is a competitive advantage, and the second is sustained competitive advantage. A company could only have one of these types of competitiveness. The first one is when the firm makes a new value-creating strategy and implements it. At the same time, this strategy has not been implemented by any of the competitors in the market. The second type is sustained competitive advantage. Here we have again a firm with a value-creating strategy that any other competitor firms have not implemented. But in addition to that, the competitors cannot copy or duplicate the benefits of this value-creating strategy. At the same time, it is essential to mention that this sustained competitiveness will not last forever. Barney explains further that these immobile resources also create entry barriers for newly established firms. On the other hand, companies that use mobile resources to implement strategies in an industry with entry barriers will allow new firms to acquire and use these resources to enter the market. But if these resources are immobile, the firm will have a sustained competitive advantage (Barney, 1991, p. 105).

3.2.3 Industrial Clusters

Industrial clusters are another factor for having competitiveness in the industry. When big and strong industrial clusters exist in a specific region, that region will become attractive for companies with similarities in many ways (Reve, 2009, p. 17-18). Firms in the same industry

and near each other geographically with similarities in their competence are characterized by being an industrial cluster. Within the cluster, increased competitiveness leads to innovation and growth. The cluster will become the center of knowledge and innovation globally. Examples of such clusters are silicon valley in the USA and the aquaculture industry in Norway, which has formed a global center of knowledge

3.3 Portfolio theory and relevant risk

The modern portfolio theory (MPT) was founded by Harry Markowitz in 1952. Since then, investors and others have used it as a framework for portfolio management methods (Vollmer, 2014, p. 9). According to this theory, an investor must create an optimal combination of risky assets with an expected return. The idea of this theory is spreading the investment on different assets. The general idea is that the expected return will increase if an investor takes an additional risk in a portfolio. However, if an investor prefers low risk on his portfolio assets, the expected return will also fall accordingly (Vollmer, 2014, p. 10-11). But when we use the modern portfolio theory, the idea changes to that if the investor adds another risky asset to the already risky portfolio, the overall risk will be reduced. This concept will be practical if the investor tries to diversify his investment by having assets from different industries. A portfolio comprising assets from various sectors and each firm's growth factor are uncorrelated will give us a situation where one stock loses money. In contrast, the other stock makes money, stabilizing the expected return for the whole portfolio (Bodie, Kane, & Marcus, 2017, p. 148-149). The risk in the portfolio is two types of risk. The first type of risk is called the systematic risk, this risk is what can happen outside or the firm's control, and it is a risk that the company cannot do anything about it. It is a reality that we have to live with. These systematic risks are inflation, interest rates, business cycles, and macroeconomic factors that influence the market and the asset. The second type of risk is an unsystematic risk. This type of risk is connected only to each specific company. In other words, risky factors in each company that will affect the firm's performance and can decrease the share value will be seen as unsystematic risks. These risk factors are the management style, organizational culture, accidents in the firm, and uncertainty in the company's profits. These risks can be eliminated through diversification, making the portfolio less risky. However, the risk that will remain no matter how much diversification we do and no matter how many stocks we add are the systematic risk that is outside the company's control and has to do with the macro economic factors. The systematic risk is called Beta in the financial models. It is possible to make the portfolio even more diversified if we add stocks on an international level. However, there will

still be some global macro economic factors that will keep some of the systematic risks in the portfolio (Bodie, Kane, & Marcus, 2017, p. 149-150).

3.4 Limitations of the capital asset pricing model (CAPM)

The capital asset pricing model, or CAPM, is widely used in modern financial economics. The creators of the CAPM were Treynor, Sharpe, Lintner, and Mossin in the early 1960s, and they are linked to the modern portfolio theory. This model predicts the relationship between the risk and the expected return on risky assets. CAPM assumes that investors hold a purely diversified portfolio, meaning that all the unsystematic risk is eliminated. Therefore the only risk the expected return is correlated with is the systematic risk (Bodie et al., 2017, p. 193-194). The expected return of a share can be found when we add the risk-free rate to the risk premium of the share. There are som assumptions that CAPM considers when we use this model. The first primary assumption is that the asset market is highly competitive and equally profitable for all investors. The second primary assumption is that investors have similarities between them in all aspects, except for their wealth and risk aversion. Still, they all choose the portfolios similarly (Bodie et al., 2017, p. 194-195).

These assumptions do not consider many problems in reality. Therefore this model has been criticized. For example, Richard Roll's criticism argues that even if the proxy of the market portfolio is perfectly fit, it will still not be able to reflect the weighting for all the investments people make correctly. Because of that, we can identify the crucial mistake of using the wrong index as a proxy of the market portfolio because that will misguide the validation of the CAPM (Vollmer, 2014, p. 21).

Market efficiency is about assuming that an asset's prices are fully reflected by the information available about the asset. But the critics of this assumption say there is empirical evidence about share prices not always being efficient with all the available information (Bodie et al., 2017, p. 233-234). Another finding about the unsystematic risk is that it has not any effect on the pricing of the share. This means that when an investor does not diversify their portfolio, they will carry a risk without compensation. There are also other findings about systematic risk not being the only factor that decides the expected return and cost of equity. There are other factors like how big the company is and some values like multiples price/earnings and price/book. These will affect the cost of equity. Some studies have also found that there is not possible to find a connection between the level of the Beta and the level of achieved return (Bøhren & Michalsen, 2012, p. 136-137).

Another critic from Roll is that CAPM cannot be tested because an actual market portfolio can not be observed. Investments include human capital, real estate, foreign investments, and arts. Still, CAPM does not consider these investments.

The final criticism is that the model is single-periodic, while most real investments are multi-periodical. Therefore, the cost of equity that the CAPM has calculated cannot always be used to discount all future multi-periodical cash flows.

3.5 Real option theory

The traditional fundamental valuation of a company tends not to consider the total value of the company, especially if the company is going through some uncertainties. The reason for that is that this type of valuation does not consider the company's flexibility (Tvedt, 2000). For that reason, real option valuation is used as a supplement in the valuation process to value the company's flexibility. An option gives its owner a right but not an obligation to buy or sell the option in a predefined period in the future and with a price agreed on previously. The company can use the option theory to have the opportunity to invest in a project or not. The decision to invest in the project doesn't need to be taken at an exact time. There is a period when the decision can be taken. This will give the company flexibility and great value (Tvedt, 2000). In addition, the real options theory allows us to quantify the value of different strategic decisions related to increasing the company's flexibility.

The critical factor when deciding the project's pricing as an option is to build on the already taken analysis. This will, in combination with the present value analysis, better predict the value of the projects in the company. In addition, some tasks can be delayed, giving two more factors to value creation. The first one is the time value of money, and the second one is the uncertainty of the future value of the investment so that the company has the choice of getting rid of the project if it has a negative present value (Luehrman, 1998).

Generally, the company's historical data is used when using different valuation models to get an idea about the company's future cash flows. But in some companies with new technology, it will be challenging to do a valuation when no historical data in the market can predict future development. So, the real options theory is still critical because it will give some ideas about what the company should focus on and how it should think.

4. Research Methodology

This chapter will present a methodological approach used in this thesis. The methodology is about following a specific path toward a goal or objective. This path, also known as the research process, contains four stages or phases: preparation, data collection, data analysis, and reporting (Johannessen et al., 2011, p. 36). Although this thesis is considered a report of the research process, we will focus only on the three first phases and describe them in this section of the thesis.

4.1 Preparation

The author of this research aims to answer one or more questions. To be able to do that, it is needed to explore and read a lot of books, articles, news feeds, and financial statements of the XXL company to be able to get a broad view of what is the relevant theories and information that we have to consider when performing the valuation to XXL. I had to look at some previous work done in the valuation field to get an idea about the structure of the thesis. The database and search engine I have been using was Oria, Google Scholar, and the library of BI. I was able to get a lot of important information in these databases. My teacher also gave me valuable articles and resources for valuation.

4.1.1 Purpose

Finding the baseline value of a business is critically important for owners who want to build their business effectively. That is why the purpose of this thesis is to come to an estimation for the fundamental value of the XXL stock. Secondly, this thesis aims to give investment advice to a fictive investor. It is vital to clarify that the value concept has to be understood as a subjective value perception. That is why we have to conclude that the results that previous analysts have come from should not be used as a foundation for this thesis because each analyst makes assumptions when calculating the company's fundamental value. The purpose of this thesis can also be considered exploratory. This meaning of experimental research is exploring less known conditions because the knowledge we process of the phenomenon is inadequate (Johannessen et al., 2011, p. 61-62).

4.1.2 Approach

When finding a research approach, we must distinguish between two approaches. The deductive and the inductive method. The deductive approach is when performing research based on established theory to provide new empirical research. The deductive is a "top-down" approach based on a logical principal. When researching a phenomenon, we already have a

research basis. This method is not being used for empirical research. The inductive approach uses empirical research to find a new theory. The inductive is the "bottom-up" approach. Here we have the empirical that, which creates the basis of a new idea by giving new knowledge in some areas that have not existed, But this approach is rarely used alone. Most of the time, it is used in combination with the deductive method. The most significant difference between the two approaches is the relationship between theory and empirical (Grønmo, 2016, p. 51).

This thesis mainly uses the deductive approach because I have been using a group of different models and theories to predict some parameters that I can use afterward in my analysis for the valuation of the XXL company, in addition to that these data will not give an empirical that can be used in the new research. In other words, we can say that the research of this thesis is moving from a theory to an empirical one.

4.2 Data collection

4.2.1 Research strategy

Research methodologies are about finding out how knowledge is obtained in empirical research. In other words, we have to ask: what have we done? How have we done that? And which limitations we see in that particular choice we have been taking. This thesis is a case study, meaning that the researcher gets a lot of different data and information from one or several units during a specific period (weeks, months, or years). The case should be studied in an appropriate manner and setting of economics. A case study can be either a single-case study or a multi-case study. The case study can also have one or several analysis units, meaning that the researcher collects data and information from one or several individuals, institutions, programs, or concepts (Johannessen et al., 2011, p. 92).

We should consider a single-case study with several analysis units in this study. The reason for being a single-case study is that I am studying only one case, which is XXL, and the analysis units are several because I am getting data and information from quarterly reports, theoretical literature, analyzes from different institutions, and market news from the newspapers.

4.2.2 Data foundation

I have used qualitative and quantitative data and information in this thesis. Qualitative data are best suited for a case study with an inductive design. On the other hand, quantitative data can be measured by numbers in contrast with qualitative data, and it is best suited for deductive studies (Saunders et al., 2016, p. 566). Giving an example of qualitative data is

when performing an in-depth interview, but when we have a list of standard questions. We have quantitative data. That means we will have a broad and open view of the objective when we conduct qualitative research. But when we have quantitative analysis, we will focus on analyzing the theories and parameters (Nyeng, 2004, p. 187). For example, this thesis is about the valuation of XXL company, which is why it is clear that we will define it as quantitative research because we have a lot of data collected from the financial reports and statements. But at the same time to be able to understand the theories being used in a better way, I have collected some information from theoretical books. That means that I have also used some qualitative data in this thesis.

It is also vital to differentiate between this thesis's primary and secondary data. Preliminary data is when the researcher gets the data and uses it, especially for this thesis or a project. On the other hand, secondary data has been collected previously for another cause, so the researcher is getting second-hand data and will use it to analyze it further and get a different knowledge or conclusion. Many secondary data sets have been primary data sets previously, but researchers combine them to make them secondary data (Saunders et al., 2016, p. 566).

This thesis study is primarily based on secondary data since this is a noted company, and every piece of information is available to the public. Raw data that I have used is financial data from quarterly reports and accounting information. These data can be analyzed and processed further.

4.3 Data analysis

4.3.1 Analysis tools

The valuation process is based on different financial and strategic analyses, using other models and tools to achieve that. *The financial analyzes* contain some models that are generated in Excel. Excel is considered an essential program in the process of valuation. There will always be uncertainty in every valuation, so the author has used sensitivity analysis to see the uncertainty around the valuation. Monte Carlo simulation has been used to test some of the assumptions taken in this thesis about the company, industry, and economy. After reformulating the income statement and balance sheet, we will use it as a basic for the discounted cash flow model (DCF). This model is built using Excel and is a tool for deducting the firm's fundamental value. This will be the essential financial analysis tool used in this thesis. With this model's help, we can perform different historical analyses for profitability and liquidity. The DCF model will estimate all future cash flows the company is expected to

generate, discount them to their present value, and add them together. This process is known as forecasting, so it will not be precise, particularly in rapidly developing industries. The next step is performing a relative valuation. Here we look at a group of companies with many similarities between them. The objective is to value and compare these firms and conclude about the company's value using different multiples.

The strategic analysis is also critical in valuation to see the internal and external factors affecting the company and the industry. Evaluation of the competitive advantage of a business and analyzing the environment surrounding the firm is critical. Well-known tools and frameworks, such as Porter's five forces, PESTEL, VRIO, and SWOT, will be used for the strategic analysis. When we evaluate the firm's resources, VRIO analysis will help us identify its strengths and weaknesses compared to its competitors (Fjeldstad & Lunnan, 2018, p. 74). The resources are assessed to determine if the firm can get competitiveness through its resources. The analysis starts with asking these questions about the resources. Is the resource valuable? Rare? Expensive to imitate? And are they exploited by the firm? The PESTEL analysis concentrates on the macro factors that could affect the firm. Factors like political, technological, economic, social, legal, and environmental (Fjeldstad & Lunnan, 2018, s. 108). Porter's five forces analysis is used to overview the firm's competitiveness. It will look at competitive rivalry within the industry, supplier power, threat of new entry, buyer power, and the threat of substitution (Porter, 2008, p. 33).

4.3.2 Methodological Qualities and Limitations

When evaluating our data, we should ask ourselves how reliable the data is. The meaning of reliability of the research is when we assess the accuracy of the data, the type of data used, how the data is collected, and how the data gets processed. We can test the reliability when a group of researchers studies a phenomenon, and all or most of them get the same result, which means high reliability (Johannessen et al., 2011, p. 44). The next question we should ask is how relevant these data are to answering the research question, which is known as the validity of the data. The validity of the data is critically important because we need to be sure that the data will measure what it is intended to measure (Johannessen et al., 2011, p. 73).

To get high reliability in this thesis, I have prioritized data, information, models, and theories that theorists generally accept. I use different sources to obtain the same information to see if the results match, which means high reliability. But at the same time, a lot of the information and data in this thesis is secondary data, which means that it is hard to evaluate the primary

data source for its reliability. Because the primary source will tell us about the origins of the data and if it is affected by different motives and intentions. A firm's valuation is also based on analysts' assumptions and is subjective. That is why the valuation of the same company by different analysts will be different, so the whole valuation process could be put under the question of how reliable the research is. However, I have limited my personal opinions in this thesis as far as possible and try to use facts most of the time.

The validity of the thesis is also essential, so I have only used relevant data, information, and theories that can help answer the research question. The simulation and strategic models I have used will increase the thesis's validity and reliability.

5. Financial Methodology

5.1 Valuation methods

To value a company, we have different valuation approaches. Valuation methods that we will use should include methods from both the present value approach and the relative value/ multiples approach. The current value approach discounts the forecasted or upcoming cash flows (Plenborg & Kinserdal, 2021, p.333). there are different methods in the present value approach, but I will focus mainly on discounted cash flow analysis as a primary method in this thesis. The two other methods in the current value approach are the dividend discount and economic value added, which will supplement the primary method of DCF.

The relative valuation is performed as a control or validation of the primary method, DCF valuation. Using relative valuation means that we estimate the value of XXL based on a company's price that has similarities with XXL. UNLIKE THE RELATIVE VALUATION APPROACH, the DCF model implements the company's intrinsic value, a market value ascribed by the market in a given period (Plenborg & Kinserdal, 2021). Therefore, we can compare the results from the different approaches based on these other valuation methods. For example, suppose the results of the DCF valuation are much higher than the company's competitors, which are much alike. In that case, we have to consider that maybe the cash flow estimates are too optimistic, which means that it had predicted that the company is overvalued or the company has better advantages than its comparable companies (Plenborg & Kinserdal, 2021, p.355). In conclusion, if we use different methods for valuation, we will get higher accuracy for the estimated value of the XXL company.

5.1.1 Present value

The present value approach needs more work and time than other valuation approaches. But the accuracy of the estimation with the current value is higher. The cash inflow and outflow within the firm will signal how it is going with the company. The DCF is the essential tool to evaluate the firm and will be our primary method for valuing XXL (Plenborg & Kinserdal, 2021, p. 341).

5.1.1.1 Discounted Cash Flow Model

The steps of DCF valuation start with estimating the future cash flows for a specific forecasting period. The second step is estimating the terminal value because the value created after the forecasting period will continue. Step three is estimating the required rate of return. In step four, we start to discount future cash flows to present value using the estimated rate of return (Kaldestad & Møller, 2011, p. 29). We can find the intrinsic value using the DCF by looking at the asset's fundamental value. The intrinsic value reflects the firm's cash flow potential and its risk. A good strength of this method is that it is not affected by the market mood because it is based on the fundamentals of the firm's value. The weak point is that the analyst has to make some assumptions about the future. These assumptions can be challenging to predict, and they will significantly impact the estimated value of the firm.

$$EV_0 = \sum_{t=1}^{n} \frac{FCFF_t}{(1 + WACC)^t} + \frac{FCFF_{n+1}}{WACC - g} \times \frac{1}{(1 + WACC)^n}$$

This is the formula that we use to get the firm's value.

5.1.1.2 Dividend Discount Model

The dividend discount model argues that to find the firm's equity value. We have found the present value of the future dividends. The DDM is most convenient for mature companies with a history of regular dividend payments. But for some new companies or companies that don't pay any dividends then, it is not suggested to use this method because that will give a high degree of uncertainty in the conclusion and assumptions we have to make (Plenborg & Kinserdal, 2021, p . 338-341). Furthermore, the dividend discount model does not rely on assumptions and yields unbiased value estimates. This model also requires a very long forecasting period.

5.1.1.3 Economic Value-Added Model and Residual Income Model

These two approaches, Economic Value Added model and Residual Income Model, depend on accrual accounting data, unlike DDM and DCF, which rely entirely on the cash flow data. The EVA estimates the enterprise value of the firm, and the RI model forecasts the firm's equity value (Plenborg & Kinserdal, 2021, p.345). These two models argue that the value of the firm is the capital invested and addition to the return created by this investment capital. There is only one big difference between the two models: RI is based on operating profit before tax, while EVA is based on profit after tax. There are advantages with these two models compared to the DCF, with the terminal value being a smaller percentage of the total value than the DCF. That is why miscalculating the terminal value will less impact the total weight. But these two models are still new and can be challenging to use in reality (Plenborg & Kinserdal, 2021, p.345-349).

5.1.2 Relative valuation

The relative valuation method is used when we have a group of companies that have a lot of similarities which can help us estimate the value of a firm based on the value of other firms. But no company is identical to another company. There are, however, companies in the same industry that can be comparable when they are about the same size and have the same customer base. There are differences in the risk, growth potential, and cash flows between companies. Still, at the same time, relative valuation argues that these companies' operating margins and cash flows should be alike (Plenborg & Kinserdal, 2021, p. 354-356). Enterprise Value/EBITDA, EV/EBIT, EV/Sales, Price/Earnings, Price/Book, and Price/Sales are the multiples most common in relative valuation. Doing these valuations is faster but usually used to supplement the DCF model. It will give different views and aspects of the company that cannot be seen in the DCF model. However, this method has some weaknesses, like we cannot be sure that the firms we compare to are a lot like our firm and can be used as acceptable comparable firms. The solution should be to have a larger pool of firms to use the average or the median to get the sector-based data. Multiples also say a lot about the market sentiment, which will cause overvaluing of firms when the market is optimistic and vice versa (Plenborg & Kinserdal, 2021, p. 354-356). Multiples give us a chance to look at different aspects of the financial standing of the firms. I will use the results from the relative valuation as a support to the DCF model results.

5.1.3 Other valuation methods

There are many different other types of valuation approaches like contingent claim valuation and other types of multiples. But I have chosen to use the discounted cash flow as the primary approach that will fit my ambitions for getting to the value of the XXL company.

5.2 Discounted Cash Flow Model – Inputs

A company is funded by more than one type of stakeholder. We have investors, bondholders, and banks. They have each different interests in the firm. That is why we must consider cash flows to each stakeholder. The free cash flow to the firm can be calculated using the DCF model. We will look at the components of this formula in the following sections. The formula is:

$$\sum_{t=1}^{n} = \frac{FCFF_t}{(1+WACC)^t} + \frac{FCFF_{n+1}}{WACC-g} \times \frac{1}{(1+WACC)^n}$$

5.2.1 The Free Cash Flow to Firm (FCFF)

FCFF describes the amount of cash left from the operations after adjusting for taxes, depreciation/amortization, investments, and working capital. At this stage, we don't consider changing for debt and interest. Using the FCFF, we get the cash flow from operations before financing. This way, we get a good idea of the company's profitability. At the same time, we can find out how much cash is left for financing activities after using money on operation and investment activities. Therefore, the FCFF is one of the most famous indicators for estimating the firm's value. There are many variants for calculating the FCFF, and I have chosen the following method (Plenborg & Kinserdal, 2021, p.90).

Operating Income

+/- Adjustment in EBIT for depreciation, provision, etc., with no cash flow effects

+/- Net working capital changes

+/- Tax

= Cash Flow from operating activities

+/- Investments in net non-current assets

= Free cash flow to the firm, FCFF

5.2.2 Cost of Capital

A company can raise money from equity and debt; the cost of capital is the weighted average cost of capital (WACC). The financing of the capital structure in the firm shows the weights of the debt and equity and reflects the market value of each. The cost of equity and debt also reflects the risk the holder of debt and equity takes (Plenborg & Kinserdal, 2021, p. 298-299). The WACC formula is as fellows:

$$WACC = \frac{NIBL}{NIBL + Equity} \times r_d \times (1 - t) + \frac{Equity}{NIBL + Equity} \times r_e$$

$NIBL = Market\ value\ of\ net\ interest-bearing\ liabilities$
$Equity = Market\ value\ of\ equity$
$r_d = Required\ rate\ of\ return\ on\ NIBL$
$r_e = Required\ rate\ of\ return\ on\ equity$
$t = Corporate\ tax\ rate$

5.2.3 Cost of Equity

The cost of equity is what investors in the company expect to gain or receive from their participation in the firm. The cost of equity cannot be observed in the market. For estimating the required rate of return to equity investors, we need a model called the capital asset pricing model (CAPM). The formula is as such:

$$E(R_i) = R_f + \beta_i [E(R_m) - R_f] \quad E(R_m) = \text{Expected return on market portfolio}$$
$$E(R_i) = \text{Expected return on asset } i \quad R_f = \text{Risk-free rate} \quad \beta_i = \text{Beta of investment } i$$

The CAPM model shows us that the required rate of return is like holding a risk-free asset interest rate in addition to the risk premium for having a risky asset like the XXL. The market risk premium is estimated based on the covariance of the firm's stock price and the market moves using the firm's Beta, representing the systematic risk. In other words, the investor will pay for the risk of each stock that cannot be diversified, which is the systematic risk (Plenborg & Kinserdal, 2021, p. 303).

5.2.3.1 Risk-free Rate

The risk-free rate is about investing without any risk. For this, we have government bonds, which are considered risk-free because there is a low possibility that the government can go bankrupt. For the valuation of XXL, we get the choice from different types of bonds, and I see it reasonable to choose a ten-year government bond for the valuation of XXL. This will be closest to the actual value of a risk-free rate (Plenborg & Kinserdal, 2021, p. 3 04-305). As of

April 2023, Norway's ten-year government bond is % on average, 3.0% (Investing, 2023). So the r_f The model that I will be using is 3.0%.

5.2.3.2 Market Risk Premium

The idea of the market risk premium is looking at the investor perspective to find out how much extra return an investor wants to invest in the stock market and be willing to take some risk instead of no risk using risk-free assets. We calculate the risk premium by looking at the difference between market return and the return from risk-free investments. The formula is as follows: $E(r_m) - r_f$

We have a risk-free rate of 3,0%, so we must determine the expected return on a market portfolio. The required rate of return that we will

	OSEAX	OSEBX
Level on 01.10.2014	669,76	602,84
Level on 08.04.2023	1 358,82	1 195,23
Accumulated Return	102,88 %	98,27 %
Yearly Return	12,10 %	11,56 %

use for XXL valuation tells us the alternative return an investor should expect to get instead of investing in the XXL stocks. That is why we will use the market indexes for the Norwegian stocks OSEAX and OSEBX. We can see in the table that when calculating an average return on these two indexes, we get around 12% return for both indexes. This is historical data and will not assure that we will get this return in the future, but at the same time, I have been choosing to use this 12% as the expected return on the market portfolio. Historical data like this will not be accurate because this return will include volatile situations like financial crises and financial bobbles. In the CAPM formula, the market risk premium will increase the required rate of return to the firm whenever the Beta value goes up. We can find the market risk premium by subtracting the risk-free rate from the expected return on a market portfolio using the average of these two indexes. We get 12% - 3% = 9%.

5.2.3.3 Equity Beta

Equity beta will measure the stock's sensitivity to the market and the company's systematic risk. That is why it plays a vital role in the CAPM and in finding the required rate of return to equity. When the Beta is high, it will give a higher risk and return to a specific stock. We can see in the diagram below the relation between the risk-free rate and the expected rate of return to the market. For example, if XXL Beta was 1, systematic risk and the required return are as high as the expected rate of return to the market. So above the Beta of 1, we will get a higher risk and return. And, of course, below the Beta of 1, we will get a lower risk and recovery compared to the index of a group of stocks.

We have three methods of estimating the Beta. First, we can use the historical data to estimate the Beta using regression analysis, or we can use the bottom-up Beta method, or lastly, we can use the Damodarans global industry Beta. I have chosen the last method, the Damodarans global industry Beta. The industry is the "Retail (Special Lines)" that makes the estimation based on 78 firms. Among them is the XXL company (Damodaran, 2023).

Industry Name	Number of firms	Average unlevered beta	Average levered beta
Retail (Special Lines)	78	1.19	1.48

We can see in the table that the average Beta for the industry is 1,48. So we can argue that in the long run, every stock's Beta will come closer and closer to Beta 1, which is the exact Beta of the market index. That will happen because every firm will get more and more diversified through their product mix and their costumer base.

I will choose the average industry Beta to estimate the XXL Beta because I see XXL as a sports company and is a good fit among these industry firms. When I use this Beta value, I will also get a less standard error because this Beta is for a group of different firms. In conclusion, I will use a Beta of 1,48 for the equity in this thesis.

5.2.4 Blume's Adjusted Beta

There is the theory that the Beta for every firm will go toward the average Beta for the market indexes, in other words, Beta 1. Therefore I have to adjust the Beta I found for the XXL to be more accurate in my valuation and shift the beta toward Beta 1. The formula is as follows (Blume, 1975, p. 194): $B_{Adj} = B_{raw} * (1 - P) + P$. The P is 1/3, and we have the raw Beta like 1,48. Putting these numbers in the formula, we get this: $B_{Adj} = 1,48 * \left(1 - \frac{1}{3}\right) + \frac{1}{3} =$ 1,32. So we go down from Beta 1,48 to Beta 1,32, the Beta we will use forward in this thesis.

5.2.5 Estimated Cost of Equity

Now we have all the components in the cost of equity formula that we can use to estimate the cost of equity value. $E(R_i) = R_f + \beta_i [E(R_m) - R_f]$ $E(R_i) = 3\% + 1,32 *$ $(12\% - 3\%) = 14,88\%$.

5.2.6 Cost of Debt

The cost of debt is the cost for the firm that must be paid because it has borrowed funds to support its projects. Generally, the cost of debt can be found using the current interest rate value, the company's default risk, and the corporate tax level. The easiest way to determine that value is to see if the firm has outstanding long-term bonds. In these cases, we use the

information about the bond, like its coupon, maturity, and market price, to find the cost of debt. The following method I will use in this thesis is this formula to calculate the cost of debt after tax. $r_d = (r_f + r_s) * (1 - t)$. We have three components in this formula that define the cost of debt. The risk-free interest rate we found was 3%. The next component is the corporate tax rate which is 22%. The last component is the company's credit spread; there are many different ways to calculate that value. I have chosen to use this table below, where I found the interest paid for debt each year, and after that, I took the average of that rate. I will use this average as the credit spread of the company (Plenborg & Kinserdal, 2021, p. 323).

$r_d = (3\% + 3,93\%) * (1 - 22\%) = 5,4\%$

	2018	2019	2020	2021
Total Financial Expenses	57	183	172	146
Non-current Intrest Bearing Debt (F)	1081	767	483	485
Non-current Lease liabilities (F)	0	2428	2180	1925
Current Lease Liabilities (F)	0	553	593	567
Current interest Bearing Debt (F)	994	889	418	395
Total interest Bearing Debt	2075	4637	3674	3372
Interest Rate Paid	2,75 %	3,95 %	4,68 %	4,33 %
Average Interest Paid	3,93 %			

Table 5.1

5.2.7 Estimated WACC

After calculating all the needed parts in the WACC formula, we are ready to put the numbers in the formula to get the WACC value. Using this formula:

$$WACC = \frac{NIBD}{EV} \times r_G \times (1 - s) + \frac{MVE}{EV} \times r_e$$

I will get a WACC value of 6,88%. I will use this WACC value to discount the firm's future cash flows in the valuation process. This table shows the different numbers I used to get the WACC value. A note to the equity and net interest-bearing debt market value numbers, these two values are in thousands.

WACC	
Shares Outstanding	387 944 706
Current share price 30.12.22	3,82
MVE	1 482
NIBD	4 442
Corporate Tax Rate	22 %
Cost of Equity	14,88 %
Cost of Debt	5,4 %
Equity-to-EV	25,02 %
Debt-to-EV	74,98 %
WACC	6,88 %

Table 5.2

5.2.8 Terminal Value

We need another estimation in the DCF model: the terminal value. Noted publicly traded firms have an infinite exciting, but at the same time, it is impossible to forecast an endless cash flow for many years. We chose to stop at a specific year in the future, and from that point start, we calculate at the terminal value an estimation that should reflect all the cash flows beyond that point. We have different methods for calculating the terminal value. The most popular one is the stable growth approach. Here will, the formula assumes that we have a constant

$$Terminal\ value = \frac{FCFF_{n+1}}{WACC - g_n}$$

growth rate beyond the terminal year. But at the exact time, this growth cannot be higher than the economy's growth. This means we have to consider not having a higher growth rate than the economy's overall growth rate. The other method we have is the liquidation approach which has this formula. This approach assumes that the company will have to terminate its operation at a point in time in the

$$Terminal\ value = \frac{EBIT_{n+1}(1-t)(1-\frac{g_n}{ROIC_n})}{WACC_n - g_n}$$

future. At the end of the firm's life, it will liquidate, and its accumulated assets will be sold to the highest-paying buyer. I will not use this approach because iam assume the firm will have an infinite life.

5.3 Consistency conditions

When valuing a firm, there will be a space for making assumptions. And that is important to consider during the valuation process. We have to be consistent. That means that in our calculations, we have to use ratios and numbers appropriately so we don't get miscalculations.

Inflation will affect the calculation of the historical data and forecasting period. Therefore, I have chosen to use only nominal values in this thesis. So that we get only the actual value of the transactions, another example is using the risk-free rate consistently in this thesis. The valuation process is based on the DCF model, and the FCFF will need to focus on using the WACC for discounting the cash flow, and it is essential not to use the cost of equity.

The last example is multiple with a numerator that can be either an equity or enterprise value. The denominator can use equity value or a firm value. A rule of thump is that if the numerator is an equity value, the denominator will also be an equity value, and vice versa. So if I were assuming that XXL can get a high growth rate in the future, I would also have to assume that XXL will reinvest its capital.

6. Financial statement analysis

The financial statement analysis gives us a general understanding of the company's financial situation in the market. We can see the past years' development to get an idea of the future cash flows. This type of analysis looks at the balance sheet and the income statement. There we can find information about the profit and loss development, investments in assets, different types of liabilities of the firm, and working capital. Under the valuation process, we have to consider how much we should focus on the accuracy of the historical data in the financial statements. Thus we should use this analysis in combination with other analyses to get to the estimated value of the firm. But at the same time, these historical numbers can give me a good idea about the firm's growth, trend, and developments to make more realistic assumptions. Therefore, I have used data from the last three years to analyze financial statements.

6.1 Analysis period and benchmark

I have used financial data from the past three years to analyze the XXL firm historically and see how it performs compared to the industry and its competitors. The competitors are not listed in the stock market, so I have not focused much of the analysis on that part. But one competitor I have seen as relevant to consider is the Sport 1 firm, even though it is not publicly listed. The historical data for profitability, liquidity, solvency, and financing would give me relevant information for the company's future value.

6.2 About the financial statement

Financial statement analysis must calculate some key figures to implement the analysis correctly. I have taken the pro forma consolidated statements for the last three years (2020-2022). I have also collected some data for the Sport 1 company on the Proff Forvalt website. The key figures measure the profitability, liquidity, solvency, and financing in this analysis. My goal is to give a general understanding of XLL´s financial position.

6.3 Profitability Analysis

A company's profitability is one of the most essential areas in the financial analysis. Good profitability signals that the firm has good economic strength. At the same time, it is critical to the company's future survival. The relationship with the stakeholders like the costumers, the suppliers, and the government will also be stable and good. The benefit of profitability is that we can use that to define future expectations (Plenborg & Kinserdal, 2021, p. 141). Therefore,

I have calculated the following values: Return on assets, equity, invested capital, and Profit margin to evaluate the XXL's profitability.

In the table below, I have performed a profitability analysis to find out some key figures historically and, based on that, perform an estimation for these key figures for the forecasting years.

PROFITABILITY ANALYSIS								
XXL (NOKm)				Forecast Period				
	2020	2021	2022	2023	2024	2025	2026	2027
ROIC (ved bruk av gj. NOA)		4,39 %	-6,08 %	6,47 %	6,48 %	6,48 %	6,48 %	6,48 %
PM		3,07 %	-4,64 %	4,68 %	4,68 %	4,68 %	4,68 %	4,68 %
ATO		1,43	1,31	1,38	1,39	1,39	1,39	1,39
ROIC=PM x ATO		4,39 %	-6,08 %	6,47 %	6,48 %	6,48 %	6,48 %	6,48 %
EVA		-217	-906	-66	-66	-68	-69	-70
ROE (ved bruk av gj: BVE)		4,86 %	-13,34 %	9,21 %	8,97 %	8,53 %	8,17 %	7,85 %
NBC		3,77 %	1,50 %	3,85 %	3,73 %	3,71 %	3,68 %	3,94 %
FLEV		76,13 %	95,85 %	104,29 %	90,39 %	73,84 %	59,94 %	53,85 %
ROE=ROIC+(ROIC-NBC)xFLEV		4,86 %	-13,34 %	9,21 %	8,97 %	8,53 %	8,17 %	7,85 %

Table 6.1

6.3.1 Return on Equity (ROE)

Return on equity (ROE) measures the profitability of the firm. It will consider the influence that the financial and operating leverage have. It will give a measurement of the return on the owner's investment. We have to include in the ROE both the paid-in equity and the retained earnings (Plenborg & Kinserdal, 2021, p .170-171). The formula that we are using is the following $Return\ on\ equity = \frac{Net\ income}{Book\ value\ equity} * 100$. In the table above, we can see that we have two methods for calculating the ROE value. Both methods give us the same values. We get historically 4,86% and -13,34% for 2021 and 2022. And for the forecasting period, we get the value between the 7,85% - 9,21%.

6.3.2 Return on Assets (ROA)

The return on assets of the firm measures the efficiency of the operating activities to generate profits using the firm's assets. In other words, we can use the firm's assets to create value and then distribute that to the equity and debt holders of the company. ROA is a percentage value, and we are interested in getting a high percentage value for the firm. High ROA means that the company is profitably using the assets. There is a formula for the $Return\ on\ assets = \frac{Net\ income}{Total\ assets} * 100$.

6.3.3 Return on Invested Capital (ROIC)

Return on invested capital (ROIC) will look at the overall profitability of the firm's operations. This measurement will show us the return on invested capital in the firm's net

operating assets, and we get the value as a percentage. This measure focuses on using the invested capital. Therefore it can be used to measure the profitability of the company's operations. We can also compare this value to the investor's required return (Plenborg & Kinserdal, 2021, p .144). We have the following formula for the ROIC before tax $ROIC = \frac{EBIT}{Invested\ Capital} * 100$. For 2021 and 2022, we have 4,39% - 6,08. So for the forecasting years, we have a constant 6,48% for all the years.

6.3.4 Profit Margin

A better revenue/expense relation drives ROIC or can be caused by improved capital use. Therefore it is vital to decompose this ratio into the operating profit margin and turnover rate of invested capital. The formula for the operating profit margin after tax is as follows: $Operating\ Profit\ Margin = \frac{NOPAT}{Revenues} * 100$. The Operating profit margin focuses on explaining the relationship between the revenue and the expenses. The value is a percentage of the income, and our higher profit margin will be better for the firm.

6.4 Liquidity Risk Analysis

Liquidity risk analysis analyzes both the long-term and short-term liquidity risk. Long-term liquidity risk is about being able as a firm to pay all the long-term liabilities and costs like the interest of the obligation. The same principle is valid for short-term liquidity analysis. Here we have to find out if the firm can pay for its short-term liabilities. In other words, we find out if the company can pay for its obligations as planned. The company can pay for its obligations when a positive net cash flow comes in the future and a short-term period. Having problems with liquidity will have concekvenses for the company in terms of affecting its value negatively (Plenborg & Kinserdal, 2021, p. 209-210). The table below will give us key numbers to use in the analysis.

LIQUIDITY ANALYSIS			
XXL (NOKm)			
	2020	*2021*	*2022*
Short-term liquidity risk			
Turnover rate NOWC			
Current ratio	1,168	1,050	0,829
Quich ratio	0,441	0,271	0,214
CFO to short term debt ratio			
Cash burn rate	-3,060	-1,980	1,568
Cash burn rate in months	-36,725	-23,754	18,811
Long-term liquidity risk			
Financial leverage book value	1,240	1,402	1,959
Solvency ratio book value	44,64 %	41,63 %	33,80 %
Interest coverage ratio	2,12	2,68	-8,22
Interest coverage ratio (cash)		5,42	12,51
CFO to debt ratio		0,28	0,21
Capital expenditure ratio			1,22
Capital expenditure ratio (reinvestments)			0,98
Financial leverage med NIBD (book values)	1,472	1,173	0,919
Solvency ratio med NIBD (book values)	40,47 %	46,02 %	52,11 %

Table 6.2

6.4.1 Current Ratio

The formula for the current ratio is $Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilties}$, when we get a ratio

below 1, it will indicate that we have more payment

obligations for the next year than what could be turned

into cash in the current assets. This will signal a risk in

liquidity. A thumbs-up role is that a firm needs to have

its current ratio at two or above. Still, this idea is

Current Ratio	2020	2021
Sport 1 AS	1,33	1,06
Stadion AS	1,71	1,44
Quick Ratio	**2020**	**2021**
Sport 1 AS	1,01	0,74
Stadion AS	0,87	0,63

criticized because a high current ratio will signal that the firm has a large amount of inventory

in its existing assets and is challenging to reduce. Balancing both situations is important

(Damodaran, 2012, p. 49). I have performed an in-depth analysis in Excel for liquidity

analysis of XXL. When we look at the current ratio of XXL, we see a downside trend

signaling a liquidity risk. On the other hand, we can see in the table above that the two most

significant competitors of XXL (Sport 1 and Stadion) have higher current ratios. Thus it will

mean they are in a better position with concern to the liquidity of their firm.

6.4.2 Quick Ratio

The Quick ratio will divide the most liquid assets into the current liabilities. This way, we will

measure if the firm can pay its short-term obligations with the most liquid assets. We find the

most liquid assets by taking current assets from the inventory. The quick ratio is considered to

be more accurate and sharper at its predictions of the liquidity risk than the existing t assets

(Damodaran, 2012, p. 49). The general rule is that we have to get a number higher than one to

conclude that there is not high liquidity risk, but that rule does not apply to every industry.

The formula of $Quick\ Ratio = \frac{Current\ Assets-Inventory}{Current\ Liabilties}$. In both tables above, we see the same

development as the current ratio, by having to get a lower value for quick ratio each year for

XXL, and the competitors have better quick ratio value than XXL for each year. That

confirms the already known fact that XXL does not perform well concerning the liquidity risk

by itself and compared to the competitors.

6.5 Solvency and Financial Leverage

Solvency measures how the firm can handle losses and focuses on analyzing the ratio between

equity and total capital. In addition, it will examine the long-term liquidity risk of the

company. When having a high financial leverage and low solvency ratio, we can assume that

there is a risk on a high level in the long-term liquidity. Therefore, when finding solvency or

financial leverage, it is essential to recognize all the financial obligations in the balance sheet. In addition, all the equity parts must also be included in the balance sheet. At last, we determine if the ratio calculations should be based on the book or market value. Generally, it is best to use the market value if it is available because it is more accurate (Plenborg & Kinserdal, 2021, p. 215-217).

Equity Ratio	2020	2021	2022
XXL	44,64 %	41,63 %	33,80 %
Sport 1	37,40 %	39,80 %	
Stadion	38,80 %	36,00 %	
Debt Equity Ratio	**2020**	**2021**	**2022**
XXL	1,240	1,402	1,959
Sport 1	1,70	1,50	
Stadion	1,60	1,80	

Table 6.3

6.5.1 Equity Ratio

The equity ratio will give us information about the firm's leverage, and we will find out through this ratio how much of the firm's assets and investments are financed with equity. It will signal the firm's liquidity risk, and for the debt holders, it will also give valuable information about its solvency. The higher the equity ratio we have, the stronger the company's solvency, but this ratio depends on the industry the firm is in (Plenborg & Kinserdal, 2021, p .215-219). The formula for this ratio is $Equity\ ratio = \frac{Total\ Equity}{Total\ assets}$. We can see in the table above that the equity level of XXL has been reducing for la last three years, which is harmful. But the competitors are in a better position by having a stable equity ratio like Stadion, which has not been reducing so much. And for Sport 1, it has been positive signals getting a higher ratio.

6.5.2 Debt to Equity Ratio

The debt-to-equity ratio will analyze the firm's equity to determine if it could be used to pay back the debt if something goes wrong with the business. The ratio takes the debt and compares it to the firm's equity. This way, we can find out the financial leverage of the company. The lower ratio we get, thus better it is for the company's solvency in general. Still, we have to say that across industries, there may be different preferred debt-to-equity ratio levels (Plenborg & Kinserdal, 2021). Debt to equity ratio formula is $D/E\ ratio = \frac{Total\ Liabilities}{Total\ Equity}$. We can see in the table above that XXL had a higher ratio each year three last

year. The competitors are in a better position than XXL, Sport 1 has a lower ratio, which is positive, but Stadion has a higher ratio, which is negative.

6.5.3 Interest Coverage Ratio

The interest coverage ratio will measure if the firm can pay for its financial expenses. It will estimate how often the cash flows from operating profit can cover net financial expences. A high-interest coverage ratio will indicate that the firm has more significant potential to pay for the interest expenses from earnings. This will also suggest a low long-term liquidity risk (Plenborg & Kinserdal, 2021, p. 224). The formula for the ratio is

$Interest\ coverage\ ratio = \frac{EBIT}{Net\ financial\ expenses}$. In the table above, we can find the value of the interest coverage ratio, and XXL is getting lower values each year, which is very negative. For the last year (2022), we are getting a negative deal which means that XXL is losing money since every value below one will be causing the firm to lose money.

6.6 Summary of the Financial Statements Analysis

Looking at the profitability analysis I have done, it seems things do not go well in XXL. The ROE in XXL has been suffering significantly in the last year compared to the year before that. XXL had a ROE 2022 of about -13,34%, which is very bad compared to the 2021 value of 4,86%. Generally, financial analysts suggest that the ROE range of 15%-20% should be considered a good level of investment quality. Thus we can conclude that investors looking at ROE value XXL will not appear interested to invest in because of the bad development of the ROE. The development of the ROIC in XXL is terrible as well because we can see that, again, there is a negative development in 2022 compared to a positive value in 2021. This will again affect XXL financing badly because there will not be a possibility of obtaining cheap financing.

The liquidity analysis again shows a negative trend in key figures for the last three years. The current ratio has shown a bad development by reducing from 1,168 in 2020 to 0,829 in 2022. The suggested current ratio level is above two, incorrectly indicating the long-term liquidity risk. The quick ratio, a more accurate measurement of the most liquid assets, is also in bad shape, with a value of 0,441 in 2020 and down to 0,214 in 2022. The preferred value should be above 1. This will again confirm that there is a high liquidity risk in the company. Compared to its most relevant competitors, we can argue that XXL is performing poorly and has a lower current- and quick ratio than its competitors.

XXL's equity ratio and D/E ratio have also been moving in the wrong direction. The equity ratio has been falling for the last three years. Hence, the risks for the debt holders and the company's overall risk. From 2020 to 2022, it has fallen from 44,64% to 33,8%. Compared to its competitors, XXL has been performing poorly. The D/E ratio also has been moving in the wrong direction, from 1,24 in 2020 to 1,959 in 2022, which means higher debt than equity. A higher debt portion than equity will signal a rising risk for the XXL firm, which is a bad development.

Lastly, we can look at the interest coverage ratio, which again has been moving down in the last year. 2022 was an awful year because we started to get a negative value for that ratio. It is suggested to have a value above three, but we have a negative value, and it is also known that a value below one will make the firm lose money. This means that the cash flow from the operating activities could not pay for the financial expenses. So the competitors and the industry outperform XXL in that field by having greater values for that ratio than XXL.

Overall we can conclude that the financial statement analysis gives us information about some critical and risky development for the XXL's performance.

7. Strategic Analysis

I will be presenting a strategic analysis in this chapter, which will focus on exploring the internal and external environments of the XXL to find out the firm's strategic position in the market. Furthermore, this analysis will help see the potential risks or opportunities that can be taken advantage of in XXL. As a result, we can try to understand the market better and find the factors that will favor or threaten XXL's company (Plenborg & Kinserdal, 2021, p. 270). Finally, I will be using different analyzing methods and come to a conclusion in the SWOT focusing on the most important findings.

7.1 Macroeconomic Analysis

A macroeconomic analysis aims to discover macro factors influencing the company's risk and cash flow potential (Plenborg & Kinserdal, 2021, p .272). I will review some macro conditions affecting XXL in these upcoming sections.

7.1.1 Inflation

Inflation can predict what future price levels can be. There is an inflation target in Norway that is implemented as part of the monetary policy, and the main objective is to have low and stable inflation over the years. The target is inflation which can be measured through the

annual consumer price index (CPI), which should be approximately 2,0%. The inflation in Norway is 6,5% (SSB, 2023), which is higher than the target level and is moving the prices higher than expected. This is because they are going more specific into the clothing and footwear, which is a large part of the products in XXL company. We can see that inflation in these products is about 5,8%, which means the prices are also higher than expected (SSB, 2023). In addition, people prioritize food, drinks, electricity, gas, and housing more than products sold in XXL. All these factors will decrease the demand for XXL products, giving a negative signal to earning expectations. The weaker Norwegian krone will also make buying from suppliers outside Norway more expensive. Still, at the same time, customers who also buy from online stores outside of Norway will choose to buy their products in Norway, making the demand for XXL products higher.

7.1.2 Purchasing Power

Purchasing power concerns different sides of the economy, like consumer spending, stock prices, and economic growth. After the pandemic and the crises of war in Ukraine the electricity crisis, people have become more careful about their spending. There is high inflation now in the economy, and the purchasing power is declining, which is why the LO and YS organization that works for the interest of the workers are now demanding an increase in purchasing power. That will mean the wages should increase more than the consumer price index growth. Price growth for the last year has been about 4,9%, so they are demanding growth in wages higher than this value (E24, 2023). This will positively impact the XXL's sales when the purchasing power increases.

7.1.3 Interest Rates

The pandemic caused some changes in the interest rate. The central banks lowered the rate to 0% because of the lockdown, so the economy can still move. After the pandemic and the lockdown had ended, the central bank started to raise the interest rate so that this fast-moving economy could slow down. That way, the central bank can also control the fast-rising inflation to the targeted value of 2%. The central bank chief says the interest rate will continue until inflation reaches a reasonable value. As of today, 25.04.2023, the interest rate is at 3%, the following change will be on 04.05.2023, and it is expected that the central bank will keep raising the interest rate to control inflation and slow down the economy.

7.1.4 The Global Economy

The Covid pandemic crisis had a long-lasting impact on the global economy. There was and still is a negative effect on all sectors, economic activity, well-being, and jobs. There is still a lot of uncertainty about the future and the development of the global economy. The economy's recovery will depend on how much the vaccination gives good long-term results and how much the Coronavirus is under control. The recovery is expected to continue this year with the help of vaccination efforts, macroeconomic policies, and financial conditions. But the Russian war against Ukraine will put the global economy again in danger, slowing global growth and increasing inflation. The government must be cautious about higher energy prices and diversify its energy sources (OECD, 2023). The global growth slowed down in 2022 by one percentage point, weaker than expected at the end of 2021, which is a negative impact of the Russian war on Ukraine. The growth was at 3,3% in 2022 and will be at a lower level for 2023 and 2024, at 2,6% and 2,9%. And there is significant uncertainty regarding the expectation for growth under this war situation for the coming years (OECD, 2023).

7.1.5 The Norwegian Economy

Norway is a diverse industrial country, and the prosperity of this country comes from responsible management of the natural resources of this country. The natural resources give Norway a competitive advantage. The country has oil, gas, seafood, and electricity from waterfalls. The Norwegian economy has been robust over the years. The reason for that is that Norway has business-friendly policies. The revenue from the oil and gas is used in the service of the society. The government Penson fund global is getting funded by the oil and gas revenue, so even if oil and gas do not exist anymore, there will still be money to get from that fund to keep the Norwegian economy going (Norway, 2023). The economy in Norway is small, and it is open. It is also dependent on international cooperation (Norway, 2023).

The gross domestic product (GDP) volume grew at 3,9% in 2021 and 3,3% in 2022 (SSB, 2023). The GDP per capita in Norway is about 1 000 000 NOK (SSB, 2023). It seems that the growth in GDP was slowed down because of the war in Ukraine and the food and electricity crisis in the world. However, in 2023 the GDP growth is expected to be solid and get that support from household consumption. There is also an anticipated rise in the real wage salary (SSB, 2023).

7.1.6 Market Outlook

The sports market has been getting a reduction in the total earnings in all stores by approximately one billion NOK in just about nine months of 2022 (E24, 2022). On the other hand, there are clear signals that online stores are taking higher sports market shares. As a result, the total sports market growth was at a 25% level in 2022 (E24, 2022). The decline in the market now is normal, according to the CEO of the Norsk Sportbransjeforening, because the market got fed up with the growth and rise of revenue during the pandemic years, and now it is time for the market to correct its path to a normalization direction (E24, 2022).

7.2 Supplementary Analyses

To get an idea of the overall situation of the XXL and its strategic position, I have been performing a group of other analyses that will concentrate on the competition in the market and find the competitive advantages in the market.

7.2.1 Company Outlook and Development

The XXL in 2022 maybe had its worst year since its establishment date. The company suffered huge losses and made some big decisions, leaving the Austrian market since it had been causing some significant losses each year since its establishment in Austria. Another important announcement is that XXL will take care of these considerable inventory increases t, creating extra costs. XXL is expected to recover, especially after stopping its operations in Austria and not suffering more losses.

7.2.2 Cost Control

XXL has ambitions and targets that it is working on achieving. There are financial ambitions to get to. The first one has a gross margin of 40%, and we can increase the label share from 10% to 30%. Category strategy and execution, and lastly, the price! Balancing everyday low price and campaign execution (XXL, 2023). The second ambition is to have the OPEX at a 30% level through a group of different actions to achieve this goal: optimize store staffing, marketing efficiency, HQ costs, optimizing store footprints, downscaling of stores, and finishing the exiting of Austria (XXL, 2023). The result will be in step three, where we aim to get an EBITDA equal to 10%. 2016 year was the year that we achieved all these three goals, so we use 2016 as a cooperation year (XXL, 2023).

7.2.3 PESTEL

The PESTEL analysis will examine the macro-factors affecting the sports industry and the XXL company.

Political Factors

This factor is about the pollical system can affect the industry and the company through pollical stability, regulations, monetary policies, and trade barriers (Fjeldstad & Lunnan, 2018, p. 108). Norway is in a stable political situation that will give the company good opportunities for doing business. The corporation tax is 22%, a reasonable level for doing business in Norway. There is also no indication that the government is willing to raise the tax level, making Norway less attractive to investors worldwide. Many countries have been reducing corporate taxes so investors will not take their capital from the government. Overall, this law cooperates tax will keep investors inside Norway and will be attractive for new businesses and investors to come to Norway, which is a positive signal for XXL. The parliament in Norway has also decided that the limit for purchasing products from online stores and not paying an extra fee if the total amount of purchasing is below 350 is now eliminated. Now all online purchases in stores like Alibaba, Wish, and Amazon will have to pay that fee no matter how much the payable sum is. This has been a great decision over these past years so that the competitive bases are equal between XXL and these stores outside Norway (Forsland, 2018). I can conclude that having these factors in place: A politically stable country, low taxes, and better competitive advantages will make the sports industry more profitable and is a positive sign of development in the industry.

Economic Factors

The economic factors that can affect the industry can be the interest rate, economic growth, and the saving of the households (Fjeldstad & Lunnan, 2018, p.108). the Norwegian central bank, in the past year, has been raising the interest rate, which will have some impacts on the economy, slow down the economy, and have a goal of reducing the inflation that has been affecting the spending of the consumers negatively. Consumers are now planning their spending more cautiously. Unemployment will also get higher because of the rise in interest rates. All these economic factors will negatively affect the sales of XXL products and earnings. Consumers spend less money on products that are not critically important to them.

Social Factors

When analyzing social factors, we can find trends and new societal developments that can affect the sports industry (Fjeldstad & Lunnan, 2018, p. 109). There are popular trends in society now like training is a big trend and eating healthy and having a good sport activity is

highly recommended in the community now. Influencers on social media also promote such sports activities in society. There is also a growth in the sports industry's total earnings in these years that training and sports activities became popular in the community. In conclusion, we can say that these positive trends in society about having a healthy life and training for a better and healthier lifestyle will positively impact the profitability of the sports industry generally and XXL company specifically.

Technological Factors

The technological factors are trends in technological development like digitalization, innovation, and investments in new technologies (Fjeldstad & Lunnan, 2018, p. 108). For example, consumers in the Nordic countries tend to use online stores and purchase online more and more each year. This is a development that XXL has to consider by continuously improving its online store and the technologies used in its online store. The next move XXL has taken in the technological field is making the inventory digitalized and automatically working, this has been costing significant investment in the technical resources to make that possible, but at the same time, this will reduce personal expenses and, in the long run, will be profitable for the company.

Based on these facts, I can conclude that these factors will positively impact the development of XXL business, reduce costs, and make running the business more effective in the long run. This means that technological factors have a positive role in XXL's development.

Environmental Factors

The environmental factors include sustainability, environmental, and ethical business performance facts that can affect the sports industry (Fjeldstad & Lunnan, 2018, p.109). Corporate social responsibility (CSR) has been critically important in recent years. Because every stakeholder, like the employees, government, environment, shareholders, and consumers, are involved in the business. And taking care of these stakeholders will give a competitive advantage to the company. Knowing how benefits more from the raw material and the recycling of products so that they will not harm the environment even after it is not being used anymore. All these concerns are essential in these last years and will help in building a reputation for the companies doing business and taking into account these factors. The rights of the employees and if the products are made outside Nordic countries, XXL have to ensure that the employees in other countries get their rights and have good working

conditions. Sustainability is also another critical factor. When dealing with resources, we must invest in technologies that can re-produce products from existing products that are not being used anymore. XXL has also taken the initiative in making a market for second-hand products, where they buy used products from their customers and double-check that these products are in good shape. After that, they sell them back to the consumers. All these factors explain the importance of environmental factors, and I have to confirm that these factors have a positive role in developing the XXL company if used correctly.

Legal Factors

Legal factors in implementing the law and legal processes are essential for the business's success, at the same time being able to take care of the legal rights of the stakeholders surrounding the company (Fjeldstad & Lunnan, 2018, p. 109).

The working environment act is legal to protect the employees and their rights during working hours. This act is implemented in the public and private sectors. This act will safeguard a healthy and secure working environment for the employees. Any private or public organization or company that violates this act's principles will be held accountable by the Norway government. There will be sanctions against the company or the leadership of the company through prison or paying a considerable fine.

XXL company came under the spotlight in 2019 for violating the act of advertising and the working environment. This was and still hurts the firm. The reputation has been negatively impacted, and there were allegations against XXL of misleading and using its customers and taking advantage of them. When companies like XXL do not implement all the regulations and legal obligations, there will be consequences in the form of a bad reputation and even sanctions from the government.

The legal factor is an essential factor that XXL should take as a priority, and the regulation and law processes in the sports industry are pretty fixed, so this should not be difficult for XXL to take care of. In conclusion, I can say that the legal factors will have a negative impact if XXL does not take it securely.

7.2.4 The Five Forces Framework

Porter's five forces will help me examine an industry's competitiveness and structure. The author of this theory, Michael Porter, states that any firm is affected by its economic environment, and these effects can be grouped into five primary forces that will affect the

industry's competitiveness. These forces can be high in some sectors, which means that the profitability of operating in this industry is low because there is increased pressure on the players in the industry. But if these five forces are weak, there are good opportunities for making a profit and taking advantage of these opportunities. In this section, I will go through these five forces.

The Threat of New Entrants

New entrants in a specific industry will bring new capacity and product assortment. New entrants will try to gain market share and put pressure on the prices, costs and demand new investments in the field. The threat of new entrants will depend on whether there is an entry barrier in the industry and how easy or hard it is to establish new firms.

With concern to the sports industry, there are threats from new entrants that can create a "Price War" where new entrants will lower the prices of their products to gain market share. This strategy will not be effective against firms like XXL because, as a big company, XXL could use its economies of scale to avoid such a threat. By having opportunities to lower the prices without getting losses, XXL can stop this threat from new entrants. There is a potential new entrant like sports outlets that have been using a different business model, where they buy products from different suppliers or buy products from past year models and sell them at a lower price.

There are, however, some obstacles for new entrants to enter this industry. For example, starting a business in the sports industry will need considerable investments in infrastructure, warehouses, advertising, and technology. For this, there will be a need for capital in investors willing to take the risk of starting this business. But there is not possible to do business online in stores, which will not require such significant investments.

I can conclude that new entrants will not be a threat, and the danger is low because this industry requires capital and significant investments, and big players like XXL have economies of scale.

The Threat of Substitutes

Substitution of some products may create a threat if it can give the customers the same service or get the same benefits at a competitive price compared to the original product's price. Substitutes can reduce the industry's profitability because customers can seek these alternatives instead of buying the original products. For example, sport-selling product firms

like XXL specialize in selling sports clothes and sports equipment. XXL has a variety of product sortments that are all specific to the sport, outdoor, indoor, hiking, and swimming activities. But at the same time, other stores sell these products and other non-sport related products. These stores can be a substitute for XXL products. Stores like H&M, Biltema, and Dressman sell sports clothes and some sports equipment. Training centers like SATS give sports services so people don't need to buy sports equipment. They can instead pay a fee each month to train at that center. But at the same time we have to be aware that these stores are not specialized in selling sports products, so the employees there are not educated about the products, that is why they cannot give a service on the same level as the stores like XXL who is specialized into this field. Online stores like Wish, Aliexpress, etc., can be a threat as they also present substitutes and are gaining more and more market share each year.

I can conclude that the threat from substitutes is low as long as XXL continues developing its online store to make it more convenient. And XXL also educates its employees so that they are updated about their products and can give good services to their customers.

The Power of Buyers

The power of buyers in a highly competitive industry will depend on how much the customer can bargain. In addition, this power will depend on factors like how easy it is for the buyer to leave this store and buy at another store which will create extra costs for that buyer. For example, the following fact is if the products sold in different stores are much alike for the buyer, it will be the same thing where they buy their products.

Customers in the sports industry can choose where to buy their products since the sports products are much alike across all the different sports stores. With growing market share for the online stores, will the buyer get a higher bargaining power since it is easy for them with a click on their PC screen to compare prices of different online stores and choose to buy their products where the prices are lowest? For the buyers of these sports products, there will not be any additional costs when selecting another store to buy from because the products are similar to each other across all the stores.

I can conclude that the buyers have bargaining power and can pressure XXL and other sports stores to bargain lower prices for their products.

The Power of Suppliers

Suppliers that have power over the company will be able to get more profit and value for themselves and require higher prices for their products, requiring extra fees for extra services and charging higher prices for a better quality of their products. The suppliers can also have power if they are in a monopolistic market where products are primarily available in their stores, and they have many stores like XXL buying from them.

The suppliers of the XXL company are about 700 (XXL, 2020). This means that XXL deals with a large group of suppliers and has been establishing good relationships with all the suppliers. This means the suppliers have low influence and power over XXL because XXL has many suppliers. XXL does not produce its products, so keeping a good relationship with its suppliers will be necessary in the long run. The suppliers between themselves are also different. Some suppliers have good quality products and are well-known with good reputations. These suppliers will have the power to deal with XXL. XXL is interested in products that can be available to everyone, not necessarily expensive, high-quality products. Some suppliers deal with big firms like XXL and are aware that XXL can threaten them to go to other suppliers, and if these suppliers are small companies, then XXL will power over them.

In conclusion, I can say that because of the variety of supplier company that supplies XXL with their products and because they are so many different suppliers (700), I can conclude that XXL is not under a severe threat from the suppliers. The only danger I can see is that some suppliers are moving towards having their stores and online stores sell their products directly to their customers.

Competitive Rivalry

The rivalry between the existing players in the industry can be through different methods like lowering the prices, developing new products, advertising, and updating their services and products. For example, in Norway, we have a few big companies in the sports industry. That is why they have robust competition, impacting their profitability negatively. Another factor that can raise the rivalry between the sporting firms is their products not being different. They are all the same products in various stores, so the customer will quickly change their choice of where to buy. This will also put pressure on the actors in the market to have more robust competition for price and the quality of their services. That is why I can conclude that an intense rivalry can affect the sports industry's competitiveness.

7.2.5 Value Chain Analysis

In this chapter, I will look at XXL's value chain. Then, I will evaluate the value chain to find out how much it is creating value for XXL company and how it can get more efficient in creating value.

Inbound & Outbound Logistics

There are two central warehouses for XXL company. These two warehouses are in Norway and Sweden (XLL, 2021). The main objective for the warehouse in Norway is to supply the Norwegian XXL stores with products of XXL. The other warehouse is in Sweden and is mainly responsible for providing to the XXL stores in Finland and Denmark, also previously Austria's XXL stores. These two warehouses operate with highly advanced robots delivered to XXL from AutoStore AS. This will play an essential role in reducing the expenses for the warehouse in terms of transporting and overall warehouse costs. Costs of goods are considered among the highest fees in the XXL company, which is why reducing these costs through making the warehouse operations more cost-efficient will positively impact the profitability of XXL company. Furthermore, we can see in the annual reports for 2022 that XXL is also moving on reducing the inventory to make the warehouse costs more efficient (XXL, 2023).

Sales, Operations & Service

The sales and services activities in XXL are among the activities done in each store. They can vary in the quality of these activities based on the employee's knowledge and the services they give to the customers. XXL has the Big-Box concept, which provides a wide range of products so customers can find everything they want in sports products in XXL. This concept is unique to XXL, and combining this with employees who are specialists in different products will give good results in making the customers more positive about XXL products. This will also create more value and help reduce the XXL company's overall costs.

Furthermore, launching the fit station and automating the purchasing of products in the stores without the need to go the traditional way of buying products made the customer satisfaction of XXL overall higher. That will, in turn, help increase the company's profitability. Customer services also play an essential role. XXL has been giving updates about the products to its employees and continues to educate them to provide high customer service. Despite these efforts, XXL has been scoring low on customer satisfaction and loyalty based on the last

report from BI that sent inquiries to customers that answered some questions. XXL scores lower than Sport 1 and Intersport (Handelhøyskolen BI, 2023).

Marketing

XXL considers marketing spending essential for a higher trademark, customer satisfaction, and loyalty. Therefore, XXL uses different channels for marketing like TV, Newspapers, social media, and radio. The strategy that XXL uses for marketing is spending a lot on marketing and, compared to competitors, spending more on building a trademark and being well-known to the customers. That is why the costs will increase because of the big spending on marketing, but at the same time, the sales volume will also increase, the market share and the revenue.

Support Activities

The supporting activities also play an essential role in XXL's value creation. For example, human resource management is a necessary part of the company. XXL has 4 749 employees; among them, there are 1 900 female employees (XXL, 2023). That indicates that XXL is also working on CSR by moving toward gender equality in the working place. In addition to that cultural environment in the firm must also be good, considering the large number of workers. A good working climate and culture will help reduce personal costs by not having many workers that get sick and want to rest, which will harm XXL overall.

The other supporting activity is technology development. We can see that in XXL, the warehouses are getting more automatic by having more robotic systems that take over the human workers, positively reducing overall personal costs. The online store is also upgrading so that XXL can build on the trend that more and more people are purchasing their products online. The following investment is in a solar cell on the top of the building of XXL warehouses (XXL, 2022), which is an investment that is highly recommended given these high prices of electricity these days. Reducing the cost of electricity in these warehouses will lower the company's overall cost. We must also remember that having all these investments in the XXL company will also increase the total depreciation cost of the company.

7.2.6 Strategic Capabilities

VRIO analysis determines XXL's resources to give the firm a competitive advantage. The theory of resources suggests that finding out the company's capabilities in its recourses (tangible and intangible) that are valuable and managed correctly will give the company a

competitive advantage. In addition, the VRIO analysis will answer why companies in the same industry appear differently and perform differently. The table below will explain the most critical resources of the XXL company.

Resource	Valuable	Rare	Difficult to Imitate	Organized to exploit	Competitive Advantage
Localization	Yes	No	No	Yes	Parity
Business Culture	Yes	Yes	Yes	Yes	Sustained
Big-Box Concept	Yes	Yes	Yes	Yes	Sustained
Reputation	Yes	No	Yes	No	Parity

Table 7.1

The VRIO analysis is about looking at the resources and determining if these resources are valuable, rare, difficult to imitate, and well organized. These criteria will give a particular resource a competitive advantage to the company. That is why we can see that two companies in the same industry with many similarities can still perform differently if they have different valuable resources. However, suppose a company with strategic resources that fulfill all these criteria will not necessarily keep this advantage forever because the industry will change. In that case, the demand will change, and the technology will change also. That is why each company has to continuously work on its resources to keep its competitive advantage in the future also.

<u>Localization</u>

The localization of the XXL stores is spread throughout the strategic places near big cities in the three Nordic countries (Norway, Sweden, and Finland). This way, XXL stores are available to most of the public (XXL, 2023). Considering the criteria of the VRIO analysis when looking at this resource, we can see that this resource is valuable. Still, it is not rare since each competitor will have the opportunity to open new stores in similar cities where XXL has stores. It is also not difficult to imitate since it will not be complicated or challenging to open new stores when competitors discover that having a new store in a specific city will give them a competitive advantage. The last criterion is that the store is spread in the Nordic countries in a good way, and XXL has been organizing the choices of

cities in a way that is based on the demand from the sports market. In conclusion, this resource will give a moderate competitive advantage since it does not fulfill all the criteria for being a strategic resource.

Business Culture

The employees in XXL company are over 4000+, and they play a critical role in combining and connecting the firm to the customers. Their performance in their job will result in higher earnings and better profitability. That is why XXL needs to build an excellent business culture. A good business culture will appear attractive to new employees seeking to start working in a company with a good business culture. At the same time, XXL will have the opportunity to choose employees that fulfill the desired criteria that XXL wants. A good business culture will be difficult to copy by other competitors, giving the company a higher reputation. This resource is considered valuable to every company, and it is a rare resource since every business culture in a company is unique to its own. A company with so many employees that form a group of people can create a good business culture that will be rare, and it will be one of its kind. XXL's business culture fulfills the criteria of being rare. The following criteria are if the resource is hard to imitate, and this is also something that the business culture of XXL fulfills since the environment and the connection between the employees in these stores and the communication codes they use is not easy to copy by the competitors. XXL does not use money compensation to create a good climate in the store. It uses different social activity opportunities and creates an environment in the store that will make the employees enjoy their work throughout the day. The last criterion is if this resource is being organized well, and XXL has done this since this business model has been playing a role in the satisfaction of the employees and their performance (XXL, 2022). In conclusion, the business culture in XXL is a strategic resource that gives XXL company a sustained competitive advantage.

Big-Box Concept

The big-Box concept is considered a valuable resource by XXL since it has been helping the company increase profitability (XXL, 2019). The idea is about having stores that are big but at the same time, each store has the same building, and the way the products are organized in the store is similar between each store so that no matter which stores the customer is going to, the organization of the products in the store is similar. This concept plays a role in reducing logistics costs since the logistics system is identical throughout all the stores of XXL. When

reducing the expenses, XXL also will be able to reduce the prices of their products. This concept is considered rare also since the competitors of XXL are not using it. This resource is also regarded as complex to copy since this concept will require significant investments in all the stores so that all of the stores have the same logistic systems. The smaller companies that cannot make considerable investments can also not copy this concept. However, the organization of this resource is also well done since it has been implemented in all the stores of XXL. In conclusion, the Big-Box concept is a resource that gives XXL a strategic capability and competitive advantage.

Reputation

Reputation is critically important for every company because it will give higher profitability, better deals with the suppliers, loyalty of customers, and a more robust business culture. Reputation is considered a valuable resource if XXL benefits from it in a good way. A good reputation is not a rare resource since many other companies can have it. But simultaneously, it is impossible to copy the same reputation quality to other companies. Each company has to build its reputation, so we can say that it is impossible to imitate the importance of other companies. XXL has not been able to get the full effect of the reputation because it has not been organized well to serve the company's profitability. In conclusion, we can say that this recourse will give a low to moderate competitive advantage to XXL since many other companies have a good reputation, and this recourse has not been organized effectively.

7.3 SWOT

We can use the SWOT analysis to include the most critical findings in the extern and intern analyses. We find the strengths and weaknesses in the intern analysis. And we see the opportunities and threats in the extern analysis. Combining all the findings in the SWOT will give us a good indication of how we should plan for the future and what we should consider as essential factors to the future growth and profitability of XXL company.

<table>
<tr><td colspan="2"><u>Strengths</u></td><td colspan="2"><u>Weaknesses</u></td></tr>
<tr><td colspan="2">

- **Big-Box Concept**
- **Integrated Value Chain**
- **Business Culture**
- **Access to Capital**

</td><td colspan="2">

- **Low Reputation**
- **Low customer satisfaction and loyalty**
- **Weather-dependent**

</td></tr>
<tr><td colspan="2"><u>Opportunities</u></td><td colspan="2"><u>Threats</u></td></tr>
<tr><td colspan="2">

- **Growth in Online Shopping**
- **Training- and Healthy Lifestyle Trend**
- **Technological Development**
- **Sustainable Growth Solutions**

</td><td colspan="2">

- **High-Interest Rate**
- **Intense Rivalry**
- **High Inflation**
- **Lower Demand In The Market**
- **Foreign Competitors**

</td></tr>
</table>

Table 7.2

8. Forecasting

In this chapter, we will start looking forward to the future and using what we learned in chapters 6 and 7 to estimate the future fundamental values and numbers. I have calculated critical numbers for the forecasting period using the financial statement and strategic analysis. Combining the historical development in the income statement and balance sheet with the strategic research and its conclusion in the SWOT, I could estimate reasonable vital numbers that can be used for future development in XXL. The assumptions and critical findings in chapters 6 and 7 will determine the forecasted future value of XXL. We can see in the table below the development in actual numbers of the forecasting period and the estimated FCFE throughout the forecasting period.

	2022	Forecast Period				
		2023	2024	2025	2026	2027
NOPAT	-406	418	426	435	444	452
+Depreciation Expense	732	536	547	557	569	580
-/+ incr./decr. In NOWC	462	-504	-19	-20	-20	-21
-/+ incr./decr. In NONCA (including dep!)	-645	-138	-657	-670	-684	-697
FCFF	143	312	296	302	308	314
+/- Incr./Decr. In NIBD excluding cash	518	-83	-267	-279	-291	48
Financial expenses (4) (F)	-63	-163	-149	-135	-121	-123
Tax-shield from NFE	14	36	33	30	27	27
FCFE	612	100	-87	-82	-77	266
- (super) dividends	-231	-103	87	82	77	-266
Cash surplus in period	381	-3	0	0	0	0

Table 8.1

8.1 Forecasting Model

The free cash flow forecasting model is made of several parts. First, we have to start forecasting the income statement and balance sheet. Then, I will explain further the different parts of the forecasting model I have been using.

The revenue forecast

This variable is the most crucial in forecasting, and most other parts depend on this variable in one way or another. Therefore, I have used different approaches to estimate revenue growth in the forecasting period. First, by taking the average growth of a period of historical data, by taking the median of these growths, and at the same time by looking at the strategic analysis and its SWOT and, based on the overall situation, decide a reasonable growth rate for the forecasting period.

Forecasting the income statement

Using the forecasted revenue value together with the historical development of the critical other lines in the income statement, we will come to a conclusion and estimation for some strong values in the income statement like the cost of gods sold, depreciation and amortization, other operating expenses, personal expenses, tax, and NOPAT.

Forecasting the balance sheet

Using the revenue growth estimation and the balance sheet development, we can forecast critical figures like working capital, net property plant and equipment, nonoperating assets, current and non-current liabilities, and total equity. Further, we also assume that all net income is paid as super dividends. In other words, we don't have any retained earnings.

Calculating FCF

The last step is calculating the free cash flow and using that as a basis for the valuation process.

8.2 Forecasting Period

XXL, since 2014 has been getting a decline in its growth rate by having lower and lower growth rates each year. However, the growth rate was positive until 2019. Since that year, the growth rate has been negative except for 2020, the pandemic year. The growth was positive at 15,9%, which is unique because of the pandemic. So I have decided to have a five-year forecasting period. I think this is a reasonable period of years because if I had a shorter period,

I would get a significant undervaluing of the firm. Also, a more extended forecasting period will result in inaccurate estimation values for some key figures. That is why I think a five-year period is sufficient for an accurate estimation.

8.3 Revenues

The table below shows us that the revenue has declined in their growth each year. Some factors are the intense rivalry and price war between the competitors throughout these years, as explained in Chapter 7. XXL had growth in the inventory, which created extra costs these last years. That is why XXL chose to reduce the price of their products to eliminate these significant amounts of products in the inventory. Increasing threats from foreign competitors that offer the same products with lower prices made XXL choose to lower their costs, as we mentioned in the SWOT in Chapter 7. Higher interest rates made people with loans use less money, which has also affected lowering the prices. These facts explain why we have seen lower revenue these last few years.

Year	2 014	2 015	2 016	2 017	2 018	2 019	2 020	2 021	2 022
Operating Revenue (O)	5 212	6 486	7 813	8 709	9 475	8 992	10 423	10 006	8 755
Change in Growth		24,4 %	20,5 %	11,5 %	8,8 %	-5,1 %	15,9 %	-4,0 %	-12,5 %

Table 8.2

Based on the growth analysis performed in Chapter 6, we can assume that the lowering of prices will continue because it is still a high level of inventory, which will continue in the next year. At the same time, as mentioned earlier, exiting the Austrian market will cut losses in this market, provide new capital from selling the property there, and positively impact XXL. Furthermore, this will allow XXL to invest further in marketing and technology to increase sales volume. That is why I have decided to have an expected revenue growth, like 2% in the coming years and the terminal year, based on the analysis in chapters 6 and 7.

8.4 Expenses

In general, the expenses are calculated using the revenue as a percentage. This way, the expenses will follow the revenue growth. There are three types of expenses in XXL company. First, we have the Cost of gods sold, personnel expenses, and other operating expenses. Using the table below from Chapter 6, financial statement analysis, we can understand the cost development and the estimated forecasting values. Also, we can make reasonable assumptions using Chapter 7, the strategic analysis.

XXL income statement forecast assumptions				Forecast period				
Year	2020	2021	2022	2023	2024	2025	2026	2027
Revenue growth		-4,0 %	-12,5 %	2,0 %	2,0 %	2,0 %	2,0 %	2,0 %
Cost of gods sold as % of revenue	62,5 %	59,2 %	67,6 %	60,0 %	60,0 %	60,0 %	60,0 %	60,0 %
Personnel expenses as % of revenue	17,9 %	18,8 %	19,8 %	18,0 %	18,0 %	18,0 %	18,0 %	18,0 %
Other operating expenses as % of revenue	8,9 %	10,0 %	10,1 %	10,0 %	10,0 %	10,0 %	10,0 %	10,0 %
Depreciation and amortization as a % of PPE	22,1 %	27,4 %	26,9 %	20,0 %	20,0 %	20,0 %	20,0 %	20,0 %

Table 8.3

The cost of goods sold has been around 60% of the revenue in the last three years. Given the higher inflation and weaker krone, it will be more expensive for XXL to purchase from suppliers from outside Norway. At the same time, having a higher interest rate will push the prices down so that cost of gods purchased inside Norway will get lower in the following years. Based on these analyses, I have decided to have the estimated cost of gods as a % of revenue as 60%.

The personnel expenses have been approximately 18% to 20% in the last three years. We can see that increase as the average wage increases each year and the inflation effect. However, given that the technological development in XXL stores has made more and more tasks done by robots that take the employees' jobs, we can estimate that there will not be a significant increase in personnel expenses for the coming years, and it will be stable. In addition, other facts like growth in demand for purchases in online stores, big-box concepts, and integrated value chains will keep the need for employees at a lower level. Based on these analyses, we can estimate that the personnel expenses as a percentage of the revenue for the coming years will be calculated at an 18% level.

Other operating expenses include cleaning, security, repair & maintenance, and additional typical costs. These costs are similar to the overall employees in XXL, so the same circumstances will also be right for these costs. At the same time, we can see that the other operating expenses have been stable throughout those last years, at a 10% level. Moreover, there is no indication in the strategic analysis that there will be any changes, so we will keep this rate (10%) at the same level as our estimation for this post in the coming years.

Inflation is another factor that must be considered in the forecasting process. Now the inflation is higher than the target inflation for the Norges Bank, which is to hold the inflation at a stable rate of around 2% per year. Therefore, when estimating the WACC, I have considered these inflation rates now and use these rates accordingly in the valuation process. However, there is room for uncertainty in all these assumptions.

8.5 Depreciation and Reinvestment Needs

Forecasting the depreciation can be done using two approaches. The first one is taking the percentage of the revenue, which is inaccurate and unreliable because the depreciation will grow yearly when the income increases. The other option which is more reliable is using PP&E. Here. We calculate the depreciation as a percent of the total PP&E. This will give us a more accurate percent value that we can use in the future. For the last three years, we have got depreciation as a percentage of PP&E by around 27%, which has been stable for the previous two years. Given that we have a decrease in revenue, making significant investments and depreciation should be lower is not recommended. In conclusion, we estimate the yearly depreciation rate level at 20% of the total PP&E.

Reinvestment will be difficult because, at this stage, making significant investments is challenging. Given the current situation, XXL is going through a decline in its revenue and has the ambition to make the inventory smaller by selling products at a lower price, reducing the margin, and making it difficult to make significant investments.

8.6 Working Capital

Net operating working capital takes the firm's assets minus the current liabilities. Net operating working capital contains trade inventories, other receivables, accounts payable / supplier finance, tax payable, public duties payable, and other current liabilities. These items can be found by first finding the historical data for these posts. Then, using the revenue again, we can take the percentage of the revenue by dividing each item by the actual revenue for that year. In the table below from Chapter 6, two items have been interesting to analyze. First, the total inventories have been growing, which is not what XXL wants. XXL wants to reduce its inventories. The next item is accounts payable, which is very important to focus on. It has gote dobbel as high compared to 2021. In 2022 there has been a high increase in accounts payable. This is officer negative with concerns about the liquidity of the firm. The next step is the estimation of these items in the working capital. I have chosen to look at the levels of the last three years and take the average plus adjusting for some key factors that can affect these values from the SWOT analysis in Chapter 7, after that using these estimated percent rates to estimate the future values of these items in the working capital.

Total Inventories (O)	1 835	2 220	2 328	2 233	2 277	2 323	2 369	2 417
Trade receivables (O)	166	161	60	179	182	186	190	193
Other receivables (O)	118	440	200	98	100	102	104	106
Accounts Payable and Supplier Finance (O) -	532 -	644 -	1 214 -	714 -	729 -	743 -	758 -	773
Tax Payable (O) -	16 -	102 -	50 -	18 -	18 -	19 -	19 -	19
Public duties payable (O) -	391 -	544 -	360 -	357 -	364 -	372 -	379 -	387
Other Current liabilities (O) -	574 -	600 -	495 -	447 -	455 -	465 -	474 -	483
NOWC	606	931	469	973	993	1 013	1 033	1 054

Table 8.4

8.7 Taxes

The corporate tax rate in Norway today is 22% (PWC, 2023). However, there have been suggestions from the NHO to reduce this tax rate further in the future. Therefore, I have used a tax rate of 22% in the DCF model for the valuation. I have also assumed this rate will remain at the same level for the next five years. Since five years is not very long, I have assumed that the same tax rate will be at this level throughout these five years.

8.8 Terminal Value

Using the discounted cash flow model, we will have two parts of the forecasting period. The forecasting period contains years. In my case, I have used five years for the forecasting, and the last year which is 2027, will be the terminal year. So the years before the terminal year, which is the final year, we can make assumptions that can be accurate and precise, but in the years that come after the terminal year, there will be much more uncertainty about our assumptions. But the firm will still exist and have a cash flow, which is why we need to calculate the terminal value differently so that we can find the cash flow for the terminal year and all the years that come after the terminal year so that we can get an idea about how much value will be added to the company's value after the terminal year.

There are different ways of calculating the terminal value. The perpetual growth method assumes that a company will get cash flows at a constant rate forever, while the multiple exit method assumes that the company will be sold in the future. I have chosen the perpetual growth method to calculate the terminal value. Using this formula, I will be able to calculate the terminal value. $PV \ of \ Terminal \ per \ 31.12.22 = \frac{\frac{FCF \ (2027)}{WACC - Revenue \ growth \ rate}}{(1 + WACC)^{\wedge}4}$.

9. Valuation

The valuation is done in this chapter. Here we will be performing the valuation based on the further analysis we have done in the previous chapters, the assumptions we have made, and the key numbers and values we found using different formulas, which will help us in the valuation process. I will be performing the valuation on two approaches. The first one is the discounted cash flow using four methods for valuation in this approach. The second approach is relative valuation. Finally, at the end of this chapter, I will be given a conclusion to the different results of the valuation process.

9.1 Discounted Cash Flow Valuation

FCFF & EVA Methods

I have explained these methods together since they gave me the same results for the market value of equity.

	Nå	1	2	3	4	Terminal
		Explicit Forecast period				Terminal
	2022	2023	2024	2025	2026	2027
NOA	6 403	6 509	6 639	6 772	6 908	7 046
NOPAT		418	426	435	444	452
WACC	7,49 %					
NOA t-1 x WACC		480	488	497	507	518
EVA		-62	-61	-63	-64	-65
Discountingfactor		0,93	0,87	0,81	0,75	
PV av EVAs i Explicit per 31.12.2022		-57	-53	-50	-48	
PV av EVA i Terminal per 31.12.2027					-1 186	
PV av EVA i Terminal per 31.12.2022					-888	
Sum alle EVAer per 31.12.2022	-1 097					
EV per 31.12.2022	5 306					
NIBD per 31.12.2022	3 338					
MVE per 31.12.2022	**1 968**					

Table 9.1

I will start with the EVA method, where we take the NOA, multiplies it with the WACC, and then subtract it from the NOPAT. Next, we create the discounting factor using the WACC and find the present value for the forecasted period and the terminal year. Then we see the EV by subtracting the NOA for 2022 from the sum of the present value. Finally, we remove the NIBD from the EV to reach the MVE.

FCFF	Now	Explicit Forecast period				Terminal
	2022	*2023*	*2024*	*2025*	*2026*	*2027*
FCFF		312	296	302	308	314
WACC	7,49 %					
Discount factor		0,93	0,87	0,81	0,75	
PV of FCFF Per 31.12.2022		290	256	243	231	
PV of terminal per 31.12.2027					5721	
PV of terminal per 31.12.2022					4286	
EV per 31.12.2022	5306					
NIBD per 31.12.2022	3338					
MVE per 31.12.2022	**1968**					

Table 9.2

The following method is the FCFF, where we take the free cash flow to the firm, discount it using the WACC, and discount the terminal value. After that, we get the EV and subtract NIBD from it to get the market value of the equity. It is worth mentioning that these two methods will give us the same value for the MVE.

FCFE & RE Methods

These two methods will also give me the same result, so using these two methods will be two different ways toward the same goal or result.

DDM	Present	Explicit Forecast period				Terminal
	2022	*2023*	*2024*	*2025*	*2026*	*2027*
R'e	**14,88 %**					
Dividend		103	-87	-82	-77	266
Discount factor		0,87	0,76	0,66	0,57	
PV Dividend in Expl. Per 31.12.2022		90,03	-66,14	-54,40	-44,45	
PV Dividend in terminal per 31.12.2027					2068	
PV Dividend in terminal per 31.12.2022					1188	
MVE per 31.12.2022	**1 113**					

Table 9.3

The FCFE, the dividend discount method, focuses on the dividend paid to the shareholders. We discount it the same way as these previous methods, but this time we will use the cost of equity to perform the calculation. Again, finding the terminal value and the forecasted period and summing them together will give us the market value of equity.

	Now	Explicit Forecast period				Terminal
	2022	*2023*	*2024*	*2025*	*2026*	*2027*
BVE	3067	3255	3652	4063	4490	4580
Net income		291	310	329	349	356
R'e	14,88 %					
BVE t-1 x re		456	484	543	605	668
RE		-165	-175	-214	-255	-312
Discountingfactor		0,870473538	0,75772418	0,659578847	0,574145932	
PV of REs i Explicit per 31.12.2022		-144	-132	-141	-147	
PV of RE i Terminal per 31.12.2027					-2422	
PV of RE i Terminal per 31.12.2022					-1390	
Sum of all REer per 31.12.2022	-1954					
MVE per 31.12.2022	**1113**					

Table 9.4

The equity method is the following: the book value of equity for the past year and multiply. First, the present value of the forecasting period and the terminal value must be subtracted from the book value of the equity of the year 2022. Then we get the market value of equity.

In conclusion, using the table below, we can find the average of these four methods and estimate the share price and the market value of equity in the discounted cash flow approach.

XXL ASA	EVA	FCFF	FCFE	RE	Average
MVE	1 967 747 475	1 967 747 475	1 112 589 732	1 112 589 732	1 540 168 603
Shares Outstanding	387 944 706	387 944 706	387 944 706	387 944 706	387 944 706
Estimated Share price	5,07	5,07	2,87	2,87	3,97
Share price at 30.12.22	3,82	3,82	3,82	3,82	3,82

Table 9.5

We can see that the average of these four methods is 3,97 NOK, which is close to the actual share price in a stock exchange. We will further combine this average share price and market value of equity with the relative valuation method results to get a more accurate and reliable estimation of the share price and market value of the equity.

9.2 Relative Valuation

Relative valuation is another approach for valuation when we want an alternative way of valuing a company instead of using the discounted cash flow model. This approach compares the company's value to its competitors to estimate how much the company is worth. First, we have to choose competitors with many similarities in size, risk, and business model, and we have to convert their market value into trading multiples that can be compared. These multiples will help us determine if the company is undervalued or overvalued. To find similar competitors, we had to look at some companies identical to XXL, but not necessarily in the sports industry, because in Norway, we don't have companies like XXL listed on the Oslo

Stock Exchange. Therefore, I will use three multiples in the relative valuation process: Enterprise value / EBIT, Price / Earnings, and Enterprise value/sales. The table below will give us the necessary information about these key figures that we need so that we can calculate the Enterprise Value.

Company Name	EV/EBIT 2022	P/E 2022	EV/S 2022
DICK'S	7,69	12,92	1,15
HIBB	5,30	6,55	0,66
SPWH	7,83	8,31	0,50
HM-B	9,70	27,32	1,24
Median	**7,76**	**10,62**	**0,91**

Table 9.6

9.2.1 Enterprise Value/EBIT

The EV/EBIT ratio is called the enterprise multiple. This is one of the most common multiples used when comparing the relative value of different companies. The formula of these multiple ratios is as follows. $\frac{EV}{EBIT} = \frac{(Market\ value\ equity + net\ interest\ bearing\ debt)}{EBIT}$.

2022 has been an unusual year with a very negative performance in XXL, so I have chosen not to use the data numbers from this year. Instead, I will use the average of 2020 and 2021 when I will use the EBIT for XXL company.

$$EBIT\ average\ of\ 2020\ and\ 2021 = \frac{364 + 391}{2} = 377,5$$

The table above shows that these companies' multiple EV/EBIT varies, but we are interested in the median, which is 7,76x. Therefore, putting this number into the formula Enterprise Value = EBIT * EV/EBIT ratio = 377,5 * 7,76 = 2 929,4m NOK is the enterprise value for the XXL company.

9.2.2 Price/Earnings

The P/E ratio is a typical equity multiple used as an indicator to determine growth opportunities. There are two types of P/E. One was called trailing, and the other was called forward. Forward focuses on the future and is used to compare current earnings with earnings in the future. The trailing type looks at the historical developments of the earnings. I have chosen to use the trailing type because it will also consider last year's bad performance and the effects of the pandemic. The formula is as follows. $\frac{P}{E} = \frac{Market\ value\ of\ share}{EPS}$. We need to

find the net income again by finding the average between both numbers for 2020 and 2021. We must do that since 2022 was a special year and a negative net income.

$$Net\ income\ average\ of\ 2020\ and\ 2021 = \frac{126 + 193}{2} = 159,5$$

The net income is 159,5, and we will use the P/E ratio median of 10,62. As a result, we can find the equity value of XXL. The market value of equity = Net income * P/E multiple medians = 159,5 * 10,62 = 1 693,9 is the market value of equity.

The next step is calculating the enterprise value using this formula: Enterprise Value = equity value + debt – cash and cash equivalents = 1 693,9 + 3 338 – 552 = 4 479,9m NOK is the enterprise value for the XXL company.

9.2.3 Enterprise Value/Sales

These multiple ratios measure the company's total value to its total revenue. When we get a high value of these multiple ratios, we can conclude that this company is overvalued, especially if it is over value 3. In contrast, if the value is below 1, it will be considered an undervalued company, especially a ratio below 1. At the same time, we should compare the value of this ratio between all the competitors. The following formula is used when calculating this ratio. $\frac{EV}{S} = \frac{Equity\ Value + Debt - cash\ and\ cash\ equivalents}{Annual\ Sales}$.

Using the median of the EV/S ratio in the table above 0,91, we can find the EV for the XXL by multiplying this median by the total revenue in 2022. The formula follows Enterprise Value = Sales * EV/S multiple medians = 8 755 * 0,91 = 7 967m NOK is the enterprise value for the XXL company.

9.3 Valuation Summary

We have performed valuation using different approaches like discounted cash flow and relative valuation. And in each of these approaches, we have performed valuation using other methods. I am now given a summary of these results. First, I will find one value for enterprise value by combining the results from all these different ways of calculating the enterprise value.

The DCF model, as we know, will use the future expected cash flows to determine the company value. At the same time, the relative valuation depends on the actual number from the different companies to approximate the company value. The DCF includes more details in the calculation of the company's values. Still, at the same time, it also depends on many

assumptions, which will give room for manipulation and misleading results. A combination between the relative valuation and the DCF will be a good way of estimating the company's value.

The companies used as comparacion in the relative valuation are exactly like XXL but have many similarities in size, risk, and market share. Therefore, in the previous section, we concluded that we would use the companies' median value in these three methods in the relative valuation. The results we got using different methods in the valuation process are as follows:

EV/EBIT median ratio = 2 929,4 - P/E median ratio = 4 479,9 - DCF approach EV = 5 306 - EV/S median ratio = 7 967. Those four values come from the DCF and relative valuation approaches. I will find the median of those four values to estimate the final result of the XXL's company value. EV of XXL $= \frac{4\,479,9 + 5\,306}{2} = 4\,893$ is the XXL's value on 31.12.2022.

10. Uncertainty Considerations

10.1 Sensitivity Analysis

When performing the DCF process, we have to make some assumptions to assemble all the parts needed for completing the valuation. For example, forexempel the discount rate, forecasting period, terminal value, and growth rate. I have made these assumptions using the analysis in chapters 6 and 7. The assumptions are based on the financial statement analysis, where I have calculated the historical values of the past year's historical data and combined that with the strategic analysis, where I have looked at the external and internal factors that affect the company. But at the same time, no assumption will be perfect, and there is not possible to be able to know the development of the share price and the future cash flow of the company in advance. Therefore, these assumptions must be tested using different methods to determine how different parameters will impact each other. For example, using sensitivity analysis, we will be able to try different parameter that is independent and have an influence on the dependent variables. This way, we can see how these changes will affect the valuation of the XXL. These simulations will show us different valuation results when changing key variables.

10.1.1 Simulation: Beta and Market risk premium

Simulating the sensitivity of the cost of equity will give us an idea about our assumptions and the calculated values that have been done based on these assumptions. I have been simulating how changes in the market risk premium and beta will affect the cost of equity. And I have chosen to have a constant risk-free rate on this simulation. As we can see, the green values are lower than our current cost of equity, which is 14,88%. And the red values are higher than our current cost of equity. So we can see that the cost of equity is very sensitive to changes in the market risk premium and beta.

Sensitivity of cost of equity		Beta						
		1,72	1,62	1,52	1,42	1,32	1,22	1,12
Market risk premium	6 %	13,32 %	12,72 %	12,12 %	11,52 %	10,92 %	10,32 %	9,72 %
	7 %	15,04 %	14,34 %	13,64 %	12,94 %	12,24 %	11,54 %	10,84 %
	8 %	16,76 %	15,96 %	15,16 %	14,36 %	13,56 %	12,76 %	11,96 %
	9 %	18,48 %	17,58 %	16,68 %	15,78 %	14,88 %	13,98 %	13,08 %
	10 %	20,20 %	19,20 %	18,20 %	17,20 %	16,20 %	15,20 %	14,20 %
	11 %	21,92 %	20,82 %	19,72 %	18,62 %	17,52 %	16,42 %	15,32 %
	12 %	23,64 %	22,44 %	21,24 %	20,04 %	18,84 %	17,64 %	16,44 %

Table 10.1

10.1.2 Simulation: Cost of Equity and Growth Rate in the terminal period

This simulation tests the share price sensitivity when we change the growth rate and cost of equity values. The red numbers in the table below show us the share prices that are higher than our current estimated share price, and the green numbers are lower than our current share price value that we have estimated. I have chosen the cost of equity instead of the WACC since it will also influence the WACC calculation, affecting the enterprise and share price values. In addition, we can see that the changes in the growth rate have a significant influence on the share price value. In conclusion, the share price is very sensitive to changes in the growth rate and the cost of equity rate.

Sensitivity in estimated share price		Cost of equity				
		16,00 %	15,50 %	14,88 %	14,00 %	13,50 %
Growth rate terminal period	0,00 %	kr 4,05	kr 4,26	kr 4,53	kr 4,95	kr 5,21
	0,50 %	kr 3,91	kr 4,13	kr 4,41	kr 4,85	kr 5,12
	1,00 %	kr 3,76	kr 3,98	kr 4,28	kr 4,74	kr 5,03
	1,50 %	kr 3,59	kr 3,82	kr 4,13	kr 4,62	kr 4,92
	2,00 %	kr 3,40	kr 3,64	kr 3,97	kr 4,48	kr 4,80
	2,50 %	kr 3,18	kr 3,44	kr 3,78	kr 4,33	kr 4,67
	3,00 %	kr 2,93	kr 3,20	kr 3,57	kr 4,15	kr 4,52

Table 10.2

10.1.3 Simulation: Expenses as Percentage of Revenues and Cost of Equity

This simulation tests how changing the expenses percentage of revenue and cost of equity will affect the enterprise value. In the table below, we can see the effects of changing these variables on the enterprise value. Here we have the cost of equity increased by 0,5% each time, and the expenses as a percentage of revenue increased by 2% each time. Therefore, the highest enterprise value we get is 13 995 when we have the expense percentage and the cost of equity at their lowest rate. At the same time, we have the lowest value of enterprise value when the expenses as a percentage of revenue are at their highest level and the equity is at its highest level. My values in the valuation process for these two variables are 60% and 14,88%, giving us an enterprise value of 5 306m NOK for the XXL company.

Sensitivity in enterprise value		Cost of equity				
		16,00 %	15,50 %	14,88 %	14,00 %	13,50 %
Expences as percentage of revenues	54,00 %	12 154	12 483	12 915	13 584	13 995
	56,00 %	9 768	10 031	10 379	10 916	11 246
	58,00 %	7 381	7 580	7 842	8 248	8 497
	60,00 %	4 994	5 128	5 306	5 580	5 748
	62,00 %	2 607	2 677	2 769	2 912	2 999

Table 10.3

10.2 Scenario Analysis

Variables (2023-2027)	Bear	Base	Bull
Revenues Growth Rate	1 %	2 %	3 %
Expences as % of Revenues	62 %	60 %	58 %
ROIC	4,30 %	6,48 %	8,69 %
ROE	4,71 %	8,55 %	12,42 %
Share Price	0,26	3,97	9,13
Enterprise Value	3 287	5 306	8 285

Table 10.4

Scenario analysis is about looking at different scenarios that could happen in the future because it is not always possible to know precisely what could happen in the future, so we have to take into account that the worst-case scenario, a typical scenario as we predicted and a better scenario than what we predicted. To test different scenarios, I have chosen to change two critical variables: revenue growth and the cost of god as a percentage of revenue. All the other parts and calculations remain the same. The changes in these two variables are shown above in the table. These three scenarios are called the base case scenario, bear case scenario, and bull case scenario.

Base case scenario

The base case scenario is the scenario that I think will happen and base my thesis on. The base case scenario is based on financial statement analysis and strategic analysis. The assumption I made from these analyses to perform the valuation has given me the following values. Share price equal to 3,97 and enterprise value equal to 5 306. Together these other key values are shown in the table above.

Bear case scenario

This is the scenario where things don't go as planned, and we get problems with having wrong assumptions for developing the XXL company. The growth in the revenue was not as expected. It is where the growth is at 1%. In this scenario, we assume the market demand is lower than expected. XXL is losing market share, so it tries to sell its products at lower prices. Investments get reduced because of lower cash flows, and long-term debt is not paid. Based on this worst-case scenario, having revenue growth at 1% and the cost of goods as a percentage of revenue like 62%, we will get a share price of 0,26 NOK, and the enterprise value will be 3 287m for the XXL company. AS SHOWN IN THE TABLE ABOVE, the ROIC and ROE will also get lower than the base case scenario.

Bull case scenario

In these scenarios, we assume things go better than expected. First, we will see that sales volume is increasing, and XXL has gained a larger market share. The next development is the cost of gods rate, which is lower than expected since XXL has lowered the costs, and the inventory size is much smaller than expected. That will also improve the cash flow performance and make investment opportunities larger. Overall these facts and situations will improve the dividend policy by being able to pay more significant dividends to the shareholders. That will improve the situation more than I had foreseen in the base scenario. We can see in the table above the development by having a share price equal to 9,13, higher than the base scenario, and having an enterprise value equal to 8 285m for the XXL company. As a result, the ROIC and ROE values are also higher than the base scenario.

11. Discussion of the Analysis Results

The financial analysis was performed to analyze key issues and get critical information about the profitability, liquidity, and solvency of the XXL company in chapters 6.3, 6,4, and 6,5. As a result, the profitability and liquidity analysis shows us a negative trend in developing these key figures in XXL company.

The strategic analysis was performed to find out the strength and weaknesses of XXL, as well as find the opportunities and threats that XXL could face. I have been performing the macroeconomic analysis, PESTEL, Porter's five forces, VRIO, and value chain analysis. I have also concluded in the SWOT the most critical findings in all these analyses combining what I found of vital information to create a solid basis for making my assumption in the valuation process. The strength of XXL shown in the SWOT analysis confirms that XXL's strengths are the Big-Box concept, integrated value chain, business culture, and access to capital. The weaknesses of XXL are low reputation, low customer satisfaction, and weather dependent. The opportunities in XXL are Growth in Online Shopping, Training- and Healthy Lifestyle Trends, Technological Development, and Sustainable Growth Solutions. The threats are High-Interest Rates, Intense Rivalry, High Inflation, Lower Demand In The Market, and Foreign Competitors. I have used this key information to make assumptions about the growth and key numbers used for the valuation.

In the forecasting chapter, I have estimated, on the bases of both chapters 6 and 7, the assumptions for the revenue growth and used that as a base for calculating all the other key numbers like the depreciation, expenses, working capital, etc. the forecasting horizon is also decided in this chapter which is five years. So this chapter is the preparation of all the values that we need to calculate the value of the company and the share price in the next chapter, which is the valuation chapter.

In the valuation chapter, I have done a valuation process based on two approaches: the discounted cash flow and the relative valuation method. I have combined these two approaches to estimating the share price and the enterprise value. DCF contains more subjective estimation than the relative, objective valuation. Therefore, combining these two valuation methods will give a more accurate and reliable valuation result.

Lastly, I have considered the uncertainty of these analyses and the valuation I have done. The first sub-chapter is about the sensitivity of some key figures, using simulations to find out how different key figures will get affected when changing values of some variables that will

impact the valuation result. The following sub-chapter is about testing different scenarios that will impact the value of the company and our valuation process. First, we have the base scenario, when everything goes as planned. We have the bear scenario where everything does not go well, and things do not go as predicted in the valuation base case scenario. Here the enterprise value will be lower, and the share price will be lower. The last scenario is the bull case scenario which is in a situation where everything goes as planned and pluss it goes even better, our assumption will be confirmed even more through having higher growth and lowering the costs, and that will impact the share price, which will be higher and the enterprise value which will be higher also compared to the base case scenario.

12. Criticism of the Analysis

Across all the different chapters and parts of this thesis, there have been uncertainties and assumptions that have weaknesses in it. I have tried to underline these weaknesses in each part. But here, I will review the most critical points I have evaluated in this thesis.

The cost of equity, which has been an essential part of the valuation process in determining the WACC and further use it in the DCF, has had a critically important role in estimating the share price and the enterprise value. But we discovered that the cost of equity should be further evaluated in the sensitivity analysis to find out more about the accuracy of the cost of equity level. Using different values for the beta and market risk premium shows us that the cost of equity is very sensitive to changes in these two variables. Because of that, we can conclude that the cost of equity, which plays a crucial role, has a lot of uncertainty in its value since it is very sensitive to changes in its variables.

The following critique is about the assumptions we have made throughout this thesis. The assumption has been based on the best guess and the available information and data about the XXL company. The valuation has been focusing on how the future of XXL will look and with the limitation of how much we know about the intern situation in XXL. Our only information is through annual reports, proff forvalt newspapers, and financial news websites. To reduce the level of uncertainty, I have been performing a scenario analysis to test different scenarios.

Lastly, using the relative valuation also contains some uncertainty and has advantages and disadvantages. The valuation approach is quick, but at the same time, using this method, we need to find companies that are similar to XXL, and that is a tough job to do since XXL is the only listed company in Norway in the sports sector, I had to find other companies that have

some degree of similarities with XXL. So that will make the accuracy and reliability of the valuation lower. In addition, we will get the market sentiment in the estimated value using the relative valuation, so the value will partially depend on whether the market is pessimistic or optimistic. These facts confirm my critics of the valuation using the relative valuation.

13. Conclusion

In this thesis, I have had an objective in my research question to find out the fundamental value of XXL ASA on 31.12.2022. and further suggest to a fictive investor whether to buy, hold or sell their XXL shares. I have been performing various analyses using different theories and valuation methods. Different enterprise values using these other methods are as follows: EV/EBIT median ratio = 2 929,4 - P/E median ratio = 4 479,9 - DCF approach EV = 5 306 - EV/S median ratio = 7 967. The median of those four values is the final result of XXL's company value. For example, EV of XXL = (4 479,9+5 306)/2 = **4 893 000 000 NOK is the XXL's value at 31.12.2022.**

The next part of the research question was to suggest to fictive investors about buying, holding, or selling XXL shares. Here we have used two methods in the DCF approach to estimate the share price of XXL. Using the FCFF, we get a share price equal to 5,07. Using the FCFE, we get a share price equal to 2,87. I have chosen to take the average of these two values and get a share price equal to **3,97 NOK per share on 31.12.2022.**

The actual share price on Oslo Stock Exchange on that date was 3,82 NOK, which means that the XXL company is undervalued, and XXL's value is higher. Therefore, although my share price estimation concludes that the share price should have been higher, and it will go higher, even though the estimated share price is slightly higher than the actual share price at the Oslo stock exchange, I will still **give a suggestion to a fictive investor to buy XXL shares** since we can expect higher future cash flows.

References

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, Volume 17, Issue 1, 99-120.

Bøhren, Ø., & Michalsen, D. (2012). Finansiell Økonomi – Teori og praksis (4th ed.). Bergen: Fagbokforlaget.

Bodie, Z., Kane, A., & Marcus, A.J. (2017). Essentials of Investments (10th ed.). New York: McGraw-Hill Education.

Blume, M.E. (1975). Betas and Their Regression Tendencies. The Journal of Finance, Volume 30, Issue 3, 785-795.

Damodaran, A. (2023). Total Betas by Sector. Source from http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/totalbeta.html Dato: 08.04.23.

Damodaran, A. (2012). Investment valuation (3rd university ed.). Hoboken, N.J: John Wiley & Sons.

Dyrnes, S. (2011). Innløsning av aksjer etter aksjeloven og allmennaksjeloven - en taksonomi for verdibegreper Fagbokforlaget.

Dagbladet (2019). Legger seg flate – lover endringer. Source from https://www.dagbladet.no/nyheter/legger-seg-flate---lover-endringer/71327392

DN (2023). XXL fortsetter å tape markedsandeler: – Det er press på likviditeten. Source from https://www.dn.no/marked/xxl/handel/xxl-fortsetter-a-tape-markedsandeler-det-er-press-pa-likviditeten/2-1-1400837

DN (2023). Krisevinter for XXL – tapte nær en halv mrd. før skatt i fjerde kvartal. Source from https://www.dn.no/handel/xxl/handel/krisevinter-for-xxl-tapte-nar-en-halv-mrd-for-skatt-i-fjerde-kvartal/2-1-1399925

E24. (27.03.2023). Lønnsoppgjøret er i gang – krav om økt kjøpekraft. Source from https://e24.no/naeringsliv/i/EQKX4P/loennsoppgjoeret-er-i-gang-krav-om-oekt-kjoepekraft

E24. (2014.03.10). XXL-gründeren til E24: -Du må ikke være for glad i pengene dine. E24. Source from http://e24.no/naeringsliv/xxl/xxl-gr-nderen-til-e24-du-maa-ikkevaere- for-glad-i-pengene-dine/23307678

E24. (20.11.2018). 350-kronersgrensen fjernes fra 2020. Source from
https://e24.no/naeringsliv/i/vQlGk4/350-kronersgrensen-fjernes-fra-2020

E24 (2020). Nav fryser XXL-samarbeidet-krever arbeidsmiljø-tiltak. Source from
https://e24.no/naeringsliv/i/kJGXBL/nav-fryser-xxl-samarbeidet-krever-arbeidsmiljoe-tiltak

Fjeldstad, Ø. D., & Lunnan, R. (2018). Strategi (2.ed.). Bergen: Fagbokforlaget.

Gjønnes, S.H., Tangenes, T. (2014). Økonomi og viksomhetsstyring (2nd ed.). Bergen:
Fagbokforlaget Vigmostad & Bjørke AS.

Gjønnes, S. H., & Tangenes, T. (2016). Økonomisk styring 2.0. Bergen: Fagbokforlaget

Grønmo, S. (2016). Samfunnsvitenskapelige metoder (2nd. ed.). Oslo: Fagbokforlaget.

Handelshøyskolen BI. (2023). Norsk Kundebarometer 2023. Source from
https://www.bi.no/forskning/norsk-kundebarometer/bransjeresultater-2023/

Halvorsen, K. (2008). *Å forske på samfunnet: En innføring i samfunnsvitenskapelig metode.*
Oslo: Cappelen akademisk.

Investing.com (2023) Norway 10-Year Bond Yield. Source from
https://www.investing.com/rates-bonds/norway-10-year-bond-yield-historical-data

Johannessen, A., Christoffersen, L., & Tufte, P.A. (2011). Forskningsmetode for økonomisk-
administrative fag (3rd ed.). Oslo: Abstrakt Forlag AS.

Johannessen, A., Christoffersen, L., & Tufte, P.A. (2011). Forskningsmetode for økonomisk-
administrative fag (3rd ed.). Oslo: Abstrakt Forlag AS.

Kaldestad, Y., & Møller, B. (2011). Verdivurdering – Teoretiske modeller og praktiske
teknikker for å verdsette selskaper. Oslo: Interface Media AS.

Luehrman, T. A. (1998, August). Investment Opportunities as Real Options: Getting Started
on the Numbers. Harvard Business Review. Source from https://hbr.org/1998/07/investment-
opportunities-as-real-options-gettingstarted-on-the-numbers

Magasinet Sport. (2022). Sport Magasin For Sportbransjen Juni 2022. Source from
https://communicatorcloud.blob.core.windows.net/imagecontainer/d5fc7f76-de69-4a4c-9d76-
afe0b630452e.pdf

Norsk Sportsbransjeforening. (2021.09.09). Det globale salget av sportsutstyr økte med 11 % i pandemiåret. Source from https://sportsbransjen.no/nyhetsarkiv/det-globale-salget-av-sportsutstyr-okte-med-11-i-pandemiaret

Norsk Sportsbransjeforening. (2023.02.27). Sportskjedene etter pandemien. Source from https://sportsbransjen.no/nyhetsarkiv/sportskjedene-etter-pandemien

Norsk Sportsbransjeforening. (2023.01.09). Vinter i sportsbransjen. Source from https://sportsbransjen.no/nyhetsarkiv/vinter-i-sportsbransjen

Norsk Sportsbransjeforening. (2022.11.10). Brems i omsetningen hos sportskjedene. Source from https://sportsbransjen.no/nyhetsarkiv/brems-i-omsetningen-hos-sportskjedene

Nyeng, F. (2004). Vitenskapsteori for økonomer (4th ed.). Oslo: Abstrakt Forlag AS.

Norway, (2023). The Norwegian economy and business sector. Source from https://www.norway.no/en/central-content/en/values-priorities/the-norwegian-economy-and-business-sector/

Oystein D. Fjeldstad, Randi Lunnan (Red). (2018). Strategi (2. utgave).

OECD, (2023). Focus on the global economy. Source from https://www.oecd.org/coronavirus/en/themes/global-economy

Porter, M. E. (1980). Competitive strategy. New York: Free Press.

Porter, M.E. (1979). How Competitive Forces Shape Strategy. Harvard Business Review, March-April 1979, 137-145.

Porter, M. E. (2008). On Competition (Updated and expanded ed., Harvard business review book series). Boston, Massachusetts: Harvard Business School Press.

Petersen.C & Plenborg.T. (2012). Financial Statement Analysis. Harlow: Pearson Education Limited

PWC. (2023). Taxes on corporate income. Source from https://taxsummaries.pwc.com/norway/corporate/taxes-on-corporate-income

Reve, T. (2009). Fra næringsklynger til kunnskapsnav. Praktisk økonomi & finans, Volume 25

Saunders, M., Lewis, P., & Thornhill, A. (2016). Research Methods for Business Students (7th ed.). Essex: Pearson Education, Ltd., Prentice-Hall.

SSB, (2023). Consumer price index. Source from https://www.ssb.no/en/priser-og-prisindekser/konsumpriser/statistikk/konsumprisindeksen

SSB, (2023). Fakta om Norsk økonomi. Source from https://www.ssb.no/nasjonalregnskap-og-konjunkturer/faktaside/norsk-okonomi

Tvedt, J. (2000, May). Realopsjoner - verdien av fleksibilitet. Magma. Source from https://www.magma.no/realopsjoner-verdien-av-fleksibilitet

Vollmer, M. (2014). A Beta-return Efficient Portfolio Optimisation Following the CAPM: An Analysis of International Markets and Sectors. Source from Oria, https://ebookcentral-proquestcom.ezproxy.library.bi.no/lib/bilibrary/reader.action?docID=1783585&ppg=1.

XXL ASA (2022). XXL ASA Interim report Q1 2022. Source from https://www.xxlasa.com/wp-content/uploads/2022/04/XXL-ASA-Interim-report-Q1-2022.pdf

XXL ASA (2022). XXL ASA Interim report Q2 2022. Source from https://www.xxlasa.com/wp-content/uploads/2022/07/XXL-ASA-Interim-report-Q2-2022.pdf

XXL ASA (2022). XXL ASA Interim report Q3 2022. Source from https://www.xxlasa.com/wp-content/uploads/2022/10/XXL-ASA-Interim-report-Q3-2022.pdf

XXL ASA (2023). XXL ASA Interim report Q4 2022. Source from https://www.xxlasa.com/wp-content/uploads/2023/02/XXL-ASA-Interim-report-Q4-2022.pdf

XXL ASA (2022). XXL ASA Annual report 2021. Source from https://www.xxlasa.com/wp-content/uploads/2022/04/XXL-ASA-Annual-Report-2021.pdf

XXL ASA (2021). XXL ASA Annual report 2020. Source from www.xxlasa.com%2Fwp-content%2Fuploads%2F2021%2F04%2FXXL-ASA-Annual-Report-2020.pdf&clen=10182532&chunk=true

XXL ASA (2020). XXL ASA Annual report 2019. Source from https://www.xxlasa.com/wp-content/uploads/2020/04/XXL-ASA-Annual-Report-2019.pdf

XXL ASA (2019). XXL ASA Annual report 2018. Source from https://www.xxlasa.com/wp-content/uploads/2019/04/XXL-ASA-Annual-Report-2018.pdf

XXL ASA (2017). XXL ASA Annual report 2016. Source from https://www.xxlasa.com/wp-content/uploads/2015/04/XXL-ASA-Annual-Report-2016.pdf

Appendices

Litteraturmatrise

Author and Title	Focus	Approach	Results
Dyrnes, S. (2011). Innløsning av aksjer etter aksjeloven og allmennaksjeloven - en taksonomi for verdibegreper Fagbokforlaget.	Market price Asset value	Understanding the value concept	Learning about the value concept
Gjønnes, S.H., Tangenes, T. (2014). Økonomi og viksomhetsstyring (2nd ed.).	Strategic positioning	Learning about how the firm position itself in the market	Product differentiation will lead to strategic positioning
Porter, M.E. (1979). How Competitive Forces Shape Strategy	Competitiveness advantages	Understanding new entry barriers	Government regulation will be a barrier to new entrants to the industry
Gjønnes, S. H., & Tangenes, T. (2016). Økonomisk styring 2.0. Bergen	VRIN framework	Understanding the VRIN framework strategic capabilities	The resource has to be valuable, rare, hard to imitate, does not have substitutes, and well organized
Barney, J. (1991). Firm Resources and Sustained Competitive Advantage	RBV theory	Understanding the RBV theory	RBV theory takes into account that the company also controls every resource that the company has

Reve, T. (2009). Fra næringsklynger til kunnskapsnav. Praktisk økonomi & finans	Industrial clusters	Understanding the Industrial clusters	When there are significant and robust industrial clusters in a specific region, that region will become attractive for companies that have similarities in many ways.
Vollmer, M. (2014). A Beta-return Efficient Portfolio Optimisation Following the CAPM: An Analysis of International Markets and Sectors	The modern portfolio theory	Understanding The modern portfolio theory	According to this theory, an investor must create an optimal combination of risky assets with an expected return. The idea of this theory is spreading the investment on different assets.
Bodie, Z., Kane, A., & Marcus, A.J. (2017). Essentials of Investments (10th ed.).	The modern portfolio theory	Understanding The modern portfolio theory	A portfolio that consists of assets from different industries and each firm's growth factor is uncorrelated with each other will give us a situation where one stock loses money. But, in contrast, the other stock makes money, which will stabilize

			the expected return for the whole portfolio.
Bøhren, Ø., & Michalsen, D. (2012). Finansiell Økonomi – Teori og praksis (4th ed.).	The capital asset pricing model, CAPM	Critics of using the capital asset pricing model, CAPM	CAPM cannot be tested because an actual market portfolio can not be observed
Tvedt, J. (2000, May). Realopsjoner - verdien av fleksibilitet. Magma	Real option theory	Understanding real option theory	The traditional fundamental valuation of a company tends not to consider the total value of the company, especially if the company is going through some uncertainties. The reason for that is that this type of valuation does not consider the company's flexibility.
Luehrman, T. A. (1998, August). Investment Opportunities as Real Options: Getting Started on the Numbers.	Real option theory	Understanding real option theory	Some projects can be delayed, and that will give two more factors to value creation. The first one is the time value of money, and the second one is the uncertainty of the future value of the

			investment so that the company has the choice of getting rid of the project if it has a negative present value.

Reformulated and Estimated Financial Statements

XXL income statement (NOKm)			
Year	2020	2021	2022
Operating Revenue	**10 423**	**10 006**	**8 755**
Cost of Gods Sold	-6 519	-5 923	-5 918
Personnel Expenses	-1 863	-1 886	-1 736
Depreciation And Amortization	-753	-810	-732
Other Operating Expenses	-924	-996	-887
Operating Income	**364**	**391**	**-518**
Net Financial Expenses	-172	-146	-63
Net Financial Income (Expenses)	**-172**	**-146**	**-63**
Income before tax	**192**	**245**	**-581**
Income Tax Expense	66	52	-126
Net Income	**126**	**193**	**-455**
Corporate Tax Rate	**22 %**		

XXL income statement (NOKm)					
Year	Q1	Q2	Q3	Q4	2022
Operating Revenue	**1 984**	**2 194**	**2 313**	**2 264**	**8 755**
Cost of Gods Sold	-1 230	-1 368	-1 504	-1 816	-5 918
Personnel Expenses	-465	-406	-419	-446	-1 736
Depreciation And Amortization	-202	-210	-148	-172	-732
Other Operating Expenses	-215	-229	-204	-239	-887
Operating Income	**-128**	**-19**	**38**	**-409**	**-518**
Net Financial Expenses	-48	41	24	-80	-63
Net Financial Income (Expenses)	**-48**	**41**	**24**	**-80**	**-63**
Income before tax	-176	22	62	-489	-581
Income Tax Expense	-23	-8	20	-115	-126
Net Income	**-153**	**30**	**42**	**-374**	**-455**

XXL income statement (NOKm) Reformulated				Forecast period				
Year	2020	2021	2022	2023	2024	2025	2026	2027
Operating Revenue (O)	10 423	10 006	8 755	8 930	9 109	9 291	9 477	9 666
Cost of Gods Sold (O)	-6 519	-5 923	-5 918	-5 358	-5 465	-5 575	-5 686	-5 800
Gross Profit	*3 904*	*4 083*	*2 837*	*3 572*	*3 643*	*3 716*	*3 791*	*3 866*
Personnel Expenses (O)	-1 863	-1 886	-1 736	-1 607	-1 640	-1 672	-1 706	-1 740
Other Operating Expenses (O)	-924	-996	-887	-893	-911	-929	-948	-967
EBITDA	*1 117*	*1 201*	*214*	1 072	1 093	1 115	1 137	1 160
Depreciation And Amortization (O)	-753	-810	-732	-536	-547	-557	-569	-580
EBIT	*364*	*391*	*-518*	536	547	557	569	580
Reported tax expense	*-66,0*	*-52,0*	*126,0*	-82	-87	-93	-98	-100
Tax-shield from NFE	*-37,8*	*-32,1*	*-13,9*	-36	-33	-30	-27	-27
Operating tax expense (O)	*-104*	*-84*	*112*	-118	-120	-123	-125	-128
NOPAT	260	307	-406	418	426	435	444	452
Net Financial expenses (F)	-172	-146	-63	-163	-149	-135	-121	-123
Tax-shield from NFE	37,8	32,1	13,9	36	33	30	27	27
Net Income	*126*	*193*	*-455*	291	310	329	349	356

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022
Operating Revenue (O)	5 212	6 486	7 813	8 709	9 475	8 992	10 423	10 006	8 755
Change in Growth		24,4 %	20,5 %	11,5 %	8,8 %	-5,1 %	15,9 %	-4,0 %	-12,5 %
	-12,50 %	-5,10 %	-4,0 %	8,80 %	11,47 %	15,91 %	20,46 %	24,44 %	Average
Median				10,13 %					7,43 %

XXL income statement forecast assumptions				Forecast period				
Year	2020	2021	2022	2023	2024	2025	2026	2027
Revenue growth		-4,0 %	-12,5 %	2,0 %	2,0 %	2,0 %	2,0 %	2,0 %
Cost of gods sold as % of revenue	62,5 %	59,2 %	67,6 %	60,0 %	60,0 %	60,0 %	60,0 %	60,0 %
Personnel expenses as % of revenue	17,9 %	18,8 %	19,8 %	18,0 %	18,0 %	18,0 %	18,0 %	18,0 %
Other operating expenses as % of revenue	8,9 %	10,0 %	10,1 %	10,0 %	10,0 %	10,0 %	10,0 %	10,0 %
Depreciation and amortization as a % of PPE	22,1 %	27,4 %	26,9 %	20,0 %	20,0 %	20,0 %	20,0 %	20,0 %
Tax rate				22,0 %	22,0 %	22,0 %	22,0 %	22,0 %

% of revenue	Cost of goods sold	Personnel Expenses	Depreciation	Other Oper.Exp.
XXL	68 %	20 %	8 %	10 %
Sport 1	60 %	18 %	0,14 %	12 %
Difference	-7 %	-2 %	-8 %	1 %
Operating Revenue sport1	33 537			
Cost of Gods Sold sport 1	20 172			
Personnel Expenses sport 1	5 928			
Depreciation And Amortization sp	47			
Other Operating Expenses sport 1	3 879			

XXL Balance sheet forecast assumptions				Forecast period				
	2020	2021	2022	2023	2024	2025	2026	2027
Total Intangible assets as % of revenue	29 %	31 %	37 %	32 %	32 %	32 %	32 %	32 %
PP&E as % of revenue	32,7 %	29,5 %	31,0 %	30,0 %	30,0 %	30,0 %	30,0 %	30,0 %
Deferred tax liabilities as a % revenue	0,03 %	0,00 %	0,00 %	0,01 %	0,01 %	0,01 %	0,01 %	0,01 %
Total inventories as a % revenue	17,61 %	22,19 %	26,59 %	25,00 %	25,00 %	25,00 %	25,00 %	25,00 %
Trade receivables as % revenue	1,59 %	1,61 %	0,69 %	2,00 %	2,00 %	2,00 %	2,00 %	2,00 %
Other receivables as % revenue	1,13 %	4,40 %	2,28 %	1,10 %	1,10 %	1,10 %	1,10 %	1,10 %
Acconts pay.bl & suppli. Finac. as % revenue	5,10 %	6,44 %	13,87 %	8,00 %	8,00 %	8,00 %	8,00 %	8,00 %
Tax payable as a % revenue	0,15 %	1,02 %	0,57 %	0,20 %	0,20 %	0,20 %	0,20 %	0,20 %
Public duties payable as % revenue	3,75 %	5,44 %	4,11 %	4,00 %	4,00 %	4,00 %	4,00 %	4,00 %
Other current liabilities as % revenue	5,51 %	6,00 %	5,65 %	5,00 %	5,00 %	5,00 %	5,00 %	5,00 %
NIBD exclud. cash as % NOA	52,26 %	48,50 %	60,75 %	50,00 %	45,00 %	40,00 %	35,00 %	35,00 %
NFE as % of NIBD	6,05 %	4,56 %	1,89 %	5,00 %	5,00 %	5,00 %	5,00 %	5,00 %

XXLs Balance Sheet

Assets (NOKm)	2020	2021	2022	Equity and liabilities (NOKm)	2020	2021	2022
Non-current assets				**Equity and liabilities (NOKm)**			
Total Intangible assets (O)	3 019	3 069	3 216	Share capital	102	101	100
Total PP&E (O)	3 408	2 952	2 718	Share Premium	3 609	3 049	2 894
Total Financial Assets (F)	-	-	-	Other Paid-In Equity	31	36	30
Total non-current assets	**6 427**	**6 021**	**5 934**	Non-Controlling Interest	26	30	25
				Total Paid-in Capital	**3 768**	**3 216**	**3 049**
Current assets				Other Equity	417	537	18
Total Inventories (O)	1 835	2 220	2 328	**Total equity**	**4 185**	**3 753**	**3 067**
Trade receivables (O)	166	161	60				
Other receivables (O)	118	440	200	**Non-current liabilities**			
Cash and cash equivalents (F)	830	173	552	Deferred tax liabilities (P)	3	-	-
Total current assets	**2 949**	**2 994**	**3 140**	Non-current Intrest Bearing Debt (F)	483	485	654
				Non-current Lease liabilities (F)	2 180	1 925	1 568
Total assets	**9 376**	**9 015**	**9 074**	**Total non-current liabilities**	**2 666**	**2 410**	**2 222**
				Current liabilities			
				Accounts Payable and Supplier Finance (O)	532	644	1 214
				Current Lease Liabilities (F)	593	567	533
				Current interest Bearing Debt (F)	418	395	1 135
				Tax Payable (O)	16	102	50
				Public duties payable (O)	391	544	360
				Other Current liabilities (O)	574	600	495
				Total current liabilities	**2 524**	**2 852**	**3 787**
				Total liabilities	**5 190**	**5 262**	**6 009**
				Total equity and liabilities	**9 376**	**9 015**	**9 074**

XXLs Balance Sheet TA-Format

Assets (NOKm)	2020	2021	2022	Equity and liabilities (NOKm)	2020	2021	2022
Total Intangible assets (O)	3 019	3 069	3 216	Share capital	102	101	100
Total PP&E (O)	3 408	2 952	2 718	Share Premium	3 609	3 049	2 894
ONCA	**6 427**	**6 021**	**5 934**	Other Paid-In Equity	31	36	30
Total Financial Assets (F)	-	-	-	Non-Controlling Interest	26	30	25
Cash and cash equivalents (F)	830	173	552	**Total Paid-in Capital**	**3 768**	**3 216**	**3 049**
FA	**830**	**173**	**552**	Other Equity	417	537	18
Total Inventories (O)	1 835	2 220	2 328	**Total equity**	**4 185**	**3 753**	**3 067**
Trade receivables (O)	166	161	60	Deferred tax liabilities (P)	3	-	-
Other receivables (O)	118	440	200	**P (NCOL)**	**3**	**-**	**-**
OCA	**2 119**	**2 821**	**2 588**	Non-current Intrest Bearing Debt (F)	483	485	654
				Non-current Lease liabilities (F)	2 180	1 925	1 568
TOTAL ASSETS (ONCA+FA+OCA)	**9 376**	**9 015**	**9 074**	Current Lease Liabilities (F)	593	567	533
				Current interest Bearing Debt (F)	418	395	1 135
				IBD	**3 674**	**3 372**	**3 890**
				Accounts Payable and Supplier Finance (O)	532	644	1 214
				Tax Payable (O)	16	102	50
				Public duties payable (O)	391	544	360
				Other Current liabilities (O)	574	600	495
				OCL	**1 513**	**1 890**	**2 119**
				TOTAL E+P+IBD+OCL	**9 376**	**9 015**	**9 074**

XXLs Balance Sheet CE-Format

Assets (NOKm)	2020	2021	2022	Equity and liabilities (NOKm)	2020	2021	2022
Total Intangible assets (O)	3 019	3 069	3 216	Share capital	102	101	100
Total PP&E (O)	3 408	2 952	2 718	Share Premium	3 609	3 049	2 894
Deferred tax liabilities (P)	- 3	-	-	Other Paid-In Equity	31	36	30
NONCA	*6 424*	*6 021*	*5 934*	Non-Controlling Interest	26	30	25
Total Inventories (O)	1 835	2 220	2 328	**Total Paid-in Capital**	**3 768**	**3 216**	**3 049**
Trade receivables (O)	166	161	60	Other Equity	417	537	18
Other receivables (O)	118	440	200	**Total equity**	**4 185**	**3 753**	**3 067**
Accounts Payable and Supplier Finance (O)	- 532	- 644	- 1 214	Non-current Intrest Bearing Debt (F)	483	485	654
Tax Payable (O)	- 16	- 102	- 50	Non-current Lease liabilities (F)	2 180	1 925	1 568
Public duties payable (O)	- 391	- 544	- 360	Current Lease Liabilities (F)	593	567	533
Other Current liabilities (O)	- 574	- 600	- 495	Current interest Bearing Debt (F)	418	395	1 135
NOWC	*606*	*931*	*469*	**IBD**	**3 674**	**3 372**	**3 890**
NOA (NONCA+NOWC)	**7 030**	**6 952**	**6 403**				
Total Financial Assets (F)	-	-	-	**TOTAL E+IBD**	**7 860**	**7 125**	**6 955**
Cash and cash equivalents (F)	830	173	552				
FA	**830**	**173**	**552**				
TOTAL CE = NOA+FA	**7 860**	**7 125**	**6 955**				

XXLs Balance Sheet NOA-Format	Historical Period			Forecast period				
Assets (NOKm)	2020	2021	2022	2023	2024	2025	2026	2027
Total Intangible assets (O)	3 019	3 069	3 216	2 858	2 915	2 973	3 033	3 093
Total PP&E (O)	3 408	2 952	2 718	2 679	2 733	2 787	2 843	2 900
Deferred tax liabilities (P)	- 3	-	-	- 1	- 1	- 1	- 1	- 1
NONCA	6 424	6 021	5 934	5 536	5 646	5 759	5 875	5 992
Total Inventories (O)	1 835	2 220	2 328	2 233	2 277	2 323	2 369	2 417
Trade receivables (O)	166	161	60	179	182	186	190	193
Other receivables (O)	118	440	200	98	100	102	104	106
Accounts Payable and Supplier Finance (O)	- 532	- 644	- 1 214	- 714	- 729	- 743	- 758	- 773
Tax Payable (O)	- 16	- 102	- 50	- 18	- 18	- 19	- 19	- 19
Public duties payable (O)	- 391	- 544	- 360	- 357	- 364	- 372	- 379	- 387
Other Current liabilities (O)	- 574	- 600	- 495	- 447	- 455	- 465	- 474	- 483
NOWC	606	931	469	973	993	1 013	1 033	1 054
NOA (NONCA+NOWC)	7 030	6 952	6 403	6 509	6 639	6 772	6 908	7 046

XXLs Balance Sheet NOA-Format	Historical period			Forecast Period				
Equity and liabilities (NOKm)	2020	2021	2022	2023	2024	2025	2026	2027
Share capital	102	101	100					
Share Premium	3 609	3 049	2 894					
Other Paid-In Equity	31	36	30					
Non-Controlling Interest	26	30	25					
Total Paid-in Capital	3 768	3 216	3 049					
Other Equity	417	537	18					
Total equity	4 185	3 753	3 067					
=Total equity end of period	4 185	3 753	3 067	3 255	3 652	4 063	4 490	4 580
Non-current Intrest Bearing Debt (F)	483	485	654					
Non-current Lease liabilities (F)	2 180	1 925	1 568					
Current Lease Liabilities (F)	593	567	533					
Current interest Bearing Debt (F)	418	395	1 135					
Total Financial Assets (F)	-	-	-					
NIBD without cash	3 674	3 372	3 890					
Cash and cash equivalents (F)	- 830	- 173	- 552	- 552	- 552	- 552	- 552	- 552
NIBD	2 844	3 199	3 338	3 255	2 988	2 709	2 418	2 466
TOTAL E+NIBD	7 027	6 951	6 406	6 509	6 639	6 772	6 908	7 046

Profitability Analysis

PROFITABILITY ANALYSIS								
XXL (NOKm)				Forecast Period				
	2020	2021	2022	2023	2024	2025	2026	2027
ROIC (ved bruk av gj. NOA)		4,39 %	-6,08 %	6,47 %	6,48 %	6,48 %	6,48 %	6,48 %
PM		3,07 %	-4,64 %	4,68 %	4,68 %	4,68 %	4,68 %	4,68 %
ATO		1,43	1,31	1,38	1,39	1,39	1,39	1,39
ROIC=PM x ATO		4,39 %	-6,08 %	6,47 %	6,48 %	6,48 %	6,48 %	6,48 %
EVA		-217	-906	-66	-66	-68	-69	-70
ROE (ved bruk av gj: BVE)		4,86 %	-13,34 %	9,21 %	8,97 %	8,53 %	8,17 %	7,85 %
NBC		3,77 %	1,50 %	3,85 %	3,73 %	3,71 %	3,68 %	3,94 %
FLEV		76,13 %	95,85 %	104,29 %	90,39 %	73,84 %	59,94 %	53,85 %
ROE=ROIC+(ROIC-NBC)xFLEV		4,86 %	-13,34 %	9,21 %	8,97 %	8,53 %	8,17 %	7,85 %

Growth Analysis

GROWTH ANALYSIS								
XXL (NOKm)				Forecast period				
	2020	2021	2022	2023	2024	2025	2026	2027
Super dividends		625	231	103	-87	-82	-77	266
Growth in EVA			-317,79 %	92,74 %	-0,75 %	-2,00 %	-2,00 %	-2,00 %
Growth in NOA		-1,11 %	-7,90 %	1,66 %	2,00 %	2,00 %	2,00 %	2,00 %
Growth in revenues		-4,00 %	-12,50 %	2,00 %	2,00 %	2,00 %	2,00 %	2,00 %
Growth in Equity		-10,32 %	-18,28 %	6,12 %	12,20 %	11,27 %	10,50 %	2,00 %

Liquidity Analysis

LIQUIDITY ANALYSIS								
XXL (NOKm)				Forecast period				
	2020	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*
Short-term liquidity risk								
Turnover rate NOWC								
Current ratio	1,168	1,050	0,829					
Quich ratio	0,441	0,271	0,214					
CFO to short term debt ratio								
Cash burn rate	-3,060	-1,980	1,568					
Cash burn rate in months	-36,725	-23,754	18,811					
Long-term liquidity risk								
Financial leverage book value	1,240	1,402	1,959					
Solvency ratio book value	44,64 %	41,63 %	33,80 %					
Interest coverage ratio	2,12	2,68	-8,22					
Interest coverage ratio (cash)		5,42	12,51	2,76	6,38	7,18	8,21	8,21
CFO to debt ratio		0,28	0,21					
Capital expenditure ratio			1,22	3,27	1,45	1,45	1,45	1,45
Capital expenditure ratio (reinvestments)			0,98	1,08	0,84	1,74	1,74	1,74
Financial leverage med NIBD (book values)	1,472	1,173	0,919	1,000	1,222	1,500	1,857	1,857
Solvency ratio med NIBD (book values)	40,47 %	46,02 %	52,11 %	50,00 %	45,00 %	40,00 %	35,00 %	35,00 %

Equity Ratio	**2020**	**2021**	**2022**
XXL	44,64 %	41,63 %	33,80 %
Sport 1	37,40 %	39,80 %	
Stadion	38,80 %	36,00 %	
Debt Equity Ratio	**2020**	**2021**	**2022**
XXL	1,240	1,402	1,959
Sport 1	1,70	1,50	
Stadion	1,60	1,80	

Cash flow (Historic and forecast)

XXL FCF (NOKm)				Forecast Period				
	2020	2021	2022	2023	2024	2025	2026	2027
NOPAT	260	307	-406	418	426	435	444	452
+Depreciation Expense	753	810	732	536	547	557	569	580
-/+ incr./decr. In NOWC		-325	462	-504	-19	-20	-20	-21
-/+ incr./decr. In NONCA (including dep!)		-407	-645	-138	-657	-670	-684	-697
FCFF		385	143	312	296	302	308	314
+/- Incr./Decr. In NIBD excluding cash		-302	518	-83	-267	-279	-291	48
Financial expenses (4) (F)		-146	-63	-163	-149	-135	-121	-123
Tax-shield from NFE		32	14	36	33	30	27	27
FCFE		-31	612	100	-87	-82	-77	266
- (super) dividends		-625	-231	-103	87	82	77	-266
Cash surplus in period		-656	381	-3	0	0	0	0
Cash beginning of period		830	173					
+/- cash surplus		-656	381					
=cash end of period	830	173	552					

XXL FCF (NOKm)				Forecast period				
	2020	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*
NOPAT	260	307	-406	418	426	435	444	452
+Depreciation Expense	753	810	732	536	547	557	569	580
-/+ incr./decr. In NOWC		-325	462	-504	-19	-20	-20	-21
CFO		**792**	**788**	**449**	**953**	**972**	**992**	**1012**

XXL FCF (NOKm)				Forecast period				
	2020	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*
NOPAT	260	307	-406	418	426	435	444	452
-/+ incr./decr. In NOA		78	549	-106	-130	-133	-135	-138
FCFF		**385**	**143**	**312**	**296**	**302**	**308**	**314**

			1	2	3	4	
		Now	**Explicit Forecast period**				**Terminal**
		2022	*2023*	*2024*	*2025*	*2026*	*2027*
NOA		6 403	6 509	6 639	6 772	6 908	7 046
NOPAT			418	426	435	444	452
WACC		7,49 %					
NOA t-1 x WACC			480	488	497	507	518
EVA			-62	-61	-63	-64	-65
Discountingfactor			0,93	0,87	0,81	0,75	
PV of EVAs i Explicit per 31.12.2022			-57	-53	-50	-48	
PV of EVA i Terminal per 31.12.2027						-1 186	
PV of EVA i Terminal per 31.12.2022						-888	
Sum of all EVAer per 31.12.2022		-1 097					
EV per 31.12.2022		5 306					
NIBD per 31.12.2022		3 338					
MVE per 31.12.2022		**1 968**					

FCFF	**Now**	**Explicit Forecast period**				**Terminal**
	2022	*2023*	*2024*	*2025*	*2026*	*2027*
FCFF		312	296	302	308	314
WACC	7,49 %					
Discount factor		0,93	0,87	0,81	0,75	
PV of FCFF Per 31.12.2022		290	256	243	231	
PV of terminal per 31.12.2027					5721	
PV of terminal per 31.12.2022					4286	
EV per 31.12.2022	5306					
NIBD per 31.12.2022	3338					
MVE per 31.12.2022	**1968**					

| DDM | Present | 1 | 2 | 3 | 4 | 5 |
| | | Explicit Forecast period | | | | Terminal |
	2022	2023	2024	2025	2026	2027
R'e	14,88 %					
Dividend		103	-87	-82	-77	266
Discount factor		0,87	0,76	0,66	0,57	
PV Dividend in Expl. Per 31.12.2022		90,03	-66,14	-54,40	-44,45	
PV Dividend in terminal per 31.12.2027					2068	
PV Dividend in terminal per 31.12.2022					1188	
MVE per 31.12.2022	1 113					

| | Now | 1 | 2 | 3 | 4 | |
| | | Explicit Forecast period | | | | Terminal |
	2022	2023	2024	2025	2026	2027
BVE	3067	3255	3652	4063	4490	4580
Net income		291	310	329	349	356
R'e	14,88 %					
BVE t-1 x re		456	484	543	605	668
RE		-165	-175	-214	-255	-312
Discountingfactor		0,870473538	0,75772418	0,659578847	0,574145932	
PV of REs i Explicit per 31.12.2022		-144	-132	-141	-147	
PV of RE i Terminal per 31.12.2027					-2422	
PV of RE i Terminal per 31.12.2022					-1390	
Sum of all REer per 31.12.2022	-1954					
MVE per 31.12.2022	1113					

WACC and other Valuation data

WACC	
Shares Outstanding	387 944 706
Current share price 30.12.22	3,82
MVE	1 482
NIBD	3 338
Corporate Tax Rate	22 %
Cost of Equity	14,88 %
Cost of Debt	5,4 %
Equity-to-EV	30,75 %
Debt-to-EV	69,25 %
WACC	7,49 %

XXL ASA	EVA	FCFF	FCFE	RE	Average
MVE	1 967 747 475	1 967 747 475	1 112 589 732	1 112 589 732	1 540 168 603
Shares Outstanding	387 944 706	387 944 706	387 944 706	387 944 706	387 944 706
Estimated Share price	5,07	5,07	2,87	2,87	3,97
Share price at 30.12.22	3,82	3,82	3,82	3,82	3,82

Company Name	EV/EBIT 2022	P/E 2022	EV/S 2022
DICK'S	7,69	12,92	1,15
HIBB	5,30	6,55	0,66
SPWH	7,83	8,31	0,50
HM-B	9,70	27,32	1,24
Median	**7,76**	**10,62**	**0,91**

	2018	2019	2020	2021
Total Financial Expenses	**57**	**183**	**172**	**146**
Non-current Intrest Bearing Debt (F)	1081	767	483	485
Non-current Lease liabilities (F)	0	2428	2180	1925
Current Lease Liabilities (F)	0	553	593	567
Current interest Bearing Debt (F)	994	889	418	395
Total interest Bearing Debt	**2075**	**4637**	**3674**	**3372**
Interest Rate Paid	**2,75 %**	**3,95 %**	**4,68 %**	**4,33 %**
Average Interest Paid	**3,93 %**			