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Preface

This thesis is written as a final assignment for our bachelor's study of economics and administration at the University of Stavanger. The purpose of this thesis is to use what we have learned during our 3 years of study. The choice of valuing a company was therefore made, as this ultimately meant that we would be combining several aspects from our field of study to answer our thesis.

We will be conducting a valuation of Entra ASA. When writing this thesis, we have learned more about how a proper valuation is done, and how valuable it can be for stakeholders, or anyone else with an interest in the company. We see all this new information as a great resource for us onward in our careers and life in general. Additionally, we have gained insight into the industry that Entra operates in.

Our choice of industry relied on choosing one we found to be interesting, which also met our criteria for a company to valuate. Some of our criteria for the industry were that it needed to have a relatively long history for us to be able to see the historical development, and it had to be well established and quite stable. The reason we chose real estate operating and management industry was that we found it to be interesting to research further due to its relevance and its potential for improvements related to carbon emissions. We saw Entra ASA as the perfect fit for our valuation of a company, because of several factors such as its history, market share, and it being one of the largest firms in its industry.

As the writers of this thesis, we would like to thank our supervisor Bernt Arne Ødegaard for all his help and guidance during the writing process. UiS has no responsibility for any views or content in the thesis. The writers of the thesis are completely liable and responsible for all its content.

Summary

The purpose of this thesis was to conduct a valuation of Entra ASA and answer our research question:

"What is Entra ASA worth as of 31.12.2023?", with intent to find out if the share price is over- or undervalued.

Entra ASA is a commercial real estate company in Norway, that owns and operates properties in the biggest cities and in the surrounding areas. The firm was founded in the year 2000 and was listed on the Oslo Stock Exchange on the 7th of October 2014 with a share price of 65 NOK. We started our thesis by providing information about the firm and a description of the industry, before looking at valuation methods, and thereafter going into different strategic analysis of Entra. Using Porter's Five Forces and a PESTEL analysis, we explored some external factors that may influence Entra ASA. We also used the VRIO framework in our internal analysis to look at the company's strengths and weaknesses. Afterwards, we used these factors and added some more into a SWOT analysis to see how the factors have affected Entra ASA.

From our strategic analysis, we found out that Entra has a competitive advantage in their property strategy as well as their customer base. Their work on sustainability as well as their reputation as a lessor puts them in a great position to attract more customers. We also found threats, mostly regarding macroeconomic factors, such as inflation and the policy rate to influence their operations. Customers' changing behaviour regarding new standards and requirements, is also a threat that can influence them.

A financial statement analysis was done thereafter to get a better understanding of Entra's financial health. Profitability, liquidity, and solidity indicators have been done. The future cash flows were estimated 5 years ahead in time where we used free cash flow to firm, and WACC as the discount factor. The WACC was calculated to be 5,08%, and we used a constant growth rate of 2,2%. Estimated share price was 109,9 NOK, which corresponds to a market value of equity of 20 011 million NOK. The market-based valuation consisted of the multipliers P/B, P/SQM, and P/S, which gave us an average share price of 126,5 NOK. We have also conducted a valuation with the dividend discount model, resulting in a share price of 65,7 NOK. Ultimately, we did 3 different sensitivity analysis to see how the share price changes under different circumstances. Considering the results from our valuation, we conclude with a sale recommendation.

Abstrakt

Formålet med denne oppgaven var å gjennomføre en verdsettelse av Entra ASA og svare på vår problemstilling:

«Hva er Entra ASA verdt per 31.12.2023?», for å finne ut om aksjeprisen er over- eller undervurdert.

Entra ASA er et næringseiendomsselskap i Norge, som har eiendommer i de største byene og i nærliggende områder. Firmaet ble grunnlagt i år 2000, og ble notert på Oslo Børs 7. oktober 2014 med en aksjekurs på 65 kr.

Vi startet oppgaven med å tilføye informasjon om selskapet og en beskrivelse av industrien, før vi ser på verdsettelses metoder, og deretter gå inn i forskjellige strategiske analyser av Entra. Ved bruk av Porters Five Forces og en PESTEL-analyse så vi på eksterne faktorer som kan ha en innflytelse på Entra ASA. Vi brukte også et VRIO-rammeverk i intern analysen for å se på bedriftens styrker og svakheter. Etterpå brukte vi disse faktorene og la til ekstra i en SWOT-analyse for å se hvilke faktorer som påvirker Entra ASA. Fra våre strategiske analyser, fant vi ut at Entra har et konkurransefortrinn i deres eiendomsstrategi i tillegg til kundene de har. Deres arbeid på bærekraft i tillegg til deres omdømme som utleier, plasserer dem i en bra posisjon til å tiltrekke seg mer kunder. Vi fant også trusler som gikk mest på makroøkonomiske forhold, som f.eks. inflasjon og styringsrente som kan påvirke deres drift. Endringer i kunders oppførsel rundt nye standarder og krav er også trusler som kan påvirke dem.

En regnskapsanalyse ble deretter gjort for å forstå Entra sin finansielle helse, der vi så på lønnsomhets-, likviditets- og soliditetsindikatorer. De fremtidige kontantstrømmene ble estimert 5 år frem i tid, der vi brukte frie kontantstrømmer til bedriften og vektet gjennomsnittlig kapitalkostnad (WACC) som diskonteringsfaktor. WACC ble kalkulert til 5,08% per 31.12.2023. Estimert aksjekurs ble 109,9 kr, noe som tilsvarer en markedsverdi av egenkapitalen på 20 011 millioner kr. Den markedsbaserte verdsettelsen baserte seg på multiplikatorene P/B, P/SQM og P/S, som ga oss en gjennomsnittlig aksjekurs på 126,5 kr. Vi gjennomførte også en verdsettelse ved bruk av en dividendemodell som resulterte i en aksjekurs på 65,7 kr. Avslutningsvis gjennomførte vi 3 forskjellige sensitivitetsanalyser for å se hvordan aksjekursen endrer seg under ulike omstendigheter. Med våre funn fra verdsettelsen i betraktning, konkluderer vi med en salgsanbefaling.

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1 – Introduction

1.1 – Research question

We want to value the publicly traded company Entra ASA, and we have therefore chosen the following research question:

"What is Entra ASA worth as of 31.12.2023?"

When doing our valuation of Entra, we used fundamental and market-based valuation methods, with the financial statement analysis as the foundation. In addition to this, we have also conducted a sensitivity analysis to see how external factors affect the stock price. We also conducted a strategic analysis using the following methods and models; Porter's Five Forces, PESTEL, Internal, and SWOT.

1.2 – Limitation

We have conducted the valuation of Entra at the end of 2023, considering that their Q1 report for 2024 was not published before the end of April. Therefore, the valuation will be based on accounting numbers from 2018 to 2023. In our market-based valuation, we have limited the comparable firms to consist of firms abroad. The reason for this is that there are few to no comparable firms in Norway, as these firms mostly operate in selling properties and other areas of commercial real estate.

1.3 - Structure

The thesis will start with a brief presentation of Entra and the industry it operates in. The following section will consist of several theoretical topics with regards to valuation and finance.

A thorough strategic analysis is the next chapter, where we will discuss Entra's position in the market and what choices they have made. This part and the income statement analysis will

form the basis for when we will be estimating future cashflows for the firm, in addition to calculating the firm's cost of equity and the weighted average cost of capital. The fundamental analysis will be completed with this in mind, and will thereafter be compared with a market-based valuation for the firm.

The penultimate point will present a sensitivity analysis before we finally conclude our thesis and give a short critique summary. We will also comment on developments in Q1 2024.

2 – Presentation of Entra ASA

2.1 – Industry Description

Real estate is the part of the economy which consists of developing, managing, and leasing properties. There are mainly 5 categories when looking at real estate: commercial real estate, industrial real estate, residential real estate, land, and special purpose (Chen, 2023). Commercial real estate consists of properties used for business purposes, which is the category Entra operates in. Property types included in commercial real estate are offices, hotels, shopping malls, apartment complexes, etc.
When investing in commercial real estate, the investor usually has a long-term perspective for their investment, looking to achieve cash flows from rental income, alternatively selling property with profit. Historically, the firms in commercial real estate have developed their buildings and rented them out to tenants, which has been a good source of income.

2.2 – Growth factors in the commercial real estate

To get a better understanding of the market, we point out the key factors that we consider to be important for growth. In Entra's annual report of 2023, they write that the volatility in the market has reduced its activity, mostly due to high inflation and an increase in interest rates. The transactions during 2022 and 2023, were from selling several properties, to strengthen their balance sheet and to improve their debt metrics.

The transaction volume for the Norwegian real estate sector has seen a strong increase in the past years, with a record year in 2021 with 164 billion NOK in volume but has decreased to 55 billion NOK in 2023 (DNB, 2024).

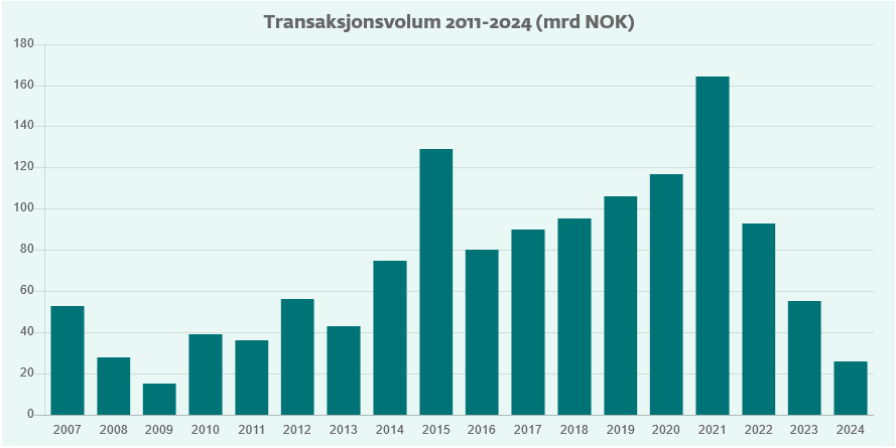

Figure 1, transaction-volume 2011-2024 (in billion NOK) (DNB, 2024)

In June 2022, Norges Bank published a memo called "Næringseiendomsmarkedet – ikke lenger en svart boks", which is about the exposure banks have towards commercial real estate. Their results show that banks have an overweight exposure, especially towards the office segment in the biggest cities, especially in Oslo. They also mention that the development in the commercial real estate sector as well as the bank's exposure, has a significant impact on the financial stability in Norway (Bjørland et al., 2022, p. 4).

Net yield is a factor that tells us about the direct return of a property, and it can be used to compare the price of a property to comparable ones. It is calculated by dividing net rental income by the market value of the property (Eiendomshjørnet, 2023). The net yield is affected negatively when the policy rate increases because the lessor will have higher financial costs, reducing the net rental income.

$$Net\ yield = \frac{Rental\ income - Expenses}{Property\ value}$$

Equation 1, net yield

The rental price is also a key factor, which lessors can adjust. A higher rental price usually means an increase in the firm's cash flows, which in turn means an increase in income. Supply and demand are factors that affect the rental price. The supply for offices varies a lot, depending on how much plot there is to build on. As for demand, it will vary both on location and the quality of the property. Tenants often have to think about the modernization of the offices, as well as the sustainability factors connected to it. Regarding the correlation rental price has with the consumer price index, a general price increase will give an increased expense for tenants.

Lastly, one can look at the vacancy rate in the properties as an important growth driver. It is calculated by looking at the number of square meters rented out divided by the number of total square meters in the market. The office vacancy in Norway's largest cities has been relatively low. According to Entra's annual report for 2023, the vacancy rate in offices in their portfolio was at 4,7% (Entra, 2024, p. 18).

2.3 – History of Entra

Entra ASA was founded in the year 2000 through rentable government properties that were separated from Statsbygg. From 2014 and over the coming years until 2020 the Norwegian government started partially selling itself out of Entra and was completely out of the company in 2020. 2014 was also the year that the company was listed on the Oslo Stock Exchange (Bryhn & Askheim, 2024).

Historically Entra had a more geographically diverse portfolio than they currently do. Until 2014 they had properties in Fredrikstad, Moss, Arendal, and Lillestrøm. They also had properties in Skien and Tromsø until 2015, and in Kristiansand and Bodø until 2016. After 2016, they have had an almost identical geographically spread portfolio until the present date. Their current portfolio, per the 2023 annual report, consists of 69% of properties in Oslo, 10% in Bergen, 10% in Trondheim, 6% in Sandvika, 3% in Drammen, and 2% in Stavanger (Entra, 2024, p. 16). However, on the 1st of February 2024, Entra announced that they have made a letter of intent of sale with E C Dahls Eiendom for the entirety of the portfolio in Trondheim. This also includes ongoing building projects after completion by Entra (Entra, 2024, p. 10).

On the 3rd of December 2021, Entra bought Oslo Areal AS for 13,55 billion NOK. Thus, acquiring an additional 17 large office buildings. This acquisition further cemented Entra's position as one of Norway's leading real-estate operating and management firms (Entra, 2021).
As of 31st of December 2023, Entra's portfolio included 99 properties, with a market value of 69,5 billion NOK (Entra, 2024, p. 16). The 20 largest tenants currently make up 45% of Entra's rental income, 14 of which are in the public sector. A total of 57% of the portfolio's rental income comes from public sector tenants (Entra, 2024, p. 19). This means increased safety for their rental income, because of the low possibility of these tenants going out of business.

2.4 – Their vision, values and goals

Entra ASA has a vision of leading the development of office environments in future-sighted and environmentally-leading ways. On their website and in their annual report they write that their vision is to have "the most satisfied people work in Entra buildings" (Entra, 2024, p. 4). They go on to say that they have three pillars as part of their strategy which are profitable growth, high customer satisfaction, and environment leadership (Entra, n.d.).

Profitable growth in the largest cities which is the first of the three pillars to their strategy, refers to Entra owning properties in central locations in the largest cities in Norway. Entra thinks that the locations of their office properties will become even more relevant and important in the future due to the increase in demand for efficient and sustainable transportation. In addition, they also think that having office buildings in proximity to central locations allows them to create and work on good development of the surrounding area. Profitable project development has according to Entra always been their most important source of growth and innovation (Entra, n.d.).

High customer satisfaction, the second of their three strategy pillars, is according to Entra an important cornerstone of their strategy. They wish to be up close with the customers and provide the best solutions. For that reason, Entra operates all its properties themselves, something that differs from most competitors in the industry. The justification for this is that they themselves have broad knowledge of their properties and a large amount of competence in the field. Entra is actively working on creating and maintaining good customer relations with the aim of achieving high customer satisfaction and a continued wish for a rental agreement. Over time they say that this strategy has led to high scores on customer satisfaction among their tenants and customers (Entra, n.d.).

Environmental leadership and sustainability, the last of Entra's strategy pillars, is an integrated part of their company culture and value chain. As a result of more than 20 years of this focus, Entra now has office buildings with good environmental qualities. They also write on their website that one of their goals is to become carbon neutral by 2030. To achieve this, Entra has measurable yearly carbon reduction goals for their portfolio of properties, ongoing projects, and naturally for their firm. They go on to write that responsibility is one of their core values, and that they are constantly working on safety, health, ethics, and human rights.

Entra assumes that by investing in their employees and company culture, they will gain a competitive advantage in the long term (Entra, n.d.).

2.5 – Ownership structure

Following their listing on the Oslo Stock Exchange on the 17th of October 2014, Entra was valued at 65 NOK per share, giving the company a market value of 11,94 billion NOK. As of 31.12.2023, the stock price had increased with 77,5%, with a market value of 21,02 billion NOK (Yahoo, 2023). As per the annual report from 2023, the company has 182 132 055 shares outstanding, with only one share class (Entra, 2024, p. 131). This means that all shares have the same rights, and each share carries one vote.

Investor	Number of shares per 31.12.2023	% of total	Type of account	Nationality
Castellum	60 710 624	33,33 %	Ordinary	Sweden
Fastighets AB Balder	50 000 000	27,45 %	Ordinary	Sweden
Skandinaviska Enskilda Banken	12 568 660	6,90 %	Nominee	Sweden
Skandinaviska Enskilda Banken	5 982 063	3,28 %	Ordinary	Sweden
Danske Bank	2 626 346	1,44 %	Nominee	Sweden
Folketrygdfondet	2 321 779	1,27 %	Ordinary	Norway
State Street Bank and Trust Comp	2 056 217	1,13 %	Nominee	United States
Goldman Sachs International	2 000 000	1,10 %	Nominee	United Kingdom
Danske Invest Norske Instit. II.	1 943 005	1,07 %	Ordinary	Norway
JP Morgan Chase Bank	1 388 651	0,76 %	Nominee	United States

Table 1, overview of the top 10 shareholders in Entra ASA (Entra ASA, 2024, p. 170)

The table above shows the 10 biggest shareholders of Entra as of 31.12.2023. Castellum and Fastighets AB Balder are two of the biggest real estate companies in Sweden and own respectively 33,33% and 27,45% of Entra. By looking at the table, we see a lot of banks having shares in the firm, from big banks in Scandinavia to more international banks such as JP Morgan Chase Bank from the United States. According to their annual report for 2023, the company had 4 947 shareholders, where 12% were Norwegian investors, and the remaining 88% were foreign investors (Entra, 2024, p. 170).

2.6 – Comparable companies

There are several Norwegian companies that operate within the real estate business, such as Olav Thon Eiendomsselskap and Selvaag Bolig which are both listed on the stock exchange and have some of their business based around the rental of office buildings. Having said this, Olav Thon primarily focuses their business on shopping malls, which makes the basis of comparison weak (Olav Thon, 2024, p. 8). Other non-listed companies include Norwegian

Property ASA and OBOS. Norwegian Property is the only other company in Norway that has their business solely based around rental of office buildings. For our market-based valuation, we decided to only consider Scandinavian firms, more specifically Swedish and one Finnish firm. This is due to their macroeconomic factors being similar to Norway's.

Hufvudstaden AB

Hufvudstaden AB is a Swedish commercial real estate listed on the Nasdaq Stockholm Exchange, that has been operating since 1915 and operates mainly in the letting of exclusive office complexes in Stockholm and Gothenburg. Their portfolio market value for 2023 was 46,7 billion SEK. Their portfolio consists of 29 properties covering about 390 842 square meters, out of which 201 929 sqm are office complexes (Hufvudstaden, 2024).

Fabege AB

Fabege AB is a Swedish commercial real estate on the Nasdaq Stockholm Exchange. Most of their portfolio is based around Stockholm and consists of 100 properties covering around 1,2 million square meters. The occupancy rate in their portfolio is 91%. 61,2% of the company is owned by the state of Sweden. As of 31.12.2023, they made approximately 3,37 billion SEK in rental income (Fabege, 2024).

Catena AB

Catena AB is a Swedish real estate on the Nasdaq Stockholm Exchange, which has a total of 132 properties, stretching from Luleå in Sweden to Kolding in Denmark. As of 31.12.2023, their total property value was 30,8 billion SEK, with a lettable space of approximately 2,3 million square meters. In their annual report, their rental income rose 17% to 1,8 billion SEK (Catena, 2024).

Norwegian Property ASA

Norwegian Property ASA is a commercial real estate which is no longer listed on the Oslo Stock Exchange. Their portfolio is primarily located in the Oslo area. It consists of 29 properties, covering 530 000 square meters. As of 31.12.2023, Norwegian Property's office vacancy totalled at 4,7%, and their net letting was 36 million NOK (Norwegian Property, 2024, p. 17).

3 – Methods for valuation

3.1 – Valuation method

When proceeding with a valuation of a firm, analysts have different methods to reach the value. In this part of the thesis, we will look at these different methods. The author, Damodaran, has put the models into different approaches. The first approach is discounted cash flow valuation, which is based on discounted expected future cash flows. The second approach is relative valuation, where the value of an asset is defined by looking at the price of assets based on a common nominator, for example, book value (Damodaran 2012, p. 11). There is also the dividend discount model, which is based on dividends paid out to stockholders on a stable growth rate, which we will come back to later in the thesis. These models do not exclude each other and are not directly correlated, so they can be used to fulfil each other and supply a result (Damodaran 2012, p. 25). Which valuation model one chooses, depends on what industry the firm is in, the life cycle, as well as if the firm is still operating.

3.2 – Discounted cashflow valuation

In the discounted cash flow valuation, the value of assets is equal to the present value of expected future cash flows, where the value is based on the underlying relations in the firm. Here it is based on their fundamental characteristics. For the firms that generate cash flows, these characteristics are forecasts of future cash flows and their risk, called the required return (Damodaran 2012, p. 12). When using the discounted cash flow valuation, one will then find that the value of the firm is equal to the sum of the discounted cash flows, added with the present value of terminal value. Out of the different methods, the discounted cashflow valuation lays the fundament for all the other valuations.

$$NPV = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t}$$

Equation 2, NPV (Net Present Value) (Damodaran, 2012, p. 12)

Where,
NPV= Net Present Value
n = Life of the asset
CF = Cash Flows
t = Time (period)
r = Discount rate reflecting the riskiness of the estimated cash flows

This method needs more data and information than the other methods since the valuation is based on an estimation of the future, which can be considered a con since it is hard to predict.

According to Damodaran, one cannot estimate cash flows for eternity. A firm with high growth cannot continue with the same growth for eternity, so it will later level out at a point in time and stabilize. Therefore, one must take a standpoint on the cash flows in the growth period, and then calculate a terminal value, which is the value of an asset beyond the forecasted period (Damodaran 2012, pp. 304-305).

$$TV = \frac{CF_n * (1 + g)}{r - g}$$

Equation 3, Terminal Value (Damodaran, 2012, p. 306)

Where,
CF_n = Cash Flow in n years
r = Discount rate
g = Growth rate

There are prerequisites when calculating terminal value. The growth rate, for example, cannot exceed GDP and is not theoretically possible. Supposedly there is also stable growth. Slight changes in the stable growth can significantly change the terminal value (Damodaran 2012, p. 306-307). After the terminal-value calculation, it can be put into the formula for the firms' present value (NPV).

$$NPV = \sum_{t=1}^{t=n} \frac{CF_t}{(1 + r)^t} + \frac{TV_n}{(1 + r)^n}$$

Equation 4, NPV with TV (Damodaran, 2012, p. 304)

Where,

NPV = Net Present Value

CF = Cash Flow

r = Discount rate

t = Time

n = n years

CAPM-capital value model

The CAPM model is used to show how large the required rate of return is. In the model, one calculates the rate of return to equity, where there are three main components in doing so: risk-free rate, risk premium, and beta (β). Here, the risk-free rate and risk premium are equal to all firms operating in the same industry and market, making the outcome for each firm dependent on the beta (Damodaran 2012, p. 68).

$$E(r_i) = R_f + \beta_i[E(R_m) - R_f]$$

Equation 5, CAPM (Damodaran, 2012, p. 68)

Where,

$E(r_i)$ = Required rate of return

R_f = Risk-free rate

$E(R_m)$ = Expected return on the market portfolio

β_i = Beta of asset i

Risk-free rate

The risk-free rate is the expected return on an asset with zero risk of financial loss. The risk-free rate should be measured consistently with the currency of the market where cash flows are estimated. It is also important to be consistent with the use of real and nominal rates since the same rate can be used in all calculations (Damodaran 2012, p. 156-157).

Beta (β)

"Beta (β) is a measure of the volatility – or systematic risk – of a security or portfolio compared to the market as a whole." (Kenton, 2024). It is the risk added to the market portfolio when using the capital asset pricing model (CAPM). There are different procedures for finding beta, the main ones are fundamental beta and historical beta (Damodaran 2012, p. 183).

Historical beta

When calculating the historical beta, one usually takes a regression analysis into use, where the required return of a stock is compared against the market index. For firms publicly traded for a long time, it is easy to estimate the return an investor would have made on investing in the equity of the firm in intervals over a period (Damodaran 2012, p. 183). The formula to estimate beta is as follows:

$$R_j = a + b * R_m$$

Equation 6, Historical beta (Damodaran, 2012, p. 183)

Where,

R_j = Required return

R_m = Required return on the market portfolio

a = Intercept

b = Slope of the regression

The slope in the formula equals the beta of a stock, which measures the riskiness of the stock. This beta-calculation is not flawless and can come with some complications and weaknesses. It can result in a high standard error and the regression analysis will not reflect the firms' distribution of business areas in the current state, only for that period, which can result in a slanted distribution over time. Based on this, it is important to make assumptions and make use of changes for future sights, as well as taking one-time events from the past into consideration. It is then important when using this, that the historical numbers must be a representation of the future when the historical beta is used. The historical beta can also be calculated by using a so-called service beta, which is a beta made by well-known companies who estimate the future and adjust the beta based on reflection for what they feel are better estimates. By using this method, external sources can be used as a starting point in the regression analysis to adjust the beta, so that the future sights can be better reflected (Damodaran 2012, pp. 186-187).

The market risk premium

The market risk premiums deal with the difference between the market risk and the risk-free rate, which deems how much one or several investors on average will demand in premiums to invest in a market portfolio, instead of investing in a risk-free alternative (Damodaran 2012, p. 161).

The historical risk-premium

Often, risk premiums are estimated by looking at the historical risk premiums over a longer time horizon. To find the historical risk premium, an estimation of the actual required return of stocks over a longer period and thereafter comparing it to the actual return takes place. Here, the difference on an annual basis represents the historical risk premium. (Damodaran, 2012, p. 161)

The historical risk premium is the best estimate to find market risk premiums, according to Damodaran. However, there are considerations to take into account. Extended periods of historical returns are required to obtain a reasonable standard error. Longer periods result in a lower standard error, while shorter ones provide a more current estimate. Furthermore, the choice of risk-free securities, which has to be consistent with the risk-free rate for expected returns. One also has to consider the use of an arithmetic or a geometric average. The arithmetic average measures the mean of a series of annual returns, while the geometric average looks at a compounded return. Use arithmetic average for independent annual periods, geometric average for longer periods than 5 years due to rate effects (Damodaran 2012, pp. 161-163).

3.2.1 – FCFF Method

“Free cash flow to the firm (FCFF) represents the amount of cash flow from operations available for distribution after accounting for depreciation expenses, taxes, working capital, and investments” (Hayes 2022). When using this method, one estimates the firm's total value including the market value. The cash flows are discounted after the operating costs while reinvestments and taxes are discounted by the discount rate WACC. Weighted average cost of capital (WACC) is the average rate that the firm expects to pay to finance the business moving forward (Hargrave, 2024). FCFF is considered by many to be the most important

financial indicator of a firm's stock value. Major growth in total capital is a big indicator that the firm has been profitable in the period of valuation or major investments.

3.3 – Relative valuation

Relative valuation is used to make a comparison between different corporations operating in the same market. Doing a relative valuation is easy compared to other methods, but finding comparable firms may prove to be a difficult task. Two models can be used to proceed with the valuation: the multiplicator model and the substance-value model. The comparison tools' uses are to see if the firms and their assets are equal and equally priced (Damodaran 2012, p. 453).

Line of work, growth opportunity and cash flows equal to the firm that is being valued, are important factors when finding comparable companies (Damodaran 2012, p. 462). Comparing by only using the market value, will not give a proper result. The stock price being the main reason since it is mostly determined by the amount of stocks, but there are several other reasons for this being the case. As a standard practice, stock prices or market values are converted to a standard value by dividing them by a scale factor (Damodaran 2012, p. 454). The multiplicator used is as follows:

$$Standarized\ value = \frac{Market\ value\ /stock\ price}{Scale\ factor}$$

Equation 7, Standardized value

The standardized value is the multiplicator or multiple (Damodaran 2012, p. 454). The scale factor used to find the multiplicator may vary, the usual ones being result, operating result, or book value. The multiplicator itself is usually divided into non-financial multiplicators, result and cashflow multiplicators, and balance-oriented multiplicators.
After the choice of which multiplicator to use, the next step is to multiply with the analyzed scale factor. When pursuing this, it is important to have control over the differences between firms that drive a comparison due to its effect on the multiple. It is done by finding the average multiplicator, based on the comparison of the firms. The value of the following formula is the market value of the firm based on relative valuation. (Damodaran 2012, p. 463):

$$Value = Multiplicator * Scale\ factor$$

Equation 8, Market value, relative valuation

There are several pros to using the multiplicator method, however these pros can also be considered cons. The reason for this is that they can result in non-consistent estimates of value where the key performance indicators such as risk, growth, and prognosis of cash flow are ignored, despite it being easy to assemble. One may end up overestimating the value since they mirror the market´s state at a certain point in time (Damodaran 2012, p. 454).

Compared to the fundamental valuation, relative valuation is more dependent on the market being correct, such as stocks being priced right. Still, it is open to there being errors in the pricing of individual stocks (Damodaran 2012, p. 19).

3.4 – Choice of valuation model/method

When choosing a valuation method for valuing a company there are a lot of different options, each having its pros and cons. Therefore, the choice of valuation method depends largely on factors like what information you have access to, how much time you have to conduct the valuation, and what industry the company operates in.

During the valuation theory part of the thesis, we chose to mostly focus on fundamental analysis and market-based valuation. For our fundamental valuation, we are choosing to look at the future cash flow to the firm (FCFF) model and the dividend model. For our market-based valuation, the multiplicator method is used.

4. – Strategic analysis

4.1 – Porter's Five Forces

Porter's Five Forces model, developed and published by Michael Porter in 1979, is a model that is used to identify an industry's weaknesses and strengths. This is done by analysing five competitive forces that make up every industry. This model is still to this day a fundamental and common tool for analysing the competitive landscape of an industry. The five competitive forces that are analysed in this model are internal competition, the potential for new entrants

to the industry, the negotiating power of supplies and customers, and the ability of consumers to find substitutes within the industry. (Gratton, 2024)

4.1.1 – Competitive rivals

Entra's competitors are companies that offer the same product as themselves. The real-estate operating and management industry mostly consists of large companies with a big market share and many medium-sized companies, a lot of which are family-owned and have owned property over several generations. This means that the industry is considered to be mature. In a mature industry, the companies primarily have to compete on price and are forced to reduce costs to capture a larger portion of the market share (CFI, n.d.). However, there are several different ways for companies to differentiate themselves from their competitors. Entra's way of doing this has been to purchase and develop larger areas nearby, among other things. Doing so enables them to develop and affect the area surrounding their properties, which can be a competitive advantage and make the areas more attractive and boost demand.

4.1.2 – Threat of new entrants

The threat of new entrants refers to how threatening new entrants are to the current companies within the industry (CFI, n.d.). As mentioned under "4.1.1 Competitive rivals", the industry largely consists of large companies and family-owned firms. Historically the industry has proven to be profitable with stable growth, thus making it an attractive industry to enter (Johannessen, 2022). One of the largest entrance barriers of the real-estate operating and management industry is the high property values and costs of establishing a foothold, making it a difficult and expensive industry for new entrants. Another advantage of the already-established companies in the industry has been the knowledge they acquired over the years. This gives those companies a big competitive advantage over potential new entrants. Entra, which is a well-established company in the industry has both the capital, experience, and the knowledge needed and thus is not very threatened by new entrants in the industry as things are currently. According to EEA regulations, in bidding within the Norwegian real-estate market, Norwegian companies will not be prioritized nor favored above any non-Norwegian companies. This ensures equal opportunities for all EEA suppliers (NOU 1997:21, p. 10). Because of this one cannot exclude the possibility that there will be new international entrants in the future. One example of this would be companies from the Swedish real-estate industry,

which is similar to Norway's. Some of these companies would have access to a lot of capital from their business in Sweden, giving them an advantage over other new entrants in the Norwegian real-estate industry and potentially becoming a larger threat to Entra. Examples here would be Castellum and Fastighets AB Balder, which are also the two biggest owners of Entra.

4.1.3 – The negotiating power of supplies

The negotiating power of supplies refers to what power the suppliers have over the industry's profitability. This comes in the form of a change in the price or quality of the product. As capital is the largest and most important factor in real estate, financial institutions such as banks are the most important suppliers. With a substantial portion of the costs in the industry also relying on the terms a company gets from the banks, the financial institutions will have a high degree of negotiating power related to supplies.

When it comes to supplies needed for the development of new properties such as office buildings, there is a need for building materials, amongst other things. Having an imbalance between the supply and demand of materials, gives these suppliers more negotiating power. This has previously resulted in many building projects being put on hold because of increased material prices (Sættem, 2022).

4.1.4 – The negotiating power of customers

The fourth of Porter's five forces is the negotiating power of customers which refers to what power the customers hold over the profitability and prices in the industry. In real estate, the customers negotiating power will largely depend on the relationship between supply and demand of properties. The amount of negotiating power the customers hold depends on several factors such as the number of buyers, switching costs, informed buyers, price sensitivity, and purchase size (Gratton, 2024).

Fewer buyers mean more power for the customers. In the real-estate operating and management industry, many customers and businesses are looking to buy or rent new office spaces. In addition, international firms who are looking to establish themselves in Norway

will also be considered potential customers. As Entra owns and develops both small, medium, and large size properties, they have a lot of potential customers.

If the cost of switching to another supplier is small for the customers, they will gain a larger amount of negotiating power over the suppliers. In this case, the cost of switching to another supplier, meaning switching to another office location, is usually quite substantial. Therefore, the customer will not gain much negotiating power from the cost of switching suppliers.
If a potential customer is well informed, they will have more negotiating power. This is due to the customer knowing the competitive terrain and will therefore be able to negotiate better deals and prices. In the real estate operating and management industry, there's mostly well-informed customers who know what they want, what is a fair price, and such. This increases their negotiating power over the supplier.

How sensitive the customers are to the price will impact their negotiating power. The more price-sensitive the customers are, the more power they will hold. Naturally, no customer wants to pay more than they need to, so every customer is somewhat price-sensitive. However, in this case, a potential buyer will in most cases have other factors that are prioritized more than the price. Comfort, luxury, and sustainability are often such factors, as such things often lead to a better work environment for employees. Therefore, price sensitivity will in this case not be relevant to the negotiating power of the customer.
The purchase size refers to the size or amount of a purchase. This means that if one buys for example a lot of a certain product, one may be able to negotiate a better deal. This is not relevant in the real estate operating and management industry, due to the product in most cases is one property and not several.

4.1.5 – Ability of customers to find substitutes

The ability of customers to find substitutes for the supplier's services or products is a major threat to suppliers. The threat that these pose to a supplier depends on several factors. The relative price performance, customer willingness to go elsewhere, the sense that products are similar, and the availability of close substitutes are all factors that determine its threat (Gratton, 2024).
One substitute that customers could potentially turn to, is buying instead of renting a property. This is more common outside of the largest cities as the price and capital requirements are

usually much higher. Purchasing large properties within the largest city is mostly only possible for the biggest companies as it requires substantial amounts of capital.
Another substitute could be the implementation of working from home. This became a lot more common during and after the COVID-19 pandemic. As a result of the pandemic, workers were forced to work from home in a lot of cases. During and after this, many companies found that worker efficiency increased as a result (Kaste, 2023). Therefore, some companies have decided to keep the possibility of working from home, going forward. All of this could result in customers requiring less area in their offices, and possibly a lower demand for offices in general. This could lead to less profit for the industry.

4.2 – PESTEL-analysis

The PESTEL analysis is a framework used to look at 6 different factors that affect the business environment a firm is operating in. It takes on the political- (P), economic- (E), sociocultural- (S), technological- (T), environmental- (E), and lawful (L) macro-economic factors that can influence the firm. In finance, it is used to analyze these factors to see where the firm stands in the market with its surrounding competition. It is also the foundation for finding threats and weaknesses, which later can be used in a SWOT analysis (Washington State University, 2023).

4.2.1 – Political factors

The political factors are about how the state, as well as other political agencies, affect the macroeconomic aspect a firm is surrounded by. This includes government policies, leadership, tax policies, etc. (Washington State University, 2023). As Entra only operates in Norway, they only have to worry about the Norwegian government's political rules. Entra and the other real estate firms have to think about the government's expectations regarding the building of new sustainable properties. Due to the recent years of focus on ESG, this especially has an impact on the demand for building standards, technical standards, and environmental standards.

Regarding the safety around building quality, the Directory for Building Quality, an official organ under the municipality- and district department in Norway, regulates what a firm or person is allowed to do on their property. According to them, one should look at 3 separate

sets of rules around the planning: the property, the nearby area, and the municipality. As well as looking at these rules, one should also contact the municipality to get a situation map for the property and to see what area is designated for the plot (Direktoratet for Byggkvalitet, n.d.). As Entra has its commercial buildings in 6 different municipalities, they have 6 different rulesets to follow when both developing new properties and refurbishing existing structures. Out of the 6 areas they have buildings in, there are a total of 99 different properties owned and rented out by Entra (Entra, 2024, p. 16).

When it comes to the tax policies in the real estate market concerning commercial buildings, they have to pay taxes calculated from their property value, which usually assesses 80% of rental value, both if rented or not. However, there are some exceptions for calculating the property value. This includes what is defined as not being a commercial building: tenements, agricultural-property, forests, and power plants. If the property is used both for tenement- and commercial use, there is a rule that says that if 50% or more of the property is commercial, the whole property should be viewed as commercial. If the property is primarily used as a land lot, the property value is calculated by the amount of square meters hired out and gross rental income (Skatteetaten, n.d.). Also, a firm is required to be taxed 22% of its general income, which has been held at the same rate since 2019 (Regjeringen, 2023).

Regarding the government's increasing focus on ESG, more firms are taking an interest in trying to go for more “green” investments and financing to become more sustainable. Green investments refer to investing in activities aligned with environmentally friendly business practices and the conversation of natural resources (Chen, 2022). At the same time, more focus on sustainable reporting has come into focus, putting more requirements on reporting around the firm’s activity to reduce climate emissions and their continued work to becoming more sustainable. The EU made the Corporate Sustainability Reporting Directive (CSRD) a bigger part of the reporting at the beginning of 2023. This has helped to modernize and strengthen the rules concerning the social and environmental information that firms are required to report on (European Union, n.d.).

4.2.2 – Economic factors

The economic factors refer to economic growth, including inflation and interest rates, globalization's impact, job growth, and unemployment, as well as overall changes in the economy (Washington State University, 2023).

As of 2023, the GDP in Norway per citizen was 925 431 NOK and Norway's overall GDP in 2023 was 5 129 billion NOK. The GDP is an economic measure that looks at the economic activity in Norway and expresses the economic added value that is earned through the production of goods and services for a period, subtracted by the goods and services used in the production. Numbers from January 2024 show that the volume-change in GDP per month has increased by 0,2%. It is calculated by making a comparison between three months and a prior three-month period (Statistisk sentralbyrå, n.d.). Due to the petroleum sector being a substantial proportion of Norway's GDP, GDP-Mainland-Norway is also a metric used to show the production on Norway's mainland. In comparison to the overall GDP, 3 857 billion NOK is from the mainland.

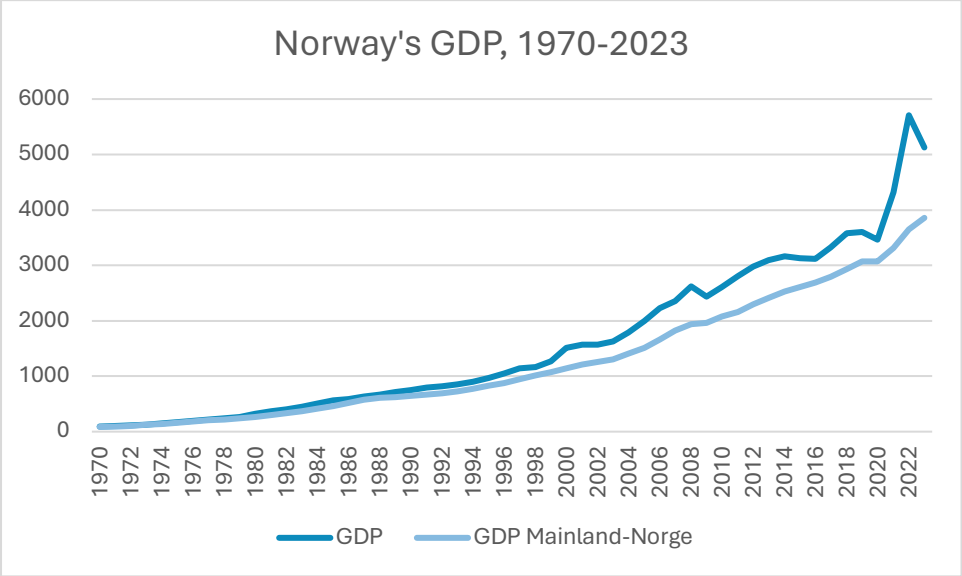

Figure 2, Norway's GDP, 1970-2023 (SSB Nasjonalregnskap, n.d.)

Increase in overall GDP and GDP Mainland-Norway is partially linked to the increase in prices (Statistisk sentralbyrå, 2024). This concerns both the consumer-price index (CPI) and the price index for used properties, as well as the increase in interest on property debt. The consumer-price index is a measure of the price level of consumer products and shows the price development of goods and services for private residents in Norway. Numbers from the twelve-month growth for February 2024 show that the price growth is set to 4,5%, a decrease from the last month of 0,2%. The percentage change is often used to show the general

measure of inflation in an economy. According to Norges Bank's monetary report for Q1 2024, the growth in the price of goods has continued to fall but the price of services has increased. Their commerce-partners' consumer-price indexes have also decreased but are still over their goal of 2% (Norges Bank, 2024, p. 5).

The price index for used properties shows the growth in value of used properties. It is based on the current valuation of properties for sale, where the price is adjusted after size, location, and building year. Overall, in Norway, it has seen a decrease of 0,7% from 2022. The average property debt on newly obtained debt for February 2024 was 5,66%, which is an increase of 0,04% from the previous month (Statisitisk sentralbyrå, n.d.). There are high risks for banks to give out loans to firms, making interest and establishment costs more expensive, and giving them a short down-time payment plan. Due to these expenses, banks have higher requirements toward firms for service and profitability in order to meet the deductions (Johannesen, 2023).

In the monetary report for Q1 2024, Norges Bank states that the interest rate on newly obtained debt has been held fluxional at around 6,5% in January, which is calculated from a weighted average of banks and obligations' debts. The interest rate on the bank loans takes a standing point from the three-month NIBOR, which has had an increase from Q4 2023 (Norges Bank, 2024, p. 18). NIBOR is the Norwegian Interbank Offered Rate and refers to monetary interests with different yields. The rate shows what a bank demands for an unsecured loan in NOK to another bank (Finans Norge, n.d.). Regarding the report, the twelve-month growth in credit has seen a decrease in value and lies lower than the historical average for both private residents and firms. This can be viewed as an effect of lower demand for loans due to higher interests and a lower sale of newly constructed properties. For non-financial firms, it can be linked to fewer firm investments made (Norges Bank, 2024, pp. 19-20).

The policy rate in the market is one of the main indicators regarding inflation, that Norges Bank uses to stabilize the economy against the rest of the world. From the end of 2019 to around September 2021, the policy rate got a reduction of around 1,5%, mostly due to the COVID-19 pandemic reducing foreign trade and exportations/importations. Since then, the policy rate has increased to 4,5% (Norges Bank, 2024). The Russian invasion of Ukraine has also caused an increase in inflation as well as other financial costs, affecting the Norwegian and other Nordic markets (Newsec, 2023).

	Price-index				% change from last year			
Year	2019	2020	2021	2022	2019	2020	2021	2022
Industry	121,0	121,9	125,4	127,8	3,2	0,7	2,9	1,9
Office	123,9	124,8	125,6	127,8	1,5	0,7	0,6	1,8
Warehouse	135,1	137,9	143,1	149,7	2,7	2,1	3,8	4,6
Other	131,9	132,0	134,0	137,8	2,6	0,1	1,5	2,8

Table 2, commercial buildings' rental after type of property, statistical variable, and year 2019-2022 (SSB, n. d.)

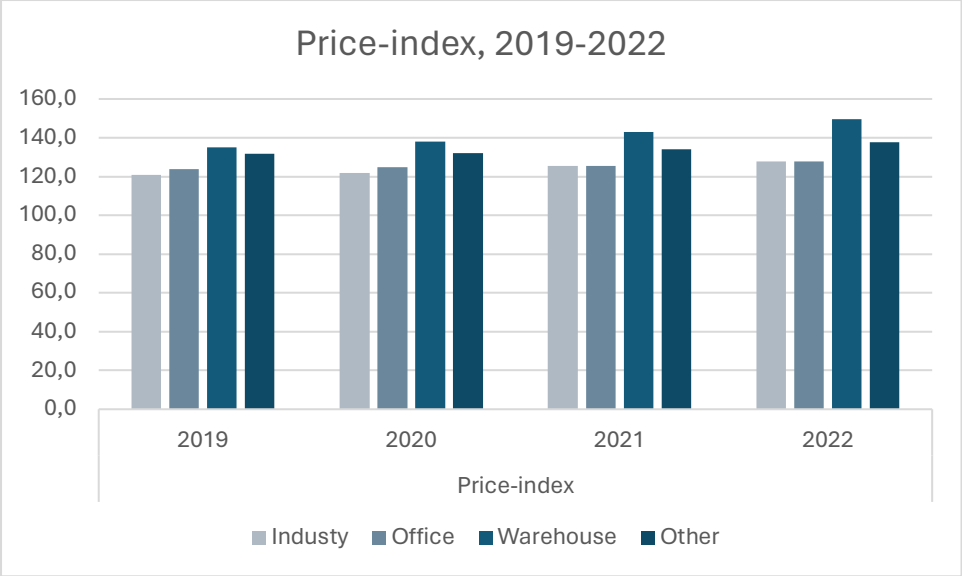

Figure 3, commercial buildings' rental after type of property, statistical variable, and year as pillar diagram 2019-2022 (SSB, n. d.)

The table above shows the square-meter price calculated as yearly rental-turnover for the commercial-building market, years 2019 to 2022, since there is no data for 2023 as of the turn-in of the thesis.

As for the Norwegian currency, the currency has strengthened itself against Norges Bank commerce partners currencies. The strengthening in the currency mostly comes from the increase in the policy rate to 4,5% which gave an increase in Norwegian interests and coincided with a decrease in the commerce-partners' interests. While there are some uncertainties around the rate of the currency, both changes in differences for expected interests and loose risk premiums in the currency market can affect the currency's development (Norges Bank, 2024, p. 20).

4.2.3 – Sociological factors

The social factors deal with demographics, like gender, age, and race. It also includes opinions, consumer patterns, growth of the population, socio-cultural changes such as religion

and ethnic trends, etc. (Washington State University, 2023). According to reports from FN's World Population Prospects 2022, the world population reached 8 billion people, with an approximate increase of 70 million people each year (Tønnessen, 2023). As of the fourth quarter of 2023, the Norwegian population has reached around 5,55 million residents. As the population grows, and people immigrate to Norway, there is an increased rate of centralization in Norway. According to SSB, over 80% of Norway's population lives in cities and densely populated areas (SSB, 2023). In their report for 2007, they mention that some reasons for centralization are due to young individuals moving from home into the cities, as well as technological and communal developments (SSB, 2007). In recent years, the war in Ukraine has increased the immigration rates in Norway and surrounding countries in Europe. By the entry of 2023, 30 300 more Ukrainians were living in Norway compared to the year before, making them the third largest immigration group in Norway (SSB, 2023).

Entra has properties in six different municipalities: Oslo, Bergen, Trondheim, Stavanger, Bærum and Drammen. As the population grows all around the world, so does it in Norway and in the municipalities in which Entra has properties. In the municipality of Oslo, the population grew by 8 700 inhabitants, making its total population 717 710 as of 1st of January 2024. By also looking at the previous year, in which the population grew by 9 200, we can see that the population growth in Oslo has stabilized after the COVID pandemic where there was unusually low population growth (Engvik & Strand, 2024).

Throughout 2023 the municipality of Bergen and Trondheim saw a population increase of 0,9%, and Stavanger had an increase of 2,1%. As for Drammen and Bærum, there are no public numbers on the population as of 1st of January 2024 due to municipalities' merges and counties' splitting (Statistisk sentralbyrå, n.d.).

Entra has also released a consensus report estimating the office vacancy in Oslo. As of Q4 2022, the vacancy was at 5,6% which is exceptionally low compared to the last 13 years after the financial crisis in 2008 (Entra, 2023, p. 12). As of Q4 2023, the office vacancy had risen slightly to 6,1% (Entra, 2024, p. 3). Even with an increase in office vacancies around the world, mostly due to the COVID-19 pandemic, the Nordic countries have seen a rebound in occupancy rates with their mixed-use offices (Newsec, 2023).

4.2.4 – Technological factors

Technological factors refer to the technological changes that affect the market. This includes new ways of producing and distributing goods and services, as well as new ways of communicating with target markets (Washington State University, 2023). It also includes growth, expansion, and change of basic technology in the line of business.

The real estate sector is heavily politically regulated, as well as the property-stewards necessity to satisfy building requirements in consideration of climate, customer's preferences, and costs. To satisfy a continued change in the technological scene, proptech can be considered a valuable tool. Proptech is a definition for the use of technological data to make improvements to properties, in development, marketing, managing, and occupation (Patapoff 2023).

Emerging business models made the commercial real estate industry look at residents more like customers. These firms are finding new, innovative ways to enhance their customers' experience while making improvements to operational efficiency and sustainability. Entra has stated in their 2023 annual report, that systematic work and technical upgrades over time have been some important drivers to their success, having integrated energy management in their business operations (Entra, 2024, p. 64). They have also started a pilot project with a proptech company, Carrot, to find ways to collect granular waste data at the tenant level and find ways to use the data.

Proptech-solutions can help to optimize performance with smart buildings, by accelerating decarbonization. As an example, it can develop systems that adjust heating and cooling based on occupancy and weather conditions. Furthermore, it can improve occupant comfort by monitoring indoor air quality and temperature to create more comfortable environments, as well as enhancing security to create more proactive security measures.
By utilizing proptech, Entra can improve productivity through increasing the output of automated tasks, to allow employees to focus on more complex tasks. The firm can also save money, through streamlining processes, and use a centralized data source with robust analysis to make informed decisions. Utilization of proptech-solutions can help commercial real estate firms retain more occupants and increase their properties’ value (Patapoff 2023).

4.2.5 – Environmental factors

The environmental factors refer to the challenges that the firm will meet in improving the climate and decreasing global warming and pollution. These include the increasing scarcity of raw materials, as well as doing business ethically and sustainably (Washington State University, 2023). Most of the environmental factors concern the continued climate change and global warming.

As of 2022, SSB has released numbers for change in emissions per produced NOK since 1990, which has decreased by 56,3%. Most of the climate cuts came after the Paris Agreement was put into force on November the 4th, 2016. The agreement is a binding international treaty, that forces countries to make cuts in carbon emissions, and make economic and social transformations to "limit the temperature increase to 1,5˚C above pre-industrial levels" (UNCC, n.d.). Other relevant factors are FN's sustainability development goals, which have 17 goals for the world to become more sustainable, most of them being relevant for the real estate branch.

These are highly relevant for the real estate sector, due to them standing for around 40% of the energy usage, as well as 40% of the material usage. Furthermore, a lot of materials are needed to construct and develop buildings, for example, concrete, which stands for high carbon emissions in production. While new construction is rising, it also affects transport patterns and emissions through localizing of the building (Grønn Alliansen, n.d.). This is especially the case for typical industry hubs, where offices are placed in industrial areas.

For real estate sectors, this means that they have to make continuous cuts to their carbon emissions, by reusing materials from previous constructions, reusing furniture, and making smart solutions to their indoor climate and energy usage. Furthermore, to become more sustainable, integrating green solutions will be an important implementation to help reduce emissions.

There are already climate-certification systems put into place, like BREEAM, which is Norway's most used system to certify properties, where the buildings can be certified in five stages, from Pass to Outstanding. The certification system is also split into newly raised and existing buildings, through BREEAM-NOR and BREEAM In-Use. They are continuously

used to reflect the best practices and drive rethinking in the planning and construction regarding climate and increased sustainability, as well as to accommodate Norwegian thorough standards (Grønn Alliansen, n.d.).

4.2.6 – Legal factors

The legal factors refer to the laws and regulations that affect a firm. These include health and safety, consumer rights and laws, product labeling and safety, advertising standards, etc. (Washington State University, 2023). As well as these, firms also have to think about the rental contracts they agree to, laws and regulations that the state prescribes, including the EU taxonomy, climate requirements, and different building regulations for planning and building that affect the firms' operations.

Regarding the rental contracts, the changes in energy prices regulate the contract, even if the energy usage is paid by the renter. This correlates with CPI, which is used to measure inflation and includes numbers for the increase in energy prices. By entering new rental contracts, there are also rent per square meter that differentiates between municipalities. These variables can be explained by how the city's industrialization is compared to other cities.
Norsk Eiendom has worked on a rental-contract that has more focus on the climate, called “Miljøavtalen”, which is an essential tool to drive greener properties. It lays out sustainable upgrades to existing buildings and is an agreement between landlord and tenant to accomplish sustainable improvements of the building during the rental period. It is added to the rental contract and regulates the rights and obligations between the partners (Norsk Eiendom, n.d.).

4.3 – Internal analysis

To explain and identify if Entra has or can gain a competitive advantage compared to its competitors, we will conduct an internal analysis, by using the VRIO framework. The framework intends to view if a company’s resource is valuable (V), rare (R), imitable (I), and organized (O). If the resource checks these marks, the company can be considered to have a competitive advantage (Barney, 1995, p. 53). Naturally, Entra has plenty of different resources, but through this analysis, we will limit it to three resources that we view as a potential competitive advantage: physical capital, sustainability focus, and customer capital.

4.3.1 – Physical capital

Portfolio

In the physical capital, we include Entra's ownage of constructed buildings, including their buildings under development and their owned plots. As of Entra's annual report for 2023, they have a property portfolio of 99 assets, with a combined market value of 69,5 billion NOK (Entra, 2024, p. 16). Out of these, 90 of them are considered management properties, which are mainly made as office locals for commercial use. The properties are mostly placed in Norway's biggest cities, where most industries normally operate. As buildings need to meet new standards and need upgrades, redevelopment is necessary to keep up. An example is Kongens gate 87, in Trondheim, which they finalized the modernization of in 2023. The building's original construction year was 1974 and is the police station in Trondheim. Through a high grade of re-use of building materials for the interior and furniture, the building reached a re-use grade of up to 40%, saving approximately 100 000 kg co2e compared to a comparable building (Entra, n.d.), and is in the process of receiving a certification of BREEAM-In-Use Very Good (Entra, 2024, p. 20). This building is more in a category of differentiated buildings, which are used as offices but with other purposes included. Including these buildings, Entra also has ongoing projects, aimed at being more management-based, such as Holtermanns veg 1-3, in Trondheim. The property totals 15 500 square meters and is in the third and final stage of being finalized. 60% of the property is rented to the Norwegian Broadcasting Corporation (NRK). After completion, the property will be sold and NRK will acquire 49% of their rented section (Entra, 2024, p. 23). One of the factors that Entra has in focus when redeveloping properties and building new ones, is the sustainable certification of them, which will be discussed later.

When comparing the competitor's portfolio to Entra's, there seem to be similarities in the proportion of differentiated and management buildings. When comparing whether the competitors are sustainable or not, most of them are equal since most firms want to become sustainable. As for the demand, modern and sustainable buildings are not just valuable, they also help to reduce the costs for the lease through making the building more energy efficient. A downside of these types of buildings is that they are relatively easy to replicate, but still, the firms will have to have insight in the market. Entra's size and contacts in the Norwegian market make their portfolio more valuable and rarer than the comparable competitors, due to their large operating advantage and recognizability. Entra is currently focused on expanding

its portfolio, which is a key driver for the company. However, during economic downturns, Entra's ability to access capital may be limited, which could pose a threat to its expansion plans. Despite this, Entra still maintains a strong and organized position, making it a valuable and unique in the short to medium term.

Geographical placement

The property's location seems to influence the demand, rental price, and occupancy of these properties, as mentioned in the social factors in the PESTEL analysis. The geographical placement of properties appears to be associated with a competitive advantage. Most of Entra's portfolio is in the biggest cities in Norway, including Oslo, Trondheim, Bergen, and Stavanger, as well as surrounding cities. Around 91% of their portfolio is in the biggest cities. This gives Entra the possibility to acquire a leading role as a commercial real estate source. According to their report for Q4 in 2023, vacancy in Oslo is expected to increase slightly but at low levels, making this combined with low newbuild volumes the possibility for continued market rental growth in the coming years. Included, in Bergen the overall letting market is high and there is a solid demand for modern premises (Entra, 2023, p. 12).

Entra has a diverse portfolio with properties located in various established areas, including urban areas on the outskirts of city centers. We view this as a valuable resource for customer satisfaction, but also as counterproductive as the trend to have more centralized business districts becomes more popular for the tenants. Concurrently, Entra has most of its portfolio in these districts, known for having a high level of demand. Entra also knows which locations are attractive, as shown by the acquisition of Oslo Areal in 2022 as well as the increasing demand for office spaces (Entra, 2024, p. 24). In areas where the demand is high, but the supply is low, tenants may experience an increase in rental costs. Currently, we view the physical assets of their portfolio as well-organized and significant, which provides them with a competitive advantage in the Norwegian market in terms of both portfolio and location.

4.3.2 – Sustainability focus

Sustainability has gained significant importance for companies' reputations and operations in recent years, especially for the real-estate sector, where a lot of the energy-usage comes from constructing the buildings and their utilization of them. To construct smarter and more sustainable buildings, Entra started developing more energy-efficient buildings and also

making energy-cuts in existing buildings. They have also implemented an ESG reporting unit with a separate responsibility to follow up on their ESG targets (Entra, 2024, p. 49). As almost all the firms in this sector have a sustainability and climate focus, Entra does not differentiate itself from other firms here, but this focus can still be considered valuable. In their means to cut down on energy consumption in their buildings, Entra has from 2011 to 2023 reduced the consumption from 202 kWh/sqm to 122 kWh/sqm and aims to reduce it to 119 kWh/sqm by 2024. Reducing energy consumption can lead to cost savings for both Entra and its tenants. Therefore, it is important to consider energy conservation measures in order to achieve this goal. Entra has integrated energy management into its operations, with operational staff focusing on deviations and energy use (Entra, 2024, p. 64).

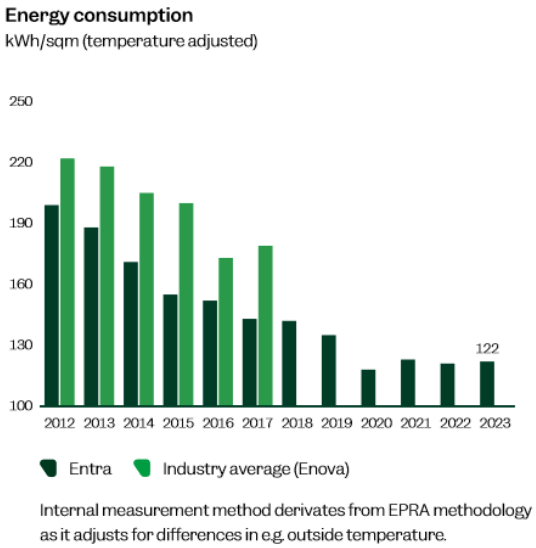

Figure 4, energy consumption kWh/sqm (temperature adjusted)

(Entra ASA, 2024, p. 64)

As shown in the graph above, they have reduced the energy consumption in their buildings over the years, staying lower than the industry average. For the years 2009-2020, the industry average for offices in Oslo was 156,4 kWh/sqm, but as there are only numbers for these years, we take into consideration that the number is slightly lower than for 2023 (Enova, n.d.).

Entra has also integrated waste management into its operations, working actively to reduce emissions from waste in its portfolio. In 2023, they had an overall target to waste sort 70%, however, their sorting rate only reached 67%. They view this as an area of improvement and are trying to further the reduction. Furthermore, Entra has started to investigate solutions for the multi-use and reuse of recycled waste, Examples of this are paperless offices in their management portfolio, food waste reductions in the canteens, etc. As mentioned earlier, their

cooperation with the proptech company, Carrot, which they further partnered with throughout 2023, has shown that collecting waste data at the tenant level can be successfully done and can make it easier to engage in waste management. The data collected can also help to motivate the tenants to make further cuts (Entra, 2024, p. 64).

Focusing on climate is valuable for several reasons. Entra can potentially increase its rental prices as a result of lower energy costs. Tenants prefer environmentally leading buildings as they promote sustainability. By being associated with eco-friendly solutions, a tenant's reputation will improve positively. Gaining a positive reputation in this arena will help to enhance their customer's satisfaction with the firm. For tenants, green initiatives are also important because energy-efficient solutions help reduce operating costs. By prioritizing sustainability with environmentally certified properties and green initiatives, the company's physical assets become complementary.

Entra has been implementing various green initiatives for many years, which has put them in an advantageous position when it comes to sustainability. They have focused on obtaining climate certifications for their buildings, such as BREEAM, which is highly valuable due to the growing demand for buildings that are sustainably rated. By getting this form of certification on the building, one can start to increase the rental price, which can increase the firm's profitability.

	Entra ASA	Norwegian Property ASA	Castellum AB	Fabege AB	Catena AB	Average
BREEAM certification of portfolio	59%	N/A	43%	82%	19%	50,75%

Table 3, BREEAM certification per firm, 2023

As well as using these certifications, Entra has engaged a third-party, Deloitte, to conduct reviews on Entra's ESG and EU Taxonomy instead of conducting these themselves. This helps Entra to gain more trust from its customers, and the reporting gives a legitimate verification of the business operations. In their EU Taxonomy reporting, they mention that they are not yet covered by their regulations, due to them having fewer than 500 employees, but still report on turnover, capital expenditure, and operating expenses that are associated with EU Taxonomy-eligible and aligned activities. Their focus in the reporting has been on transparency, providing explanations and best intentions when interpreting the criteria (Entra, 2024, p. 65). In the aggregated EU Taxonomy KPIs, the results for 2023 show the following:

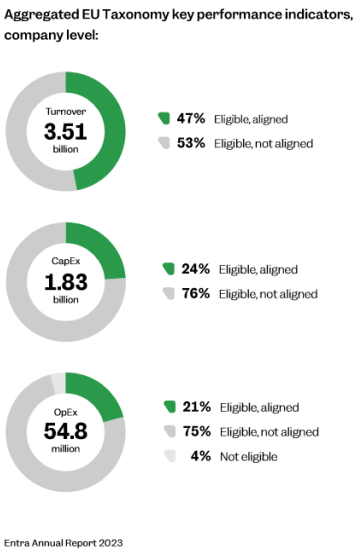

Figure 5, EU Taxonomy KPIs, company level

(Entra ASA, 2024, p. 66)

In S&P Global's Second Party Opinion on Entra's Green Bond, they went through the firm's portfolio and its governance. From the report, Entra received a "Shades of Green" result of Medium Green, which reflects the strengths of the energy criteria and embodied emissions considerations for most of the financed buildings (S&P Global, 2023, p. 1). The governance factor in the report was set to C, which is a rating of excellent. In their assessment, they mention that Entra has appropriate and relevant strategies for climate change mitigation and adaption. They also add that their reporting on sustainability follows a well-established standard (S&P Global, 2023, p. 4).

Sustainability has become an important part of the real estate business. It's difficult to replicate and requires significant investment in technology and knowledge to conduct sustainability reports. Creating a thorough sustainability report is also resource-intensive. The tenant can require these climate reports to meet their and the government's requirements. Since there is not much official information on the certification of the portfolio on Norwegian commercial real estate, making a comparison with the Swedish firms as the nearest competitors, gives Entra a worse score in our assortment. On the other side, the sustainable focus can be considered valuable, due to investors and tenants being attracted to green investments. At the same time, green buildings will help make cuts in the operating costs for many years to come. We will value Entra as not being rare and non-imitable when considering its positioning with its sustainability focus.

4.3.3 – Customer Capital

Entra has a vision to have "the most satisfied people work in Entra's buildings" (Entra, 2024, p. 4). This underlying vision shows that they want to be the leading firm in customer satisfaction in the market. Having satisfied customers is crucial as it leads to increased customer loyalty. This, in turn, reduces transaction costs for both parties as tenants are more likely to renew their lease contracts. Satisfied customers also enhance the firm's reputation in the market, making it easier for them to attract new customers to their properties. An increased reputation can help increase the demand for good lessors, with the possibility of increasing the rental, having a positive effect on Entra's income.

Entra uses customer surveys regularly to keep track of their level of satisfaction with their different properties. These surveys are used to identify areas where Entra can improve its services and where it may be performing worse than its competitors. (Entra, 2024, p. 35). In Entra's annual report for 2023, they scored 83 points, down from 85 in 2022. The industry average was set to 80 points, making Entra among the best commercial real estate companies when it comes to customer satisfaction (Entra, 2024, p. 6). Still, the fall in customer satisfaction comes from the customers' expectations and service requirements, and Entra is making improvements to its offered services to meet the customers' demands (Entra, 2024, p. 35). This process is conducted by their own real-estate team, making them being viewed as a well-organized and valuable resource.

	Entra ASA	Norwegian Property ASA	Castellum AB	Fabege AB	Catena AB	Average
Customer Satisfaction Index	83%	N/A	71%	88%	75%	79,5%

Table 4, CSI per firm. 2023

Customer satisfaction is crucial for commercial real estate tenants. Entra consistently shows a positive change in customer satisfaction, resulting in a favorable net letting. Net letting is the difference between new and renewed contracts, subtracted by terminated contracts. While having a top for net letting in 2020, mostly due to the expansive monetary policy, it looks to increase again with the value being 59 million NOK as of 2023. The evolution of gross letting has increased since 2020, to 483 million NOK for 2023, including renegotiated contracts (Entra, 2024, p. 18). Compared to the competitors, Entra has experienced a lower vacancy rate in the last years in their properties, with a portfolio occupancy of 95,3% (Entra, 2024 p. 6).

Figure 6, Net letting Entra

(Entra ASA, 2024, p. 18)

The nature of Entras' customer base has meaning for their customer capital. As of the end of 2023, the public sector tenants accounted for 57% of their total contractual rent (Entra, 2024, p. 19). This resource is of significant value as the public sector offers longer and more stable leases than the private sector. These leases are challenging to replicate due to their extended contract maturities and high levels of customer satisfaction. The unique benefits and competitive edge that the public sector provides to Entra are worth discussing. Comparing other annual reports with the one for 2023, we can see a trend where the ratio of public sectors has decreased. Furthermore, the big public tenants correlate with low risk and long cash flows due to their contracts. When viewed next to what the competitors report, it looks like Entra has a competitive advantage in this area, arguing that Entra's total customers are temporarily rare and valuable.

4.3.4 – Conclusion of internal analysis

	Valuable	Rare	Imitable	Organized	= Outcome
Physical capital	Yes	Partly	Partly	Yes	Durable, well-kept competitive advantage
Sustainability focus	Yes	No	Partly	Yes	Potential competitive advantage
Customer capital	Yes	No	Partly	Yes	Well-kept competitive advantage

Table 5, internal analysis of Entra ASA

4.4 – SWOT

To get an overview of the company's operations and the surrounding effect, a SWOT analysis is of beneficial use. It is a framework used to view the company's competitive position and to develop a strategic plan around the findings (Kenton, 2023). The SWOT analysis is made to aid the company in identifying its internal sources; strengths and weaknesses, as well as identifying the external sources; opportunities, and threats.

Strengths	**Weaknesses**
• Customer loyalty • Sustainability focus • High ratio of public sector • Property locations	• Proportion of climate-certificated buildings • Costly climate-reporting • Customer's change in requirements to flexibility and sustainable solutions
Opportunities	**Threats**
• Proptech • Low development and lack of area • Capitalisation of urbanization	• Working from home • Access to, and price of financing • Oversupply in the market • Rising interest rates • Increased unemployment • International entrants • Recession • Depreciation of NOK against other currencies

Table 6, takeaways form SWOT-analysis

4.4.1 – Strengths

The strengths in the SWOT analysis show what an organization excels at and what separates it from the competition (Kenton, 2023). Customer loyalty for the firm can be considered a strength for many reasons. Firstly, when having customer loyalty, the firm knows that their customers trust them with their actions. Secondly, customer loyalty will attract more

customers who want to rent an office complex. Entra's sustainability focus can also be viewed as a strength, in that it helps the climate, both in reduction in depleting resources and in cutting down on carbon emissions. Their focus can also help Entra gain more attention from businesses looking for a new office complex, increasing their income and customer magnitude. The high ratio of their portfolio being in the public sector, makes Entra have a more secure source of income with less risk involved, as well as their lease contracts usually being longer than for the private sector. Their portfolio locations can also be viewed as a strength since many industries operate in and around these cities, and this helps the industry be more centralized. In addition, the properties' location can help Entra to increase their rental income due to the generally high prices in the biggest cities.

4.4.2 – Weaknesses

The weaknesses show what stops an organization from performing at its optimum level (Kenton, 2023). Their portfolio of BREEAM-certified buildings is lacking, making this a weakness regarding the buildings having to meet up to new standards, and not being that sustainable. While as of 2023 only 59% of their portfolio has received this certification, Entra notes that more buildings are getting certified as time goes on and are determined to get new buildings and redevelopments certified (Entra, 2024, p. 67). For the projects completed in 2023, only 2 out of 5 got BREEAM-NOR certified (Entra, 2024, p. 74).
Regarding climate reporting, it is costly for a firm to report on its climate behavior, which is why it is considered a weakness. The reporting is a resource-heavy process to conduct properly. Norway reported that in 2022, climate finance totalled NOK 15,5 billion, mostly due to a high level of private capital being a part of the mix (Regjeringen, 2023). As the years go on, the cost will most likely increase, which will also make it costly for Entra, even if it is mandatory. According to the EU Taxonomy report on Entra in 2023, the total capital expenditure of eligible and non-eligible activities was 1,8 billion NOK, and 431 million of which were from environmentally sustainable activities (Entra, 2024, p. 225).

4.4.3 – Opportunities

The opportunities in the SWOT analysis, refer to favorable external factors that can give an organization a competitive advantage (Kenton, 2023). One opportunity could be to capitalize on the increasing urbanization in today's world. The increase in population in Norway is

largest in and around the biggest cities (Regjeringen, n.d.). Most of this statistic comes from the younger generation moving for work purposes, meaning that most will be a part of the workforce, which Entra can utilize. With this comes a growth in the real-estate operating and management industry, due to a larger working population.

Referring to earlier in the thesis, the use of proptech in commercial real estate has increasingly become a part of the business. This can be viewed as an opportunity for Entra to utilize, even though they as of 2023 have proptech integrated into their business operations. The continued development of proptech can help Entra have better control over its operations when it comes to becoming more sustainable in the aspect of energy usage and waste management. The use of proptech can also make the operations more efficient, through automation of tasks, and can help to increase the building's security measures.

The lack of new areas to build on and the low development of these areas can be utilized and is viewed as an opportunity. The reason for that is because these areas often have a high demand, and Entra can use this to their advantage by increasing rental costs for the tenants. Due to their portfolio being based in the biggest cities with high demand and attractiveness, Entra can utilize this in both rental costs and the redevelopment of existing buildings making them more attractive.

4.4.4 – Threats

The threats show what external factors may have the potential to harm an organization (Kenton, 2023). An increase in the popularity of working from home and the use of home offices comes as a threat to Entra due to the reduction in revenue this could lead to. Working partly from home has increased in popularity after the COVID-19 pandemic. In 2023 43,9% of the working force in Norway worked from home at some point during the year according to SSB (Statistisk Sentralbyrå, 2023). This results in less office area required and could be a threat to Entra. However, Entra states that although this would have a large effect, the likelihood of a change in the use of, or demand for offices is quite low (Entra ASA, 2024, p. 43).

A reduction in access to financing could lead to Entra being exposed to larger financing costs. This would impact the company in several ways, among these is the possibility of future refinancing and the ability to finance future investments. One way that an increase in the cost of financing could occur is by not complying with environmental regulations (Entra ASA, 2024, p. 31). An oversupply of properties like Entra's on the market is also a potential threat. The prices in the industry are decided based on supply and demand. Therefore, an abundance of supply would lead to the prices being reduced.

Rising interest rates are increased by countries to counter the rate of inflation. With this comes an increase in the cost of borrowing capital. This would set loose a sort of chain reaction where fewer businesses or people borrowing capital, and fewer people investing in the market. This would lead to a reduction in demand (Momin, 2024). An increase in unemployment is also a threat to Entra, especially if the increase is large and sudden. Such increases could result in lower demand for Entra's properties and would reduce profits for the company. Another threat to Entra would be the entrance of new companies into the industry, especially international companies. As there is a relatively small amount of direct competition in the industry, there are opportunities for international companies to enter and seize a large amount of the market share.

A recession in the economy could also pose a threat to Entra. A recession would lead to a lower demand for Entra's properties along with an increased unemployment rate. It would also lead to customers and people, in general, wanting to save a larger portion of their money rather than invest in the market. A weakening of the Norwegian krone is another threat. This would lead to an increase in development costs for new projects by increasing the price of any imports done by Entra, such as materials.

4.5 – Summary of the strategic analysis

To sum up our strategic analysis we will look at the individual methods we used and conclude and comment on them here.

When using Porter's five forces to analyze the competitive landscape in the industry we can find the weaknesses and strengths in the industry. We find that under "competitive rivals", Entra gains a competitive advantage due to their strategy of developing a larger area which

enables them to develop the surrounding area of their properties, as well as the property itself. Under “Threat of new entrants” we find that there are large entrance barriers that make it difficult for new entrants to establish themselves. However, because of EEA regulations, there is a possibility for international companies in the same industry to enter the market, making the threat of new entrants more real for Entra. Under “The negotiating power of supplies” we find that financial institutions, which supply capital, and the suppliers of building materials have substantial negotiating power due to their control over supplies. However, these companies also have competitors making the negotiating power they hold somewhat limited. Under “the negotiating power of customers” we find that the customer holds a relatively small amount of negotiating power over the suppliers. This is explained by the cost of switching suppliers, the price sensitivity of the customer, and no large purchase sizes that can help negotiate a deal. Regarding the “Ability for customers to find substitutes” we find that the customer gains no substantial amount of negotiating power with their ability to find substitutes. This is due to the large amount of capital required to purchase a property instead of renting, and because of the relatively small effect on profits that working from home has currently.

When conducting a PESTEL analysis we find the following: Entra’s operating area in commercial real estate, is to develop, rent as well as manage properties that attract customers and are sustainable to meet the new standards in the market and that match the development of new building regulations. Since Entra is a leading firm regarding sustainability in the real estate market, it will have a positive effect on their future cash flows. The effect on the cash flows is built upon the political and environmental factors, that are regulated by the government and the EU commission. Regarding the sociological factors that affect Entra, the increasing rate of centralization in Norway and the increased immigration will make up for the low growth in population and the increased use of home offices. It will also make commercial real estate that is located near the hub of the city more profitable. In the short term, increased interest rates will drive higher gross and financial costs, which will lead to weaker profitability and growth for firms in the real-estate sector. Furthermore, due to the banks decreasing willingness to lend out money to firms, we believe that diverse accessibility to capital will create increased diversity between large and small commercial real estate.

We used the internal analysis to find whether Entra has or can gain a competitive advantage over its competitors. Here we found which of Entra’s resources are valuable, rare, imitable, or

organized. The table under section 4.3.4 shows our conclusion on the different resources. We found that both physical capital and customer capital are a well-kept competitive advantage, as well as physical capital also being durable. We also found that their sustainability focus is a potential competitive advantage.

The table under section 4.4 shows what we found to be strengths, weaknesses, opportunities, and threats for Entra when conducting our SWOT analysis. The most notable strengths are customer loyalty, their sustainability focus, and their property locations. As for weaknesses, the biggest ones are the proportion of climate-certified buildings and the costs of climate reporting. When it comes to opportunities, proptech and Entra´s capitalization on urbanization is what we consider to be most important moving forward. As technology continues to be innovated and improved with every passing minute, we think this can be a massive opportunity. As for threats, we conclude that working from home is one of the largest threats due to its increased popularity. The access to and price of financing could be a real threat if Entra does not comply with environmental regulations. The threat of international companies entering the industry in Norway could also prove to be a major threat, considering their ability to seize a large amount of the market share.

5. – Financial statement analysis

A financial statement analysis is a critical approach to get an understanding of the current situation in the company. The analysis is based on the income statement for the last years. To get the most accurate trend for the company, it is desirable to have the accounting numbers for several years back in time (Sander, 2024).

5.1 – Historical development

As mentioned earlier, Entra was listed on the Oslo Stock Exchange in 2014 and has since seen a strong and continuous growth. After the COVID-19 pandemic, like most firms, they saw a decrease in their profitability and an increase in financial expenses. Additionally, the firm was also previously owned by the state before the government sold itself out and Entra became a privately owned firm in 2020.

Income statement (numbers in millions)	2019	2020	2021	2022	2023
Rental income	2338	2353	2508	3158	3418
Other revenue	300	113	73	112	92
Total income	**2638**	**2466**	**2581**	**3270**	**3510**
Operating costs	-189	-211	-234	-263	-282
Other costs	-260	-79	-43	-85	-67
Administrative costs	-171	-186	-210	-210	-185
Total operating expense	**-620**	**-476**	**-487**	**-558**	**-534**
EBIT	**2018**	**1990**	**2094**	**2712**	**2976**
Share of profit from associates and JVs	312	120	19	-37	-72
Net realized financials	-551	-541	-551	-1095	-1620
Change in value of investment properties	1 909	5 980	5 057	-2 519	-8 148
Change in value of financial instruments	46	-275	206	473	-4
Profit before tax	**3 735**	**7 274**	**6 825**	**-467**	**-6 868**
Tax payable	-11	-26	-19	-31	-13
Change in deferred tax	-498	-1 552	-1 433	-71	1299
Profit for the year	**3 225**	**5 696**	**5 373**	**-569**	**-5 582**

Assets (in millions)	2019	2020	2021	2022	2023
Intangible assets	118	109	109	0	0
Investment Properties	49 095	56 834	67 568	77 404	68 470
Investments in associates and JVs	397	527	872	891	859
Financial derivatives	274	347	254	698	705
Other non-current assets	278	269	253	661	611
Total non-current assets	**50 161**	**58 086**	**69 056**	**79 654**	**70 644**

Inventory properties	413	461	469	472	481
Trade receivables	43	64	77	56	88
Other current assets	226	279	295	525	932
Cash and bank deposits	317	217	309	226	171
Total non-current assets	**998**	**1 021**	**1 149**	**1 278**	**1 672**
Investment properties held for sale	0	33	87	1 230	1 020
Total assets	**51 160**	**59 141**	**70 292**	**82 162**	**73 336**

Equity and liabilities (in millions)	2019	2020	2021	2022	2023
Shareholders' equity	22 570	27 136	31 263	29 693	23 779
Non-controlling interests	1 947	2 069	2 308	1 978	1 775
Total equity	**24 517**	**29 205**	**33 571**	**31 671**	**25 555**
Borrowings	17 362	19 095	22 788	38 091	38 156
Deferred tax liability	5 367	6 914	8 307	8 216	6 896
Financial derivates	341	690	355	310	283
Other non-current liabilities	505	554	650	673	636
Total non-current liabilities	**23 576**	**27 253**	**32 099**	**47 291**	**45 971**
Borrowings	2 539	2 051	3 791	2 423	958
Trade payables	200	281	465	355	392
Other current liabilities	328	351	367	421	460
Total current liabilities	**3 067**	**2 683**	**4 622**	**3200**	**1 811**
Total liabilities	**26 642**	**29 936**	**36 722**	**50 490**	**47 782**
Total equity and liabilities	**51 160**	**59 141**	**70 292**	**82 162**	**73 336**

5.2 – Profitability

By analyzing Entra's profitability, we can see how the firm gets its surplus, which is important for all firms. Especially for firms on the stock exchange, well-perceived profitability shows they can pay dividends to their shareholders. The analysis can be done by looking at the firm's key performance indicators (KPI). For the firm to be profitable, its income must be larger than its costs.

5.2.1 – Operating margin

Operating margin is the operating result expressed in percentage. The operating result can be defined as "how the operations have done, independently from how the firm is financed" (Hoff & Pedersen 2019, p. 220). The operating margin indicates how much percentage of a dollar of sales is profit. A high ratio is usually considered to be a good thing. When proceeding with the analysis, one should look at how profitable the firm is with the background of the activities in the operation, the result of depreciations and write-downs, before the interest costs and tax considering (Hayes, 2022). The operating margin is expressed in percentage:

$$Operating\ margin = \frac{Operating\ result}{Operating\ income} * 100\%$$

Equation 9, Operating margin

Year	2019	2020	2021	2022	2023
Rental income	2338	2353	2508	3158	3418
Other revenues	300	113	73	112	92
Operating income	2638	2466	2581	3270	3510
EBIT	2018	1990	2094	2712	2976
Operating margin	76,50 %	80,70 %	81,13 %	82,94 %	84,79 %

Table 7, operating margin (in millions), 2019-2023

Figure 7, operating margin (in %), 2019-2023

As shown in the graph above, Entra's operating margin has always been high, with an average of 81,2% over the last 5 years. The operating margin in 2019 was the lowest at 76,5%. For 2020 it sharply rose to 80,7%, which can be attributed to the other revenues, under operating income, decreasing by substantially more than what EBIT did. This is due to 185 of the 300 million NOK in 2019's other revenues being attributed to the development of a property on Tollbugata in Oslo, which was sold and delivered in November of 2019 (Entra ASA, 2020). After 2020 the graph shows a steady increase in the operating margin until 2023 where it was at 84,8%.

5.2.2 – Return on Total Capital

The return on total capital (ROTC) shows the total capital's expected return under normal circumstances, where it excludes eventual extraordinary incomes and expenses for a given period. It is independent of the ratio between equity and debt (Hoff & Pedersen 2019, pp. 207-208). This metric is especially useful to measure how effectively the company in question is at using its capital to generate profits (SuperfastCPA, n.d.). To find the return on total capital, the following formula is used:

$$R_{tc} = \frac{Ordinary\ result\ before\ tax + financial\ costs}{Average\ total\ capital} * 100\%$$

Equation 10, Return on total capital

Where,

R_{tc} = Return on total capital

Year	2019	2020	2021	2022	2023	Average
Net income before taxes	3735	7274	6825	-467	-6 868	
Financial costs	562	551	559	1113	1654	
Average total capital	49434,5	55150,5	64716,5	76227	77749	
Return on total capital	8,69 %	14,19 %	11,41 %	0,85 %	-6,71 %	5,69 %

Table 8, total capital rentability before tax (in millions), 2019-2023

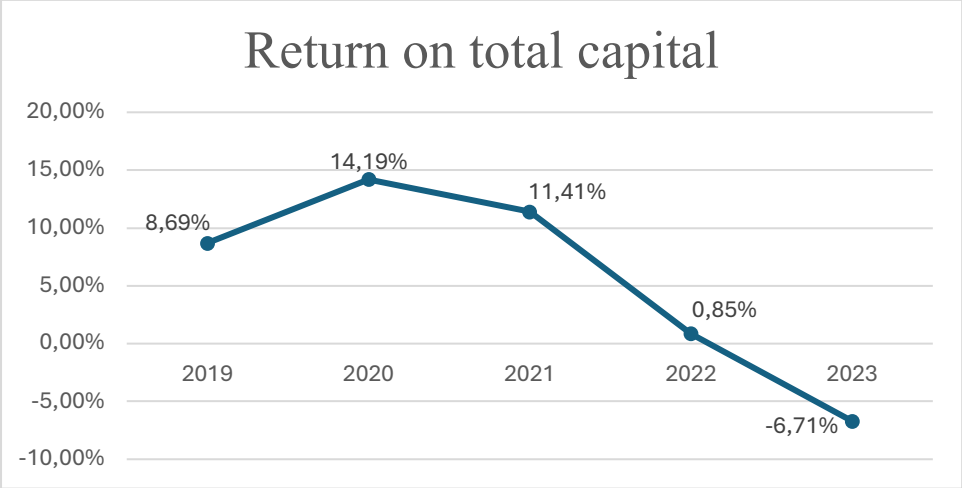

Figure 8, return on total capital (in %), 2019-2023

The table above shows that while the firm has seen an increase in its average total capital, its interest and other financial expenses have increased. Also worth noting is that their net income was negative for both 2022 and 2023, because of large write-downs. For 2023, write-downs on properties were exceptionally high: -8 148 million NOK for investment properties and -4 million NOK for financial instruments. The increase in interest and finance costs can be explained by the increase in the Norwegian policy rate in recent years. One can also see that they have experienced a big loss in profit before tax in 2023. According to the annual report for 2023, it is connected to the reduced activity in the property transaction market and put pressure on yields throughout 2023 (Entra, 2024, p. 24). It is also worth mentioning that the total capital has increased steadily over the years. The average return on total capital for Entra in percentage was 5,7%.

5.2.3 – Return on Equity

The return on equity (ROE) is the KPI that shows the owners of the firms' expectations of their invested equity. ROE is used to show the result when operating normally after financial expenses are deducted from the operating result. The sum here is what is left to the owners

after the borrowers have received their share (Hoff & Pedersen 2019, p. 215). To find the return on equity after tax, the following formula is used:

$$R_{eq} = \frac{Ordinary\ result\ after\ tax}{Average\ equity} * 100\%$$

Equation 11, Return on equity after tax

Where,

R_{eq} = Return on equity

Year	2019	2020	2021	2022	2023	Average
Net income before taxes	3735	7274	6825	-467	-6868	
Profit for the year	3225	5696	5373	-569	-5582	
Average total equity	21547	24853	29199,5	30478	28613	
Return on equity (before tax)	17,33 %	29,27 %	23,37 %	-1,53 %	-24,00 %	8,89 %
Return on equity (after tax)	14,97 %	22,92 %	18,40 %	-1,87 %	-19,51 %	6,98 %

Table 9, return on equity before and after tax (in millions), 2019-2023

As for the post "Profit for the year", these numbers are subtracted from the non-controlling interests, which are paid out to minority shareholders and are not a part of the return on equity.

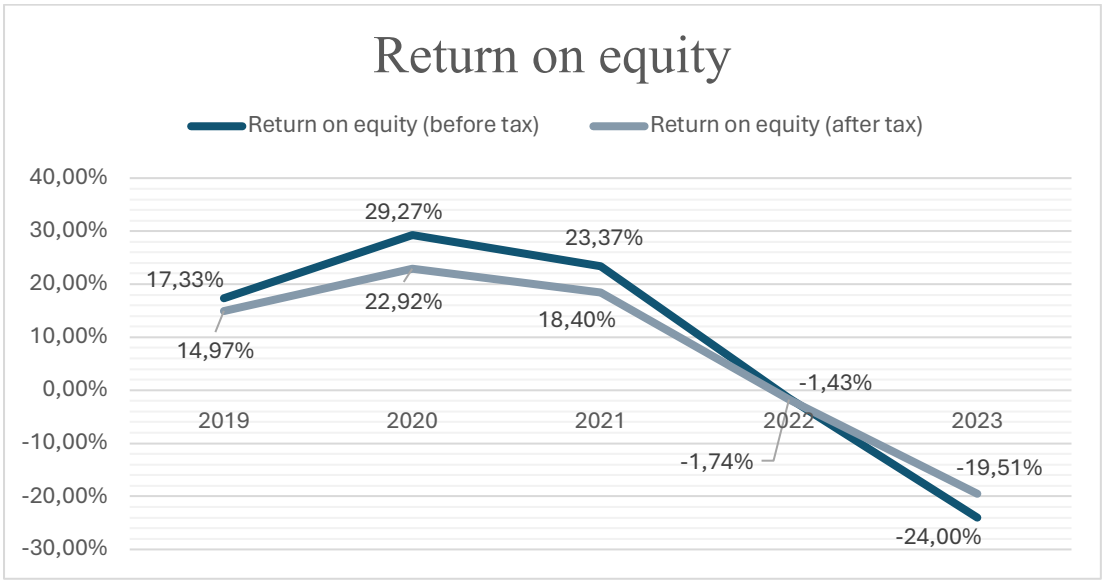

Figure 9, return on equity (in %), 2019-2023

In theory, the return on equity should be larger than the sum of the risk-free rate and the business area risk premium, and should usually be around 10-15%, based on the business area risk. Entra's return on equity was negative for both 2022 and 2023, compared to the previous years. This is related to the value changes of their properties being negative for these years,

which affects net income negatively. Return on equity was at the highest in 2020, with it being 29,3% before tax, and 22,9% after tax.

5.3 – Liquidity

Liquidity is defined as the stock of bank deposits, payment media such as cash, and easily transferable securities that a firm has (Hoff & Pedersen 2019, p. 261). Firms with good liquidity can pay their contractors and other institutions they are obliged to pay. In the liquidity term, current assets play a significant role and is concerning the short-term cycle of goods in the firm. These assets are bought to be quickly used and are directly connected to the firm's operating cycle, with a requirement of less than 12 months (Hoff & Pedersen 2019, p. 58).

5.3.1 – Current liquidity ratio

The current liquidity ratio is regarding the relation between the current assets divided by the short-term debt. In this case, the current assets are the short-term assets of the firm (Hoff & Pedersen 2019, p. 238). It can be calculated by using this formula:

$$Current\ liquidity\ ratio = \frac{Current\ assets}{Shortterm\ debt}$$

Equation 12, Current liquidity ratio

Year	2019	2020	2021	2022	2023
Current assets	998	1021	1149	1278	1672
Current liabilities	3067	2683	4622	3200	1811
Current liquidity ratio	0,33	0,38	0,25	0,40	0,92

Table 10, current liquidity ratios (in millions), 2019-2023

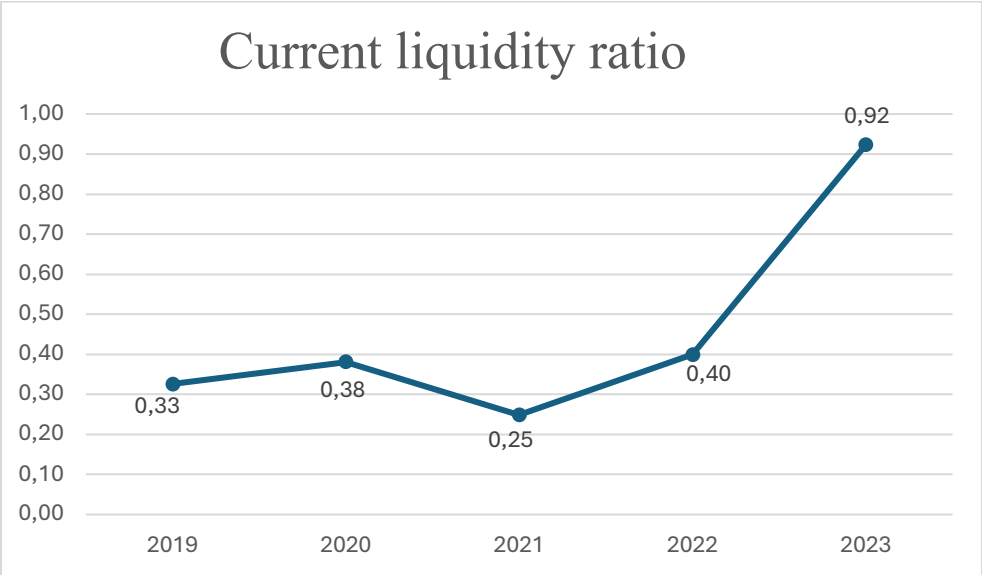

Figure 10, current liquidity ratios, 2019-2023

As shown in the graph above, the current liquidity ratio has increased from previous years. The current liquidity ratio has a recommendation, not a requirement of being ≥ 2, which means that half of the current assets one owns are financed by long-term capital and debt. As commercial real estate does not have a lot of liquid assets, we viewed the result for 2023 as more likable, compared to the years prior.

5.3.2 – Quick liquidity ratio

The quick liquidity ratio is concerning the short-term debt and current assets subtracted by the stock of goods. For the quick liquidity ratio, the calculation is done by subtracting inventory from the current assets. The reason is that the stock of goods is considered less liquid than the other types of current assets (Damodaran 2012, p. 48-49). The following formula is used for the quick liquidity ratio:

$$Quick\ liquidity\ ratio = \frac{Current\ assets - Inventory}{Shortterm\ debt}$$

Equation 13, Quick liquidity ratio

Year	2019	2020	2021	2022	2023
Current assets - inventory	585	560	680	806	1191
Current liabilities	3067	2683	4622	3200	1811
Quick liquidity ratio	0,19	0,21	0,15	0,25	0,66

Table 11, quick liquidity ratios (in millions), 2019-2023

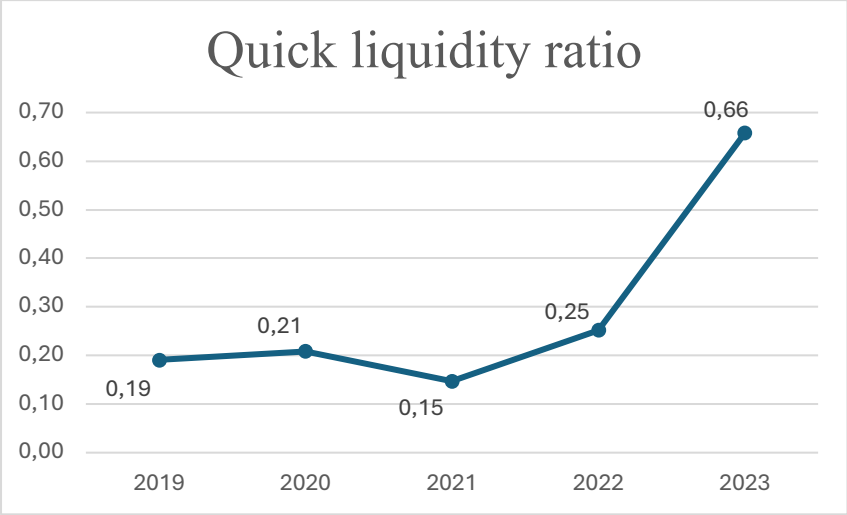

Figure 11, quick liquidity ratios, 2019-2023

While the current liquidity ratio should be above 2, the quick liquidity ratio should be higher or around 1, since it is based on the most liquid assets which is best usable to pay off the short-term debt (Damodaran 2012, p. 49). Their quick liquidity ratio has followed the same trend as the current liquidity ratio for Entra, with it being at the highest for 2023, and lowest in 2021.

5.4 – Solidity analysis

Solidity is a term commonly used to show how big of a proportion of the firm's assets that are financed by their equity. The number on solidity shows how big of a loss the firm can withstand over a period (Proff.no, n.d.).

5.4.1 – The equity ratio

The equity ratio shows how big of a proportion of the assets that can be lost before the lenders and creditors are affected. This calculation divides capital, both paid-in and earned (Hoff & Pedersen 2019, p. 276), which also shows the solidity of the firm:

$$Equity\ ratio = \frac{Equity}{Total\ capital} * 100\%$$

Equation 14, The equity ratio

Year	2019	2020	2021	2022	2023
Total equity	24517	29205	33571	31671	25555
Total equity and liabilities	51160	59141	70292	82162	73336
Equity ratio	47,92 %	49,38 %	47,76 %	38,55 %	34,85 %

Table 12, equity ratios (in millions), 2019-2023

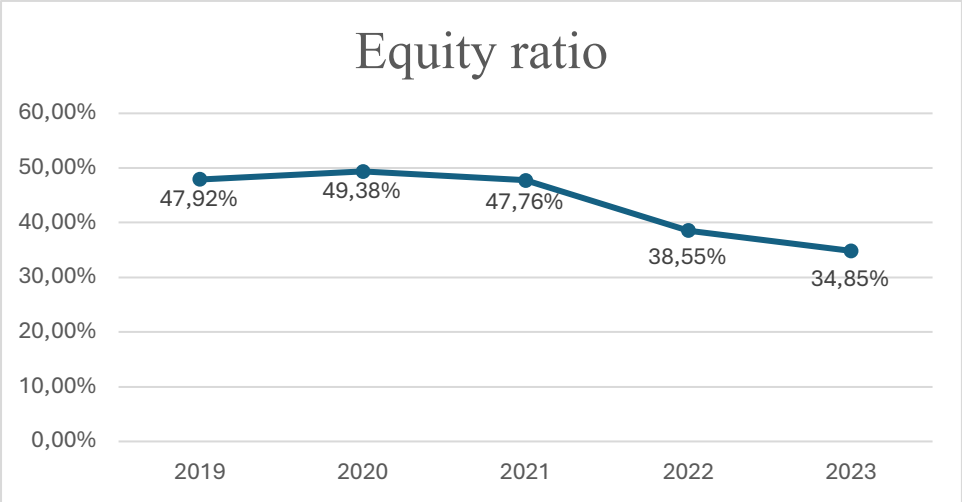

Figure 12, equity ratios, 2019-2023

The graph above shows us that the equity ratio peaked in 2020 at 49,4% and has since decreased to 34,9% in 2023. The largest decrease was in 2021-2022 when the equity ratio decreased by 9,2%. The large decrease between these years can be attributed to Entra borrowing capital for the acquisition of Oslo Areal AS in 2022, which accounts for the significant increase in total equity and liabilities. Having said this, Entra has a goal to have a 50/50 split between equity and debt (Entra, 2024, p. 29).

5.4.2 – The debt-to-equity ratio

The debt-to-equity ratio expresses the proportion between debt and equity. This says how much Norwegian kroner of debt there is in relation to equity (Hoff & Pedersen, 2019, p. 279). This is another form of a solidity analysis, which is calculated through this formula:

$$Debt'to'equity\ ratio = \frac{Debt}{Equity}$$

Equation 15, The debt-to-equity ratio

Year	2019	2020	2021	2022	2023
Total debt	26642	29936	36722	50490	47782
Total equity	24517	29205	33571	31671	25555
Debt to equity ratio	1,09	1,03	1,09	1,59	1,87

Table 13, debt-to-equity ratios (in millions), 2019-2023

A lower debt-to-equity ratio indicates that a company has less debt relative to its equity. This implies smaller future financial obligations and payments for the firm. The recommendation is that the debt-to-equity ratio does not exceed 1,85 compared to a 35% equity ratio. (Hoff & Pedersen, 2019, p. 279).

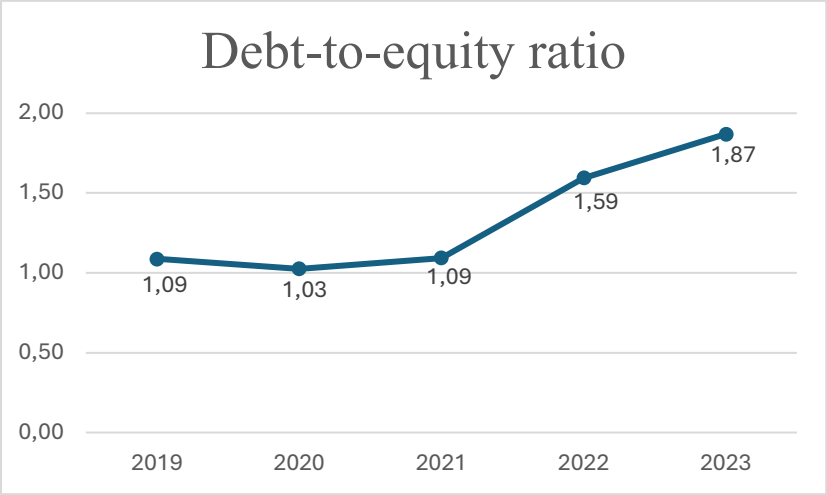

Figure 13, debt-to-equity ratios, 2019-2023

For Entra, their debt ratio increased a lot in 2022, mostly because of them having a lot of debt and their financial costs increasing. In Entra's annual report for 2023, they said that one of their goals is to better their debt metrics (Entra, 2024, p. 10). In 2023, they sold six properties totalling 2,8 billion NOK (Entra, 2024, p. 14). However, because of the decrease in total equity, this ratio has increased for the previous year. They have now exceeded the recommended debt-to-equity ratio.

5.4.3 – Funding ratio

The funding ratio is used to show how a company´s fixed assets are financed. A funding ratio of 1 means that all fixed assets are financed with long-term capital, which is considered good. However, if the funding ratio is above 1, it indicates that parts of the fixed assets are funded with short-term debt (Norian, n.d.).

Year	2019	2020	2021	2022	2023
Total non-current assets	50161	58086	69056	79654	70644
Total non-current liabilities	23576	27253	32099	47291	45971
Total equity	24517	29205	33571	31671	25555
Funding ratio	1,04	1,03	1,05	1,01	0,99

Table 14, funding ratio, 2019-2023

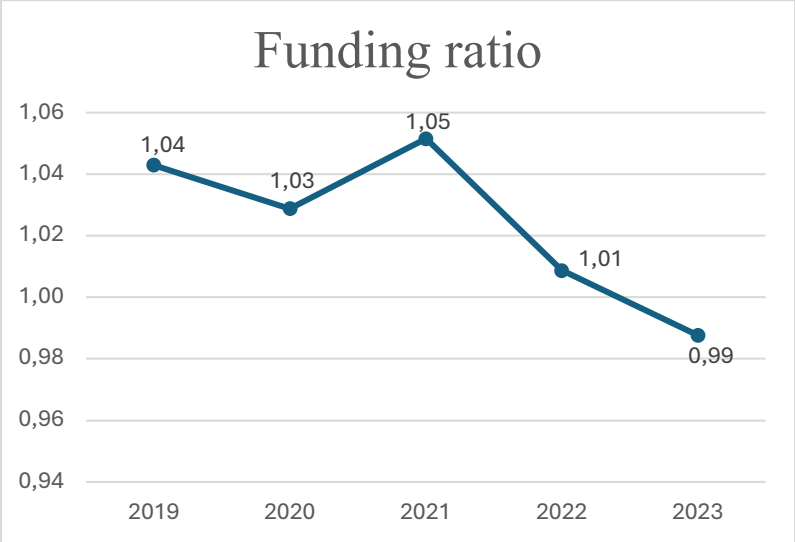

Figure 14, funding ratio, 2019-2023

The funding ratio for Entra has had a downward trend in the last few years. We can see that the funding ratio was stable from 2019 until 2021 when it was at its highest. From there we can see that it has decreased until 2023 when the funding ratio was at its lowest, at 0,99. That means that 2023 was the first of the last few years where all their fixed assets were financed with long-term capital.

5.4.4 – Times interest earned

The times interest earned is a solvency ratio which is based on its current income. Here one can measure the company's ability to meet its debt obligations. The higher the value of the ratios, the better the firm's capability is to pay its debt charges by using its current earnings

(Chen, 2024). Commercial real estates usually take up more debt to be able to finance new projects. Generally, the times-interest earned ratio should minimum be 2, but ideally 3 or higher, as this means that the company is very cash abundant when it comes to paying of their interest expenses. Furthermore, the company can proceed to re-invest more money to generate more profit (Wall Street Prep, 2024).

Year	2019	2020	2021	2022	2023
EBIT	2018	1990	2094	2712	2976
Interest expense	578	555	552	1079	1592
Times interest earned	3,49	3,59	3,79	2,51	1,87

Table 15, times interest earned, 2019-2023

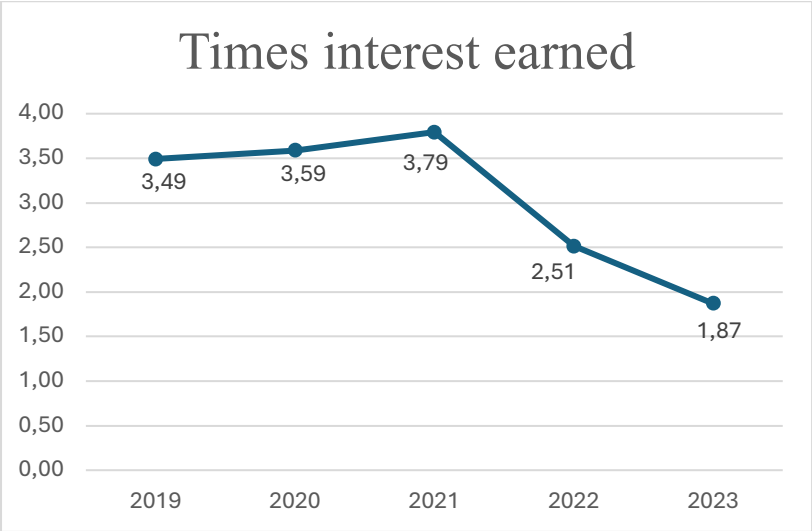

Figure 15, times interest earned, 2019-2023

Entra's times interest was exceptional from 2019-2021, following low interest expenses. Afterwards, because of an increase in policy rate, their interest expense has gone up. As a consequence, it has now fallen below the minimum accepted level.

5.5 – Conclusion

If we look at Entra's operating margin, we can see that it has grown for each year from 2019 to 2023, with a big spike in 2020. The return on total capital has seen a negative trend for the last few years, because of a higher average total capital, and net income before taxes being negative for the last two years. Return on equity has had a similar course. Both these ratios are affected by property write-downs. When looking at the numbers for 2019 to 2021, Entra has kept a solid return.

Their liquidity ratios have for the most part been quite low, with a spike for both ratios in 2023. Most of their assets are hard to make liquid since they are properties.
When looking at the solidity of Entra, we saw that their equity ratio has been steady for the most part, with a little dip in 2022, mostly because of increased borrowing costs. Their debt-to-equity ratio has increased as a result of increasing financial costs from higher interest rates. Times interest earned has also been affected negatively over the last few years, because of the same reason. Entra has had a healthy financial leverage ratio for the last 5 years, and even going below 1 for 2023, which is considered good.

6 – Forecasts for future cash flows

The purpose of the fundamental valuation is to try to find the present values for all future cash flows, by making estimations of the components, based on historical numbers. The cash flows will later be discounted by using the weighted average cost of capital (WACC), which we will come back to. The components used for the valuation are:

Total income
- Total expenses
= EBITDA
- Depreciation
= EBIT
- Tax
= EBI
± Change in working capital
+ Depreciation
- Net Investments
= Free cash flow

Year	2024e	2025e	2026e	2027e	2028e
Total income	3 396	3 581	3 765	3 946	4 137
Total expenses	675	711	748	784	822
EBITDA	**2 722**	**2 869**	**3 017**	**3 163**	**3 315**
Depreciation	4	4	4	4	4
EBIT	**2 717**	**2 865**	**3 012**	**3 158**	**3 311**
Tax	598	630	663	695	728
EBI	**2 120**	**2 235**	**2 350**	**2 463**	**2 583**
Change in working capital	21	18	15	13	11
Depreciation	4	4	4	4	4
Net Investments	170	358	663	695	729
Free cash flow	**1 934**	**1 864**	**1 676**	**1 760**	**1 848**

Table 16, prognosis of free cash flows for Entra ASA (in millions), 2024-2028

We do our estimations by looking at historical numbers. Rental income is estimated by calculating real growth from a 5-year historical period, with CPI growth taken into consideration. Total expenses are estimated by seeing it relative to incomes. For working capital, we estimated it by using the average historical percentage change. Our depreciation and amortization estimates are found by looking at a 5-year average. For estimating investments, we have deducted net borrowing from total investments for the previous years, and thereafter calculated this as an average proportion of total incomes.

6.1 – Total Income

Entra's income is mostly categorized in two; their rental income and other revenues. Rental income consist of income from renting out properties, and turnover-based rental income. Their other revenues include sales of additional services and rental income from their inventory properties.

We see Entra as a leading commercial real estate in sustainability making them more attractive for customers. In Entra's annual reports, they note that around 98% of their lease contracts for each year are CPI-adjusted (Entra, 2024, p. 145). We have also discussed the effects of home offices being increasingly popular among workers and can be viewed as a substitute for commercial offices. Even though businesses have seen the effects of working from home, we have viewed this as a threat to their operations, but not so much for centralized and attractive office complexes. We then evaluate that the total income will most likely continue to steadily increase over the years.

Year	2018	2019	2020	2021	2022	2023	
Rental income	2 243	2 338	2 353	2 508	2 836	3 060	
Percentage growth		4,24 %	0,64 %	6,59 %	13,08 %	7,88 %	
CPI for the given year	2,75 %	2,21 %	1,26 %	3,48 %	5,77 %	5,54 %	
Real growth		2,03 %	-0,62 %	3,11 %	7,31 %	2,34 %	
Average real growth	2,83 %						
Other revenue		115	113	73	112	92	
Total income		2 453	2 466	2 581	2 948	3 152	
Other revenue percentage of total income		4,69 %	4,58 %	2,83 %	3,80 %	2,92 %	3,7634%

Table 17, total income Entra ASA (in millions), 2018-2023

Rental income for 2022 was set to 3 158 million NOK. We viewed this as a big spike, considering that 644 million of their income was from the takeover of Oslo Areal (market rent Oslo for 2022 * area of Oslo Areal) (Entra, 2023, pp. 16 & 23). We therefore decided to calculate an average value of rental income with and without Oslo Areal, which gave us an outcome of 2 836 million NOK. As for 2023, the same normalization was done.

"Other revenue" for 2019 in the annual report was set to 300 million NOK. This was seen as a big deviation compared to the other years. 185 million of the "other revenue" post was from the development of a project, Tollbugata 1A (Entra, 2020, p. 73). We have therefore decided to normalize it to 115 million. Other revenue for the following 5 years is calculated as a percentage of total estimated income. Historically, the other revenue post has constituted to approximately 3,8% of total income, as shown in the table above.

Year	2024e	2025e	2026e	2027e	2028e
Rental income previous period	3 060	3 269	3 446	3 623	3 798
Average real growth	87	93	98	103	108
CPI for the given year (forecast from SSB)	4,0%	2,6%	2,3%	2,0%	2,0%
CPI growth	122	85	79	72	76
Rental income this year	3 269	3 446	3 623	3 798	3 982
Other revenue	128	135	142	148	156
Total income	**3 396**	**3 581**	**3 765**	**3 946**	**4 137**

Table 18, predicted income Entra ASA (in million), 2024-2028

According to our estimation, total income will continue to grow steadily over the next 5 years, even with the decrease in CPI, forecasted by SSB (Statistisk sentralbyrå, 2024). We have also adjusted the CPI for 2027 and 2028 to be aligned with Norway's inflation target of 2% (Norges Bank, n.d.).

6.2 – Total expenses

Entra's total expenses consist of operating costs, other costs and administrative costs.
An increase in costs due to an energy crisis and high interest rates, as well as an increased sustainability focus, are factors we consider to have an influence on the increase in costs for the next years. Here, we estimate the average ratio between total costs and total income.

Year	2019	2020	2021	2022	2023
Operating costs	189	211	234	263	282
Other costs	260	79	43	85	67
Administrative costs	171	186	210	210	185
Total costs	620	476	487	558	534
Total income	2 453	2 466	2 581	2 948	3 152
Ratio between total costs and total income	25,28 %	19,30 %	18,87 %	18,93 %	16,94 %
Average	19,86 %				

Table 19, total expenses Entra ASA (in millions), 2019-2023

Total costs amounted to an average of 19,9% of total income for the previous 5 years. From the strategic analysis, we estimate that the costs will continue to increase as the years go on.

Year	2024e	2025e	2026e	2027e	2028e
Total income	3 396	3 581	3 765	3 946	4 137
Total costs	**675**	**711**	**748**	**784**	**822**

Table 20, predicted expenses Entra ASA (in millions), 2024-2028

6.3 – Tax

The current statutory rate is 22%. As discussed in the PESTEL analysis, commercial real estates also have to worry about the fortune-tax rates, depending on how much of their property is considered to be for commercial use, etc. Due to the complexity a commercial real estate has to go through with their taxation and the difficulties estimating a future tax rate, we took our standpoint in the earnings before interest and tax (EBIT), where we use the 22% tax rate for LLCs for the estimating of future earnings before interest (EBI).

6.4 – Working capital

The working capital tells us what the difference between a firm's current assets and current liabilities is. For Entra, working capital has been negative for the last 6 years, with large variations between the numbers.

This can be explained by their continuous investments in new and existing properties, which leads to a higher capital cost, but with a reliable income in the future. As for 2023, the increase in working capital can be attributed to the reduction in their current borrowings. The working capital will stabilize over the next 5 years, according to our estimates.

Year	2018	2019	2020	2021	2022	2023
Total current assets	1 921	998	1 021	1 149	1 278	1 672
Total current libabilities	4 710	3 067	2 683	4 622	3 200	1 811
Working capital	(2 789)	(2 069)	(1 662)	(3 473)	(1 922)	(139)
Change in working capital		720	407	(1 811)	1 551	1 783
Percentage change		25,82 %	19,67 %	-108,97 %	44,66 %	92,77 %
Average	14,79 %					

Table 21, working capital Entra ASA (in millions), 2018-2023

Year	2024e	2025e	2026e	2027e	2028e
Working capital	(118)	(101)	(86)	(73)	(62)
Change	**21**	**18**	**15**	**13**	**11**

Table 22, estimation of future working capital Entra ASA (in millions), 2024-2028

6.5 – Depreciation and amortization

Depreciation shows the periodization of the lifetime for assets. For Entra's part, depreciation only comes from other operating assets, which are very similar each year. Changes in the value of investment properties and financial instruments are separate posts in their financial statement. We have decided to merge depreciation with amortization, as this is what Entra does in their financial statement.

Year	2019	2020	2021	2022	2023
Depreciation and amortization	4	5	5	4	4
Average	4,4				
Year	**2024e**	**2025e**	**2026e**	**2027e**	**2028e**
Depreciation and amortization	**4**	**4**	**4**	**4**	**4**

Table 23, estimation of depreciation and amortization Entra ASA (in millions), 2024-2028

6.6 – Investments

Entra didn't acquire any new properties for 2023, following their heavy investments in 2022. In 2023 Entra did refurbish some of their properties. However, their cash flow for investment activities was positive for 2023, because property transaction proceeds were much higher. Therefore, to estimate investments, we decided to look at the years between 2018 and 2022 instead, to get a better picture of the trend, as 2023 deviates a lot. We wanted to determine the extent to which investments exceed net borrowing. To do this, we subtracted net borrowing from the investments and used this value as a share of total income for the given year.

Year	2018	2019	2020	2021	2022
Investments	1 645	1 005	1 868	5 865	14 459
Interest bearing debt	13 209	16 430	14 635	23 348	30 900
Repayment interest bearing debt	(11 998)	(15 699)	(13 390)	(17 888)	(16 999)
Repayment lease liabilities	-	(9)	(9)	(10)	(5)
Net borrowing	1 211	722	1 236	5 450	13 896
Investments - net borrowing	**434**	**283**	**632**	**415**	**563**
Total income	2 764	2 453	2 466	2 581	2 948
Proportion of total income	16 %	12 %	26 %	16 %	19 %
Average	18 %				

Table 24, investment activities Entra ASA (in millions), 2019-2023

Year	2024e	2025e	2026e	2027e	2028e
Total income	3 396	3 581	3 765	3 946	4 137
Investments	**170**	**358**	**663**	**695**	**729**
Proportion of total income	5 %	10 %	18 %	18 %	18 %

Table 25, predicted future investments Entra ASA (in millions), 2024-2028

Although Entra is dependent on investing in key areas to create value, we believe that their investment activities will stay low for the next two years, due to high investments in 2022, their goal to reach a 50/50 split between equity and debt for the future, and increased interest rates. Therefore, net investments for 2024 will only constitute to 5% of the total income for 2024. We estimate an increase in 2025 to 10%, before it reaches a normal level of 18% in 2026. From 2026 and onwards, we expect Entra to use the same proportion of total income on net investments following what they have previously done.

7 – Required return

To conduct a valuation, it is necessary to calculate the required return, which is used when discounting future cash flows to present values. This will give a picture of what future cash flows are worth today. It considers external factors, such as inflation, risk, time value, and alternative costs. The required return is the expectation or rentability on an investment, which can be the interest rate one earns on a bank deposit (Hoff & Pedersen 2019, p. 224). If the return is lower than the requirement, then one should not make the investment, since the investor will lose money on it.

7.1 – Risk-free rate

The risk-free rate used in the valuation can be chosen from several bonds since the non-compliance risk is low and has a low bankruptcy risk. The longevity a risk-free rate has should reflect the time horizon to an everlasting cash flow. We used a 10-year government bond to reflect the risk-free rate used in the calculation of the required return on total capital because the rate is fixed beforehand and doesn't change during its lifetime A bond can also have a certain risk regarding the firm going bankrupt, even if it is a big and stable firm on the stock exchange. As shown in a survey done by PWC, around 54% of the respondents said that a 10-year government bond should be used when using a normalized risk-free rate. (PWC, 2023). As of 31.12.2023, the rate of a 10-year government bond was 3,48%. (Norges Bank, n.d.).

7.2 – Risk premium

The risk premium will differentiate over time and can be affected by the risk-free rate short term. Since most investors are risk-averse, they will demand a higher return to invest in a project with a higher risk than the risk-free rate. The certainty of what a risk premium in the stock is will vary. According to the survey done by PWC, the median market risk premium as of 2023 is 5% (PWC, 2023). Even though comparing the total stock market risk to a commercial real estate firm seems like the easy answer, we chose to use that premium, because we view the sector as a stable class of assets.

7.3 – Beta

Since Entra is a firm that is noted on the stock exchange, one can estimate the beta by measuring each individual stock's risk compared to the market and looking at how exposed the stock is to the market risk.

We computed Entra's beta by conducting a regression analysis on Entra's stock and the OSEBX market index from 2019 to 2023. We decided to use weekly observations, to get enough values, and also to reduce the standard error. A smaller sample size tends to have a higher standard error. Standard error for weekly returns over the 5-year period was 0,0395, and 0,0766 for monthly returns over the same period. In total, our estimated beta has 260 observations, which is sufficient to get enough variation in the data used. Our regression

analysis for monthly and weekly beta are attached in appendix. Covariance between the returns for Entra and OSEBX is 0,00053764, while the variance for OSEBX is 0,00060397. This gives the following estimated Beta:

$$\beta_{Entra} = \frac{0{,}00053764}{0{,}00060397} = 0{,}89$$

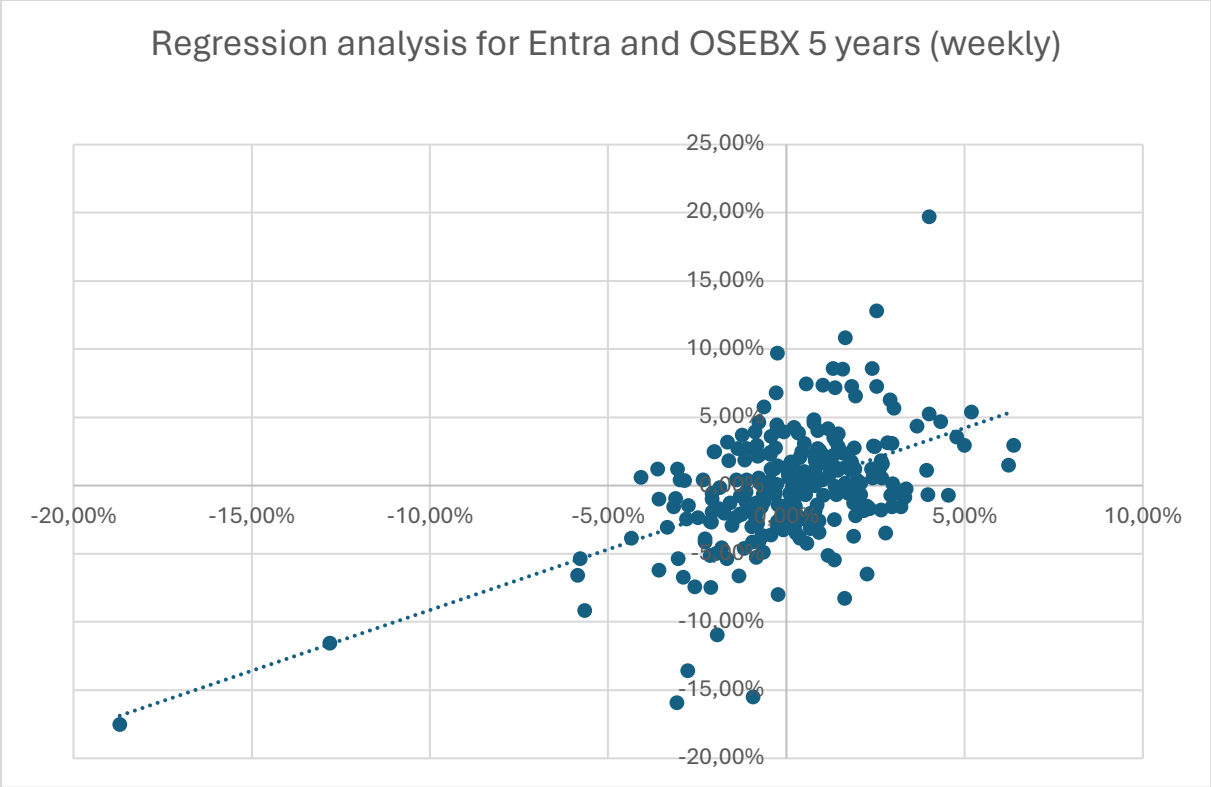

Figure 16, regression analysis

Beta for Entra ASA is therefore estimated at 0,89. with the regression analysis. R-squared is 0,2664. However, Bloomberg also calculates what is known as *adjusted beta*, which pushes all estimated betas toward the market average over time (Damodaran, p. 187). Adjusted beta is calculated as follows:

$$Adjusted\ beta = \left(\frac{2}{3} * Raw\ beta\right) + (\frac{1}{3} * 1)$$

Equation 16, Adjusted beta

Adjusted Beta for Entra ASA is 0,93, which is the beta we will be using to calculate the cost of equity. A beta of 0,93 tells us that when the market index increases by 1%, then Entra's stock price will increase by 0,93%. The weekly beta calculation indicates that Entra's stock price fluctuations are slightly less than the overall market's fluctuations.

Instead of using the regression analysis, one can also use the beta from Yahoo Finance, Reuters, or Infront Analytics. At Yahoo Finance, there was no data for the beta, Reuters beta was set at 1,31 compared to S&P 500 (Reuters, n.d.), and Infront Analytics shows a 1-year levered beta of 0,72 compared to OBX (Infront Analytics, n.d.).

7.4 – Cost of equity

By using the capital-asset pricing model (CAPM) with a risk-free rate of 3,48%, market risk premium of 5%, and an adjusted beta of 0,93, Entra's cost of equity is calculated at 8,11%.

$$Cost\ of\ Equity = 3{,}48\% + (0{,}93 * 5\%) \approx 8{,}11\%$$

7.5 – Cost of debt

To continue with the calculation of WACC, it is necessary to calculate the cost of debt, which is the effective rate a firm uses to pay off its debt. To find the cost of debt, we will use the firm's average effective interest rate of the debt at year-end for 2023, which is noted as 4,44% (Entra, 2024, p. 28). We have previously seen that the interest rates are most likely to increase for the next couple of years, but due to a commercial real estate's ability to secure good financial conditions, we will use the current cost of debt at 4,44%.

7.6 – Equity- and debt ratio

The equity ratio has already been calculated earlier in the KPI analysis. For 2023 the equity ratio is 34,85%. The debt ratio is then 65,15%, as shown in the calculation below:

$$100\% - 34{,}85\% = 65{,}15\%$$

7.7 – Required return on total capital (WACC)

The weighted average cost of capital can also be described as the cost of holding equity and debt. It is used to find the expected discount rate for the firm's portfolio of assets. As mentioned earlier, we have calculated the cost of equity to be 8,11%, which will now be multiplied by the equity ratio. WACC is relevant because most firms have debt, and the debt ratio varies from one firm to another. The cost of debt springs from the accrued financial costs in relation to the total debt, and is multiplied by the debt ratio, which afterward will be

multiplied by 1 subtracted by the tax rate, since the firm gets a deduction for their financial costs. The formula is:

$$WACC = \frac{Equity}{Total\ capital} * R_e + \frac{Debt}{Total\ capital} * R_g * (1 - tax\ rate)$$

Equation 17, WACC

$$WACC = 34{,}85\% * 8{,}11\% + 65{,}15\% * 4{,}44\% * (1 - 22\%) \approx 5{,}08\%$$

The WACC of 5,08% will be used to calculate the terminal value for Entra.

7.8 – Present value of free cash flow

To further our valuation, one has to discount the future cash flows to present value. Since we are doing a valuation with the FCFF method, we therefore use the WACC as a discount factor.

Year	2024e	2025e	2026e	2027e	2028e
Free cash flow	1 934	1 864	1 676	1 760	1 848
Discount factor	1,051	1,104	1,160	1,219	1,281
Present value	**1 840**	**1 688**	**1 445**	**1 443**	**1 442**

Table 26, present value of free cash flows (in millions)

7.9 – Terminal value and present value

We found Entra's real growth rate in rental income to be 2,83% for the past 5 years. However, this number would be very unrealistic to use in a terminal growth rate, as this essentially would mean that Entra would grow with the same rate indefinitely. In the strategic analysis, we believe that Entra will be in a great position in the commercial real estate market as a lessor going forward. This is especially true due to an increasing demand for offices that are centralized and sustainable, a low supply for these services, and a loyal customer base. Coincidentally, an increase in interest rates and inflation will damper growth.
For the calculation of terminal value, we will use the average growth rate that we found in PwC's report for the risk premium in the Norwegian market, which was 2,2%. The survey

from PWC is based on answers from 146 FFN members (PwC, 2024, p. 5). Calculating the data from SSB stretching from 1978 to 2023 shows that the average GDP growth per year in Norway was 2,44% (Statistisk sentralbyrå, n.d.). One key factor when deciding growth rate, is that it cannot exceed the GDP growth rate, as this would essentially mean that the company would exceed the entire economy (Vipond, n. d.).

To calculate the terminal value, the following formula will be used:

$$TV = \frac{CF_n * (1 + g)}{r - g}$$

Where,

TV = Terminal value

CF_n = Estimated free cash flow in 2028

r = WACC

g = Growth rate

This gives us:

$$TV = \frac{1\,848 * (1 + 2{,}20\%)}{5{,}08\% - 2{,}20\%} \approx 65\,475$$

8 – FCFF Model

The first stage of estimating the stock price is to calculate the present value of terminal value, and then add the sum of all discounted free cash flows to find the company value. Afterwards, we will subtract net debt from the company value to get the market value of equity. Finally, we will divide the value of equity by the number of shares outstanding. By doing this analysis, we will see if the stock price is overvalued or undervalued compared to the stock price from our research question.

Sum of FCFF	7 857
Terminal value	65 475
Present value of TV	51 097
Company Value	58 954
Net debt	38 943
Value of equity	20 011
Number of shares outstanding	182,1
Estimated share price	**109,9**

Table 27, DCF valuation (in millions)

Our calculations give us a share price of 109,9 NOK per share. This is a 5% decrease from the actual share price as of 31.12.2023. Our estimates are affected by an uncertainty of future policy rates, and the uncertainty of how the future will be for the market. Added, Entra's focus on bettering their debt metrics, has a big effect on the value of the stock.

9 – Market-based valuation

The market-based valuation's purpose is to valuate Entra with the help of comparable companies. The following ratios will be used: P/B, P/Sqm, and P/S.
Entra is in a special position where there are not many companies that operates in the exact same industry description within Norway. Norwegian Property ASA could have been applicable, but they were delisted in 2021, which will make the comparison weaker.

According to Refinitiv Eikon as of 15th of April 2024, the most comparable companies for Entra ASA are the Swedish companies Hufvudstaden AB, Catena AB, Fabege AB, Wihlborgs Fastigheter AB, Pandox AB and Castellum AB, in addition to Kojamo Oyj, a company from Finland (Refinitiv Eikon, 2024).

These are the companies we will be using in this valuation method. The disadvantage of using foreign companies in a relative valuation is that all the companies are not exposed to the exact same macroeconomic conditions, which could lead to inaccurate multiples. However, there are few other options, and these companies represent the closest comparable companies for Entra. All numbers have been retrieved from the latest annual reports for each respective

company. The stock price for the last trading day has been retrieved from Refinitiv Eikon. In addition, every number from the comparable companies has been exchanged to NOK to make everything consistent. The Swedish companies use SEK in their financial statements, while the Finnish company uses EUR. We have also decided to apply the median value instead of the average when finding the multiple for our peer group, as the median is not influenced by extreme values. All calculations can be found in appendix.

9.1 – P/E

The price-to-earnings ratio (P/E) is a common metric that is often used by investors and analysts to determine the value of a stock. This metric tells us whether a stock is undervalued or overvalued. What is considered to be a good P/E ratio varies between industries. Therefore, any comparisons should only compare similar companies within the same industry (Murphy, 2024). The P/E ratio is calculated like this:

$$Price\ to\ earnings\ ratio = \frac{Current\ price}{Latest\ earnings\ per\ share}$$

Equation 18, P/E ratio

A high P/E ratio indicates that, due to the expectation of future growth, investors are willing to pay more per share (Murphy, 2024). If a company reports negative earnings for a year, then the P/E ratio will be negative as well. A negative P/E ratio for a given company is not necessarily a bad thing, however, if a company constantly shows a negative P/E ratio for several years, then this might indicate that the company is not in good financial health (Wilkins, 2023)

Entra	2018	2019	2020	2021	2022	2023
Stockprice last trading day	115,2	145	194,2	198,3	105,8	115,4
Earnings per share	14,00	16,00	30,00	27,68	-3,41	-29,95
P/E	8,23	9,06	6,47	7,16	-31,03	-3,85

Table 28, P/E

The table above shows the P/E calculation for Entra ASA for 2018-2023. As we can see for 2022 and 2023, their earnings per share (EPS) were negative for both these years. This is because of their large write-downs in property value, making this ratio unusable as the stock price would be estimated as negative.

9.2 – P/B

The price-to-book (P/B) ratio is used by many investors to locate undervalued firms. It is also commonly used when comparing a company's market capitalization to its book value. To put it simply, it "measures the market's valuation of a company relative to its book value." (Fernando, 2024). Just like the P/E ratio, a good P/B ratio varies between industries. This means that with P/B, it is important to only compare companies within the same industry. P/B is a measure of how much the shareholders will receive if liquidating the firm. The formula for P/B is:

$$\frac{P}{B} = \frac{Market\ value\ of\ equity}{Book\ value\ of\ equity}$$

Equation 19, P/B ratio

Company	P/B
Hufvudstaden AB	1,00
Catena AB	1,36
Fabege AB	0,87
Wihlborgs Fastigheter AB	1,29
Kojamo Oyj	0,81
Pandox AB	0,94
Castellum AB	0,91
Median	**0,94**

Table 29, P/B from comparable companies

The median value for the comparable companies was 0,94, which is the number we will be using to estimate a share price of Entra with this method.

Valuation of Entra ASA based on P/B:

	Book value 31.12.2023	23 779 000 000
x	P/B multiple	0,94
=	Value of Equity	22 233 594 041
/	Shares Outstanding	182 132 055
=	**Estimated share price**	**122,1**

Table 30, estimation of share price with P/B

The share price for Entra is estimated at 122,1 NOK with the P/B method, which signifies a 5,8% increase in price from the actual stock price as of 31.12.2023.

9.3 – P/Sqm

Considering that the rental of office spaces is the core business aspect for Entra and its peers, we also wanted to calculate a multiple that looks at the relationship between the market cap and the number of square meters in the portfolio of each company. The number of square meters in the portfolio was retrieved from each of the company's annual reports for 2023. We have also included properties under development.

The formula we used to calculate this comparison is:

$$\frac{P}{Sqm} = \frac{Market\ value\ of\ equity}{Reportred\ sqm\ in\ portfolio}$$

Equation 20, P/Sqm ratio

Company	P/Sqm
Hufvudstaden AB	74 187
Catena AB	10 479
Fabege AB	27 549
Wihlborgs Fastigheter AB	12 822
Kojamo Oyj	15 412
Pandox AB	13 260
Castellum AB	12 979
Median	**13 260**

Table 31, P/Sqm from comparable companies

There is a big spread between the P/Sqm-values. The variation in the multiples is explained by the location of their portfolio and the quality of their properties. Regarding the location, it is usually more valuable to have a property centralized in the capital than to have it on the outskirts. Regarding the quality of the properties, it is most likely to be more valuable if the property meets new standards in sustainability and technology, than for older buildings. Hufvudstaden, has their portfolio in the most exclusive areas in Gothenburg and Stockholm, while Castellum, Fabege, and Entra themselves have their portfolio mostly spread over many geographical areas.

Entra ASA valuation based on P/Sqm:

Square meters in portfolio	1 560 000
x EV/Sqm multiple	13 260
= Value of Equity	20 685 817 857
/ Shares Outstanding	182 132 055
Estimated share price	**113,6**

Table 32, estimation of share price with P/Sqm

By valuing Entra with the P/Sqm method, we get an estimated share price of 113,6 NOK, which is a 1,6% decline from the actual price as of 31.12.2023.

9.4 – P/S

The P/S (price to sales) ratio is a valuation method that compares a company's stock price to its revenue. If the ratio is low, it could imply that the stock is undervalued. If the ratio is high, or higher than average, this could indicate that the stock is overvalued. It is a good measurement to use to compare firms in the same market sector. This ratio shows how much an investor is willing to pay per NOK for the sale of a stock. One limitation that the ratio has, is that it does not consider whether the firm has any earnings or if it ever will make earnings in the future (Hargrave, 2024). To calculate the P/S ratio, this formula is used:

$$Price\ to\ sales\ ratio = \frac{Market\ value\ of\ equity}{Sales}$$

Equation 21, Price-to-sales ratio

Company	P/S
Hufvudstaden AB	9,14
Catena AB	13,09
Fabege AB	8,66
Wihlborgs Fastigheter AB	7,47
Kojamo Oyj	6,65
Pandox AB	4,04
Castellum AB	7,20
Median	**7,47**

Table 33, P/S ratios from comparable companies

Valuation of Entra ASA based on P/S:

Revenue 2023	3 510 000 000
x P/S multiple	7,47
= Value of Equity	26 205 153 945
/ Shares Outstanding	182 132 055
Estimated share price	**143,9**

Table 34, estimation of share price with P/S

By using the P/S ratio, estimated share price is 143,9 NOK. Out of the comparative firms, Catena AB seems to be the firm that differentiates the most. Factors that can affect the P/S-value, is the number of sales the firm has done, as well as the pricing of the goods being sold, in this case the properties. The stock price here indicates an 24,7% overvaluing from the actual stock price as of 31.12.2023.

9.5 – Conclusion of the market-based valuation

Multiple	Share price in NOK
P / E	-
P / B	122,1
P / SQM	113,6
P / S	143,9

Table 35, summary of market-based valuation

We notice that there are some variations between the different multiples. P / S deviates the most, while P / SQM has the closest share price to the actual market share price as of 31.12.2023. Calculating the average gives us 126,5 NOK in share price, which is also above our fundamental valuation.

10 – Dividend Discount Model

In this part of the thesis, we will consider a third approach to valuing a stock, the dividend discount model. It is a very simplified model where you reach the day's stock price by looking at the evolution of dividends paid out. The model is based on the Gordon formula used for endless growth in the calculation and is therefore simplified. Added, the model assumes that there is a constant growth in the dividends each year. Earlier in the thesis we came to a cost of equity of 8,11%, and to fill out the calculation we need to calculate the expected dividends and the dividend's growth rate. Even though Entra stated in their annual report for 2023, that they decided to hold back dividends for 2023, we used an average of the dividends that were paid out for 5 years which was then used as the future dividend pay-outs. The reason behind Entra holding back their dividend payments was since they wanted to strengthen their balance sheet and better their debt metrics. They also wrote in the report that their dividend policy remains unchanged, which usually consists of paying out 60% of cash earnings to their stakeholders (Entra, 2024, p. 14). This is the reason we are estimating the future dividends paid out from a historical average.

Year	2019	2020	2021	2022	2023
Dividends	4,7	4,9	5,1	5,1	0
Average div.	3,96				
Growth rt.		4,26 %	4,08 %	0,00 %	0,00 %
Average g.rt.	2,08 %				
Cost of equity	8,11 %				
Stock price	65,7				

Table 36, dividends and the growth rate Entra ASA, 2019-2023

We estimated the dividend payouts by finding the average of the noted dividends paid throughout 2019 to 2023. To get the growth rate, we calculated the average change in dividends for each year. The growth rate for 2023 has been set to 0%. Between 2022 and 2023 the growth was originally -100%, but since the value exceeds the cost of equity negatively, the stock-price would come out as a negative number. We felt that the growth rate was reasonable to use, because it is not too large compared to the inflation goal for Norway, that is 2% (Norges Bank, n.d.). After putting in the different variables, we reached a stock price of approximately 65,7 NOK, which was calculated using this formula, referred to as the Gordons Growth Model:

$$P_0 = \frac{D_1}{r - g} = \frac{3{,}96}{8{,}11\% - 2{,}08\%}$$

Equation 22, Gordons Growth Model

Where,

P_0 = stock price

D_1 = dividend next year

r = cost of equity

g = growth rate

The estimated stock price with this formula is undervalued by 75,6% compared to 31.12.2023. The results shown have some complications. One of the obvious ones, being Entra's 2023 policy of holding back the dividends, can affect the average dividends, making the pay-outs for the coming years somewhat inaccurate. The second one is the growth rate between 2022 and 2023. As the original value should be -100%, it affects the growth rate that we used for the stock price.

11 – Sensitivity analysis

In a sensitivity analysis, one tests to see how vulnerable the estimated stock price can be to changes in the weighted average cost of capital (WACC), growth, and income, which are variables that affect the stock price (Damodaran, 2012, p. 894). From the fundamental valuation of Entra, we got an estimate price of 109,9 NOK. From the dividend discount model, we got an estimate of 65,7 NOK, where we used a WACC of 5,08% and a growth rate of 2,08%. Due to some uncertainty in the calculated values, we conducted a sensitivity analysis to see how much the value would change by adjusting the variables.

11.1 – WACC and growth rate

Making changes to the WACC and growth rate, will have a direct impact on the stock price of Entra. A high WACC value will generate a lower stock price, due to the cash flows vigorously discounting, and vice versa. In the WACC, both the risk-free rate and the risk premium are involved in the calculation, making the WACC affected by uncertainties such as interest rates, yields, and conjunctures in the market. This means that an increase in risk will give a higher required rate of return. Added, a higher WACC will reduce the terminal value.

The growth rate illustrates the growth prognosis for future cash flows. It tells how much the cash flows will increase in percentage over time for each year. The growth rate will have the opposite effect to the WACC, where a high growth rate will increase the terminal value, making the stock price increase. The greater the terminal value relative to the cash flows, the more responsive it will be to fluctuations in the growth rate. By looking at the analysis, one can see that the growth rate have to be below the WACC. If the growth rate equals the WACC, the denominator will be zero, rendering the stock price calculation impossible. A growth rate exceeding the WACC will result in a negative number in the denominator, negatively impacting the stock price due to the terminal value, corresponding to a firm going bankrupt.

Considering these complications in the discounted cash flow valuation, we chose intervals of 0,25%, both over and under the growth rate of 2,2%. For the WACC we chose to have intervals of 0,1% both over and under our estimation of 5,08%

		WACC								
		4,68 %	4,78 %	4,88 %	4,98 %	**5,08 %**	5,18 %	5,28 %	5,38 %	5,48 %
Growth rate	1,20 %	64,5	56,7	49,4	42,4	35,6	29,6	23,6	18,0	12,6
	1,45 %	83,3	74,4	66,0	58,1	50,3	43,6	36,8	30,5	24,4
	1,70 %	105,2	94,9	85,2	76,1	67,2	59,5	51,9	44,7	37,9
	1,95 %	131,2	119,0	107,7	97,1	86,9	78,0	69,2	61,0	53,2
	2,20 %	162,4	147,9	134,4	121,9	**109,9**	99,5	89,3	79,9	70,9
	2,45 %	200,6	182,9	166,6	151,6	137,3	125,0	113,0	101,9	91,6
	2,70 %	248,4	226,3	206,2	187,8	170,4	155,6	141,3	128,1	115,9
	2,95 %	310,1	281,6	256,0	232,9	211,3	193,0	175,6	159,7	145,0
	3,20 %	392,6	354,3	320,6	290,7	263,0	240,0	218,2	198,5	180,5

Table 37, sensitivity analysis for the discounted cash flow model (WACC & growth rate)

We also made a sensitivity analysis of the dividend discount model, by using the cost of equity and growth rate to see how much the stock price would change. We used a 0,25% interval over and under the growth rate of 2,08% and cost of equity of 8,11%.

		Cost of Equity								
		7,11 %	7,36 %	7,61 %	7,86 %	**8,11 %**	8,36 %	8,61 %	8,86 %	9,11 %
Growth rate	1,08 %	65,7	63,1	60,6	58,4	56,3	54,4	52,6	50,9	49,3
	1,33 %	68,5	65,7	63,1	60,6	58,4	56,3	54,4	52,6	50,9
	1,58 %	71,6	68,5	65,7	63,1	60,6	58,4	56,3	54,4	52,6
	1,83 %	75,0	71,6	68,5	65,7	63,0	60,6	58,4	56,3	54,4
	2,08 %	78,8	75,1	71,7	68,6	**65,7**	63,1	60,7	58,4	56,4
	2,33 %	82,8	78,7	75,0	71,6	68,5	65,7	63,1	60,6	58,4
	2,58 %	87,4	82,8	78,7	75,0	71,6	68,5	65,7	63,1	60,6
	2,83 %	92,5	87,4	82,8	78,7	74,9	71,6	68,5	65,7	63,1
	3,08 %	98,3	92,5	87,4	82,8	78,7	75,0	71,6	68,5	65,7

Table 38, sensitivity analysis for the dividend discount model

As shown in both figures, the sensitivity analysis for our discounted cash flow- and dividend discount model, the stock price increases greatly when the growth rate increases. We also see that an increase in the WACC and cost of equity, will reduce stock price for these models.

11.2 – Beta and risk-free rate

The stock beta and risk-free rate are also estimates that will influence the stock price, due to their values affecting the cost of equity. They work more indirectly, compared to the required return and the growth rate. From the formula for cost of equity, we know that an increase in risk-free rate and beta will have a positive outcome, in other words, an increase in value,

which will result in a higher WACC. The increase in WACC will make the stock price decrease, because of the riskiness involved.

The cost of equity's effect on the WACC depends on how big the proportion of total capital is equity. An increase in risk-free rate will make it more attractive to invest risk-free, which will make the payments for the placement of money less. This will influence the stock since investors no longer are willing to pay the same amount for the risky stock. An increase in the beta will have a similar effect, as beta measures the stock's market risk, which in turn will increase the market risk a stock has. The increase in risk will result in a lower stock price since the investor expects to be paid for the risk. To check how the beta and risk-free rate would affect the stock price, we also did a sensitivity analysis for these variables. For the beta, we chose a 0,1 interval, and for the risk-free rate, we chose an interval of 0,25%.

		Beta								
		0,6	0,7	0,8	0,9	**0,93**	1	1,1	1,2	1,3
	2,48 %	260,4	221,9	189,2	161,1	154,2	136,6	115,2	96,2	79,3
	2,73 %	240,3	204,9	174,6	148,4	142,0	125,6	105,4	87,5	71,6
	2,98 %	221,9	189,2	161,1	136,6	130,6	115,2	96,2	79,3	64,2
	3,23 %	204,9	174,6	148,4	125,6	119,9	105,4	87,5	71,6	57,2
Risk-free rate	**3,48 %**	189,2	161,1	136,6	115,2	**109,9**	96,2	79,3	64,2	50,5
	3,73 %	174,6	148,4	125,6	105,4	100,4	87,5	71,6	57,2	44,2
	3,98 %	161,1	136,6	115,2	96,2	91,5	79,3	64,2	50,5	38,2
	4,23 %	148,4	125,6	105,4	87,5	83,1	71,6	57,2	44,2	32,4
	4,48 %	136,6	115,2	96,2	79,3	75,1	64,2	50,5	38,2	26,9

Table 39, sensitivity analysis for the discoutned cash flow model (beta & risk-free rate)

As shown in the table above, an increase in risk-free rate and beta will make Entra's stock price decrease. Additionally, a slight change in the beta will affect the stock greatly.

12 – New developments

As for how Entra has done per the Q1 2024 report, we see an increase in rental income of approximately 2,1% and an increase in net income of 9,8% (Entra, 2024, p. 2). Their growth in rental income is mostly impacted by projects that Entra finalized during the quarter. On 22nd of March 2024, they finalized the agreement to divest all management properties located in Trondheim, and these properties are now classified as a discounted operation, with the expectation of closing the transaction on 31st of May 2024. (Entra, 2024, p. 4). Regarding their investments and divestment, Entra invested a total of 313 million in the portfolio of investment and inventory properties (Entra, 2024, p. 11). They have also made progress on reducing their debt, by decreasing their net realized financials by 28 million NOK from Q4 2023 (Entra, 2024, p. 6). During the first quarter of 2024, Entra signed new and renegotiated

leases with 162 million in annual rent, their largest new contract being with Yara International for 16 100 sqm (Entra, 2024, p. 10). As of the last day that of the Q1 2024 report covers, the stock price was 112,2 NOK (Yahoo, 2024).

13 – Conclusion

The purpose of the thesis has been to estimate the value of Entra ASA as of 31.12.2023 by conducting a fundamental valuation. Additionally, we have also conducted a market-based valuation, to see how Entra compares to its competitors. Using a strategic analysis, we have been able to identify Entra and the market sector it belongs to and see the firm's worthiness and strategic position. Entra is viewed as a leading firm in sustainability, with a good reputation in the market. However, one of their biggest threats is the risk of international companies entering the market and seizing a large market share, because of their abundance of capital. More than 50% of Entra's rental income comes from tenants from the public sector, which leads to a more secure source of income.

The FCFF method was used to calculate Entra's value of equity. WACC was calculated to be 5,08%, and we used a constant growth rate of 2,2%. This resulted in a value of equity of 20 011 million NOK, and an estimated share price of 109,9 NOK. This is a 5% undervaluation compared to the actual share price as of 31.12.2023, that was 115,4 NOK.

We have also conducted a market-based valuation with 7 foreign companies in our peer group, where we used P/B, P/Sqm and P/S ratios which resulted in an average share price of 126,5 NOK. This is an overvaluation of 9,6% compared to the observed price. Our dividend discount valuation resulted in a share price of 65,7 NOK, which is exceptionally low. One important thing to consider is that they didn't pay out any dividends for 2023, which has affected our estimates.

From our sensitivity analysis, we saw that an increase in the WACC and cost of equity, will reduce stock price for these models. An increase in risk-free rate and beta will make Entra's stock price decrease. Additionally, a slight change in the beta will affect the stock greatly. The share price on the last day in Q1 was 112,2 NOK, and this is a decrease in the price from the date of our research question. Based on this, and the findings from our fundamental valuation, we will conclude with a slight sale recommendation.

14 – Critique

In our valuation of Entra ASA, our main source of data has been the firm's annual reports which have been applied through theories, for example from the author Damodaran. Even if the theories used may hold, we have also made assumptions, which can create uncertainties in our predictions.

Our choice not to include the value changes of their properties can affect how the stock exchange values the firm compared to our valuation. When trying to conduct our market-based valuation, we chose to include firms that are not established in Norway, since they were the most comparable companies. These can be impacted by different accounting policies and macroeconomic relations, which can affect our comparisons.

As for our normalization of the incomes, these may give some inaccurate estimates for future incomes and costs.

There are always disagreements on how to value a stock on the stock exchange, and this is reflected in the thesis. On one hand, the stock market has its estimates, while investors considering buying or selling the stock may find this inaccurate from their valuation.

Confirmation bias is also a possible factor that could affect our assumptions and choices when valuing Entra ASA.

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Appendix

Regression analysis

SAMMENDRAG (UTDATA)

Regresjonsstatistikk	
Multippel R	0,51618127
R-kvadrat	0,2664431
Justert R-kvadrat	0,26359986
Standardfeil	0,03636918
Observasjoner	260

Variansanalyse

	fg	*SK*	*GK*	*F*	*Signifkans-F*
Regresjon	1	0,12395308	0,12395308	93,7109584	4,16279E-19
Residualer	258	0,341261	0,00132272		
Totalt	259	0,46521408			

	Koeffisienter	*Standardfeil*	*t-Stat*	*P-verdi*	*Nederste 95%*	*Øverste 95%*	*Nedre 95,0%*	*Øverste 95,0%*
Skjæringspunkt	-0,002279	0,00225948	-1,0086591	0,31408318	-0,00672841	0,00217032	-0,0067284	0,002170324
X-variabel 1	0,89016307	0,0919548	9,68044206	4,1628E-19	0,70908556	1,07124058	0,70908556	1,071240583

Regression analysis using weekly observations (2019 to 2023)

SAMMENDRAG (UTDATA)

Regresjonsstatistikk	
Multippel R	0,612221949
R-kvadrat	0,374815715
Justert R-kvadrat	0,364036675
Standardfeil	0,076680851
Observasjoner	60

Variansanalyse

	fg	*SK*	*GK*	*F*	*Signifkans-F*
Regresjon	1	0,2044615	0,2044615	34,772645	2,015E-07
Residualer	58	0,3410373	0,00588		
Totalt	59	0,5454988			

	Koeffisienter	*Standardfeil*	*t-Stat*	*P-verdi*	*Vederste 95%*	*Øverste 95%*	*Nedre 95,0%*	*Øverste 95,0%*
Skjæringspunkt	-0,00755664	0,0101028	-0,7479723	0,4574991	-0,0277797	0,0126664	-0,02777966	0,012666378
X-variabel 1	1,281777982	0,2173672	5,8968335	2,015E-07	0,8466703	1,7168856	0,846670327	1,716885637

Regression analysis using monthly observations (2019 to 2023)

Cost of equity and WACC calculation

WACC	
Equity share	34,85 %
Cost of Equity	8,11 %
Debt share	65,15 %
Cost of Debt	4,44 %
Tax	22 %
WACC	**5,08 %**

CAPM	
Risk-free rate	3,48 %
Risk premium	5 %
Beta	0,93
Cost of Equity	**8,11 %**

Market based valuation

Close 31th of december	NOK
1 SEK	**1,0085**
1 EUR	**11,23**

31.12.2023	Hufvudstaden AB	Catena AB	Fabege AB	Wihlborgs Fastigheter AB	Kojamo Oyj	Pandox AB	Castellum AB
Share price	143,3	475,4	109,1	95,1	133,6	151,7	144,5
Shares outstanding	202 306 933	50 212 478	314 577 096	307 426 912	247 144 400	183 849 999	492 601 452
Market Cap	28 992 171 608	23 871 358 507	34 326 558 342	29 221 273 841	33 027 636 183	27 886 073 688	71 189 801 270
Revenue 2023	3 171 732 500	1 823 368 000	3 963 405 000	3 913 988 500	4 963 660 000	6 907 216 500	9 889 351 000
P/S	9,14	13,09	8,66	7,47	6,65	4,04	7,20
Mean	**8,04**						
Median	**7,47**						

P/S ratio from peer group

31.12.2023	Hufvudstaden AB	Catena AB	Fabege AB	Wihlborgs Fastigheter AB	Kojamo Oyj	Pandox AB	Castellum AB
Sqm in portfolio	390 800	2 278 000	1 246 000	2 279 000	2 143 000	2 103 000	5 485 000
Share price	143,3	475,4	109,1	95,1	133,6	151,7	144,5
Shares outstanding	202 306 933	50 212 478	314 577 096	307 426 912	247 144 400	183 849 999	492 601 452
Market value	28 992 171 608	23 871 358 507	34 326 558 342	29 221 273 841	33 027 636 183	27 886 073 688	71 189 801 270
P/Sqm	74 187	10 479	27 549	12 822	15 412	13 260	12 979
Mean	**23 812,60**						
Median	**13 260,14**						

P/Sqm ratio from peer group

31.12.2023	Hufvudstaden AB	Catena AB	Fabege AB	Wihlborgs Fastigheter AB	Kojamo Oyj	Pandox AB	Castellum AB
Share price	143,3	475,4	109,1	95,1	133,6	151,7	144,5
Shares outstanding	203 001 207	50 212 478	314 577 096	307 426 912	247 144 400	183 849 999	492 601 452
Market value	29 091 666 523	23 871 358 507	34 326 558 342	29 221 273 841	33 027 636 183	27 886 073 688	71 189 801 270
Book value	29 033 303 100	17 538 823 500	39 577 574 000	22 581 323 500	40 719 980 000	29 824 370 500	77 833 004 500
P/B	1,00	1,36	0,87	1,29	0,81	0,94	0,91
Mean	**1,03**						
Median	**0,94**						

P/B ratio from peer group