Handelshøyskolen BI - campus Oslo

BTH 36201

Bacheloroppgave - Økonomi og administrasjon

Bacheloroppgave

Valuation of Norwegian Property ASA

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Utlevering:	11.01.2021 09.00
Innlevering:	02.06.2021 13.00

VALUATION OF NORWEGIAN PROPERTY ASA

Exam Code and Name:

BTH 3620 – Bachelor Thesis Økonomi & Administrasjon

Date:

02.06.2021

Norwegian Business School BI

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NORWEGIAN PROPERTY

Executive Summary

Hold

Norwegian Property ASA was established in 2006 with the goal of having an extensive and liquid portfolio of commercial real estate. The company is today considered to be dividend-driven with a goal of paying 30-50% of its ordinary profit after tax as dividends to shareholders. The ownership structure in NPRO consists of John Fredriksen as a large blockholder with 80% of the shares.

Target price (NOK)	16
Share price (NOK)	15

Portfolio of prime assets

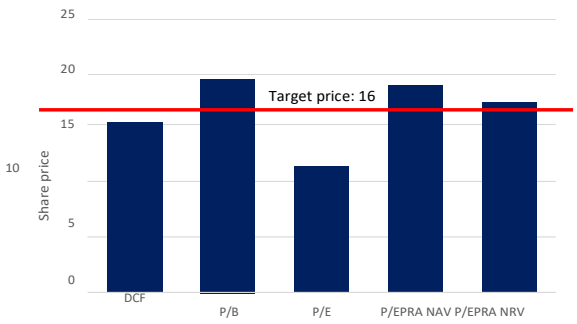
NPRO's primarily location is the Oslo area with 96% of their total property holdings. Aker Brygge and Fornebu accounts for approximately 80% of the total Oslo portfolio. The company's Stavanger portfolio consist of only 4% and has been converted from a commercial building to a combined residential and commercial property. The residential units in Stavanger will be put on sale in 2021.

Increased portfolio and rental income

The level of activity in the transaction market has been high over several years with record low interest rates. We have witnessed the second largest level of transactions ever registered in 2020, and NPRO had the biggest deal with the purchase of Telenor HQ at Fornebu. This transaction will expand their total property portfolio of about 500 000 sqm, and with an overall market value of 23,5BNOK.

Valuation – Hold Rating

A thorough valuation is based on a present value approach by discounting future cash flows, and a relative valuation using multiples. Both approaches implied a share price close to today's market price. Based on these estimations, a hold rating is issued with a target price of 16 NOK, suggesting an upside below 10%. Going forward, I consider the risk factors to be manageable and future estimates achievable for Norwegian Property ASA.



Ticker	NPRO
Sector	Real Estate - Norway
Number of shares (m)	650
Market cap (NOKm)	9 454
Net debt (NOKm)	11 608
Enterprie value	21 505
WACC	4,36 %
Free float (%)	33

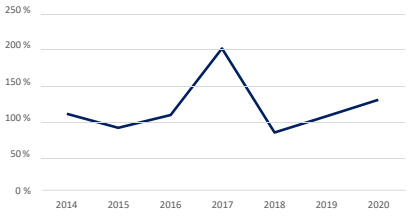
Performance

Source: Oslo Euronext

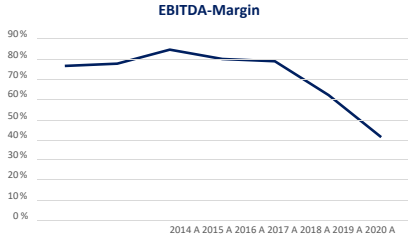
Multiples

P/E	24,70x
P/B	0,80x
P/EPRA NAV	0,81x
P/EPRA NRV	0,73x

Operating Profit Margin (NOPAT)



EBITDA-Margin



1 Preface

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

A valuation of Norwegian Property ASA has been a long and demanding process, and I have acknowledged that valuation requires broad expertise. During my studies I have attended many different courses and acquired a skillset from different economic and strategic subjects. The task of implementing knowledge from my three years at BI into this thesis has been rewarding. With acquired knowledge from this thesis, I hope to be ready for two more years at BI.

I want to thank Tor Tangenes for giving me confidence and providing inputs during my working process. At last, I would like to thank my girlfriend and family for being patient with me during a semester using a lot of home-office. I hope this thesis represents the end to studying during a pandemic.

2 Introduction

2.1 Purpose

The purpose of this thesis is to estimate the fair market value of the commercial property company Norwegian Property ASA. On that basis, the author will find out whether the share of the company is undervalued, correctly valued, or overvalued as of 24.05.2021. By studying both the external and internal aspects of the company, the thesis will make predictions with evidence from the strategic analysis as supportive evidence. In that way the author will be able to make personal recommendations to potential investors and the company.

2.2 Research Question

The author's motivation for this thesis was to challenge himself by writing about an industry he knew little about and that was booming. With record low interest rates in Norway, the commercial real estate sector became the industry of choice. Furthermore, a firm that mainly was operating with commercial real estate, and less residential became an interesting criterion. I found Norwegian Property ASA as a company most fitted for this thesis, due to a very interesting real estate portfolio and strategy.

When formulating a research question or in other worlds, problem statement, there are two questions that basically needs to be answered: *What and who should be examined?* According to Johannessen et al. (2020, p. 34), good research is characterized by being precise and clearly states what and who is being examined. With this in mind, the author has prepared a research question that fulfil these criteria.

The theme of this paper is valuation of a public listed company within the real-estate sector. Norwegian Property ASA is listed on the Oslo Stock Exchange and is currently trading at 14,55 NOK (24.05.2021). The main purpose of this thesis is to find out the fair value of Norwegian Property ASA, and if the fair value is reflected in the current stock price on Oslo Stock Exchange. The following research question is formulated:

> *What is the fundamental value of a share in Norwegian Property ASA, traded at Oslo Stock Exchange as of 24.05.2021?*

The sub-problem statement is the following:

Should a potential investor buy, hold, or sell the NPRO stock with a goal of maximizing profit?

2.3 Delimitations

In this thesis, historical accounting data from the last seven years is applied. The data is collected from NPRO's annual and quarterly reports. However, since NPRO's Q1 report was released close to the thesis's final date, this information is not included. Publicly available information is applied, such as company reports, governmental documents, financial data from Bloomberg Terminal and independent financial reports etc. There are not, under any circumstances, used internal information from the company. Furthermore, the thesis only uses peer groups with Norwegian companies that share similarities in the financial analysis.
Norwegian Property is mainly a commercial property company with only a joint venture in a residential development company. For that reason, the analysis will exclude a deep analysis of residential, logistic and hotels.

2.4 Thesis Structure

The first chapter includes purpose, research question and delimitations of the thesis. The following chapter will introduce the real estate sector and the company. Chapter three is a theoretical section with a presentation of strategic- and financial theory relevant to this thesis. The next chapter includes the methodological approach used and involves analysis tools and financial tools. These financial tools will be further explained in chapter five, which is a purely financial methodology chapter. Each component included in different valuation approaches will be explained in detail. After chapter five, two analytical chapters will follow. Chapter six is a financial analysis section, where NPRO's historical performance is analysed and compared to its peers. The last analytical chapter is a strategic analysis of both external and internal factors that affects NPRO. Chapter eight is the first chapter where components from the previous analysis will be applied. This chapter is the forecasting chapter, which includes estimation and explanation of inputs used in the valuation. Chapter nine is the valuation and a summary of the results from different applied methods presented. The following chapter deals with the uncertainty in these valuations, and simulations are applied. The closing three chapters will include a discussion of the results and present criticism of this thesis. At last, the final chapter is a possible conclusion that is related to the research question.

3 Real Estate Sector, the Asset and Company Overview

3.1 Commercial Real Estate Overview – Office

In this section, the purpose is to outline the main characteristics of the industry of commercial real estate. The purpose is to understand the commercial part of real estate and the driving factor within the industry.

3.1.1 Defining Commercial Real Estate (CRE)

Commercial real estate (CRE) can be defined as real estate that is not a private residence or holiday home. The term commercial can include segments such as office, retail, hotel and logistics. Publicly owned CRE such as healthcare, school and sports buildings is also part of the commercial segment (Hagen, 2016). Properties used exclusively for business-related purposes and provides a workspace rather than a living space are a more general definition of commercial real estate. However, the primary purpose is to conduct income from real estate that are leased to tenants (Chen, 2020).

3.1.2 Investing in Commercial Real Estate

The global investment market is mainly driven by investors and fund managers, guided by advisory firms. Pension funds, insurance companies and sovereign wealth funds (government funds) are the most significant global real estate investors. We also find wealthy individuals who operate through private banks and family offices. Real Estate is regarded as an illiquid, long-term asset class that is more suited for investors without short-term liabilities. Therefore, we find it especially attractive for sovereign wealth funds (Baum & Hartzell, 2011). The economy in general is the fundamental driver of occupier demand. In the long-term, returns on investment in real estate are produced by occupiers who pay rent. In the short-term, up to 10 years, returns are according to Baum & Hartzell (2011), more likely to be explained by references to changes in yield.

Investing in commercial real estate has a broad history in Norway with several listed companies, funds, syndicates and private companies. In the last four years we have seen an expansion in especially funds and syndicates as active buyers in the Norwegian property market (Pangea, 2021). According to Pangea (2021), there is a significant activity amongst private companies shifting towards investing through syndicates and funds.

The cash flow delivered by a property asset is controlled or distorted by the lease contract agreed between owner and occupier (Baum & Hartzell, 2011, p. 13).

Real estate is unlike equities, governed by lease contracts, and, unlike bonds, the income is both perpetual and might be expected to increase at rent reviews or if turnover based or change at lease ends. In Norway a typical lease agreement tends to be from 3 to 10 years and linked to the consumer price index (CPI) (Hagen & Hansen, 2018).

3.1.3 Valuation of Commercial Real Estate

Commercial real estate assets trade infrequently, and markets do not observe regular transactions where we can infer values. We are dependent on using several techniques in attempting to determine the value of the property (Baum & Hartzell, 2011).

Participants in commercial real estate use *yield* as a ratio between rental income and the price of the property (Bærug, 2012).

$$Net\ Yield = \frac{Net\ Operating\ Income}{Value\ Property}$$

By turning this expression around, we can find the value of the property:

$$Value\ Property = \frac{Net\ Operating\ Income}{Net\ Yield}$$

We can understand from the formula above that the market value of a property increases when rental income increases. A reduced yield will also give a higher market value. With information about the properties' costs, we are able to estimate net operating income (Baum & Hartzell, 2011, p. 212).

3.2 External Value Drivers – Commercial Real Estate

Figure 1 – Value drivers:

Value Drivers CRE		
Key Drivers	**Impact On:**	**Comments**
Rental Prices	Property Value and Yield	Increase/decrease in property value
Yield	Property Value	Lower yield indicates lower risk of vacancy and often higher qualitiy property, and the other way around
Demand	Rental Income - Property Value	Demand side is pro-cyclical with economic growth indicators. Also, rents will raise in response to economic growth. Demand will also increase rental income, due to market equilibrium.
Employment	Demand - Rental Prices - Property Value	A sustained period of above-trend employment growth will generate an increased demand for space.
Vacancy Rate	Rental Prices & Rental Income	Low vacancy rates will give owners higher NOI since rent prices will increase. The lease rent is expected to to change in line with vacancy.
Interest Rate	Cost of Debt	Access to capital will either be worsen or easier.
Location	Demand & Yield	Prime locations is considered to give a higher rental income. Futhermore, prime locations will also result in prime-yield.
Inflation	Property rents & Interest Rate	Property rents is closely correlated with inflation in the long run. Alslo, many CPI adjusted lese agreements.
GDP	Rental Income & Property Values	Rental Income has shown to be strongly pro-cyclical with GDP.
Development	Supply and Demand & Property Values	Development activity appears to be highly pro-cyclical with GDP growth and property values.
		Source: Baum & Hartzell (2011), Pangea (2021) (Modified by author)

3.3 Company Overview – Norwegian Property ASA

3.3.1 Company History

Norwegian Property ASA (NPRO) was established in May 2006 with a long-term goal of becoming the largest and most liquid commercial real estate company in Norway for both private and institutional investors. In NPRO's first year of operations, they acquired 55 commercial real estate properties with a total of 723.000 square meters. This gave an annual rental income of approximately 1.000 MNOK (Property, 2007).

NPRO went public at the Oslo Stock Exchange on the 15th of November 2006, with a market value of 5,6 BNOK. The initial goal and focus were a portfolio of commercial real estate, but NPRO diversified into the hotel industry by acquiring Norgani Hotels in 2007. Norgani Hotel AS contained a portfolio of 74 hotel properties in the Nordic countries (Property, 2007). After some tough years in the hotel industry, NPRO decided to sell the hotel business in 2010 and concentrate its operations in the office business. From 2006 to 2010, NPRO was considered a financial player who was based on outsourcing operation and management. From May 2010, the firm decided to handle its property management in-house and cancelled the contract with Neas (property management) (Property, 2010).

John Fredriksen started his strategy with purchasing stocks in the company from 2014 thru his firm, Geveran Trading (DN, 2014). From that point till today, Fredriksen has continued to strengthen his position and become the biggest blockholder in NPRO.

Today, Norwegian Property has started a strategic repositioning with a new area at Fornebu and exposure to the housing market with two joint ventures (Property, 2020).

3.3.2 Goals, Strategy and Values

Norwegian Property has a goal of paying 30-50% of its ordinary profit after tax as dividend to its shareholders. An assessment of potential dividend will be determined by the firm's financial position and prospects, and also in terms of increased capital requirements when investing in properties and changes to the income base when properties are sold (Property, 2020).

High tenant satisfaction is another important goal for NPRO. They work to ensure a high level of tenant satisfaction, which they believe contributes to a good reputation. This will make it even more attractive for existing tenants and for attracting new ones (Property, 2020).

Another central vision is to define and include clearly defined targets for measures to protect the environment. This includes high aesthetic standards for buildings and outside areas in local environments where NPRO is operating (Property, 2020).

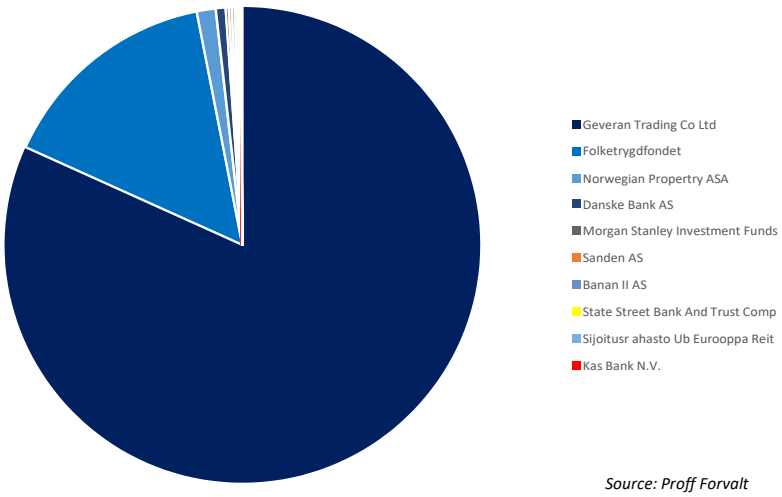
Their investment strategy is created with the emphasis of four main parameters. They seek to become a leading player for office and associated commercial property in selected areas of the Oslo region. Properties located close to public transport hubs will be prioritized. Furthermore, NPRO will also seek to create natural property clusters in their prioritized areas. In terms of development of their portfolio, they have a goal of having 5 to 15 per cent of their portfolio's area under development over time. At last, NPRO will actively manage its portfolio through transactions, and purchase of properties with value development potential (Property, 2020).

Finally, NPRO has a financial strategy to deliver a competitive return over time with a balanced risk profile. Their main financial goal is to have a long-term loan-to-value ratio of maximum 45-55 per cent (Property, 2020).

3.3.3 Ownership Structure

As of today, John Fredriksen controls a majority of the shares through his company Geveran Trading Co Ltd, followed by Folketrygdfondet as second largest owner. John Fredriksen's positions as a majority owner gives him a total control of the company through voting rights (Property, 2020). Folketrygdfondet is a fund created by the Norwegian Government and is among Oslo Stock Exchange largest institution investor (Folketrygdfondet, 2021).

Figure 2 – Ownership structure:



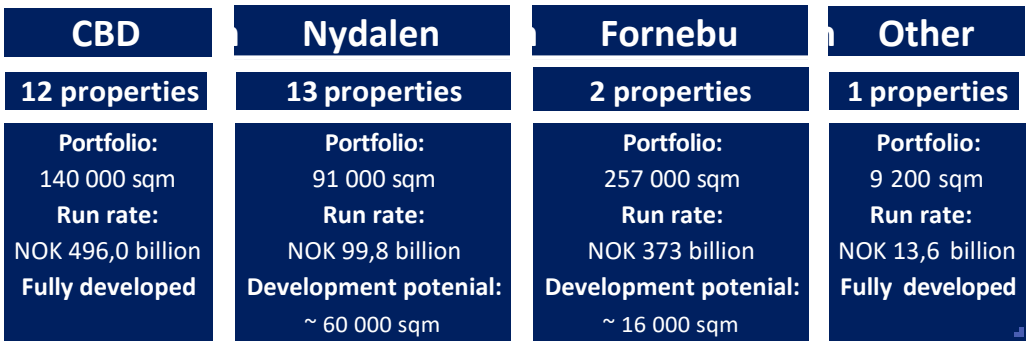
Source: Proff Forvalt

3.4 Business Areas – Norwegian Property ASA

3.4.1 Oslo

The Oslo area is NPRO's primarily location with 96% of their total property holdings. The property portfolio in Oslo breaks down into three areas, which is Oslo's central business district (CBD), Nydalen district, Fornebu and Hasle (Other) (Property, 2020).

Figure 3 – Portfolio:



Source: NPRO annual report 2020, modified by author

As seen above, CBD and Fornebu account for 79% of the total Oslo portfolio. Aker Brygge contains of 90% of CBD, and the remaining 10% is located in the city center of Oslo. Aker Brygge is a prime location in Oslo with prime yields of around 3,25% (DNB-Næringsmegling, 2020).

The firm also has an investment in Nordr Eiendom (former Veidekke Eiendom), which is a residential development company. The investment gives NPRO a 42,5% share in Nordr Eiendom with a land bank of approximately 15 000 units and 1 586 units under development.

3.4.2 Stavanger

In NPRO's portfolio, Stavanger amounts to 23 299 sqm which is around 4% of total portfolio. The properties in Stavanger have been re-zoned from a commercial building to a combined residential and commercial property. Today, NPRO has a joint venture with local developer Base Bolig for this development project of 250 residential units. The project will be put on sale in 2021 (Property, 2020).

3.4.3 Transaction Market

The level of activity in the transaction market has been high over several years. With record low interest rates, we have witnessed many property deals in various segments at sharp yield levels. The demand is high from buyer groups seeking good objects (Property, 2020).

According to DNB Næringsmegling (2020), the covid-19 pandemic and restrictions did not give any drop in activity, yet the opposite.

Transaction volume in 2020 reached 110BNOK, which is the second largest level ever registered. In October 2020, NPRO purchased Telenor's headquarter (Snarøyveien 36) at Fornebu. The underlying property value was 5,45BNOK and this transaction was the biggest deal in Norway in 2020 (Pangea, 2021). NPRO has also completed a transaction of Veidekke Eiendom with two partners. This acquisition was announced in June 2020. Before the Covid-19 pandemic, access to loan capital on favorable terms and activity in the transaction market was difficult before the summer of 2020. However, conditions improved in the second half of 2020 with loan margins in both bank and bond markets back to pre-pandemic levels (Property, 2020).

Going forward, NPRO is devoting attention to opportunities that could strengthen its position in their core areas of the Oslo region.

3.4.4 Occupied Space

The newly acquired property at Fornebu has already several solid tenants with long leases. Telenor is the most important tenant with a long-term lease representing approximately one-third of the income for the property. Other tenants at Fornebu are ABB, Norsk Moteforum and Tieto Evry. This means that the property was acquired with occupied space.

Furthermore, NPRO's portfolio has reduced its vacancy risk by having fewer single-user buildings (Property, 2020).

3.4.5 Vacant Space

NPRO is exposed to vacancies in Oslo, Fornebu and Stavanger. In general, the vacancies in Oslo are 8,9% in Central Business District (CBD), 21,2% at Hasle and 5,8% in Nydalen. At Fornebu, the vacancies are at 7,4%, while in Stavanger the vacancy rate is 10,7%. NPRO's vacancy rate in Oslo is 6,3% overall, while they experience a lower rate in the city center at 4,1%. Fornebu has a vacancy of 8,1%. The total vacancy of NPRO's portfolio is 7,2% as of 31 December 2020. This is primarily related to the purchase of Snarøyveien 36 with a relatively high vacancy rate (Property, 2020).

3.4.6 Rental Prices

Figure 4 – Rental prices:

Rental Prices (NOK/sqm/year)	Top Rent	High Standard	Moderate Standard
CBD Oslo	5 700	5000-4200	3 400
Nydalen	2 500	2200-1850	1 500
Fornebu	2 000	1800-1400	1 300

Source: UNION (Mars 2021)

3.4.7 Yield

The prime yield in Oslo is 3,20% and decreased during 2020. However, not as much as the interest rate (DNB-Næringsmegling, 2021). It is expected that high demand will flatten the prime yield and that a rising interest rate will not affect the yield due to this demand. The normal yield in Oslo is 5,20%. The prime yield at Fornebu is 4,50% and the vacancy rate has increased the last 6 months. It is expected that the yield will increase due to higher vacancy rate and declining market rents (Union, 2021). In Stavanger, the prime yield is 4,75% which decreased in the second half of 2020. However, this difference in prime yield in Stavanger to Oslo is record high. Furthermore, the yield spread is also significantly higher in Stavanger than Oslo.

Figure 5 – Yield overview:

Yield			
Location	**Prime Yield**	**Normal Yield**	**Yield Spread**
Oslo	3,25 %	5,20 %	1,95 %
Fornebu	4,50 %		
Stavanger	4,75 %	7,00 %	2,25 %

Source: DNB (2021) & Union (2021)

3.4.8 Conversion Rate

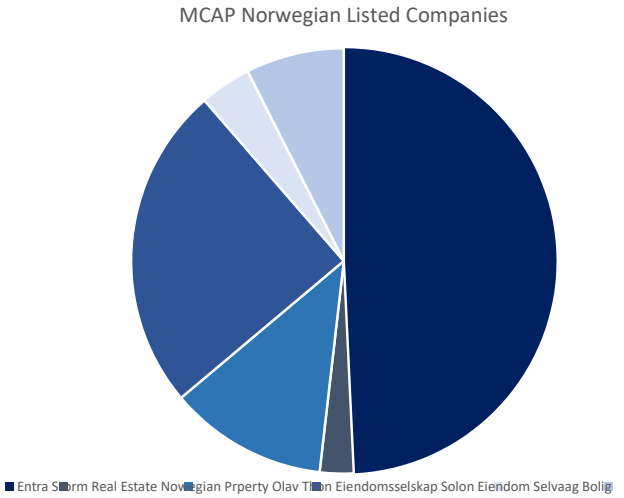
Increasing housing prices are a tempting factor for investors to convert properties from commercial to residential. Conversion rate describes the pressure on transforming offices to residential properties (Hagen, 2016). In recent years we have witnessed, especially in Oslo, a high amount of conversion from old office buildings into development projects for housing. This trend is now turning, due to already lower supply of offices and therefore higher demand. This is shown in the yield pressure in the office segment (Pangea, 2021). In the long term, the supply of rental property will influence changes in rental prices. According to Norges Bank (2016) will changes in supply will be determined by construction activity and net conversion of office property into other property types.

3.4.9 Norwegian Real Estate Taxes

The current national corporate tax is 22% (Regjeringen, 2021). In addition, properties in Oslo are also affected by a real estate tax on all commercial properties with 0,003% (O. Kommune, 2021b). Fornebu is located in Bærum Kommune, and they are not currently operating with a real-estate tax. Stavanger, on the other hand, is operating with the same real-estate tax as Oslo, with 0,003% (S. Kommune, 2021).

3.5 Competitors and Peers

Figure 5 – Market cap Norway:



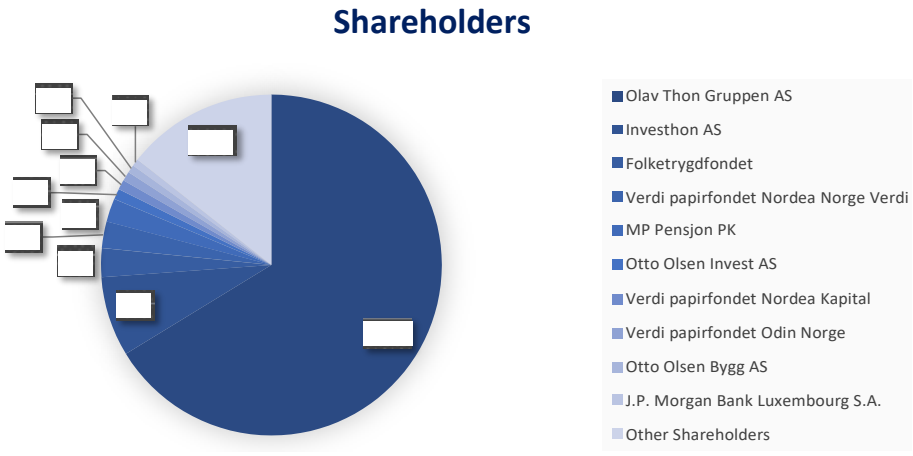
Source: Oslo Børs

3.5.1 Norwegian Peers

Compared to other Scandinavian countries, Norway has few listed commercial real estate companies that share similarities to NPRO. Entra and Olav Thon Eiendomsselskap (OLT) are the most similar companies and listed on the Oslo Stock Exchange. They share similarities in terms of owner structure, segment exposure and size. For that reason, those two companies are chosen as NPRO's Norwegian competitors and peers.

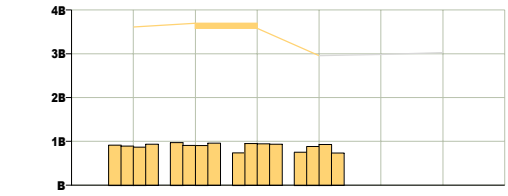
OLAV THON EIENDOMSSELSKAP AS (Retail REIT)

Olav Thon Eiendomsselskap ASA, a part of the Olav Thon Group, operates in the real estate industry. The Company provides services for real estate management and development. Olav Thon owns a portfolio of properties located primarily in the Oslo area. Properties include office buildings, retail space, restaurants and hotels. [FIGI



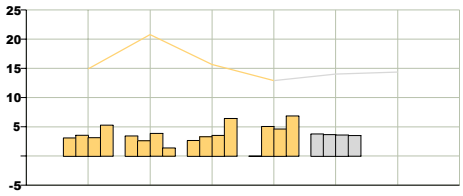
Source: Proff Forvalt

Revenue



	2017	2018	2019	2020	2021	2022
FY	3.62B	3.70B	3.59B	2.96B	2.99B	3.03B
Q1	913.00M	972.00M	741.00M	754.00M	--	--
Q2	893.00M	905.00M	947.00M	885.00M	--	--
Q3	873.00M	906.00M	945.00M	929.00M	--	--
Q4	937.00M	960.00M	935.00M	732.00M	--	--

Earnings Per Share

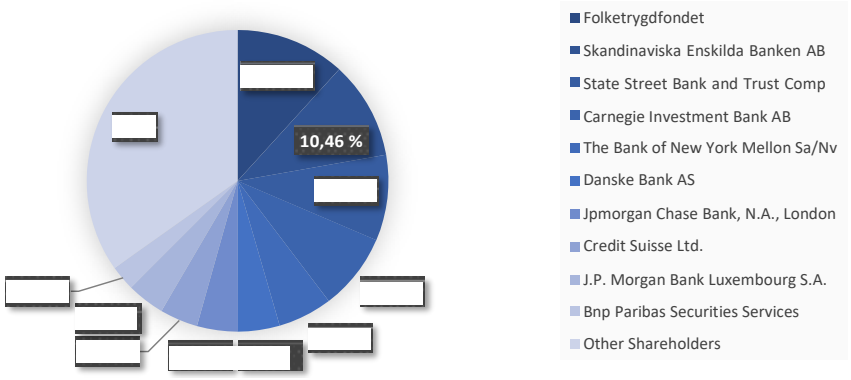


	2017	2018	2019	2020	2021	2022
FY	14.93	20.81	15.68	12.91	14.04	14.38
Q1	3.12	3.41	2.65	-0.02	3.78	--
Q2	3.52	2.64	3.31	5.04	3.65	--
Q3	3.18	3.85	3.56	4.64	3.59	--
Q4	5.26	1.39	6.42	6.87	3.49	--

ENTRA ASA (Real Estate Services)

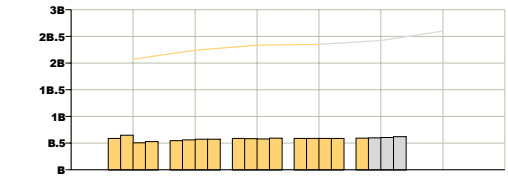
Entra ASA is a real estate company. The Company owns, develops, and manages properties in Norway. Entra focuses on office properties, centralizing around main Norwegian cities. [FIGI BBG0074H79M1]

Shareholders



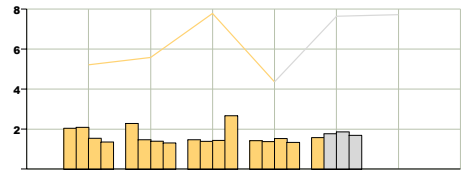
Source: Proff Forvalt

Revenue



	2017	2018	2019	2020	2021	2022
FY	2.08B	2.24B	2.34B	2.35B	2.42B	2.60B
Q1	586.00M	545.00M	585.00M	587.00M	591.00M	--
Q2	646.00M	558.00M	580.00M	587.00M	597.20M	--
Q3	507.00M	570.00M	577.00M	589.00M	606.00M	--
Q4	526.00M	569.00M	595.00M	590.00M	618.75M	--

Earnings Per S



	2017	2018	2019	2020	2021	2022
FY	5.23	5.59	7.79	4.37	7.65	7.73
Q1	2.04	2.28	1.46	1.42	1.58	--
Q2	2.09	1.46	1.39	1.38	1.77	--
Q3	1.54	1.40	1.43	1.52	1.85	--
Q4	1.36	1.30	2.66	1.33	1.69	--

4 Theoretical Framework

4.1 Reasons for Competitiveness

The year 1980 is a milestone for strategy as a modern theory, and the same year as Micheal Porter released his bestseller *Competitive Strategy.* At this time, the focus shifted from strategic planning as a process to focuse on creating and retaining financial profits based on a competitive advantage.

While in earlier years, they had explained progress based on corporate management, they were now more concerned with the company's ability to generate profit through the choice of strategy. The question about why some companies succeed better than others was attempted to be answered using different perspectives (Roos, 2014, p. 24). In the following, the paper will present these different perspectives.

4.1.1 Michael Porter's Strategic Positioning

Porter's strategic positioning school tries to highlight different forces affecting the competition within an industry and find a way to outperform rivals. According to Porter (1996), strategy is creating a unique and valuable position by involving a set of different activities. The essence is to choose activities that are different from rivals. However, a unique position is not enough to guarantee a sustainable advantage since others will try to copy your position. A key to positioning within an industry is to understand the competitive forces and their underlying causes. By understanding the industry structure, the firm will be able to obtain an effective strategic position (Porter, 1996).

According to Porter (Review et al., 2020), defending against the competitive forces and shaping them in a company's favor is crucial to the strategy. The threat of entry in an industry plays an important role and is an advantage that incumbents have relative to new entrants. Porter describes seven major sources of entry barriers: *economics of scale, benefits of scale, switching costs, capital requirements, advantages independent of size, access to distribution channels and government policy* (Review et al., 2020, p. 43). Economics of scale become a barrier when firms that produce at larger scales enjoy a lower cost per unit. New entrants will be forced to come into the industry on a large scale or accept a cost disadvantage. Benefits of scale arise when in industries where buyer's willingness increase as other buyers patronize the company. This limits the entry for new companies since customer's willingness to buy from a newcomer is limited. The third entry barrier is switching costs, which are fixed costs that buyers face when they change suppliers. Capital requirements work as a barrier since new entrants need to invest large financial resources to compete. Advantages independent of size can be cost or quality advantages that are not available to potential rivals. The second last barrier, according to Porter, is how access to distribution channels can limit the possibility of entry into an industry. The new entrant must secure its product or service distribution, and limited retail channels make it tougher to enter. Restrictive government policy is the last barrier and can hinder new entrants directly and amplify the other entry barriers (Review et al., 2020, pp. 44-45).

Micheal Porter established *"The Five Forces Analysis"* to determine different forces affecting the competition in an industry. These five forces differ from industry to industry, but the idea is to analyse the competitive landscape with help from this model. These five forces are *threat of entrants, bargaining power from suppliers, threat of substitutes, bargaining power from buyers and competitive rivalry*. According to Porter (Review et al., 2020), the strongest competitive force or forces, will determine the profitability of an industry. Furthermore, this force or forces will become the most important to strategy formulation.

4.1.2 The Resource Based View (RBV)

The resource-based view approach regarding competitiveness builds on a firm's internal characteristics, like resources and competence. According to RBV, successful companies have valuable strategic resources that constitute a competitive advantage. The theory builds on the idea that a firm can either have a competitive advantage or a sustained competitive advantage. RBV theory suggests that by implementing strategies, that exploit a firm's internal strengths, it will be able to neutralize external threats and avoid internal weaknesses by responding to environmental opportunities. Furthermore, firms will obtain a sustained competitive advantage. A sustained competitive advantage will not necessarily last forever. Unanticipated changes in the economic structure of an industry may change what earlier were valuable sources that gave a competitive advantage. However, not all company resources hold the potential of sustained competitive advantages (Barney, 1991).

According to Barney (1991), a firm can have this potential if their resources have the following four attributes:

- *it must be valuable (it exploits opportunities and/or neutralizes threats)*
- *it must be rare among a firm's competition today and in the future*
- *imperfectly imitable*
- *cannot be strategically equivalent substitutes*

The key argument from Barney is how heterogeneous and immobile resources are helpful for generating sustained competitive advantages. If a firm's resources are immobile, they will create barriers to entry. On the other hand, if firm resources are mobile, they face the threat of allowing other firms to acquire entry protected strategies to enter the industry (Barney, 1991).

4.2 The Value Concept

The terms "price" and "value" are essential to distinguish because a buyer's personal preferences are taken into consideration when determining an asset's value. On the other hand, a price is an observable size that is a result of a transaction. An example is how a price on a property is an observable number, but the actual value of the property will be the highest bid. Therefore, valuation is essentially about estimating the most likely price of an asset in a particular market at a certain time and under specific circumstances (Dyrnes, 2011).

Many claims that a company's market price does not reflect the fundamental value of the same company. For that reason, professional analysts have an idea that they can make analyses of whether the market value reflects the fundamental value of the firm based on relevant information. With the available information, analysts will have to interpret and evaluate this information and use it as a basis for uncertain estimates of future economic development. The interesting part is that different analysts who value the same asset with the same information will often conclude with different perception of the value. We can observe this by looking at different brokerage firms and how some give a buy recommendation while others give a sale recommendation on the same stock. Dyrnes (2011) claims that it is not appropriate to assume that an asset has a single true value. He argues that value perception is essentially subjective and that appreciation is a way of estimating hypothetical market prices given certain assumptions about the market (Dyrnes, 2011).

When performing a valuation, it is essential to find out what the purpose is. We need to determine to whom the value concerns. So, the question is "the value to whom"? By defining whether we find a subjective value for a single person, equilibrium price in the free market, or a hypothetical price agreed between a few accomplices, we can answer the question (Dyrnes, 2011). According to the International Valuation Standards Council (IVSC), it may be appropriate in general to operate with the following three bases of value: *Open market value, closed transaction value and value in use* (Dyrnes, 2011).

Open market value:

This value works as the likely price that would have been paid in a hypothetical transaction in a free and open market. However, Dyrnes (2011) emphasizes the importance of describing what type of market the valued asset usually would trade.

Closed transaction value:

A closed transaction value is an estimate of the price that seems reasonable in a transaction between two specific parties. It could also be the price in a transaction where only predefined parties are involved. The notable aspect of this type of value is that some parts of the transaction exclude specific details that affect the asset's price in an open market (Dyrnes, 2011).

Value in use:

This value occurs as a result of owing and using an asset, rather than what the asset would hypothetical be sold for in a transaction (Dyrnes, 2011).

At last, we need to consider under which circumstances the asset should be valued under. The following examples are some principles that that in general have an impact (Dyrnes, 2011):

i. *Will the firm continue its operations, or liquidate?*
ii. *If the firm or an asset will be sold, is the sale intended or forced?*
iii. *Shall it be considered that there is better alternative use of assets than at time of valuation?*

4.3 Modern Portfolio Theory and Relevant Risk

Harry Markowitz established modern portfolio theory during the 1950s (Francis & Kim, 2013). His pioneering work laid the foundation for modern portfolio theory. Markowitz established a conceptual framework for portfolio management methods used by practitioners (Vollmer, 2014, p. 9). According to Markowitz (2014, p. 10), the biggest challenge for an investor is to find the perfect combination of stocks in terms of yield and risk. The basic idea is that a portfolio with the highest return is not automatically the portfolio with the lowest risk. This means that the expected return of a portfolio increases when the investor is willing to take on additional risk, or a risk-averse investor is able to reduce the risk in exchange for a lower expected return. To reduce the risk, Markowitz (2014, p. 13) implies an adequate diversification that depends on the number of securities and diversification across sectors and industries. Companies within the same industry usually show high covariances among themselves since they all will be exposed to economic events within the industry. Perfect distribution of uncorrelated stocks will reduce or even eliminate the unsystematic risk, and the only remaining risk is the systematic one. Systematic risk, also called the non-diversifiable risk, is the risk that is attributable to marketwide risk sources. On the other hand, the unsystematic risk can be defined as the firm-specific risk (Bodie et al., 2020, p. 288).

4.4 Limitations of the Capital Asset Pricing Model (CAPM)

The idea of the capital asset pricing model (CAPM) is to give us a precise prediction of the relationship between the risk of an asset and its expected return. In other words, the model is a set of predictions concerning equilibrium expected returns on risky assets (Bodie et al., 2020, p. 387). A CAPM investor is expected to hold a perfectly diversified portfolio, with the unsystematic risk eliminated. The expected return of a stock is linearly correlated to its beta risk. We can calculate the expected return from addition of the risk-free rate and the risk premium of the stock (a more through definition will follow in chapter 5.3.3) (Vollmer, 2014, p. 19).

The CAPM is based on two assumptions regarding individual behavior and market structure. The first assumes that investors are alike in most important ways, specifically that they are all rational, mean-variance optimizers with a common time horizon and a common set of information reflected in their use of an identical input list (public information). Second assumption asserting that markets are well-functioning with few blocks to trading (Bodie et al., 2020, p. 387). These assumptions are relativly strong, and one may wonder whether they will withstand empirical tests. According to Bodie et al. (2020, p. 411), testing the CAPM is surprisingly difficult. Part of the first assumption of CAPM is that the market portfolio must include all risky assets in the economy. In reality, we cannot observe all assets that do trade, especially those that do not. This means that the theoretical market portfolio, which is central to CAPM, is impossible to pin down in practice. Richard Roll also presented this critisism. Early tests of the CAPM were performed in the 1970s and with following criticism of the model, especially by Richard Roll. The so-called Roll's critique was directed towards how even if the proxy of the market portfolio is perfect, it does not reflect the correct weighting of all investments of all people. According to Roll, the most crucial mistake is made if a false index is used as a proxy that misleads to a CAPM validation (Vollmer, 2014, p. 21). Furthermore, the risk-free rate is only theoretical and does not exist in reality.

One of the assumptions underlying the CAPM is that the risk-free rate is realistic. It will be impossible for everyone to lend money at the same riskless rate of interest. Furthermore, a riskless asset may not exist in the real world (Francis & Kim, 2013, p. 314). Another limitation of the CAPM is how the assumptions state that investors have identical investment horizons.

According to Francis and Kim (2013), it is more realistic that different investors have different horizons.

4.5 Theory on Blockholders

What is a Blockholder?

The definition of what constitutes a blockholder is according to Hermalin and Weisbach (2017, p. 548), often surprisingly vague. The size of the holding is probably what distinguishes a blockholder from a mere shareholder. Most literature focuses on the percentage size of the "block", but theory shows that the value of the block is also important. Defining a blockholder based on percentage helps us to understand the effect on voting rights. Greater fractional ownership gives an individual shareholder more votes and thus more power. Theory shows that a blockholder can vary from 5% to 50,1%. With a 50,1% ownership, the shareholder becomes a majority shareholder and can decide the outcome of elections (Hermalin & Weisbach, 2017, p. 549). Most researchers define a blockholder as a shareholder with at least 5% of total shares (Holderness, 2009). Holderness (2009) describes that in the US, more than 96% of the listed firms have at least one blockholder.

We can also divide blockholders between insiders and outsiders (Hermalin & Weisbach, 2017, p. 555). An outside blockholder may be governing through voice or exit or may instead be purely passive. Research shows that board representations by blockholders decline with firm age and increases with both the blockholders' percentage and the firm's market to book ratio (Hermalin & Weisbach, 2017, p. 558).

Liquidity

Blockholder ownership above a certain level may lead to increased portfolio risk since their exposure inclines. This may also influence risk taking and expected return (Thomsen et al., 2006). A larger block will reduce the free float in the stock and thus liquidity. A large blockholder reduces the number of small shareholders who might be able to provide liquidity in case of a shock. This will in turn, according to Hermalin & Weisbach (2017), lower the price that investors are willing to pay for a stock.

Blockholder and Firm Value?

According to Hermalin and Weisbach (2017, p. 592), the most important evidence about blockholders is that if they did not add value in the broadest sense, such ownership structure should have been "rare" and dispersed ownership should be the norm. Instead, we find the most public corporations around the world have large blockholders. Another interesting piece of evidence is that if blockholder did not engage in governance, the firm value would be unaffected by who owns a particular block (Hermalin & Weisbach, 2017, p. 592).

5 Research Methodology

The following chapters will present the methodological approach used in this thesis. A methodological approach is in general a method of a planned procedure to achieve a specific goal. There are some approach variations between different subject areas, however there are still key similarities between all research methodologies (Grønmo, 2016, p. 41). Johannessen et al. (2020, p. 23) present a methodological approach as four phases: preparation, data collection, data analysis and reporting. This thesis will not focus on reporting as this thesis is a report of the research process.

5.1 Preparation

A vital point of every research is to explore relevant and potentially relevant theory. In that way, the researcher will be able to answer one or several research questions successfully. For this thesis, the author started by exploring sector reports, financial literature and company reports. Furthermore, some examination of previous valuation work was part of preparing to gain knowledge about structuring a thesis of valuation. The use of search engines like *ORIA*, *Google Scholar and Investopedia* was valuable in collecting relevant data. At last, Bloomberg Terminal Portal was used to provide expertise in using services from a financial data program.

5.1.1 Purpose

This thesis aims to estimate the fundamental value of Norwegian Property's stock at the Oslo Stock Exchange. This estimation will be used to provide an investment advice to a fictive investor. This thesis will explore existing conditions and according to Johannessen et al. (2020, p. 52), a study with such purpose is called descriptive.

5.1.2 Approach

In the process of finding a research approach we generally distinguish between deductive and inductive method. The first approach is the deductive method where the research is based on established theory to provide new empirical research.

The inductive approach, on the other hand, uses empirical research to provide new theory. The critical difference between the two methods, is the relation between theory and empirical (Grønmo, 2016, p. 51).

We can argue that this thesis uses the inductive approach to process empirical analyses from already processed theory. An example is the use of key performance ratios in the financial analysis and the elements in the strategic analysis. However, it can also be argued that this thesis uses mainly the deductive approach. The use of established models and theories to find the fundamental value of NPRO's stock can, however, be argued to be a process from theory to empirical findings (Grønmo, 2016, p. 51).

5.2 Data Collection

5.2.1 Research Strategy

This thesis is a case study characterized by a process where the researcher collects much information from a few units over a shorter or longer period through detailed and comprehensive data collection. A case study should be studied in a context, and in this thesis, that context will be economics. Furthermore, a case study can be carried out using quantitative data and techniques, which will be done in this thesis. A case study distinguishes between a single case study or multi-case design, also called cross-case analyses. It also distinguishes between one or several analysis units. The idea is to determine if the study will collect information from one or several sources (Johannessen et al., 2020, pp. 213-214).
With only one case (NPRO) and several information units, this thesis is considered to be a single-case study with several analysis units.

5.2.2 Data Foundation

We need different types of data or information to be able to perform an analysis of our case. What type of information depends on the research question, but we can distinguish between qualitative- and quantitative data. According to Grønmo (2016, p. 126), one key distinction between the two is that quantitative data is registered as expressions in the form of numbers. Qualitative data, on the other hand, is expressed in the form of text. Johannessen et al. (2020, p. 23) express an example of typical qualitative data as a more detailed and complementized interview, intending to achieve a deeper understanding.
In this thesis, the goal is to perform a valuation of a firm, and it will therefore be natural to use quantitative data as most of the data foundation is collected from financial reports as numbers.

However, this thesis is not based solely on quantitative data but also includes information collected from empirical research and other sources to build a strategic analysis. Thus, there are included qualitative data in the thesis.

The data foundation can include both primary and secondary data. Primary data is collected as new data by the researcher of the study. On the other hand, secondary data is data that has analysed primary data into a new study purpose. Before analysing primary data, we need to critically consider the data in terms of relevance, quality and ethic (Grønmo, 2016, p. 150).

Secondary data have mainly been used in this thesis, as all data being contained is already published and submitted to the public. Financial data from annual reports have been further analysed and could according to Grønmo (2016, p. 150), be classified as analysis of available data.

5.3 Data Analysis

The collected data in the thesis needs to be analysed and interpreted. Analyses of quantitative data are done by processing numbers by using different techniques. However, quantitative and qualitative methods mainly consist of interpreting data (Johannessen et al., 2020, p. 24).

5.3.1 Analysis Tools

The valuation process of this thesis will include both financial and strategic analyses. Both the reformulated income statement and balance sheet serve as a basis for the discounted cash flow model (DCF). A model built in excel works as a tool of deducting the fundamental value of the firm. Such a model is the most essential financial analysis tool that will be applied in this thesis. Such a model enables us to perform different types of historical analyses of both profitability and liquidity.

Furthermore, the Bloomberg terminal is a tool that simplifies the work when comparing analyses of NPRO with its peers. Another tool that will be applied is the relative valuation with different multiples. In the process of valuation, the model in excel is used as a tool of including assumptions about the future. These assumptions involve uncertainty about future aspects of the company, industry and economy, which all affect the valuation. The DCF model discounts future cash-flows, which means that assumptions of the future serve as the basis of these estimations. Both internal and external aspects affect these. However, strategic analysis tools will be necessary for analysing internal and external aspects. Well-known tools and frameworks like Porter's five forces, PESTEL, VRIO and SWOT will be used. At last, the Monte Carlo simulation model will be used to test the probability and uncertainty of different outcomes.

5.3.2 Methodological Qualities and Limitations

In all research, we depend on assessing the reliability of collected data. The reliability is connected to how accurate the data is, how it is used and how it is collected and processed (Johannessen et al., 2020, p. 27). In general, reliability can be defined as the degree of agreement between different collections of data on the same phenomenon based on the same survey design (Grønmo, 2016, p. 242).

Validity is another criterion for determining whether the data is of good quality. The criterion is about the validity of the data material for the research. A high degree of validity shows that the survey design and data collection results in data that are relevant (Grønmo, 2016, p. 241).

6 Financial Methodology

6.1 Valuation methods

Valuing a company can be done using several different valuation models. In this paper, the purpose of a valuation is stock analysis. Using two or more valuation approaches will enable the analyst to ensure that the valuation is unbiased. Due to many different valuation approaches, we can classify them into four different groups (Petersen et al., 2017, p. 297). The first group is based on a method of discounting future income, such as cash flows. These methods are called *present value* approaches. The next group is referred to as the *relative valuation* approach, often called multiples. The assumption that perfect substitutes should sell for the same price is what multiples are founded on. The *asset-based value* approach is the third group of approaches, where the focus is on the value of the firm's assets. The last group, called *contingent claim valuation models*, measures the value of firms that share option characteristics. In the following, the paper will present different methods within these groups and discuss the potential use of the exact method (Petersen et al., 2017, p. 298).

6.1.1 Present Value

6.1.1.1 The Dividend Discount approach

The dividend discount model (DDM) estimates the present value of all future dividends, including a liquidation dividend, and in that way finds the value of a firm. In this approach, only future dividends and the required rate of return on equity is affecting the value of a firm. Furthermore, the dividend discount model does not rely on any assumptions and yields unbiased value estimates.

The model is relatively simple to use, but it requires inputs usually based on many different sources and therefore time-consuming to generate (Petersen et al., 2017, p. 302). The author has chosen not to use the DDM for NPRO.

6.1.1.2 The Discounted Cash Flow approach (DCF)

This approach can either estimate the enterprise value or the equity value thru two different approaches. The enterprise value approach uses the obtained WACC to discount estimated future cash flows to find the present value. The weighted average cost of capital (WACC) will be further explained in chapter 5.3.2. The firm value will be affected positively by either higher free cash flows or a lower WACC. After discounting future cash flow, the approach estimates the enterprise value instead of the market value of equity.

Furthermore, it is necessary to deduct the market value of NIBL from the enterprise value to obtain an estimated market value of equity. To obtain the discounted terminal value, it is necessary to subtract the expected growth rate. The following formula is applied when discounting future cash flows included terminal value:

$$Enterprise\,value_{!} = \sum_{"\&\%}^{\#} \frac{FCFF_{"}}{(1+WACC)^{"}} + \frac{FCFF_{\#\$\%}}{WACC-g} * \frac{1}{(1+WACC)^{\#}}$$

The DCF approach is, according to Petersen et al. (2017), the most popular present value approach. However, the future cash flow is estimated based on an assumption about the future, which could be challenging to estimate but still manageable. A critical part that needs to be considered is that the analyst can easily manipulate assumptions about the future. A biased analyst would be able to obtain a high enterprise value through manipulated higher free cash flows (Petersen et al., 2017, p. 306). As mentioned before, the author has chosen to use this present value approach and will rely its estimates on a thorough strategic analysis of the future.

6.1.1.3 The EVA Model

The Economic Value Added (EVA) model relies on accrual accounting data to estimate the enterprise value of a firm. This model estimates the enterprise value by the initial invested capital plus the present value of all future EVAs. The invested capital is the book value of equity plus net interest-bearing debt. The model shows when a firm is traded below or above its book value of invested capital. A positive EVA shows that the estimated market value is above its book value, and a negative EVA shows that it is below the book value (Petersen et al., 2017, p. 311).

6.1.2 Relative Valuation

Relative valuation based on multiples is, according to Petersen et al. (2017), often popular among practitioners. The reason is how the low level of complexity and a relatively quick way of performing a valuation. The use of multiples is a method where a valuation is applied by comparing a company's financial ratios of relevant peers (Petersen et al., 2017, p. 318). When using multiples, some considerations that need to be addressed. They are the following (Petersen et al., 2017, p. 325):

- When comparing companies, it is crucial that they follow the same accounting practices and accounting estimates so that data can be compared across related firms.
- Only include normalised earnings so that the true value potential of the firm is reflected.
- Multiples based on expected earnings yield are more accurate value estimates than current earnings

For NPRO's selected peers, OLT and Entra, all of them are using the same reporting standard which is in accordance with International Financial Reporting Standards (IFRS)[1]. The author argues that the first assumption holds for NPRO's Norwegian peers. They are also operating in the same commercial real estate market and external environment, similar to NPRO.

In the absence of enough peers to perform a relative valuation, the author has included four Swedish peers that will be included in the relative valuation using multiples.

6.1.2.1 Multiples

A deeper understanding of the fundamental value drivers influencing multiples is helpful when selecting multiples for valuation purposes. There are different factors that affect multiples, and these work as underlying requirements when selecting which ones to apply. Equity-based multiples require that comparable firms have identical expected growth rates, cost of capital and profitability. On the other hand, enterprise-value-based multiples have even more requirements, such as tax rate, depreciation rate and EBITDA margin. Even though valuation with multiples is based on several restrictive assumptions, Petersen et al. (2017, p. 330) claim that multiples should be used as a complementary approach to the present value approach.

[1] Eiendomsselskap, O. T. (2019). *Annual Report 2019*. O. T. E. ASA.
, Entra. (2020). *Annual Report 2020*. E. ASA.
, Property, N. (2020). *Annual Report 2020*. N. P. ASA.

The author has chosen to use equity-based multiples and industry-specific multiples in the relative valuation of NPRO. The chosen multiples for the equity value estimations are price-to-earnings (P/E) and price-to-book (P/B). Both price to earnings and price to book will use expected earnings as the denominator in the multiples. According to Petersen et al. (2017, p. 326), current earnings and trailing earnings inform about past performance, which is not necessarily a good indication of future performance. They recommend the use of expected earnings, which is also supported by research (Liu et al. 2002).

6.1.2.2 Industry-Specific Multiples

All of NPRO's selected Scandinavian peers follow the recommendations of the European Public Real Estate Association (EPRA). This means they all report Net Reinstatement Value (NRV) and Net Asset Value (NAV). Both NRV and NAV are typically done for firms that are capital intensive, like the real estate industry. In real estate, most of the values are represented by assets (EPRA, 2020). NAV is also typically used in real estate and measures the market or fair value of assets. Net asset value is calculated by dividing total NAV by the number of shares. The ratio between the market value of equity and NAV (P/NAV) is expected to be close to one since most of the values in real estate are represented by assets (Petersen et al., 2017, p. 328).

6.2 Choice of Analytical Models

This paper will apply frequently used approaches for valuing NPRO's share, such as a discounted cash flow method (DCF) and relative valuation. The relative valuation will be based on NPRO's Norwegian peers and Swedish peers, using traditional- and industry-specific multiples.

6.3 Discounted Cash Flow model – inputs

6.3.1 The Free Cash Flow to Firm (FCFF)

The free cash flow to firm (FCFF) is cash flow from operations minus cash flow from investing activities (Petersen et al., 2017, p. 673). FCFF measures the firm's profitability after all expenses and reinvestments. A positive FCFF indicates that a firm has cash remaining after expenses, and a negative FCFF indicates that it has not generated enough revenue to cover costs and reinvestment activities (Hayes, 2021).

6.3.2 Cost of Capital

Providing funds for both equity and debt holders includes an amount of risk, they want to be compensated for.

They require a return for taking on risk, and this return can be identified through the weighted average cost of capital (WACC) for both equity- and debt holders. The formula consists of four key components: capital structure, cost of debt, cost of equity and tax rate (Petersen et al., 2017, p. 341). The WACC formula is defined as:

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

$NIBL = Market\ value\ of\ net\ interest - bearing\ liabilities$
$Equity = Market\ value\ of\ equity$
$r_{1} = Required\ rate\ of\ return\ on\ NIBL$
$r_{\cdot} = Required\ rate\ of\ return\ on\ equity$
$t = Corporate\ tax\ rate$

6.3.3 Cost of Equity

Estimating the required rate of return on equity can be done in several different ways. In this paper, the Capital Asset Pricing Model (CAPM) will be applied. The idea behind CAPM is that in a diversified portfolio of shares, the investor will only pay for the risk of each share that cannot be diversified (systematic risk) (Petersen et al., 2017, p. 345). The required return on equity formula consists of three main factors: risk-free rate, Beta equity and market risk premium. The formula is defined as:

$$r_{(} = r_{)} + \beta_{(} \times (r_{*} - r_{)})$$

$r_{\cdot} = Investors^{\#}\ required\ rate\ of\ return$
$r_{\$} = Risk - free\ rate$
$\beta_{\cdot} = Systematic\ risk\ on\ equity$
$r_{\%} = Return\ on\ market\ portfolio$

6.3.3.1 Risk-free Rate

A risk-free interest rate is supposed to express how much an investor can earn without experiencing any risk. Finding an investment that involves zero risk is questionable. However, a government bond is usually used as a proxy for the risk-free rate. Nonetheless, examples have shown that government bond has proven to be risky and should be used with care (Petersen et al., 2017, p. 346). In this paper, and for NPRO's case, Norges Bank's 10-year government bonds are chosen as the risk-free rate. This is the most accurate option since NPRO's relevant currency and operations are in NOK and within Norway.

As of 30 June 2020, the return on Norwegian 10-year Government Bond was **0,82%** (Bank, 2021).

Figure 6 – Risk free rate:

Risk-Free Rate = 10-year Norwegian Government Bond			
Year	3-year	5-year	10-year
2020	0,44 %	0,56 %	0,82 %
2019	1,23 %	1,28 %	1,49 %
2018	1,15 %	1,44 %	1,88 %

Source: Norges Bank (modified by author)

6.3.3.2 Market Risk Premium

The difference between returns from risk-free investments and returns from the market is called *the market portfolio's risk premium*. In CAPM, we find the market risk premium defined as: $(r_* - r)$. According to Petersen et al. (2017), there are typically two ways to determine the risk premium. These are called *ex-post approach* and *ex-ante approach.*

Ex-post approach

By examine 50 – 100 years of historical data from returns on the stock market and the returns on risk-free investments, the method will determine the market portfolio's historical risk premium. This method is on the other hand, based on historical return data. A criticism of this method is the way historical risk premium is a reasonable indicator of the future. For that reason, this paper will not include the ex-post approach.

Ex-ante approach

This approach attempts to find the risk premium based on analysts' consensus earnings forecast. Major market participants' expectations are being conducted in a survey from PWC. Nonetheless, professor Damodaran from NYU is also one of the most frequently applied references to justify the risk premium (Petersen et al., 2017, p. 361).

In this paper, an average between PWC and Damodaran will be applied in NPRO's calculation of the CAPM. The average equity risk premium is **4,86%.**

Figure 7 – Risk premium:

Total Equity Risk Premium		
Sources	Year	Risk Premium
Damodaran	2020	4,72 %
PWC	2020	5,00 %
Average		**4,86 %**

6.3.3.3 Liquidity Premium

Shareholders	Stocks	Percent	Total
Geveran Trading Co Ltd	397 932 667	79,61 %	97,40 %
Folketrygdfondet	73 951 642	14,79 %	
Norwegian Propertry ASA	6 250 000	1,25 %	
Danske Bank AS	3 269 006	0,65 %	
Morgan Stanley Investment Funds	1 034 229	0,21 %	
Sanden AS	1 000 000	0,20 %	
Banan II AS	1 000 000	0,20 %	
State Street Bank And Trust Comp	946 644	0,19 %	
Sijoitusrahasto Ub Eurooppa Reit	763 640	0,15 %	
Kas Bank N.V.	717 239	0,14 %	

Petersen et al. (2017, p. 363) refer to liquidity as the costs and problems of converting shares for cash. NPRO's share is, as mentioned before, highly dominated by ten large shareholders and one block owner John Fredriksen. This gives the stock a low volume of marketable ownership and free float. Firms with marketable ownership are, according to Petersen et al. (2017), considered attractive for investors. They appreciate the ability to convert shares to cash with minimum transaction costs quickly. Empirical studies seem to support that investors demand a discount for investing in shares with limited or no liquidity. According to Petersen et al. (2017, p.363), investors adjust the required rate of return with a liquidity premium. Investors usually attach a premium of up to 3-5%. The author has decided to attach a premium of **3%** on the required rate of return to compensate for illiquidity in the share.

6.3.3.4 Equity Beta

In the CAPM, the beta will reflect the systematic risk of NPRO's historical stock returns compared to the market portfolio's returns. In this paper, the beta will measure NPRO's volatility in relation to Norway's stock market index volatility. The estimation of the beta is based on historical data. A beta above 1, reflects higher volatility than the market portfolio. A beta below 1, is showing that equity returns are less volatile than the market portfolio. Lack of liquidity in a firm's shares can imply lower volatility than necessary is the reality (Petersen et al., 2017, p. 348). NPRO's stock can be classified as illiquid compared to other firms of its scale in Norway, regarding the low daily average trading volume and the stock's spread between bid and ask [2]. Another critical factor is that a firm's change in strategy may face a different risk profile over time. This could be the case for NPRO, who set a new strategic course in 2020, illustrated by two investments that increased their exposure to residential and peripheral offices (Pangea, 2021).

Damodaran Industry beta - Western Europe		
Industry Name	Number of firms	Average Unlevered beta
Real Estate (Development)	65	0,49
Real Estate (General/Diversified)	58	0,44
Real Estate (Operations & Services)	237	0,34

The industry beta was extracted from Damodaran and NYU Stern (2021). The author picked retail (general/diversified) as an industry and found the unlevered average beta to be 0,44.

[2] Bloomberg NPRO NO 11.05.2021

To be able to estimate the systematic risk, we must lever the unlevered beta. A levered beta is a function of the unlevered beta, operating risk, and financial risk, which is the firm's capital structure (Petersen et al., 2017, p. 352). Before levering the unlevered beta, beta of debt is measured in the following:

$$\beta_{\cdot} = \frac{r_{\cdot} - r_{)}}{r_{*}} \rightarrow 0{,}3$$

The unlevered beta is levered thru the following beta relation:

$$\beta_{(} = \beta_{+} + (\beta_{+} - \beta_{\cdot}) * \frac{NIBL}{Equity} \rightarrow 0{,}58$$

Due to the lack of liquidity in NPRO's stock, the paper will use an average between the industry beta and historical market beta from Bloomberg.

Figure 7 – Beta:

Average Unlevered Beta NPRO	
Source:	**Levered Beta:**
Industry Beta	0,58
Bloomberg	0,68
Average:	**0,63**

After levering the beta and finding the average, we arrive at a beta of **0,63** for NPRO.

6.3.3.5 Blume's Adjusted Beta

Previous studies have shown that there was a tendency for an estimated beta to regress towards the grand mean of all betas, namely one. Marshall E. Blume examined this tendency in further detail (Blume, 1975). According to Blume (1975), the adjusted beta improves the accuracy of estimations of betas. We make the raw beta from regression more robust and closer to the expected future beta by adjusting the betas. The formula for adjusting the raw beta is:

$$\beta_{+',} = \beta_{-+.} * \frac{2}{3} + 1 * \frac{1}{3}$$

The betas obtained above are already adjusted in accordance with Blume's model and are therefore ready to apply in estimations.

6.3.3.6 Estimated Cost of Equity

Through calculations of each formula in the sections above, we are now able to enter the results into the Cost of Equity formula as first described:

Figure 8 – Cost of equity:

Cost of Equity	
Risk-free rate	0,82 %
Equity Beta	0,63
Market Risk Premium	4,86 %
Cost of equity (ex premium)	*3,88 %*
Liquidity Premium	3 %
Cost of equity (premium)	**6,88 %**

$$r_(= 0{,}82\% + 0{,}63 \times 4{,}86\% + 3\% = 6{,}88\%$$

6.3.4 Corporate Tax

Corporate tax plays a role when measuring both the required rate of return on net interest-bearing debt and when calculating the WACC. Furthermore, interest expenses are tax-deductible, and for that reason, may benefit from a tax-shield (Petersen et al., 2017, p. 364). The effective tax rate is by some argued to be the best choice. On the other hand, Petersen et al. (2017 p. 364) argue that it rests on a large number of assumptions that may be difficult to fulfill in practice. In this paper, it is chosen to incorporate the corporate tax rate in Norway due to the fact that it is difficult to obtain an efficient tax rate. The Norwegian corporate tax rate is currently at **22%.**

6.3.5 Cost of Debt

The required rate of return on NIBL, also known as the cost of debt, estimates the rate a firm can borrow. The required rate of return consists of three variables: the risk-free rate, the credit spread (risk premium on NIBL) and corporate tax (Petersen et al., 2017, p. 363).

$$r\cdot = \mathbb{U}r) + r/\mathbb{V} * (1 - t)$$

According to NPRO's annual report in 2020, the average interest rate for the company's loans amounted to 2,94%. We found in chapter 5.3.3.1 that the risk-free rate was 0,82%. This gives a risk premium on debt of 2,12%. At last, the Norwegian corporate tax rate was found to be 22%. This gives a calculated cost of debt of 2,29%.

$$Cost\ of\ debt\ (r\cdot) = (0{,}82\% + 2{,}12\%) * (1 - 22\%) = 2{,}29\%$$

6.3.6 Capital Structure

A firm's capital structure is an essential component of the weighted average cost of capital formula, as mentioned above. Capital structure is the amount of debt and equity a firm possesses (Petersen et al., 2017, p. 341).

The capital structure must be based on market values, as market values reflect the actual opportunity costs of investors or lenders. NPRO's capital structure is calculated by dividing NIBD by the enterprise value. The current (market value) equity ratio of NPRO is 45% and a debt ratio of 55% (market value). The company's goal is a long-term capital structure between 45 and 55 percent (Property, 2020). NPRO has managed to be assigned with this goal since 2016, and such high ratio gives the company a financial buffer for the future.

6.3.7 Estimated Weighted Average Cost of Capital (WACC)

After calculated each of the formulas above, we can finally estimate the WACC formula. This gives us a WACC of 4,36%. In the valuation later on, this number will be used for discounting future cash flows.

Figure 9 – WACC:

WACC		
Cost of Equity	6,88 %	
Cost of Debt	2,29 %	
Debt-to-EV	55,03 %	
Equity-to-EV	44,97 %	
Value of Debt (NIBD)	11 608,30	31.12.2020
Value of Equity	9 487	
Current share price NOK	14,6	13.05.2021
Shares outstanding	649 825 596	31.12.2020
WACC	**4,36 %**	

7 Financial Analysis

Norwegian Property's financial statements enable us to gain insight into historical financial performance. In order to do so, this paper uses a time-series analysis with data from the past seven years. The length of the period examined is determined by the importance of catching a sense of fluctuations in growth, profitability and risk over time (Petersen et al., 2017, p. 105). For that reason, financial data from the past seven years should be sufficient.

The same length of time is used for Entra and OLT, making it easier to compare every peer in terms of historical measurements. Another critical aspect is that every peer is following International Financial Reporting (IFRS) (Eiendomsselskap, 2019; Entra, 2020; Property, 2020).

7.1 Accounting Policies

In NPRO's notes, we can see that they are using the fair value method to value their assets. This approach implies the current value of the investment properties.

The valuation process is based on internal analysis and external valuation. All the properties are being revalued before accounting reports every year by two independent external specialists. The average of these valuations is then being used as the basis for recognising the investment properties at fair value on 31 December each year (Property, 2020). Furthermore, fair value changes are recognised in the income statement.
This method is standard for real estate companies because they make their income from capital gains and rents (PWC, 2017).

7.2 Analytical Income Statement

When reformulating NPRO's income statement, it is necessary to classify every accounting item as either "operational" or "financial". In that way, the analysis can obtain a better knowledge of the different sources of value creation (Petersen et al., 2017, p. 111). By separating operating items from financial items, we manage to isolate the firm's primary driving force of value creation. This is because a firm's operation makes it unique, in contrast with a financial composition that is much easier to copy (Petersen et al., 2017, p. 107). Determining which accounting times to include in operations depends on the firm's business and characteristics. This means that some items could be classified as operational for one firm and financial for another.

When reformulating the actual income statement of a firm, the analyst will be able to extract key performance measures of operating profit. There are three essential profit measures that an analyst will be able to obtain, which is *Earnings Before Interest and Tax (EBIT), Earnings Before Interests, Taxes, Depreciations and Amortizations (EBITDA and Net Operating Profit After Tax (NOPAT) (Petersen et al., 2017, p. 112).* By using historical financial data, the author has, in the following calculated key figures as mentioned above.
Figure 10 – Pro forma:

Reformulated Income Statement - Norwegian Property

NOK in millions	2014 A	2015 A	2016 A	2017 A	2018 A	2019 A	2020 A
Rental Income	739	858	901	784	799	735	709
Property Sales	-	-	-	-	-	383	856
Total Revenue	739	858	901	784	799	1 118	1 565
Property-related expenses	(135)	(140)	(111)	(124)	(138)	(117)	(107)
Saleries and personal expenses	(58)	(73)	(51)	(50)	(52)	(403)	(845)
Share of profit after tax, associates (O)	-	-	-	-	0	57	(0)
Tax on profit from associates	-	-	-	-	0	12	-
EBITDA	546	645	740	611	610	667	613
Change in market value of investment property	355	387	475	1 047	161	787	1 828
Depreciation	(7,10)	(7,70)	(6,80)	(4,20)	(5,20)	(3,60)	(2,30)
EBIT	894	1 024	1 208	1 653	766	1 451	2 438
Corporation Tax	96	(189)	(213)	(58)	(87)	(247)	(400)
Tax on profit from associates	-	-	-	-	(0)	(12)	-
+/- Tax-shield, net financial expenses	(206)	(96)	(58)	(59)	(43)	(41)	(80)
NOPAT	783	739	937	1 536	636	1 151	1 958
Financial Income	2	1	1	3	4	5	4
Change in market value financial instruments (F)	(383)	73	171	44	71	70	(102)
Financial Expenses	(383)	(429)	(403)	(292)	(263)	(259)	(265)
Net financial expenses	(764)	(355)	(231)	(246)	(188)	(185)	(362)
+/- Tax-shield, net financial expenses	206	96	58	59	43	41	80
Consolidated Profit	225	480	765	1 349	491	1 007	1 676

7.2.1 Comments on Special Items

Change in Market Value of Investment Properties

Change in market value of investment properties is included in the income statement of NPRO and not in the balance sheet. In the income statement, it is classified as part of operational since it has a significant impact on the overall profit. However, it is "non-cash" and will therefore not be included as part of cash earnings. By excluding this adjustment, we are able to observe what the firm earns thru its operations.

7.3 Analytical Balance Sheet

It is essential to classify accounting items as either operational or financial as done with the reformulated income statement. The crucial part is to match operating and financial items in the income statement with operational and financial items in the balance sheet (Petersen et al., 2017, p. 114). By classifying and separating essential items, we are able to calculate invested capital. According to Petersen et al. (2017, p.114), invested capital is defined as followed: "*Invested capital represents the net amount a firm has invested in its operating activities and which requires a return".* Other key figures in the reformulated balance sheet are crucial for performing profitability and liquidity analysis.

Figure 11 – Pro forma balance:

Reformulated Balance Sheet - Norwegian Property -

NOK in millions	2014 A	2015 A	2016 A	2017 A	2018 A	2019 A	2020 A
ASSETS							
Investment Property	15 695	16 170	14 025	15 290	14 574	16 469	23 088
Owner-Occupied Property	102	87	87	71	76	89	98
Other Fixed-Assets	44	46	49	42	39	41	38
Investments in associated companies (O)	-	-	-	-	30	-	1 014
Receivables (O)	-	-	-	-	10	-	265
Deferred tax liabilities (O)	(67)	(259)	(472)	(532)	(616)	(866)	(1 268)
Other non-current liabilitites (O)	-	(53)	(58)	(57)	(2)	(5)	(4)
NONCA	15 773	15 991	13 631	14 814	14 110	15 727	23 229
Receivables (O)	192	182	116	81	446	129	196
Sold properties (O)	-	-	-	-	816	709	-
Avaiable-for-sale investment property (O)	-	-	-	-	942	-	-
Other current liabilities (O)	(241)	(265)	(201)	(149)	(445)	(380)	(256)
NOWC	(49)	(83)	(85)	(67)	1 758	457	(60)
Invested Capital	**15 724**	**15 907**	**13 546**	**14 747**	**15 868**	**16 185**	**23 169**
LIABILITIES AND EQUITY							
Share capital (F)	274	274	274	274	274	247	322
Share premium (F)	3 412	3 412	2 295	2 295	2 295	1 678	3 281
Other equity (F)	6 440	6 440	7 557	7 557	7 564	7 567	7 563
Retained earnings (F)	(4 836)	(4 349)	(3 638)	(2 472)	(2 130)	(1 258)	396
TOTAL E	**5 290**	**5 778**	**6 489**	**7 655**	**8 003**	**8 234**	**11 561**
Interest-bearing debt (F)	9 622	4 613	6 756	6 941	4 680	5 691	10 701
Interest-bearing debt (F)	14	4 907	11	10	3 154	2 467	1 396
Financial derivate instruments (F)	825	670	339	233	163	93	200
Financial derivates instruments (F)	3	2	6	1	2	-	3
Financial derivaties non-current (F)	(7)	(6)	(7)	(2)	(8)	(16)	(26)
Financial derivatives current (F)	-	-	(2)	(0)	(0)	(1)	-
Cash and cash equivalents (F)	(22)	(56)	(46)	(89)	(125)	(282)	(666)
NIBD	**10 434**	**10 130**	**7 057**	**7 092**	**7 865**	**7 951**	**11 608**
Invested Capital	**15 725**	**15 908**	**13 546**	**14 747**	**15 868**	**16 185**	**23 169**
Control	-0,3	-0,2	-0,2	-0,1	0	-0,1	0

7.4 Profitability Analysis

A firm's profitability is vital regarding future survival and ensuring a satisfactory return to shareholders. Therefore, measuring profitability is one of the key areas of financial analysis (Petersen et al., 2017, p. 141). By calculating key financial ratios, we will be able to analyse the profitability of NPRO. In this profitability analysis of NPRO, the paper has focused mainly on Return on Equity (ROE) and Return on Invested Capital (ROIC). To compare these ratios, fair value adjustments are included for both NPRO and its peers.

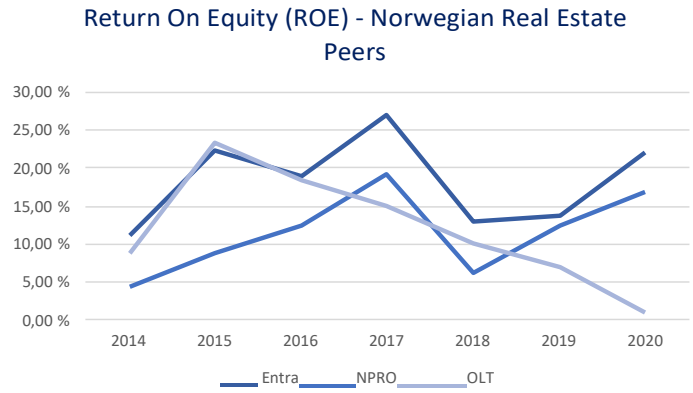
7.4.1 Return on Equity (ROE)

This financial ratio examines the impact of both financial leverage and operating measurements. The return on equity ratio measures the owners accounting return on their investments in a firm (Petersen et al., 2017, p. 168). The return on equity ratio is defined as:

$$Retrun\ on\ equity = \frac{Net\ Profit\ After\ Tax}{Book\ Value\ of\ Equity} * 100$$

7.4.1.1 Analysis of ROE

Figure 12 – ROE:



The graph above shows NPRO's development in return on equity ratio for the last seven years, compared to peer group. NPRO has struggled with its profitability from 2014 to 2016 compared to OLT and Entra. NPRO has been following the same trend as Entra, but with a slightly lower return each year. In recent years, NPRO and Entra are both on an uprising trend compared to OLT with a decreasing ROE. Overall, we can argue that the profitability calculated in the ROE ratio indicates that the trend is positive and stable in recent three years. Going forward, we can probably expect the ratio to stabilize and not increase forever.

7.4.2 Return on Invested Capital (ROIC)

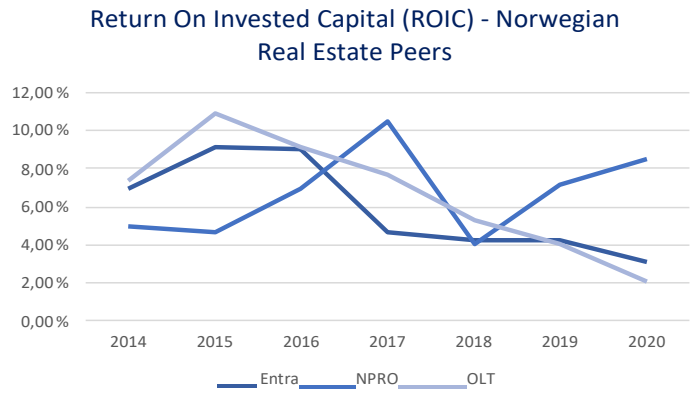
By calculating the return on invested capital (ROIC) the analyst will be able to measure the profitability of the operations. ROIC expresses the return on capital invested in a firm's net operating assets as a percentage (Petersen et al., 2017, p. 142). Return on invested capital after tax is defined as:

$$ROIC = \frac{NOPAT}{Invested\ Capital} * 100$$

Unlike nominal operating profit, the ROIC ratio takes invested capital into account. Later on, we will see how a higher ROIC can lead to a higher valuation of a firm, which stresses the importance of the ratio (Petersen et al., 2017, p. 142).

7.4.2.1 Analysis of ROIC

Figure 13 – ROIC:



In the last seven years, NPRO has realised an average ROIC of 6,65%, which is higher than its peers. The graphs above show how NPRO's ratio has changed a struggling profitability, while OLT and Entra have started to struggle. A fluctuating trend in NPRO's ROIC has been the case while OLT and Entra have a steadier trend, however in a downward trend.

In the last financial year, NPRO experiences a significant increase in ROIC, and becomes above 8%. OLT experiences a decreasing ROIC each year since 2015, which is also the case for Entra from 2016. The pattern is similar to the ROE ratio with increasing profitability after 2018.

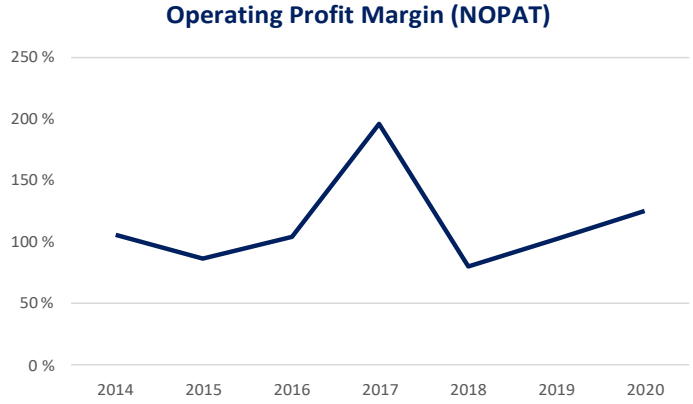
7.4.3 Profit Margin

A ROIC ratio can either be driven by better revenue and expense relation or improved capital utilisation. Therefore. it is necessary to decompose the ratio into an operating profit margin and turnover rate of invested capital (Petersen et al., 2017, p. 155). The operating profit margin after tax is defined as:

$$Operating\ profit\ margin = \frac{NOPAT}{Revenues} * 100$$

Operating profit margin explains the relation between revenue and expense. It is expressed as a percentage of revenues, and a high margin is attractive.

Figure 14 – Operating profit Margin:

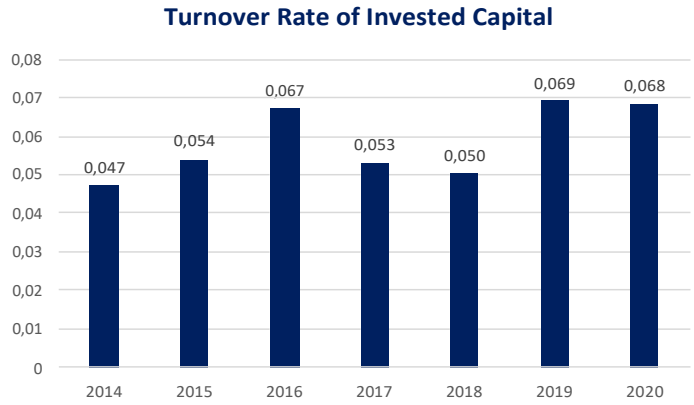


NPRO's 7-year average operating margin is at 114%. Last financial year shows a higher margin than average, after reversing a downward trend. Rental income has decreased in the last two years due to a smaller portfolio in Oslo after selling properties. However, property sales were the primary source of increased total revenue in 2019 and 2020.

7.4.4 Turnover Rate of Invested Capital

The turnover rate measures a firm's efficiency in utilise its invested capital. By calculating the turnover rate of invested capital, we can measure how long a firm is able to tie up invested capital. A higher turnover rate is considered attractive but will vary from industry to industry (Petersen et al., 2017, p. 156).

Figure 15 – Turnover rate:



The trend in turnover rate is the same as for profit margin in terms of recent years improvement. NPRO's average turnover rate is 0,058, which indicates that invested capital is tied up for 6206 (approx. 17) days on average. The last financial year shows a higher turnover rate of 0,068, which is higher than average and indicates that invested capital is tied up for 5294 days (approx. 14 years). As mentioned above, some industries have a naturally lower turnover rate than others. Commercial Real Estate is such an industry due to long-term investments in properties (Petersen et al., 2017, p. 157). NPRO's annual reports show an increase in market value of properties each year, which indicates that it would be unwise not to have a long holding period (Property, 2020).

7.5 Financial Risk Analysis

Liquidity analysis is a crucial part of financial risk analyses, because a company cannot survive without proper liquidity. Without proper liquidity a company will not be able to pay its bills, make profitable investments or survive in declining periods. Furthermore, a detailed liquidity analysis in both long-term and short-term perspectives is essential. The long-term liquidity risk involves a firm's financial condition and ability to satisfy all future obligations in the long term.

With a shorter time perspective, the short-term liquidity risk also involves analysing a firm's risk of not satisfying all obligations. We consider short-term commonly as a year (Petersen et al., 2017, p. 211).

The following chapters will be covering an analysis of NPRO's short-term and long-term liquidity position. It will be done by comparing financial ratios from historical financial accounting of NPRO with industry peers.

7.5.1 Liquidity Risk – Short Term

NPRO's ability to meet its immediate obligations is crucial when evaluating the short-term liquidity risk. A few financial ratios will enable us to measure the liquidity risk, such as current ratio, cash flow from operations to short-term financial debt ratio, and cash burn rate.

The *current ratio* focuses on the potential liquidation of a firm and compares assets with current liabilities. The higher the ratio, the greater the likelihood that current assets will cover current liabilities. According to Petersen et al. (2017, p.231), some argue that a current ratio above 2.0 indicates low risk. However, they are skeptical of using this ratio since it does not consider that most firms are refinancing their liabilities all the time. Furthermore, they are also skeptical about finding a rule of thumb across different businesses. *Cash burn rate* is a conservative financial ratio used typically on firms with negative earning. The author has chosen not to use cash burn rate, but instead use *the cash flow from operations (CFO) to short-term financial debt ratio* and current ratio, which Petersen et al. (2017) argue is a potentially better financial ratio.

7.5.1.1 Cash Flow from Operations to Short-Term Financial Debt Ratio

According to Petersen et al. (2017, p.233), cash flow from operations is a good indication of the cash available to serve current net interest-bearing liabilities on an ongoing basis. The ratio measures a firm's ability to cover current liabilities with cash flow from operations.

$$CFO\ to\ short-term\ financial\ debt\ ratio = \frac{Cash\ flow\ from\ operations}{Current\ net\ interest-bearing\ liabilitites}$$

Figure 16 – CFO:

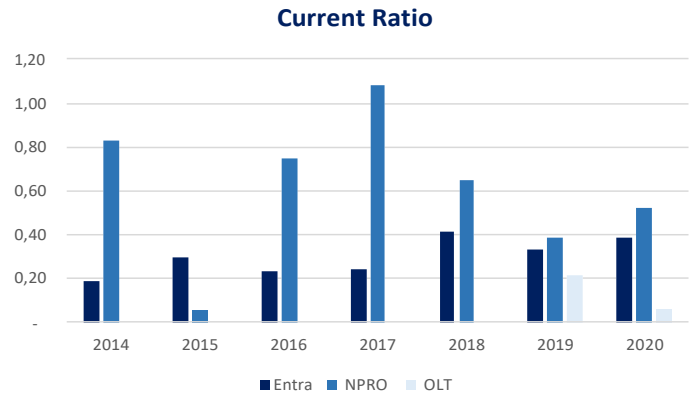
CFO to Short-Term Financial Debt Ratio - NPRO Industry Peers							
Year	2014 A	2015 A	2016 A	2017 A	2018 A	2019 A	2020 A
NPRO	-0,25	0,05	0,05	1,24	0,22	0,11	0,45
Entra	0,22	0,26	0,31	0,31	0,32	0,43	0,53
OLT							0,2

7.5.1.2 Current Ratio

The current ratio compares a firm's current assets with current liabilities. The higher ratio, the greater the likelihood that a liquidation of current assets would cover current liabilities.

Some argue that a ratio greater than 2.0 is an indication of low short-term liquidity. However, there is no common standard because it can vary a lot between different industries and companies (Petersen et al., 2017, p. 231). Furthermore, a too high ratio is not something to eager about since it may be an inefficient use of capital or are in trouble with selling its inventory.

Figure 17 – Current ratio:



Both Entra and NPRO have an average current ratio below 1, implying potential difficulties to meet all current obligations. However, NPRO is above its industry peers, which are generally considered acceptable. The low current ratio is considered acceptable by the author.

7.5.2 Liquidity Risk – Long Term

Measuring the long-term liquidity risk can be done by evaluating the solvency of a firm. The amount of equity should have a good balance with the amount of long-term and short-term financing. Equity plays an essential role because it is not required a fixed interest or return. In times with lower profit, a firm can decide not to pay dividends and thereby save liquidity. Therefore, every firm is in need of sufficient equity to reduce fixed interest payments and handle unexpected events (Petersen et al., 2017, p. 217).

Equity Ratio

An equity ratio that is commonly used to assess whether NPRO has a sound financing structure, is the *solvency ratio:*

$$Solvency\ ratio = \frac{Equity}{Total\ liabilities + Equity}$$

According to Petersen et al. (2017), this ratio has proven to be one of the best ratios to predict bankruptcy at an early stage. For that reason, the author finds it essentail to use and compare NPRO's solvency ratio with its peers.

Figure 18 – Solvency ratio:

Solvency Ratio NPRO Industry Peers							
Year	2014 A	2015 A	2016 A	2017 A	2018 A	2019 A	2020 A
NPRO	32,94 %	34,92 %	45,28 %	49,14 %	46,90 %	46,43 %	45,54 %
Entra	34,94 %	38,65 %	37,88 %	42,63 %	43,02 %	44,12 %	45,88 %
OLT	35,80 %	39,35 %	39,88 %	42,59 %	44,95 %	45,71 %	46,29 %

In the table above, we can see that the solvency ratio for NPRO and its peers are almost at the same level, which can be seen as the industry benchmark. It is important to observe how NPRO increased its ratio by 10% from 2015. However, NPRO has a downward trend from an all-time high in 2017 due to an increase in interest bearing debt. At the current stage, the author concludes that NPRO's financial health is acceptable.

Interest Coverage Ratio

We find the interest coverage ratio an alternative way of determining the long-term liquidity risk by seeing how many times operational profit can cover net financial expenses. The long-term liquidity risk will increase in correlation with the ratio (Petersen et al., 2017, p. 224).

$$Interest\ Coverage\ Ratio = \frac{Operating\ profit(EBIT)}{Net\ Financial\ Expenses}$$

Interest Coverage Ratio							
Year	2014 A	2015 A	2016 A	2017 A	2018 A	2019 A	2020 A
NPRO	1,2	2,9	5,2	6,7	4,1	7,9	6,7

The operational profit has been sufficient for covering net financial expenses each year. In recent years the ratio has increased a lot which is a positive sign regarding long-term liquidity risk.

7.6 Concluding Remarks

The financial analysis showing a positive but fluctuating trend for NPRO, especially when comparing profitability to its peers. The peers were in a stronger position at the beginning of the analysed period, but NPRO has undoubtedly improved and is enjoying better ratios in recent years. In both the short- and long-term financial state, NPRO is in a healthy state and the overall risk has been significantly reduced.

8 Strategic Analysis

8.1 Macroeconomic Analysis

8.1.1 Inflation

According to Pangea Property (2021), will inflation affect real estate directly through rental income, as contracts usually include annual CPI indexation. The inflation in Norway for 2020 reached 1,3%, which is down from 2.2% in 2019. Despite a drop in interest rates to 0% in May 2020, consumption has decreased and turnover of capital has reduced the inflation in 2020. The Norwegian economy is heavily export-driven, and a simultaneously weakening NOK has contributed to a higher inflation rate than the Euro area. Norges Bank expects the Norwegian inflation in 2022 and beyond to stabilize around the central bank's long-term target of 2%. This will affect NPRO's rental income, as rising inflation might increase rental growth and valuation of real estate, due to CPI-adjusted rental contracts. NPRO's all new leases awarded in 2020 have full CPI adjustment, so we consider inflation an ongoing risk but will only be positive in terms of rental growth (Property, 2020).

8.1.2 Interest Rates

Low interest rates will affect investors positively as cost of capital will decrease. Furthermore, this will have a positive impact on commercial real estate prices. The Norwegian central bank has expressed that the key policy rate will stay untouched for the foreseeable future. However, SSB is expecting the first rate hike during late 2021 (Pangea, 2021). NPRO has a policy of fixed interest rates of more than 50%, which contributes to predictability for interest rate costs (Property, 2020). Decreased interest rates will give NPRO reduced financing costs for the part of the debt portfolio with floating interest rates.

8.2 PESTEL

In the following section, NPRO's macro factors will be presented thru an analytical framework called PESTLE. This will be done by explaining what key parts of the external environment will most likely will affect the firm (Johnson et al., 2014).

8.2.1 Political

A stable political environment is key for businesses wanting to operate within the nation's economy. Norway's political climate must be considered as highly stable with a large welfare state, collective bargaining and free-market capitalism.

The Norwegian political system gives local self-government in different areas around the country called municipalities (Thorsnæs & Berg, 2020).

There has been a significant political change in Oslo over the past years with a new left-wing coalition including, the environmental party. This has resulted in large car-free zones in central parts of Oslo city, and increased real estate tax. The city council is also working on a proposal to establish zones where fossil-fuel cars are banned (Aftenposten, 2020). This will affect NPRO's portfolio in Oslo. Today, the firm's properties located at Aker Brygge are on the borderline of the car-free zone, which is crucial for the car park for both working people and shopping people. There is no guarantee that this care-free zone will not be extended to include that area in the future. However, Aker Brygge is an area where streets are already car-free and car parks are located close to the main road thru Oslo.

8.2.2 Economic

Global outlook

High uncertainty surrounds the global economic outlook. The ongoing covid-19 pandemic is the primary source of contraction of activity. The International Monetary Fund (IMF) (2021) estimated a -3,3% contraction in 2020. They predict the future global economy to grow at 6% in 2021 and moderate to 4,4% in 2022. In October 2020, IMF predicted the contraction of 2020 to be 1,1% less than what happened. A better outcome of 2020 was due to higher-than-expected growth in the second half of the year. Growth is expected to moderate at 3,3% over the medium term. IMF argues that projected damage to supply potential, and forces that predate the pandemic, including aging-related slower labour force growth in advanced economies and some emerging market economies. Furthermore, they argue that the pandemic is likely to leave smaller scars than the 2008 global financial crisis.

On the other hand, emerging market economies and low income countries have been hit harder and are expected to suffer more (IMF, 2021). The losses have also been particularly substantial for countries that rely on commodity exports and tourism and those with limited policy space to respond. Entering a crisis with already limited major health care policy made the pandemic even harder. People with relatively lower education and that are informally employed have generally been hit hardest. IMF estimated that close to 95 million more people have fallen below the threshold of extreme poverty in 2020. This is more people than predicted before the pandemic (IMF, 2021).

Norwegian outlook

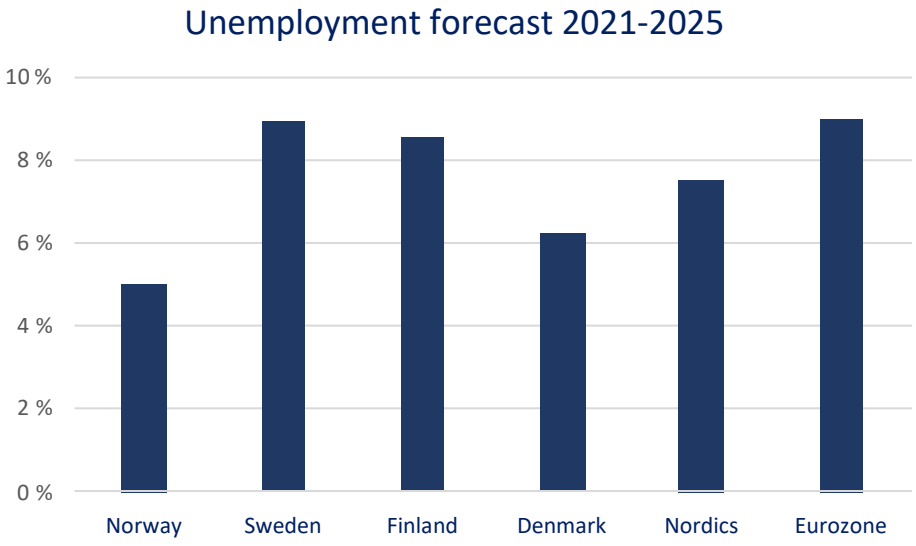
GDP-growth:

The ongoing COVID pandemic resulted in a -0,8% decline in GDP in 2020 compared to a 0,9% growth in 2019. Mainland GDP had a drop of -2,5% in 2020, compared to a growth of 2,3% in 2019 (Pangea, 2021). The drop in mainland GDP is largely driven by reduced household consumption as a result of the economic slowdown caused by the pandemic. Reduced consumption of services due to strict infection control measures is expected to be less strict as a large part of the population will be vaccinated. We can still expect a strong GDP growth combined with declining unemployment. However, this is still entirely dependent on the rate of vaccinations. According to Pangea (2021), we have seen the smallest drop in Norwegian GDP compared to Nordic peers in 2020. Norway can also expect larger GDP growth in the next five years.

Oslo:

Oslo is one of Europe's fastest growing cities and is expected to grow by 1% annually in the next five years. This is due to a significant urbanization trend and immigration, which also is the case for other large cities in Norway (O. Kommune, 2021a). Urbanization will most likely affect the labor market in Oslo in the long term, and pre-corona will also decrease the unemployment rate. The forecasted unemployment rate for the next five years shows a lower level in Norway compared to Nordic peers and the Eurozone.

Figure 19 – Unemployment forecast:



Source: SSB (2021), Pangea (2021)

Unemployment figures show a difference between industries and sectors, with travel and service industries being particularly affected. At Aker Brygge in Oslo, we can find numerous restaurants and shops that are struggling in the ongoing pandemic. This affect NPRO since there properties at Aker Brygge have turnover-based rents, which means that rental income fluctuates with sales by tenants. However, NPRO has leases where minimum rents are at reasonable levels (Property, 2020).

Stavanger:
Stavanger is considered Norway's energy capital with a large oil sector that substantially impacts the city's economy. The pandemic has had an impact on oil prices through reduced activity across the globe. This has been affecting the employment levels in Stavanger negatively. According to ABG Sundal Collier (2021) the impact from the oil shock will be less significant compared to the shock in 2015. Stavanger's office market has experienced dropping rental prices as an effect of a decrease in the oil sector and increased unemployment. The area of Forus outside Stavanger city center is suffering from the highest vacancy rates of all time. Going forward, we might expect an increase in the oil-sector as the sector's activity will pick up after covid-19. NPRO's portfolio in Stavanger is located at Forus.
Nonetheless, NPRO has re-zoned the property from a commercial building to a combined residential and commercial property. As mentioned before, this is a joint venture with the Stavanger based company Base Bolig. This re-zoning makes NPRO's Stavanger portfolio less exposed to the low office market rents. However, on the other hand, high unemployment rates could affect the sale of these properties which will be put on sale in 2021. The author argues that NPRO's portfolio in Stavanger and Forus is risky and involves some uncertainty going forward.

8.2.3 Social

The social aspect will include population growth and lifestyle changes. We will find immigration and urbanisation as relevant factors that will affect population growth. Norwegian population growth in 2020 was at 23 800 people, which is the lowest level since 2001. Low level of population growth is, according to SSB (2021), a result of strict pandemic measures and low immigration. Immigration numbers show a record low number with a 27% decrease from 2019 to 2020. However, we have witnessed a decrease in immigration since 2012.

The driver of population growth in 2020 is due to birth surplus is higher than net immigration (Tømmerås, 2021). In the following charts we can see how 2020 immigration level is now lower than the average from 2017 to 2019, and how birth surplus is higher than net immigration:

Figure 20 – Immigration:

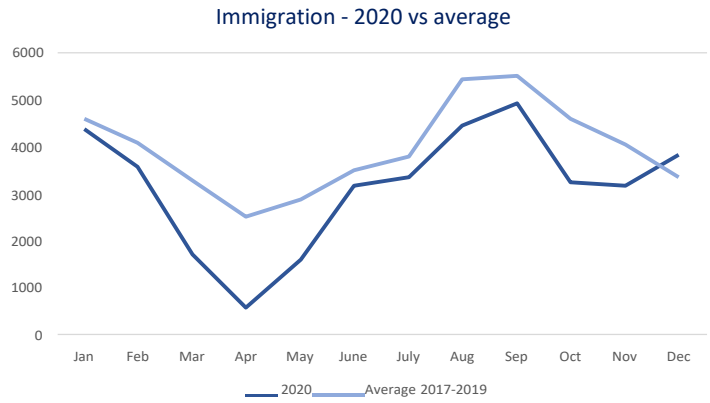
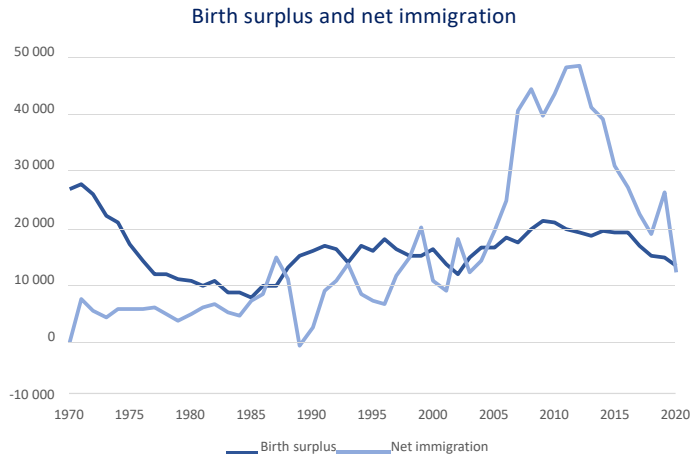


Figure 21 – Birth surplus and net immigration:



Another factor is the rapid use of home offices during the pandemic, which has resulted in less use of the company's offices. Even though the use of home-offices is because of strict government measures to reduce the spread of covid-19, we have witnessed a lifestyle change among many business areas in the way work is being executed. The question is, will this change be permanent, or will we get back to everyday use of offices after the pandemic? A survey from Respons Analyse (2020) shows that among academia, 64% express that they would like to continue using home-office. It is the flexibility that workers highly appreciate and would like to continue in the same way after the pandemic. This flexibility could result in less use of offices in the future, or that companies will not be needing the same amount of space per worker as earlier.

8.2.4 Technological

The need for technology is vital for further development in a competitive market. The technological aspect for NPRO is present in the form of energy solutions and building standards. It is crucial for NPRO to keep abreast of technical developments. NPRO considers new technology as an opportunity for more energy efficient solutions for their buildings (Property, 2020). In a competitive market, high standard buildings will give an increase in prime yield. As mentioned before, we are witnessing increasing urbanisation, which could increase the demand for prime location real estate with high standards.
Internet of things (IoT) is, according to NPRO, another new technological solution for enhanced energy efficiency and cost cuts (Property, 2020).

In the ongoing pandemic, we are experiencing rapid technological development within video communication. This digitalisation might lead to a change in how people work, meets and share information. Video communication combined with a potential home-office, transformation as mentioned in chapter 7.1.3, could be a rising risk for NPRO regarding a decrease in total demand for office spaces. A study from Logitech supports this trend and showing an 80% increase in video calling and 70% of global employees work remotely at least one time a week (Logitech, 2020).

8.2.5 Environmental

A collective movement with an ambition to limit the temperature rise to below 2°C also includes the real estate sector. Real estate has started to take concerted action to reduce its impact on climate change. In 2019, a market intelligence provider on economic risk of climate change called FourTwentySeven estimated that 19% of retail spaces and 16% of offices in Europe were exposed to floods or rising sea level (Martin & Bernat, 2020).

According to Deloitte (2020) there are four specific fields that real estate will find new and better solutions. These four are within energy production, raw material re-usage, biodiversity enablement and climate transition leadership. Most of these are especially important for construction businesses, but for NPRO will energy production be vital. *Energy production* means that every new building needs to be energy self-sufficient. Most ideally will these new building supply urban networks with additional production. *Biodiversity enablement* will affect NPRO in potential rehabilitation or construction operations in urban areas.

NPRO will need to enable biodiversity, which is much needed for both health and temperature reasons in these areas. *Climate transition leadership* will play a role in the management of NPRO by preparing its employees, products, clients and population for a deep change regarding climate change (Martin & Bernat, 2020).

NPRO works on establishing energy-efficient solutions in its buildings and converting as much clean energy as possible. They are using a seawater pump at Aker Brygge as a measure to reduce CO2 emissions there. Furthermore, NPRO has established urban farming at Aker Brygge which is profitable in case of positive interest from tenants and visitors. According to the Norwegian Water Resources and Energy Directorate (NVE), higher sea level is considered less of a risk for properties on the Oslo Fjord. They estimate a rise of 46 centimeters, but not until 2050 (Property, 2020). However, flooding and heavy rain may give rise to leaks in facades and roofs as a result of climate change. Together with greater humidity, we can expect higher maintenance costs.

8.2.6 Legal

Development projects are regulated and include specific limitations. This will vary between different areas of Norway and different areas within the same city. However, there is one law that applies to the country. This law applies to all types of activities and businesses related to real estate. The *"Plan- og Bygningsloven"* decides how the land is to be used and regulated. Regulations of areas are essential in terms of how the areas are being used preferably efficiently and rationally. Rules on the processing of construction projects shall ensure proper execution and control of construction work. The law also sets certain material requirements for buildings and provides authority for technical regulations with additional requirements.
Furthermore, the law contains an area plan part and a building case part. The planning section has rules on state area plans, regional plans, municipal plans and zoning plans. There are different rules that the law provides on how these areas are treated and what effects they have on current and future utilization (pbl, 2008).

This law affects NPRO in how they are able to develop and maintain their properties. A vital aspect of deciding to purchase a building is to consider the possibilities of development to increase rental income or satisfy existing and future tenants. This could also be in terms of environmental and safety issues (Property, 2020).

8.3 Porter's Five Forces

A way of understanding the competitive environment in an industry is to apply Michael Porter's *five forces analysis* approach. This analytical framework highlights different forces affecting the competition in an industry, and the possibility of earning attractive returns (Porter, 1998).

8.3.1 Threat of New Entrants

An understanding of potential entrants is crucial when analysing the threats of new participants in the industry. We can understand that new entrants generally bring new capacity and with a goal to gain market shares. Plenborg et al. (2017, p. 271) describe typical barriers to entry in an industry:

- *Economies of scale* – gives cost advantages
- *Product differentiation* – distinguishing a product or service
- *Capital requirements* – amount of liquid capital required
- *Switching costs* – costs of changing brands or products etc.
- *Access to distribution channels* – not able to access for example distributors
- *Government policy* – governmental barriers like rules or regulations

Commercial real estate will require large investments, which are very expensive, particularly prime real estate in large cities. The Norwegian sector consists of institutional investors, listed property companies, funds/syndicates, private companies and international investors (Pangea, 2021). High prices of prime real estate in large cities affect the entry barriers into the industry. Higher prices on prime real estate are causing higher capital requirements, which could force players to access financing or large amount of capital. Furthermore, cheap financing requires a stable track record with banks and solid balance sheets.

In Oslo, the office market is still in high demand in both the rental and transaction markets. The interest rate cuts have lowered investors' cost of capital and positively impacted on commercial real estate prices. With lower interest rates, investors are in search of placing capital in investments that gives a return (DNB-Næringsmegling, 2020). Alongside the drop in interest rates and financing costs, the Norwegian NOK fell markedly during 2020. This has made Norway a relatively more attractive destination for foreign capital to invest in the Norwegian CRE market (Pangea, 2021).

The barriers are still high, but increasing interest for commercial real estate as an investment gives a rising threat to new entrants.

8.3.2 Power of Buyers

According to Petersen et al. (2017, p.273), if buyers possess a high bargaining power it typically limits the potential returns in an industry. If a large portion of sales in an industry is purchased by a given buyer, it could be that the buyer is powerful. A buyer with such power would need to operate in a market with enough supply to be able to maintain its power.

In Oslo, we are experiencing a lack of supply which gives buyers little bargaining power. For buyers or renters of commercial real estate, they have less bargaining power due to the small number of alternatives. For NPRO, this means that they can dictate higher prices in areas with so-called prime real estate. NPRO's portfolio exists of a large amount of prime real estate so they will experience little customer power.

NPRO's portfolio in Stavanger consists of both office and residential real estate. The office market in Stavanger is characterized by high vacancy rates (DNB-Næringsmegling, 2020). An entirely different scenario can be observed here than in Oslo. Due to high vacancy rates, customers are experiencing strong bargaining power at both Forus and in central Stavanger. The transaction market in Stavanger consists mainly of out-of-town investors seeking office buildings with lower risk and steady cash flows (DNB-Næringsmegling, 2020). The conclusion is that buyers have more extensive power in Stavanger than in Oslo, which will be reflected in NPRO's portfolio.

8.3.3 Power of Suppliers

Suppliers can also obtain bargaining power over the participants in an industry, resulting in squeezed profitability and raising prices or lowering the quality of services and products (Petersen et al., 2017). NPRO is not a development company and therefore requires few suppliers. Their only development project is the joint venture with Base Bolig in Stavanger, which is a small part of NPRO's total portfolio. In this project, they have suppliers in form of contractors, but the author believes that bargaining power of suppliers is low due to many players competing for such contracts.

In NPRO's daily operations, they require suppliers of inventory and maintenance, but also within such industries there are many suppliers so the competition is healthy and will not involve a bargaining power for those suppliers.

8.3.4 Substitute Products or Services

The risk of substituting products varies across industries, but they will all limit the potential returns in an industry since substitutes may be more attractive (Petersen et al., 2017, p. 272). In commercial real estate there are always differences in terms of areas and price levels. Central business districts are as mentioned before, areas with higher rents and prices due to the popularity of central locations in cities. In these areas, large companies will probably always seek prime real estate and those areas are hard to replicate elsewhere.

For companies that are not equally dependent on CBD will look for substitute areas. In Oslo, many are seeking new areas as certain areas have become too demanding and expensive. These are the dynamics of the commercial real estate market and general in other industries. According to Nærings Eiendom (2020), central business districts are today located at Aker Brygge, Tjuvholmen and Vika, but Bjørvika is today also considered part of CBD. Developing new areas in the city center of Oslo is both expensive and challenging in terms of finding a relevant area. The author believes that the threat of substitutes is low for NPRO's portfolio in Oslo.

A higher vacancy rate and decreasing prices in Stavanger give lenders the opportunity to afford CBD offices in Stavanger. This makes CBD a substitute to properties in the Forus area that are not located in the city center.

8.3.5 Rivalry amongst Existing Competitors

An analyst can gain an understanding of the level of competition by studying the rivalry among existing competitors. Tough competition will tend to affect returns negatively. Rivalry occurs when one or more competitors either see the opportunity to improve their position in the market or starting to feel the market pressure (Petersen et al., 2017, p. 272).

In the Norwegian CRE market, there are as mentioned before competitors that operate in the same areas as NPRO. However, there are few direct competitors to NPRO in terms of size, strategy and portfolio combination. Furthermore, with high competition of prime real estate, NPRO is competing with many different types of companies wanting to partake in commercial real estate. This is showed in Pangea's (2021) reported high volume in the transaction market. With low vacancy rates in Oslo, there is less competition among existing competitors.

This is, however, the opposite of Stavanger, where we are witnessing relatively high vacancy rates and higher competition in the office market.

8.4 Internal Analysis – VRIO Framework

The following sections will apply the VRIO analysis introduced by Barney (1991). It is useful to consider a firm's available resources and the uniqueness of those. This can help a firm to assess its competitive advantage. The VRIO framework consists of four elements of analysing a firm's resources. Those four elements are *Value, Rarity, Imitability and Organisation* (Petersen et al., 2017, p. 275). We divide a firm's resources into the following different types: *Physical, Intangible, Organisational and Financial.*

8.4.1 Physical Resources

NPRO's physical resources are the portfolio of their real estate assets in Norway. Most of NPRO's assets are valuable in terms of their location and size. NPRO's portfolio at Aker Brygge and Tjuvholmen are rare in the fact that it is difficult to imitate due to capital requirements and availability of new properties. We can argue that NPRO has organized its portfolio to exploit the resource in Oslo. It is clear that the Oslo area portfolio makes up the most significant portion of NPRO's value, with 96% of the portfolio located in the Oslo region. The Stavanger portfolio has experienced a decline in value before converting the Forus property from office to residential. The author finds this change positive in terms of increasing their portfolio value in Stavanger. Consequently, NPRO's physical resources can contribute to a competitive advantage.

8.4.2 Intangible Resources

We can argue that a listed real estate company is not stealing financial paper's headlines often, but NPRO has managed to establish a well-known brand in Norway. Well-known owners, robust portfolio and locations are factors that can benefit NPRO's intangible resources. To be able to manage their portfolio, they are dependent on attracting resources to their management. Historically, NPRO has proven that they can manage their portfolio with good returns (Property, 2020). Going forward, with an even larger portfolio, a strong brand name will enable them to attract new resources to their team.

8.4.3 Organisational Resources

Today, NPRO has a total of 51 employees, which is a small increase from 2019 (47). The management of NRPO consists of five people. In recent years, the management received yearly bonuses, implying that they are all meeting their performance targets (Property, 2020).

Such bonuses are determined by the individual's own performance in meeting key targets, and the CEO's target is set by the board. The CEO is the one setting targets for the other senior executives. Furthermore, the dividend payout in 2020 was at NOK 0.10 per share. The dividend payout can imply that NPRO's management has created value for its shareholders (Property, 2020).

The board of directors of NPRO is considered highly competent with several well-known names in the real estate industry. Also, John Fredriksen's two daughters are represented in the board, which means that a large blockholder is represented in the board.

8.4.4 Financial Resources

NPRO operates in a capital intensive industry and is dependent on large amount of financial resources. They are currently operating with an equity ratio of 49,90% (2020), aligning with NPRO's capital structure goal (Property, 2020). Their portfolio's market value was in 2020 above 23,45 billion NOK and together with a low cost of capital and debt, they are currently in a solid financial position. This gives NPRO's an opportunity to access cheap financing and equity, which was favorable when purchasing Telenor HQ at Fornebu (Property, 2020). Additionally, NPRO's block holder John Fredriksen is an extra favorable aspect to strengthen NPRO's ability to access new capital.

In the earlier financial analyses, we saw that NPRO's liquidity and solvency was solid, and we concluded that their financial position was strong going forward.

8.4.5 Summary of VRIO

Figure 22 – Summary VRIO:

Resources	Valuable	Rarity	Imitability	Exploited resource	Competitive advantage
Physical					
Oslo	Yes	Yes	Yes	Yes	Yes
Stavanger	Partly	No	Yes	Yes	No
Financial	Yes	No	Yes	Yes	No
Organisational	Yes	Partly	Partly	Yes	Partly
Intangible resources	Yes	Yes	Yes	Yes	Yes

8.5 SWOT Analysis

The critical factors identified in the previous external and internal analyses can be summarised in a SWOT matrix. In the following matrix, the author has summarised the strengths, weaknesses, opportunities, and threats.

Figure 23 – SWOT summary:

External Factors

Opportunities	Threats
- Increased exposure to the Fornebu area with metro line	- Increased interest rates
- Converted the Stavnger area to residential	- Covid-19 pandemic
- Joint venture with residential firms	- Use of home office
- Ownership in Veidekke	- Reduced demand for office space
	- Change in retail shopping

Internal

Strenghts	Weaknesses
- Portfolio of prime real estate	- Stavanger portfolio
- Prime locations	- Illiquidity of stock
- Financial resources with strong balance sheets	- Undiversified office portfolio
- Competent board and experienced management	
- Strong track record of managing properties	

9 Forecasting

The following forecasting method is an approach by Petersen, Plenborg and Kinserdal, and is a sales-driven forecasting approach. This approach reflects how different accounting items are driven by the expected level of activity like future rental revenue and then added into a pro forma statement. Petersen et al. (2017, p. 254) believe that this approach gives a better link between the level of activity in a firm and the related expenses and investment than a line-item approach. The "line-by-line-item" approach is forecasting each accounting item without including the expected level of activity (Petersen et al., 2017, p. 254).

When forecasting the analytical balance sheet and income statement, key value drivers are applied based on historical and potential future trends. In combination with earlier strategic chapters, the author has made realistic and likely projections of future data.

The commercial real estate industry could be considered a fairly stable market with an asset that is also considered stable.

For that reason, a lot of the assumptions going forward will rely on a large extent of past performance. However, the strategic change in NPRO's portfolio may affect the firm's potential cash flow and risk.

9.1 Forecasted Income Statement

9.1.1 Revenues

As mentioned before, the author follows the sales-driven approach, which means that forecasted revenues play an essential role. Forecasting revenues during the pandemic is a challenging task since present rental numbers include a lot of noise. People are still working at home offices, and many are questioning the use of offices after the pandemic. However, the author has chosen to rely on estimates on future development in the commercial real estate market from financial institutions and brokerages. Estimates for Oslo and Stavanger will primarily be used, even though the Stavanger portfolio accounts for 4% of total revenue. Market reports from Pangea Property Partners AS, Union AS and DNB ASA include current and future development projections of the Norwegian market. Rental growth estimates are also included in these reports[3].

With three clear geographical priority areas in the Oslo region, NPRO's rental income from Oslo accounts for 96% (Property, 2020). Within the Oslo region, there are differences in estimates of future rental growth. In the most central areas of Oslo, we have witnessed a substantially higher rent growth compared to the rest of the market due to limited newbuilding and a low office vacancy. Union (2021) expects both office vacancy and newbuilding to decline from 2022. They expect a nominal annual rent growth in 2022 and 2023 at around five percent. DNB Næringsmegling (2021) supports Union's report about low newbuilding in 2022, leading to declining vacancy and rental growth. Pangea Property is slightly positive for the Oslo rental market going forward (Pangea, 2021).

As a result of their new strategy with purchasing Telenor HQ and the fact that NPRO's portfolio includes such high number of prime locations, the author expects rental growth at the same level as CBD Oslo.

[3]DNB-Næringsmegling. (2020). *Markedsrapport*. DND Næringsmegling. https://www.dnbnaringsmegling.no/no/markedsrapport/oslo/
, Pangea. (2021). *Pangea Property Outlook 2021 Norway*. P. P. Partners.
, Union. (2021). *M2 Analyseportal*. Union. Retrieved 15. April from https://m2.union.no

The transaction at Fornebu expands NPRO's total property portfolio of about 500.000 sqm with an overall market value at 23,5 billion NOK. The job of developing this new area is only in its start-up phase, but it is expected that this new building will increase its rental income significantly.

In Stavanger, we can expect rental prices to grow in accordance with the inflation estimates. A potential sale of apartments in the development project in 2021 will affect NPRO's income from sales. However, the author has chosen not to predict future property sales that there is no clear strategy on when properties are being sold.

9.1.2 Operating Costs

The operating costs are forecasted based on a percentage of revenues. NPRO's operating costs have been on an average 32% of revenues. However, the last two years we observed an increase in operating costs due to project expenses from sale. These expenses are related to project costs from the sale of residential properties. If we exclude the last two years' project costs, we retrieve an average operating cost of 21%. Going forward, the author assumes that NPRO will manage to lower their costs gradually with a total of 1%. Expected operational costs in the forecasted period are 21%.

9.1.3 Corporate Tax

The Norwegian corporate tax is today at 22%, which is still the highest compared to other Scandinavian countries. In Sweden the corporate tax is at 21,4%, 22% in Denmark and 20% in Finland. The Norwegian corporate tax has been in a downward trend since 2013 from 28% (NHO, 2021). There is no expected change in this tax going forward. Therefore, the author assumes that the tax rate remains at this level in the forecasted period.

9.1.4 Net Financial Expenses

Net financial expenses have been relatively stable the past seven years. The average has been 2,83% of net interest-bearing debt. Going forward, the author assumes that net financial expenses remain in line with the historical average.

9.1.5 Depreciation

The firm's depreciations are reasonably small and include only IT equipment, licenses, cars, furnishings, inventory and an energy center at Aker Brygge. Average depreciation the last seven years has been in a total of 5MNOK with an average of 0,03% PP&E. With an increased portfolio, the author assumed depreciations to increase to 0,05% going forward.

9.2 Forecasted Balance Sheet

9.2.1 Net Operating Working Capital

Net operating working capital (NOWC) is composed of receivables as a percentage of revenue and other current liabilities as a percentage of revenue. In recent years net working capital as a percentage of revenue has ranged from -4% to -10% (excluding sales impact). The average NOWC from the period is 9% and will be used as a percentage of future revenues to estimate future net operating working capital changes.

9.2.2 Net Interest Bearing Debt (NIBD)

Net interest-bearing debt is measured as a percentage of invested capital. NPRO has a historical NIBD relative to invested capital of an average of 54% in the last seven years. The firm has announced a 45-55% capital structure goal, and the author expects the firm to maintain this in the future. Therefore, we can expect that they will continue to stay inside their target.

9.2.3 Investment Properties

Forecasting investment properties is based on average CAPEX on properties adjusted for inflation. NPRO has invested an average of 1.232 MNOK in properties from 2014-2020. Prior to the large sale in 2019 and large purchase in 2020, we expect the same investment activity going forward. The management of NPRO has announced that growth is not an objective, but properties that they believe have comparative advantages for creating value over time will be of interest (Property, 2020). This announcement supports the forecasted investment activity.

9.3 Terminal Value

Future assumptions get more challenging as the time horizon grows longer, especially when it comes to estimating a firm's cash flows into the future. Most companies do not assume that they will quit its operations after a certain time, but expect to continue with business "forever". The terminal value attempts to anticipate future value and apply it to present value through discounting (Ganti, 2021). The constant rate that a company is expected to grow forever is the terminal growth rate. It means that this rate starts at the end of the last forecasted cash flow period in a DCF model and goes into perpetuity. A terminal growth rate is usually in line with the inflation rate and not higher than the GDP growth rate (Ganti, 2021).

The growth rate in the terminal value is set to 2,00%, which is in line with the inflation target and reflects the fact that growth is limited.

10 Valuation

Valuation, or the process of finding the value of NPRO is calculated as the future income generated by the firm discounted to present value with a discount factor. This discount factor considers the time value of money and risk, associated with the income generated by the asset. Based on previous chapters, we are now able to perform a valuation of NPRO's stock. We have contained a proper discount rate and estimated future cash flows, which are essential factors to value an asset (Petersen et al., 2017). As mentioned before, this paper will apply the DCF model and a relative valuation of NPRO based on Norwegian peers using multiples.

10.1 Discounted Cash Flow Method (DCF)

The calculations of the discounted cash flow are divided into two parts. The first part is a six-year forecasted period derived from the reformulated pro forma statements. A terminal value is the second part which is as mentioned above calculated with a growth rate of 2,00%. Below is a summary of the free cash flow to firm (FCFF):

Figure 24 – FCF:

Free Cash Flow							Terminal
NOK in millions	2021F	2022F	2023F	2024F	2025F	2026F	2027F
NOPAT	554	615	664	695	735	760	779
Depreciation	0,04	0,04	0,04	0,04	0,04	0,04	0,04
Fair Value Adjustments	-	-	-	-	-	-	-
Changes in NOWC	23	7	5	4	4	3	2
Changes in NONCA (including depreciation)	302	(166)	(179)	(193)	(197)	(207)	(218)
FCFF	**879**	**455**	**491**	**505**	**542**	**557**	**564**

NPRO's FCFF can now be discounted with the acquired WACC, and the previously determined growth rate for the terminal value.

Figure 25 – DCF:

							Terminal
Discounted Cash Flows	1	2	3	4	5	6	7
	2021F	2022F	2023F	2024F	2025F	2026F	2027F
FCFF	879	455	491	505	542	557	564
Discount Factors	0,958251	0,918244	0,879908	0,843172	0,807970	0,774238	0,741914
PV	842	418	432	426	438	431	
PV Terminal						23 916	

DCF Valuation		*% of EV*
PV of CF	2 987	14 %
PV of TV	18 517	86 %
Enterprise Value	21 505	
- Net interest-bearing debt	11 608	
Equity Value	9 896	
# of shares	650	
Price of shares	15,2	
Trading share price	14,6	24.05.2021
Difference	4,67 %	

Inputs	
ROIC	8,45 %
WACC	4,36 %
Growth	2 %
Rd	2,29 %
Re	6,88 %

The model implies that NPRO's enterprise value is 21.505 BNOK, and after subtracting the NIBD, we arrive at an equity value of 9.896 BNOK. This estimation indicates a share price of 15,22 NOK. It implies that NPRO's stock is undervalued in the market since the actual price per 24th of May 2021 is 14,55. This indicates an upside potential of 4,58% and further implies that the stock is slightly undervalued today.

10.2 Relative Valuation

The second valuation method is relative valuation with multiples. In the absence of enough Norwegian peers, the author has decided to include real estate firms from Sweden considered to be in the same industry as NPRO. The Swedish peers are Castellum, Fabege, Hufvudstaden and Kungsleden. They also fulfil the assumptions that they are truly comparable in terms of economic characteristics and outlook and accounting policies[4]. As mentioned in the strategic analysis, the corporate tax is lower in Sweden than in Norway. Nonetheless, the tax rate is not a requirement in use of equity-based multiples.

The Swedish peers are all reporting EPRA NRV and EPRA NAV, which also Entra and NPRO is doing. This is not the case for OLT and calculation NRV is very comprehensive, so the author has excluded OLT from price to NRV. Price to book and price to equity is conducted from Bloomberg for each of NPRO's peers. NAV per share is calculated by extracting net asset value from their balance sheets and dividing it by the total number of shares.
The relative valuation is illustrated above:
Figure 25 – Multiples:

[4] Castellum. (2020). *2020 Annual Report*. Castellum.
, Fabege. (2020). *Årsredovisning 2020*.
, Hufvudstaden. (2020). *Årsredovisning 2020*. Hufvudstaden.
, Kungsleden. (2020). *Års- och hållbarhetsredovisning 2020*. Kungsleden.

Nordic	Mcap USDm	P/E (x) 2021e	2022e	2023e	P/B (x) 2021e	2022e	2023e	P/EPRA NRV 2020	P/EPRA NAV 2020
ENTRA-OSL	4 284	25,2	23,4	21,1	1,3	1,3	1,2	1,0	1,0
OLT-OSL	2 200	11,5	11,3	9,8	0,6	0,6	0,6	Not reporting	0,5
KLED-OME	2 734	16,6	16,8	15,7	1,1	1,0	1,0	1,0	1,2
FABG-OME	5 252	29,7	27,6	25,6	1,0	1,0	0,9	0,9	1,1
HUFV.A-OME	3 439	28,8	26,7	26,3	1,0	0,9	0,9	0,8	1,0
CAST-OME	7 122	19,4	19,2	17,8	1,1	1,1	1,0	1,0	1,2
Average peers	**3 738**	**21,9**	**20,8**	**19,4**	**1,0**	**1,0**	**0,9**	**0,9**	**1,0**
Median peers	**3 439**	**22,3**	**21,3**	**19,5**	**1,0**	**1,0**	**0,9**	**1,0**	**1,1**
NPRO - Consensus estimates	**1 137**	**24,7**	**24,4**	**22,0**	**0,8**	**0,8**	**0,8**		
Premium/dicount to median		11 %	15 %	13 %	-24 %	-21 %	-16 %		
NPRO - Own estimates		**22,9**	**21,2**	**20,0**	**0,8**	**0,8**	**0,7**	**0,7**	**0,8**
Premium/dicount to median		2 %	-1 %	3 %	-24 %	-23 %	-20 %	-27 %	-23 %
Adjusted									
Share price		**11,3**			**19,1**			**17,1**	**18,6**
Average share price	**16,5**								
DCF share price	**15,2**								
Diff	(1,3)								

NPRO is currently trading at 24,7x 2021e earnings relative to Nordic peers at median 22,3x, which indicates that they are trading at a premium. We can also observe from the table above that NPRO is trading at a discount relative to its P/B, P/EPRA NRV and P/EPRA NAV. Among its peers, OLT is the only firm trading at a bigger discount. The author's own estimates are lower than consensus relative to its P/E, which means that the author's earnings estimates are higher than consensus.

The relative valuation arrived at an average implied share price of 16,50 NOK of the median of peers. The price is close to the DCF share price, which implies that the estimates from DCF and the relative valuation are close to today's share price and supports that NPRO's stock is correctly priced in the market.

11 Scenario Analysis

11.1 Sensitivity Analysis

By conducting a sensitivity analysis, we can examine the robustness of the estimated value by changing some of the key value drivers. By changing the parameters by +/- 1,0 percentage-point, the analysis can check the sensitivity of the factors entered into the WACC. The sensitivity analysis can reveal changes in the equity value, and it is of great interest to examine such changes (Petersen et al., 2017, p. 334). Since the terminal value consists of 87% of the EV, an analysis of changes in WACC and the growth rate will be of interest.

Figure 26 – Sensitivity:

Sensitivity Analysis

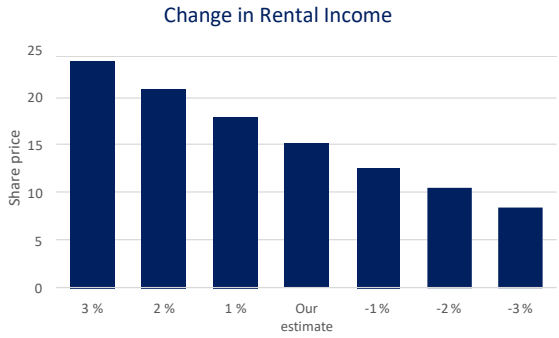
G		WACC				
		3,86 %	4,36 %	4,86 %	5,36 %	5,86 %
R	1,0 %	11,0	6,7	3,6	1,1 -	0,8
O	1,5 %	16,1	10,2	6,1	3,0	0,7
W	2,0 %	24,0	15,2	9,5	5,5	2,5
T	2,5 %	37,6	22,8	14,3	8,8	4,9
H	3,0 %	67,2	36,1	21,7	13,5	8,1

The table above shows that the stock is sensitive to changes in the WACC and growth rate. A decrease of 0,50% in the growth rate implies that the share price would decrease by 5.10 NOK. An increase of 0,50% in the WACC implies the same decrease in share price with a total of 5.80 NOK. Such variations in stock price caused by WACC and growth rate changes demonstrate how sensitive the value is to changes in key value drivers. It also underlines the importance of devoting the time necessary to prepare realistic pro forma statements with proper research behind the assumptions (Petersen et al., 2017, p. 335).

11.2 Share Price and Revenue Growth

An increase in the vacancy rate or decreased demand for properties will have a negative effect on the firm's rental income. A bear scenario for NPRO is reduced rental income, which is the primary source of value creation. If we simulate a possible scenario where the future revenue growth rate decreases by 1% each year, we can observe that the share price increases linearly. It further shows how sensitive NPRO's share price is to rental income.

Figure 27 – Change rental income:



12 Discussion of the Analysis Results and Normative Analysis

Both the DCF model and the relative valuation show that NPRO appears to be slightly undervalued in the market. The primary valuation method in this thesis has been the DCF model and it implied that the fundamental value of the stock is 15,2 NOK. The current market price is 14,55, which is not far from the fundamental value but still lower. There is a small upside potential in the NPRO share. Even though the present value approach and the relative valuation indicate almost the same share price, this thesis will place greater weight on the present value calculation. The present value approach is relying on a more thorough analysis than the relative valuation. However, the author argues that NPRO's peers worked as good indicators of how the market valuates similar firms.

It seems that the estimated share price using the DCF model generated a reasonable result. The average share price from the relative valuation indicated a higher potential upside than calculated in the present value approach. It is natural to assume that this difference results from variance in assumptions taken during the valuation. The underlying assumptions depend on several uncertain parameters that will affect future cash flows. However, the inputs in the valuation have been kept realistic. Nonetheless, in case of high uncertainty the assumptions have been slightly more pessimistic than optimistic.

The strategic analysis revealed that future macro factors play a significant role in the CRE industry. The demand for properties is probably the most uncertain parameter and most complex to predict. The DCF model builds on the assumption that the vacancy rate remains low, which is possible since NPRO possesses numerous prime assets. It will be fascinating to observe future home-office use and how it affects demand for offices. If the demand decreases, it will arguably affect the firm's earnings and cash flows negatively. Furthermore, it will also decrease the firm's value, which we saw in the sensitivity analysis of share price and rental income.

The financial analysis revealed that NPRO's liquidity and solvency were solid, and that their financial position was strong going forward. The record low interest-rates have had a positive impact on CRE, especially in terms of lower cost of capital. We saw how an economy with low interest rates forces investors to place capital in investments that give a return. We can argue that this situation is challenging for NPRO in finding suitable investments in a market with competition from both national- and foreign players looking to invest in Norway.

The only source of steady cash earnings is rental income. We concluded in the sensitivity analysis how sensitive this variable was to the share price and future cash flows. NPRO and other real estate firms report fair value adjustments in the P&L statement, affecting the firms' earnings. However, these changes are non-cash and will be excluded in the cash flows and therefore not affect the firms' value when using the DCF model. When analyzing a real estate company, it is essential to distinguish between cash earnings and earnings included value adjustments. We could argue that this type accounting policy is making the P&L statement look more significant than it is, but on the other hand, value adjustments could show if the player has made a lucrative investment or not. If we compare two firms in the same market, and one is experiencing a higher value adjustment than the other, we could argue that that firm's investment gave a greater return. Of course, this is a simplified example, but the idea is that such value adjustments can show a development in the firm's investment properties in terms of its market value.

The strategic analysis showed how inflation and interest rates were crucial regarding rental prices and the value of properties (yield). With a lower expected unemployment forecast and Oslo as one of the fastest-growing cities in Europe, we can argue that NPRO's position in the Oslo region is favourable in terms of these macro factors. We further revealed that increasing population and decreasing unemployment rate would affect the demand for office properties. On the other hand, the rapid use of home offices during the pandemic has resulted in less use of the company's offices. We have already witnessed a lifestyle change among many business areas in the way work is being executed. The future demand could result in less office use or a smaller amount of space per worker as earlier. Even though such change is generally negative, a possible solution is to change the way offices are designed, and the owner would need to facilitate differently. Another possible solution is that NPRO could rent out the same amount of space to added tenants if the amount of space per worker is decreased.

12.1.1 Diversification of Portfolio

Rental income from Oslo is where almost all of NPRO's revenue is obtained. If a downturn were to happen in the Oslo market, it will affect NPRO's value significantly. In an earlier chapter, we discussed the risk of not having a diversified portfolio. A diversified portfolio of real estate can serve as a solution for this potential problem.

There are several different segments within the real estate industry that NPRO is not exposed to at the moment. The logistic market is such a segment. The logistics market is experiencing much activity, demonstrated by decreasing yields. Logistics has been an emerging segment in recent years as e-commerce has continued to conquer market shares. This trend has accelerated even further during the pandemic, and e-commerce is reaching all-time high levels (Pangea, 2021). The pressure is high on assets with long-term contracts, solid tenants, modern facilities, and a strategic location in the greater Oslo region.

A diversification approach to enter the logistic market, which today is a booming sector, is a possible solution for NPRO. The author believes that such an approach will expose NPRO to a new segment and obtain a more well-diversified portfolio. Furthermore, in the author's viewpoint, the outlook for this segment is positive. We have already witnessed indications of changing consumer habits, which illustrate an additional upside potential.
During 2020, there were also significant land acquisitions for logistics purposes, which indicate an increasing supply going forward (Pangea, 2021).

12.2 Blockholders and Value

In the chapter about NPRO's ownership structure, we saw that John Fredriksen controls most of the shares through his company Geveran Trading Co Ltd with 80%. According to the theory about Blockholder ownership, it is safe to determine that his ownership can be considered as a blockholder-ownership since we define a blockholder as a shareholder with at least 5% of total shares. With only 33% of free float in the NPRO share and a spread between ask and bid, we concluded earlier that NPRO's share is illiquid. When we determined the cost of equity, we added a premium to compensate the investor for investing in an illiquid share. A large blockholder will reduce the free float in the stock and the liquidity, which can be another reason why there is a discount on NPRO relative to its P/EPRA NRV, P/EPRA NAV, and P/B. Therefore, we could argue that Fredriksen, as a large blockholder, will lower the price that investors are willing to pay for the stock. That argument can be supported by the fact that a higher number of small shareholders will be able to provide liquidity. The OLT share also has a significantly low free float of only 24% and Olav Thon is a blockholder with 66%. We can observe the same pattern for OLT, with a trading discount relative to its P/B and P/EPRA NAV peers.

Contrarily, Entra does not have a large blockholder and is trading higher than its Norwegian peers. The author argues that we might witness a discount for OLT and NPRO relative to its peers because of large blockholders.

On the other hand, we can also argue that blockholders do add value to a firm. The theory showed that more than 96% of listed companies in the US had at least one blockholder, and if a block did not add value, such ownership structure would have been rare. John Fredriksen is engaging in the governance of NPRO with his daughters at the board and with a majority of voting rights. It means that he can affect the firm and engage in governance. Evidence showed that if a blockholder did not engage in governance, the firm value would be unaffected by who owns a particular block. As Fredriksen is engaging in governance, we can argue that he might affect the firm value. If the added value from a blockholder is lower than the discount, it could be argued that the blockholder reduces the firm's value. Suppose the share is trading close to the fair value of their portfolio (P/EPRA NAV, and P/EPRA NRV=1x), which is expected for companies that are asset heavy. In that case, it might be a signal that it is overvalued relative to its peers if the theory about blockholder ownership holds.

The author cannot determine if Fredriksen is adding value to NPRO through governance. The fact that NPRO's blockholder ownership is causing a lower free float in the stock, and that evidence on blockholder theory shows that blockholders are reducing the free float, it is safe to assume that the ownership structure in NPRO is reducing the share price.

13 Criticism of the Analysis

In this valuation, most estimates relate to the growth in rental income and how that affects the value of NPRO. Estimation based on historical performance and projected growth analysis includes a certain amount of uncertainty. Available information at the time of valuation will become "old news" as time goes on. It is, therefore, necessary in real life to constantly update estimates based on newly available information. The author's assumptions about both the firm and the industry it operates within are represented by the estimated forecast. For that reason, it is essential to understand that these assumptions are subjective perceptions and do not represent the actual value of the stock. The author's predictions are only one of several possible outcomes, but the author has performed an analysis that optimistically will be the most realistic outcome.

However, the most uncertainty today in NPRO's portfolio involves vacancy at Fornebu and the sale of residential units from Nordr Eiendom. The estimated value implies that the firm will neither outperform nor underperform in the near future. However, the stock can still perform in the long-term which understates that a present value estimate involves uncertainty, and that new information could change the assumptions.

The capital asset pricing model (CAPM) has been criticised for being too unrealistic, however it is still the most used model for measuring the cost of equity. Despite the criticism, the model was the chosen approach in this thesis. A record low key interest rate, and an announced increase from Norges Bank, make it reasonable to assume that cost of capital will increase in the future. Furthermore, the WACC is kept stable during the forecasted period, which would not be the case in reality. However, it would be impossible to predict the future capital structure for NPRO.

Relative valuation relies on several assumptions. When applying such valuation in practice, all assumptions are not necessarily fulfilled, which can lead to biased value estimates.

14 Conclusion

As stated in the beginning, the purpose of this thesis aimed to determine the fair market value of Norwegian Property ASA, and further provide a fictive investor with either a buy, hold or sell recommendation. Based on the DCF model's value, the NPRO share is currently correctly valued, which was also supported by the relative valuation when using P/B, P/E, P/EPRA NAV, and P/EPRA NRV multiples. The fact that average stock price from the relative valuation implied almost the same value as the DCF model supports the assumptions made in the DCF model.

Figure 28 – Target Price:

The fundamental value of NPRO's stock is estimated to be 16 NOK as of 24.05.2021. Based on several estimates, it appears that the stock of Norwegian Property ASA will neither outperform nor underperform in the near future. Regarding the estimated stock price, I give a *hold* rating and recommend a fictive investor to neither buy nor sell the stock.

15 References

Aftenposten. (2020). *Byrådet i Oslo vil ha forbud mot fossilbiler i deler av Oslo*. Aftenposten. Retrieved 03.03 from https://www.aftenposten.no/norge/politikk/i/dldQ0q/byraadet-i-oslo-vil-ha-forbud-mot-fossilbiler-i-deler-av-oslo

Akademikerne. (2020). *To av tre vil fortsette med hjemmekontor etter koronakrisen*. Akademikerne. Retrieved 06. May from https://akademikerne.no/2020/to-av-tre-vil-fortsette-med-hjemmekontor-etter-koronakrisen

Bank, N. (2021, 30 June 2020). *Government bonds annual average*. Norges Bank. Retrieved 27 April from https://www.norges-bank.no/en/topics/Statistics/Interest-rates/Government-bonds-annual/

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of management, 17*(1), 99-120. https://doi.org/10.1177/014920639101700108

Baum, A. E., & Hartzell, D. (2011). *Global Property Investment: Strategies, Structures, Decisions* (1. Aufl. ed.). Chicester: Wiley-Blackwell.

Blume, M. E. (1975). BETAS AND THEIR REGRESSION TENDENCIES. *The Journal of finance (New York), 30*(3), 785-795. https://doi.org/10.1111/j.1540-6261.1975.tb01850.x

Bodie, Z., Kane, A., & Marcus, A. (2020). *ISE EBook Online Access for Investments*. McGraw-Hill US Higher Ed ISE.

Bærug, S. (2012). *Verdsetting av næringseiendom*. NMBU.

Castellum. (2020). *2020 Annual Report*. Castellum.

Chen, J. (2020). *Commercial Real Estate (CRE)*. Investopedia. Retrieved 06. February from https://www.investopedia.com/terms/c/commercialrealestate.asp

Collier, A. S. (2021). *Construction & Real Est.* E. Research.

DN. (2014). *Fredriksen-selskap byr på Norwegian Property*. Dagens Næringsliv. Retrieved 13.February from https://www.dn.no/oppkjop/npro/norwegian-property/fredriksen-selskap-byr-pa-norwegian-property/1-1-5272531

DNB-Næringsmegling. (2020). *Markedsrapport*. DND Næringsmegling. https://www.dnbnaringsmegling.no/no/markedsrapport/oslo/

DNB-Næringsmegling. (2021). *Kontorleiemarkedet*. DNB Næringsmegling. https://www.dnbnaringsmegling.no/no/markedsrapport/oslo/

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

Eiendomsselskap, O. T. (2019). *Annual Report 2019*. O. T. E. ASA.

Entra. (2020). *Annual Report 2020*. E. ASA.

EPRA. (2020). *EPRA NAV FAQ*. European Public Real Estate Association. Retrieved 03. May from https://www.epra.com/application/files/2315/7321/0568/EPRA_FAQ_-_FINAL_version.pdf

Fabege. (2020). *Årsredovisning 2020*.

Folketrygdfondet. (2021). *About us*. Folketrygdfondet. Retrieved 06. February from https://www.folketrygdfondet.no/about-us/category390.html

Francis, J. C., & Kim, D. (2013). *Modern portfolio theory : foundations, analysis, and new developments + website* (1st edition. ed.). Wiley.

Ganti, A. (2021). *Terminal Value (TV)*. Investopedia. Retrieved 10. May from https://www.investopedia.com/terms/t/terminalvalue.asp

Grønmo, S. (2016). *Samfunnsvitenskapelige metoder* (2. utg. ed.). Fagbokforl.

Hagen, M. (2016). *Commercial real estate in Norway*. N. Bank. https://www.norges-bank.no/contentassets/093fda53ce45407aba78d88a97243e10/economic_commentaries_6_2016.pdf

Hagen, M., & Hansen, F. (2018). *Driving forces behind European commercial real estate prices prior to a sharp fall in prices*. N. Bank.

Hayes, A. (2021). *Free Cash Flow to the Firm (FCFF)* Investopedia. Retrieved 13. April from https://www.investopedia.com/terms/f/freecashflowfirm.asp

Hermalin, B., & Weisbach, M. (2017). *The Handbook of the Economics of Corporate Governance* (Vol. 1). Saint Louis: Elsevier Science & Technology.

Holderness, C. G. (2009). The Myth of Diffuse Ownership in the United States. *The Review of financial studies, 22*(4), 1377-1408. https://doi.org/10.1093/rfs/hhm069

Hufvudstaden. (2020). *Årsredovisning 2020*. Hufvudstaden.

IMF. (2021). *World economic outlook (International Monetary Fund)*. IMF.

Johannessen, A., Christoffersen, L., & Tufte, P. A. (2020). *Forskningsmetode for økonomisk-administrative fag* (4. utgave. ed.). Abstrakt forlag.

Johnson, G., Whittington, R., & Scholes, K. (2014). *Fundamentals of Strategy*. Pearson Education UK. http://ebookcentral.proquest.com/lib/bilibrary/detail.action?docID=5138115

Kommune, O. (2021a). *About Oslo*. Oslo Kommune. Retrieved 06. mai from https://www.oslo.kommune.no/politics-and-administration/politics/about-oslo/#gref

Kommune, O. (2021b). *Eiendomsskatt i Oslo*. Oslo Kommune. Retrieved 15. april from https://www.oslo.kommune.no/skatt-og-naring/skatt-og-avgift/eiendomsskatt/om-eiendomsskatt-i-oslo/

Kommune, S. (2021). *Handling- og økonomiplan 2021-2024*. Stavanger Kommune. Retrieved 15.april from https://hop2021.stavanger.kommune.no/4-avgift-gebyr-og-egenbetaling/#4-15-eiendomsskatt

Kungsleden. (2020). *Års- och hållbarhetsredovisning 2020*. Kungsleden.

Logitech. (2020). *5 workplace trends in 2020 and beyond*. https://www.logitech.com/content/dam/logitech/vc/en/pdf/ebook-5-workplace-trends-in-2020-and-beyond.pdf

Martin, S., & Bernat, P. (2020). *Climate change and the real estate sector*. Deloitte.

NHO. (2021). *Selskapsskatt*. NHO. Retrieved 15. May from https://www.nho.no/tema/skatter-og-avgifter/artikler/selskapsskatt/

Næringseiendom. (2020). *CBD - det sentral businessdistriket*. Nærings Eiendom Retrieved 05. April from https://ne.no/guide/cbd-det-sentrale-businessdistriktet/

Pangea. (2021). *Pangea Property Outlook 2021 Norway*. P. P. Partners.

[Record #44 is using a reference type undefined in this output style.]

Petersen, C. V., Plenborg, T., & Kinserdal, F. (2017). *Financial statement analysis : valuation, credit analysis, performance evaluation*. Fagbokforl.

Porter, M. (1996). *What is strategy?* .

Property, N. (2007). *Årsrapport 2007*. N. Property.

Property, N. (2010). *Annual Report 2010*. NPRO.

Property, N. (2020). *Annual Report 2020*. N. P. ASA.

PWC. (2017). *Applying IFRS for real estate industry*. PWC.

Regjeringen. (2021). *Skattesatser 2021*. Finansdepartementet. Retrieved 15. april from https://www.regjeringen.no/no/tema/okonomi-og-budsjett/skatter-og-avgifter/skattesatser-2021/id2767458/

Review, H. B., Iansiti, M., Lakhani, K. R., Van Alstyne, M. W., & Parker, G. G. (2020). *HBR's 10 Must Reads on Platforms and Ecosystems (with bonus article by "Why Some*

Platforms Thrive and Others Don't" By Feng Zhu and Marco Iansiti). La Vergne: Harvard Business Review Press.

Roos, G. (2014). *Strategi : en innføring* (6. utg. ed.). Fagbokforl.

Thomsen, S., Pedersen, T., & Kvist, H. K. (2006). Blockholder ownership: Effects on firm value in market and control based governance systems. *Journal of Corporate finance, 12*(2), 246-269.

Thorsnæs, G., & Berg, T. O. (2020). *Kommune*. Store Norske Leksikon. Retrieved 15.04 from https://snl.no/kommune

Tømmerås, A. M. (2021, 23. february 2021). *Lågaste folkeauke sidan 2001*. Statistik Sentralbyrå. Retrieved 08.april from https://www.ssb.no/befolkning/artikler-og-publikasjoner/lagaste-folkeauke-sidan-2001

Union. (2021). *M2 Analyseportal*. Union. Retrieved 15. April from https://m2.union.no

Vollmer, M. (2014). *A Beta-Return Efficient Portfolio Optimisation Following the CAPM: An Analysis of International Markets and Sectors* (2015 ed.). Wiesbaden: Springer Fachmedien Wiesbaden GmbH. https://doi.org/10.1007/978-3-658-06634-5