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An Analysis and Valuation of Eiendomsspar AS

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Executive summary

The purpose of this thesis is to determine Eiendomsspar A/S stock price and eventually determine if the stock is worth buying as of 31st of December 2009. The valuation has been done on the basis on a strategic and financial analysis.

Eiendomsspar is a relatively small firm. Its principal activities are ownership and development of properties mainly in Norway and Sweden. The company holds both commercial and residential properties with hotels, office buildings and retail shops accounting for the main part of rental income. In 2005 Eiendomsspar acquired the Swedish property firm Pandox, in a 50/50 split with Sundt A/S, and thereby became a large hotel owner in Sweden.

The growth rate for Eiendomsspar has been significant since the founding of the company in 1983 and has in the analyzed period from 2001 to 2009 the stock price has increased by over 800 index points. Eiendomsspar has nonetheless a large debt ratio, which is normal for the industry. However a debt equity ratio just beneath 3 and with 59 percent of the debt up for renegotiations causes an uncertainty for the firm’s future.

The strategic analysis has revealed that both the rent prices and RevPAR are bottoming out and are therefore expected to increase in the near future. In addition new projects in the Oslo region are expected to be historical low in the forecasted period. Coming off a two-year period, were the number new projects were extremely high, a low period is essential for the growth in rental prices. The results from the strategic analysis are that the market future is looking bright for Eiendomsspar.

As Eiendomsspar’s strategy has been successful up to this point and given Eiendomsspar’s overall financial state, it is both expected and recommended by this thesis that the firm continuous its current strategy. Eiendomsspar has managed thru the difficult financial times the world has experienced the last years.

The consolidated strategic- and financial analysis generated the foundation for a 5-year forecast followed by a terminal period estimating future revenues, investments and costs.

Estimating the Weighted Average Cost of Capital is performed by calculating several different factors, a beta of 0.37, a market risk premium of 5.5 percent and a cost of debt of 300bps over the risk free rate, the result was a WACC of 5.36 percent.
Using the WACC to discount the company’s forecasted future cash flows and residual income resulted in a theoretical share price when using the Discounted Cash Flow Model and the Economic Value Added Model to 205.87 NOK. The result shows an upturn just beneath 30 percent on today’s value.

A sensitivity analysis was later applied to reveal the importance of the factors and eventually how changes in the factors would affect the stock price. The conclusion when analyzing four important factors was that a relative small change would create a large change the stock price. Nevertheless, the upturn is superior compared to the downside.
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4
1 Introduction

1.1 Objective

As 2010 is underway the effects of the sub prime crisis is finally starting to ease up. The crisis has created several unforeseen problems and challenges for countless companies. Some companies have managed to tackle the challenges of the crisis, but some has also defaulted.

The real estate marked throughout Scandinavia has thru the last decades experienced a large growth in property price. This has created stable framework with growth and large ROI\(^1\) for the companies in the property sector. As a result of the favorable circumstances, the financing for new projects has been unproblematic. The reaction from market has been in the creation of new projects. However as the last years as evolved, also this sector has had its difficulty.

Eiendomsspar A/S\(^2\) has followed the marked and has had a positive development. However Eiendomsspar has also challenges because of the financial crisis. Since 1982 the company has increased its stock value 28 times. In the same period the property portfolio has increased from NOK 430 millions to NOK 12.491 millions.

As Eiendomsspar has invested in hotels/restaurants, office buildings and private property, they have a large capital binding in actives. The firm has as a company policy to have a high liquidity reserves and a good solidity.

My valuation is based on a strategic analysis of external and internal relations, and a financial statement analysis, which will give an overview of the firm. In addition there are macro economic relations that affects the growth of the firm.

The financial crisis has made it more difficult to get loans to new projects, and has caused a fall in the property prices.

As Eiendomsspar always has had a policy of high liquidity reserves will Eiendomsspar be more attractive for investors in the future?

\(\text{1 Return on Investment} \)
\(\text{2 From here only know as Eiendomsspar}\)
Eiendomsspar is beginning to adapt to the world after the sub prime crisis. How will the future look for the sector and how will Eiendomsspar perform when the negative trends has stopped?

These are interesting questions and the main reasons for me to do this valuation of Eiendomsspar.

1.2 Problem formulation

The goal for this master thesis is to do an accurate valuation of Eiendomsspar. The firm specializes in investing and renting out hotel/restaurants and office buildings.

Eiendomsspar’s strategic situation is a challenge due to their operations operates in several different markets, mainly in Norway and Sweden. The firm sends the following clear message thru their vision statement; “the company should be finically healthy and at the same time to invest in project that will make the surroundings, especially in Oslo, looking better”.

As Eiendomsspar operates in several markets, the challenge is to make a high-quality valuation, as the different markets may not respond in the same way to the same market correlations.

As Eiendomsspar is an unlisted company, where the stock is traded over the counter (OTC), they are not required to exert IFRS. Instead they use Norwegian financial report laws. As an unlisted company there are modest public information and few independent reports are made. Since a different set of financial reporting than IFRS is used, it creates a more challenging financial analyses.

The financial situation the world is currently experiencing is forcing the normal market to react abnormally, which bring another perspective into this thesis. The financial crisis and the fact that Eiendomsspar is an unlisted company that is rarely traded could make the stock price unreliable. The stock market has been and maybe still is in an unstable state.

These challenges make Eiendomsspar particularly interesting and challenging to proper valuate. The overall objective of the thesis is:

*Undertake a fundamental analysis of Eiendomsspar A/S, resulting in an estimated market value of the equity and share price as of 31st of December 2009.*
In order to estimate the value of Eiendomsspar it is necessary to conduct an in-depth analysis of the company. The analysis is composed of two parts: a strategic analysis and a financial analysis. In the strategic analysis the following issues will be analyzed:

- What is the overall business strategy of Eiendomsspar?
- Which position does Eiendomsspar have in the marked?
- What is the composition of the portfolio?
- A Strength – Weakness profile of Eiendomsspar, and what opportunities and threats does the profile present?

The thesis will present a section about the key factors and value drivers for the property market. The underlying question is:

- What are the key factors for Eiendomsspar and the real estate market in the new decade?

Since Eiendomsspar is unlisted few reports are public. This limits the available information for the thesis. The financial analysis is based on reports published by Eiendomsspar and peers. It will also include Eiendomsspar’s annual reports. In this analysis Eiendomsspar’s profitability, liquidity as well as financial and operating risk will be analyzed to answer the following question:

- Does Eiendomsspar’s key ratios underpin its strategic direction?

Every company in every industry is affected by the world’s economic status and trends. Therefore an important question is:

- Which are the most crucial macroeconomic factors that are influencing the industry?

Another specific industry question that is important;

- What are the expected future developments in the Scandinavian commercial property market and Scandinavian hotel market?

This thesis will value Eiendomsspar on the basis of the Discounted Cash Flow and the Economic Value Added analysis as well on the basis of the strategic and financial analysis. In relation to the valuation the thesis will determine:

- Can a theoretical valuation be used in practice?
• What is the estimated theoretical value of Eiendomsspar?
• Is there a difference between the actual price and the estimated values from the theoretical models?

It will also be interesting to look into the ownership structure and if it affects the valuation. If so this could answer the question:

• Does the ownership structure of Eiendomsspar reflect on the stock price?

The value of the stock is set largely by investor’s expectations to the firm’s future performance and the underlying market situation. This thesis will therefore try to answer the question:

• Is the fact that Eiendomsspar is an unlisted company a reason for the stock to be under- or over – valued?
• How sensitive is the share price to changes in a set of different key variables?

At the end the thesis will evaluate the findings and answer the most important question to potential future investors:

• Is the stock worth buying?

1.3 Outline

For this thesis to perform a valuation of Eiendomsspar in a holistic manner a number of issues must be explored and taken into account. At the same time an extensive analysis of these issues must be prepared.

It is crucial for the final result that the appropriate models and valuation methods are chosen. As well as it is essential that the following aspects are important parts of the valuation:

• Strategic Analysis
• Financial Statement Analysis
• Forecasts
• The Cost of Capital
• Valuation

Each of these parts will be given their own chapters as Figure 1.1 illustrates. As a prelude to the analysis we will introduce Eiendomsspar and give an appropriate overview of the company.
1.4 Methodology and Data

In the following section there will be a brief description of each chapter. The aim is to explain their purpose and what models will be used. The information gathering will be conducted through secondary sources and Eiendomsspar’s financial statements.

Throughout this thesis all the analysis will be performed by the author using the data and information gathered and the relevant models and methods that are generally accepted by both academia and the business community.

1.4.1 Method

The goal for this thesis is to determine the value of the company. This is done from a normal investors point of view through publicly available sources. The depth of the analysis is most likely to be more extensive than the normal investor would perform.

The role this thesis has taken is more the informed investor role, where the role is to determine whether to buy or sell Eiendomsspar stock. The foundation of the analysis will be structured as follows:

Figure 1.1 – Thesis Structure

Source: Own creation
Chapter 2: Eiendomsspar

This chapter consists of an overview of the company including an ownership structure, economy and finances, management, history as well as an overview of the markets Eiendomsspar operates within.

The purpose of this chapter is to generate an extensive overview of the company. This will create the foundation for the analysis in the next chapters.

Chapter 3: Strategic Analysis

The strategic analysis establishes the foundation for the cash flow estimates and other forecasts. For them to be reliable a sound strategic analysis must be carried out\(^3\). The strategic analysis will be divided in three parts consisting of a macro analysis, an industry analysis and an internal analysis. It will also include an analysis of factors that are important for the future property market. It will also investigate differences between the hotel/restaurants and offices segment. There will also be a description of the market history.

Chapter 4: Financial Statement and Analysis

The purpose for this chapter is to evaluate Eiendomsspar’s historical performance by analyzing their annual reports and comparing the key results and ratios with the peers.

In the analysis of Eiendomsspar, the peers consist of Olav Thon Eiendomsselskap. The company has a portfolio that is comparable to Eiendomsspar. The only difference between the two is that Olav Thon Eiendomsselskap is a listed company and therefore using the accounting standard IFRS. Because of this difference a ratio analysis or a financial statement analysis is not possible and a stock performance analysis of the two different firms is chosen.

\(^3\) Brealy et al, 2006
Chapter 5: Forecasts

In this section the thesis will generate estimates of the future prospects of Eiendomsspar and what the company’s cash flow will look like for the forecasted period.

Chapter 6: Cost of Capital

The aim of this chapter is to estimate the Weighted Adjusted Cost of Capital as well as other important ratios and several calculations will be presented.

Chapter 7: Valuation

In this chapter the thesis brings the different parts and chapters together. In other words: The core of the thesis. There will be used two different models for this purpose:

- Discounted Cash Flow (DCF)
- Economic Value Added (EVA)

In these models Eiendomsspar’s cost of capital i.e. the company’s Weighted Average Cost of Capital (WACC), which is determined in chapter 6, is needed. When using the models the thesis will use a sensitivity analysis to determine how changes in certain variables will influence the company’s value.

Chapter 8: Conclusion

The main conclusion of the research will be presented and discussed with regards to the issues raised in the problem formulation. There will be a summary of the sub conclusions under the different chapters.
Chapter 9: Perspective

The purpose of the perspective is to expand the project and provide new perspective on the thesis and therefore the research that underlies the results. Furthermore, it will describe how the applied analysis can be expanded to other companies and industries.

1.4.2 Models

The thesis will use a wide variety of models which are essential to provide the structured methodology as shown above. Figure 1.2 illustrates the anatomy of the strategic analysis and beneath the figure is a short description of the models that will be used in the strategic analysis and the valuation.

Figure 1.2 – Strategic Analysis Model

![Strategic Analysis Model](source: Elling et al., 1998)
The External Analysis

The purpose of this analysis is to determine what opportunities are possible for Eiendomsspar and which threats the company has to be aware of.

Market Analysis

PESTLE
This analysis will determine which macro-environment factors influence Eiendomsspar’s financial performance and growth.

Oslo Real Estate Market
This is an analysis of the market in and around Oslo, which is Eiendomsspar’s main market within office space.

The Scandinavian Hotel Market
This is an analysis based on characteristics and development of the Scandinavian Hotel market, which is Eiendomsspar’s main market.

Branch Analysis

Porter’s Five Forces (P5F)
The aim of this analysis is to go into the depths of the industry dynamics that ultimately influences industry profitability and therefore the company. The thesis will assume that the industry is homogenous in the markets Eiendomsspar operates within, and therefore can be profiled as a single market.

The Internal Environment

The purpose of this analysis is to determine the company’s strength and weaknesses.

The Boston Consulting Group (BCG) Matrix
The aim here is to map the market in which Eiendomsspar is competing with their current portfolio. The matrix will give a pointer in to which market(s) are successful and which are not.
The internal analysis has partly been given under chapter 2 where Eiendomsspar is presented. Much of the points that are made in chapter 2 are used in the BCG model and under the SWOT analysis.

**SWOT**
The SWOT analysis will function as a sub conclusion where key findings and reflection will be discussed for both internal and external factors.

**Valuation**

*Discounted Cash Flow (DCF)*
The DCF model will be used for discounting the projected Free Cash Flow to determine their present value and thus determining the value of Eiendomsspar.

*Economic Value Added (EVA)*
The EVA Model builds on similar present value principles as the DCF model. The difference is that the EVA model requires a more vigorous analysis and decomposition of a company’s financials.

*The Capital Asset Pricing Model (CAPM)*
This model helps to determine the required return on the company’s stock for an investor

*The Weighted Average Cost of Capital (WACC)*
This Model incorporates the CAPM calculations together with the company’s cost of debt and determines the discount factor, given the capital structure, to use in the DCF and EVA.

**1.5 Criticism of Sources**
This thesis relies on information published by the company in question and other secondary sources. This information contains some caveats and must therefore be taken at an arm’s length. Since the company has to follow rules and regulation according to Norwegian law and accounting principals the information is considered reliable, under the assumption that these regulations are indeed effective.

Under the whole thesis there are references to sources where there are direct quotes to data or theory. All these sources, including material that has been used to gain basic knowledge about the subject in question, is referred to in the literature list.
1.6 Delimitation

For answering the problem statement properly and prevent the thesis from escalating outside the scope, it is necessary to attain some delimitations.

The thesis has a length restriction and a practical approach, due to these factors a delimitation of taking critical assessments of the theoretical models used in the strategic analysis, financial statement analysis, the forecast and the valuation are taken.

It is assumed, as in most of the theoretical models, that the cash flows is received by the company as a single sum at the end of the year. As the flows are received continuously over the year, an argument is that the thesis apply a mid year adjustment factor in order to avoid understating the discount factor.\(^4\)

When forecasting and discounting the future free cash flows, the thesis will hold target weights to determine a constant WACC, because rebalancing the WACC is in practice a too complex procedure. As a consequence, a target capital structure is assumed to be achieved for Eiendomsspar at the beginning of 2010 and held throughout the entire valuation.

Eiendomsspar has a portfolio consisting of a small part of apartments and stores. For simplicity this segment will be treated as they respond to the same effects as office space.

19 percent of Eiendomsspar’s portfolio is widespread through Northern- Europe and America. As each part has different characteristics and responds differently to the market, this segment will not receive a separate part in the analysis, but will be mentioned where it is appropriate.

There will be made assumptions and simplifications throughout the paper where this is deemed necessary, and to get a better overview I find it more feasible to address these in the respective sections.

\(^4\) Koller et.al 2005, p.105
2 Presentation of Eiendomsspar

2.1 History

Eiendomsspar was established in 1982 by Sparebanken Oslo og Akerhus, which also was the largest stockowner. At the time Eiendomsspar had seven office- and store- real estate properties. Two years later Christian Ringnes was named CEO, a position he still holds today.

In 1985 - 1987 Eiendomsspar merged with four different companies. In the same time period Eiendomsspar bought several hotels and other real estate both in Oslo and capitals in Europe. This event marked the beginning of Eiendomsspar’s expansion. Including some sale of assets, due to financial challenging years, Eiendomsspar has had an annual growth of 15 percent thru mergers and investing real estate.

In 1993 10 percent of Eiendomsspar’s assets demerged into Victoria Eiendom to front a more aggressive investment strategy.

In 2003 - 2004 Eiendomsspar bought the Swedish hotel company Pandox in a 50/50 operation with Petter C.G. Sundt, which is also a large shareholder in Eiendomsspar. This was the start of Eiendomsspar’s investment in the other Scandinavian countries that today is Eiendomsspar’s second largest revenue source.

During the last five years Eiendomsspar has developed its real estate portfolio as well bought and sold property thru both Eiendomsspar and Pandox. The portfolio consists of almost 100 properties where 50 percent is fully owned by Eiendomsspar and the rest is shared with Sundt AS. The value of the property exceeds NOK 12,000 million.

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5 Annual Report 2009
6 More about shareholders under the next chapter 2.2 Ownership.
7 Annual Report 2009
2.2 Ownership

Eiendomsspar is a non-listed company that has been traded over the counter since 1982. The number of shares is over 68 million. Of these shares, just over 40 million are shares outstanding\(^8\)\(^9\) while over 28 million are shares that are closely held\(^10\)\(^11\).

2.2.1 Shareholders

A mixture of investors with diverse horizon owns Eiendomsspar and their reason for investing in the company is expected to differ. There is only one class of shares, and thus no shares carry any special rights over other. Different branches group the different owners and structure of the ownership is as shown in figure 2.1\(^{12}\).

![Ownership Structure by Type](image)

**Ownership Structure by Type**

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norwegian institutional</td>
<td>45%</td>
</tr>
<tr>
<td>Investors</td>
<td></td>
</tr>
<tr>
<td>Foundations and trust</td>
<td>25%</td>
</tr>
<tr>
<td>Individual investors</td>
<td>13%</td>
</tr>
<tr>
<td>Non - Registrert</td>
<td>10%</td>
</tr>
<tr>
<td>Eiendomsspar</td>
<td>7%</td>
</tr>
</tbody>
</table>

*Source: Eiendomsspar Annual Report 2009*

Several of these investors can be classified as traditional investors. Therefore their investment strategy can be determined and the effect this strategy and group might have on the trading of the shares. Other groups can be analyzed thru their position in the sectors and their track record, while others can be difficult to classify due to lack of information that are public knowledge.

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\(^8\) Stock currently held by investors, including restricted shares owned by the company's officers and insiders, as well as those held by the public. Shares that have been repurchased by the company are not considered outstanding stock.

\(^9\) Annual report 2009

\(^10\) The shares held by individuals closely related to a company.


\(^12\) Annual Report 2009
Each of these groups also has different involvement in the company, i.e. they are either passive investors or they involve themselves in the overall strategy.

### 2.2.2 Ownership Profile

Under this section the thesis will pay a special attention to the largest shareholders, not only due to the size of their holding but also due to their current situation.

Over half of the shares in Eiendomsspar are owned by Sundt Eiendom I AS\(^\text{13}\). This is a company are owned 51/49 by Victoria Eiendom and Eiendomsspar. Indirectly Eiendomsspar own 25.5 percent of themselves. This is a clear indication that they believe in its own business strategy and have a positive outlook for the future.

Victoria Eiendom owns in addition 8.5 percent of Eiendomsspar, and thru their share in Sundt Eiendom I AS they are the largest shareholder with 46 percent of the shares\(^\text{14}\). Victoria Eiendom was established in 1993 thru a demerger of Eiendomsspar. The point at that time was that Victoria Eiendom should have a more aggressive investment strategy in a marked that was then believed to be at the bottom\(^\text{15}\). Christian Ringnes and related parties controls directly or indirectly Victoria Eiendom.

Victoria Eiendom is also closed related as they have the same CEO, much of the same board and Eiendomsspar also own 15% of Victoria Eiendom thru Sundt Eiendom II AS, that are a 51/49 owned by Christian Ringnes and Eiendomsspar. Eiendomsspar also manage and administer Victoria Eiendom’s real estate portfolio\(^\text{16}\).

The third largest shareholder is the family hold investment firm Sundt AS, which is owned by the Sundt family. Christian Ringnes and the Sundt family has been investment partners for years and in 2008 Ringnes became the Chairman of the Board of Sundt AS\(^\text{17}\).

\(^{13}\) Appendix 1

\(^{14}\) Annual Report 2009

\(^{15}\) Victoria Eiendom Annual Report 2009

\(^{16}\) Victoria Eiendom Annual Report 2009

\(^{17}\) [http://e24.no/naeringsliv/article2431606.ece](http://e24.no/naeringsliv/article2431606.ece)
As a result Ringnes are CEO or chairman of the Board in companies that control almost 70 percent of Eiendomsspar.

Neither of the companies Eiendomsspar, Victoria Eiendom nor Sundt, that are the three largest shareholders, are listed companies.

17 funds/investors or others owns between 2.3 and 0.5 percent of the remaining 30 percent of the company. In Norway only the 20 largest shareholders are by law required to be public thru annual reports, and the reminding 507 shareholders own 13.1 percent of the company\textsuperscript{18}.

2.3 Management
As briefly described above, the management in Eiendomsspar is important. And for a deeper knowledge it is important to establish an overview of the company’s inner functions and what drives the company’s performance internally.

2.3.1. Board structure
Eiendomsspar’s management follows structure for the rest of Scandinavia with a two-tier board system, which consists of a Supervisory board and a Management board\textsuperscript{19}. In the two-tier, the shareholders elect the Supervisory board. These board members are regularly non-executive directors. The supervisory board selects the executives that form the management committee.

In the Scandinavian two-tier model it is common that the employees have a representative on the Supervisory board. These employees are elected by and among the others employees. However this is not the case in Eiendomsspar, were the only employee on the board is CEO Christian Ringnes.

The supervisory board of Eiendomsspar consists of eight people. Their main tasks are to evaluate the work performed by the executive board, overall strategic management along with financial and managerial supervision of the company.

\textsuperscript{18} Annual Report 2009
\textsuperscript{19} Thomsen, 2008
The members have higher education within finance and several have invested in the company. In addition to CEO Christian Ringnes also the CEO of Sundt AS, Leiv Askvig, the largest shareholder, is a board member.

All members of the board are also on the board of Victoria Eiendom in addition to be on several other boards. In Norway all Supervisory boards are obligated by law to have women as a member.

2.3.2 Remuneration

Supervisory board members are remunerated on a flat salary basis, unless they are rewarded according to the company’s performance, e.g. share options. Executive board members are most often has a mixture of flat salary and bonus. Their income is therefore dependent on the firm’s performance.

2.4 The Organization

Eiendomsspar has a network of companies that they are close related to and have shares in. On top of the network is Christian Ringnes CEO of Eiendomsspar and Victoria Eiendom and Chairman of the Board of Pandox. These three companies are the foundation of the organization. Ringnes also has personal stakes in these three companies thru private investments in Sundt Eiendom I that owns 29 percent of Victoria Eiendom and Thys Holding that owns another 15 percent.20

Pandox are bought in a 50/50 collaboration with Sundt. Sundt and Eiendomsspar have an 8.4 percent stake in each other. Pandox specializes in hotels and has a large portfolio consisting of a 50/50 split between Sweden and other large city in Europe. As of 2008 Pandox has started to invest in North America.21

A demerger of Eiendomsspar created Victoria Eiendom in 1993. They have an aggressive investment strategy in the same markets as Eiendomsspar. Victoria Eiendom is the largest shareholder in Eiendomsspar.

20 http://www.purehelp.no/
21 Pandox annual report 2008
Eiendomsspar and Victoria Eiendom share the same administration and Supervisory Board\footnote{Expect one} as well as Eiendomsspar manages the company’s portfolio.

In addition to the companies mentioned above Sundt Eiendom II and I are deeply involved in the organization. As well as some different companies fully controlled by Ringnes with family. It is a fair assessment to say that the organization is heavily influenced by Ringnes.

### 2.5 Markets

#### 2.5.1. Geography

Eiendomsspar operates directly or indirectly for the most part in Scandinavia and over 50 percent is in Oslo. However a smaller part of the business is located in the rest of the world with a heavy section in large European cities as Figure 2.2 shows.

**Figure 2.2 – Geographic distribution of portfolio**

Revenues by Geography

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oslo</td>
<td>54%</td>
</tr>
<tr>
<td>Sweden</td>
<td>26%</td>
</tr>
<tr>
<td>Norway without Oslo</td>
<td>1%</td>
</tr>
<tr>
<td>Foreign Countries</td>
<td>19%</td>
</tr>
<tr>
<td>Norway with Oslo</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: Own Creation

The revenue from Oslo is in most part from investments made by Eiendomsspar and Victoria Eiendom. The revenue made else where are made indirectly by Eiendomsspar thru Pandox.
2.5.2. Market Turnover

Further more, Eiendomsspar’s portfolio can be divided into four difference groups; Hotel/Restaurants, Offices, Stores and Apartments, warehouse and parking houses. As we see in Figure 2.3 the biggest segment are Hotel/Restaurants. Eiendomsspar has classified this as one group and are the only group that are located in every location. The other groups are smaller and 54 percent are located in the Oslo area. Figure 2.3 shows revenue divided by type of real estate.

Figure 2.3 – Type of real estate distribution of portfolio

Source: Own Creation

2.6 Product

The section above described briefly the “products” that Eiendomsspar presents. Furthermore, Eiendomsspar is engaged in the acquisition, leasing and development of commercial and residential properties. However Eiendomsspar has its main focus on investments in wholly owned property in Oslo and in Europe thru Pandox.

As Figure 2.3 illustrates Hotel/Restaurants is the largest “product”. Eiendomsspar focuses on the most part on existing properties, but has also a small number of construction projects in Oslo. The portfolio comprises long-term leased properties.
2.7 Economy

At the end of December 2009, with at share price at 160 NOK, the market capitalization of Eiendomsspar exceeded NOK 6,400 million. The share was then down by NOK 27.5 from the top level in December 2007. However 2009 must be classified as a good year for the Eiendomsspar share as it increased almost 55 percent over the year. 2009 a pretax profit was NOK 303 million. The company’s liquidity and committed credit facilities amounted to NOK 1 689 million.

At the end of 2009 Eiendomsspar had a net debt of NOK 4 454 million, while the total assets of NOK 6 000 million.

The average interest at the portfolio was at 4.2 percent, a reduction from 6.4 percent from previous year.

Value adjusted equity is calculated to be NOK 4 840 million, equivalent to NOK 121 a share.

Eiendomsspar’s own net yield calculations of themselves are 6.7 percent. For Pandox the calculations for net yield are at 6.5 percent.

The company has always had a strong financial position with a net asset value ratio of 50 percent.

Eiendomsspar increased during 2009 the portfolio by direct purchasing of office buildings in Oslo, but also in Stavanger and Tromsø. No sales are repored in the period. Thru Pandox Eiendomsspar has purchased a new spa-hotel.

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23 After the 4:1 split in 2006.
24 Annual Report 2009
3 Strategic Analysis

The strategically analysis is essentially about;

*Identifying strategic opportunities and threats in the organization’s operating environment that will affect how it pursues its mission*\(^{25}\)

The analysis function is to understand the structure and competitive dynamics of the industry, its surroundings, the macro environment, and how it can affect the performance and profitability of the corporation.

In the analysis the PEST analysis is used to analyze the macro environment. Porters’ Five Forces model is used to determine the competitive intensity and thereby the attractiveness of the industry Eiendomsspar operates within. The BCG matrix will analyze the “product” line, which helps the company to allocate resources to the strategic correct place.

In addition to these normal analysis the thesis will also perform an analysis of the office space in Oslo and of the Scandinavian hotel market. The aim is to get an even deeper knowledge of the markets operated in and thereby get a more correct forecast, and eventually valuation.

The chapter will be summed up with a SWOT analysis. The aim is to point out strengths and weaknesses of the corporation, and reveal the threats and opportunities in its surroundings.

3.1 Introduction to Real Estate

The risk-return profile of investors in the real estate sector is determined by a set of factors influencing the commercial property and hotel market. The aim of this subchapter is to explain the characteristics of the real estate market, and how these characteristics are attached to the income and costs of the investors. The next subchapter, 3.1.1, will outline the macro economic factors with the greatest impact on the real estate sector and explain how these factors interact and affect each of the specified characteristics with help of various analysis.

\(^{25}\) Hill, Charles W.L. and Jones, Gareth R.: “Strategic Management Theory – An Integrated Approach”
3.1.1 Classification of investors in the real estate sector and types of properties

The real estate sector consists of several different players with various characteristics. The players could be split up into direct investors who receive rent by owning or developing the properties and indirect investors that receive their rate of return by investing in the companies who own and/or manage the properties. The most influential players in the market are the listed and unlisted property companies, financial institutions, pension funds, private investors, property funds (and syndicates) and limited partnerships\(^{26}\).

Several of the investors in addition act as property developers, and decide to trade the properties or keeping the properties for the rent income. It is usual that the players act in several roles simultaneously, as developers, direct or indirect investors. However, it is most common to specialize within a specific role and category of real estate.

The different categories within real estate are classified as residential and non-residential. Single and multi family houses e.g. apartments represents residential properties, while five subcategories, offices, retail, industrial, hotel, recreational and institutional, represents non-residential properties\(^{27}\).

Due to Eiendomsspar’s portfolio, Figure 2.2, the main focus will be on the characteristics that influences property companies that act as direct investors in the commercial property and hotel market.

3.1.2 Income from property

When equity investors receive dividend, the real estate investors receive rent\(^ {28}\). The similarity is that both investors expect an appraisal in the market value of the underlying asset. The property is valued as the present value of the expected rental income from the building over the remaining lifetime of the property.

There are several different factors that together, in a complex fashion, are affecting the rental income with different impact and combined represents the income potential of the property.

\(^{26}\) Holmes et. al. 1994 p. 161
\(^{27}\) Brueggeman et.al 2005
\(^{28}\) Brueggeman et.al 2005
The different factors affect each other, and therefore ultimately the income received, and can be hard to differentiate. The ability to attract tenants and thereby reduce vacancy is an example of the factors that are closely connected with supply and demand of the properties, terms of the lease, active management and the market rent.

3.1.2.1 Market rent

The market rent is the price the tenant must pay for the use of the property under the current condition.\(^{29}\) It is the most decisive factor when it comes the income potential. The market rent depends also largely upon the price for comparable properties. The rent is complex and the underlying variables are some of the most important variables:

- National economy outlook
- Economy of the area where the property is located
- Demand for type of property provided in the specific location and the supply of similar properties.

3.1.2.2 Lease contract

The lease contract is an agreement between owner and tenant, which normally is based for a specific time period. The average duration is approximately seven years for commercial property and longer for hotels.\(^{30}\) The contracts for commercial property are usually formulate such as they are annually adjusted for CPI.

In some cases in long-term contracts the rents are reviewed at specific, contract regulated, dates, where the normal procedure is an upward adjustment where market rents are above the rents received. On the other hand the rent is kept unchanged if market prices are below.\(^{31}\) New contracts follow the market rents, unaffected by the previous rent prices.

\(^{29}\) Brueggeman et.al 2005 p. 251
\(^{30}\) Investment property forum Understanding commercial property investments 2007
\(^{31}\) Investment property forum Understanding commercial property investments 2007 p. 12
3.1.2.3 Supply and Demand

There are several market forces that affect the supply and demand for property, which again affects the real estate investments and market rents. As illustrated in Figure 3.1, real estate goes through a cycle, in the same manner as the economy in general.32

When the market experiences rising market rent, the absorption are often high and the vacancy low. The market reacts by supplying more properties by increase construction. As long as the vacancy is not decreasing the rent is increasing to the point where the supply exceeds the demand and results in a situation with oversupply. The high rental prices results ultimately therefore directly in an oversupply.

When the prices reaches a certain level, firms, due to cost affiance, try to make more affiance use of their existing space instead of demanding more, contrary that the optimally would need more space. This also results in a decreasing in new employment growth, which again results in a declining or a smaller growth pace than before. The constructions that were started in the initial growth phase are now finished which causes oversupply and eventually a decrease in the real estate market and lower market rents. The lower market rents causes owner maybe to deliberately to hold some of the existing space vacant in anticipation of higher rents.

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Figure 3.1

Source: Wheaton, Williams Real estate cycles; some fundamentals (1999)

32 Wheaton 1999 Real estate cycles


3.1.2.4 Active Management

Direct real estate investors have the opportunity to manage their assets actively in contrast to investors within equities and bonds. This is done by either sustaining the value or by enhancing it in forms of finding alternative uses or refurbishing. Active management can include:

- Redeveloping or refurbishing the property for a different use
- Buying an existing tenant out of the lease commitment, refurbishing the premises and letting to a new tenant at a higher rent
- Renegotiation of the lease terms for an existing tenant, for example by increasing the lease length or by increasing rent payable or both.

3.2 Market Analysis

3.2.1 PEST

The thought behind the PEST analysis is to identify key factors of change in the macroeconomic business environment that could affect future demand or structure in the industry and factors impacting future profitability. The PEST analysis traditionally takes four environmental factors into account when the situation is analyzed.\(^\text{33}\)

- Political – e.g. Government stability, taxation and foreign trade regulations
- Economic – e.g. Business cycles, GDP trends, Interest rates and unemployment
- Social – e.g. Demographics, lifestyle changes, consumerism
- Technological – New discoveries, speed of technological transfer, rates of obsolescence

The PEST analysis is regarded in this thesis as a guideline rather than a strict prescription on how to perform an environmental analysis.

The aim of the analysis is to stretch the analysis into making all the factors of the PEST as relevant as possible, however by doing this the roles might be reversing; i.e. using the report to fill out a model rather than using a model to contribution to the analysis.

\(^{33}\) Johnson et al
The analysis will contain all the elements that are required for a PEST analysis; however, they are analyzed to the extent of their impacts on Eiendomsspar and thereby in accordance with the previous statement.

The analysis will be performed with respect to Eiendomsspar’s revenue distributions between markets (Figure 2.2); hereby a special focus on Oslo and Sweden, which combined, generates 80 percent of Eiendomsspar’s revenue.\(^\text{34}\)

Some parts will be separated to generate a deeper and more thorough analysis, while other parts that are assumed to be similar would be as one. The financial crisis, which has troubled the world, is a naturally central point in the analysis due to its enormous effects to the real economy that increases the interaction between the different factors in the model.

Because Eiendomsspar has 19 percent of the portfolio in several countries all over the world, a PEST analysis for this segment would provide little contribution due to the large geographical spread.

3.2.1.1 Political

Scandinavia, which represents 81 percent of the portfolio, can be described as a parliamentary representative democratic constitutional monarchy. All three countries have built the political system that can be described as very stable and is very typical Western Europe.

Sweden and Denmark are part of the European Union\(^\text{35}\), while Norway still remain as an outsider. However Norway is close related to the European Union thru the European Economic Area.\(^\text{36}\)

As a member of EEA it allows Norway to participate in the Internal Market on the basis of their application of Internal Market relevant acquisition. The EEA Agreement is based upon the four fundamental pillars of the Internal Market, “the four freedoms”, i.e. freedom of movement of goods, persons, services and capital.

\(^{34}\) Annual Report 2009 and Figure 2.2

\(^{35}\) http://europa.eu/abc/european_countries/index_en.htm

\(^{36}\) http://ec.europa.eu/external_relations/eea/
The economic crisis has diverted a large portion of political attention from the “normal” political tasks towards trying to make economical stimulus and rescue packages to prevent collapse or minimize a regression of their respective economies.

Both in Norway, Sweden and Denmark the respective governments have launched several rescue packages to save both industries and banks.37, 38, 39

These efforts could in some cases entail increase nationalism as countries seek to protect their own economies40, however, as Europe is now a single market and the EU and EEA has, as described above, “the four freedoms” which includes free trade barriers. This will therefore not been seen upon as a threat for Eiendomsspar’s main markets. Instead the political efforts could be seen upon as a positive effect on the European economy in the medium and long run and limit the economic downturn to an extent.

According to economic publications, such as *The Nordic Model - Embracing globalization and sharing risks*, the Nordic model41 is characterized by following points:

- Strong property rights, contract enforcement, and overall ease of doing business.
- Low barriers for free trade
- Nordic countries rank very high in product market freedom according to OECD rankings, this means little product market regulations (Wölf *at el*, 2009).
- Nordic countries have little financial market regulations. Denmark has de lowest regulation burden in EU-1542 (Wölf *at el*, 2009).

39 http://www.fxstreet.com/fundamental/analysis-reports/flash-comment/2008-10-27.v03.html
40 The Economist, February 5th 2009 “The Rise of Economic Nationalism”
41 Economic and social models of the Nordic Countries that is a particular adaption of the mix market economy, which is characterized by more generous welfare states.
42 The first 15 countries that joined EU.
3.2.1.2 Economic Oslo

Norway has a steady economy, which is reflected with the second highest GDP\textsuperscript{43} per capita in the world.\textsuperscript{44} The GDP growth has been steady around two percent annually the last decade and is expected to do so in the next four years. However the financial crises caused a decline in GDP by 1.5 percent in 2009.\textsuperscript{45}

Norway has had a strong economy for several years, which reflects on a strongly integrated welfare system and a high standard of living. A significantly part of Norway’s income is based on oil and gas, which also is Norway’s largest export article.\textsuperscript{46}

As a direct result of the financial crises the interest rate in Norway are at a historical low.\textsuperscript{47} Before the financial crisis Norway also experienced low interest rates, after a decline following the burst of the IT bubble in 2001.\textsuperscript{48} The average NIBOR\textsuperscript{49} at the 4\textsuperscript{th} quarter 2009 was at 2.24 per cent.\textsuperscript{50} Due to an improved economic outlook, Norges Bank put up the base rate by 0.5 percentage points towards the end of last year.\textsuperscript{51}

A strong Norwegian krone\textsuperscript{52}, which is likely to strengthen further next year, combined with low wage growth and improved productivity, means that the anticipating CPI-inflation\textsuperscript{53} of 1.7 per cent in 2010 and 1.3 per cent in 2011, in reflection to 2.1 in 2009. Historical the CPI-inflation was at record high at 3.8 per cent under the last financial crisis, which only can be matched by the IT bobble were the inflation was at 3 per cent. In 2007 the inflation was noted at only 0.8 per cent.\textsuperscript{54}

\textsuperscript{43} Gross Domestic Product
\textsuperscript{44} http://imf.org
\textsuperscript{45} http://www.ssb.no/en/kt/main.html
\textsuperscript{46} http://www.state.gov/r/pa/ei/bgn/3421.htm
\textsuperscript{47} Average interest rate on loans in mortgage companies, insurance companies, state lending institutions and the Norwegian Public Service Pension
\textsuperscript{48} Appendix 3
\textsuperscript{49} Norwegian InterBank Offered Rate
\textsuperscript{50} Appendix 3
\textsuperscript{51} http://www.ssb.no/en/kt/main.html
\textsuperscript{52} http://www.na24.no/article2861528.ece
\textsuperscript{53} Consumer Price Index
\textsuperscript{54} http://www.ssb.no/en/kt/main.html
Historically Norway’s unemployment rate has always been at a very low level. According to SSB\textsuperscript{55} the unemployment rate has fluctuated between 2.5 percent and 4.5 percent since 2000. The predicted forecasts for the next years are just beneath 4 percent.

\textbf{3.2.1.3 Economic Sweden}

As the rest of Scandinavia, Sweden has a stable economy. The GDP per capita was in 2009 at a 24\textsuperscript{th} place beating Denmark with a single place.\textsuperscript{56} However, due to the economic crisis that has hit Sweden hard, mainly because 26.8 percent of GDP comes from industry, Sweden has experienced a decline in GDP by 4.6 percent in 2009.\textsuperscript{57} This is the weakest performance in a single year since the Second World War.\textsuperscript{58} GDP has increased steady in 21\textsuperscript{st} century, with a peak in 2007 and declining thereafter.\textsuperscript{59} The forecast for GDP is an increase the next four years. A modest start is expected, however it will by 2011 be at a normal level of 2.4 percent.\textsuperscript{60}

The current interest rate in Sweden is at an all time low. In the end 2009 the three months Treasury discount notes to 0.17 percent. Under the financial crises in 2008 the rate was at almost 4.5 percent. Sweden has, due to financial difficulties and recession, had to decrease the interest rate several times – at one point with 1.75 percent.\textsuperscript{61} The rate is expected to rise within the next years.\textsuperscript{62}

The CPI inflation shows that from 3.4 percent inflation in 2008 to a decline the next year (-0.3 per cent). The forecast for the next two years shows however, a positive inflation with increasing numbers ending up at 3.2 percent.\textsuperscript{63}

\textsuperscript{55} Statistics Norway (Statistisk Sentralbyrå)
\textsuperscript{56} http://www.indexmundi.com/g/r.aspx?c=sw&v=67
\textsuperscript{57} https://www.cia.gov/library/publications/the-world-factbook/geos/sw.html
\textsuperscript{58} http://www.sweden.gov.se/sb/d/9513
\textsuperscript{59} http://www.scb.se/Pages/TableAndChart____117449.aspx
\textsuperscript{60} http://www.sweden.gov.se/sb/d/9513
\textsuperscript{61} http://www.scb.se/Pages/TableAndChart____32291.aspx
\textsuperscript{63} http://www.riksbank.com/templates/Page.aspx?id=32047
The unemployment rate in Sweden is currently, December 2009, at 9.5 percent. According to the Swedish government, this will also be the unemployment peak. The peak is the highest in the 21st century, but it is lower than the average unemployment in EU. The unemployment rate has average around 6-8 percent in the 21st century.

3.2.1.4 Social
Especially in the last decade there has been an economic upturn. The general upturn has been unbroken since the Second World War. As a result people has been wealthier and has higher demands for leisure. This creates an opportunity since Eiendomsspar’s largest revenue group is Hotel/Restaurants.

In addition there has also been an increasing demand of higher standards in buildings and in Eiendomsspar’s case, office buildings. There has been much refurbishing in the large cities in Europe and Scandinavia is no exception. As a result the quality and price of the buildings has increased.

The trend in all over Europe has been that more people are moving into cities. The current supply is modest and the demand increases means higher prices. In some ways this trend has been broken because of the high prices on houses.

3.2.1.5 Technological
There have not been any single large technological changes that have had a large impact on the industry. The industry must be classified as transparent because of the Internet have given the industry a more efficient method to purchase and look at new prospects and to have a deeper knowledge of the potential new property.

As a consequence of Internet, booking of restaurants and hotels has become easier. This has also been a positive force in marketing.

http://www.swedishwire.com/economy/2955-sweden-unemployment-jumps
3.2.2 Oslo Real Estate Market

In order to be able to conduct a reasonable forecast and to get a more in depth knowledge of the markets where Eiendomsspar has its operations, this chapter will address the market conditions for the real estate market in Oslo, thereby commercial property.65

Due to the sub prime crisis in 2008 followed by the credit squeeze, 2009 also became a difficult year with financial instability. Norway and Oslo was influenced by this, but not as hard as other cities and countries. As mentioned above under the PEST analysis, the Norwegian GDP has experienced a decline in growth, but the outlook is optimistic. As a result there has been a higher unemployment rate in the last years. For 2009 this has caused higher vacancy and declining rental prices.

The property’s location is one of the most important factors when analyzing the potential income from real estate companies. There are different markets for each property type, but the supply and demand are basically affected by the same macro economic factors.

As mentioned above there are several parameters that have an impact on the value of commercial real estate company, and the profitability in the different markets segments. In the following subchapters I will interpret information about rent levels and supply and demand factors within the office segment.

3.2.2.1 Office space in Oslo Region

After experiencing record high economic growth, the sub prime crisis has had a slight negative impact on the Norwegian economy. Nevertheless, the forecasts are now good and entering 2010 the momentum in the economy is positive.66

65 The chapter builds mainly on Oslostudiet 2010, an analysis of the commercial office property segment in Oslo.
In 2009 several reports\textsuperscript{67} have indicated that the temperature in the office letting market was declining and they were correct.\textsuperscript{68} The office rental prices have decreased by as much as 28\% in Oslo CBD\textsuperscript{69} in 2009, the positive macro outlook should dampen downward pressure and the growth are expected to return gradually.\textsuperscript{70}

As seen on Figure 3.2 Oslo is one of the few cities in Europe where prices are bottoming out in the last part of 2009.

**Figure 3.2 – European Office market property Clock**

![European office market property clock 4Q 2009](image)

Typical Norwegian office leases have 5 or 10 years duration. The conclusion is that the volumes currently up for renegotiation in the Oslo region, has a fair chance of still being under-rented, despite the fall in rental prices.\textsuperscript{71}

In 2009 the completions of new buildings and full renovation projects began to impact on the vacancy as only 60 percent where rented out. The total vacancy of the office market was primo 2009 at 5 percent.

\textsuperscript{67} DnBNOR rapporten
\textsuperscript{68} Annual Report 2009
\textsuperscript{69} Central Business District
\textsuperscript{70} Pareto Research Report of Olav Thon Eiendomsselskap
\textsuperscript{71} 2003-2004 price are lower than the prices in November 2009
In the following section I will focus the supply and demand factors in the commercial real estate sector. The objectives are to interpret the market conditions surrounding Eiendomsspar and generate a deeper understanding of the market trends impaction Eiendomsspar’s future.

### 3.2.2.2 Absorption of office space

The figure beneath, 3.3, shows the development in the volume of the commercial property in Oslo, Asker and Bærum as well as the number of employed and number of persons between 20 and 65 years.

**Figure 3.3 – Development in commercial real estate Oslo/Asker/Bærum vs. number of employed in Oslo/Akershus (y= sqm in 1000, x= year, z= tenants in 1000)**

Source: Oslo studiet 2010

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72 This section is base don Oslo studiet 2010
The figure shows that the property mass has increased by 96 percent over a 25 years period. In the same period the employment has only increased by 34 percent. Under the assumption that the market was in balance in 1985 with 2 percent vacancy, the employment numbers and assumption of unchanged use of office space would imply a vacancy rate of 33 percent in 2003. The real number is however a vacancy of 4.8 percent. The explanation is that there has been a significant development in the demand for office space, where the share of persons employed in office demanding sectors has seen a considerable growth in the period analyzed.

**Figure 3.4 – Office space absorption 1986 – 2009 (1,000m²)**

*Source: Oslo Studiet 2010*
In the late 1980’s and in the mid/late 1990’s the absorption was extremely high. In the start of the 1990’s there was a recession and employment rate also fell which resulted in a low absorption. This is also the case in the start of the 21st century, when the IT bubble burst. In 2002 the trend was negative, for the very first time, with a decline of 74,000m².

In the time period from 2005 to 2007 the absorption increased with 200,000m², which is the average for the period, to 250,000m². The employment rate increase in 2007 and 2008 was record high, with almost 300 percent over average.73 The next year the employment increase was beneath average, which also reflected in the low absorption. In addition 2008 also had a low absorption rate. This is most likely the result of the large increase in demand in the two previous years high employment increase.

This subchapter has shown that there is a correlation between the employment growth and the following year’s absorption. The unemployment rate is expected to rise in till 2012. Because of a reduction in GDP growth, including the factors above, it is likely that the demand for office space will be not increase during the next few years.

3.2.2.3 Vacancy in the office sector in Oslo

There is a natural vacancy in most markets, even though it exists a balance in the supply and demand. The vacancy is in this case the percentage of space that is not occupied and can be an indicator of the general health of the office market.

The vacancy increased thru 2009, due to the fact that there were more new completed projects than there was absorption. The completed projects were record high in 2009, with over 365,000m², almost 200 percent over the average absorption. Office vacancy was primo 2010 at 7.2 percent and rising in Oslo, but there are variations in different sub-areas.74 This shows an increase of almost 50 percent.75

73 Average employment increase for the period was 9.000 per year
74 See Figure 3.3
75 Oslo Studiet 2010 and Pareto Research Report Olav Thon Eiendomsselskap
The office vacancy has decreased from 2003-2005 until late 2008 or early 2009 where there has been a rapid increase. Changes in economic conditions have different effects on different types of property and its locations; this is confirmed by the situation in the various regions in Oslo. Due to the change in supply and demand, the regions in Oslo experience differences in absorption and thus also vacancy.\(^76\)

Akershus Eiendom estimates that vacancy will peak at 8.5 percent in 2010. From 2011 the supply of new office space in Oslo is very low, and vacancy is expected to decline back to levels between 6 and 7 percent. The major change in sentiment over the summer 2009 has made renegotiations of lease contracts significantly easier, according to players in the market.

Eiendomsspar has divided Oslo, Asker and Bærum into eight different areas. As seen under in Figure 3.5 only one, Majorstua, had a decline in vacancy in 2009. There has been a large increase in vacancy, especially in Asker/Bærum and Vika.

\(^76\) Pareto Research Report Olav Thon Eiendomsselskap
When considering the vacancy it is important to note that the short run demand is elastic, while the supply is inelastic as demand rises much faster than supply, resulting in an undersupply in the “white” zones.

In the short run, vacancy might rise because employers want to be cost efficient and cut back space per employee rather than move into a larger space. Thus the growth in employment and pressure on vacancy rates will make companies become more space efficient, reducing the demand for space.

### 3.2.2.4 Future development in Oslo

In 2009 the development of new office space was extremely high. The forecasts for 2010 are that the development is going to decrease by over 50 percent to 145.000m². An additional increase for 2011 is predicted, at a level of 180.000m². The new development forecasts are over the 2008 and 2009 absorption numbers at 100.000m².
As these two years were largely influenced by the sub prime crisis, a new economic upturn could decrease the vacancy level in Oslo.

It is also worth mentioning that the CBD in Oslo are the areas with the least vacancy. This could be a result of that no available space for new buildings, therefore the vacancy mostly created by firms moving out of the area. In addition it is also a popular place. As a result the market rent are not pressured as much in the CBD as it is in the districts outside central Oslo.

Eiendomsspar has a majority of their office portfolio in Oslo’s CBD. Which is reflected by Eiendomsspar’s main strategies, which are location, location and location.77

3.2.3 The Scandinavian Hotel market

Pandox, which is partly owned by Eiendomsspar, owns ultimo 2009 29 hotels in Scandinavia, mainly in Sweden. Pandox owns also 13 hotels outside of Scandinavia. These are spread thru Europe and USA. Due to a geographic widespread these hotels will not be taken into consideration.

There are many similarities between the hotel markets in Scandinavia, consequently it is naturally to view Scandinavia region as one. Considering that Eiendomsspar (thru Pandox) operates in all of Scandinavia, justifies the view that Scandinavia counts a single market.

3.2.3.1 Characteristics

There are three main categories in the hotel market; the owners, the operators and the distributors. The Scandinavian region has, opposed to the rest of Europe, seen a clear distinction between these segments. However, the market is still under development, as some of the actors are acting in all three categories.78 The fact that the market is categorized in practice means that the actors specialize in their own role.

77 Annual Report 2009
78 Home Properties Annual Report 2010
Eiendomsspar, thru Pandox and alone, is responsible for owning the hotel and managing hotels. Eiendomsspar is the only company in both of these categories.\textsuperscript{79}

The hotel owners agreements with the hotel operators are normally turnover based, where the owners get a certain minimum rent in addition to a percentage of the hotels operators total revenue. As a result the hotel owners are affected by change in the economic growth and travel activity. Therefore it is of everyone’s interest to get economy of scale.

For Eiendomsspar it is crucial that the operators can create enough RevPAR\textsuperscript{80} ensuring that they cover their demanded yield for the property. In order to fill this goal the owners need to provide well-kept rooms at a good location for the operators. The operators has also incentives to create a high RevPAR as the future renegotiations with the lessor could keep the lease rent ratio to a minimum if the operators could show to good earnings.

Opposite to the fact that Scandinavian hotels are marketed thru chains, hotels outside of such chains are the majority in this market. The market is more and more characterized by the development of common branding, giving travelers both business and leisure, with the same confidence of quality and in addition loyalty programs encourages repurchase. It is expected to see an increased number of hotels entering the chains as larger groups more easily create economic of scale.

\textbf{3.2.3.2 Development}

The last year has due to the sub prime crisis been an economic downturn for the World as well as the Scandinavian countries, which has affected the hotel markets. However the Scandinavian marked has performed better than other markets in the crisis.\textsuperscript{81} The development in GDP is closely correlated to hotel rental income, and is therefore often used as a proxy for the growth in the hotel market.\textsuperscript{82}

In 2009 the RevPAR fell by 11.1 percent as well as the occupancy was down by 7.3 percent. However, at the end of the year the market witnessed an improvement in both RevPAR.

\textsuperscript{79} Home Properties Annual Report 2010

\textsuperscript{80} Revenue Per Available Room, more extensive explanation next page.

\textsuperscript{81} Rezidor Hotel Group Annual Report 2009 – Kurt Ritter CEO and President

\textsuperscript{82} Home Properties Annual Report 2010
Although stable the first months of the year, average room rate weakened as the year progressed, but managed to improve the last month and 2009 came in 4.2 percent below that of last year. In Norway and Sweden, like-for-like RevPAR declined by 12.2 percent and 10.8 percent respectively. The relationship between RevPAR, ARR and the hotel occupancy is:

**Figure 3.6 – RevPAR**

\[
\text{RevPAR} = \frac{\text{Hotel Occupancy} \times \text{ARR}}{\text{Room capacity}} \times \frac{\text{Rooms sold}}{\text{Rooms sold}} = \frac{\text{RevPar in hotels at constant exchange rates}}{\text{Room capacity}}
\]

*Source: Real Estate Finance and Investments*

As Figure 3.7 tells, at the end of 4th quarter in 2009 the RevPAR in Oslo and Stockholm was flattening out and starting to reach the ultimate bottom. This could signal a new upturn for the hotel industry.

A keynote is that GDP and hotel market are closely related, and as the economic forecast for both Sweden and Norway, in a three-year period, is optimistic, this could be a new upturn for the hotel market.

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83 RevPAR for like-for-like = RevPar in hotels at constant exchange rates.

84 Rezidor Hotel Group Annual Report 2009

85 Average Room Rate
The development in 2009 for room capacity, ARR and RevPAR in the Nordic Region is shown in table 4.1 below.

Table 3.1 – Scandinavian Hotel Statistic 2009

A special characteristic for the Scandinavian market is that close to 80 percent of the guests in the region are Nordic nationals. This indicates that GDP expectations and development in the Nordic countries are especially important for room demand and ultimately hotel revenue, making the operators less sensitive to economic movements outside of the Nordic region.86

86 Home Properties Annual Report 2009
The characteristics for the Scandinavian markets are similar, however a difference lies in the distribution of business vs. leisure guests. The ratio for the Nordic countries, without Sweden is close to 50 percent, as of Sweden has over 60 percent. This could imply that the Swedish market is more sensitive to economic state, as it is believed that business travelers are one of the costs being cut in an economic turndown.

As Eiendomsspar own a small number of hotels in other large cities in Europe and North America, it could be noted that the market in North America was slightly worse than Norway. In the large European cities the RevPAR was falling the first half of 2009. The downturn continued, but at a slower pace. A real change in trends cannot yet be perceived.\(^{87}\)

### 3.2.4 Sub Conclusion

To conclude, the current market is beginning to stabilize after a weak year in 2009 caused mainly due to the financial crisis but also a high rate of new office spaces. As a consequence the RevPAR and the office rent is staring to reach a bottom. Some new hotels are expected in a two-year period. This will increase the supply and slowing the upturn that are expected as part of an economic upturn for the countries.

The macro Economics for Norway is looking bright. The GDP are expected to grow. Since the hotel markets are closely correlated with the GDP, the market should be turning. This is also the case for Sweden. However, a more modest growth than Norway is expected.

The vacancy has increased significantly in the greater Oslo, but in the CBD the vacancy has become more stable as in a part the vacancy has decreased. As new office spaces are expected not to exceed the absorption rate, and in addition the economic outlook, the outlook are positive for the real estate market.

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\(^{87}\) Pandox Annual Report 2009
3.3 Branch Analysis

3.3.1 Porters Five Forces

I chose Porters Five Forces (P5F) to analyze the real estate and hotel industry attractiveness. The framework provides an outside-in perspective on the competitive situation within the market, in addition to the relationship between competitors as well as the relationship with costumers, suppliers and other externalities.

The aim of this subchapter is to create an overview of the industry probability and attractiveness that eventually generate a basis for the choice of the value drivers that will be utilized in Eiendomsspar’s revenue forecast.

I prefer to conduct a combined industry analysis of the commercial property and the hotel market.

3.3.1.1 Threat of new entry

To maintain and enhance Eiendomsspar’s level of profit, it is essential to strive to uphold and create barriers of entry, seeking to reduce the rate of competitors entering the market. Due to competition with residential development, there has been little addition of space in the prime office market recently.

Nevertheless, the sentiment has changed and office development in high rental growth areas is currently growing. In general, few firms are willing to enter the prime location real estate market because of the uncertain long yields and rent levels, as well as entering the market and building portfolios involves high start-up costs.

At present time, the competitors in the market are highly concentrated around Nordic players. Due to this fact and especially if the profit margins remain at a high level, there will always be a threat of foreign investors entering the market.

This argument can be justified with the fact that the Scandinavian market for hotels is getting more profitable and there is a possibility that there will be consolidations in the years to come. A possible threat of entry could be larger international hotel chains penetrating the market and acting as both operators and distributors.

Commercial office properties are relative easy to sell, as it is a relative standardized product. Exit costs connected to sale are generally small making exit barriers more or less nonexistent.

---

88 Porter 1980 Competitive Strategy
3.3.1.2 Threat of substitute products

The occupation rate in the CBD in Oslo and the surrounding areas are at a high level and little supply of new office space is expected in the near future. However, there has been a slight increase in vacancy, which today is 5 percent, an increase of 15 percent from the historical low in 2008. The main reason for the increase is that new office spaces have increased in a combination with the financial crisis.

In the outer areas of Oslo the rate of vacancy rate is lower, but few of the tenants in the inner city area would consider these as a substitute. Even with a higher supply during 2009 and with a decreasing supply of new office spaces, it is not likely that this will have large impact on Eiendomsspar’s core market. Hence substitute premises do not pose a large threat in the current market situation in the near future.89

Another aspect that needs to be pointed out is the possibility of tenants purchasing office premises as opposed to leasing. However, this is considered to be a weak threat due to several reasons.90 One reason is that tenants would tie up large amount of capital if they invested in office premises, and will therefore usually find leasing more cost efficient. The company’s flexibility will be reduced and at the same time shifting the focus away from their core business and into the real estate market. However, a threat for Eiendomsspar is new areas in other parts of the city develop to be prestigious areas, deteriorating the perception of “old” prestige locations. The time period for such a threat is long-term and Eiendomsspar could potentially follow such a development.

The hotel industry’s main substitutes within the leisure and holiday segments are such as the caravan industry, rental apartments, cabins for lodging and hostels. This is however not a threat when it comes to the segment of business travelers.

The economic cycle has an impact on the amount companies spend on representation, meeting activity and thereby hotel bookings.

89 Eiendomsspar 2009 The Oslo Study
90 Bruggemann et al 2005 p. 240
The increased technology and improvement of conference calls poses a threat to the hotel industry, as business meetings are more likely to be held using new technology. Another aspect is the increasingly smaller barriers of companies creating new subsidiaries abroad and the facilitating of obtaining trade partners abroad.

3.3.1.3 Costumer Power

As long as the unemployment levels remain at a low level, which is the case in Norway, companies need to offer fringe benefits to compete for employees. As stated above, the unemployment are higher in Sweden, and lower than the European average, so the challenge to get employees are not in the same level as in Norway.

Due to the high occupancy level, the property owners have a strong bargaining power and square meter prices remains at a high level. Many of the tenants are larger firms, however their bargaining power and little influence over the price are weak, due to the competition for the offices, as well as the market being fragmented.

There are a wide variety of choices for the buyers of different segments in the hotel market, ranging from low budget to luxury hotels. The hotels offer products that are to an extent very much standardized within the different price classes and due to the low switching costs for the costumer, leads to a certain degree of costumer power. Hotel offers several benefits for loyalty, such as bonus points, upgrade to better rooms and discount prices. All for keeping costumers coming back to the same hotels. This is especially for business travelers, because this segment often returns to the hotel more often than tourists.

3.3.1.4 Supplier Power

Eiendomsspar has a large portfolio, with a good liquidity, which weakens the supplier power. However, Eiendomsspar is not among the larges player in Scandinavia nor rest of the World. On the other hand Eiendomsspar has suppliers for property management as well as contractors in large maintenance and refurbishment projects and they are constantly working on such projects. Supplier power is considered to be medium.
3.3.1.5 Competitive rivalry

Due to Eiendomsspar not being listed, the segment that Eiendomsspar represents, and the principle strategy if investing in attractive and centrally located properties in Oslo and Sweden and capitals mainly in Europe thru Pandox there are no direct comparable players in the Scandinavian market. However there are a few large real estate companies that hold part of their portfolio in Eiendomsspar’s core segment, but at the same time hold part of their portfolio in other segments. These players can be classified as competitors.

Since there is low vacancy in the prime locations, there is less competition among the competitors that maintains the rent level. The property market remains fragmented and the largest property owners are the life insurance companies, Norwegian Property, Olav Thon, Entra, and various fund structures such as property funds and syndicates.91

Historically, foreign investors have made limited direct investments in the Norwegian market, though participating in various transactions to a greater extent in 2007 that may indicate greater involvement in the future. In Oslo there is still a lot of privately held property. But in the recent years there have been a major consolidation of property in hands of newly established firms.92

3.3.2 Sub Conclusion

As it is relative expensive and difficult to enter the market there are few firms willing to try at entering the real estate markets. Currently the market consists of mostly Nordic players. But as the market is (highly) profitable there is a threat of foreign investors moving in. New locations that could compete with current prime locations are always a threat in real estate in addition to firms purchasing instead of leasing office space. The vacancy has increased in the last years, however as future vacancy is expected to decline the leaser would get less power. The leasers will nonetheless have more power than before the financial crisis due to the vacancy levels.

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91 Home Properties Annual Report 2009
92 Newsec Nordic report Spring 2008 and 2009 p.31
3.4 Internal Analysis

3.4.1 The Boston Consulting Group (BCG) Matrix

The BCG Matrix, Figure 3.7, was developed in the 1970’s by Boston Consulting Group and was a part of their review of the Experience Curve, also Figure 3.7. According to BCG, businesses can be categorized into four categories:

- Businesses that require more cash input than they generate (Question Marks)
- Businesses that generate far more cash than they can profitably reinvest (Cash Cows)
- Businesses that generate and use very little cash (Dogs)
- Businesses that are self-sufficient in cash flows and have a potential of being even larger cash generators (Stars)

Figure 3.7 – The BCG Matrix and the Experience Curve

*Question marks*
These can be cash traps and is the real gamble. They need extensive founding due to they are in development phase. If they do not develop a leading market position before the growth slows, they become big *dogs*. Question marks are very difficult to make into winners. Most end up as big losers.

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93 As described by Boston Consulting Group and Johnson et al
Dogs
With dogs both growth and share are low. They are known to report a profit even though they are net cash users. Eventually they are worthless, and can be described as another cash trap.

Cash cows
The cash use is low due to low market growth. Market share is however high and therefore comparative cash generation is high. Cash cows pay the dividends, pay interest on debt and cover the corporate overhead.

The Stars
They grow fast and therefore need cash, but they are market leaders hence generate large amount of cash. Such products are normally balanced wit net cash flow. Eventually all growth slows and stars become cash cows if they can obtain market share or dogs if they fail to hold the market share.

3.4.1.1 BCG Oslo Office property market
Oslo is Eiendomsspar’s main revenue source. However only approximately ¼ of the revenue are generated by office property.

The market has suffered thru the sub-prime crisis with, as mention under section 3.2.2.3, the vacancy rate is increasing. This has much to do with the increase in number of new projects and that 2009 was a year with significantly new office space finished. The new projects have declined, but there are current building activities and projects in the planning stage. 95

Eiendomsspar has only a small part in new projects, and their only project that is expected be completed in the next three years is a small office space located in CBD. 96 This is in regards to Eiendomsspar’s strategy to have medium size projects with limited risks.

Compared to the total office space stock in Oslo Eiendomsspar’s portfolio is only a minor portfolio. However, Eiendomsspar’s portfolio is located for the most part in CBD that is not completely in the same market as for example Bærum and Asker.

95 Newsec Property Outlook spring 2010
96 Annual Report 2010 and Newsec Property Outlook spring 2010
Hence Eiendomsspar’s market share of Oslo CBD is higher. The market is divided between 30 sizeable property owners, of which Eiendomsspar is one.⁹⁷

The outlook for the office market in Oslo is good as the vacancy is beginning to decrease, the office rent slowly increasing and the Norwegian economy and the GDP is also increasing. The results are however first to be seen in 2011.

3.4.1.2 BCG Scandinavian Hotel market
Over half⁹⁸ of Eiendomsspar’s revenue is generate from Hotels/Restaurants, partly generated by Pandox. Without taking Pandox into account, hotels alone stand for almost 40 percent⁹⁹ of Eiendomsspar’s rent revenue.

The market is widely spread among several players. There are no single firms that own or manage a large section of the market. This creates high competition among the players. Eiendomsspar and Pandox have, thru operating with large chains like Hilton and Rica, managed to get an advantage in relation to the other players. Large and well-known chains attract in general mainly business customers. 

The market has suffered a major downturn, much due to the sub prime crisis and the fact that 2008 was an all time high.¹⁰⁰ Reports indicate that Oslo is soon starting to get an increase in RevPAR, which means higher revenue for Eiendomsspar.

Since 2007 the hotel construction activity has been experiencing growth, however in the third quarter 2009 the trend turned and started to decrease.¹⁰¹ At the present time there are several new hotels and hotel expansions planned. Eiendomsspar is planning an expansion of 110 rooms at Holmenkollen Park Hotel, which are planned to be completed at the end of the 2010.

The market in greater Oslo is also expanding this year with several hotels in the airport area, which will increase the room available by over 35 percent. This could be seen as a threat to the hotels in central Oslo.

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⁹⁷ Newsec Property Outlook spring 2010
⁹⁸ 59 percent
⁹⁹ Annual Report 2010
¹⁰⁰ Akershus Eiendom
¹⁰¹ Akershus Eiendom
Sweden, and thereby Stockholm and Gothenburg where Pandox has most of its portfolio, has also suffered thru 2009. Gothenburg has managed the downturn relative well but high increase in the market cannot be expected. Stockholm has suffered a more severe downturn than the average in Sweden. Therefore, the forecasts are in a two years period to regain growth.

The Scandinavian market has experienced a growth in guest nights in the last year, which can be a reflection of the GDP growth. However, the business segment has decreased slightly. The turnover has decreased by a few percent; a lower RevPAR causes this.

In both Sweden and Norway (Oslo) Eiendomsspar has hotels that are in the upper class segment and is therefore not threatened by low price hotels.

As the World economy is expected to increase the next years the business travelers and eventually leisure travelers are expected to follow. This will cause a higher occupancy rate. Which again will force a higher average room price.

### 3.4.2 Sub Conclusion

Eiendomsspar’s market share in both office space and hotel has to be considered to be medium, however slightly stronger in the hotel market than in the office market. The market share is considered so high because of the largely divided market. Other companies consider Eiendomsspar to be a serious competitor, with a considerable market share.  

Eiendomsspar has had substantial revenue each year, but under the financial crisis the revenue has also dropped. The outlook is better; therefore it is justified to place both markets near the middle of the BCG matrix, slightly into the cash cow corner.

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102 Norwegian Property Annual Report 2009
3.5 SWOT Analysis

To sum up the strategic analysis chapter a SWOT analysis is favored. The analysis focuses on the Strength, Weaknesses, Opportunities and Threats to Eiendomsspar. The framework will summarize the factors that are considered the most influential on Eiendomsspar’s business operations and strategic capabilities. These factors will function as a basis for the following forecast and valuation of Eiendomsspar.

Strengths:

• Favorable situated in high price locations on most of Eiendomsspar’s portfolio, which decreases the risk for downfall in market rent or/and price on buildings. Also favorable countries as in Scandinavia, and especially Norway due to the small impact the financial crisis had.
• Eiendomsspar and Pandox rent out to some of the largest operators, that have strong brand names, in the Scandinavian market.
• CEO Christian Ringnes is a well know figure in Norwegian business, and therefore have the resources to create publicity and positive reputation around Eiendomsspar.
• A somehow diversified portfolio, this could lower the overall risk.
• Made it successfully thru the sub prime crisis
• Profitable market

Weaknesses:

• Eiendomsspar is a relative small player in the market, and therefore has little influence on the market.
• Christian Ringnes is known as Mr. Eiendomsspar, is he bigger than the firm?
• 19 percent of Eiendomsspar portfolio is represented in North Europe as well as in North America. The macroeconomics and markets are different among the countries in addition to the difference from the “home” market.
• The 19 percent is wide spread in different areas which is difficult to asses if it is in collaboration with Eiendomsspar’s overall strategy. It might be spread too wide.
Opportunities:

- Disposal of non-strategic properties, to improve market share as well as coming into a more favorable market.
- The hotels outside Scandinavia represents an opportunity for a market penetration as the hotels that are currently there could be seen upon as “feelers” to get to know the market.
- Tighter collaborations with the most important Nordic hotel operators to ensure continued strong progress. Gathering fewer hotel operators with more hotels to take advantage of the economies of scale.
- Take advantage of new projects and purchase more in strategic segments.
- Both of the clocks that are presented in this chapter have shown that prices are hitting the bottom, and are about or soon, entering a phase where they are about to increase. When or if they do is an important question. They depend, in addition to macro effects that are already mentioned, on a stable supply. A supply not overstepping the absorption will force the market rent to increase.

Threat:

- The factor that imposes the largest threat for Eiendomsspar is a yield up shift. This could probably lead to negative revaluations, in the end affecting the bottom line directly. And as a worst-case scenario, forcing divestment of properties at an unsatisfying price.
- If the employment rate would decrease, the rental income might stagnate, consequently reducing the property value.
- Development projects could create “new” prime locations in the greater city area, thus driving both prices and demand in the current prime locations where most of Eiendomsspar’s commercial properties are situated, downwards.
- As a profitable market, foreign investors represent a threat.
4 Financial Statement Analysis

One of the purposes of a financial analysis is to give parties outside the corporation information about the economic situation and opportunities for development of the corporation. This chapter contains an analysis of Eiendomsspar’s past, which is important to be able to accurately forecast its future.\textsuperscript{103} Therefore this chapter also contains discussions and calculations on accounting principles and techniques, reformulated financial statements to better reflect economic value, analysis of profitability and firm specific risk. The objective of this chapter is to identify value and forecast drivers in order to enhance the quality of the estimated value of Eiendomsspar.

4.1 Review of accounting principles, practices and economic value

The analysis will start with an evaluation of accounting principles and how they affect the measurement of economic value both in general and specifically in the Eiendomsspar’s case. Difference between accounting profitability and economic profitability could arise from incorrect use of accounting principles and/or from the different accounting principles themselves.

Eiendomsspar has to some degree a freedom to choose between allowed alternative principles and methods. By Norwegian law accounting principles should be used consistently over time to ensure the results are comparable over time. Any change in accounting policies are allowed only when the new policies better reflect economic value and thereby economic profitability, thus companies cannot change accounting principles on a regular basis to maximize their accounting value.

In the analysis period Eiendomsspar is using the Norwegian General Accepted Accounting Principles (NGAAP). Eiendomsspar is not required by law to use IFRS as their main competitors use, because Eiendomsspar remains an unlisted company. Therefore it can be difficult to directly compare Eiendomsspar to its peers. However as Eiendomsspar has been consistent with the use of NGAAP throughout the period the reformulation of the statement should be of a higher standard than if they change in the period to IFRS as many firms did.

\textsuperscript{103} Koller et al. p. 159
Eiendomsspar’s interest in Pandox is accounted for using the equity method. This means that Eiendomsspar keeps such equities, as Pandox, as an asset. 50 percent of Pandox net income increases the investment. In the income statement, the proportional share, 50 percent, of Pandox’s net income is reported as a single line item. This method applies to all of Eiendomsspar’s joint controlled firms.

Shares / interests in subsidiaries are eliminated in accordance with the purchase method. This means that the cost price for the shares, together with the subsidiaries equity at the time of purchase, taking into consideration the difference between the deferred tax in the subsidiaries and the value that is reflected in the transaction price.

Paid additional value beyond the value of equity is divided on the individual properties in accordance with the value considerations that lay behind the acquisition, and depreciated according to the same principles as the other properties. The difference between the recorded out-put tax in the subsidiaries and the value that is reflected in the transaction price, reversed / recognized over time as deferred taxes.\textsuperscript{104}

For foreign subsidiaries the income statement are translated into NOK according to the average exchange rate for the year and the balance after the currency exchange rate on the balance sheet date. Changes in equity due to currency exchange rate changes are recorded directly against group’s equity.\textsuperscript{105}

Investments in joint ventures are a large part of Eiendomsspar’s activity. Shares in joint ventures are accounted for according to equity method in the consolidated financial statements.

Real estates are listed at purchasing cost (including depreciation), reduced by cumulative accounting depreciation. The real estate portfolio is valued together. I have made no depreciation of the individual properties to the extent that there is sufficient excess of the remaining real states.

\textsuperscript{104} Annual Report 2009
\textsuperscript{105} Annual Report 2009
The ordinary financial statements are not designed for valuation purposes and therefore it is necessary to rearrange the accounting statements to obtain an analytical format for the consolidated income statement and balance sheet.

By doing this the adjusted analytical statements reflect the economic and not the accounting performance of the company. In this approach the various items are characterized according to their nature of being operational, non-operational or financial. We are then able to compute ratios, which are independent of leverage and only focus on the operations of the company.

4.2 Quality review of the financial statements

The financial statements are the core information needed to perform a valuation. A manipulation of the financial statements will distort the measurements of the economic value.

The auditor’s report has no objections in the accounting and states that in their opinion Eiendomsspar follows the rules and regulation for financial reporting. Under the entire period analyzed, Eiendomsspar has used the same accounting firm. Furthermore, this could be characterized as a signal of high quality.

The overall understanding from the author is that the financial information provided by Eiendomsspar is of high quality.

4.3 Reformulated financial statements

Due to different accounting principles, financial statements may be distorted and hereby show an incorrect economic performance. To analyze the historical performance better the financial statements are reorganized to reflect the economic performance more correctly. The raw data is included in the appendix. The financial statements are reformulated in accordance with the recommendations in “Regnskabsanalyse og værdiansættelse” by Jens O. Elling and Ole Sørensen.

106 See Appendix 4
The income statement is reformulated to better reflect economic value by introducing net operating profit-adjusted taxes (NOPAT). NOPAT is the after tax operating profit available to the investors.\(^\text{107}\)

Eiendomsspar has a large income from joint ventures and sales of property that fluctuate over the period. This income has been classified as non-operational and does thereby not affect NOPAT.

The taxes also vary largely in the period. The overall taxes have been weighted by the different income in the raw data analysis. The different weights have since been used in the reformulation.

Table 4.1 - Reformulated income statement

<table>
<thead>
<tr>
<th>In million NOK</th>
<th>Reformulated income statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005</td>
</tr>
<tr>
<td>Net income</td>
<td>346.2</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>37.4</td>
</tr>
<tr>
<td>Adjusted net income from net operation before tax</td>
<td>308.8</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>95.8</td>
</tr>
<tr>
<td>Depreciation</td>
<td>30.8</td>
</tr>
<tr>
<td>Adjusted net income before tax</td>
<td>182.2</td>
</tr>
<tr>
<td>Tax</td>
<td>18.1</td>
</tr>
<tr>
<td>Operating Income after tax (NOPAT)</td>
<td>164.1</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>-</td>
</tr>
<tr>
<td>Income from sale of property</td>
<td>271.1</td>
</tr>
<tr>
<td>Other operating net income before tax</td>
<td>271.1</td>
</tr>
<tr>
<td>Tax</td>
<td>14.2</td>
</tr>
<tr>
<td>Operating net income after tax</td>
<td>256.9</td>
</tr>
<tr>
<td>Total Net Income before tax</td>
<td>455.3</td>
</tr>
<tr>
<td>Tax</td>
<td>32.2</td>
</tr>
<tr>
<td>Total Net income after tax</td>
<td>423.1</td>
</tr>
</tbody>
</table>

The balance sheet is reorganized to reflect the capital invested in Eiendomsspar’s operations. Operating assets subtracted operating liabilities can be defined as operating working capital. Deferred tax has been classified as operating and is therefore included in operational liabilities.

As Eiendomsspar business is property the post: “Land, Buildings and other property” is classified as an operational asset. Eiendomsspar has no goodwill under the whole period.

\(^{107}\) McKinsey (2005)
Table 4.2 – Reformulated Balance Sheet

<table>
<thead>
<tr>
<th>In million NOK</th>
<th>Reformulated Balance sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005</td>
</tr>
<tr>
<td><strong>Operation assets</strong></td>
<td></td>
</tr>
<tr>
<td>Land, buildings and other property</td>
<td>2,906,6</td>
</tr>
<tr>
<td>Fixtures, furnishings, office machines, etc.</td>
<td>24,7</td>
</tr>
<tr>
<td>Investments in subsidiaries</td>
<td>-</td>
</tr>
<tr>
<td>Loans to subsidiaries</td>
<td>-</td>
</tr>
<tr>
<td>Investments in joint ventures</td>
<td>631,4</td>
</tr>
<tr>
<td>Investments in associates</td>
<td>26,1</td>
</tr>
<tr>
<td>Other Receivables</td>
<td>28,1</td>
</tr>
<tr>
<td>Other assets</td>
<td>43,1</td>
</tr>
<tr>
<td><strong>Net Operation assets</strong></td>
<td>3,660,2</td>
</tr>
<tr>
<td><strong>Operating liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Deferred tax</td>
<td>343,5</td>
</tr>
<tr>
<td>Other provisions</td>
<td>22,7</td>
</tr>
<tr>
<td>Short term interest on debt</td>
<td>93,5</td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>8,5</td>
</tr>
<tr>
<td>Tax cut, holiday pay etc.</td>
<td>14,8</td>
</tr>
<tr>
<td>Company tax payable</td>
<td>31,4</td>
</tr>
<tr>
<td>Provision for interest</td>
<td>21,7</td>
</tr>
<tr>
<td>Advance</td>
<td>5,1</td>
</tr>
<tr>
<td>Dividend</td>
<td>55,7</td>
</tr>
<tr>
<td><strong>Other net operating liabilities</strong></td>
<td>666,2</td>
</tr>
<tr>
<td><strong>Working Capital</strong></td>
<td>2,994,0</td>
</tr>
<tr>
<td><strong>Financial liabilities and equity</strong></td>
<td></td>
</tr>
<tr>
<td>Share Capital</td>
<td>338,7</td>
</tr>
<tr>
<td>Own Stocks</td>
<td>1,1</td>
</tr>
<tr>
<td>Share premium account</td>
<td>166,6</td>
</tr>
<tr>
<td>Minority interests</td>
<td>-</td>
</tr>
<tr>
<td><strong>Other Equity</strong></td>
<td>591,4</td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td>1,095,6</td>
</tr>
<tr>
<td><strong>Financial Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Liabilities to credit institutions</td>
<td>2,573,7</td>
</tr>
<tr>
<td><strong>Total Financial Liabilities</strong></td>
<td>2,573,7</td>
</tr>
<tr>
<td><strong>Financial Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Investments in shares</td>
<td>26,3</td>
</tr>
<tr>
<td>Loans to joint ventures</td>
<td>498,7</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>150,3</td>
</tr>
<tr>
<td><strong>Total Financial Assets</strong></td>
<td>675,3</td>
</tr>
<tr>
<td><strong>Net Financial Assets</strong></td>
<td>1,898,4</td>
</tr>
</tbody>
</table>

Source: Own Creation
4.4 Analysis of profitability

In this subchapter Eiendomsspar’s historical profitability will be analyzed. The analysis will focus on economic profitability and will therefore be based on the reformulations made in subchapter 4.3.

The measurement used to express economic profitability is Return On Invested Capital (ROIC). ROIC focuses on the core operations of the company and is therefore a good approximation of the company’s profitability.

**Equation 4.1 - Return On Invested Capital**

\[
\text{ROIC} = \frac{\text{Net Income} - \text{Dividends}}{\text{Total Capital}}
\]

This paper has however not used invested capital\(_{t-1}\), but the invested capital at the beginning of the year. A minimum requirement is that ROIC is higher than the estimated WACC.\(^{108}\) This relationship will be discussed later in the thesis.

**Table 4.3 – Return on Invested Capital**

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROIC</strong></td>
<td>14.06%</td>
<td>6.68%</td>
<td>5.91%</td>
<td>4.71%</td>
<td>5.61%</td>
</tr>
</tbody>
</table>

Source: Own Creation

ROIC has decreased from 2005 and been relative stable the next four years. 2005 was an extremely good year for Eiendomsspar with large sales of property and lower expenses than the other years. The ROIC is low from 2006, but has exceeded the WACC, which is a minimum requirement.\(^{109}\) Another important fact is that Eiendomsspar under the period has increased the Total Capital extensively, over 50 percent; which will have a negative influence on the ROIC.

\(^{108}\) WACC will be discussed later in the thesis.

\(^{109}\) WACC Analysis, Chapter 7
The operating income has increased every year in till 2009 there were a drop back to 2005 level.\textsuperscript{110} The difference between the years is mainly sale of property, which fluctuates largely. This has to be a part of the ROIC because this is a main part of Eiendomsspar’s income. However this is not classified as a operating income, but a financial income.

To better analyze the Eiendomsspar’s historical performance ROIC has been decomposed into key performance drivers as shown in Figure 4.1

**Figure 4.1 – Decomposition of ROIC (McKinsey, 2005)**

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4.1.png}
\caption{Decomposition of ROIC (McKinsey, 2005)}
\end{figure}

\textit{Source: McKinsey 2005}

\textsuperscript{110} Table 4.1
The performance is calculated in three levels. In Table 4.4, the calculations of the operating performance measurements, level 1 are presented.

**Table 4.4 – Operating Performance Level 1**

<table>
<thead>
<tr>
<th>Key Ratio Analysis</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>49.71%</td>
<td>15.78%</td>
<td>13.37%</td>
<td>9.64%</td>
<td>16.31%</td>
</tr>
<tr>
<td>ROIC (after tax)</td>
<td>14.1%</td>
<td>6.7%</td>
<td>5.9%</td>
<td>4.7%</td>
<td>5.6%</td>
</tr>
<tr>
<td>RONA</td>
<td>5.48%</td>
<td>5.79%</td>
<td>5.59%</td>
<td>4.66%</td>
<td>3.34%</td>
</tr>
<tr>
<td>r (effective)</td>
<td>4.23%</td>
<td>4.38%</td>
<td>5.03%</td>
<td>5.42%</td>
<td>4.54%</td>
</tr>
<tr>
<td>SPREAD</td>
<td>9.83%</td>
<td>2.29%</td>
<td>0.88%</td>
<td>-0.71%</td>
<td>1.06%</td>
</tr>
<tr>
<td>FGEAR</td>
<td>1.73</td>
<td>1.47</td>
<td>1.94</td>
<td>2.04</td>
<td>2.16</td>
</tr>
<tr>
<td>DGEAR</td>
<td>0.22</td>
<td>0.27</td>
<td>0.22</td>
<td>0.17</td>
<td>0.19</td>
</tr>
</tbody>
</table>

*Source: Own Creation*

In the breakdown of these numbers, it is clear that the 2005 numbers are much better than the rest of the period. Therefore, the 2005 numbers will not be taken into consideration as much as the other years.

Eiendomsspar’s ROE has in the period (2006-2009) been stable. 2008 was a down year – a reflection of the world’s economic state. However, a 15 percent ROE is a stable and positive trend.

Eiendomsspar is highly financed by debt as FGGEAR and DGEAR shows. Appendix 4 and 9 understates also this fact. Most of the debt is however long-term debt. As long as the SPREAD is positive, a high FGGEAR is positive, as it only generates higher revenue. In 2008 Eiendomsspar had a negative SPREAD, which means that the firm has a negative gearing because ROE would decline in comparison to Working Capital or Net operating assets.

Because of the high long-term debt, the short-term debt, also known as operating liabilities is low. Compared to Net Operating Assets, it is low throughout the period, which DGEAR is a picture of. Overall, Eiendomsspar seems to be a healthy firm. Large revenues from sale of property in 2005 could inflate the picture, but is part of Eiendomsspar’s business and will happen in certain years also in the future. 2009 is another example of a year with high revenues in sale of property.
4.5 Unsystematic Risk

In addition to variation in revenues and profitability, a firm’s liquidity, financing and ability to pay its mortgage affects the firm specific risk. This subchapter is going to examine different ratios and key performance indicators to analyze Eiendomsspar’s financial risk.

A liquidity analysis evaluates the firm’s ability to meet its short-term obligations. If a company has difficulties meeting its short-term commitments the firm can be categorized as highly risky and it also may eventually go bankrupt. Measures such as the current ratio and acid test are the two most common ratios for describing a firm’s liquidity situation. The current ratio is described as current operating assets divided by current operating liabilities while the acid test is the most liquid current operating assets.

Table 4.5 – Liquid ratio

<table>
<thead>
<tr>
<th>Liquidity ratio</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio</td>
<td>5,49</td>
<td>4,74</td>
<td>5,50</td>
<td>6,79</td>
<td>6,20</td>
</tr>
<tr>
<td>Acid test ratio</td>
<td>1,29</td>
<td>0,85</td>
<td>0,96</td>
<td>2,19</td>
<td>1,55</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>5,46</td>
<td>4,71</td>
<td>5,47</td>
<td>6,75</td>
<td>6,16</td>
</tr>
</tbody>
</table>

Source: Own Creation

As seen in Table 4.5 Eiendomsspar has a respectable liquidity. Much of this is due to the buildings are classified as operating assets. However, the Acid test ratio should be over 1. This is not the case in 2006 and 2007. The reason could be described as the loans to joint ventures are high in till 2007, and the net operating assets are increasing thru the period, which has a positive effect on the acid test. However, the trend shows positive signs. This is the case for all the four ratios.

It is important to note current ratio is high because of the property is classified as current assets.
4.6 Stock Performance

The performance of any company is measured by the stock price. In order to get a better picture of the performance in the period an index based graph with Olav Thon Eiendomsselskap (OLT), and OSEBX.

Graph – 4.1 EISP, OLT and OSBEX index based

The graph above shows that Eiendomsspar has done exceptionally well since 2001. In addition to outperformed OSEBX, Eiendomsspar has also performed much better than OLT. It shows clearly that the real estate industry has done well, but Eiendomsspar was hit relatively harder in the financial crisis and the stock almost halved in value.

Eiendomsspar is a relative new firm; with large growth in the period above and such a growth performance as shown above is not expected to continue as the firm is starting to mature.
4.7 Financial Risk

Debt

Total debt has increased in the budgeting period; however, the debt/equity ratio has remained the same. Acquiring new buildings are expensive, and Eiendomsspar’s main approach is to lend. 59 percent of the long-term debt is to be renegotiated in 2010. A large uncertainty is therefore presented. However, Eiendomsspar has a good connection with the lenders, and has not so far had a problem in repaying the debt outstanding.

In order to minimize the debt risk related to change in the interest rate Eiendomsspar uses swap\(^{111}\), cap\(^{112}\) and forward rate agreement.\(^{113}\) These derivates are active used by Eiendomsspar.

Currency

As a result of operating across borders Eiendomsspar do have a currency risk. For those countries in which operations are placed the risk is small since purchases and wages and other operating costs are paid in local currencies. As a large part of Eiendomsspar’s portfolio is placed in Sweden that has a currency that has been unstable compared to NOK, the risk has increased.

Interest rate

Interest rate hikes or cuts primarily affect the value of debt outstanding, which is important as long as Eiendomsspar is close its loans prematurely. Especially in the light of the current debt situation this risk is one of the greatest risk to Eiendomsspar at present time.

\(^{111}\) One party exchanges a stream of interest payments for another party's stream of cash flows

\(^{112}\) An upper limit on interest rate

\(^{113}\) One party pays a fixed interest rate, and receives a floating interest rate equal to a underlying rate
4.8 Financial Statement Summary

Eiendomsspar has thru the entire period used Norwegian accounting standards and not IFRS. Therefore Eiendomsspar becomes difficult to comparer to other peers with different accounting standards.

Thru the whole period Eiendomsspar has generated a high profit, much due to sales of property and investments in joint ventures. Some ratios have shown underperformance in the middle of the period. This was however expected when looking at the strategic analysis. ROIC is one of the most important ratios and shows a steady return for most of the period, but more importantly a positive trend. The low numbers can be explained by a company in high growth including a high investment level and the fact that income from joint ventures are not a part of the formula, because the numbers would vary too much as this financial post fluctuates extensively thru the period.

Eiendomsspar has also positive liquid ratios. However, in the middle of the period the acid test turned under 1. The negative outcome can be explained by high loans to joint ventures. In addition net operating assets increased which caused the acid test to become positive in the end of the period.

Eiendomsspar will shortly renegotiate 59 percent of the long-term debt. This will be a major risk for the company and will have a large effect on Eiendomsspar’s future.
5 Forecast

5.1 Introduction
Forecasting is a vital part of company valuation. It is necessary to estimate future cash flows to be able to determine the present value of future cash flows, as the DCF analysis is one of the core parts of this thesis. It is important to state that no one can predict the future. I will make calculated estimates (might also be termed as educated guesses) on how the thesis look upon the development in the near future based on the analysis already performed.

The forecasting of Eiendomsspar’s future cash flows will be made with references to the strategic analysis in Chapter 3 which will then be coupled with the financial analysis from Chapter 4. The period I have chosen for our projections is the next six years, that is, 2010 – 2015, as the period chosen exceeds e.g. the economic indicator data we collected in Chapter 3 this entails that a few assumptions have to be made along the way, these will be clearly stated.

5.2 Investments
Eiendomsspar has under the analyzed period grown considerably. Both thru investments in joint venture, mostly Pandox, and by investments thru Eiendomsspar. It is my understanding that Eiendomsspar will continue this growth in the forecast period.

The main reasons for this is that both the rent price and RevPAR are bottoming out and therefore the outlook for a new upturn is good. The world has just experience a financial crisis and is now in an economic upturn. The rent is low in both Norway and Sweden, which are Eiendomsspar’s main markets.

Eiendomsspar is heavily financed by debt. Since the rent is historically low in both Norway and Denmark, the thesis will also state that this is the path to follow also in the future.

The consequence of the assumption that Eiendomsspar will continue to grow will be that in the first part that the Working Capital will increase each year and as a direct consequence the FCF will be negative.
5.3 Net Revenue

In chapter 3 the thesis analyzed Eiendomsspar’s major markets and established that they were both bottoming out and on the brink of starting an new upturn. Norway, thereby mostly Oslo, which is where Eiendomsspar generated most of its revenue, is categorized as a positive place for both real estate and hotel business.

Sweden has had some more difficulties with the effects of the financial crisis. Currently the country is in good condition and the outlooks for Eiendomsspar’s segments are also positive here. However, a slower growth in Sweden overall than in Norway are expected due to more exclusive residents in mainly CBD in Oslo.

The changes in the macro analysis will only be considered to have a positive effect on Eiendomsspar as the estimates from, SSB among others, are evaluation the world economy to have a bright future.

Assuming that Eiendomsspar continues to follow their current strategy and can make profitable investments as we have seen in 2005 and 2009, Eiendomsspar will most likely increase the revenue.

It is difficult to estimate over a long period, and even more difficult to estimate numbers that varies a great deal, like sales of property. Therefore Eiendomsspar has a negative trend the first year of the estimations, as 2009 was a very profitable year.

The net income from rental will rise the next years, but will slowly start to stabilize as the market enters a new cycle.

| Source: Own Creation |

Table 5.1 – Eiendomsspar’s Estimated Revenue Development 2009 – 2015

<table>
<thead>
<tr>
<th>NOK '000 000</th>
<th>2008</th>
<th>2009</th>
<th>2010e</th>
<th>2011e</th>
<th>2012e</th>
<th>2013e</th>
<th>2014e</th>
<th>2015e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>444,20</td>
<td>454,20</td>
<td>490,54</td>
<td>554,31</td>
<td>609,74</td>
<td>646,32</td>
<td>685,10</td>
<td>733,06</td>
</tr>
<tr>
<td>Change</td>
<td>6,29 %</td>
<td>2,25 %</td>
<td>8,00 %</td>
<td>13,00 %</td>
<td>10,00 %</td>
<td>6,00 %</td>
<td>6,00 %</td>
<td>7,00 %</td>
</tr>
</tbody>
</table>

For a full copy of the forecasted income see Appendix 5 and 6.
5.3 Costs

Eiendomsspar has not too high cost compared to other firms. The company does not have sales and distribution expenses and production costs that are commonly large post in the income statement.

Administrative expenses are not an especially large item on Eiendomsspar’s income statement. It should however not be ignored as the thesis forecasts a larger portfolio. A larger portfolio will demand more employees and the costs is therefore likely to increase.

Refurbishing costs is a growing cost item in Eiendomsspar’s income statement. It is crucial for the value creation of Eiendomsspar’s properties. The cost will increase with increasing revenue as it is forecasted a larger portfolio. The consequence is higher refurbishing cost.

Eiendomsspar has each year depreciated a relative small amount of its total portfolio. However it is not an unimportant cost element, and for the future period it is in the same percentage as the analyzed period, when comparing to total property owned.

One of the main cost items is interest expense. It will continue to be a major part as Eiendomsspar’s debt/equity ratio is forecasted to be at the current level. The post will lie around 5.5 percent of long-term liabilities. As discussed in the previous chapter and under the Debt sub-chapter the rent level on the long-term liabilities is a major uncertainty for Eiendomsspar and therefore for the thesis and its valuation.
5.4 Working Capital

Net working capital is defined as current assets less current liabilities from the Balance Sheet.\(^{114}\) Net working capital is of particular interest in such a way that any change in this item ultimately affects the free cash flow of Eiendomsspar. Eiendomsspar’s working capital has always been exceptional good, because real estate is classified as an operational asset. The expectations are that the working capital will grow accordingly to the growth of the company’s income.

### Table 5.2 – Eiendomsspar’s working capital

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NWC</td>
<td>4805,10</td>
<td>4930,10</td>
<td>5324,51</td>
<td>6016,69</td>
<td>6618,36</td>
<td>7015,47</td>
<td>7436,39</td>
<td>7956,94</td>
</tr>
<tr>
<td>NWC as share of revenue</td>
<td>9,24 %</td>
<td>9,21 %</td>
<td>9,21 %</td>
<td>9,21 %</td>
<td>9,21 %</td>
<td>9,21 %</td>
<td>9,21 %</td>
<td>9,21 %</td>
</tr>
<tr>
<td>Change</td>
<td>25,61 %</td>
<td>2,60 %</td>
<td>8,00 %</td>
<td>13,00 %</td>
<td>10,00 %</td>
<td>6,00 %</td>
<td>6,00 %</td>
<td>7,00 %</td>
</tr>
</tbody>
</table>

Table 5.2 illustrates the development of the working capital in the period. The change in the net working capital is modest, but with a slight increase, due to a increase in the rent and RevPAR levels that are expected. The change increase is not as high the previous years, but a manageable for a firm in Eiendomsspar’s strong position especially in light of the excepted economic upturn.

5.6 Free Cash Flow

After examining the projections for Eiendomsspar’s profits for the forecasting period we observe that the bottom line result continues to be positive. However, even though it is generally prudent to look at a company’s outcomes for the year to see if it’s really making or losing money, it is more appropriate for us to examine the company’s free cash flow.

The Free Cash Flow (FCF) is the cash flow, which is available to investors after all investments necessary for growths have been made.\(^{115}\) This is an item that is of particular interest, as these cash flows will be used for our valuation in the next chapter.

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\(^{114}\) E.g. Brealy et al, 2006

\(^{115}\) Brealy et al, 2006
Referring to table 5.3, the development is continuing to be better compared to the analyzed period. After three years Eiendomsspar gets a positive FCF. Eiendomsspar’s negative FCF is not a negative sign, because Eiendomsspar has, and still will make large investments. These investments are crucial for Eiendomsspar’s future and the future income. However, it is a positive sign that FCF has in the second half of the period gone from negative to positive.

5.7 Debt

It is important to remember that Eiendomsspar is mostly financed by debt. The debt level is one of Eiendomsspar’s greatest risks. Eiendomsspar has increased the short-term loans to 484 million. The long-term debt is split up in two different sections, where both have an average interest of 4.2 percent. 41 percent of the loans, has an average of 4.7-year before interest is due. The rest, 59 percent, is to be renegotiated within 2010.116

It is expected that it will be a tough task to renegotiate the credit Due to the banks’ more cautious approach to risk taking following the financial crisis.

However, Eiendomsspar has, as far as this paper knows, always kept its annual payments and are forecasted to increase the income. Therefore it is expected that Eiendomsspar will be able to renegotiate all of its debt within the period close to similar conditions, resulting in minimal changes in overall debt levels and costs.

116 Annual Report 2009
5.8 Conclusion

Given the assumptions Eiendomsspar will continue to be profitable also for the forecasted period. However, the net profit will decrease in the beginning of the period and later increase. Operating assets and equity will steady increase through the period as the portfolio increases.

### Table 5.3 Estimates for Eiendomsspar 2010 – 2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>444,20</td>
<td>454,20</td>
<td>490,54</td>
<td>554,31</td>
<td>609,74</td>
<td>646,32</td>
<td>685,10</td>
<td>733,05</td>
</tr>
<tr>
<td>Margin Total</td>
<td>350,16</td>
<td>406,13</td>
<td>354,41</td>
<td>424,04</td>
<td>492,36</td>
<td>521,90</td>
<td>553,22</td>
<td>591,94</td>
</tr>
<tr>
<td>Net Profit</td>
<td>187,93</td>
<td>223,51</td>
<td>171,10</td>
<td>215,44</td>
<td>261,29</td>
<td>275,27</td>
<td>290,01</td>
<td>308,41</td>
</tr>
<tr>
<td>Operating Assets</td>
<td>4805,10</td>
<td>4930,10</td>
<td>5324,51</td>
<td>6016,69</td>
<td>6618,36</td>
<td>7015,47</td>
<td>7436,39</td>
<td>7956,94</td>
</tr>
<tr>
<td>Equity</td>
<td>1580,09</td>
<td>1558,20</td>
<td>1660,14</td>
<td>1850,49</td>
<td>2007,73</td>
<td>2098,95</td>
<td>2194,14</td>
<td>2315,09</td>
</tr>
<tr>
<td>Free Cash Flow</td>
<td>-629,54</td>
<td>-696,57</td>
<td>-40,00</td>
<td>-268,14</td>
<td>-109,31</td>
<td>124,80</td>
<td>132,29</td>
<td>71,40</td>
</tr>
</tbody>
</table>

*Source: Own Creation*

It is assumed that the revenue generated from sales of property and other financial revenue is to be at 35 percent of rent income. This is a decrease from 2009 values, but it is difficult to forecast an exact number.
6 The Cost of Capital

This chapter will give an answer to the sub research question “What is the most accurate cost of capital for Eiendomsspar?” The results of this chapter will contribute to a more accurate valuation of Eiendomsspar. Therefore this is an important chapter in the thesis because of the important of the determination of the factors, which later will be used in the valuation. To obtain the cost of capital for Eiendomsspar, a number of different theoretical approaches are undertaken.

6.1 Cost of Equity

In order to estimate Eiendomsspar’s cost of equity, the capital asset pricing model is chosen. Each component of the CAPM is calculated in the following section.

Risk-free rate

When valuing a company the rate of return on an asset without risk is used as the risk free rate, and an estimation based on the Norwegian 10-year government bond is a proxy for the risk free rate. After examining the monthly rate on the then year government bond in 2009, the average risk-free rate is calculated to approximately 4.03 percent.\(^\text{117}\)

The currency difference coming from Pandox is already adjusted in the annual report and since the corresponding cash flows and cost of capital is denominated in NOK, only the Norwegian bond rate is relevant.

Beta

Beta is estimated by using Eiendomsspar’s monthly return over the entire analyzed period. Ideally monthly returns are preferred to minimize bias. As Eiendomsspar stock is rarely traded, and thereby becomes illiquid, monthly are the best time period chosen.

I have performed a linear regression analysis in excel on the stock returns against markets returns (OSEBX) for the specified period to derive the company’s beta.

\(^{117}\) The calculations are shown in Appendix 6
The regression analysis estimated a beta of approximately 0.37.\textsuperscript{118} This means that in the period analyzed Eiendomsspar has fluctuated less than OSBEX.

There are several ways to find a company’s beta. In addition to regression analysis, beta is thru basic formulas and graphical linear regression in Excel. The X and Y Scatter graph below, graph 6.1, shows Eiendomsspar’s returns vs OSEBX.

Graph 6.1 – Eiendomsspar’s Returns vs OSEBX

\begin{equation*}
\text{EISP Returns vs OSEBX}
\end{equation*}

\begin{align*}
y &= 0.3709x + 0.0211 \\
R^2 &= 0.19287
\end{align*}

\textit{Source: Own creation}

The regression analyze is performed from February 2001 to December 2009. This creates 107 observations, which is enough to get a reliable result. However, Eiendomsspar created a 1:4 split in 2006, one of the main objectives was to get more transaction on the stock. After making a similar regression on the period after the stock split, the beta was only slightly higher at 0.39. At this case, the number of observations was on the borderline, with only 44. The low beta could be a result of low trading activity of the stock.

Furthermore, a small peers analysis is performed with Olav Thon Eiendomsselskap (OLT). This company has however a much higher trading activity.

\textsuperscript{118} Appendix 8
The results for the same period show that OLT also has a low beta at 0.51. This could mean that Eiendomsspar’s beta is more accurate than anticipated above.

The figure beneath describes the Beta movements in Eiendomsspar and OLT since January 2004. The meaning of the graph is to show that under the period beta can fluctuate and the beta using in this thesis is similar to the level ultimo 2009.

Graph 6.2 – Beta Eiendomsspar and OLT

Source: Own Creation

In the regression analysis only a small portion of each stock’s total risk comes from the movements in the market. The R-squared ($R^2$) figure gives us the part of the stock’s risk, in percentage, that actually comes from market movements, the systematic risk, and the remaining part is contributed to the un-systematic risk, or the unique risk, of holding the companies’ share.

When estimating the beta with the regression analysis the R-square was calculated to 0.19, which means that 19% of the stocks total risk is explained by the market movements, the systematic risk and the remaining portion, 81%, is the stock’s unique risk, the unsystematic risk.

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The low t-test value and high p-value of the beta indicates that the market is not very significant for the development in the share price of Eiendomsspar.\textsuperscript{120}

To verify the results, the correlation between EISP & OLT and EISP & OSEBX have been measured. The correlation coefficient measures the degree of linear relation between the returns. EISP and OLT have a correlation of 0.25, while EISP and OSBEX have a correlation of 0.43.

**Market risk premium**

Market risk premium is defined as the difference between the expected return of the market and the expected return on the risk-free bond.\textsuperscript{121} It is implicitly what an investor is paid for investing in a risky asset. There exist several methods for estimating the market risk premium, the most widespread is based on historical premiums. Practitioners argue of a level between 4.5-5.5 percent. It is also advocated that the market risk premium will change over time and is conditional on a number of features in the economy – not an absolute.\textsuperscript{122}

None of the methods has gained universal acceptance because of its shortcomings.\textsuperscript{123} As a result of this, the belief is that the most precise estimate is provided by analysts forecast of the risk premium. However, to provide a double check the risk premium for the last 12 months, 2009, is provided. The result was just below 5 percent annually. 2009 was a good year for OSEBX with low interest rate. Therefore, a 5.5 percent market risk premium is the risk premium that is used to estimate the WACC.

\textsuperscript{120} Appendix 9
\textsuperscript{121} Harris et.al 2001 *The market risk premium*
\textsuperscript{122} Harris et.al 2001 p.15 *The market risk premium*
\textsuperscript{123} Koller et.al 2005 p.298
6.1.1 Calculations of cost of equity / CAPM

Before I proceed with the process I would like to review the Capital Asset Pricing Model (CAPM), which was created with relations to Markowitz’s portfolio theory, and define processes in more detail. In the estimation of the owner’s required rate of return it is recommended to use the CAPM.\(^{124}\)

**Figure 6.1 - The Capital Asset Pricing Model**

Under the assumption that investors requires a compensation or a premium, for taking on additional risk, CAPM looks at the connection between the rate of return on the specific corporations’ stocks and the rate of return on the entire stock market, the market portfolio. It then follows that differences in rate of returns reflect differences in required market risk premiums as Figure 6.1 shows above.

CAPM is based on certain assumptions; investors choose a portfolio of stocks which each has different qualities, but such that they together take full advantage of diversification.

This assumption makes the sole purpose of the stock market pricing to determine the market risk premium of the inevitable risk, which is explained by general market movements, and cannot be eliminated by diversification.

This risk is called the systematic risk or the market risk. The part of the stocks’ risk that can be eliminated by diversification is called the unsystematic risk.

CAPM prices the systematic risk only\(^{125}\) and the connection between the expected rate of return (owners’ required rate of return) and the market risk can, according to CAPM, be summed up in the following formula:

\[
\begin{align*}
\text{Equation 6.1 – Capital Asset Pricing Model} \\
\text{ } & \\
E(r) + \beta_1 \cdot (E(R_m) - r_f) = E(R_i)
\end{align*}
\]

\(r = \text{the return on the stock, in this case the return on Eiendomsspar}\)

\(r_f = \text{the risk free rate, in this case the } 10 \text{ year treasury note}\)

\(r_m = \text{the return on the market portfolio, OSEBX}\)

This will be the first step in our effort to determine Eiendomsspar’s company cost of capital, i.e. what return investors will require for an investment with the same risk.

The components needed are now estimated and by employing the formula for cost of equity or CAPM we can calculate the rate for Eiendomsspar.

\[
\begin{align*}
\text{Re} & = 4.03\% + 0.36 \times 5.5\% = 6.0\%
\end{align*}
\]

This gives us a required rate of return of 8.5 % on an Eiendomsspar share given that the company has no debt. However, as Eiendomsspar is heavily levered this is only a part of the overall company cost of capital. In able to get the whole picture it is needed to determine the company’s cost of debt.

\(^{125}\) Elling, Jens O. And Sørensen, Ole: Regnskabsanalyse og værdiansættelse
6.1.2 Arbitrage Pricing Theory

Arbitrage Pricing Theory (APT) is based on the law of one price, as no arbitrage is possible. The model does not have the same assumptions as the CAPM and can therefore considered being more general and flexible.

As the CAPM is a single-index model, the APT model is a multi-index model, i.e. additional indexes are included in the model. But this induces other difficulties than using a single-index model like those discussed in the section underneath. Variables to include in the APT model could be financial market and macroeconomic data such as including additional stock indexes and/or resources indexes like metals, oil and so on, change in consumer price index (inflation) and change in gross domestic product (growth in the economy).

Equation 6.2 – Arbitrage Pricing Theory model

\[ R_i = a_i + b_{i1} I_1 + b_{i2} I_2 + b_{i3} I_3 + \ldots + b_{ij} I_j + e_i \]

where, \( R_i \) = Return on asset \( i \)

\( a_i \) = Return on asset \( i \) if rest of indexes equals zero

\( I_j \) = Value of index \( j \)

\( b_{ij} \) = Asset \( i \)’s sensitivity to index \( j \)

\( e_i \) = Random error

However, the flexibility of the model can be a weakness in practice, as there are neither academic agreement nor agreement by practitioners over which variables to include in the model. The user is very free to specific which variables to include, and this is a practical problem that easily can lead to model misspecifications.

Alternatively, including lots of variables in a multi-index model increases historical explanation but could seriously compromise the forecasting performance of the model.
This is one important argument against using Arbitrage Pricing Theory as estimating required return is the primary goal of the model.

Some variables that were addressed in chapter three and chapter four that could influence the value of the stock. Variables that could be used to estimate the required return for Eiendomsspar using the APT model in addition to risk free rate and the Oslo All-share index are growth in the economy and change in RevPAR.

There are some theoretical difficulties using CAPM to estimate the required rate of return yet there are some practical advantages by using CAPM rather than ATP as mentioned in this subchapter. Consequently CAPM will be used in the process to calculate the cost of capital for Eiendomsspar.

6.2 Capital Structure

The target capital structure for Eiendomsspar is stated by the company, thru the annual report, to be at a debt level of 25 percent. However this level changes with the market value, and can also change dependent if valuing it from equity.

In order to calculate the company’s current capital structure, the first thing we need to know is the market value of the equity on the 31st of December 2009. The market value of the equity is calculated as the share price multiplied by the number of shares outstanding:

\[ 160 \times 40\,460\,669 = NOK\,6\,473\,707\,040 \]

The market value of the debt is listed at NOK 4 453 500 000126 resulting in a debt ratio of 69 percent.

The debt ratio is slightly lower than what we have calculated in the key ratios127. The difference is that we calculated with assets and liabilities/debt and not market value. Since the historical stock levels has been lower than NOK 160 per share and the debt/equity ratio is higher than what we just calculated. A debt ratio of 74 percent is chosen when calculating the WACC.

126 Annual Report 2009
127 Appendix 9
6.3 Cost of Debt

The average market rate of Eiendomsspar’s debt as of 31st December was close to 4.2 percent, which is slightly above the risk free rate. The rate was fixed in a time when the key national rate was, at the time, historically low. The rate is still extremely low. The borrowing premium on the cut of date was 0.2 percent.

After the financial crisis banks have been more reluctant to rent out large sums to firms in the risk for default. The thesis does not assume that Eiendomsspar will pay a much larger rent than what is the current case. However, in the WACC we will calculate with 3 percent. It is in the top segment, and the Cost of Debt will therefore be at 7 percent. As the Cost of Debt is risk free rate combined with the borrowing premium.

6.4 Calculating Weighted Average Cost of Capital

Weighted Average Cost of Capital (WACC) has only briefly been mentioned, but not explained in detail what is actually is. A company’s WACC is the required rate of return its investors will demand for an investment with the same/similar risks involved and it is derived from the values of return on debt and equity along with taking into consideration the company’s capital structure.

Equation 6.3 – Weighted average cost of capital

\[
WACC = \frac{D}{E+D} \times R_d (1 - T_m) + \frac{E}{E+D} \times r_e
\]

where WACC = Weighted average cost of capital

D = Debt target

E = Equity target

V = E + D

T_m = Marginal tax rate
Table 6.1 shows how the WACC is calculated and how it is determined.

Table 6.1 - Weighted Average Cost of Capital and Capital Asset Pricing Model

<table>
<thead>
<tr>
<th>WACC Calculations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk free rate</td>
<td>4,0%</td>
</tr>
<tr>
<td>Market risk premium</td>
<td>5,5%</td>
</tr>
<tr>
<td>Beta EISP</td>
<td>0,36</td>
</tr>
<tr>
<td>Borrowing premium</td>
<td>3,0%</td>
</tr>
<tr>
<td>Target D / D+E</td>
<td>70,0%</td>
</tr>
<tr>
<td>Target E / D+E</td>
<td>30,0%</td>
</tr>
<tr>
<td>Cost of Equity (CAPM)</td>
<td>6,0%</td>
</tr>
<tr>
<td>Cost of Debt</td>
<td>7,0%</td>
</tr>
<tr>
<td>Tax rate</td>
<td>28,0%</td>
</tr>
<tr>
<td><strong>WACC</strong></td>
<td><strong>5,36 %</strong></td>
</tr>
</tbody>
</table>

*Source: Own Creation*

Eiendomsspar’s WACC for the period is calculated to 5.36 percent.

This means that in the valuation all future cash flows are discounted by 5.36 percent in order to determine the present value of the cash flow.\(^{(128)}\) The low WACC has its foundation in a low beta, which in fact shows that Eiendomsspar is less variable than OSBEX in the period analyzed. The time period has included the financial crisis, where Eiendomsspar has managed especially well. Which shows the stableness of the industry. Another reason for the low WACC is the size of the debt, firms with debt – Eiendomsspar has high dept ratio – have a lower WACC than companies without debt.

In addition Eiendomsspar has had a relative good borrowing premium. The average interest rate was in 2009 only 4.2 percent. The renegotiation will bring it somewhere higher, but a 3.0 percent borrowing premium is a number in the upper end of the scale.

It is important to note that one of the drawbacks of WACC calculations is that the formula assumes a constant capital structure over the period. Recalculating the WACC for each year in the forecasting period and thus taking changes in the capital structure into consideration can solve this.

\(^{(128)}\) See Appendix 7
Doing so presents the issue of whether constant rebalancing is performed or if it is done annually once a year, choosing to rebalance constantly is not economically viable due to possible transaction costs so using end of year capital structure would be appropriate.

This is a weakness in the formula that the thesis will consider under the valuation. However under the estimation and the forecasting the numbers that have been presented have been unenthusiastic, which is a clear strategy such a positive surprise, is more likely than a negative. This will function as a weight on a weight scale, where the uncertainty and weakness of the WACC formula is on the other side.

6.5 Conclusion

The Cost of Capital is one of the most important chapters leading up to the valuation. This is the very chapter where the discount rate or WACC is found, which is crucial for the price of the company.

The factors needed to estimate the CAPM were found both by own analyze, beta, and others analyze, market risk premium. The factors are estimated with high clearance such as there is a lower possibility of a negative outcome than a positive outcome for the eventual valuation of Eiendomsspar.

19% of Eiendomsspar’s risk is systematic, and the remaining 81% are Eiendomsspar’s own unique risk or unsystematic risk.

After reviewing the critical factors and plotted them into the WACC formula, the WACC was estimated to 5.36 percent. The WACC will be used extensively in the next chapter.
7 Valuation

This chapter is going to answer the main research question of this thesis, which is “What is the theoretical value of Eiendomsspar?” While it is possible to measure the value of Eiendomsspar in different scenarios, such as in case of mergers and acquisitions, delisting from the stock exchange and liquidation value, the thesis assumes that Eiendomsspar continues to be sole enterprise without any major changes.

In addition to the valuation it is important to employ sensitivity analysis to the results in order to capture uncertainties in some key variables that ultimately can influence the share prices derived using the two models.

7.1 Choice of Models

In chapter 1 I mentioned that two different models would perform the valuation. The models of my choice are the DCF model and EVA. What is of particular interest when implementing these two models is to see whether they produce the same or similar conclusions or not, as they are partly based on different inputs.

7.1.1 The Discounted Cash Flow Model

The basic notion behind the DCF model is to value future cash flows by discounting them backwards to today using the appropriate discount factor which is usually the project’s or company’s cost of capital (WACC). In our case we also calculate for the horizon value of the company’s cash flows as we assume that Eiendomsspar will still exist after our projection period.
Equation 7.1 – The Discounted Cash Flow

\[
PV_0 = \sum_{t=1}^{H} \frac{FCF_t}{(1 + WACC)^t} + \frac{FCF_H}{(1 + WACC)^H}
\]

Source: Benninga, 2009

Where, \(PV_0\) = Present value of Eiendomsspar

\(H\) = Horizon, Forecasting period +1

\(WACC\) = Weighted Adjusted Cost of Capital (found in Chapter 6.5)

\(FCF\) = Free Cash Flow as estimated in the forecast

7.1.1.1 Pros and cons

Pros

The best thing about the DCF is that it produces the closest thing to an intrinsic stock value.\(^{129}\) The other main advantage of using the DCF in valuation is that it treats the firm as a cash flow generator. The cash flows are based on detailed forecasting for each of the periods in question and operational aspects are taken into consideration, e.g. sales, expenses.\(^{130}\)

\(^{129}\) The actual value of a company or an asset based on an underlying perception of its true value including all aspects of the business, in terms of both tangible and intangible factors. This value may or may not be the same as the current market value.

\(^{130}\) Fernández, 2002
Unlike standard valuation tools such as the P/E ratio, DCF relies on free cash flows. For the most part, free cash flow is a trustworthy measure that cuts through much of the arbitrariness and "guesstimates" involved in reported earnings. Regardless of whether a cash outlay is counted as an expense or turned into an asset on the balance sheet, free cash flow tracks the money left over for investors.

Cons

The DCF model is only as good as its input assumptions. Depending on the estimates for the company and how the market will unfold, DCF valuations can fluctuate widely. If your inputs - free cash flow forecasts, discount rates (WACC) and perpetuity growth rates - are widely off the mark, the fair value generated for the company will not be accurate, and it will not be useful when assessing stock prices.

DCF works best when there is a high degree of confidence about future cash flows. However, things can get challenging when a company's operations lacks transparency - that is, when it is difficult to predict sales and cost trends with much certainty. While forecasting cash flows a few years into the future is hard enough, pushing results into eternity is impossible. The investor's ability to make good forward-looking projections is critical - and that is why DCF is susceptible to error.

7.1.2 Economic Value Added

The Economic Value Added is an estimate of economic profit, which can be determined, by using, unlike DCF, standard notions from the accountant analysis. The concept of EVA is in a sense nothing more than the traditional, commonsense idea of "profit," however, the advantage of having a separate and more precisely defined term such as EVA or Residual Cash Flow is that it makes a clear separation from dubious accounting adjustments that have enabled businesses such as Enron to report profits while in fact being in the final approach to becoming insolvent.
Equation 7.2 – Economic Value Added

\[
V_0 = NOA_0 + \sum_{t=1}^{\infty} \frac{EVA_t}{(1 + WACC)^t}
\]

Where,

\(V_0\) = estimated value of the net operating activities at time 0

\(NOA_0\) = book value of net operating activities at time 0

\(EVA_t\) = expected residual income from operations at time \(t\).

\(WACC\) = weighted average cost of capital

### 7.1.2.1 Pros and Cons

**Pros**

The inputs in the model are based on accounting and should therefore be easy to implement and understand by an analyst. Furthermore the budgeting is simpler than the DCF, which demands that cash flows are estimated yearly, which can be a rather extensive process. For a quick EVA valuation income, \(WACC\) and growth rate will be sufficient to conduct a quick estimate.

As in the DCF model, the output of EVA is the total market value of a firm; this makes it easy to calculate the stock price. These two advantages can be summoned under the caption “user friendly.”

**Cons**

When calculating EVA the user is dependent on various calculation- and accounting criteria. Compared to the DCF model this is a disadvantage. In the DCF model cash flows are easier to
implement correctly because they are not subject to accounting principles. The issues related to the budgeting period are equal to those mentioned in the DCF discussion.

According to EVA’s creator Stern-Stewart an analyst has to account for up to 200 corrections to arrive at a company’s true EVA value. In addition systematic risk is not included in EVA. Companies who have historically had EVA’s boosted by gains on currency changes, can hardly be expected to carry on this extra income therefore this should not be accounted for.

7.2 Terminal Period

The valuation horizon must be just so long that all the possibility of over natural growth, or other conditions that deviate from its normal operation are included. This way the terminal session will represent the company's normal future operation, also called “steady state”.

Since a steady state is assumed when the continuing value is added, the same proportion of the operating margin is invested each year, resulting in the same annual growth factor in the FCFs. It is normally supposed to reflect the economic growth, since no company can expect to make abnormal returns and outperform the market over a long time period.

The continuing value is perpetuity and calculated as following:

\[ FCF_{t-1} = \frac{\text{Continuing Value}}{WACC - g} \]

I have chosen to forecast the next six financial years, which means that 2009 are considered year zero, and in 2010 is the first budget period. Consequently 2015 will be the last budget year and beyond is estimated as the terminal value. This consists with the beliefs of Eiendomsspar’s future development.

7.3 Valuation

This sub chapter is the core of the thesis, as it will directly answer the thesis main research question. The DCF model estimations will first be presented, followed by the estimations by the EVA.
7.3.1 DCF Valuation

The information that I have gathered so far will now be put into our model. Table 7.1 lists the assumptions used for discounting the cash flows, growth at horizon and the number of shares outstanding. These are then applied to the free cash flows from Table 6.4 in the previous chapter. This ultimately illustrates my calculations of Eiendomsspar’s share price, the cash flow that are discounted back to present value and the present value of the terminal value.

Table 7.1 - DCF Model

Source: Own creation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBITDA Margin Total</td>
<td>321</td>
<td>334</td>
<td>350</td>
<td>400</td>
<td>354</td>
<td>424</td>
<td>492</td>
<td>522</td>
</tr>
<tr>
<td>Net Operating Assets</td>
<td>3,228</td>
<td>3,325</td>
<td>4,958</td>
<td>4,450</td>
<td>5,525</td>
<td>6,017</td>
<td>6,618</td>
<td>7,015</td>
</tr>
<tr>
<td>ROE</td>
<td>40</td>
<td>264</td>
<td>630</td>
<td>208</td>
<td>40</td>
<td>268</td>
<td>339</td>
<td>120</td>
</tr>
<tr>
<td>WACC</td>
<td>5.96%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discounting factor</td>
<td>105.24%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P/E of DCF</td>
<td>0.349</td>
<td>0.902</td>
<td>0.825</td>
<td>0.832</td>
<td>0.771</td>
<td>0.721</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P/E of TV</td>
<td></td>
<td>254</td>
<td>242</td>
<td>95</td>
<td>161</td>
<td>102</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Company Value</td>
<td>11,702</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of net financial liabilities</td>
<td>2,272</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of Equity</td>
<td>9,430</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Shares</td>
<td>62,246</td>
<td>6,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of each stock</td>
<td>205,871</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The calculations in Table 7.1 present a share price of NOK 205.87 given the assumptions, estimations and calculations throughout this thesis. This price represents a 29 percent increase from the cut off date and it is also an “all-time-high” for Eiendomsspar. However, the thesis sees it, based on the strategic chapter as the most possible outcome.

The reasons for the difference in the prices are numerous, but a brighter future is expected in addition that the thesis has set up Eiendomsspar to grow extensively in the next years. OSBEX has declined extensively under the financial crisis and is under a current upturn, which is expected to continue. The reasons for the difference in the share price estimations will be explored further when scenario- and sensitivity analysis will be conducted in a later chapter.
7.3.2 EVA Valuation

As in the theoretical background of EVA, the practical calculation takes the departure from total margin, $\Delta \text{Net Working Capital}$ the required return by stockowners (WACC).

The model captures returns, which exceeds the required returns of stockowners. Previously the required return has been estimated at 5.43 percent, this implies that EVA will be discounted with this rate. It is a minimum that ROIC is above the Rate of return.

The EVA surplus/deficit is calculated for every year in the budgeting period as well as the continuing value; these values are then discounted back to present value as of end 2009.

Table 7.2 presents the calculations and estimations for Eiendomsspar with the EVA model.\textsuperscript{131}

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011a</th>
<th>2012a</th>
<th>2013a</th>
<th>2014a</th>
<th>2015a</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>EVA (5-Year)</td>
<td>131</td>
<td>134</td>
<td>330</td>
<td>466</td>
<td>454</td>
<td>419</td>
<td>522</td>
<td>553</td>
</tr>
<tr>
<td>ROIC</td>
<td>10.0%</td>
<td>8.7%</td>
<td>7.3%</td>
<td>6.2%</td>
<td>6.7%</td>
<td>7.0%</td>
<td>7.4%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Discounting Rate</td>
<td>135,39%</td>
<td>140</td>
<td>129</td>
<td>93</td>
<td>102</td>
<td>109</td>
<td>117</td>
<td>177</td>
</tr>
<tr>
<td>Price at TV</td>
<td>86</td>
<td>124.89</td>
<td>145.33</td>
<td>156.75</td>
<td>136.58</td>
<td>141.46</td>
<td>81.52</td>
<td></td>
</tr>
<tr>
<td>Terminal Value (TV)</td>
<td>8.210</td>
<td>9.270</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NP of TV</td>
<td>12.360</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of net financial liabilities</td>
<td>3.172</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of equity</td>
<td>9.188</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of each share</td>
<td>205.8719</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own Creation

As presented above, the stock price of Eiendomsspar is calculated to be NOK 205.97 at the end of 2009. This is the same finding as under the DCF model estimation.

The results can vary and could very well be due to the length of the budget period, the terminal value has a major influence on the result; a shorter budget period would move the terminal period back and thus cause a lower price.

\textsuperscript{131} Extensive calculations is presented under Appendix 5 and 6
7.4 Sensitivity Analysis

Both in the DCF and EVA valuation of Eiendomsspar several simplifications and assumptions have been made. The forecasted income statement, balance sheet and free cash flow are based on historical company information, market forecasts from difference sources, as well as subjective estimates of the different value drivers. The aim is to test Eiendomsspar’s share price sensitivity by changing the values of some of these variables.

The factors, which are associated to the largest level of uncertainty, are the future risk free rate, the systematic risk of the company (Beta), the market risk premium as well as the borrowing risk premium. All the variables mentioned were estimated when calculating the company’s weighted average cost of capital, subsequently having an impact on the calculated share price. The theses will therefore investigate in to which extent changes in the risk free rate and the borrowing risk premium affects Eiendomsspar’s share price. The overall aim is to see the implication for Eiendomsspar’s share price in changes in the company’s cost of capital, and the growth rate used in the steady state. The result is shown in the tables below.

### Table 7.3 – Change in the risk free rate

<table>
<thead>
<tr>
<th>SHARE PRICE</th>
<th>%-point Change in risk free rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Price</td>
<td></td>
</tr>
<tr>
<td>%-change</td>
<td></td>
</tr>
</tbody>
</table>

| Share Price | 472,00 | 347,00 | 266,00 | 205,87 | 165,00 | 137,00 | 111,00 |
| %-change    | 129,27 % | 68,55 % | 29,21 % | -17,91 % | -33,45 % | -46,08 % |

*Source: Own Creation*

The table shows that a relative small change in the long-term risk free interest rate has a large impact on the price on Eiendomsspar’s stock. Within a span of only 1.5 percentage points, the price differs from 111 NOK to 472 NOK. It is notable that it is a larger upside than a downside with a maximum percentage change in the opposite directions.
As for the risk free rate, change in borrowing premium also has a large impact on the share price, though not as large as with the risk free rate. Within a span of 1.5 percentage points, the share price fluctuates within a range of 327 NOK to 137 NOK.

As we can see from table 6.5, and as implied by both the change in risk free rate, and the borrowing premium, the share price is very sensitive to a change in the WACC. A change in only 0.6 percentage point, which is less than the two tables above, take the stock from 295 NOK to 149 NOK. This is because of the high amount of debt in the company, and as the cash flows are discounted with a higher factor; the value grows smaller than the debt giving a negative value of equity. The stock is therefore highly sensitive towards change in the WACC.
Another critical factor is the growth rate \((g)\) that also, as shown above in Table 6.6, is as critical as the factors mentioned above. The growth rate will have a large impact on the terminal value, which represents all the future cash flows, and eventually the share price. As Table 6.6 presents, there is a larger upside than a downside to the share price if there becomes a change in the growth factor, which varies from 150 NOK to 398 NOK.

All of the four tested sensitivity factors shows that a relative small change will create a large change in the theoretical stock price. The positive result that is important to bear in mind is that the upside for this stock is larger with the same change than the downside.

Looking at the trade statistics for Eiendomsspar, it comes clear that Eiendomsspar’s stock is rarely traded and when traded most often in minor volumes. Eiendomsspar’s stock can therefore be classified as illiquid, both in a Norwegian and international perspective. Stocks with low liquidity have a larger probability of being priced incorrectly and therefore the market value could be under or over estimated. Furthermore, illiquid stocks usually have bigger ticks than more fluid stocks and therefore generate larger gains with less volume. Less volume means that it takes less to push a stock up than it does to push a heavily traded stock.

### 7.6 Sub conclusion

The main objective of the thesis, determined the value of Eiendomsspar, has now been accomplished using both the Discounted Cash Flow and the Economic Value Added models.

Absolute valuation methods such as DCF and EVA are long-term techniques accounting for future developments with horizons that are as long as the analyst finds necessary. However, the goal is to keep the forecast period as short as possible in order to limit uncertainty, which
is critical when estimating the future. An excellent example of this is when the sub-prime crisis accorded, a crisis that “no one” had expected or forecasted.

In order to perform a valuation through absolute methods a company’s cost of capital must first be determined. After estimating the $\beta$, thru regression in Excel, of 0.37, a marked risk premium of 5.5 percent and a cost of debt of 300bps over the risk-free rate, the Weighted Average Cost of Capital of Eiendomsspar was estimated to be 5.36 percent.

When determining the cost of debt, Eiendomsspar’s historical average cost of debt thru the annual reports where looked at, in addition to the future expectations for the interest. As a result there has been added 300bps to the average 10-year government bond, which is classified as the risk free rate, in 2009.

Using the WACC to discount the company’s forecasted future cash flows and residual income resulted in a fair value share price of 205.8 NOK using both the DCF and the EVA.

Sensitivity analysis was then implemented in order to find out how the valuation outcomes would be affected by changes in certain variables. The results were that Eiendomsspar’s theoretical stock price would differ a great deal when major drivers were changed. However, there was a bigger upside then a downside to the changes, which could be seen upon as a positive sign.

With respect to the findings, the conclusion is that Eiendomsspar is currently undervalued by traditional standards, DCF and EVA, based on historical stock market data. Therefore we recommend buying Eiendomsspar’s stock with a 3-6 year holding period in mind.
8 Conclusion

The overall focus of this master thesis has been to undertake a fundamental analysis of Eiendomsspar AS, in order to evaluate whether the company’s stock is under- or overvalued as 31st of December 2009.

In the beginning of the period the real estate market in the Scandinavian region has witnessed an extraordinary growth in rental prices and occupancy rates, simultaneously a historically strong economic boom has swept the Scandinavian countries fuelling the demand for office and hotel space. However, the US sub-prime crisis and the subsequent credit squeeze have caused the global economic growth period to come to an end.

These economic factors has spread to the Scandinavian economy and indirectly affecting the profitability in the real estate sector. The last signals have been that the economic downturn that the world has witnessed has been at the bottom and an upturn is underway, which will cause a positive bi-effect for the Scandinavian real estate sector.

The real estate sector in general is very much affected by various macroeconomic factors. Eiendomsspar have taken measures to be well equipped for possible dark outlooks for the macro economy. Furthermore, the company has managed to hedge most of their debt at very favorable interest rates using different derivates. However, a large portion of Eiendomsspar’s debt is up for interest rate regulation. Moreover, Eiendomsspar will most probably refinance their debt at much less favorable conditions. In the long run the company should be concerned about their relatively high debt ratio. A high debt ratio is, however, usual for a company like Eiendomsspar.

The company is one of the smallest players in Scandinavia. Nonetheless, they have grown extensively the last decade, and will possibly continue to do so.

Furthermore, increase in rental prices combined with high building activity over the last years could inflict a threat. However, the building activity for the next years is historical low.

Eiendomsspar’s commercial property portfolio consists for the most part of prime located buildings; in these areas the occupancy level has been and is expected to remain high. This contributes to a fairly low competitiveness and rivalry among the players.
Though for the hotel segment, the rivalry is more present and the occupancy rate relatively higher, the properties are also geographically more scattered for the most part over Scandinavia, but also elsewhere in Europe and in North-America.

A comparison of Eiendomsspar stock performance to a peer and OSEBX shows that Eiendomsspar has performed well the last decade and outperformed both the peer and OSEBX with a large amount. Nevertheless, Eiendomsspar experienced a drop in stock price under the financial crisis, which they are currently recovering from.

As an unlisted company Eiendomsspar does not use IFRS and were therefore unsuitable for a peers analysis, but an extensive historical financial statement was valuable as guidance for the forecasting of the valuation. The ROIC for 2009 were 5.61 percent, consistent with those of last years.

The ROIC does not include revenues from joint ventures, which is not Eiendomsspar’s core business area. This number also fluctuates which will give a inconsistency of the ROIC. The company’s WACC is calculated to be 5.36 percent. In that case an important measure is made, which is that ROIC is higher than the WACC.

The forecast expects Eiendomsspar to have a revenue increase in the forecasting period. In addition to continue the growth from the analyzed period. This is done on the background on the strategic analysis, which expects increase in the rental prices both for hotels and business properties, and the financial analysis, which shows that Eiendomsspar a has solid financial reports.

By using the DCF and EVA enterprise models I have calculated a market equity value on the cut the 31st of December 2009, of MNOK 11.702, consequently giving a stock price of 205,87 NOK, an upside of almost 29 percent. Thus, on the basis of the fundamental analysis it is argue that Eiendomsspar AS stock value is undervalued.
9 Perspectives

The main purpose of thesis was to determine the theoretical value of a single share in a company, which entails reaching a concrete result. In order to do so a number of issues had to be analyzed, assumed, calculated and forecasted. The possibility of reaching a result, which would be far from the market price, was always at risk.

The thesis was done using the tools and methods the author has found appropriate for the company and industry in question. They are however usable to every industry and therefore not limited to this industry alone.

The outside-in approach that has been used is highly relevant in this case as it enables to first identify external aspects of the industry in question before determining the very company’s capabilities. That being said, the Resource Based View in strategic management is by no means dismissed as vigorous internal analysis was conducted as well.

In choosing the main valuation methods for this thesis the author strived to find the methods that are not easily manipulated from the companies (e.g. share buy-backs to boost EPS) or analyst’s perspective (choosing those that support their own evaluation while discarding others) though they were also given some attention. The choice became two models (DCF and EVA) that are commonly used in valuating companies. The two methods have different strengths and weaknesses.

The inputs and assumptions that were used in the models can of course be debated. Questions about how high should the risk premium be on debt and equity in the WACC calculations? What is the appropriate forecasting period? Is the future income growth realistic? Will Eiendomsspar continue to grow as the company has for the last five years? Nonetheless, all numbers used in the WACC are calculated or assumed with bases on an underlying analysis. Furthermore, this is the case with all estimations/assumptions in the thesis.

Furthermore, after the cut off date at 31st of December 2009 the stock and the world have evolved. The stock price has not been stable around 160 NOK +/- 5 percent and the world economy has struggled more than this thesis had anticipated. For the moment the Euro and thereby Greece and the banks in for example France is a large concern to the world. This has consequently created mental bias for the author.
Nevertheless, after reviewing the thesis and the company, it created a stronger view with the author that the market was/is indeed undervaluing stocks at the moment.

Using the market as a benchmark in a valuation project like this creates some caveats, one of which is that the sensitivity analysis enabled us to come closer to the market’s perceived value of Eiendomsspar than our original calculations.

This caused some reservations regarding the results; however, it was not the purpose of this thesis to just simply changing the parameters to fit the market expectations so it would be an optimal method to reach qualified results. Also using OSEBX as a benchmark when Eiendomsspar is in fact an unlisted company and therefore not a part of OSEBX could create some bias.

The author are confident in the results presented, the horizon is appropriate, as the company in question is growing, which must be presented in the forecasting period.

A longer horizon could be applied. Doing so creates even more uncertainty regarding future revenues and industry environment. An example of an industry where a longer horizon could be applied would be the pharmaceutical industry where the company’s product is protected by a patent with a finite horizon. However, a shorter period could also be presented, if the firm was a mature firm with stable income and concrete plans for expanding.
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Appendix

Appendix 1 – Eiendomsspar’s network with ownership in percent
Appendix 2

Market capitalization = share price x number of outstanding shares

6,465,067,040 = 160 x 40,406,669

Appendix 3

Average lending rates, financial corporations. 1954-2009. Per cent

Per cent

From 1975 interest includes commission. Before 1979 the source is Statistics Norway's Historical Statistics. For the period 1979 to 1987, the interest rates on loans (including non-accrual loans) and on deposits overall in banks was calculated by combining the information from the annual interest rate statistics, which provide average interest rates at the end of each year, with data from the quarterly interest rate statistics, which provided the highest and lowest rates on new loans. As from 1987 until 2006, the source is Norges Bank's quarterly interest rate statistics. From 1 January 2007 the quarterly interest rate statistics are produced by Statistics Norway.

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## Appendix 4

### Income Statement

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
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<tbody>
<tr>
<td>Rental income properties</td>
<td>346.2</td>
<td>389.6</td>
<td>417.9</td>
<td>444.2</td>
<td>454.2</td>
</tr>
<tr>
<td>Operating expenses in property and projects</td>
<td>37.4</td>
<td>31.6</td>
<td>39.4</td>
<td>50.8</td>
<td>51.1</td>
</tr>
<tr>
<td>Gross operating profit</td>
<td>358.8</td>
<td>346.7</td>
<td>378.5</td>
<td>393.4</td>
<td>403.1</td>
</tr>
<tr>
<td>Profit in sales of property</td>
<td>273.1</td>
<td>32.6</td>
<td>13.3</td>
<td>2.2</td>
<td>121.4</td>
</tr>
<tr>
<td>Refurbishing costs</td>
<td>51.5</td>
<td>24.8</td>
<td>46.2</td>
<td>62.9</td>
<td>80.4</td>
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<tr>
<td>Depreciation</td>
<td>30.8</td>
<td>32.5</td>
<td>37.1</td>
<td>41.9</td>
<td>45.1</td>
</tr>
<tr>
<td>Payroll and other operating costs</td>
<td>44.3</td>
<td>56.0</td>
<td>49.8</td>
<td>58.4</td>
<td>73.5</td>
</tr>
<tr>
<td>Operating profit</td>
<td>453.3</td>
<td>267.1</td>
<td>259.7</td>
<td>232.4</td>
<td>326.5</td>
</tr>
<tr>
<td>Share of profit in joint venture</td>
<td>245.2</td>
<td>25.7</td>
<td>83.2</td>
<td>104.1</td>
<td>147.0</td>
</tr>
<tr>
<td>Interest on joint controlled firms</td>
<td>15.5</td>
<td>9.3</td>
<td>22.8</td>
<td>4.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Other financial Revenue</td>
<td>16.1</td>
<td>17.3</td>
<td>17.3</td>
<td>19.3</td>
<td>5.4</td>
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<tr>
<td>Interest expenses</td>
<td>112.8</td>
<td>124.8</td>
<td>164.6</td>
<td>201.2</td>
<td>170.6</td>
</tr>
<tr>
<td>Other financial Expenses</td>
<td>1.3</td>
<td>0.9</td>
<td>2.4</td>
<td>9.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Profit before taxes</td>
<td>616.0</td>
<td>272.7</td>
<td>216.6</td>
<td>154.8</td>
<td>302.6</td>
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<tr>
<td>Taxes</td>
<td>49.7</td>
<td>66.0</td>
<td>42.1</td>
<td>8.0</td>
<td>63.2</td>
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<tr>
<td>Profit of the year</td>
<td>569.3</td>
<td>204.7</td>
<td>173.5</td>
<td>146.8</td>
<td>239.3</td>
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</table>
Appendix 5

<table>
<thead>
<tr>
<th>Assets, Liabilities and Equity Reformed</th>
<th>Reformed Balance sheet</th>
<th>Forecasted Balance sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land, buildings and other property</td>
<td>2,006,6</td>
<td>3,406,5</td>
</tr>
<tr>
<td>Fixtures, furnishings, office machines, etc.</td>
<td>24,7</td>
<td>34,8</td>
</tr>
<tr>
<td>Investments in subsidiaries</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Loans to subsidiaries</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Investments in joint ventures</td>
<td>634,1</td>
<td>612,4</td>
</tr>
<tr>
<td>Investments in associates</td>
<td>26,1</td>
<td>-</td>
</tr>
<tr>
<td>Other Receivables</td>
<td>28,6</td>
<td>29,9</td>
</tr>
<tr>
<td>Other assets</td>
<td>43,1</td>
<td>56,9</td>
</tr>
</tbody>
</table>

Net Operation assets: 3,660,2 4,950,5 4,675,0 5,635,2 5,879,1 6,349,4 7,174,9 7,892,3 8,365,9 8,848,8 9,488,6

Operating liabilities:
- Deferved tax: 343,3 343,9 368,9 407,8 446,3 482,6 544,7 599,1 635,1 672,3 720,3
- Other provisions: 22,7 22,6 15,5 150,2 185,5 20,0 22,6 24,8 26,3 27,9 29,9
- Short term interest worthy debt: 55,5 279,0 256,0 270,0 307,5 335,6 355,7 377,1 403,5
- Accounts Payable: 8,5 8,6 12,8 23,4 14,9 16,1 18,2 20,0 21,2 22,5 24,0
- Tax cut, holiday pay etc.: 14,8 7,7 6,9 12,5 17,2 18,6 21,0 23,1 24,5 25,9 27,8
- Company tax payable: 31,4 52,0 29,6 29,3 22,4 24,6 27,8 30,6 32,4 34,4 36,8
- Provision for interest: 21,7 24,8 40,3 44,2 53,3 47,2 34,3 35,4 43,6 44,2 36,8
- Advance: 5,1 8,0 9,5 7,1 10,4 11,2 12,7 14,0 14,8 15,7 16,8
- Dividends: 55,5 79,9 91,0 91,0 102,1 87,5 93,3 91,0 91,0 91,0 91,0

Net operating liabilities: 666,2 864,6 849,6 820,1 949,0 1,294,1 1,158,2 1,274,0 1,350,4 1,431,4 1,531,6

Working Capital: 2,994,0 3,227,9 3,825,4 4,095,4 4,930,1 5,324,5 6,016,7 6,618,4 7,015,5 7,436,4 7,996,7

Financial liabilities and equity:
- Equity:
  - Share Capital: 156,7 338,7 330,7 376,0 338,7 338,1 338,1 338,1 338,1 338,1 338,1
  - Own Stocks: 116,6 168,6 168,6 168,6 168,6 168,6 168,6 168,6 168,6 168,6 168,6
  - Provision from account: 16,6 18,2 27,6 22,5 17,1 10,5 20,9 23,0 24,3 25,8 27,6
  - Minority Interests: 18,5 18,5 18,5 18,5 18,5 18,5 18,5 18,5 18,5 18,5 18,5
  - Other Equity: 151,4 79,0 89,3 1,085,1 1,247,3 1287,7 1,277,0 1,299,4 1,303,1 1,352,5 1,365,2

Total Equity: 1,095,6 1,318,4 1,373,9 1,588,8 1,563,6 1,646,4 1,793,1 1,926,4 2,011,7 2,186,2 2,314,0

Financial Liabilities:
- Liabilities to credit institutions: 2,373,7 2,573,6 2,760,1 2,715,0 2,917,3 3,127,8 3,875,4 4,170,6 4,293,9 5,376,1 5,956,1

Total Financial Liabilities: 2,577,7 2,577,6 2,460,1 2,715,0 2,917,3 3,127,8 3,875,4 4,170,6 4,293,9 5,376,1 5,956,1

Financial Assets:
- Invenatories at shares: 26,2 26,3 34,2 34,2 44,1 4,9 5,5 6,0 6,4 6,8 7,3
- Loans to joint ventures: 498,7 459,8 440,1 15,0 27,6 29,8 37,1 37,1 39,3 41,6 44,5
- Cash and cash equivalents: 150,2 89,7 143,0 43,0 88,0 59,0 108,4 119,2 126,6 133,6 143,3

Total Financial Assets: 675,3 542,9 593,5 472,2 120,9 130,6 134,7 163,3 172,0 182,4 198,5

Net Financial Assets: 1,098,4 1,930,7 1,446,6 1,593,8 1,386,6 1,574,6 1,912,0 2,451,3 2,552,8 2,583,7 2,451,0

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<tbody>
<tr>
<td>Sales</td>
<td>$120,000</td>
<td>$130,000</td>
<td>$140,000</td>
<td>$150,000</td>
<td>$160,000</td>
<td>$170,000</td>
<td>$180,000</td>
<td>$190,000</td>
<td>$200,000</td>
<td>$210,000</td>
<td>$220,000</td>
<td>$230,000</td>
<td>$240,000</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>$60,000</td>
<td>$65,000</td>
<td>$70,000</td>
<td>$75,000</td>
<td>$80,000</td>
<td>$85,000</td>
<td>$90,000</td>
<td>$95,000</td>
<td>$100,000</td>
<td>$105,000</td>
<td>$110,000</td>
<td>$115,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$60,000</td>
<td>$65,000</td>
<td>$70,000</td>
<td>$75,000</td>
<td>$80,000</td>
<td>$85,000</td>
<td>$90,000</td>
<td>$95,000</td>
<td>$100,000</td>
<td>$105,000</td>
<td>$110,000</td>
<td>$115,000</td>
<td>$120,000</td>
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Appendix 6
## Appendix 7

<table>
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<th>Month</th>
<th>Rate (%)</th>
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<tbody>
<tr>
<td>des-04</td>
<td>3.72</td>
</tr>
<tr>
<td>jan-05</td>
<td>3.81</td>
</tr>
<tr>
<td>feb-05</td>
<td>3.83</td>
</tr>
<tr>
<td>mars-05</td>
<td>3.96</td>
</tr>
<tr>
<td>apr-05</td>
<td>4.14</td>
</tr>
<tr>
<td>mai-05</td>
<td>4.28</td>
</tr>
<tr>
<td>juni-05</td>
<td>4.08</td>
</tr>
<tr>
<td>juli-05</td>
<td>4.21</td>
</tr>
<tr>
<td>aug-05</td>
<td>4.17</td>
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<tr>
<td>sep-05</td>
<td>4.08</td>
</tr>
<tr>
<td>okt-05</td>
<td>4.03</td>
</tr>
<tr>
<td>nov-05</td>
<td>3.99</td>
</tr>
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</table>

**Average**: 4.03%

Source: Norges Bank and own contribution
### Appendix 8

<table>
<thead>
<tr>
<th>Beta After ESP Split</th>
<th>OL(1)</th>
<th>ESP(1)</th>
<th>ESP(2)</th>
<th>ESP(3)</th>
<th>ESP(4)</th>
<th>ESP(5)</th>
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<tbody>
<tr>
<td></td>
<td>Alpha</td>
<td>0.0137</td>
<td>0.0428</td>
<td>0.0099</td>
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<td></td>
</tr>
<tr>
<td>0.440</td>
<td></td>
<td>0.428</td>
<td>0.3425</td>
<td>0.3753</td>
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**SUMMARY OUTPUT**

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<td>Adjusted R Square</td>
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**ANOVA**

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<th>MS</th>
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<td>0.088412124</td>
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<th>1 Variable</th>
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### Appendix 9

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<th>2005</th>
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<th>2009</th>
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<td>Working capital Ratio</td>
<td>5.49</td>
<td>4.74</td>
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<td>Acid test Ratio</td>
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<td>0.85</td>
<td>0.96</td>
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<td>Quick Ratio</td>
<td>5.46</td>
<td>4.71</td>
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<tr>
<td>Debt</td>
<td>74.73 %</td>
<td>72.32 %</td>
<td>74.95 %</td>
<td>74.10 %</td>
<td>74.01 %</td>
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<tr>
<td>Equity</td>
<td>25.27 %</td>
<td>27.68 %</td>
<td>25.05 %</td>
<td>25.90 %</td>
<td>25.99 %</td>
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<tr>
<td>Debt/Equity Ratio</td>
<td>2.96</td>
<td>2.61</td>
<td>2.99</td>
<td>2.86</td>
<td>2.85</td>
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## Appendix 10

### Key Ratio Analysis

#### Level 1

<table>
<thead>
<tr>
<th>Ratio</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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<tbody>
<tr>
<td>ROE</td>
<td>49.71%</td>
<td>15.78%</td>
<td>13.37%</td>
<td>9.64%</td>
<td>16.31%</td>
</tr>
<tr>
<td>ROIC (after tax)</td>
<td>14.1%</td>
<td>6.7%</td>
<td>5.9%</td>
<td>4.7%</td>
<td>5.6%</td>
</tr>
<tr>
<td>RONA</td>
<td>5.48%</td>
<td>5.79%</td>
<td>5.59%</td>
<td>4.66%</td>
<td>3.34%</td>
</tr>
<tr>
<td>r (effective)</td>
<td>4.23%</td>
<td>4.38%</td>
<td>5.03%</td>
<td>5.42%</td>
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<td>SPREAD</td>
<td>9.83%</td>
<td>2.29%</td>
<td>0.88%</td>
<td>-0.71%</td>
<td>1.06%</td>
</tr>
<tr>
<td>FGEAR</td>
<td>1.73</td>
<td>1.47</td>
<td>1.94</td>
<td>2.04</td>
<td>2.16</td>
</tr>
<tr>
<td>DGEAR</td>
<td>0.22</td>
<td>0.27</td>
<td>0.22</td>
<td>0.17</td>
<td>0.19</td>
</tr>
<tr>
<td>ROA (without sale)</td>
<td>7.12%</td>
<td>7.37%</td>
<td>7.18%</td>
<td>6.44%</td>
<td>6.72%</td>
</tr>
<tr>
<td>ROA (with sale)</td>
<td>3.79%</td>
<td>3.95%</td>
<td>4.06%</td>
<td>3.67%</td>
<td>2.74%</td>
</tr>
<tr>
<td>Short term interest rate</td>
<td>3.04%</td>
<td>3.15%</td>
<td>3.62%</td>
<td>3.90%</td>
<td>3.27%</td>
</tr>
<tr>
<td>SPREADd</td>
<td>11.02%</td>
<td>3.52%</td>
<td>2.29%</td>
<td>0.81%</td>
<td>2.34%</td>
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<tr>
<td>RONA?</td>
<td>9.57%</td>
<td>8.31%</td>
<td>7.69%</td>
<td>6.58%</td>
<td>7.17%</td>
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<tr>
<td>Debt Equity</td>
<td>2.96</td>
<td>2.61</td>
<td>2.99</td>
<td>2.86</td>
<td>2.85</td>
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<td>Own capital ratio</td>
<td>16.4%</td>
<td>18.5%</td>
<td>16.2%</td>
<td>15.7%</td>
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</table>

#### Level 2

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<th>Ratio</th>
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<th>2007</th>
<th>2008</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td>Revenue Margin Before tax (OG)</td>
<td>52.6%</td>
<td>61.6%</td>
<td>58.9%</td>
<td>51.8%</td>
<td>44.9%</td>
</tr>
<tr>
<td>Revenue Margin After tax (OG)</td>
<td>47.4%</td>
<td>49.1%</td>
<td>51.1%</td>
<td>50.4%</td>
<td>36.3%</td>
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<tr>
<td>Turnover Rate (AOH)</td>
<td>0.116</td>
<td>0.118</td>
<td>0.109</td>
<td>0.092</td>
<td>0.092</td>
</tr>
<tr>
<td>Revenue margin Operating</td>
<td>52.6%</td>
<td>61.6%</td>
<td>58.9%</td>
<td>51.8%</td>
<td>44.9%</td>
</tr>
<tr>
<td>Revenue margin other</td>
<td>158.26%</td>
<td>43.06%</td>
<td>32.74%</td>
<td>29.18%</td>
<td>60.66%</td>
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</table>

#### Level 3

<table>
<thead>
<tr>
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<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td>Revenue Margin</td>
<td>14.2%</td>
<td>31.8%</td>
<td>26.7%</td>
<td>13.1%</td>
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### Margin Drivers %

<table>
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<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td>Gross margin</td>
<td>89.2%</td>
<td>91.6%</td>
<td>90.6%</td>
<td>88.6%</td>
<td>88.7%</td>
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<tr>
<td>Refurbishing costs</td>
<td>-14.9%</td>
<td>-6.5%</td>
<td>-11.1%</td>
<td>-14.2%</td>
<td>-17.7%</td>
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<tr>
<td>Deprecation</td>
<td>-8.9%</td>
<td>-8.5%</td>
<td>-8.9%</td>
<td>-9.4%</td>
<td>-9.9%</td>
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<tr>
<td>Payroll and other operating costs</td>
<td>-12.8%</td>
<td>-15.0%</td>
<td>-11.7%</td>
<td>-13.1%</td>
<td>-16.2%</td>
</tr>
<tr>
<td>Margin Net operating before tax</td>
<td>52.6%</td>
<td>61.6%</td>
<td>58.9%</td>
<td>51.8%</td>
<td>44.9%</td>
</tr>
<tr>
<td>Tax</td>
<td>-5.22%</td>
<td>-12.49%</td>
<td>-7.77%</td>
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<td>Margin Net operating after tax</td>
<td>47.41%</td>
<td>49.12%</td>
<td>51.14%</td>
<td>50.43%</td>
<td>36.26%</td>
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<tr>
<td>Other net operating income</td>
<td>78.31%</td>
<td>8.57%</td>
<td>3.23%</td>
<td>0.50%</td>
<td>26.95%</td>
</tr>
<tr>
<td>Margin including sale before tax</td>
<td>125.71%</td>
<td>57.69%</td>
<td>54.37%</td>
<td>50.92%</td>
<td>63.21%</td>
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<tr>
<td>Tax</td>
<td>-4.09%</td>
<td>-1.07%</td>
<td>-0.25%</td>
<td>-0.01%</td>
<td>-2.34%</td>
</tr>
<tr>
<td>Margin including sale after tax</td>
<td>121.62%</td>
<td>56.62%</td>
<td>54.12%</td>
<td>50.92%</td>
<td>60.87%</td>
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### Turnover Rate

<table>
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<th>2006</th>
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<th>2008</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td>Financial operational assets</td>
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<td>1.609</td>
<td>1.539</td>
<td>3.007</td>
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<tr>
<td>Other operational assets</td>
<td>0.206</td>
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<td>0.242</td>
<td>0.160</td>
<td>0.262</td>
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<td>Deferred Tax</td>
<td>17.73%</td>
<td>10.748%</td>
<td>11.187%</td>
<td>12.686%</td>
<td>12.944%</td>
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<tr>
<td>Short term debt</td>
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<tr>
<td>Other operational liabilities</td>
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<td>Dividencce</td>
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<td>1 / Turnover rate</td>
<td>0.116</td>
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113
<table>
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<th>Base</th>
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Note: The table above provides the total, growth, and base values for the years specified.