

Valuation of



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This Master thesis is written as the final paper of a five year education at Copenhagen Business School (CBS). It is approved by CBS and the company analysed, BWG Homes. This does not mean that they endorse the methods or conclusion in this thesis.

Copenhagen Business School, August 2011

Department of finance

Finance and strategic management

Preliminary

This thesis is written as the final paper of the study programme Cand. Merc. Finance and Strategic Management (FSM) at CBS.

It was the course “Housing economics and finance” (CM_F82) and a general interest in the housing market that inspired me to write a valuation of a BWG Homes. When deciding the company, I wanted it to be listed on Oslo Stock Exchange (OSBX) and be exposed to the Nordic housing market.

Writing the thesis have been demanding and work intensive, but at the same time very interesting and educational. I hope I can use some of the skills and knowledge that I have learned here later in life.

I also want to thank my supervisor Christian Würtz for good advises and consultation during the process of this thesis.

Copenhagen, August 2011

Peter S. Duus

Executive summary

The purpose of this thesis is to find the fundamental value of the Norwegian and Swedish house-building company BWG Homes. A strategic and a financial analysis were conducted to find the fair value of the company.

All the findings from the strategic analysis indicate that there will be an increase in demand for homes in both Norway and Sweden for many years. As the population of each country is continuing to grow by 50,000–80,000 each year, there will be high demand for houses in the future. The current situation is characterised by an undersupply of houses in both countries, which will add to future demand for houses. The decline in the farming and production sectors has led to a clear trend of migration towards bigger cities, where jobs can be found, mainly in the service sector. The need for new homes, especially around central areas, is therefore obvious. This is where BWG Homes has its main operations and its knowledge base.

The demand for houses has been identified, but there is still the question of whether there will be a demand for houses built by BWG Homes specifically. The findings show that BWG Homes builds attractive, energy efficient and up-to-date houses, and there is a broad variety of models to choose from. In addition, the company encompasses the two most recognisable brand names in both Norway and Sweden. It has been shown that BWG Homes is capable of exploiting its resources through profitable activities in a market that will need several thousand new houses every year.

The financial analysis shows that BWG Homes has a large amount of easily sellable real assets. Most importantly, it has a 'land bank' with the potential for building 15,000 new homes as well as over 100 completed houses. The company has a good rate of turnover and satisfying operating margins, compared with its peers. It also has a healthy equity/debt ratio and a good cash reserve.

The valuation was conducted using a DCF-model based on three different scenarios. The analysis is supported by a multiple valuation. The opportunity cost of capital (WACC) was found to be 7.2%, which is used to discount the future cash flow. The value of the share was found to be NOK 16.15. The closing price at the cut-off date was NOK 9.91, giving a potential upside of 63%. The value is highly sensitive to changes in the WACC, growth in the terminal period and the order intake. The value is therefore tested for changes in these parameters through a sensitivity analysis.

The upside potential of BWG Homes is based on fundamental parameters which indicate that the housing markets in both Norway and Sweden are strong. The combination of a strong industry with the resources and capabilities of BWG Homes is believed make this company a sound investment.

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1 Introduction

This thesis presents a strategic analysis and valuation of BWG Homes ASA (hereafter referred to as BWG). The company is listed on the Oslo Stock Exchange (OSE) and is a well-established house builder and property developer in Norway and Sweden. The company has four subsidiary companies, including the two most recognisable brand names in the residential housing market in Norway and Sweden. The company enjoyed a strong comeback after the financial crisis in 2008 and is currently seeing a record high level of *order intakes*. However, empirical data indicates that house prices in Norway and Sweden have never been higher in real terms. There are currently huge disagreements about whether housing in Norway and Sweden is overpriced and if the markets are therefore in a ‘bubble’ state. If the property market in Norway and Sweden burst, this would most definitively affect the value of BWG, as the order intake would depreciate. A strategic analysis of the macroeconomic environment is therefore of great importance.

The housing market in Norway and Sweden is an interesting arena for analysis for several reasons. The population in both Norway and Sweden is expanding by approximately 60,000 each year. This creates demand for new homes and puts a pressure on the supply side. Currently, there are not enough houses to meet the demand, and prices continue to reach record-high levels. In the past 15 years, Sweden and, especially, Norway have experienced an abnormal increase in house prices; many argue that the markets are in a speculative bubble fuelled by artificially low interest rates, easy access to credit and unreserved optimism. The situation is characterized by record high prices combined with an undersupply of houses, creating a precarious market situation.

In a broader perspective, the housing market is important because it is seen as an indicator for the entire business cycle. This means that residential housing markets and residential investments have been extremely accurate indicators of forthcoming economic upturns or recessions.

2 Problem statement

The main purpose of this thesis is to find the fair value of the stock BWG. This means identifying and quantifying future demand for BWG’s product. I also wish to discover if BWG are able to compete in the market that I have identified.

To determine future earnings, the company and the business environment must be analysed in detail, with realistic and underpinned estimates. This thesis is written from the perspective of an active investor with an investment horizon of one to three years. Based on this, the problem statement can be formulated as follows.

“Does the current share price of BWG Homes represent the fair value of the company and is it a good buy, considering a holding period of one to three years?”

2.1 Sub-questions

Responses to the problem statement can be facilitated by answering sub-questions. Each sub-question is of relevance and will help to answer the overall problem statement.

- What is the likely level of demand for houses during the next five years in Norway and Sweden?
- How will the factors that affect demand change?
- How will building costs change and thus affect house prices?
- Who are BWG’s main competitors, and what are the differences between them?
- Is BWG prepared for technological and legal changes in the industry?
- Is housing in Norway and Sweden currently overvalued?

2.2 Delimitation

Answering the problem statement requires some delimitation to the thesis, enabling me to concentrate on the most important issues

- I have chosen not to estimate the future exchange rate between the Norwegian krone (NOK) and the Swedish krona (SEK). This is based on the decision that the current level is likely to be a good indicator of future levels.
- As BWG is a listed company, only publicly available information has been used.
- The financial analysis covers a period of five years. This is based on the history of the company, and figures are comparable only from 2007 onwards.
- BWG consists of four subsidiary companies. These companies could have been analysed separately, but the decomposition in the annual report only separates the Norwegian and Swedish segments. Forecasts are therefore made for these two

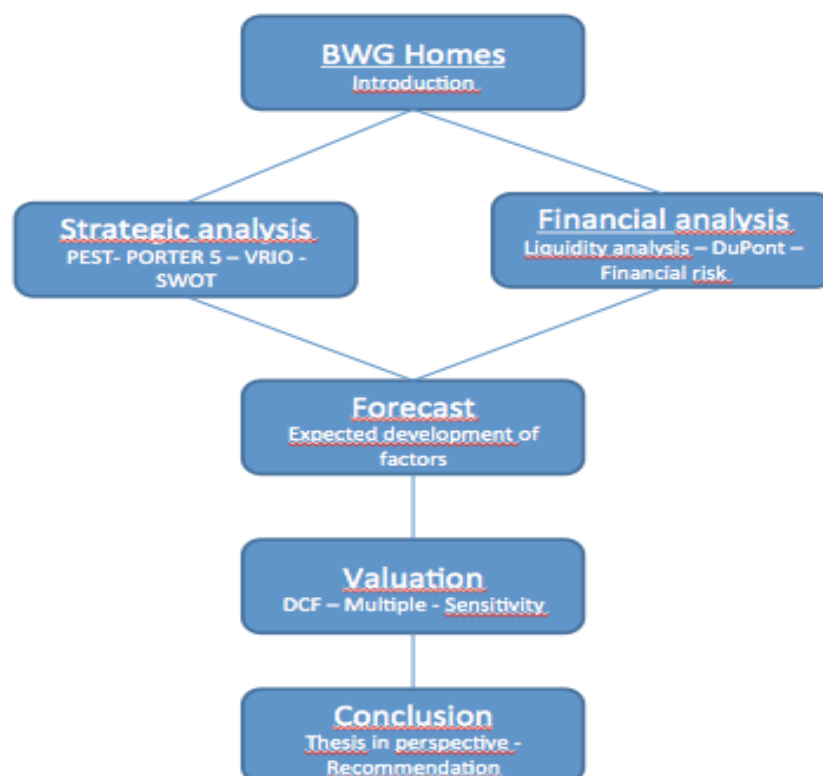
segments and not for the specific subsidiary. This is considered sufficient as the companies that operate in each segment are exposed to the same risk.

- The valuation will focus on the continuing core business of BWG. Income from financial assets, associated companies and discontinued operations will not be included in the valuation.
- Despite the cut-off date of 31 December 2011, some of the information used in the strategic analysis comes from after that date. This is to ensure a higher level of quality in the analysis.

2.3 Research design

The thesis is divided into six sections (see Figure 2-1). Each part will contribute to the final conclusion, which will then answer the problem statement. The structure will ensure a high level of consistency and thus provide an accurate analysis.

Figure 2-1



3 BWG Homes ASA

BWG is a Scandinavian house builder and property developer that is listed on the Oslo Stock Exchange (OSE). The company consist of four subsidiaries, and BWG acts as the parent company of these subsidiaries. They operate in Norway and Sweden, where they manufacture and build standardised houses for the family segment. All houses are designed, named and, to some extent, prefabricated. Specifications and price details are available to customers once they have decided which house they would like to buy. The company has 978 employees, including 569 carpenters and production workers.

Figure 3-1

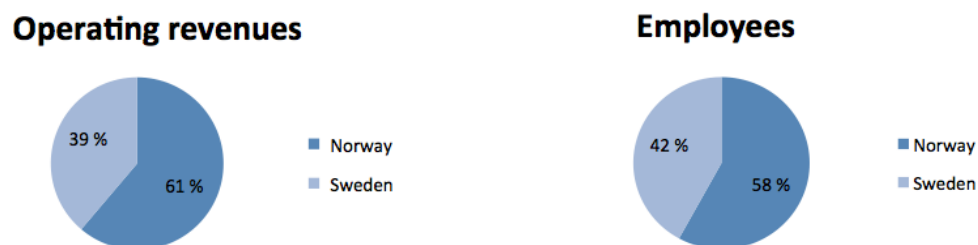
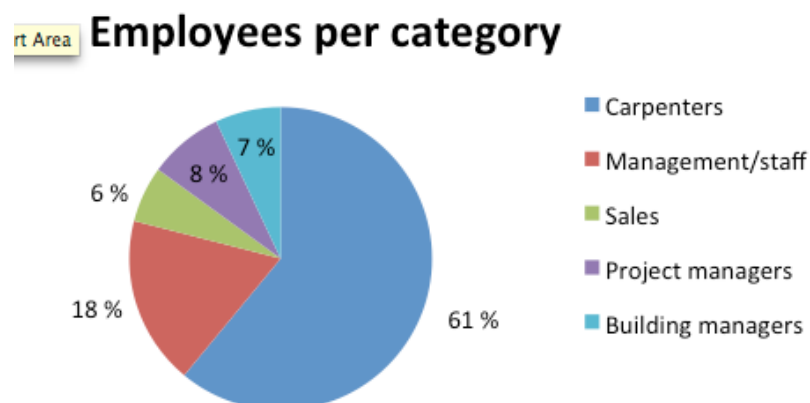


Figure 3-2



BWG's core business is residential project development and BWG is in control of the entire value chain. The process is illustrated in Figure 3-3.

Figure 3-3: Process of BWG's core business operations

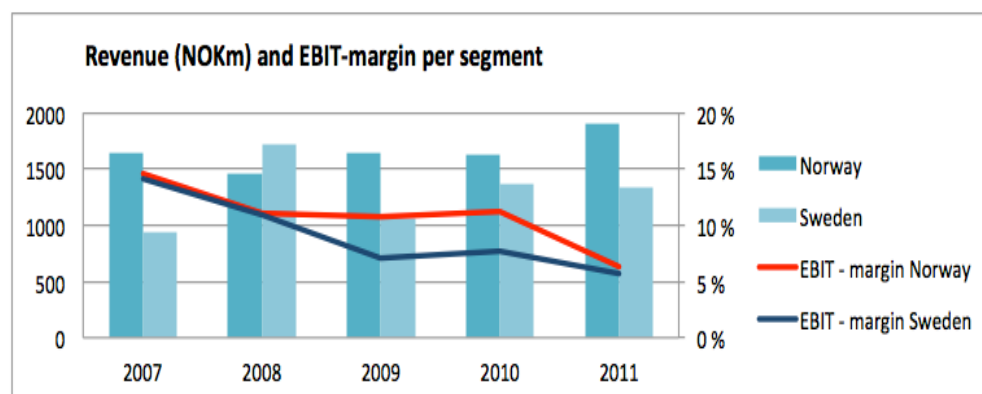


Source: BWG Annual report and own creation

The entire process usually takes between two and five years, depending on the nature of the project. The process of regulating the land for residential use is usually the most time-consuming part. BWG is in charge of the entire process but the company uses sub-contractors for tasks that cannot be completed by its own carpenters. These projects account for 90% of BWG's total revenue. The remaining 10% derives from customers who own their own land; they buy the house from BWG but build it themselves, without help from BWG.

BWG builds around 3,200 houses each year. In 2011, the company's revenue totalled NOK 3,461 million. Some 61% of the revenue came from the Norwegian segment, the rest from the Swedish segment. Its market share was 3% in Norway and 11% in Sweden. Consequently, most of the revenue currently comes from the segment with the smallest market share.

Figure 3-4: Revenue and EBIT-margin per segment



Source: BWG annual report and own creation

3.1 Norwegian Segment

Block Watne was the first brand to come under the BWG umbrella. The company builds residential units on site: the materials are delivered to the site unassembled. Block Watne has 24 architect-designed houses in its portfolio; and the standard is relatively high. Customers have a relatively high level flexibility when it comes to customising and making adjustments to the house. The company was the first to use plasterboard in residential construction in Norway (in the mid-1980s). They are now the best-known residential house builder in Norway.¹

¹ BWG Homes Annual report 2011

Hetlandhus produces modules at the SmålandsVillan factory in Sweden; these can be completed within two to three months. The concept is to offer good-quality houses at a low price, although there is little flexibility for the customer. The brand was reintroduced to the Norwegian market in 2009 and offers nine models. This company targets demand for low-energy and low-emission houses

3.2 Swedish Segment

Myresjöhus offers mid-range and high-quality houses; these are 30% prefabricated in the factory and then assembled on site. A typical client is a middle-income family or a second-time buyer, either with children or about to start a family. These customers generally demand a high level quality and flexibility, and a wide range of options that will allow them to incorporate their own style. Homes can be purchased either as a construction kit or as a “key-ready” house. The company has a portfolio of 64 houses and is one of the best known on the Swedish housing market.

SmålandsVillan offers the same concept as Hetlandhus but this company has 12 different houses in its portfolio. It uses standardised layouts and offers limited options in an attempt to keep prices down. The houses are produced mainly in the factory (80%); they are then transported to the construction site as two or three large modules, plus the roof.

Figure 3-5: BWG’s four subsidiaries

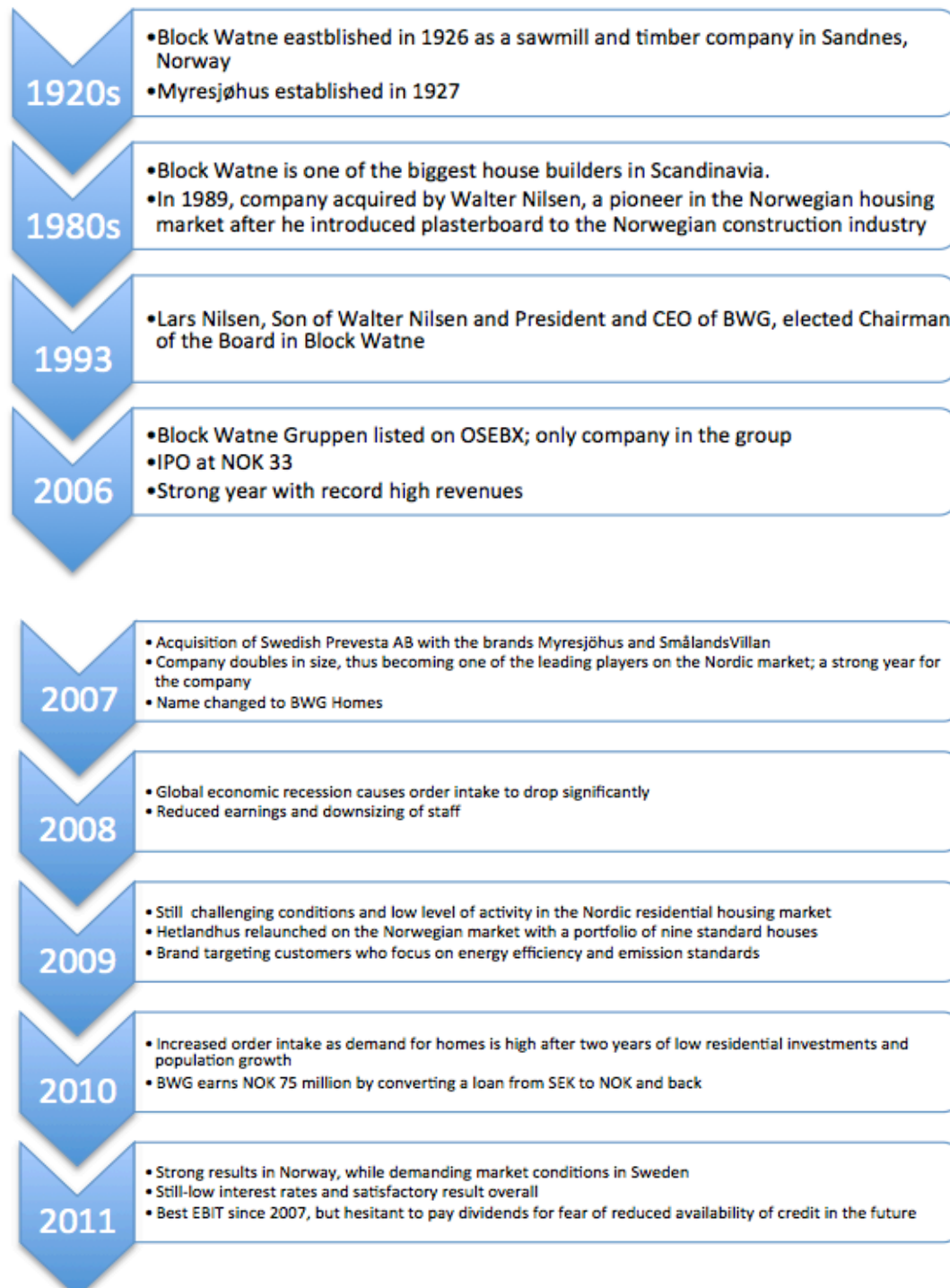


BWG has a total of 129 housing models in its portfolio. Some of its models and projects can be found in appendix 17. The level of diversity and innovation within this portfolio will be discussed later.

3.3 History

Figure 3-6 illustrates how the company has evolved over time. It shows the most important events in the company's history, and the highlights of the year.

Figure 3-6

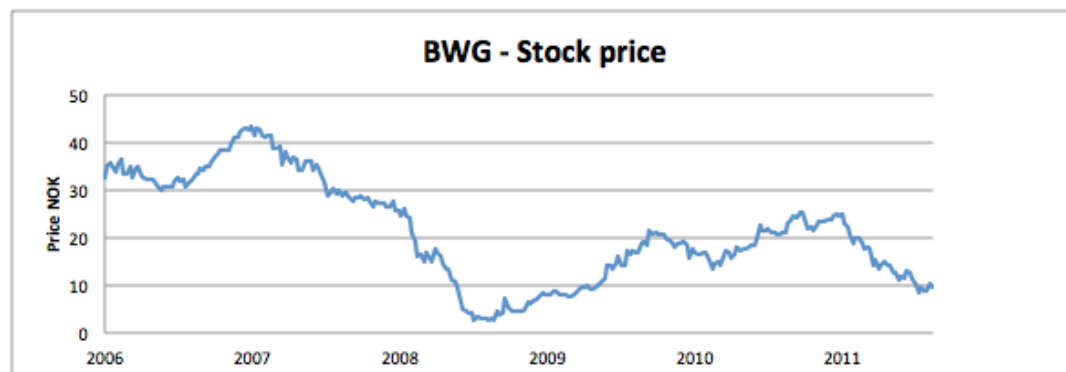


Source: BWG annual report and own creation

3.4 Performance

BWG has experienced one of the largest financial booms and busts during its short time on the OSE. Its stock reached an all-time high in April 2007, when it was trading at NOK 42. As a cyclical company, BWG was badly hit during the financial crisis; in December 2008, the value of its stock plummeted to an all-time low of 2.91.

Figure 3-7



Source: Datastream

3.5 Vision

BWG aims to build quality houses at affordable prices, either through its own projects in suburban areas or for customers who have their own plots of land.

3.6 Strategy

BWG's main purpose is to ensure that its subsidiaries are profitable and that they continue to be leading players in their respective markets. The aim is for strong and stable organic growth, with a focus on long-term profitability instead of short-term top-line results. At the same time, BWG wishes to be involved in potential acquisitions and consolidations on the Nordic housing market to create operational synergies and capture market share. BWG focuses on its own housing projects, which are mainly on the outskirts of city centres. It strives to provide dividend-paying stock, where the dividend policy is set at 50% of earnings after tax, unless it interferes with the company's growth ambitions and capital structure.²

3.7 Ownership

Oslo Bolig og Sparelag (OBOS) has the largest share in BWG: almost 20%. OBOS is the biggest housing organisation in Norway, with over 300,000 paying members. OBOS has

² BWG annual report 2010

residential projects in all major cities in Norway and it collaborates closely with BWG on several residential projects that are built for its members.

Figure 3-8

Shareholders	Ownership
Oslo Bolig og Sparelag	19.46%
Lani Industrier AS	15.57%
Orkla ASA	7.35%
Odin Norge	2.84%
Odin Norden	2.65%
Other owners	52.13%

Source: BWG Annual Report

Lani Industrier, the second largest shareholder, is fully owned by Lars Nilsen, the President and CEO of BWG. He was in charge of listing the company in 2006 and has worked with Block Watne for over 20 years. The five biggest shareholders own 47.87% of BWG. There is only one class of shares, and all shares are freely transferable. Each share has a nominal value of NOK 1 and equals one vote. Every shareholder has the right to attend shareholders' meetings, where decisions are made with simple majority.

3.8 Board

BWG has adopted the Norwegian code of practice for corporate governance of 21 October 2010. It follows a two-tier board system set by law in Scandinavian countries.³ The system requires the company to have a supervisory board in addition to the executive board. This supervisory board governs and protects shareholders' interests. Figure 3-9 illustrates this particular board system.

Figure 3-9 Board system



The board is elected by the shareholders and is responsible for deciding the overall objectives and strategy of BWG. It also appoints the CEO and the rest of the executive

³ BWGH annual report 2010, p.8 and Thomsen, S. (2008). An Introduction to Corporate Governance, p.66

management, who will be responsible for putting strategy into practice. The Board of BWG consists of seven members: four elected at the annual general meeting and three by the employees. A short presentation by each member of the board provides an understanding of the skills and expertise held by the members.

Eva Erikson (b. 1959): A civil engineer from Stockholm with experience in property and finance from previous management positions in the private sector. On the board since 2007, and became chairman in May 2011. Holds 20,000 shares in the company.

Hege Bømark (b. 1963): Educated at Norges Handelshøyskole. Gained experience as a business analyst in Orkla Finans AS and Fearnley Finans AS. Has also been a project manager in Eiendomsutvikling AS and director of the board in Fornebu Utvikling. Holds 200,000 shares in the company.

Harald Walther (b. 1946): Practising lawyer with own firm. Former consultant to the Ministry of Finance in Norway. Was chairman of the board from 2005 to 2011.

Espen Wiik (1972): Civil engineer with experience from Orkla AS and A. T. Kearney. Serves as director in many privately owned companies. Holds 5,000 shares.

Tore Morten Randen (b. 1965): Senior trade union representative for the carpenters in BWG. Has 29 years' experience as a carpenter in Block Watne. Director of the board since 2005. Holds 200 shares.

Lars Ørjan Reinholdsson (b. 1963): Carpenter in Block Watne since 1995. Director of the board since September 2010. Holds no shares in the company.

Magne Staalstrøm (b. 1951): Project manager in Block Watne since 2001. Trained as a construction engineer. Director of the board since 2010. Holds 400 shares.

Overall, the board has a good balance among its members, with extensive experience within finance, property, civil engineering, law, consulting and carpentry. Employee representatives are important to protect the interests of the labour force, which accounts for over 60% of the total number of employees.

3.9 Management

The management is in charge of the daily operations of BWG, which oversees operations at all four subsidiaries. These subsidiaries are independent/limited companies with their own qualified management. The management structure at the subsidiaries will not be presented here. The BWG management is as follows.

Lars Nilsen, President and CEO, is the second-largest shareholder in BWG. He gained an MBA in finance and real estate from the University of Denver in 1992. He joined the

board of Block Watne of 1995, and was in charge of listing BWG on the Oslo Stock Exchange in 2006. His father bought the company in 1989 and has been involved since then.

Arnt Eriksen, CFO, gained extensive experience in different accounting positions in both listed and unlisted companies. He became CFO of BWG in 2008, after serving as vice president of accounting in Marine Harvest from 2003. He graduated as an accountant from the Norwegian School of Economics and Business Administration (NHH) in Bergen in 1996.

Ole Feet, COO, trained as a civil engineer at the Technical University in South Dakota. He has held various positions in Block Watne since 1994.

3.10 Management Compensation Scheme

Management compensation is divided into a fixed part and a variable part. The fixed part is the annual salary. The variable part is a bonus programme, which is part of BWG's incentive system. Members of the executive management team have individual bonus schemes, which are based on the company's financial performance and the individual's performance. The bonus schemes have an upper limit of 12 months' salary. The CEO determines the bonus criteria for the other members of the executive management team but the CEO is not part of a bonus scheme. BWG employees do not enjoy share-based remuneration or option schemes.⁴

3.11 Nordic residential construction market

The Nordic housing market consists of a broad range of companies, from independent entrepreneurs to multinational enterprises. A growing number of the players in the market are large corporations with projects that take advantage of economies of scale. These companies are described in more detail in the Porter analysis. Figure 3-10 illustrates the extent of the Scandinavian housing market.

Figure 3-10



Source: DNB markets and own creation

⁴ BWG Annual report 2011

Figure 3.10 shows that Norway has the largest market for new residential construction, even though it is the smaller of the countries being considered in this thesis. The market is defined according to types of dwellings: single houses, apartments, smaller flats and others. The upward trend in Norway is an indication of the shortage on the supply side. It also reflects where BWG has made the most profit in the last couple of years. This will be discussed later. Denmark is included to provide a more complete illustration of the Scandinavian market.

3.12 Standardized houses

In Norway and Sweden, 80% of single-house buyers decide to buy a standardised house.⁵ Such a house is designed for serial production and it tends to be more basic in terms of design and options, compared with a custom-built house. Standardised houses are usually presented in a catalogue that shows price, model name, energy consumption and other specific details.

This makes the purchase and process predictable in terms of price and result. It also makes the supply side more elastic: standardised houses are normally assembled faster than other types of house. The information gap between seller and buyer is also narrower; the customer has more information about the house being purchased.

Block Watne had presented the concept of standardised housing to the Norwegian housing market in the late 1950s. The number of players has increased significantly since then, and the market is now characterised by a broad number of different brands and models. The industry will be discussed in greater detail later in the industry analysis.

4 Strategic Analysis

The strategic analysis will give a qualitative insight into the company's underlying economic conditions. It will be divided into three parts and be based on recognised strategic frameworks. The first part is a macroeconomic analysis based on the PEST model. The second part is an industry analysis that will map the level of rivalry and competitiveness in the industry. The third part is a VRIO analysis that identifies BWG's competitive advantage by analysing the company's resources and business model. A conclusion of the three parts will be presented in a modified SWOT model.

4.1 PEST

Housing markets and demand for houses are highly influenced by macroeconomic factors. A thorough PEST analysis must therefore be conducted to determine how

⁵ www.byggebolig.no

demand for houses will shift in relation to movements in specific factors. The PEST analysis comprises four parts: political, economic, social and technological. Later in this thesis, the development of these factors will be estimated for the future (see the Forecast section below).

4.2 Political

Political decisions are important because residential developers are dependent on permissions, licenses and mutual agreements with local authorities to allow them to start construction. Politicians decide building standards and requirements, and these can have a significant bearing on the cost of building a house. Land regulations and building standards are therefore considered to be the most important political issues for BWG.

4.2.1 Regulation

BWG is dependent on close collaboration with local authorities when building houses and developing areas for residential use. BWG's business model is therefore vulnerable to political decisions; such decisions have the potential to ruin projects and profitability. BWG has a team of lawyers, construction planners and engineers that is dedicated to the specific task of regulating land areas.

The process usually starts with the purchase of large areas of land that have been regulated for farming or recreation. These so-called LNR (land, nature and recreational) areas of land can often be bought at a high discount as they initially have little or no commercial value. Regulating land from LNR to residential usually takes around two to five years from when the land is bought to when construction starts. The process is characterised by high risk (and potential high reward), as it can take an unlimited amount of time to have areas regulated, and there is the possibility that permission will not be granted. Permission often has certain conditions attached, such as improving the infrastructure, extended pavements and installing streetlights to cope with the increase in activity in the area. This can make projects unprofitable, depending on the terms set by the politicians. The payoff from changing use from LNR to residential can also be exceptionally high. However, owning property yields no cash flow for the company and ties up liquidity.

The process of regulating land is special, as properties are heterogeneous and never identical. Subjective opinions, local knowledge or information not available to BWG may influence political decisions and prevent the right permissions from being given. Land acquisition is therefore a risky investment, and proper due diligence must be conducted before purchase.

The Norwegian and Swedish government both face criticism for being too strict and bureaucratic in the process of making land available for housing. This often results in a process taking several years, making the project more expensive and risky for the property developer. The biggest bottleneck in the Norwegian and Swedish housing market is the lack of available land regulated for residential use.

4.2.2 Building standards and cost

Construction standards for new houses in Norway and Sweden can be found in the building standard protocols called TEK 10. During the past five years, major changes have been made to these regulations by political decisions. The new requirements focus mainly on improvements in energy efficiency and the sustainability of materials, safety and accessibility for disabled users. The list below presents the estimated extra building costs arising from political decisions made since 2007. The calculations (in NOK) are based on an average two-room apartment in a three-storey building.⁶

- Thicker isolation and better windows (70,000)
- Improved ventilation (70,000)
- Turning space for wheelchair users in all rooms (110,000)
- Sprinkler system for fire-fighting (25,000)
- Elevator if more than three floors (140,000)
- Increased number of exits (10,000)
- Water-heated floors and radiators (75,000)
- Access without steps (14,000)
- Related engineering, planning and administrative work (80,000)

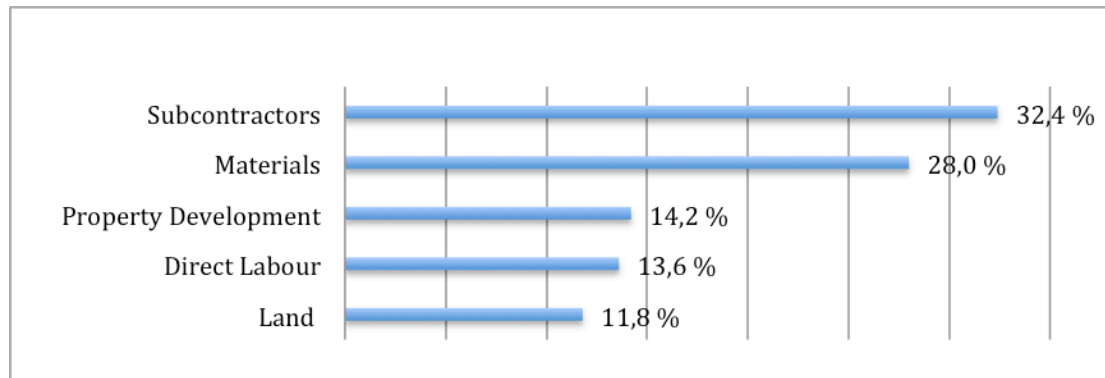
The total extra cost of NOK 600,000 for apartment will naturally be passed on to the purchaser. These requirements make it more expensive to build houses and thus reduce the incentive to engage in residential construction activities. Increasing construction cost by 1% reduces new building by 1% in the long run.⁷ This puts pressure on house prices, as demand for existing houses increases.

BWG calculates their building costs as follows (see Figure 4-1).

⁶ <http://www.aftenposten.no/bolig/boligokonomi/article4081888.ece#.T1YeDnLj7rY>

⁷ http://www.norges-bank.no/upload/import/publikasjoner/penger_og_kreditt/2006-04/boliginvesteringer.pdf

Figure 4-1: Building cost



The most interesting cost is the cost of *land*. During the past 10 years the price of land has increased more than building costs have. In city centres it is not unusual for the property to accounts for 35–50% of the total value of the house. The low cost of land indicates that the process of regulating land areas contributes substantially to the amount of profit on their projects (see Regulation).

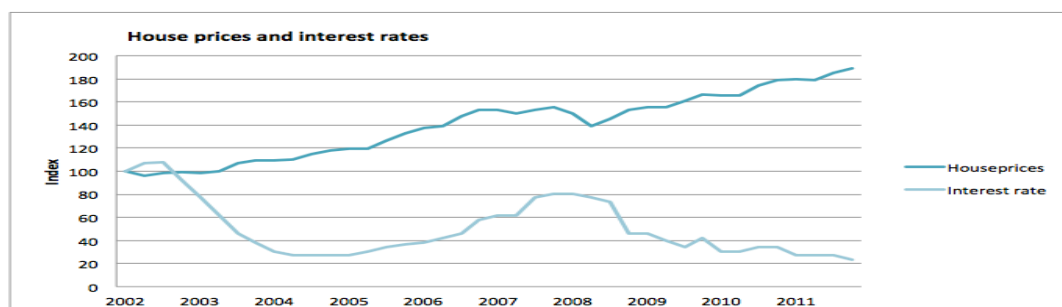
4.3 Economical

For BWG, the most important economic factors are the interest rate, the availability of credit, rules on taxation and the gross domestic product (GDP). Several of these factors are under political control but are nonetheless presented in this section.

4.3.1 Interest rate

The interest rate is important for BWG for two reasons: it affects its financial expenses and if affects demand for its product. BWG's interest-bearing debt is approximately NOK 1,700 million, all of which is at a floating rate after refinancing the debt in 2010. This makes the company very vulnerable to upward shifts in the interest rate. The interest rate is currently between 4.5% and 5%.

Figure 4-2: Interest rate vs. house price index, Norway



Source: SSB

This illustration is derived from the Norwegian market and it shows the correlation between house prices and interest rates. In the last 15 years, interest rates have been steadily declining in both Norway and Sweden, with the exception of a few short periods. A study on interest rates found that as much as 70% of the price of a house could be explained by the interest rate.⁸ Another study found that an increase of 1% in the interest rate decreased house prices by 6% in the long run.⁹ This illustrates the huge influence that interest rates have on the house prices.

4.3.2 Credit

The availability of credit is important to BWG for two reasons: its daily operations and the ability of its customers to finance investments. BWG depends on short-term credit to run its daily operations. The company's revenues are often received several months after initial investment; in the meantime, they depend on liquidity from creditors. When credit markets are under pressure, they are required to increase the level of security on debt and pay higher interest; this happened in 2008 and 2009. During those years, credit was scarce and BWG increased its net financial items by 115%.

Perhaps more importantly, BWG's customers depend on credit to purchase a house. If they are denied a mortgage, they will not be able to finance the purchase of their house. The availability of credit is highly influenced by business cycles. When house prices appreciate, lending institutions are more willing to lend money, as the value on the active side in their balance sheets increases. This is because mortgage lenders are indirectly 'part owners' of the house they help to finance. Easy access to credit encourages lending, which increases prices still further. However, when prices depreciate, lending institutions act in the opposite way. They fear losses, and become more selective when deciding who gets a mortgage. They also demand that the borrower sells the house before being granted any new credit. This slows down the market significantly. In addition, there is an increase in the level of security and the amount of equity required. This illustrates how credit institutions amplify price fluctuations by regulating access to credit. Since the mid-1990s products and creativity in the mortgage market have increased dramatically in both Norway and Sweden. Four major changes in the mortgage market have led not only to high liquidity but also to increased risk.

- Interest-only mortgages
- Adjustable rate mortgages (ARM)
- Longer maturities on mortgages.

⁸ Andre 2010, A birds eye view over the OECD housing Market, pp 18-27

⁹ http://brage.bibsys.no/uis/bitstream/URN:NBN:no-bibsys_brag_19946/1/Sjursen,%20Marie.pdf

- Housing equity withdrawal (HEW)

Interest-only loans have increased the total amount a buyer can pay for a house, as a down payment is not required. At the same time, the risk has increased significantly as the borrower is vulnerable to upward shifts in the interest rate. Interest-only loans prevent the lender and the borrower from having a safety buffer in a downward market. As a result, many house owners can end up being technically insolvent, meaning that their mortgage is higher than the value of their house. This also causes markets to stagnate, as many house owners cannot afford to move and have no equity left from their initial investment.

Adjustable rate mortgages have increased in popularity the past 20 years. Interest rates have been steadily declining; currently, 90% of mortgages in Norway and Sweden are based on a floating rate.¹⁰ This is also caused by the absence of an organised fixed-rate mortgage market, as can be found in, for example, Denmark.

Since the mid-1990s credit institutions have allowed home-equity withdrawal (HEW). This means that a borrower can withdraw money through the mortgage if the property has increased in value. This has led to many people maximising their loan-to-value (LTV) ratio and increasing their consumption.

Credit institutions have relaxed financing constraints, especially for first-time buyers, in the past 15 years. They have created affordable loan solutions that are attracting low-income segments to participate in the housing market. This can cause severe damage to a bank's loan portfolios and lead to greater fluctuations in prices in the housing market, as can be seen from the sub-prime crises in the United States in 2007 and 2008. Recently, banks have been subject to tighter lending restrictions, in an effort to prevent people taking on too much debt.

In December 2010 Sweden imposed a 15% equity requirement on those seeking a mortgage.¹¹ This was an increase from the previous requirement of 10%. This naturally decreases the amount house buyers are able to borrow, as equity is limited. One year later, house prices had dropped by 1% in Sweden but increased by 9% in Norway.¹² It is not possible to know whether the new law directly caused the drop in Sweden, but it is known to have had a negative effect on prices.

¹⁰ SSB and SCB

¹¹ <http://e24.no/eiendom/block-watne-sjefen-merker-lite-til-nye-egenkapitalkrav/20153053>

¹² <http://www.dn.no/forsiden/borsMarked/article2260695.ece>

In Norway, similar legislation was introduced on 1 January 2012. However, house prices have continued to increase since then. Many believe that the effects of the new legislation are yet to be seen. DNB (the Norwegian bank) estimates that one in four people who would previously have been approved for a mortgage will be denied because of the 15% equity requirement.¹³

BWG's CEO commented on the new credit regulation in Norway and Sweden:

*"The pressure on house prices cannot be solved by interfering with the relationship between the banks and the customer. The responsibility of the government is ensuring enough houses are built, and is the only way the prices can come down. The regulators should therefore concentrate on providing the market with enough houses instead of tightening the credit. As long as there is a shortage of supply the prices will stay high."*¹⁴

This statement illustrates the connection between political decisions and economic consequences. It also connects the absence of regulated residential land with political decisions and shows that politicians are not always targeting the right areas when trying to solve the problems associated with an overheated housing market.

4.3.3 GDP and Debt

Gross domestic product (GDP) refers to the market value of all officially recognised final goods and services produced within a country in a given period.¹⁵ GDP functions as an indicator of the business cycle, and is therefore important to the housing market. Historically, GDP has increased by between 2% and 4% annually in both Norway and Sweden. GDP correlates positively with house prices, although house prices seem to shift before the business cycle does. This indicates that house prices reflect the expectations of the economic future.¹⁶

In 2007, the level of household debt as a percentage of disposable income was high: 210% in Norway and 150% in Sweden.¹⁷ These numbers place these countries among the worst in Europe, and cause some concern. The ratio is especially high in Norway, leading

¹³ <http://www.aftenposten.no/bolig/boligokonomi/Tjener-en-halv-million--far-ikke-lan-6754259.html#.T1YRdXLj7rY>

¹⁴ Lars Nilsen, CEO BWG Homes

¹⁵ www.investopedia.com

¹⁶ Goodhart & Hofmann 2007 - House prices & the macroeconomy

¹⁷ http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Households%E2%80%9999_stock_of_liabilities_as_a_percentage_of_Household_Disposable_Income,_2000_and_2007.PNG&filetimestamp=20090608090557

the International Monetary Fund (IMF) to devote an entire section of a report (published in January 2012) to its concern about the high levels of debt held by Norwegian households. The Organisation for Economic Cooperation and Development (OECD) supports this view and points out that almost all residential debt is at a floating rate. This is unusual in a European context and it puts debt holders in a vulnerable position.¹⁸

4.3.4 Tax

Taxation is important for house prices as shifts in taxation rules affect living expenses. Taxation on houses is considered favourable in Norway and Sweden. The most important tax benefits related to housing are as follows.

- Tax-free capital gains when owning and living in a house for more than one year.
- Interest deduction on income, making house ownership more affordable for those with an income. Although this deduction applies to all debt, the fact that housing is by far the biggest component of debt means it is usually seen as a ‘subsidy’ to house owners.
- The assessed value of houses is approximately 25% of the market value when calculating wealth and municipal tax. These taxes are approximately 1% of the assessed value in both countries.
- If a person owns more than one house, the assessed value is usually between 40% and 60% of the market value. As the debts are measured in real value terms, housing investments are taxed artificially low compared with other asset classes, thereby attracting investors.

These tax benefits put upward pressure on prices as housing become more affordable for owners and more attractive for investors.

In 2010 all homes in Norway were given a new assessed value, thus increasing the number of homeowners subject to the wealth tax. The opportunity to let a bigger part of your house without paying tax on the income was also removed, thus reducing tax benefits.

In Norway, the Norwegian Confederation of Trade Unions (LO) wants to limit investors and speculators in the residential housing market by decreasing the interest rate deduction on mortgages for multiple house ownership.¹⁹ This proposition is meant to cool the Norwegian housing market, making it more affordable for first-time buyers.

¹⁸ OECD report February 2012

¹⁹ <http://www.na24.no/article3328906.ece>

It is not known if there have been any similar discussions in Sweden, probably because the housing market there is slightly less aggressive.

4.4 Social

The most important social factors for BWG are population growth, unemployment and migration patterns.

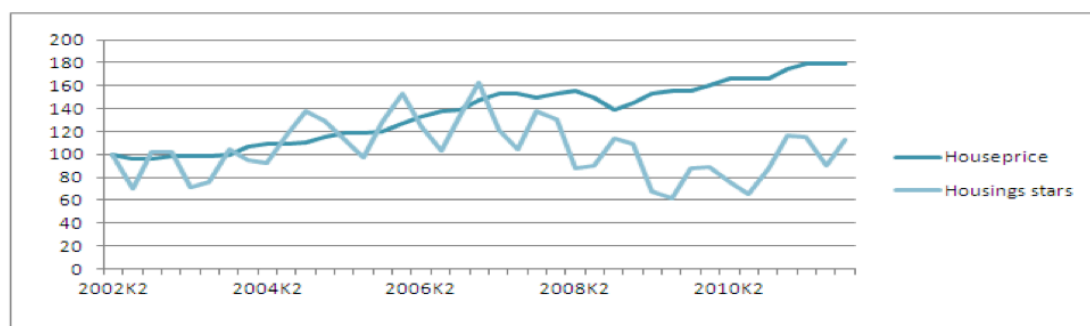
4.4.1 Population growth

Population growth creates a natural demand for houses. The population in Scandinavia have been steadily growing for several decades. The need for new homes is high after years of population growth that has been higher than expected. There are two distinct reasons for this growth.

- Immigration: Growth in the economies of both Norway and Sweden creates demand for a bigger workforce. The populations of Norway and Sweden have grown by 50,000–80,000 each year, even though the average number of children borne by each woman is 1.9.²⁰ This illustrates how much immigration influences population growth.
- Longer life expectancy: The population in Norway and Sweden are living longer than ever before; the average life expectancy is over 80 years in both countries.²¹ This is five years longer than it was just 15 years ago.²²

Population growth has led to an undersupply of houses in both Norway and Sweden, putting prices under pressure. This situation is described to be one of the main reasons for why prices have increased to the current level during the last 10 years. This is discussed more deeply in the *forecast*.

Figure 4-3– House prices and housing starts in Norway



Source: SSB and own creation

²⁰ www.fhi.no

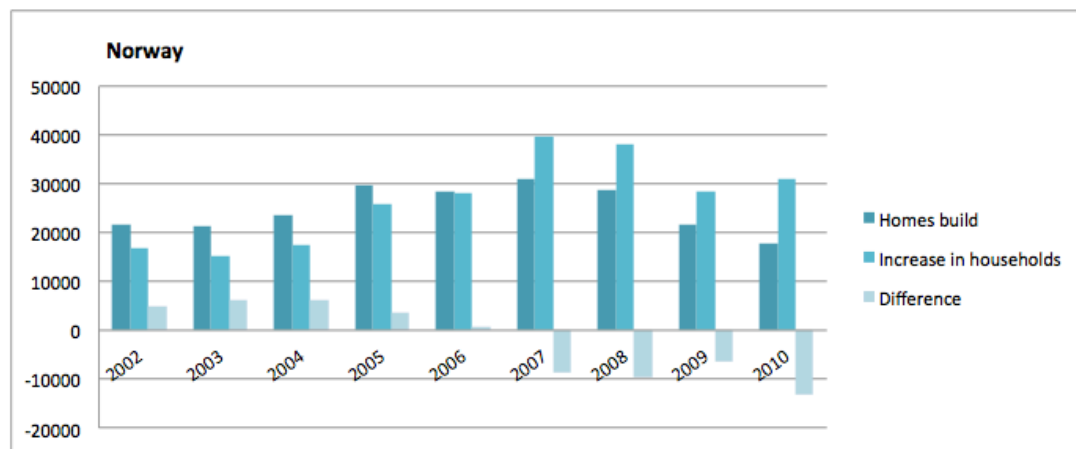
²¹ www.ssb.no , www.scb.se

²² www.ssb.no

Figure 4.3 shows a positive correlation between housing starts and house prices from 2002 until 2006. After that the correlation becomes negative, which is the most common situation. As residential housing is a lagging industry, the correlation can be skewed.

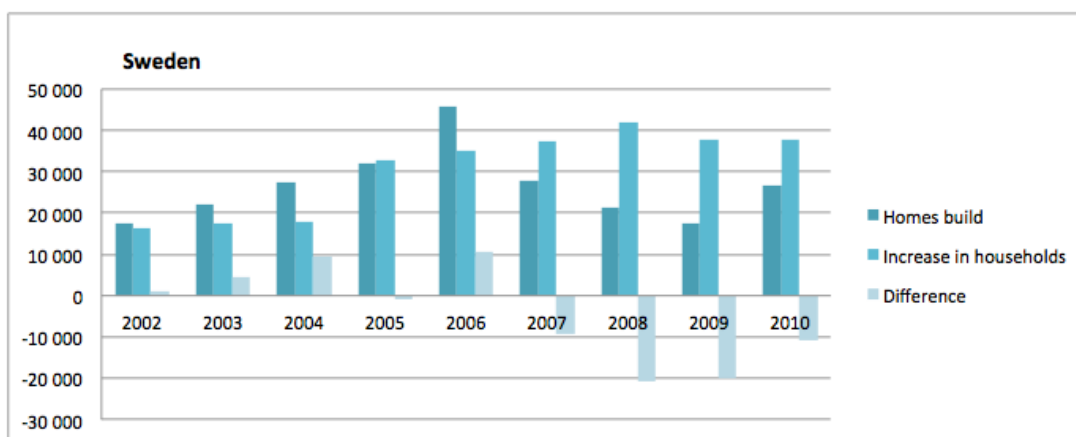
The figure below shows oversupply and undersupply of houses. This can be linked to the graph above in terms of fewer housing starts equating to a great level of undersupply and thereby pressure on prices.

Figure 4-4– Oversupply/undersupply of houses



Source: SSB

Figure 4-5



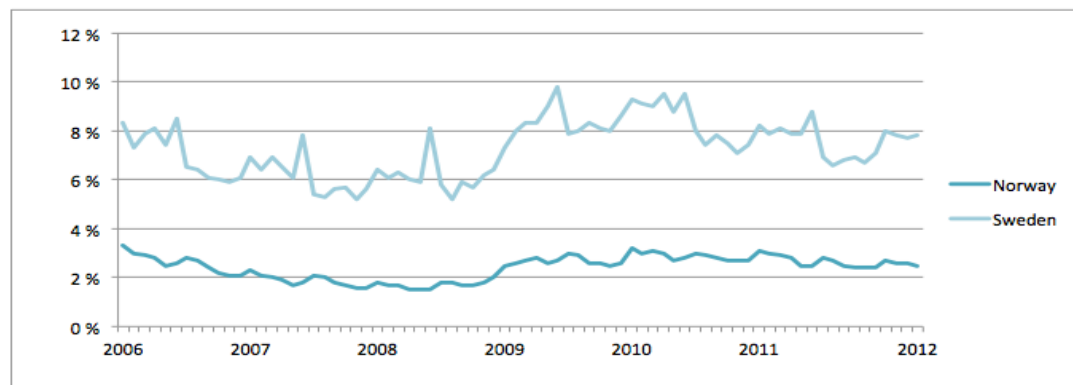
Source: SCB

Since 2007, there has been a significant undersupply of houses compared with the number of households in both Norway and Sweden. There is currently a large undersupply of houses in both countries and the trend is expected to continue.

4.4.2 Unemployment

House prices have a negative correlation with unemployment. High unemployment equals lower salaries, decreased living standard and greater uncertainty about future income. Without a job, a person will have limited access to credit and so money available for a house purchase will be reduced. Sound economies and trade surpluses from exports and industry have kept the unemployment rate in Norway and Sweden at one of the lowest in Europe.

Figure 4-6– Unemployment rate



Source: SSB and SCB

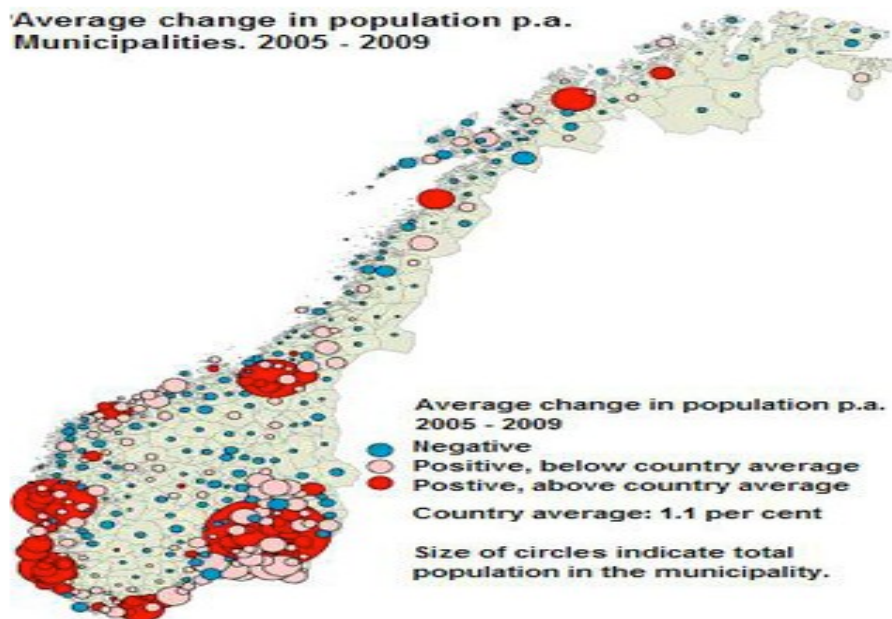
Figure 4.6 shows that Norway has a very low unemployment rate. However, Swedish unemployment rates are also low in a European context.

4.4.3 Migration patterns

Norway and Sweden have seen significant depopulation in smaller towns and villages during the past decades. This has been caused by a decrease in farming and in production industry in both countries.²³ Many have migrated towards the bigger cities, where they have better chances of getting a job. Migration towards the bigger cities and the density of the population in the main cities has led to a shortage of available land for residential use. As a consequence, house builders have been forced to build many small dwellings in limited geographical areas. The pressure on areas in the cities is reflected in house prices. For BWG this trend is positive, as the company's expertise is within residential property development and construction in the outskirts of main cities and it specialises in small and medium-sized houses that are particularly suited for population growth.

²³ www.nrk.no

Figure 4-7



Source: European forum for geostatistics

Figure 4.7 illustrates the migration trend in Norway from 2005 to 2009. Major cities like Oslo, Bergen, Stavanger and Trondheim have all seen their populations grow by more than the national average (shown in red in the graphic). This trend is causing prices to increase more in bigger cities, as land becomes a scarce resource. This knowledge is important because it shows where demand for houses will be greatest. Sweden is experiencing the same migration trend, with migrations towards cities like Stockholm, Gothenburg and Malmö.

4.5 Technology

The process of constructing a house has changed during the past decades. The first prefabricated houses in Scandinavia were seen during the early 1980s. They quickly became popular, thanks to the low cost relative to quality and size. Today, the majority of houses sold are standardised and, to some extent, prefabricated.²⁴

In the past few years, innovations in materials used and in building standards have increased energy efficiency and durability and reduced the level of maintenance needed. *Passive houses* are more energy efficient, owing to thicker isolation, heat recycling and the use of natural sunlight. They use approximately 75% less energy than ordinary houses. Almost 10% of all *passive houses* built in Europe are in Sweden, and interest is

²⁴ BWG Annual report 2010

picking up in Norway.²⁵ The Norwegian government has expressed that all new houses should meet the requirements of passive houses by 2020, although regulations could be introduced earlier. The most energy efficient houses on the market today are the so-called zero-emission houses. These houses have zero CO₂ emissions and run on solar power, wind energy and geothermal heat. They produce more energy than they use. BWG already has several houses that fulfil the new energy requirements that will be enforced in the future.

4.6 Porter's Five Forces

To analyse the level of competitiveness and rivalry in the industry, the framework of Porter's Five Forces are used. This provides an understanding of the level of saturation in the market as well as opportunities for the future.

4.6.1 Substitutes

Substitutes can be identified as dwellings that can function as a place to live and sleep. In the housing market this means all types of houses, from huge single houses to small studio apartments. As BWG deliver mostly single and chained houses, the biggest threat to the substitutes are single houses and small apartments.

During the past 20 years many house-building companies and entrepreneurs have entered the market, offering a wide range of houses in many shapes, sizes and price ranges. Some have targeted the low end of the market, offering simple but functional dwellings. One example is the Norwegian company Uniteam, whose core business is container operations. The company has used container knowledge to design simple and cost-efficient dwellings that stacked on top of each other. Despite the low quality, compared with BWG's houses, these structures function as substitutes, as ordinary houses are becoming increasingly expensive. It also illustrates how technological advances in the production and assembling of houses can change competitive advantage in the industry, making ordinary carpentry old-fashioned and expensive.

Hetlandhus has one of the most energy-efficient standard houses on the market. However, insulation and window manufactures are also entering the market. Their competence and knowledge within *passive and zero-emission* housing technology have allowed them to enter residential housing markets, and to offer energy-efficient houses. One example is VELUX, a window manufacturer; this company is currently involved in several projects on zero-emission houses.

²⁵ www.lavenergiprogrammet.no

To keep up with the innovation and developments in the industry, all subsidiaries in BWG must start to adapt to these changes. This means having the right strategy and gathering the knowledge and machinery suited to the new emission and energy standards that are about to change the industry.

4.6.2 Barriers to entry

The entry of new competitors will create fiercer competition in the industry, which can have a negative effect on BWG's profitability. Entering the market of standard and prefabricated houses requires a high level of financial investments, machinery, architects, carpenters and professionalism in the organisation. Companies are also dependent on economies of scale, which makes it even harder for new competitors to gain a foothold. Having a well-known brand name is also important for catching the attention of potential customers in this market. Many of these assets are difficult and expensive to acquire.

However, many construction, carpentry and architectural companies possess the knowledge and skills needed to start in this industry. Collaboration between companies with different skills can also create competition and threaten BWG. The large number of companies offering standardised houses confirms that the barriers to entry are not as high as one might expect.

4.6.3 Bargaining power of customers

The prices on BWG's houses are mostly fixed, but customers still have a small amount of bargaining power. During 2008 and 2009 in particular, several house builders offered discounts on their houses in order to earn some revenue. This illustrates that the bargaining power of customers depends mostly on market conditions and the general economy. BWG gains 8% of its revenue from so-called institutional customers, who develop their own properties using houses supplied by BWG.²⁶ These customers will be more able to negotiate on price and quality as they usually purchase in high volumes.

4.6.4 Bargaining power of suppliers

BWG's main suppliers are sub-contractors. BWG prefers long-term relationships with its suppliers to ensure quality, price and timely deliveries. Having close relationships to its partners creates mutual dependency, which strengthens the bargaining power of both parties. However, the market for sub-contractors is large and BWG can switch without substantial transaction cost. Suppliers are therefore considered to be the most dependent part in negotiations with BWG. When building in smaller geographical areas there might

²⁶ BWG Annual report 2010

be a limited number of sub-contractors to choose from. This increases the bargaining power of the sub-contractor, as BWG has fewer alternatives. Specific and rare knowledge can also increase the negotiation power of sub-contractors.

In negotiations with landlords, the owner of the land is considered to have the highest bargaining power. If the land is attractive for BWG, it is probably attractive for other residential house builders as well. BWG must therefore be prepared to pay the market price for the land and negotiate with both private and public actors on their terms.

Raw materials such as woodwork and metals are offered by a wide range of suppliers, and BWG is considered to have the highest bargaining power when negotiating with suppliers. BWG can take advantage of economies of scale and purchase in large quantities. This increases the company's bargaining power and reduces prices.

4.6.5 Intensity of rivalry

There are many competitors in the housing market. These competitors can be divided into mainly three categories: multinational entrepreneurial companies, standard and prefabricated housing companies and minor carpentry companies.

Multi-national entrepreneurial companies: When such companies target the Scandinavian housing market, they represent a significant threat to BWG's operations. They usually engage in large-scale housing projects, where hundreds of dwellings are built at the same time. The core operations of these firms usually relate to infrastructure, but many of them have engaged in residential housing projects in the last few decades. The Scandinavian market is targeted because the economic recession in Europe has caused many international companies to suffer great losses in fixed costs, such as machinery and staff. To reduce cost and keep their machinery operational, several companies have moved their operations to markets that still enjoy economic growth, such as Norway and Sweden. They usually have large amounts of capital and are willing to dump prices in order to capture market share. During the 1990s Nordic entrepreneurial companies like PEAB, NCC and Skanska set up residential construction activities in Scandinavia. Today, companies like the Swiss Implenia and the Danish MT Højgaard have established permanent housing operations in Norway and Sweden.²⁷ Previously, these companies were hired for single construction operations, but they are now entering housing markets with own projects. They are less dependent on sub-contractors as they have more activities integrated into the company. This enables them to take advantage of

²⁷ www.byggaktuelt.no

economies of scale and pay less for work to develop the infrastructure and other construction costs.

Standardized and pre-fabricated housing companies: This is the segment in which BWG operates. Table 4.1 shows the 10 biggest players in the housing market in Norway and Sweden. Approximately 25 companies offer standardised houses in Norway; the figure is slightly higher in Sweden.

Table 4-1

Rank	Top ten players in Norway	House starts	Market share
1.	Mesterhus	1808	5,6 %
2.	Nordbohus	1451	4,5 %
3.	Blink Hus	1211	3,7 %
4.	Block Watne	1156	3,6 %
5.	Norgeshus	1059	3,3 %
6.	Selvaag Bygg	902	3,1 %
7.	Systemhus Norge	854	2,6 %
8.	JM bygg	638	2,4 %
9.	Skanska bolig	548	2,0 %
10.	Byggmann Gruppen	529	1,7 %
	TOTAL TOP 10	10156	32,5 %

Rank	Top players in Sweden	House starts	Market share
1.	Alvsbyhus	835	8,9 %
2.	Trivselshus	663	7,1 %
3.	Myresjöhus	571	6,1 %
4.	Smålandsvillan	524	5,6 %
5.	Fiskarheden	492	5,2 %
6.	LB hus	355	3,8 %
7.	Eksjöhus	297	3,2 %
8.	Hjaltevadshus	290	3,1 %
9.	Individual custom stick players	2035	21,6 %
10.	Others	-	35,4 %
	TOTAL TOP 10	6062	100,0 %

Source: BWG annual report and own creation

Table 4.1 shows that Block Watne holds around 3.6% of the Norwegian housing market, while Myresjöhus and SmålandsVillan hold almost 12% of the Swedish market. The market share in Norway is rather small, and indicates that there are many competitors in this market. BWG has a total of 129 different models among their four subsidiaries. However, there are many similarities between these and the models marketed by its competitors; most features can be replicated.

Recently, several companies have protected their models as intellectual property. After almost identical houses had been constructed by competitive companies and private builders, it was decided that some standardised houses could be considered as intellectual property. These were mainly houses that had some special design features or solutions developed by architects. Architects design most standardised houses, so the new legislation can limit the entry of competitive companies; houses can no longer be replicated as they had been.

There are still over a thousand different standardised models on the market, and it is hard to differentiate between them. This indicates that the market is saturated.

Independent carpentry companies: These companies represent a minor threat to BWG. They operate on a much smaller scale, and are usually employed for the construction part;

they are generally not involved in the process of purchasing land, designing the house and selling it for profit. This segment has seen fierce competition from East European carpenters entering the market and offering extremely low prices. Scandinavian carpenters have trouble competing with these prices because the carpenters from Eastern Europe sometimes avoid employer's fee, holiday pay and other taxes. This situation is negative overall for BWG as it pays its carpenters competitive Norwegian and Swedish salaries.

4.7 VRIO

To determine if BWG has temporary or permanent competitive advantage, the company's resources and business model must be analysed. This part will identify if the resources are valuable for customers (valuable), rare in the market or in the industry (rare), hard to imitate (inimitable) and effectively organised (organisation). The resources will be analysed in the context of BWG's business model to see if, and how, they differentiate from their competitors.

Valuable: A company's resources and capabilities will be considered valuable if the company can exploit external opportunities or neutralise external threats. The resources and capabilities are valuable if they can increase a company's competitive potential.

Rare: A resource is considered rare if it is difficult for competitors to obtain the same quantity and quality of the resource. If a company possesses valuable but common resources in the industry, it will have competitive parity. In order to obtain competitive advantage, resources must be rare.

Inimitable: If a resource is costly or impossible to acquire, the resource is considered inimitable. If the company can use the inimitable resource to exploit opportunities or minimise threats then this resource can provide competitive advantage. If the company has valuable, rare and inimitable resources, it can gain a temporary competitive advantage.

Organised: A company is organised effectively if it can successfully use its resources to gain a competitive advantage. Good allocation of resources alone is usually not enough to give a company a competitive advantage. A sustainable competitive advantage is achieved when a resource is efficiently organised, valuable, rare and inimitable.

4.7.1 Financial resources

BWG's financial resources derive mainly from selling completed houses and the increase in property value. The balance sheet shows the equity at NOK 1,946 million at the cut-off date. The long-term debt was NOK 1,188 million while short-term debt was NOK 2,088 million. Assets and liabilities totalled NOK 5,222 million, with an equity level of 37.2%. The result for 2011 was NOK 155 million: down by NOK 69 million compared with the 2010 figure. BWG's financial strategy is to maintain a strong financial position with a high level of equity and substantial reserves of liquidity. This has been strongly emphasised after the tough years of 2008 and 2009, when the company suffered great losses in terms of order intake. A solid equity ratio and liquidity reserves gives the company financial flexibility, allowing it to quickly engage in attractive investment opportunities and avoid bankruptcy. BWG has a satisfactory bank deposit of NOK 166 million. Its financial resources are used in a profitable way, as it delivers good results and hold a strong position in the market.

BWG's financial resources are valuable but they are not impossible to obtain or imitate. These thus give rise to competitive parity, and are described further in the *Financial analysis* section (below).

Among BWG's most valuable intangible resources are the brand names Block Watne and Myresjöhus. In the annual brand name survey conducted by Prognosesenteret in 2010, Block Watne achieved a brand name recognition of 97%, the highest in the industry. The long history and market position of Myresjöhus also makes it the best-known brand name on the Swedish market. This resource is important, as house buyers are concerned about low risk when they make such a big investment. A well-known brand name gives the buyer a feeling of security and the confidence to go through with the purchase. The resources are therefore valuable, rare and hard to imitate. However, this resource is not impossible to obtain, so brand names give rise to a temporary competitive advantage.

4.7.2 Physical resources

Land and properties are the most important physical resource for BWG. The value of a property depends highly on the type of regulation related to it. The most valuable properties are usually regulated for residential use and ready for construction. The least valuable land is referred to as LNR and can be used only for recreation, such as hiking and other activities; it thus has little commercial value. In 2011, BWG had a portfolio of properties with an estimated value of NOK 1,258 million. These properties – referred to as the 'land bank' – were estimated to have a total building potential of 15,000 units. Considering that BWG builds around 3,000 units annually, this is a substantial amount.

These reserves can be valuable in years where liquidity is needed and capital expenditure is not prioritised.

At the end of 2011, BWG had conditional buying contracts (for LNR) valued at a total of NOK 629 million; these were not recognised in the balance sheet. When these contracts are approved for residential use, land values and land obligations will increase correspondingly. It is considered very likely that local authorities will approve the regulation of these areas for house building.

BWG's strategy of buying properties and developing them for residential use in the outskirts of bigger cities makes the geographical location highly important. This can give rise to a temporary competitive advantage. The properties are valuable and, to some extent, rare as each property is heterogeneous. However, most properties are not considered difficult to acquire, thus making them a source of both temporary competitive advantage and parity.

4.7.3 Human resources

Human resources in BWG consist of the board of directors, the management team, carpenters and other production workers. BWG has 978 employees, including 569 working in production and carpentry. Having in-house carpenters is considered rare in the prefabricated house segment, as most companies outsource this function to other entrepreneurs. This gives BWG better control of the production process as well as providing consistency and quality control of the projects. BWG's employees are valuable to the company, but are not rare. Most carpenters and administrative staff can be replaced without significant transaction costs, and the carpenters are therefore seen as giving rise to competitive parity.

The board of directors has overall responsibility for the company's management and the execution of its strategy. The members have experience within finance, property, law, engineering and carpentry. The composition of the board is a source of strength for the company and a valuable resource. President and CEO Lars Nilsen's knowledge of the property market and the housing industry is considered both valuable and rare. He has been on the board of directors of the Norwegian company Block Watne since 1995, and has gained extensive experience in the housing market. The combined experience and skills of the board and of top management thus gives rise to a temporary competitive advantage.

4.7.4 Organisational resources

BWG's role is to run and manage its subsidiaries: Block Watne, Hetlandhus, Myresjöhus and SmålandsVillan. Having four brand names means there is broad diversity in the range of housing models. This allows the company to capture a bigger share of the market. Each brand can focus on a different target market. High-end, low-end and energy-efficiency are all covered by the subsidiaries of BWG. The subsidiaries are organised as independent entities with their own management structures and responsibility for accounting practices.²⁸ Although the individual companies are independent, they can take advantage of economies of scale under production and procurement. For example, SmålandsVillan in Sweden produces the house modules used by Hetlandhus. The organisational structure in BWG is valuable but it is not rare or hard to imitate. This gives rise to competitive parity.

OBOS, which holds the majority of the shares in BWG, is an important partner for BWG. With 300,000 members, it has a large customer base that relies on OBOS's professionalism and expertise. In 2011, OBOS bought a share of a project where BWG had been permitted building rights after a substantial amount of planning work and negotiation with the local authorities. BWG thereby realised profit before it had started operations and reduced the risk by having a partner it was familiar with. It also benefited from OBOS's size and financial strength. This illustrates how the ownership structure of BWG is a valuable resource for the company. Having a majority-owner like OBOS is both valuable and rare. However, OBOS can sell its shares or buy shares in competitor companies. The resource is therefore not impossible to imitate, and so it is seen as giving rise to a temporary competitive advantage.

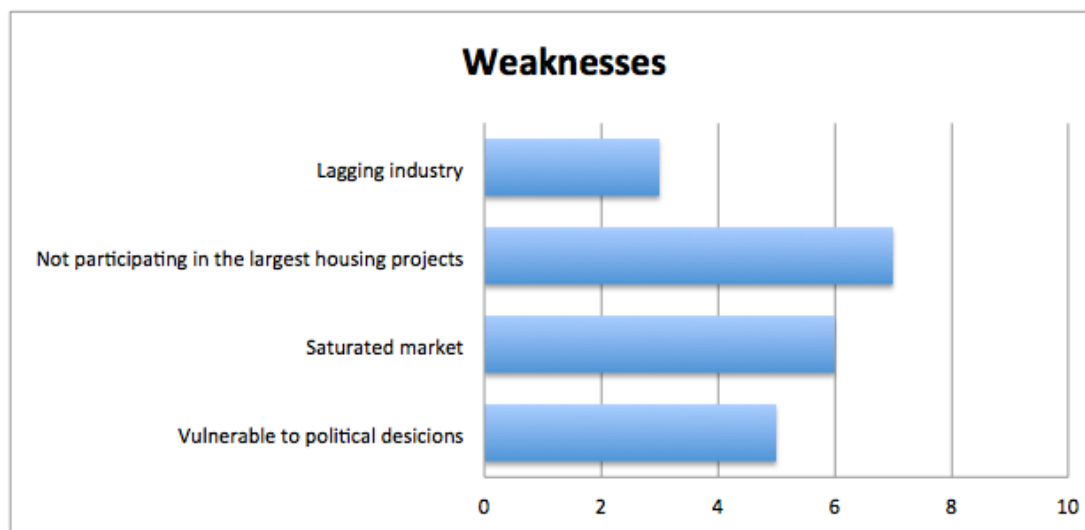
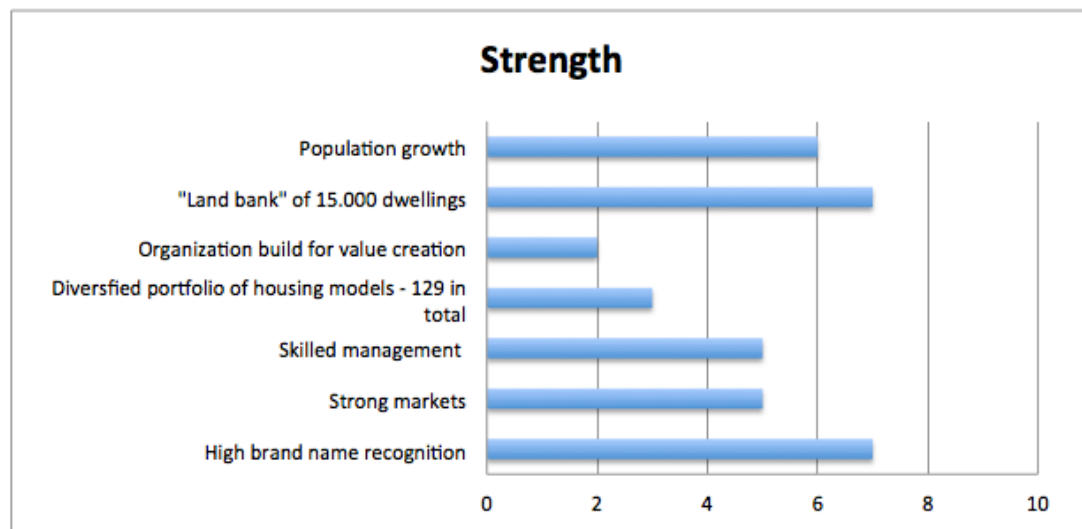
Each property owned by BWG has an individual regulation plan. A substantial part of value creation is within the regulating process of these properties (as described earlier). This process is on-going, and the organisation surrounding the regulating process is highly important. This process is optimised by having a number of different people with relevant expertise working on it full time. Such organisation is considered optimal for the task, but is not rare or hard to imitate. This resource therefore gives rise to competitive parity.

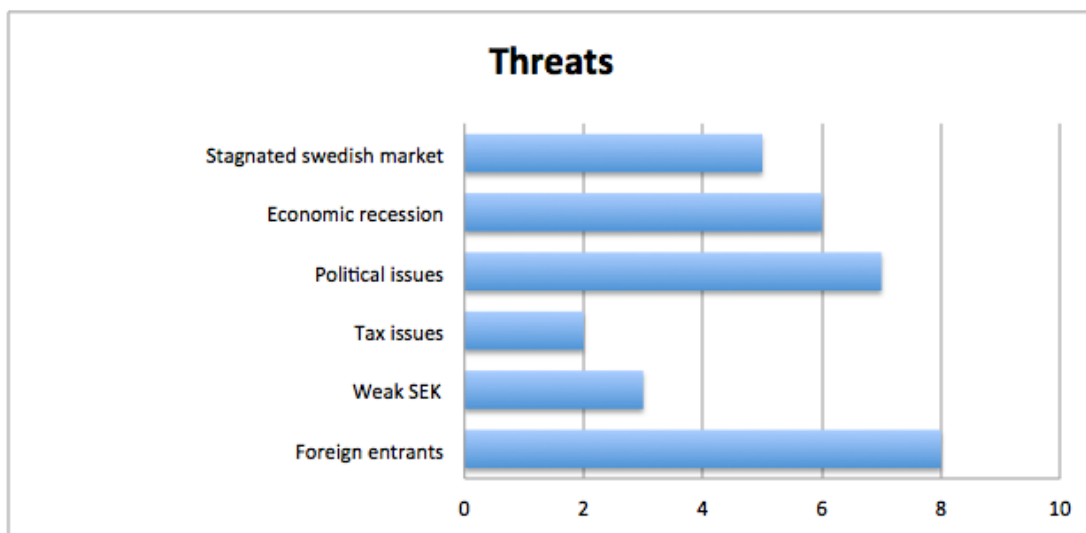
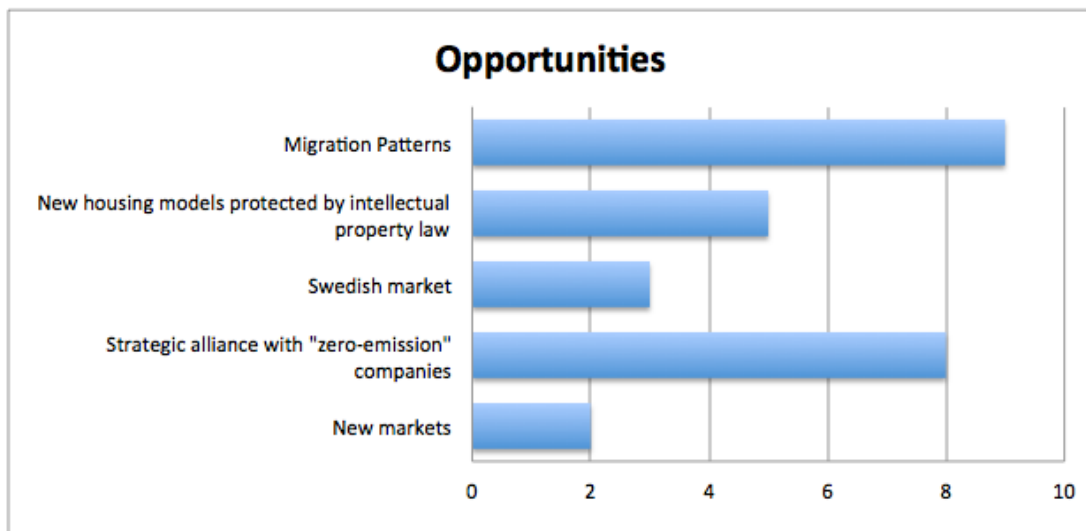
²⁸ BWG annual report 2011

In general, BWG seems to organise its financial, physical and human resources in a satisfying way. The management is capable of combining the employees and the financial resources into profitable activities. They have a sound financial position and are highly adaptable to changes in the business climate.

5 SWOT

The SWOT analysis weights the factors described in the strategic analysis according to importance. They are highly subjective, but are meant to illustrate how important they are perceived compared to each other.





6 Financial analysis

To forecast a company's performance, it is essential to understand how it performed in the past. The financial analysis will compare BWG with two similar companies, covering a period of five years (2007 to 2011). The analysis should ideally cover the whole business cycle for the industry; however, as BWG was established in 2006, this is not possible. The section will start by presenting the companies used in the peer group and explaining how they were found.

6.1 Peer groups

When defining companies in the peer group, it is important that they are similar to BWG in terms of size, core operations, geographical segments, customer base and business characteristics. Finding comparable companies involved looking at several property

companies in the Oslo Stock Exchange Benchmark Index (OSEBX). Most of these companies were involved in commercial property, such as hotels and shopping centres. Other companies had their core operations in infrastructure, such as roads and tunnels.

There are few residential house builders listed in either Norway or Sweden. I started to analyse Selvaag AS and Fornebu Utvikling, two well-known house-building companies in Norway. After analysing their financial accounts, I found that JM Gruppen and Veidekke Eiendom were among the few companies that were comparable to BWG; their organisational and accounting standards had stayed the same over the past five years. Other companies had been restructured several times during that time, mostly because of the financial turmoil in 2008. Other companies were hard to compare because of a lack of information. Decomposition of the income statement and balance sheet of the peer companies can be found in appendix 3, 4, 8 and 9.

6.1.1 Veidekke Eiendom AS

Veidekke Eiendom AS is one of the biggest residential house builders in Scandinavia, building over 2,000 dwellings annually. Its main activities are in Norway and Sweden. The company is a subsidiary of Veidekke ASA, a company with revenues exceeding NOK 18,000 million in 2011. Veidekke Eiendom AS builds apartment blocks, chained houses and single houses outside city centres in Scandinavia. The company reports financial accounts separately and is comparable in terms of geographical segment and customer base. It works in collaboration with Veidekke Entreprenør AS when building new homes.²⁹

6.1.2 JM AB

JM AB is a large player in property development and residential construction in Norway and Sweden. It builds around 1,200 houses each year, and the group has operations in Belgium, Denmark and Finland. However, it focuses on residential activities in the Norwegian and Swedish markets. The company is fully vertically integrated and in charge of the entire process from buying land to key delivery. It concentrates on developing land through regulation and building attractive homes, mainly for the family segment. The company's revenues totalled NOK 1,600 million in 2011.³⁰

6.1.3 Differences between the companies analysed

The business risk faced by the companies will never be exactly the same. The biggest difference between Veidekke Eiendom and BWG is that it is part of the biggest construction company in Scandinavia. This can provide access to credit and financial

²⁹ Annual report Veidekke ASA 2011

³⁰ Annual report JM 2010

backup when housing markets are negative. Its advantages in terms of economy of scale are also different from BWG. JM AB operates in more countries than BWG does, making its market portfolio more diversified. This can reduce risk, as some countries may have good returns when other countries are having problems. Generally, though, the companies in the peer group are considered highly comparable in terms of size, customer base and geographical segment.

6.2 Accounting principles

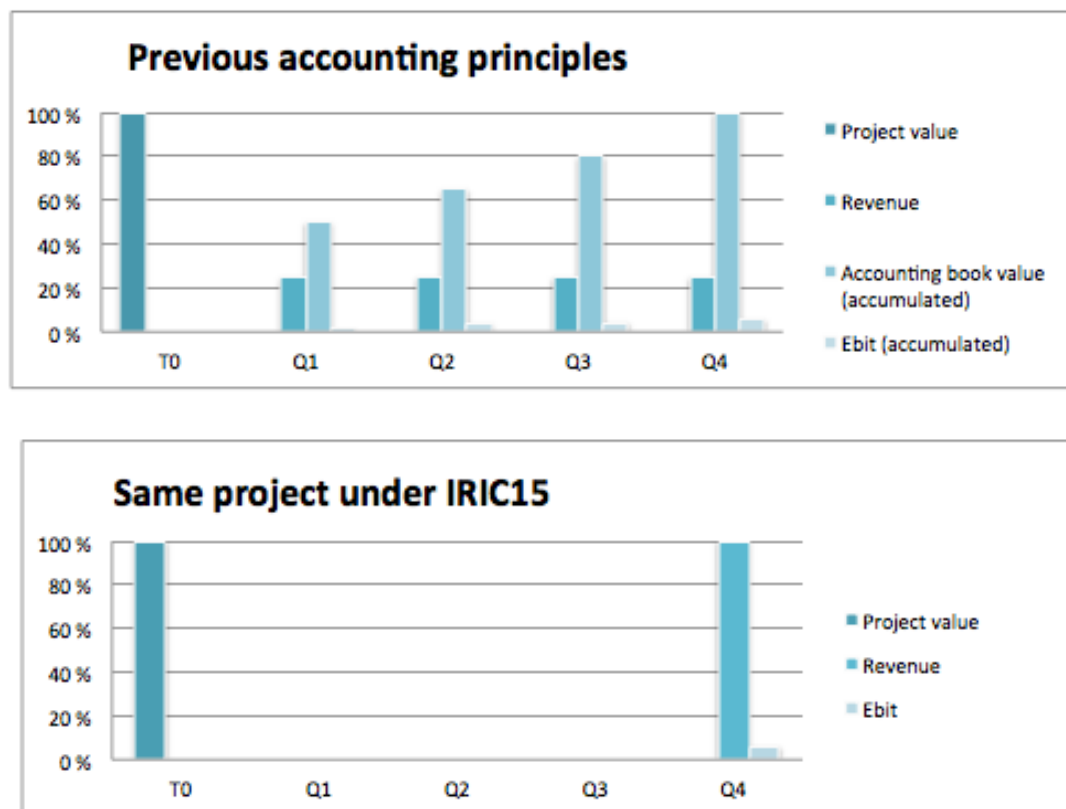
BWG reports its financial statements in accordance with the International Financial Reporting Standards (IFRS), as endorsed by European Union (EU) legislation. The financial statements are prepared under the historical cost convention, and all subsidiaries of the company apply accounting policies in line with national accounting principles.³¹ The Swedish segment reports financial statements in accordance with the IFRS, while the Norwegian segments adhere to the Norwegian accounting rules N-GAAP. Since 2010 the Norwegian segment has been unable to report income on a percentage-of-completion basis on projects it controls. This principle is called IFRIC-15 and is an interpretation of the IFRS. IFRIC-15 is applied to companies that deliver homogenous goods or services, where the customer has little or no influence on the product. As a result, there is a discrepancy between the accounting figures based on IFRS (the consolidated financial statement) and figures based on N-GAAP and IFRIC-15. The difference in the reporting principles does not interfere with the quality of the financial analysis, however, as the figures before 2010 are reworked in the annual reports.

To ensure that the financial analysis is of a high quality, the income statement and balance sheet have been reworked to separate operational performance from the financial performance. The same procedure has been applied to the competitors in the peer group, to ensure similarity and full comparability.

Figure 6.1 illustrates how the Norwegian segment changed the reporting of income from 1 January 2010.

³¹ Annual report BWG 2010

Figure 6-1



Source: BWG Annual Report

6.3 Shareholders equity and dirty surplus

The dirty surplus refers to changes to the equity caused by sources of revenue that are not stated on the income statement. It can be found by reorganising the equity of the shareholders. BWG's annual report contains an item called 'other comprehensive income'; this expresses the dirty surplus and is related mainly to changes in the exchange rate that affect the result. For BWG this item can differ significantly, as it gets almost half of its revenues from the Swedish segment. However, only the result is affected by the exchange rate as the company's expenses are in the same currency as the revenue. In 2010, BWG gained over NOK 75 million because of fluctuations in the exchange rate. This was a loan that was converted from SEK to NOK in 2009 and back to SEK in 2010. It would be highly misleading to see this item as a constant and thereby assume that this will occur each year in the future. The item is therefore estimated at zero in the analysis.

6.4 Income statement

To determine the return on invested capital (ROIC) and the free cash flow (FCF), the income statement must be reorganised. The purpose of reorganisation is to separate the financial performance and the operational performance of the company. An important task in this reorganisation is to split the operational items between the Norwegian

segment and the Swedish segment, as the performance and growth will be forecast separately for the segments. Following reorganisation, the following items are removed.

- Net financial items
- Income from associated companies
- Foreign exchange rate fluctuations
- Impairment of goodwill
- Amortisation

The other items are considered as operational and reoccurring. The reorganisation can be found in Appendix 2.

6.5 Tax issues

BWG reports that the corporate tax rate is 28% in Norway and 26% in Sweden. Its marginal tax rate is 28% and multiplied with the items removed in the reorganisation. This is done because the items also affect reported taxes. Tax on operational activities is left after the tax shield is subtracted from the reported tax.

Deferred tax liability means that the company will pay more income tax in the future. Deferred tax usually comes from investments, and is an incentive from the government to encourage companies to invest. As long as the company continues to invest, the tax will never be paid; it is therefore considered equity equivalent and not a liability. Deferred tax liability occurs because there is a difference between what a company can deduct for tax and for accounting purposes.³²

The deferred tax liability is largely based on brand value, changes in the value of financial derivatives and other provisions. These items are held constant and so the deferred tax liability is also held constant in the further analysis.

6.6 Balance sheet

Reorganising the income statement involves defining where the income and costs are generated in the company. The balance sheet is further reorganised to identify the assets that generate these earnings. The goal is to determine the level of invested capital, which is operating assets minus operating liabilities. Invested capital can be divided into working operating capital, fixed assets, intangible assets and net other long-term operating assets.

³² Koller, T. Goedhart, M. and Wessels, D. (2005). Valuation: Measuring and Managing the Value of Companies. McKinsey and Company, 4th edition 2005. P. 173

It is important to know the nature of the company being analysed, as some items can be financial for one company and operational to another. A brief discussion can be held if there is doubt about whether an item is financial or operational.

- Pension obligations: This item is discounted using the WACC and it is therefore considered a financial item.
- Bank deposits and cash: These should preferably be divided into excess cash and operating cash. This is not specified in the notes, and all cash is therefore categorised as excess cash according to the rule of thumb.³³
- Investments in associated companies: These are considered to be part of operational activities. The item is therefore included in invested capital.
- Other receivables: This item occurs in two places in the balance sheet. One item is financial and the other is operational. The operational item relates to prepayment to landowners and public duties and is considered part of the core operations.
- Deferred tax: This item can be considered as both a future liability and an asset. It is seen as an equity equivalent, based on expectations of future investments, and is held constant for the rest of the analysis.
- Goodwill: With new accounting standards, there is no longer a need to amortise goodwill. Instead, the value is tested for impairments annually.³⁴ Goodwill is not being forecast and is therefore held constant.

6.7 Comparison

Performance can be measured by comparing the company to other companies or by evaluation the company's own historical performance over time. Looking at the company's own performance involves standardising the reorganised income statements and balance sheets using index numbers. This is called a trend analysis. Using a DuPont analysis, the ROE for BWG and its competitors can be found. Details of the analysis can be found in Appendix 15.

6.8 Trend analysis

The trend analysis will reveal how the financial performance has developed over time, considering operational income and expenses. Further, the indexed equity numbers will show if the management has chosen to increase investments. The analysis will also reveal if the company is using more leverage to finance activities through change in net interest bearing debt.

³³ Koller, T. Goedhart, M. and Wessels, D. (2005). Valuation: Measuring and Managing the Value of Companies. McKinsey and Company, 4th edition 2005.

³⁴ BWGH Annual report 2010 p. 34

The following are comments on the trend analysis of the income statement.

- *Operating income* has been volatile during the last five years. However, because of the lag in the industry and an order backlog, revenues are more stable than in most other industries.
- The Swedish segment has increased *revenues* and *cost* more than the Norwegian segment has since 2007. However, the Norwegian segment has managed to reduce costs and has therefore contributed to most of the earnings before interest and taxes (EBIT) in the last two years.
- A low level of order intakes in 2008 meant that 2009 was the worst performing year. The lag in revenues is caused by a lag on the supply side and the fact that Norwegian accounting principles are followed by the Norwegian segment.
- After a huge decline in order intake in 2008 and 2009, the last two years show a recovery in the net operating profit after tax (NOPAT). This trend is expected to continue because of high orders intakes in 2011 and an expectation of the same for 2012.

The following are comments on the trend analysis of the balance sheet.

- *Equity* has remained stable, despite challenging market conditions.
- *Invested capital* has also been stable during the last five years.
- *Projects and construction in process* increased after the IFRIC-15 was enforced in the Norwegian segment in 2010. Revenues from the Norwegian segment should therefore be higher in 2011.
- In 2008, BWG's net interest bearing debt increased, owing to a low level of *bank deposits and cash* and an *increase in debt*. The debt is now back to the level it was at 2007 and bank deposits and cash have doubled. This indicates that BWG is better prepared for a potential new economic downturn.
- An increase in *other receivables* in 2009 and 2010 was caused by selling the company Gar-Bo AB in 2009. In the same period, *financial assets* declined by the same amount.

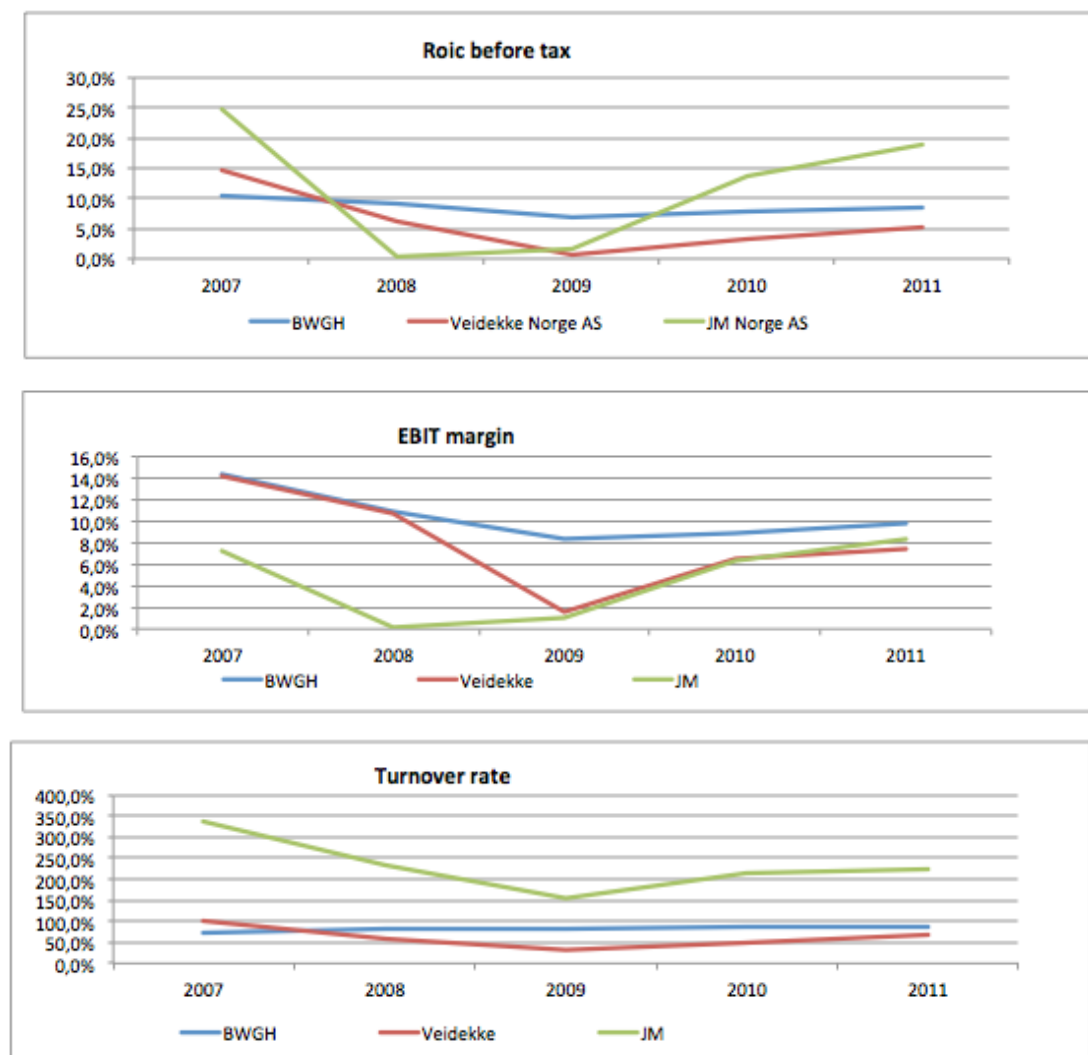
6.9 Decomposition of ROE

After reorganising the income statement and balance sheet, items considered not to be part of core operations or reoccurring have been removed. The figures that are left show the historical profitability of BWG. Return on equity (ROE) is the foundation for the financial analysis. It measures how much profit the invested capital generates for the shareholders. Using the Dupont model, the ROE will be decomposed into the return on

invested capital (ROIC), which shows how the company utilises its resources. The ROIC will be decomposed into the EBIT-margin and turnover rate to define if revenues change because of changes in cost/revenue ratios or a better/worse use of invested capital. ROE will also be decomposed to find financial gearing (FGEAR), which shows how leverage affects the ROE.³⁵

6.10 Decomposing ROIC

Figure 6-2



6.11 ROIC

With a weighted average cost of capital (WACC) of 7.3% BWG has managed to achieve abnormal returns for its investors every year except 2009, when the ROIC was 6.8%.

³⁵ Koller, T. Goedhart, M. and Wessels, D. (2005). Valuation: Measuring and Managing the Value of Companies. McKinsey and Company, 4th edition 2005. p.

Considering the challenging conditions of the market, this return is considered satisfactory.³⁶

Figure 6.2 shows that the peer group had more volatile returns on invested capital (compared with BWG) during the period being analysed. Veidekke has been underperforming each year since the financial crises in 2008; its ROIC was below 5.1% the past four years. After the financial crises, JM recovered better than BWG and Veidekke did. In 2011, it had an ROIC of 19.9%, compared with BWG's 8.5% and Veidekke's 5.1%.

6.12 EBIT Margin

Figure 6.2 shows that BWG had the highest EBIT margin throughout the past five years, compared with its peer group. The company also had the most stable EBIT margin during that period. This can be explained by substantial cost reductions, mainly by decreasing the workforce and thereby salary and personnel expenses.

BWG prioritises sustainable profitability ahead of short-term top-line growth; this can also explain the low level of fluctuation in returns, despite the volatile and challenging market conditions. However, both companies in the peer group have had a steeper incline in the EBIT margin during the last two years, as BWG has seen reduced earnings on the Swedish market. Veidekke has experienced the same problems in Sweden, but has enjoyed a very satisfying period on the Norwegian market in the past two years.

Despite high order intakes and increased house prices, EBIT margins have stayed rather stable. This can be explained mostly by increased construction costs arising from legislation on building standards; this explained in the PEST analysis.

6.13 Turnover ratio

In an industry with limited production capacity, it is normal to see low turnover ratios. This means that BWG and its peers need a high level of investments to achieve the same amount of revenue as companies with high rates of turnover. All else being equal, it is attractive, with a high rate of turnover for the invested capital. BWG's rate of turnover has been stable during the past five years; it fluctuated between 72% and 87%. JM had the highest rate in the group throughout the period: 338% in 2007 was the highest. The main difference between BWG and JM is that JM's low level of interest bearing debt contributes to a low level of invested capital. More than two-thirds of JM's liabilities are related to *projects in process* and the annual report shows it is not interest bearing. A high turnover ratio indicates that a company manages to earn the same amount of revenue with less capital invested.³⁷

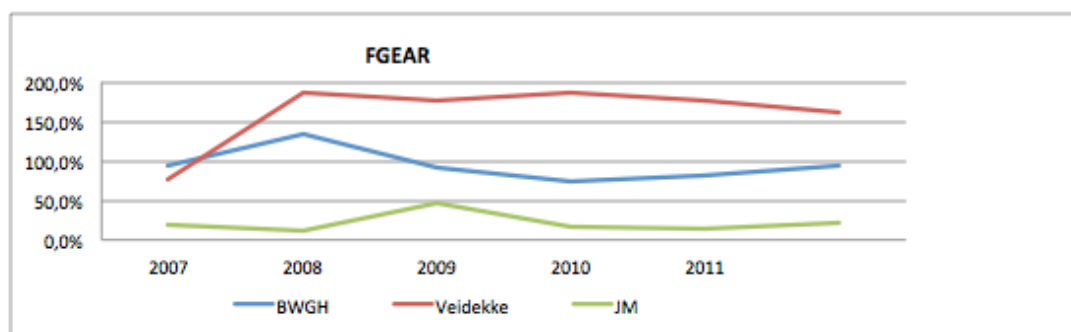
³⁶ WACC is calculated in appendix 16

³⁷ Plenborg – Regnskapsanalyse for Beslutningstagere, p.169

6.14 FGEAR

Financial gearing measures how the company's activities are financed by the owner's funds versus the creditors.³⁸ The return on equity may be greater than the return on net operating assets if the company has debts; this is calculated by dividing the net interest bearing debt on equity. In addition, the return on net operating assets must be greater than the net borrowing costs. In 2008, BWG had an FGEAR of 135%. After issuing new stocks the same year and an increase in bank deposits and cash, BWG decreased this level to 95%. Veidekke's average of 160% is the highest in the peer group. This increases the risk of the equity to shifts in income or interest rates. JM has a low FGEAR ratio because of its unusually low level of interest bearing debt; it averaged only 21.8% in the past five years.

Figure 6-3



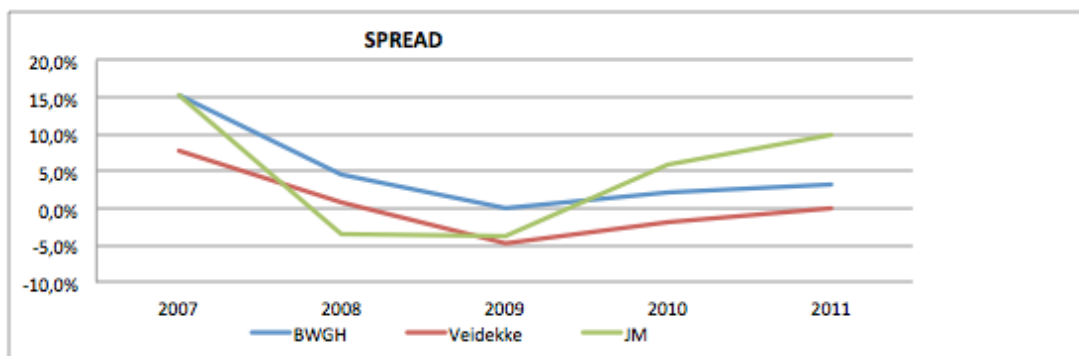
6.15 Spread

The spread indicates if the FGEAR is beneficial for the company or not. A negative spread means that the company's debt is negative for the return on equity. The spread is the difference between the ROIC and the net borrowing rate. The net borrowing rate is found by dividing the net financial cost by the net interest bearing debt. The net borrowing rate rarely tells the actual borrowing rate of a company and should be used with caution.³⁹ In years when the financial costs have exceeded the financial income, the net borrowing rate is below the actual borrowing rate. The spread has been positive for the entire period. The spread was 15.7% in 2007 but it dropped to 0.04% in 2009. It has increased since then and is currently at 3.13%. This tells us that BWG is able to make a profit from its debt.

³⁸ Plenborg – Regnskapsanalyse for Beslutningstagere, p.174

³⁹ Plenborg – Regnskapsanalyse for Beslutningstagere, p.175

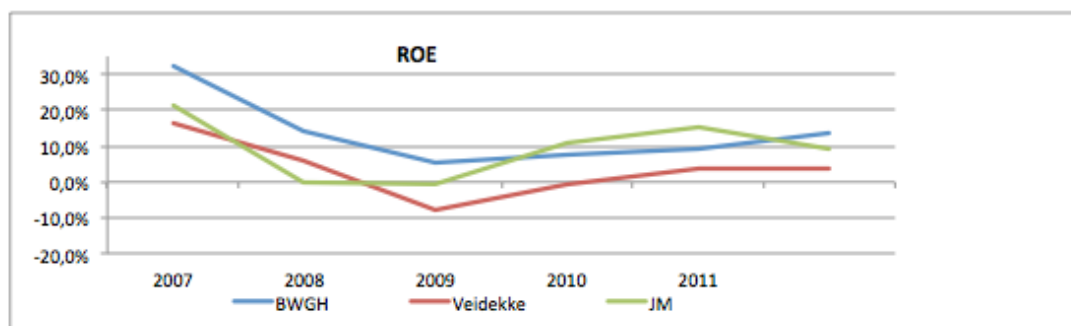
Figure 6-4



6.16 ROE

The return on equity is calculated using the formula: $ROIC + \text{Spread} * \text{FGEAR}$. When ROIC is positive, FGEAR will make profits higher for investors; the opposite is true when the ROIC is negative. BWG has had the highest average ROE since 2007: 13.9%. Veidekke managed a ROE of only 3.5% while JM's average is 9.3%. BWG's return on equity is probably satisfying for the investors.

Figure 6-5



7 Financial risk

In the annual report for 2011, BWG split the financial risk into credit risk, liquidity risk and market risk, where the interest rate and the currency risk are included. The credit risk is the risk of customers not paying for the house after delivery. This is a very rare problem, as customers are not granted credit. In fact, customers are required to provide proof of finance and to make a down payment before the construction process starts. Commercial customers and organisations are credit rated separately if they are evaluated for access to credit. The interest rate risk is of significance for the debt level of the company as well as for demand for houses. The currency risk is connected to the results coming from the Swedish operations as the company reports all its accounts in the Norwegian currency. This is a minor problem as the exchange rates between NOK and

SEK are usually stable; only the result from the Swedish segment is affected. The liquidity risk is the risk of not redeeming on-going obligations and losing the ability to engage in profitable projects. A company with a low level of liquidity might divest parts of the company at a discount or give up on profitable projects. This is very harmful for investors, and companies that risk this scenario should definitely be avoided as an investment object. To analyse the financial risk, the short-term liquidity risk and the long-term solvency risk will be analysed for BWG and its competitors.

7.1 Short-term liquidity risk

7.1.1 Liquidity cycle

The liquidity cycle measures how many days it takes to convert working capital to cash. The liquidity risk decreases the faster working capital converts to cash. The liquidity cycle is found by the formula: $365 / (\text{revenue} / (\text{current assets} - \text{current liabilities}))$.⁴⁰

Liquidity cycle (days)	2007	2008	2009	2010	2011
BWG	79	47	73	69	64
Veidekke	252	434	581	383	271
JM	79	113	179	132	111

BWG has the shortest liquidity cycle in the group, and so it has the lowest liquidity risk. It takes 66 days on average to convert working capital to cash.

7.1.2 Current ratio

The current ratio indicates the company ability to pay its short-term liabilities with its short-term assets. A number above 2 can be interpreted as healthy. The current ratio is found by the formula: current assets / current liabilities.

Current ratio	2007	2008	2009	2010	2011
BWG	1,37	1,24	1,41	1,41	1,27
Veidekke	2,96	2,87	2,53	2,52	2,53
JM	1,31	1,29	1,49	1,44	1,45

The current ratio has been stable for all three companies during the period being analysed, although Veidekke outperforms the rest of the group. Because the production cycle in the industry is long, it is considered more correct to use the quick ratio.

7.1.3 Quick ratio

This ratio measures the company's ability to pay its current liabilities with its most liquid assets. This ratio is therefore more conservative than the current ratio. The most liquid assets should be at least equal to the current liabilities and a number above 1 is therefore

⁴⁰ Plenborg – Regnskabsanalyse for Beslutningstagere, p.195.

seen as healthy. The formula for the ratio is: (current assets – inventories) / current liabilities.

Quick ratio	2007	2008	2009	2010	2011
BWG	0,47	0,31	0,18	0,19	0,14
Veidekke	N/A	N/A	N/A	N/A	N/A
JM	0,12	0,09	0,07	0,14	0,22

Despite the relatively high level of liquidity, *land* and *projects in process* are not considered part of the most liquid assets here, making the quick ratio very low in these calculations. Low quick ratios can force BWG and JM to sell assets (land or houses) at discount prices if they face liquidity problems. Owing to a lack of decomposition in Veidekke's annual report its quick ratio could not be found.

7.2 Long-term solvency ratio

7.2.1 Interest rate coverage ratio

This ratio measures the company's ability to pay interest on its outstanding debt. It is calculated by the formula: EBIT / net financial expenses.

Interest rate coverage	2007	2008	2009	2010	2011
BWGH	4,86	0,79	1,67	15,07	3,34
Veidekke	38,95	0,81	0,2	9,47	13,28
JM	13,5	0,33	0,72	8,2	7,39

Currently, none of the companies has problems paying interest on its debt. However, the changes that occurred from 2007 until 2008 shows how rapidly the situation can change in the industry.

7.2.2 Solvency ratio

This ratio measures the company's ability to meet its obligations over a long period of time. It is measured by looking at the equity as a percentage of the total capital; the formula is: equity / (equity + total liabilities).

Interest rate coverage	2007	2008	2009	2010	2011
BWG	0,35	0,32	0,38	0,41	0,37
Veidekke	0,42	0,26	0,26	0,25	0,26
JM	0,22	0,24	0,25	0,28	0,31

The balance between equity and liabilities is currently acceptable for all companies. BWG is clearly the most solvent company in the group: it averages 37%. Most of the equity in the companies relates to ownership of land. The value of this asset is not always that easy to measure, as there is no official market value on the land. Companies try to measure it using the principle of net realisable value, which is the estimated selling price

in the ordinary course of business less estimated costs of completion and selling expenses.⁴¹ This calculation can be inaccurate as the regulation of properties can change the value of a property overnight.

8 Forecast

Using the financial analysis, the historical performance of BWG has been identified and measured against two main competitors. The main value drivers behind the performance have been found. These, combined with the strategic analysis, will be used to forecast the company's future performance. Forecasting is based on best estimates and subjective opinions, and it is not always a trivial matter. The forecast is based on best estimates gleaned from the information found so far in the analysis.

The most important factor for BWG's performance is the order intake. This is the value of orders the company receives during a year and it is a function of the demand for houses. This demand is reflected in house prices. The underlying factors for house prices and demand will therefore be thoroughly analysed in order to finally forecast the order intake during the budget period.

8.1 Budget Period

The budget period should be between five and ten years to allow the company to reach a steady state and to be going through the entire business cycle.⁴² As BWG operates in the residential housing market, this would mean a budget period of 10–15 years. Estimating 15 years ahead would be very difficult and of little real value. Because of the uncertainty of such a long-term forecast and, according to the problem statement, a budget period of five years has therefore been chosen. Despite the relatively low standard deviations of the estimates, a period of five years is considered sufficient to answer the problem statement.

8.2 House prices

House prices are influenced by both fundamental and non-fundamental factors. Fundamental factors can be measured by quantitative data and will be the focus of the following analysis. Non-fundamental factors refer to the psychology of the market, a discussion of which is important to give a complete picture of how house prices move and affect the demand.

⁴¹ Annual report BWG 2011

⁴² Koller, T. Goedhart, M. and Wessels, D. (2005). Valuation: Measuring and Managing the Value of Companies. McKinsey and Company, 4th edition 2005. P. 162

8.2.1 Fundamental factors

The most important fundamental factors in the housing market are population growth, migration patterns, unemployment, income level, interest rates, GDP, tax issues, construction costs and credit regulations. Using a strategic analysis, consensus and empirical data, the future development of these factors will be estimated. How changes in these factors correlate with demand will be explained. Separate estimates for the Norwegian segment and the Swedish segment will be made where this is considered necessary. Finally, a conclusion will be drawn about how prices and demand will increase or decrease in the future. This will provide a foundation for the forecast of BWG's order intake.

8.2.1.1 Population growth

“There is a significant gap between the number of completed homes and the demand that arises directly from the population growth. The difference is striking and there is a current shortage of around 20.000 homes in Norway.” - Øystein Olsen, Manager, Norwegian Central Bank.

The growth in population is considered to be the most important driver of demand and of the rise in house prices the coming years. It is estimated that the population of Norway will grow by approximately 55,000 each year over the next five years. This creates demand for 29,000 new houses, as the average number of people living in a house is 1.9.⁴³ As explained in the PEST analysis, fewer than 25,000 houses have been built each year during the last three years. This has led to an undersupply of several thousand houses.⁴⁴ The PEST analysis also shows the trend for migration towards the bigger cities. It is therefore estimated that the construction new of dwellings in main cities in Norway and, to some extent, Sweden must double during the next few years to meet the increase in demand.⁴⁵

The level of construction of new houses is not expected to meet the demand in the future. The growth in the population combined with an existing undersupply of houses will create huge pressure on prices.

⁴³ www.ssb.no

⁴⁴ www.ssb.no

⁴⁵ http://www.obos.no/arch/_img/9939489.pdf

Table 8-1

Population growth	2012	2013	2014	2015	2016
Norway	55,242	55,847	56,463	57,079	57,65
Sweden	28,149	28,233	28,317	28,404	28,491

Source: IMF

In 2010, the Swedish population increased by nearly 80,000 because of a high number of immigrants. As a consequence, there has been a significant undersupply of houses in Sweden in the last two to three years. This undersupply has pushed prices upwards. However, these are expected to decrease, as the population is now likely to grow more slowly than it has in previous years.⁴⁶ It is estimated that around 15,000 new houses will be built in Sweden, and so demand should meet the supply in future years.⁴⁷ This is the main reason that house prices are expected to increase more in Norway than in Sweden over the budget period. The numbers in Table 8.2 is per annum and not accumulated.

Table 8-2

Expected undersupply of houses	2012	2013	2014	2015	2016
Norway	10 000	10 000	10 000	10 000	10 000
Sweden	10 000	1 000	1 000	1 000	1 000

Source: Prognosesenteret

Population growth and undersupply are considered to be the main drivers for an increase in house building during the next couple of years. Undersupply is caused mainly by political decisions that limit the number of permissions granted to build and thus the amount of land available to build houses. All the entrepreneurs contacted during the process of writing this thesis have complained about the lack of available land for residential use. This illustrates that there is not a lack of companies willing to build, but a lack of permissions from politicians. Population growth is predicative and inevitable and political forces must adapt to these changes to cool down the market. This is currently not happening.

8.2.1.2 Migration patterns

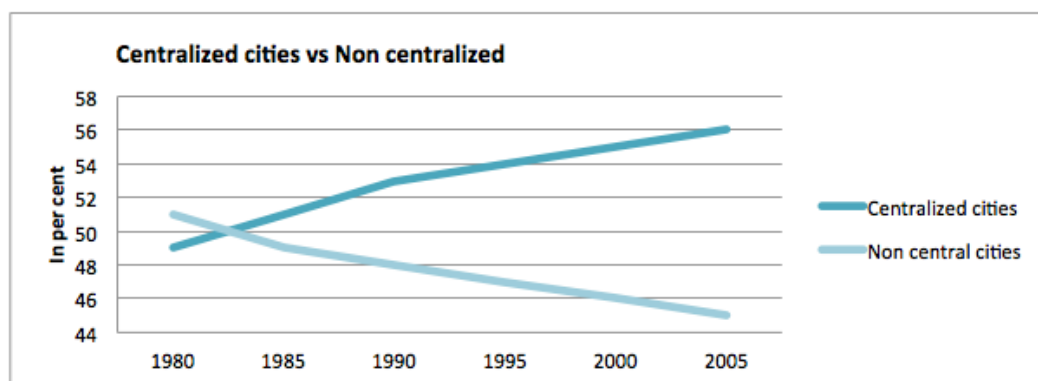
Figure 8.1 shows that there has been a clear trend of migration towards central cities in Norway during the past 30 years. This was also shown in section describing *demography* in the PEST analysis. The trend is expected to continue but at increasing speed, according to the Norwegian bureau of statistics. This trend creates pressure on the bigger cities, as there is a limited amount of available land here. The same centralising trend is expected

⁴⁶ www.imf.com / dnb sector analysis

⁴⁷ www.scb.se / dnb sector analysis

to continue in Sweden. As BWG targets mainly centralised areas, the trend is considered positive for the company, as it already owns large areas of land in these areas. BWG's employees also have expertise, knowledge and personal relationships with the authorities in these areas. This gives them a competitive advantage compared with new entrants that are inexperienced in getting the permissions needed to build. Centralisation is an important factor in future demand for BWG's product.

Figure 8-1 Number of people living in central and non-central cities in Norway



Source: SSB

8.2.1.3 Income level

The income level in both Norway and Sweden has been higher than in other European countries during the past decade. It is expected to increase most in Norway, thanks to a strong and expanding oil and gas sector. In 2011 alone, investments in this sector increased by 20.9%, thus boosting the entire economy.⁴⁸ This is why Norwegian salaries are expected to increase more than inflation during the next three to four years.

Table 8-3

Norway	2012	2013	2014	2015	2016
CPI	1,30 %	1,70 %	2,10 %	2,60 %	2,60 %
Disposable Income	3,60 %	3,80 %	3,80 %	2,60 %	2,60 %

Source: DNB Markets

Income levels in Sweden are expected to be a little lower than in Norway. Nonetheless, Swedish employees will enjoy solid and stable growth in their income. The absence of the oil and gas industry is the main reason.

Sweden	2012	2013	2014	2015	2016
CPI	1,40 %	1,90 %	2,10 %	2,10 %	2,10 %
Disposable Income	2,90 %	2,10 %	2,00 %	2,00 %	2,00 %

Source: financialstatistics.org

⁴⁸ www.ssb.no

Income levels are expected to contribute to high prices and high demand for houses in both countries over the next few years.

8.2.1.4 Unemployment

Norway has one of the lowest rates of unemployment in Europe: only 3.5% in 2011. It is likely to remain stable at this level until at least 2016. It is higher in Sweden: 7.4% in 2010 (down from 8.4% the year before). It is expected to decrease to 5.5% in 2015.

Unemployment rate	2012	2013	2014	2015	2016
Norway	3,50 %	3,50 %	3,50 %	3,50 %	3,50 %
Sweden	6,60 %	5,80 %	5,50 %	5,50 %	5,50 %

Source: DNB Markets

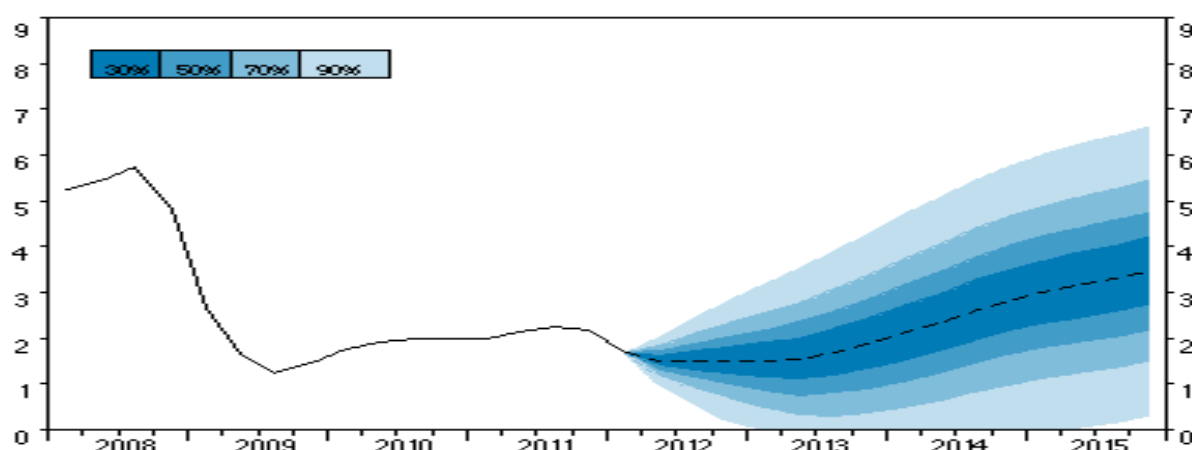
This trend is expected to increase demand for houses and put upward pressure on prices, especially on the Swedish housing market.

8.2.1.5 Interest rate

There is a negative correlation between house prices and interest rates, as the interest rate determines what level of mortgage a buyer can handle. A low interest rate makes it possible to buy a more expensive house with the same level of disposable income. According to consensus and expectations from experts, the interest rate will stay low over the next couple of years, although there will be a slight upward trend.

The interest rate dilemma is very complex; currently, Norwegian and Swedish interest rates are historically low. However, in a European context, it is still possible that interest rates will decrease further. This is mainly thanks to the strength of the Norwegian and Swedish currencies in relation to the US dollar and the euro. Central bank managers have recently said they might be forced to lower the interest rate further in order to protect revenues from the export industry. This contradicts how the interest rates are expected to develop, according to predictions from the national banks.

Figure 8-2: Norwegian key policy rate



Source: Norges bank

Figure 8.2 shows that the Norwegian key interest rate is expected to increase from 1.5% in 2012 to approximately 3.5% in 2016. However, because of the threats to the export industry the evolvement is believed to be in the lower end of the broken line. An increase in the interest rate will put downward pressure on house prices as mortgages become more expensive. Sweden's interest rate is expected to follow the same trend as Norway's.

Norway and Sweden	2012	2013	2014	2015	2016
Key Interest rate	1,50 %	2,50 %	2,50 %	3,00 %	3,50 %

Source: IMF

8.2.1.6 GDP

Both countries expect GDP growth of 2–3.5% a year over the next five years.⁴⁹ This indicates that the overall economy will be stable, with no financial distortions or crises. There is a strong correlation between the housing market and the general business cycle and so it is important for the housing market that the overall economy stays healthy.

GDP	2012	2013	2014	2015	2016
Norway	2,20 %	2,10 %	2,10 %	2,10 %	2,10 %
Sweden	3,80 %	3,50 %	2,50 %	2,50 %	2,50 %

Source: IMF

8.2.1.7 Tax

There is a small chance that taxation on housing will increase or that tax benefits will be removed. The suggestion has been discussed among politicians, who claim that housing is overpriced, especially in Norway. The discussion revolves mostly around investors who

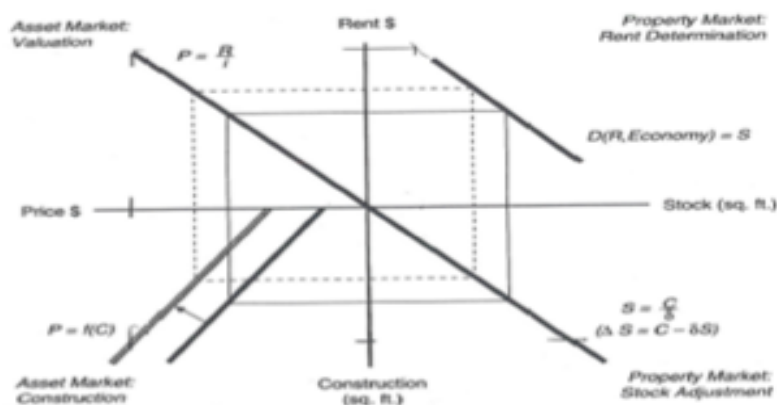
⁴⁹ Norway: NOK 392 billion, Sweden: SEK 12 billion (2011)

use the residential housing market as an arena for investments. This pushes prices further because demand is higher and investors usually have more financial resources than the average house buyer does. Increasing taxes or decreasing tax benefits will make it more expensive to own a house, creating downward pressure on prices. Changes in taxation rules are not forecasted, although this is weighted slightly towards the negative side in the conclusion because of the uncertainty.

8.2.1.8 Building costs

The costs associated with constructing new houses create a lower boundary to where it is profitable to build new houses. If the cost of building is higher than the market price, no new homes will be built and this will put pressure on prices. In a market where the demand is greater than supply, demand will push prices up to where it again becomes profitable to build new houses. The Pasquale & Wheaton model illustrates this:

Figure 8-3



Source: The Pasquale & Wheaton housing model

To understand the model, it is important to start in the northeast corner and move anti-clockwise. When building costs increase, the curve shifts to the left in the southwest corner. The change will lead to less construction, which will reduce the supply of houses. This increases the rent, which again increases house prices. When prices reach a level where it becomes profitable to build, construction will pick up again.

This illustrates the complexity of how building costs affect house prices. During the next few years, several more pieces of legislation on energy efficiency and emission standards will be enacted.⁵⁰ This will increase building costs, and fewer houses will be built. This puts upward pressure on prices, but it can decrease the order intake for BWG.

⁵⁰ Plan og bygningsloven

8.2.1.9 Credit

Credit regulations are not expected to interfere with the housing markets in Norway and Sweden in the near future. After ‘15% rule’ was implemented, governments in Norway and Sweden received criticism for interfering with the housing markets and creating imbalances.⁵¹

8.2.2 Non-Fundamental factors

In the long run, prices are a function of fundamental factors. However, in the short term, prices move in cycles and fluctuate according to the psychology of the market (a non-fundamental factor). How non-fundamental factors affect house prices is hard to measure and experts seem to disagree about the importance of the subject. However, it is agreed that this psychology makes prices more volatile than they would be if influenced by fundamental factors alone. Robert Shiller, an expert in psychology in the housing market and the co-founder of the Shiller Index,⁵² conducts an annual survey of people’s expectations of the development of house prices in several US cities. The result is clear. In cities where house prices have increased, people expect them to continue to increase the following year; in most cases, the prices are higher 12 months later.⁵³ When the markets turn, the same (but opposite) trend is observed. This confirms the power of market psychology.

To get an impression of the psychology in the Norwegian and Swedish housing markets, figure 8-4 gathered from *Prognosesenteret* (published in April 2012) shows the expectations of Norwegian house owners:

Table 8-4

Housing prices in 12 months - Norway	Total
Higher	65 %
Lower	4 %
The same	31 %

Source: Prognosesenteret

Despite historically high house prices in Norway, only 4% of respondents expect prices to decline. In the same study, the number of people who intend to buy a house before selling one was 29%. This is a historically high number and it indicates a high level of confidence in the market.

⁵¹ House buyers must have 15% equity when buying a house

⁵² Shiller Index: Measures historical housing prices in real terms over a long period of time

⁵³ Shiller (2008) - Understanding recent trends in house prices and home ownership

SEB, a Swedish bank, conducts a monthly survey to test the ‘temperature’ of the Swedish housing market. The results from a survey conducted in late 2011 are presented in Table 8.5.

Table 8-5

Housing prices in 12 months - Sweden	Total
Higher	45 %
Lower	25 %
The same	30 %

Source: SEB: Boligindikator

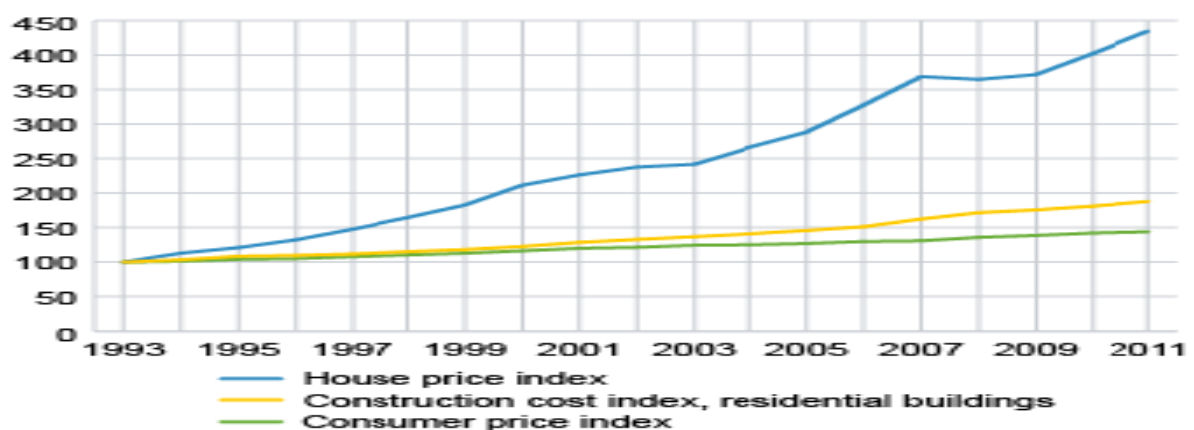
It is obvious that optimism is higher in Norway than in Sweden. However, 70% of respondents believe in steady or increasing prices, indicating confidence and a strong market psychology in the Swedish house market.

According to Shiller’s studies, the results from the Norwegian and Swedish surveys suggest that house prices are more likely to be higher (rather than lower) in a year’s time. As discussed earlier, the psychology can change very rapidly and so the result is meant only as an indicator

8.2.3 Speculative behaviour

Housing prices in Norway and Sweden are at an all-time high in real terms. When discussing market psychology, it is therefore reasonable to look for indicators that can suggest that prices are artificially high and that the markets are driven by speculative forces.

Figure 8-4: House price index, building cost, CPI

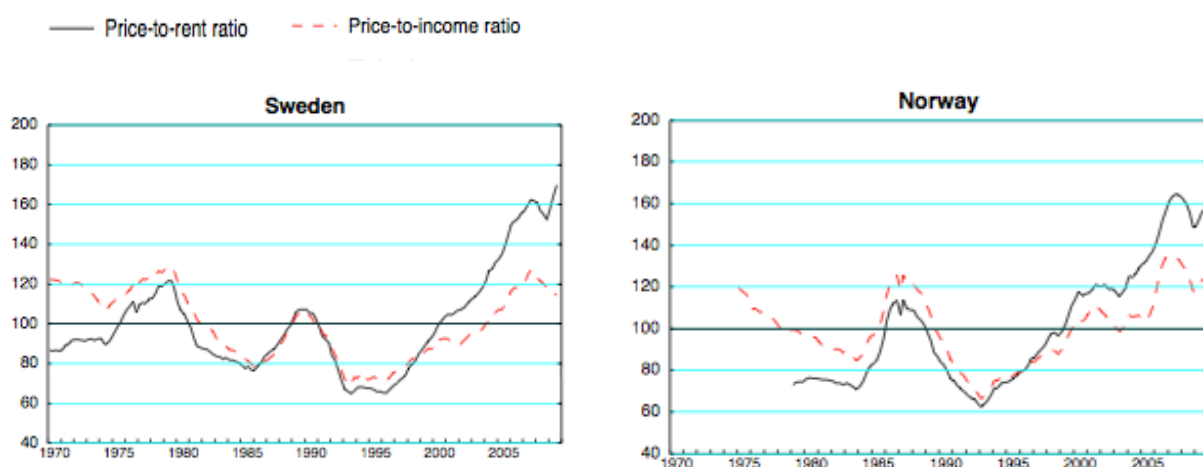


Source: SSB

The above figure shows that construction costs and consumer prices cannot explain the increase in house prices. Several fundamental factors have contributed to the increase, although there is most probably a substantial amount of optimism incorporated in the prices. The exact contribution from each fundamental and non-fundamental factor is not possible to measure. However, the trend is quite shocking.

The price-to-income ratio and price-to-rent ratio are used as indicators of pricing levels in the housing market. A high ratio indicates high prices.

Figure 8-5: Price-to-rent and price-to-income ratios



Source: Andre (2010) - A bird's eye view of the OECD housing markets

The line at '100' indicates the sample average of all countries in the OECD. Both figures start in the 1970s and the time series must be considered as valid. The price-to-rent ratio has never been this high. In other words, it has never been this cheap to rent a house, compared with owning it. Prices are also historically high, compared with income. These indicators tell us that there is a good chance that prices in Norway and Sweden are over estimated. The chance of a speculative bubble bursting is therefore given a heavy negative weight in the overall conclusion towards demand for housing.

8.2.4 Financial crisis

There is a fair probability that the world will enter a severe economic recession during the next few years. In autumn 2011, the US was in focus for being on the brink of financial failure. During the spring, the focus shifted to the Eurozone, where the economy seems to be in the same dire condition. Many experts expect a global recession, which of course would affect demand for houses in both Norway and Sweden. This will definitely

reduce the order intake for BWG and is described more thoroughly in the scenario analysis.

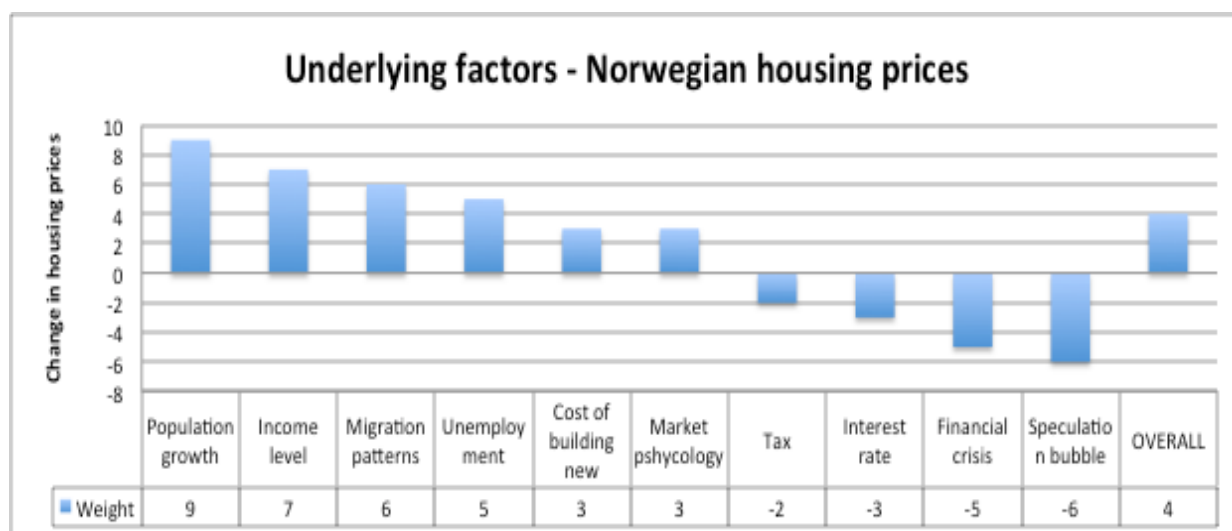
8.2.5 Housing prices conclusion

Based on the fundamental factors, there are strong indicators that the housing market will move upwards in Norway and Sweden over the next couple of years. House prices are expected to increase in both Norway and Sweden. The Norwegian market is expected to increase more, owing undersupply, the level of income and the rate of unemployment. The Swedish market will be driven mainly by a drop in the rate of unemployment and migration towards centralised areas. The market psychology is optimistic for both countries, despite the historically high price levels.

The conclusion is summarised in the figures below. Each factor is given a positive or negative weight to illustrate how it will affect house prices and the demand for houses in the future. The weights are of a subjective nature, and are presented as a visual conclusion of the analysis.

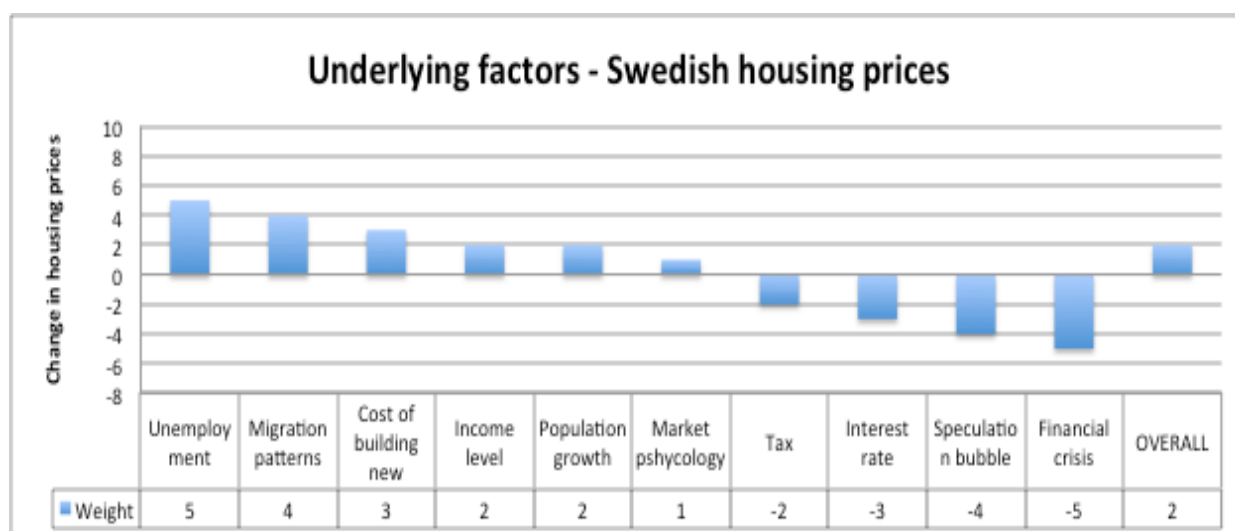
Figure 8-6

Source: Own creation



Source: Own creation

Figure 8-7



Source: Own creation

As presented in the figures, housing prices and the demand for houses is expected to grow over the budget period in both segments. The discussion and conclusion form the basis for the forecast of BWG's oncoming order intake.

Order intake: This is the most important item to forecast because it directly affects revenues. Based on the PEST and forecast section, the demand for houses is expected to increase in both segments, naturally affecting the order intake of BWG.

Growth in order intake	2012	2013	2014	2015	2016
Norway	4 %	4 %	4 %	4 %	4 %
Sweden	2 %	2 %	2 %	2 %	2 %

The base-case scenario envisages that the order intake will grow by 4% in Norway and 2% in Sweden. This is in accordance with how prices and demand are expected to develop.

Revenue: This is calculated as a two-year average of the *order intake*. For example, revenues for 2012 are calculated as an average from the order intake in 2011 and 2012. This conforms to the nature of the industry, as many projects receive payments years after the actual order intake.

Cost of goods sold: This item includes the cost of the property and materials, and most of the other costs related to the process of building a house. It is calculated as a percentage of revenue, based on a historical average. This has been 62% in both Norway and Sweden.

Payroll and personal expenses: This item is a function of production and therefore calculated as a percentage of revenues, based on a historical average. In the scenario analysis, this item will not decrease or increase by the same proportion as the change in order intake will. This is because some of the payroll expenses are seen as fixed. The item will be a bigger percentage of revenues in the worst-case scenario and smaller in the best-case scenario, compared with the base-case scenario.

Other operating expenses: This item includes operational leasing contracts for buildings, machinery and cars. Most contracts have a maturity of 2–7 years and are therefore considered fixed in the forecast.

Tax: The corporate tax rate is 26% in Sweden and 28% in Norway. This rate is used separately for each segment.

Interest bearing debt: The annual report reveals that 55% of the interest bearing debt is in SEK and the rest is in NOK. Interest bearing debt and financial expenses for the segments are calculated from this ratio.

Depreciation: This item is calculated as a historical percentage of fixed tangible assets: land, buildings and other property, machinery and fixtures and equipment. Properties are not depreciated.

Interest rate: The annual report shows that the interest rate is 4.35% on Swedish debt and 5% on Norwegian debt. This is held constant for the first two years; it increases by 1% thereafter, in accordance with the interest rate forecast.

8.3 Balance sheet forecasting

Many items on the balance sheet do not follow a linear trend or occur regularly. Ideally, the items should be forecast separately. However, owing to a lack of detailed information and guidance, this is not possible. Many of these items are a function of revenues. Using revenues as a method of measurement is considered appropriate since revenues are calculated as an average of a two-year order intake and this provides a good reflection of operations.

8.3.1 Assets

Goodwill: This is recognised in the balance sheet at cost less any accumulated impairment. It arises when a company pays more than the book value for a company. It is

tested for impairment annually or when there are objective indications of impairment. As acquisitions are not expected during the budget period, this item will be held constant.

Trademarks: These are treated in the same way as goodwill in terms of testing of impairments and future estimation.

Other intangible assets: This refers to software licences and is not considered to be dependent on the order intake in any significant way. The item is therefore held constant in the forecasting.

Land, buildings and other property, machinery, fixtures and equipment: These items depend on the activity and so are calculated as a percentage of revenues, based on the historical average.

Projects and construction in progress: These items depend on the activity and are therefore calculated as a percentage of revenues. Because of changes in accounting principles – from IAS 11 to IFRIC 15 – in 2010, percentages used are from the 2011 figures. From 2010, revenues could be recognised only after delivery of the house. Previously, these earnings were accounted for by trade receivables and this is why using the historical average can lead to incorrect calculations.

Inventories: This item refers to raw materials, consumables, work in progress and finished goods. The item is considered to change according to the activity and the calculation is based on the historic average.

Land: This item refers to the ‘land bank’; it is the value of properties BWG has in its portfolio. Despite the forecast for growth in the order intake, this item will stay constant. This is because the cost of the property is accounted for under the cost of goods sold. Properties in the ‘land bank’ are being used during the budget period but the cost is covered under cost of goods sold. It has an estimated value of just over NOK 1,258 million, with a capacity of approximately 15,000 housing units. This is considered to be a good buffer in times where BWG may need to call on this capital to reduce cost of goods sold.

Investment in associated companies, loans to associated companies and other receivables: There are currently no indications of investments in new companies and the items are not affected by the activity of the company. All items are therefore held constant.

Trade receivables: These are considered operational and a function of revenues. As explained under *Projects and construction in progress* (above), figures from 2011, *not* historical averages, are used here.

Other receivables: These include loans to associated companies and receivables associated with settlement of shares. This is held constant, as it is not likely that the company will sell any assets or lend money to associated companies.

Bank deposits and cash: This changes with the free cash flow from the year.

8.3.2 Liabilities

Pension obligations: This is the difference between the company's retirement assets and the actual liability for current and former employees. There is no clear development between revenues and historical and pension obligations. The item is therefore held constant.

Deferred tax liability: This item is held constant for valuation purposes.

Warranty provision: This item refers to warranties related to finished and delivered homes. The warranties are required by legislation; all construction companies must recognise a warranty liability in case of unsuspected damages or incorrect work. The company calculates this on the basis of historical numbers, and it is forecast at 2% of revenues.

Non-current interest bearing: The level of non-current interest bearing debt is historically 40% of revenues. In 2011, it equalled 29% and the annual report of 2011 indicates that the company will stick to this level in the future. The forecast will therefore calculate this item as 29% of revenues.

Current interest bearing debt: Historically, the current interest bearing debt has been 19% of revenues. This ratio will also be used in the forecast.

Trade payables: This is debt to suppliers. It has historically been 10% of revenues. This is believed to continue in the future.

Income tax payable: This followed revenues historically; it is forecast at 2% of revenues.

Public duties and dues payable: This is calculated as 2.5% of revenues, based on historical averages.

Current land related liabilities: This item is related to obligations of land purchase. Historically, the item has been 13% of revenues and this is believed to continue in the future.

Pre-payments from customers: BWG receives payments from customers before the house is delivered. Historically, this has been 5% of revenues, which is expected to continue in the future. The customer receives a bank guarantee from BWG after this payment has been made.

Other current liabilities: This relates to accrued salaries, holiday pay, accrued interest expenses and other current liabilities. Historically, the item has been 5% of revenues, and this level is expected to continue in the future.

9 Valuation

An analysis of the strategic environment and the financial performance has allowed qualified estimates of future performance to be made. It is important to point out that the inputs found in the *Forecast* are of a subjective nature, and small changes in inputs can have a significant effect on the value of the company. To give an indication of how these inputs affect the stock value and of risk, a sensitivity analysis and a scenario analysis will be conducted. This will enable the reader to get a better understanding of the accuracy and uncertainty of the valuation.

9.1 Choice of framework

There are mainly four types of models to choose from when estimating the value of a company: absolute-value, relative-value, option-based-value and net-assessed-value. The purpose of each is to find the value of the equity of the company. They are no mutually exclusive but can be complementary. In this valuation, an absolute model – the discounted cash flow (DCF) model – will be used first. Then a relative valuation model, based on trading multiples in the industry, will be employed.

The DCF model uses the concept of the time value of money and calculates future earnings back to net present value using a certain discount rate, called the weighted average cost of capital (WACC). After finding the net present value of the earnings in the budget period, Gordon's growth model is used to find the terminal value of the cash flow. To find the market value, net interest bearing debt is subtracted from the enterprise value. The value of the stock is then found and divided by the number of outstanding shares.

Since the WACC is used to discount all future cash flow, the choice of WACC is of great importance. As will be shown in the sensitivity analysis, small changes in this estimate will have a great effect on the final value of the company being analysed.

9.1.1 Weighted average cost of capital - WACC

A firm's WACC represents the markets' overall required return on the company as a whole. It can be defined as follows:⁵⁴

$$WACC = \frac{E}{V} * Re + \frac{D}{V} * Rd * (1 - Tc)$$

Where:

- E = Market value of the company's equity
- D = Market value of the company's debt
- V = Total market value of the company (E+D)
- Re = Cost of equity
- Rd = Cost of debt
- Tc = marginal corporate tax rate

In the following section, each component of the WACC will be discussed and calculated to find the WACC of BWG.

9.1.1.1 Corporate tax rate (Tc)

Since free cash flow is calculated after tax, WACC must be calculated on the same basis. The tax rate is 28% in Norway and 26% in Sweden. However, the marginal tax rate is calculated to be 28%.

9.1.1.2 Capital structure

The debt and equity levels used in the calculation of WACC should be measured at market value, since the WACC represents the expected return on an alternative

⁵⁴ Koller, T. Goedhart, M. and Wessels, D. (2005). Valuation: Measuring and Managing the Value of Companies. McKinsey and Company, 4th edition 2005, p.293

investment. BWG states that it will operate with lower levels of debt in the future, but it does not mention a specific capital structure target. The capital structure at the cut-off date of 31 December 2011 will therefore be used. On this day, the stock traded at NOK 9.91, having a market cap of NOK 976 million. The net interest bearing debt is stated in the annual report as NOK 1,609 million. This produces the following capital structure: debt = 38%, equity = 62%.

9.1.1.3 Cost of debt

The cost of debt can be calculated using the three-month Norwegian interbank offered rate (NIBOR) + premium. This gives a realistic picture of how much a future investor should require as a cost of debt.

The three-month NIBOR was 2.47% at the cut-off date. The premium is calculated by using the credit rating found in appendix 10. The credit rating is based on Plenborg's credit rating system. Under this system, BWG is rated BBB-, which is considered the lowest long-term investment grade. According to empirical data, this indicates a risk premium between 5% and 12%.⁵⁵ As real assets secure two-thirds of the debt, this debt will be given a low risk premium of 6%. These assets are land and projects under construction. The remaining part of the debt will be given a premium of 12% because this is the riskiest part of the debt. BWG also secures its debt by trademarks and trade payables, but these are not considered proper securitisation in case of financial distress.

This gives a cost of debt of: $2.47\% + ((66\% * 6\%) + (33\% * 12\%)) = 9.54\%$

9.1.1.4 Cost of equity

The cost of equity is the return a shareholder demands for owning a specific asset with a specific risk. To determine the cost of equity, we rely on the capital asset pricing model (CAPM) because we cannot observe the expected return. The general idea behind CAPM is that investors need to be compensated in two ways: time value of money and risk. The return on equity is calculated using this formula:

$$Re = \beta * (Rm - Rf) + Rf$$

In the CAPM, the risk-free rate and market risk premium are common to all companies. Only the beta estimate varies across companies.

9.1.1.5 Risk-free rate

Government bonds are used to estimate the risk-free rate. They come in different maturities, and each cash flow should be discounted using a government bond with the

⁵⁵ Plenborg – Regnskabsanalyse for Beslutningstagere, p.291

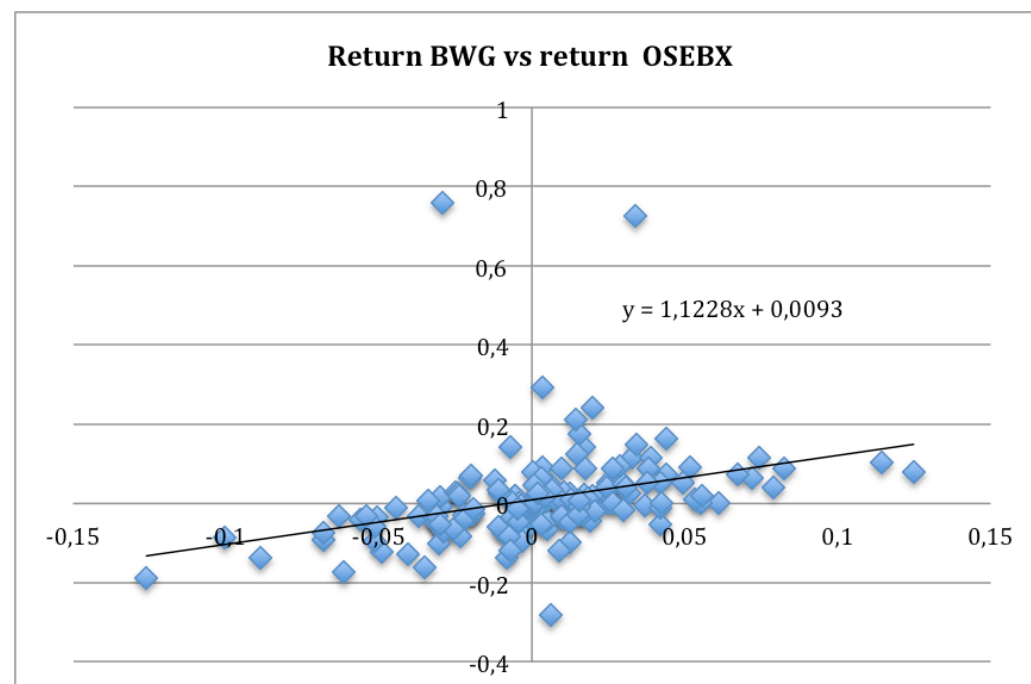
same maturity.⁵⁶ This is rarely done, though; for simplicity, the 10-year Norwegian Treasury bill is used. The yield on the bonds was 2.47% at the cut-off date 1 January 2012. However, this is considered to be very low and is not expected to last. The risk-free rate is therefore adjusted to 3.5% to reflect a more long-term view of it.

9.1.1.6 Beta

Beta represents the co-variation between an asset and the overall market. It shows how much of the risk cannot be removed by diversification. A beta above 1 indicates that the return of the stock will be more volatile than the general market return. The beta is not a fixed number; it will vary according to the timeframe and the density of the observations.

To find the beta, the return of the stock is compared with an index representing the market portfolio, Oslo Stock Exchange Benchmark Index (OSEBX). The slope of the trend line indicates the beta of the stock. The return is based on weekly observations over the past three years. This is considered adequate to give a representative measure of the beta⁵⁷. Figure 9.1 shows that the beta is 1.12. This indicates that the stock is a little more sensitive than the market portfolio and that it fluctuates by 0.12% more than the market portfolio.

Figure 9-1



Source: Datastream

⁵⁶ Koller, T. Goedhart, M. and Wessels, D. (2005). Valuation: Measuring and Managing the Value of Companies. McKinsey and Company, 4th edition 2005, p.296

⁵⁷ Koller, T. Goedhart, M. and Wessels, D. (2005). Valuation: Measuring and Managing the Value of Companies. McKinsey and Company, 4th edition 2005, p. 306.

9.1.1.7 Market risk premium

The market risk premium is not easy to determine, although several professors and researchers have produced studies that suggest otherwise. The market risk premium also depends on the time series analysed. Damodaran has measured the market risk premium on a monthly basis and suggests a 5% market risk premium on the Norwegian market. Brealey and Myers estimate a higher market risk premium and suggest 7.6%. To be conservative in the estimates, 7% is used. This gives a required return on equity:

$$Re = 3.5\% + 0.918(7\% - 3.5\%) = 6.71\%$$

9.1.1.8 WACC

When all parameters are found, the opportunity cost of capital for BWG can be calculated as follows: $WACC = ((0.38 * 0.11) * (1 - 0.28)) + (0.62 * 0.0742) = 7.21\%$

The calculation of the parameters can also be found in appendix 16.

9.2 Scenarios

BWG operates in an environment that is highly sensitive to the business cycles in Norway, Sweden and in large parts of the western world. Unlike technology and biotech companies, BWG cannot rely on cutting-edge innovations and special products that will sell in any market. A scenario analysis will be used to show different developments in future events and changes in business climate. These scenarios describe changes in macroeconomic factors that will change the order intake to BWG.

The base-case value is not considered to be a good enough estimate of the stock price and so three different scenarios are created and weighted to give a better estimate of the value of BWG.

Scenario 1

In this scenario a new financial crisis will occur. There is currently great uncertainty about many of the biggest economies in the world, such as the Eurozone and the US. These economies struggle with severe debt problems that can create financial turmoil within a short period of time. The countries seem unable to pay their debt as they continue to run up big trade deficits and have huge financial obligations towards their own people and towards foreign creditors. Global financial crises will affect important macroeconomic parameters that will shift the demand for houses.

Order intake: A financial crisis will drastically reduce demand for homes. BWG experienced this in 2008 and 2009, when the order intake dropped by 30% and 25% respectively. However, the order intake doubled from 2009 to 2010. In this scenario the

order intake will be reduced significantly the first year, and a recovery will start in 2015 (see Table 9.1). This was the same as the trend seen in 2008. However, the recovery is more moderate in this scenario.

Table 9-1

Growth order intake	2012	2013	2014	2015	2016
Norway	-20 %	-10 %	0 %	15 %	10 %
Sweden	-20 %	-10 %	0 %	15 %	10 %

Interest rate: The interest rate will go up, as creditors will demand a higher return as a consequence of the increased risk. The interest rate is estimated to move from 4.5% to 6.5% in this scenario, thus increasing financial expenses.

Payroll and personnel expenses: This item will not decrease by the same rate as the drop in the order intake. Many employees are indispensable and are needed for daily operations, despite the market conditions and the low order intake. This relates especially to administrative staff. It is also expensive to have a high turnover of employees. This item will therefore increase from 17% to 19% of total revenues.

Scenario 2

This is the base-case scenario and it is described in the forecast. There will therefore be no further discussion on this scenario here.

Growth order intake	2012	2013	2014	2015	2016
Norway	4 %	4 %	4 %	4 %	4 %
Sweden	2 %	2 %	2 %	2 %	2 %

Scenario 3

In this scenario the order intake increases by between 5% and 8% each year over the budget period. This scenario relies on even more positive developments in macroeconomic factors. This includes undersupply of houses, low interest rates, low levels of unemployment, high levels of income and a strong market psychology. In this scenario BWG also launches new products that boost their order intake more than expected. These products should be first class when it comes to energy-efficient and smart solutions.

Growth order intake	2012	2013	2014	2015	2016
Norway	8 %	6 %	6 %	5 %	5 %
Sweden	8 %	6 %	6 %	5 %	5 %

Payroll and personnel expenses: Increased efficiency and greater economies of scale decrease this item from 17% to 16% of revenues in this scenario. The interest rate is estimated to stay at the level seen in Scenario 2.

9.3 Weights

The current economic situation is very uncertain in many parts of the world, especially in Europe. The debt situation here is causing great concern for many banks and companies that rely on credit to run their operations. There is no doubt that a new financial crisis will hurt many Norwegian companies, including BWG. During the last financial crisis, the stock reached an all-time low of NOK 2.37 a share. There is a fair chance that a similar event will happen, but experts seem to disagree about the likelihood. The subject is coming under a lot of media attention, and negative news is presented almost daily.

Putting the potential financial crises aside, the Norwegian and Swedish economies have great future prospects. Growth in GDP, low unemployment, income growth and national trade surpluses will most likely continue to support a healthy and stable economy over the next few years. It is also beyond any reasonable doubt that the population in both countries will increase, creating demand for new homes.

The development of market conditions might also be more positive than expected. Population growth can accelerate more than expected, owing to immigration, and the interest rate has the potential to decrease further. Although the market seems saturated BWG might be able to produce innovative and desirable houses protected by the intellectual property law, thus boosting demand for BWG houses specifically.

Based on this brief discussion and on subjective opinions, the scenarios are weighted as follows.

Scenarios	Scenario 1	Scenario 2	Scenario 3
Weights	30 %	60 %	10 %

9.4 Calculating fair value

Figure 9-2

Million NOK	Scenario 1	Scenario 2	Scenario 3
Weight	30 %	60 %	10 %
Enterprise value budget period	-287 580	461 106	734 170
Enterprise value terminal period	2 278 778	3 140 577	4 189 160
Mid year adjustment factor	80 721	111 248	148 392
Enterprise value	2 071 918	3 712 931	5 071 722
Interest bearing debt	-1 769 244	-1 769 244	-1 769 244
EK	302 674	1 943 687	3 302 478
Shares	98 276	98 276	98 276
Price per share NOK	3,08	19,78	33,60
WACC assumption	7,2%	7,2%	7,2%
Growth assumption	2,5%	2,5%	2,5%
Value per share	16,15106955		

Seen from figure 9.2 the value of the share is calculated to be NOK 16.15. There are three distinct parameters that can change the price of the share significantly; Growth, WACC and the weights of the scenarios. To show how changes in these parameters can change the share price, sensitivity analyses have been conducted.

9.5 Sensitivity

Figure 9-3

DCF Matrix Scenario 1

WACC and growth assumptions

13,59	0,005	0,01	0,015	0,02	0,025	0,03	0,035	0,04	0,045
4,5%	10,91	15,44	21,48	29,94	42,63	63,78	106,08	232,97	#DIV/0!
5,0%	6,76	10,21	14,65	20,56	28,84	41,26	61,96	103,36	227,55
5,5%	3,45	6,15	9,53	13,87	19,66	27,77	39,92	60,19	100,71
6,0%	0,76	2,92	5,56	8,87	13,12	18,79	26,72	38,62	58,46
6,5%	-1,48	0,28	2,40	4,99	8,23	12,39	17,94	25,70	37,36
7,0%	-3,37	-1,91	-0,18	1,90	4,43	7,60	11,67	17,11	24,71
7,5%	-4,98	-3,75	-2,32	-0,63	1,40	3,89	6,99	10,98	16,30
8,0%	-6,37	-5,33	-4,12	-2,72	-1,06	0,92	3,36	6,40	10,30
8,5%	-7,58	-6,69	-5,67	-4,49	-3,11	-1,49	0,46	2,84	5,82
9,0%	-8,64	-7,87	-6,99	-5,99	-4,84	-3,49	-1,90	0,00	2,34
9,5%	-9,58	-8,91	-8,15	-7,29	-6,31	-5,18	-3,87	-2,31	-0,44

DCF Matrix Base Case

WACC and growth assumptions

19,78	0,005	0,01	0,015	0,02	0,025	0,03	0,035	0,04	0,045
4,5%	30,96	37,21	45,53	57,19	74,68	103,83	162,12	337,00	#DIV/0!
5,0%	25,17	29,92	36,04	44,19	55,60	72,71	101,24	158,30	329,46
5,5%	20,54	24,26	28,91	34,90	42,88	54,05	70,80	98,72	154,57
6,0%	16,75	19,73	23,37	27,93	33,79	41,60	52,53	68,93	96,27
6,5%	13,59	16,02	18,94	22,51	26,97	32,71	40,35	51,06	67,12
7,0%	10,92	12,93	15,32	18,18	21,67	26,04	31,65	39,14	49,62
7,5%	8,63	10,32	12,30	14,63	17,43	20,85	25,13	30,62	37,96
8,0%	6,65	8,08	9,74	11,67	13,96	16,70	20,05	24,24	29,62
8,5%	4,91	6,14	7,55	9,17	11,06	13,30	15,99	19,27	23,37
9,0%	3,38	4,44	5,65	7,03	8,62	10,47	12,66	15,29	18,51
9,5%	2,02	2,95	3,99	5,17	6,52	8,08	9,89	12,04	14,62

DCF Matrix Scenario 3

WACC and growth assumptions

33,60	0,005	0,01	0,015	0,02	0,025	0,03	0,035	0,04	0,045
4,5%	48,57	56,90	68,01	83,56	106,89	145,76	223,52	456,79	#DIV/0!
5,0%	40,83	47,18	55,33	66,20	81,42	104,25	142,31	218,41	446,72
5,5%	34,65	39,61	45,82	53,80	64,44	79,34	101,69	138,94	213,43
6,0%	29,58	33,56	38,42	44,50	52,31	62,73	77,32	99,19	135,66
6,5%	25,36	28,61	32,50	37,26	43,21	50,86	61,06	75,34	96,76
7,0%	21,79	24,48	27,66	31,47	36,13	41,96	49,45	59,43	73,42
7,5%	18,73	20,99	23,62	26,73	30,46	35,03	40,73	48,07	57,85
8,0%	16,07	17,99	20,20	22,78	25,83	29,48	33,95	39,54	46,72
8,5%	13,75	15,39	17,27	19,43	21,96	24,95	28,53	32,90	38,38
9,0%	11,70	13,12	14,73	16,57	18,69	21,16	24,09	27,59	31,88
9,5%	9,88	11,12	12,51	14,08	15,88	17,96	20,38	23,25	26,68

The sensitivity matrixes are retrieved from the three different scenarios. In scenario 1, some of the stock prices are negative, which is not possible, as the company would be bankrupt.

Figure 9-4

Scenario 1	Scenario 2	Scenario 3	Share price
10 %	60 %	30 %	22,26
20 %	60 %	20 %	19,21
30 %	60 %	10 %	16,15
40 %	60 %	0 %	13,09
50 %	50 %	0 %	11,42

Figure 9-4 show how sensitive the share price is to changes in the weights of the scenarios.

9.6 Relative valuation

A relative valuation estimates the value of a company according to how similar companies are valued in the market. The valuation has two components. The first relates to finding the value of an asset on a relative basis. This means that the values must be standardised by translating prices to multiples of earnings, the book value or the sales price. The second includes finding similar companies within the same industry. Together,

these companies will form an industry average that will be compared with BWG. This will give a simple and uncomplicated impression of whether the stock can be considered 'expensive' or 'cheap'.

This can be complicated in the residential housing industry, as many of the biggest companies are involved in other operations, such as infrastructure or public projects. Other companies involved in this market have huge operations within commercial property investments, with long contracts. These companies obtain such a large amount of their cash flow from long-term contracts that they will not be used as comparable companies. Instead, construction companies will be used to form the industry average. Some of the companies have large operations within non-residential housing operations. However, all companies are involved in the residential housing industry, and are exposed to the same risk as BWG. The companies that are compared are also used by other analysts. These are as follows.

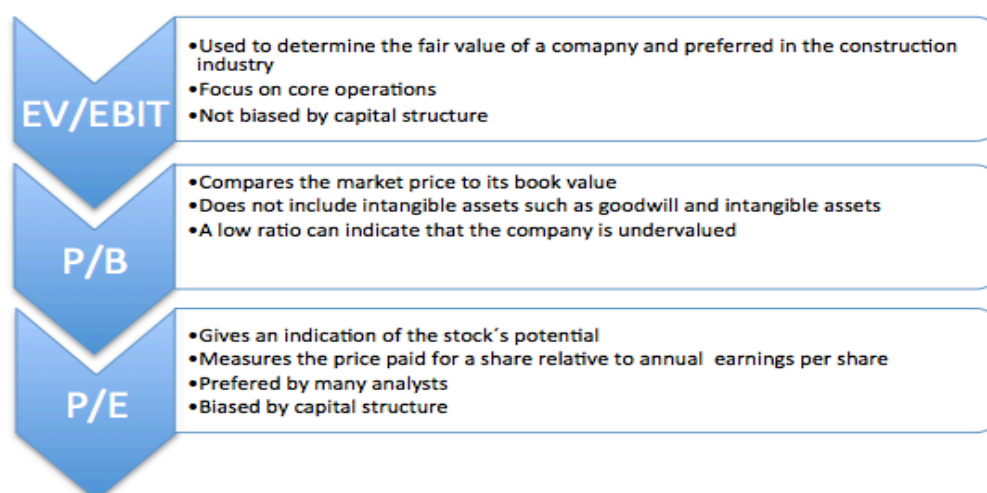
Table 9-2

Company	
AF Gruppen ASA	NCC AB
BWG Homes ASA	PEAB AB
Fornebu Utvikling AS	Skanska AB
JM AB	Veidekke ASA

Source: Bloomberg

Three multiples are used in the analysis. They are all considered to be good estimates for the industry.

Figure 9-5



Source: DNB Markets and own creation

The multiples are calculated on a forward-looking basis. This is because forward-looking multiples are consistent with the principles of the valuation. Forward-looking multiples are based on future cash flows and not on historical profits. They are found to be more accurate, with a standard deviation that is lower than historical multiples.

Comparing the current EV/EBIT ratio with the average 12-month forward can indicate that the stock is overvalued. However, multiplying the EBIT with the industry average shows that the price is 174% above the current stock price. The average EV/EBIT for the industry is 9.84. An estimation of the value of the company can be calculated by the multiplying the company's EBIT by the industry average:

$$\text{Value per share} = \frac{\left(\frac{EV}{EBIT}\right) * EBIT}{\text{Number of shares}} = \frac{9.14 * 290,291,000}{98,379,000} = 29.06$$

Company	Current 12m forward EV/EBIT	Avg. 12m forward EV/EBIT	EV potential to historical level
BWG Homes	11,70	8,70	-26 %
Industry average	9,84	10,34	10 %

Source: Bloomberg

The P/B ratio gives the highest estimated price of NOK 35 per share. This is 233% above the current price. The fact that BWG trades at a low book value can indicate that the company is undervalued, unless there is something fundamentally wrong with the company. There are no signs of BWG being in financial distress, so this is interpreted as undervaluation.

$$\text{Value per share} = \frac{\left(\frac{P}{B}\right) * \text{Book Value}}{\text{Number of shares}} = \frac{0.83 * 1,744,890,000}{98,379,000} = 35.31$$

Ticker	Current 12m forward P/B	Avg. 12m forward P/B	EV potential to historical level
BWG Homes	0,83	1,01	22 %
Industry average	1,99	2,14	12 %

Source: Bloomberg

A P/E below 10 is considered low. However, considering the industry average, it does not indicate that the company is expected to underperform its competitors. The current industry P/E ratio is below the historical average. This can indicate that investors expect challenging market conditions in the future.

$$\text{Value per share} = \frac{\left(\frac{P}{E}\right) * \text{Earnings}}{\text{Number of shares}} = \frac{9.39 * 104,075,000}{98,379,000} = 11.17$$

Ticker	Current 12m forward P/E	Avg. 12m forward P/E	EV potential to historical level
BWG NOR equity	9,39	8,60	-8 %
Industry average	10,55	11,91	14 %

Source: Bloomberg

When weighted, these multiples give a stock value of NOK 25.74.

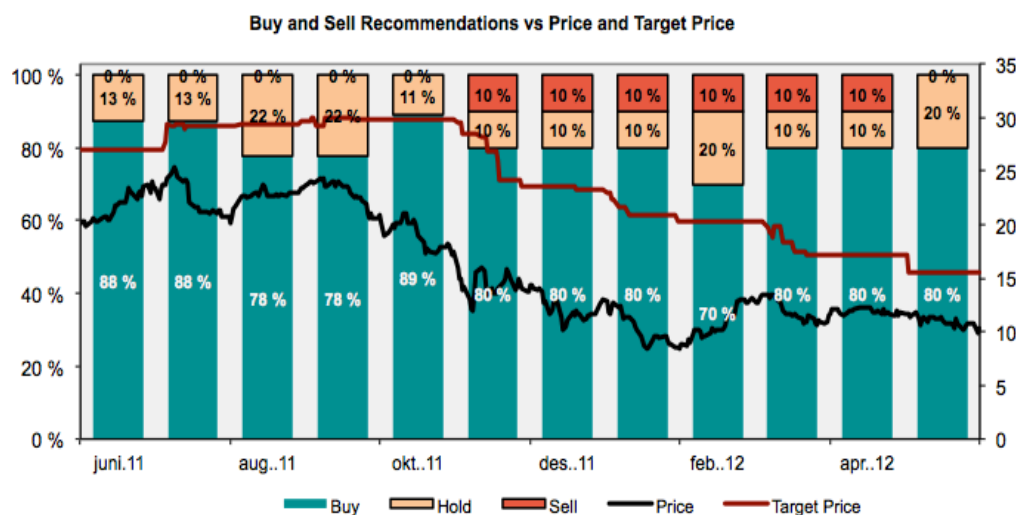
Multiples	Valuation	in % of current stock value
EV/EBIT	29,60	179 %
P/B	42,07	297 %
P/E	11,54	9 %
Weighted price	27,74	162 %

See appendix 14 for more detailed calculations on the companies in the industry.

The stock price found in the relative valuation is NOK 27.74, which is 179% above the price found in the fundamental analysis. This can indicate that the market is more pessimistic about future developments, compared with the forecast and predictions made in the fundamental analysis.

Figure 9-6 confirms that the general opinion is optimistic, and most analysts recommend a buying strategy of BWG. The figure gives an overall impression of recommendations by analysts reporting to Bloomberg.

Figure 9-6



Source: Bloomberg

Relative valuation models have become popular because of their simplistic approach and lack of subjective estimates. A relative valuation better reflects the market's point of view

because it measures relative values instead of real values. This can often result in a more accurate estimation of value. A disadvantage of using a relative valuation model is that risk and growth are overlooked. The method can easily overestimate values in an optimistic market and underestimate values in a downward market. Using this method can thus result in high levels of uncertainty.

10 Conclusion

The purpose of this thesis was to find the fundamental value of BWG Homes at 1 January 2012. The findings in the thesis create the foundation for the forecast and thereby the opinion of the fundamental value of BWG Homes.

The fundamental value of the share is estimated to be NOK 16.15. This is based on the expected values in the analysis of the scenarios. However, the estimates include a high degree of uncertainty, related mostly to the WACC, the level of growth and the order intake in the valuation. In general, investors should be advised to buy when the share is under-priced compared with underlying values, and to sell when the opposite is the case. Owing to uncertainty in the parameters, a buying strategy should be recommended only if the estimated value is found to be a minimum of 10% above the value at the cut-off date. If the value is within plus/minus 10%, it should be recommended that investors wait to buy.

The upside potential of the share is estimated to be 63% of the current stock price in the fundamental analysis, and a strong buying strategy is therefore recommended. This strategy is supported by the share price estimated in the relative valuation model.

The estimated value is based on fundamental drivers that indicate high demand for houses in the years to come. The main drivers are population growth, migration patterns, longer life expectancy, low interest rates, strong economies and a shortage on the supply side in both countries. High building costs also reduce the risk of house prices dropping as long as there is a pressure on the supply side. This high pressure is not expected to ease, mostly because the growth in population is expected to exceed the number of homes built over the next three to five years.

The strategic analysis reveals that the psychology in both markets is very strong. Combined with historically high prices, it might indicate that the current level of housing prices is driven by strong optimism and a speculative behaviour. This can lead to a burst

in the real estate markets once this trend shifts. Another potential threat is the scenario of another financial crisis occurring in a global scale. This will most definitively reduce BWG's value, but the likelihood is hard to estimate.

Historically, the company's operating margins are higher than those of its peers. It is currently in a strong position financially, thanks to the amount of real assets it owns and the equity/debt ratio. It can thus invest in profitable operations at a relatively low cost.

The strategic analysis indicates that there will be demand for BWG's houses in the future. The company offers a broad variety of attractive houses, with models that are highly energy-efficient and suited for future building requirements. The company encompasses brand names that are recognised and known for building quality houses in both Norway and Sweden. It is seen as having a competent and skilful management that is well organised and can continue to create value from its resources.

11 Thesis in Perspective

The thesis is written at a time when prices on both the Norwegian and the Swedish housing markets are historically high in real terms. Prices should drop in the longer term, coming back to historic average levels. Nonetheless, there will there always be a need for new houses because of population growth and the fact that old houses will need to be replaced. It is also important to remember that new houses will not be built before they can be sold at a price higher than the cost of building.

The thesis is aimed at two audiences (investors and academic evaluators) and it can be read without any prior knowledge of the industry or the company itself. When valuating companies in the housing industry, the importance of macroeconomic factors should be emphasised and the reader should bear in mind that the industry is highly sensitive to shifts in the general economy. So far, the Norwegian and Swedish housing markets seem unaffected by the global financial turmoil, although this could change if a new financial crisis should unfold in Europe.

BWG has operations in Norway and Sweden, and a natural twist to the thesis could be to estimate the economic potential of entering a new Nordic market, such as Denmark. However, owing to my knowledge of this market (as an enthusiastic apartment owner in Copenhagen) and following discussions with CBS professor Jens Lunde and others in the property sector, I decided not to venture into this area. This decision was based on the

apprehension of oversupply in the Danish property market leading to tough competition and low margins in the industry. I therefore decided to focus solely on the Norwegian and Swedish markets, where pressure on the supply side is expected to continue.

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Appendix 1 – Income statement BWG

BWG Homes ASA - Income statement

Income Statement	2007	2008	2009	2010	2011
Sales income	2 572 015	3 170 495	2 695 075	2 984 541	3 245 455
Other income	23	1 030	941	700	0
Total income	2 572 038	3 171 525	2 696 016	2 985 241	3 245 455
Costs of goods sold	-1 465 151	-1 906 232	-1 757 541	-1 935 620	-2 035 222
Payroll and personnel expenses	-505 598	-599 557	-439 168	-500 437	-564 024
Other operating expenses	-215 913	-297 650	-252 850	-266 470	-308 550
Total operating expenses	-2 186 662	-2 803 439	-2 449 559	-2 702 527	-2 907 796
Earnings before finance and depreciation (EBITDA)	385 376	368 086	246 457	282 714	337 659
Income from associated companies	-2 695	621	-5 186	1 434	-906
Depreciation	-15 359	-22 061	-19 225	-18 803	-21 035
Impairment of goodwill (Sweden)	0	050	0	0	0
Amortization	-22 589	0	0	0	0
Earnings before financial items (EBIT)	344 733	120 596	222 046	265 345	315 718
Interest and other finance income	8 421	32 632	4 256	3 004	4 105
Changes in value of financial instrument	-368	-42 500	6 422	1 178	1 248
Exchange gains losses	0	0	-22 125	75 213	-352
Interest expenses	-74 429	562	250	-79 908	-85 396
Other finance expenses	-4 587	-5244	-13 080	-17 097	-14 034
Net financial items	-70 963	674	777	-17 610	-94 429
Earnings before tax (EBT)	273 770	-32 078	89 269	247 735	221 289
Tax expenses	-72 690	-50 204	-19 155	-69 654	-62 039
Net earnings for the period	201 080	-82 282	70 114	178 081	159 250
OTHER INCOME AND EXPENSES RECOGNIZED					
Foreign exchange rate fluctuations changed to equity	0	0	-72 928	46 360	-3 343
Total comprehensive income	201 080	-82 282	-2 814	224 441	155 907

Appendix 2 - Reorganized income statement BWG

NOK 1000

Reorganized income statement -	2007	2008	2009	2010	2011
Operating income Norway	1 640	1 459	1 640	1 622	1 895
	860	376	061	542	981
Operating income Sweden		1 713	1 057	1 363	1 338
	931 160	072	496	053	802
Other units	18	-923	0	4 806	36 333
Other units operating income			0	0	
Eliminations other segments			-2 471	-5 160	-25 661
Total operating income	2 572	3 171	2 695	2 985	3 245
	038	525	086	241	455
Norway OPEX	-1 395	-1 290	-1 455	-1 432	-1 769
	005	001	975	881	559
Cost of goods sold			-1 045	-1 025	-1 241
			737	879	485
Payroll and personal expenses			-261	-265	-344
			305	232	055
Other operating expenses			-150	-141	-188
			446	229	216
Sweden OPEX	-791	-1 513	-972	-1 247	-1 249
	657	438	108	495	361
Cost of goods sold			-711	-909	-793
			804	741	737
Payroll and personal expenses			-177	-235	-219
			863	205	969
Other operating expenses			-102	-125	-120
			404	241	335
Total operating expenses	-2 186	-2 803	-2 449	-2 702	-2 907
	662	439	559	527	796
Operating results before depreciation (EBITDA)	385 376	368 086	245 527	282 714	337 659
Depreciation Norway	-7 425	-8 449	-7 704	-6982	-6 862
Depreciation Sweden	-7 891	-13 443	-11 279	-11 517	-13 870
Depreciations other units	-43	-169	-242	-304	-303
Operating results (EBIT)	370 017	346 025	226 302	263 911	316 624
	-103				
Tax on core operations	605	-96 887	-63 365	-73 895	-88 655
NOPAT	266 412	249 138	162 937	190 016	227 969
<i>NOPAT as% of total income</i>	10,4%	7,9%	6,0%	6,4%	7,0%

Non-Operating or Recurring items	2007	2008	2009	2010	2011
Net financial items Norway	-70 963	-152 674	-35 904	-26 117	-35 878
Net financial items Sweden			-60 900	-36 946	-45 398
Net financial items other			-35 973	158 310	-13 153

Income from associated companies Norway	-2 695	621	930	1 434	-906
Income from associated companies Sweden			-5 186	0	0
Net financial items other 2011 onwards					
Eliminations			7	-112 857	0
Norway					
Sweden					
		-226			
Impairment of goodwill (Sweden)	0	050	0	0	0
Amortization	-22 589	0	0	0	0
Net other Non-Operating Items		-378	-137		
	-96 247	103	026	-16 176	-95 335
Tax Non-Operating Items (TAX SHIELD)	30 915	46 683	44 210	4 241	26 616
Net Income Year	201 080	-82 282	70 121	178 081	159 250
Foreign exchange rate fluctuations changed to equity	0	0	-72 928	46 360	-3 343
Total comprehensive income	201 080	-82 282	-2 807	224 441	155 907
Control	0	0	-7	0	0

TAX adjustments	2007	2008	2009	2010	2011
Reported Tax	-72 690	-50 204	-19 155	-69 654	-62 039
Tax on non-operating items (TAX Shield)	30 915	46 683	44 210	4 241	26 616
Tax on core operations	-103 605	-96 887	-63 365	-73 895	-88 655
Marginal tax rate (from annual report)	0,28	0,28	0,28	0,28	0,28

Appendix 3 - Reorganized income statement Veidekke AS

	2007	2008	2009	2010	2011
Income from core operations					
Operating income Norway	1 389	631	349	572	916
	100	700	100	400	700
Operating income Sweden	767	719	359	472	601
	800	700	300	400	200
Total operating income	2 156	1 351	708	1 044	1 517
	900	400	400	800	900
Operating expenditures Norway	-1 202	-570	-349	-528	-832
	500	200	000	300	000
Operating expenditures Sweden	-638	-629	-342	-466	-562
	500	200	200	000	600
Total operating expenses	-1 841	-1 199	-691	-994	-1 394
	000	400	200	300	600
EBITDA	315	152	17	50	123
	900	000	200	500	300

Depreciation Norway			-6	17	-10
	-4400	-6500	100	800	300
Depreciation Sweden	-3 800	-500	-100	-100	-100
EBIT	307	145	11	68	112
	700	000	000	200	900
Tax on core operations	-	-	-	-	-
	83079	39150	-2970	18414	30483
NOPLAT	224	105		49	82
	621	850	8 030	786	417

Appendix 4 - Reorganized income statement JM

Income from core operations	2007	2008	2009	2010	2011
Sales revenue	1 707 888	1 189 086	1 061 865	1 331 109	1 613 148
Other revenue	894	20 751	20 751	432	1 988
Total revenue	1 708 782	1 209 837	1 082 616	1 331 541	1 615 136
Project expenses	1 490 137	1 114 779	1 002 859	1 170 165	1 378 213
Salaries and personnel expenses	35 551	32 655	24 406	29 710	55 588
Other operating expenses	48 800	53 665	38 683	44 442	45 110
Other income					
Income from associated companies					
Total operating expenses	1 574 488	1 201 099	1 065 948	1 244 317	1 478 911
EBITDA	134 294	8 738	16 668	87 224	136 225
Depreciation	8 585	6 989	4 856	1 837	1 260
EBIT	125 709	1 749	11 812	85 387	134 965
Tax on core operations	33 941	472	3 189	23 054	36 441
NOPLAT	91 768	1 277	8 623	62 333	98 524

Appendix 5 – Balance Sheet BWG

Balance sheet	2007	2008	2009	2010	2011
ASSETS					
Trademarks	477 199	501 650	462 370	487 697	487 446
	2 146	2 021	1 883	1 972	1 971
Goodwill	938	282	577	363	486
Other intangible assets	5 160	4 473	3 762	3 233	2 483
	2 629	2 527	2 349	2 463	2 461
Total intangible assets	297	405	709	293	415
Land building and other real estate	17 009	23 692	22 474	27 308	25 111
Machinery	73 980	78 064	59 349	62 208	59 499
Fixtures/fittings and equipment	7 216	7 327	5 976	6 977	9 138
					1 071
Projects, construction in progress	369 892	472 393	632 987	625 239	755

Inventories	59901	36 548	31 987	42 755	35 700
Land	925 540	1057587	947 224	999 290	175
Total tangible assets	1 453	1 675	1 699	1 763	2 459
	538	611	997	777	378
Investments in associated companies	68 692	71 753	5 567	7 088	5 186
Loans to associated companies	5 321	5 321	6 071	7 851	5 851
Other receivables	229	190	21 917	24 877	310
Total financial assets	74 242	77 264	33 555	39 816	11 347
	4 157	4 280	4 083	4 266	4 932
Total non-current assets	077	280	261	886	140
Trade receivables	588 803	428 082	105 304	118 162	91 981
Other receivables	43 437	26 305	23 512	33 169	32 300
Total receivables	632 240	454 387	128 816	151 331	124 281
Bank deposits and cash	82507	61 152	102 379	109 870	166 138
Total current assets	714 747	515 539	231 195	261 201	290 419
	4 871	4 795	4 314	4 528	5 222
Total assets	824	819	456	087	559

EQUITY AND LIABILITIES					
Share capital	66 000	66 000	98 276	98 276	98 276
	1 414	1 414	1 529		
Share premium reserve	897	897	837	529 837	529 837
				1 000	1 000
Other paid-in Capital	0	0	0	000	000
	1 480	1 480	1 628	1 628	1 628
Total paid in capital	897	897	113	113	113
Total retained earnings	221 817	59 300	25 534	249 975	317 434
	1 702	1 540	1 653	1 878	1 945
Total equity	714	197	647	088	547
Pension obligations	18 229	20 867	23 755	9 652	8 769
Deferred tax liability	226 564	201 722	147 685	174 961	172 826
Warranty provisions	60 291	48 771	53 837	58 074	67 498
Total non-current provisions	305 084	271 360	225 277	242 687	249 093
	1 353	1 309	1 129	1 040	
Non-current interest bearing debt	995	938	090	138	939 022
Total non-current provisions and interest-bearing debt	1 659	1 581	1 354	1 282	1 188
	079	298	367	825	115
Current interest bearing debt	350 362	824 340	469 650	441 661	830 222
Trade payables	412 408	292 108	187 336	254 695	338 566
Income tax payable	48 671	62 217	37 189	45 440	50 081
Public duties and dues payable	46 210	41 239	39 678	121 988	61 927
Derivatives	0	36 495	30 073	31 392	34 291
Current land-related liabilities	424 283	233 352	291 355	309 494	381 857
Prepayments from customers	63 815	89 342	148 668	20 131	259 994
Other current liabilities	164 395	95 231	102 493	142 373	131 959
	1 159				1 258
Total current non-interest bearing liabilities	782	849 984	836 792	925 513	675

Total current interest bearing and non-interest debt	1 510 144	1 674 324	1 306 442	1 367 174	2 088 897
Total liabilities	3 169 223	3 255 622	2 660 809	2 649 999	3 277 012
Total equity and liabilities	4 871 937	4 795 819	4 314 456	4 528 087	5 222 559

Appendix 7 – Reorganized balance sheet BWG

Reorganized income statement					
-	2007	2008	2009	2010	2011
Assets					1 071
Projects construction in progress	369 892	472 393	632 987	625 239	755
Inventories	59 901	36 548	31 987	42 755	35 700
		1 057			1 258
Land	925 540	587	947 224	999 290	175
Trade receivables	588 803	428 082	105 304	118 162	91 981
Other receivables	43 437	26 305	23 512	33 169	32 300
	1 987	2 020	1 741	1 818	2 489
Operating current assets	573	915	014	615	911
Trade payables	412 408	292 108	187 336	254 695	338 566
Income tax payable	48 671	62 217	37 189	45 440	50 081
Public duties and dues payable	46 210	41 239	39 678	121 988	61 927
Current land-related liabilities	424 283	233 352	291 355	309 494	381 857
Prepayments from customers	63 815	89 342	148 668	20 131	259 994
Derivatives	0	36 495	30 073	31 392	34 291
Other current liabilities	164 395	95 231	102 493	142 373	131 959
	1 159				1 258
Operating current liabilities	782	849 984	836 792	925 513	675
		1 170			1 231
Operating working capital	827 791	931	904 222	893 102	236
Land buildings and other real estate	17 009	23 692	22 474	27 308	25 111
Machinery	73 980	78 064	59 349	62 208	59 499
Fixtures/fittings and equipment	7 216	7 327	5 976	6 977	9 138
Sum fixed assets	98 205	109 083	87 799	96 493	93 748
Investments in associated companies	68 692	71 753	5 567	7 088	5 186
Loans to associated companies	5 321	5 321	6 071	7 851	5 851
Other receivables	229	190	21 917	24 877	310
Sum financial assets	74 242	77 264	33 555	39 816	11 347
Pension obligations	-18229	-20867	-23755	-9652	-8769
Warranty provisions	-60291	-48771	-53837	-58074	-67498
Non-current liabilities	-78520	-69638	-77592	-67726	-76267

		1 287			1 260
Invested capital excluding goodwill	921 718	640	947 984	961 685	064
Trademarks	477 199	501 650	462 370	487 697	487 446
	2 146	2 021	1 883	1 972	1 971
Goodwill	938	282	577	363	486
Other intangible assets	5 160	4 473	3 762	3 233	2 483
	3 551	3 815	3 297	3 424	3 721
Invested capital including goodwill	015	045	693	978	479

Invested capital	2007	2008	2009	2010	2011
	1 702	1 540	1 653	1 878	1 945
Equity	714	197	647	088	547
Deferred tax liability	226 564	201 722	147 685	174 961	172 826
	1 353	1 309	1 129	1 040	
Non-current interest bearing debt	995	938	090	138	939 022
Current interest bearing debt	350 362	824 340	469 650	441 661	830 222
	1 704	2 134	1 598	1 481	1 769
Total interest bearing debt	357	278	740	799	244
Bank deposits and cash	-82 507	-61 152	-102 379	-109 870	-166 138
	1 621	2 073	1 496	1 371	1 603
Net interest bearing debt	850	126	361	929	106
	3 551	3 815	3 297	3 424	3 721
Invested capital	128	045	693	978	479

Appendix 8 - Reorganized balance sheet Veidekke

NOK thousands	2007	2008	2009	2010	2011
Assets					
Projects construction in progress	959 857	1 049 624	1 091 131	861 827	670 620
Inventories	0	0	0	0	0
Land	489 404	523 037	441 954	564 832	673 189
Trade receivables	63 143	12 024	37 538	119 132	152 726
Other receivables	39 862	88 425	26 123	67 590	0
Operating current assets	1 552 266	1 673 110	1 596 746	1 613 381	1 496 535
Projects in process	872 710	1 071 577	920 337	790 252	771 360
Credit from bank	0	36 371	0	0	0
Trade payables	87 032	51 516	1 895	66 856	67 477
Income tax payable	33 126	13 317	46 959	22 223	42 308
Public duties and dues payable	30 424	30 137	0	38 699	25 766
Derivatives	50 000	0	28 747	0	0
Current land-related liabilities	70 940	70 470	42 648	146 682	124 654
Prepayments from customers	0	0	0	0	0
Other current liabilities	73 442	37 214	31 873	31 129	58 959
Operating current liabilities	1 217 674	1 310 602	1 072 459	1 095 841	1 090 524
Operating working capital	334 592	362 508	524 287	517 540	406 011

Land buildings and other real estate	6 956	7 844	7 961	7 961	4 655
Machinery	6 711	959	439	101	0
Fixtures/fittings and equipment	1 874	5 543	1 779	2 346	3 570
Sum fixed assets	15 541	14 346	10 179	10 408	8 225
Investments in associated companies	85 453	98 889	69 241	62 795	186 915
Loans to associated companies	32 200	37 700	101 487	83 988	82 526
Other receivables	46 788	31 453	16 946	40 193	48 642
Sum financial assets	164 441	168 042	187 674	186 976	318 083
Pension obligations	-5439	-6618	-7517	-3200	-3263
Warranty provisions	-7200	-17700	-15300	-35700	-81700
Non-current liabilities	-12639	-24318	-22817	-38900	-84963
Invested capital excluding goodwill	501 935	520 578	699 323	676 024	647 356
Trademarks	0	0	0	0	0
Goodwill	3 652	0	0	0	0
Other intangible assets	0	0	0	0	0
Invested capital including goodwill	505 587	520 578	699 323	676 024	647 356

Invested capital	2007	2008	2009	2010	2011
Equity	386 976	440 006	447 299	502 296	587 920
Deferred tax liability	42 607	30 337	38 977	40 648	42 416
Non-current interest bearing debt	113 209	63 407	219 203	96 313	104 102
Current interest bearing debt	0	0	0	0	
Total interest bearing debt	113 209	63 407	219 203	96 313	104 102
Bank deposits and cash	-37 205	-13 172	-6 156	-16 320	-19 492
Net interest bearing debt	76 004	50 235	213 047	79 993	84 610
Invested capital	505 587	520 578	699 323	622 937	714 946

Appendix 9 - Reorganized balance sheet JM

NOK thousands	2007	2008	2009	2010	2011
Assets					
Projects construction in progress	959 857	1 049 624	1 091 131	861 827	670 620
Inventories	0	0	0	0	0
Land	489 404	523 037	441 954	564 832	673 189
Trade receivables	63 143	12 024	37 538	119 132	152 726
Other receivables	39 862	88 425	26 123	67 590	0
Operating current assets	1 552 266	1 673 110	1 596 746	1 613 381	1 496 535
Projects in process	872 710	1 071 577	920 337	790 252	771 360
Credit from bank	0	36 371	0	0	0
Trade payables	87 032	51 516	1 895	66 856	67 477
Income tax payable	33 126	13 317	46 959	22 223	42 308
Public duties and dues payable	30 424	30 137	0	38 699	25 766
Derivatives	50 000	0	28 747	0	0
Current land-related liabilities	70 940	70 470	42 648	146 682	124 654
Prepayments from customers	0	0	0	0	0
Other current liabilities	73 442	37 214	31 873	31 129	58 959
Operating current liabilities	1 217 674	1 310 602	1 072 459	1 095 841	1 090 524
Operating working capital	334 592	362 508	524 287	517 540	406 011
Land buildings and other real estate	6 956	7 844	7 961	7 961	4 655
Machinery	6 711	959	439	101	0
Fixtures/fittings and equipment	1 874	5 543	1 779	2 346	3 570
Sum fixed assets	15 541	14 346	10 179	10 408	8 225
Investments in associated companies	85 453	98 889	69 241	62 795	186 915
Loans to associated companies	32 200	37 700	101 487	83 988	82 526
Other receivables	46 788	31 453	16 946	40 193	48 642
Sum financial assets	164 441	168 042	187 674	186 976	318 083
Pension obligations	-5439	-6618	-7517	-3200	-3263
Warranty provisions	-7200	-17700	-15300	-35700	-81700
Noncurrent liabilities	-12639	-24318	-22817	-38900	-84963
Invested capital excluding goodwill	501 935	520 578	699 323	676 024	647 356
Trademarks	0	0	0	0	0
Goodwill	3 652	0	0	0	0
Other intangible assets	0	0	0	0	0
Invested capital including goodwill	505 587	520 578	699 323	676 024	647 356

Invested capital	2007	2008	2009	2010	2011
Equity	386 976	440 006	447 299	502 296	587 920
Deferred tax liability	42 607	30 337	38 977	40 648	42 416
Non-current interest bearing debt	113 209	63 407	219 203	96 313	104 102
Current interest bearing debt	0	0	0	0	
Total interest bearing debt	113 209	63 407	219 203	96 313	104 102

Bank deposits and cash	-37 205	-13 172	-6 156	-16 320	-19 492
Net interest bearing debt	76 004	50 235	213 047	79 993	84 610
Invested capital	505 587	520 578	699 323	622 937	714 946

Appendix 10 – Credit rating BWG

Credit Rating	2007	2008	2009	2010	2011
EBIT interest coverage	4.63	0.88	2.05	3.32	3.70
EBITDA interest coverage	5.18	2.68	2.28	3.54	3.95
Total debt/capital (%)	65.1%	67.9%	61.7%	58.5%	62.7%
Long term debt / capital	34.1%	33.0%	31.4%	28.3%	22.7%
Return on capital (%)	10.42%	9.07%	6.86%	7.71%	8.51%

Rating	AAA	AA	A	BBB	BB	B	CCC	>CCC	SUM
Number	1	1	3	7	6	7	0	0	25
Factor	1	2	3	4	5	6	7	8	
Sum	1	2	9	28	30	42	0	0	112
Average	4,48								

Credit rating	BBB-
Risk premium	6%

Appendix 11 – Scenario 1

Scenario 1

Income statement assumptions	2012	2013	2014	2015	2016	T
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Norway						
<i>Growth in order intake</i>	-20%	-20%	0%	15%	10%	2,5%
<i>Costs of goods sold</i>	-64%	-64%	-64%	-64%	-64%	-64%
<i>Payroll and personnel expenses</i>	-17%	-17%	-17%	-17%	-17%	-17%
<i>Other operating expenses</i>	-9%	-9%	-9%	-9%	-9%	-9%
<i>Tax</i>	-28%	-28%	-28%	-28%	-28%	-28%
<i>Interest-bearing debt</i>	-45%	-45%	-45%	-45%	-45%	-45%
<i>Interest rate</i>	5%	5%	6%	6%	6%	6%

<i>Depreciation</i>	-8%	-8%	-8%	-8%	-8%	-8%
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Sweden						
<i>Growth in order intake</i>	-20%	-20%	0%	15%	10%	3%
<i>Costs of goods sold</i>	-64%	-64%	-64%	-64%	-64%	-64%
<i>Payroll and personnel expenses</i>	-19%	-19%	-19%	-19%	-19%	-19%
<i>Other operating expenses</i>	-9%	-9%	-9%	-9%	-9%	-9%
<i>Tax</i>	-26%	-26%	-26%	-26%	-26%	-26%
<i>Interest-bearing debt</i>	-55%	-55%	-55%	-55%	-55%	-55%
<i>Interest rate</i>	7%	7%	7%	7%	7%	7%
<i>Depreciation</i>	-11%	-11%	-11%	-11%	-11%	-11%

Balance sheet assumptions	2012	2013	2014	2015	2016	T
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Assets						
<i>Land building and other real estate</i>	1%	1%	1%	1%	1%	1%
<i>Machinery</i>	2%	2%	2%	2%	2%	2%
<i>Fixtures/fittings and equipment</i>	0%	0%	0%	0%	0%	0%
<i>Projects, construction in progress</i>	33%	33%	33%	33%	33%	33%
<i>Inventories</i>	1%	1%	1%	1%	1%	1%
<i>Trade receivables</i>	3%	3%	3%	3%	3%	3%

Liabilities						
<i>Warranty provisions</i>	2%	2%	2%	2%	2%	2%
<i>Current interest bearing debt</i>	19%	19%	19%	19%	19%	19%
<i>Non-current interest bearing debt</i>	29%	29%	29%	29%	29%	29%
<i>Trade payables</i>	10%	10%	10%	10%	10%	10%
<i>Income tax payable</i>	2%	2%	2%	2%	2%	2%
<i>Public duties and dues payable</i>	2%	2%	2%	2%	2%	2%
<i>Current land-related liabilities</i>	13%	13%	13%	13%	13%	13%
<i>Prepayments from customers</i>	5%	5%	5%	5%	5%	5%
<i>Other current liabilities</i>	5%	5%	5%	5%	5%	5%

Future Income Statement

Consolidated	2012	2013	2014	2015	2016	T
	2 710	2 168	1 927	2 072	2 327	2 468
Sales Revenue	652	522	575	143	546	862
	-1 734	-1 387	-1 233	-1 326	-1 489	-1 580
Cost of goods sold	817	854	648	171	630	072
Payroll and personal expenses	-478 067	-382	-339	-365	-410	-435
		454	959	456	500	424
		-201	-178	-192	-215	-228
Other operating expenses	-251 417	134	786	195	884	991
	-2 464	-1 971	-1 752	-1 883	-2 116	-2 244
Total operating expenses	302	441	392	822	014	486
			175	188	211	224
EBITDA	246 350	197 080	182	321	533	376
Depreciation	-17 238	-13 791	-12 258	-13 178	-14 802	-15 701
			162	175	196	208
EBIT	229 112	183 290	924	143	731	675
Financial expenses	-86 617	-69 293	-66 727	-71 731	-80 573	-85 465
				103	116	123
Net income before tax	142 495	113 996	96 197	412	158	211
Tax	-39 533	-31 626	-26 675	-28 676	-32 210	-34 166
Net income	102 963	82 370	69 522	74 736	83 948	89 045

Norway	2012	2013	2014	2015	2016	T
	1 686	1 349	1 199	1 289	1 448	1 536
Sales Revenue	452	162	255	199	100	020
	-1 079	-863	-767	-825	-926	-983
Cost of goods sold	329	463	523	087	784	053
Payroll and personal expenses	-283 469	-226	-201	-216	-243	-258
		775	578	696	406	184
		-125	-111	-119	-134	-142
Other operating expenses	-156 303	042	149	485	212	361
	-1 519	-1 215	-1 080	-1 161	-1 304	-1 383
Total operating expenses	101	281	250	269	402	597
			119	127	143	152
EBITDA	167 351	133 881	005	930	698	423
Depreciation	-7 061	-5 649	-5 021	-5 397	-6 063	-6 431
			113	122	137	145
EBIT	160 290	128 232	984	533	636	992
Financial expenses	-36 090	-28 872	-30 797	-33 107	-37 187	-39 445
					100	106
Net income before tax	124 200	99 360	83 187	89 426	448	547
Tax	-34 776	-27 821	-23 292	-25 039	-28 126	-29 833
Net income	89 424	71 539	59 895	64 387	72 323	76 714

Sweden	2012	2013	2014	2015	2016	T
	1 024		728	782	879	932
Sales Revenue	200 819 360		320	944	446	841
		-524	-466	-501	-562	-597
Cost of goods sold	-655 488	390	125	084	846	018
Payroll and personal expenses	-194 598	-155 678	-138 381	-148 759	-167 095	-177 240
Other operating expenses	-95 115	-76 092	-67 637	-72 710	-81 672	-86 630
		-756	-672	-722	-811	-860
Total operating expenses	-945 201	160	143	553	612	889
EBITDA	78 999	63 200	56 177	60 391	67 834	71 953
Depreciation	-10 177	-8 142	-7 237	-7 780	-8 739	-9 270
EBIT	68 822	55 058	48 940	52 611	59 095	62 683
Financial expenses	-50 526	-40 421	-35 930	-38 625	-43 385	-46 019
Net income before tax	18 296	14 636	13 010	13 986	15 710	16 664
Tax	-4 757	-3 805	-3 383	-3 636	-4 085	-4 333
Net income	13 539	10 831	9 628	10 350	11 625	12 331

ASSETS	2012	2013	2014	2015	2016	T
			487	487	487	487
Trademarks	487 446	487 446	446	446	446	446
	1 971	1 971	1 971	1 971	1 971	1 971
Goodwill	486	486	486	486	486	486
Other intangible assets	2 483	2 483	2 483	2 483	2 483	2 483
	2 461	2 461	2 461	2 461	2 461	2 461
Total intangible assets	415	415	415	415	415	415
Land building and other real estate	21 308	17 046	15 152	16 289	18 296	19 407
Machinery	62 108	49 686	44 165	47 478	53 330	56 568
Fixtures/fittings and equipment	6 769	5 415	4 813	5 174	5 812	6 165
Projects, construction in progress			636	684	768	815
	895 146	716 116	548	289	632	299
Inventories	39 033	31 227	27 757	29 839	33 517	35 551
	1 258	1 258	1 258	1 258	1 258	1 258
Land	175	175	175	175	175	175
	2 282	2 077	1 986	2 041	2 137	2 191
Total tangible assets	538	666	611	244	762	165
Investments in associated companies	5 186	5 186	5 186	5 186	5 186	5 186
Loans to associated companies	5 851	5 851	5 851	5 851	5 851	5 851
Other receivables	310	310	310	310	310	310

Total financial assets	11 347	11 347	11 347	11 347	11 347	11 347
	4 755	4 550	4 459	4 514	4 610	4 663
Total non-current assets	300	428	373	006	524	927
Trade receivables	76 824	61 459	54 630	58 728	65 966	69 971
Other receivables	32 300	32 300	32 300	32 300	32 300	32 300
						102
Total receivables	109 124	93 759	86 930	91 028	98 266	271
		-382	-420	-281		
Bank deposits and cash	-223 351	580	434	272	-83 504	68 517
		-288	-333	-190		170
Total current assets	-114 227	820	504	244	14 762	789
	4 641	4 261	4 125	4 323	4 625	4 834
Total assets	073	607	869	761	286	716

EQUITY AND LIABILITIES						
Share capital	98 276	98 276	98 276	98 276	98 276	98 276
			529	529	529	529
Share premium reserve	529 837	529 837	837	837	837	837
	1 000	1 000	1 000	1 000	1 000	1 000
Other paid-in Capital	000	000	000	000	000	000
	1 628	1 628	1 628	1 628	1 628	1 628
Total paid in capital	113	113	113	113	113	113
			601	673	752	838
Total retained earnings	434 202	527 311	606	478	368	613
	2 062	2 155	2 229	2 301	2 380	2 466
Total equity	315	424	719	591	481	726
Pension obligations	8 769	8 769	8 769	8 769	8 769	8 769
			172	172	172	172
Deferred tax liability	172 826	172 826	826	826	826	826
Warranty provisions	53 692	42 954	38 181	41 045	46 104	48 903
Total non-current provisions	235 287	224 549	776	640	699	498
Non-current interest bearing debt	784 285	627 428	714	542	439	327
Total non-current provisions and interest-bearing debt	1 019		777	822	901	944
	572	851 977	490	182	138	825
Current interest bearing debt	528 089	422 471	530	694	452	983
			197	212	238	252
Trade payables	277 338	221 870	218	009	141	599
Income tax payable	51 345	41 076	36 512	39 251	44 088	46 765
Public duties and dues payable	65 561	52 449	46 621	50 118	56 295	59 713
Derivatives	34 291	34 291	34 291	34 291	34 291	34 291
Current land-related liabilities	345 749	276 599	245	264	296	314
			866	306	883	908
Prepayments from customers	122 663	98 130	87 227	93 769	105	111
					326	721

				102	115	122
Other current liabilities	134 150	107 320	95 396	550	190	184
Total current non-interest bearing liabilities	1 031		743	796	890	942
	097	831 735	131	293	215	182
Total current interest bearing and non-interest debt	1 559	1 254	1 118	1 199	1 343	1 423
	185	206	660	988	667	165
	2 578	2 106	1 896	2 022	2 244	2 367
Total liabilities	758	183	150	170	805	989
	4 641	4 261	4 125	4 323	4 625	4 834
Total equity and liabilities	073	607	869	761	286	716

Reorganized Balance sheet						
NOK thousands	2012	2013	2014	2015	2016	T
Assets						
Projects construction in progress			636	684	768	815
	895 146	716 116	548	289	632	299
Inventories	39 033	31 227	27 757	29 839	33 517	35 551
	1 258	1 258	1 258	1 258	1 258	1 258
Land	175	175	175	175	175	175
Trade receivables	76 824	61 459	54 630	58 728	65 966	69 971
Other receivables	32 300	32 300	32 300	32 300	32 300	32 300
	2 301	2 099	2 009	2 063	2 158	2 211
Operating current assets	478	277	410	330	589	296
			197	212	238	252
Trade payables	277 338	221 870	218	009	141	599
Income tax payable	51 345	41 076	36 512	39 251	44 088	46 765
Public duties and dues payable	65 561	52 449	46 621	50 118	56 295	59 713
Current land-related liabilities			245	264	296	314
	345 749	276 599	866	306	883	908
Prepayments from customers	122 663	98 130	87 227	93 769	105	111
					326	721
Derivatives	34 291	34 291	34 291	34 291	34 291	34 291
				102	115	122
Other current liabilities	134 150	107 320	95 396	550	190	184
	1 031		743	796	890	942
Operating current liabilities	097	831 735	131	293	215	182
	1 270	1 267	1 266	1 267	1 268	1 269
Operating working capital	381	542	280	037	375	115
Land buildings and other real estate	21 308	17 046	15 152	16 289	18 296	19 407
Machinery	62 108	49 686	44 165	47 478	53 330	56 568
Fixtures/fittings and equipment	6 769	5 415	4 813	5 174	5 812	6 165
Sum fixed assets	90 184	72 147	64 131	68 941	77 438	82 140
Investments in associated companies	5 186	5 186	5 186	5 186	5 186	5 186

Loans to associated companies	5 851	5 851	5 851	5 851	5 851	5 851
Other receivables	310	310	310	310	310	310
Sum financial assets	11 347	11 347	11 347	11 347	11 347	11 347
Pension obligations	-8 769	-8 769	-8 769	-8 769	-8 769	-8 769
Warranty provisions	-53 692	-42 954	-38 181	-41 045	-46 104	-48 903
Non-current liabilities	-62 461	-51 723	-46 950	-49 814	-54 873	-57 672
Invested capital excluding goodwill	1 309	1 299	1 294	1 297	1 302	1 304
	451	313	808	511	287	930
Trademarks	487 446	487 446	487	487	487	487
	1 971	1 971	446	446	446	446
Goodwill	486	486	1 971	1 971	1 971	1 971
Other intangible assets	2 483	2 483	486	486	486	486
	2 483	2 483	2 483	2 483	2 483	2 483
Invested capital including goodwill	3 770	3 760	3 756	3 758	3 763	3 766
	866	728	223	926	702	345

Invested capital	2012	2013	2014	2015	2016	T
	2 062	2 155	2 229	2 301	2 380	2 466
Equity	315	424	719	591	481	726
			172	172	172	172
Deferred tax liability	172 826	172 826	826	826	826	826
Non-current interest bearing debt	784 285	627 428	557	599	673	714
Current interest bearing debt	528 089	422 471	714	542	439	327
			375	403	453	480
	1 312	1 049	530	694	452	983
Total interest bearing debt	374	899	933	1 003	1 126	1 195
			244	237	892	310
Bank deposits and cash	223 351	382 580	420	281		
			434	272	83 504	-68 517
	1 535	1 432	1 353	1 284	1 210	1 126
Net interest bearing debt	725	479	678	509	396	793
	3 770	3 760	3 756	3 758	3 763	3 766
Invested capital	866	728	223	926	702	345

Future cash flow statement	2012	2013	2014	2015	2016	T
			175	188	211	224
EBITDA	246 350	197 080	182	321	533	376
Financial expenses	-86 617	-69 293	-66 727	-71 731	-80 573	-85 465
Tax	-39 533	-31 626	-26 675	-28 676	-32 210	-34 166
		-183				
Change in working capital	-212 421	996	-81 776	49 066	86 683	47 962
				136	185	152
Cash flow from operations	-92 221	-87 836	4	980	433	707

Investments in tangible assets	159 602	191 082	78 796	-67 810	-111 320	-69 104
Investments in intangible assets	0	0	0	0	0	0
Capex	159 602	191 082	78 796	-67 810	-111 320	-69 104
Cash flow from investments	159 602	191 082	78 796	-67 810	320	-69 104
Instalments	-830 222	-528 089	-422 471	-375 530	-403 694	-453 452
New loans	373 352	265 614	305 816	445 523	527 349	521 871
Cash-flow from finance	-456 870	-262 475	-116 655	69 993	123 655	68 418
Free Cash Flow	-389 489	-159 228	139 -37 855	197 163	152 768	022
Interest paid	-86 617	-69 293	-66 727	-71 731	-80 573	-85 465
Tax shield	24 253	19 402	18 684	20 085	22 560	23 930
New loans	-456 870	-262 475	-116 655	69 993	123 655	68 418
Net change in cash flow	-908 723	594	554	509	410	905
Dividends paid		202 471 594	-157 554	-263 509	-158 410	905

Equity	2012	2013	2014	2015	2016	T
	1 945	2 062	2 627	2 903	2 818	2 633
Equity primo	547	315	018	867	230	709
Net income	102 963	82 370	69 522	74 736	83 948	89 045
Changes in warranty provisions	13 806	10 738	4 773	-2 864	-5 059	-2 799
Dividends	0	471 594	202 554	-157 509	-263 410	-158 905
Equity Ultimo	2 062	2 627	2 903	2 818	2 633	2 561
	315	018	867	230	709	050

Capex	2012	2013	2014	2015	2016	T
	-2 282	-2 077	-1 986	-2 041	-2 137	-2 191
Tangible assets ultimo	538	666	611	244	762	165
Tangible assets primo	2 459	2 282	2 077	1 986	2 041	2 137
Depreciations	378	538	666	611	244	762
Investments in tangible assets	-17 238	-13 791	-12 258	-13 178	-14 802	-15 701
	159 602	191 082	78 796	-67 810	-111 320	-69 104
Intangible assets ultimo	2 461	2 461	2 461	2 461	2 461	2 461

	415	415	415	415	415	415
	-2 461	-2 461	-2 461	-2 461	-2 461	-2 461
Intangible assets primo	415	415	415	415	415	415
Amortisation	0	0	0	0	0	0
Investments in intangible assets	0	0	0	0	0	0
					-111	
Capex	159 602	191 082	78 796	-67 810	320	-69 104

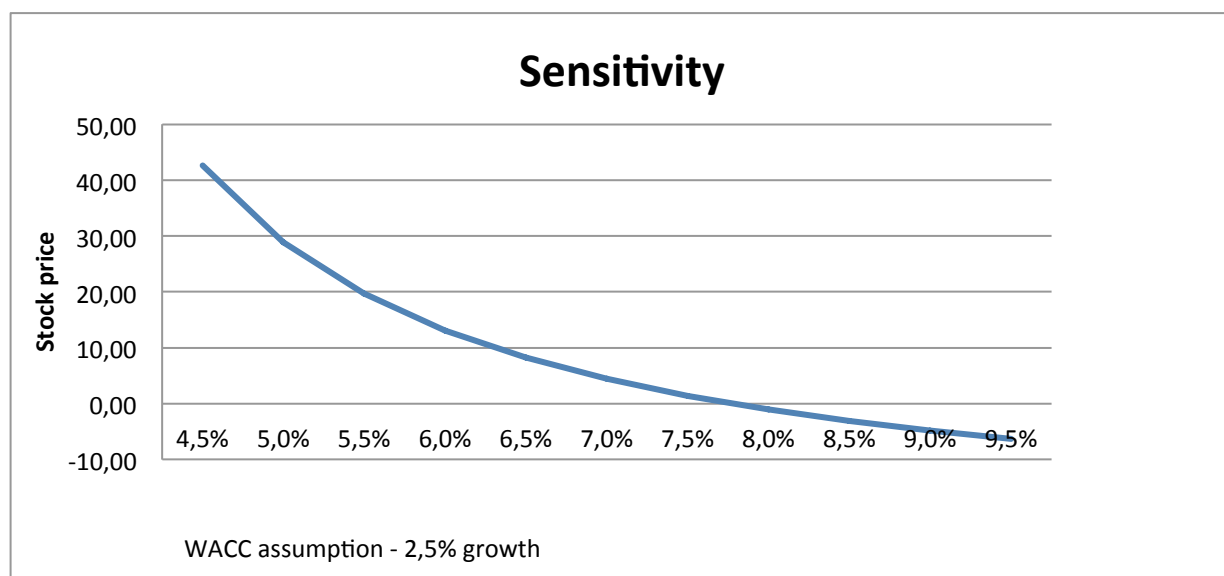
DCF Valuation	2012	2013	2014	2015	2016	T
	1	2	3	4	5	
Discount factor	93%	87%	81%	76%	71%	
		-159		139	197	152
Free Cash Flow	-389 489	228	-37 855	163	768	022
		-138		105	139	278
PV Free Cash Flow	-363 295	532	-30 720	337	630	778

Enterprise value budget period	-287 580
Enterprise value terminal period	2 278 778
Mid-year adjustment factor	80 721
	2 071
Enterprise value	918
	-1 769
Interest bearing debt	244
EK	302 674
Shares	98 276
Price per share	3.08
WACC assumption	7.2%
Growth assumption	2.5%
Percentage of value in terminal period	110%

Sensitivity analysis

DCF Matrix WACC and growth assumptions

3.08	0.005	0.01	0.015	0.02	0.025	0.03	0.035	0.04	0.045
4.5%	10.91	15.44	21.48	29.94	42.63	63.78	106.08	23.7	#DIV/0!
5.0%	6.76	10.21	14.65	20.56	28.84	41.26	61.96	10.33	227.55
5.5%	3.45	6.15	9.53	13.87	19.66	27.77	39.92	60.19	100.71
6.0%	0.76	2.92	5.56	8.87	13.12	18.79	26.72	38.62	58.46
6.5%	-1.48	0.28	2.40	4.99	8.23	12.39	17.94	25.70	37.36
7.0%	-3.37	-1.91	-0.18	1.90	4.43	7.60	11.67	17.11	24.71
7.5%	-4.98	-3.75	-2.32	-0.63	1.40	3.89	6.9	10.98	16.30
8.0%	-6.37	-5.33	-4.12	-2.72	-1.06	0.92	3.36	6.4	10.30
8.5%	-7.58	-6.69	-5.67	-4.49	-3.11	-1.49	0.46	2.84	5.82
9.0%	-8.64	-7.87	-6.99	-5.99	-4.84	-3.49	-1.9	0.0	2.34
9.5%	-9.58	-8.91	-8.15	-7.29	-6.31	-5.18	-3.87	-2.31	-0.44



Appendix 12 – Scenario 2

Scenario 2

Income statement assumptions	2012	2013	2014	2015	2016	T
Norway						
<i>Growth in order intake</i>	4%	4%	4%	4%	4%	2.5%
<i>Costs of goods sold</i>	-64%	-64%	-64%	-64%	-64%	-64%
<i>Payroll and personnel expenses</i>	-17%	-17%	-17%	-17%	-17%	-17%
<i>Other operating expenses</i>	-9%	-9%	-9%	-9%	-9%	-9%
<i>Tax</i>	-28%	-28%	-28%	-28%	-28%	-28%
<i>Interest-bearing debt</i>	-45%	-45%	-45%	-45%	-45%	-45%
<i>Interest rate</i>	5%	5%	6%	6%	6%	6%
<i>Depreciation</i>	-8%	-8%	-8%	-8%	-8%	-8%
Sweden						
<i>Growth in order intake</i>	2%	2%	2%	2%	2%	2.5%
<i>Costs of goods sold</i>	-64%	-64%	-64%	-64%	-64%	-64%
<i>Payroll and personnel expenses</i>	-17%	-17%	-17%	-17%	-17%	-17%
<i>Other operating expenses</i>	-9%	-9%	-9%	-9%	-9%	-9%
<i>Tax</i>	-26%	-26%	-26%	-26%	-26%	-26%
<i>Interest-bearing debt</i>	-55%	-55%	-55%	-55%	-55%	-55%
<i>Interest rate</i>	4%	4%	5%	5%	5%	5%
<i>Depreciation</i>	-11%	-11%	-11%	-11%	-11%	-11%
Balance sheet assumptions	2012	2013	2014	2015	2016	T
Assets						
<i>Land building and other real estate</i>	1%	1%	1%	1%	1%	1%
<i>Machinery</i>	2%	2%	2%	2%	2%	2%
<i>Fixtures/fittings and equipment</i>	0%	0%	0%	0%	0%	0%
<i>Projects, construction in progress</i>	33%	33%	33%	33%	33%	33%
<i>Inventories</i>	1%	1%	1%	1%	1%	1%
<i>Trade receivables</i>	3%	3%	3%	3%	3%	3%

Liabilities						
<i>Warranty provisions</i>	2%	2%	2%	2%	2%	2%
<i>Current interest bearing debt</i>	19%	19%	19%	19%	19%	19%
<i>Non-current interest bearing debt</i>	29%	29%	29%	29%	29%	29%
<i>Trade payables</i>	10%	10%	10%	10%	10%	10%
<i>Income tax payable</i>	2%	2%	2%	2%	2%	2%
<i>Public duties and dues payable</i>	2%	2%	2%	2%	2%	2%
<i>Current land-related liabilities</i>	13%	13%	13%	13%	13%	13%
<i>Prepayments from customers</i>	5%	5%	5%	5%	5%	5%
<i>Other current liabilities</i>	5%	5%	5%	5%	5%	5%

Future Income Statement

Consolidated	2012	2013	2014	2015	2016	T
	3 060	3 160	3 263	3 369	3 480	3 580
Sales Revenue	692	132	090	698	091	455
	-1 958	-2 022	-2 088	-2 156	-2 227	-2 291
Cost of goods sold	843	485	378	606	258	491
Payroll and personal expenses	-514 765	-531	-548	-566	-585	-602
		485	797	723	285	162
		-293	-302	-312	-322	-332
Other operating expenses	-283 883	103	650	535	771	078
	-2 757	-2 847	-2 939	-3 035	-3 135	-3 225
Total operating expenses	490	073	825	864	314	731
		313	323	333	344	354
EBITDA	303 202	059	265	833	777	724
Depreciation	-19 464	-20 097	-20 751	-21 429	-22 131	-22 770
		292	302	312	322	331
EBIT	283 738	963	514	404	646	954
					-101	-104
Financial expenses	-76 204	-78 680	-95 580	-98 703	937	876
		214	206	213	220	227
Net income before tax	207 534	283	934	701	709	078
Tax	-56 778	-58 652	-56 693	-58 577	-60 529	-62 291
		155	150	155	160	164
Net income	150 756	630	241	124	181	787

Norway	2012	2013	2014	2015	2016	T
	1 911	1 987	2 067	2 149	2 235	2 308
Sales Revenue	312	765	275	966	965	305

	-1 223	-1 272	-1 323	-1 375	-1 431	-1 477
Cost of goods sold	240	169	056	978	018	315
Payroll and personal expenses	-321 265	-334 116	-347 480	-361 379	-375 835	-387 994
		-184	-191	-199	-207	-213
Other operating expenses	-177 143	229	598	262	233	937
	-1 721	-1 790	-1 862	-1 936	-2 014	-2 079
Total operating expenses	648	514	135	620	085	246
		197	205	213	221	229
EBITDA	189 664	251	141	346	880	059
Depreciation	-7 972	-8 231	-8 500	-8 777	-9 065	-9 326
		189	196	204	212	219
EBIT	181 692	019	641	569	815	732
Financial expenses	-40 751	-42 075	-52 135	-53 838	-55 602	-57 205
		146	144	150	157	162
Net income before tax	140 941	944	506	731	214	527
Tax	-39 463	-41 144	-40 462	-42 205	-44 020	-45 508
		105	104	108	113	117
Net income	101 477	800	045	526	194	020

Sweden	2012	2013	2014	2015	2016	T
	1 149	1 172	1 195	1 219	1 244	1 272
Sales Revenue	380	368	815	731	126	150
		-750	-765	-780	-796	-814
Cost of goods sold	-735 603	315	322	628	241	176
Payroll and personal expenses	-193 499	-197 369	-201 317	-205 343	-209 450	-214 168
		-108	-111	-113	-115	-118
Other operating expenses	-106 740	874	052	273	538	141
	-1 035	-1 056	-1 077	-1 099	-1 121	-1 146
Total operating expenses	842	559	690	244	229	484
		115	118	120	122	125
EBITDA	113 538	808	125	487	897	665
Depreciation	-11 492	-11 865	-12 252	-12 652	-13 066	-13 443
		103	105	107	109	112
EBIT	102 046	943	873	835	830	222
Financial expenses	-35 453	-36 605	-43 446	-44 865	-46 335	-47 671
Net income before tax	66 593	67 338	62 427	62 970	63 496	64 551
Tax	-17 314	-17 508	-16 231	-16 372	-16 509	-16 783
Net income	49 279	49 830	46 196	46 598	46 987	47 768

ASSETS	2012	2013	2014	2015	2016	T
		487	487	487	487	487
Trademarks	487 446	446	446	446	446	446
	1 971	1 971	1 971	1 971	1 971	1 971
Goodwill	486	486	486	486	486	486
Other intangible assets	2 483	2 483	2 483	2 483	2 483	2 483
Total intangible assets	2 461	2 461	2 461	2 461	2 461	2 461
	415	415	415	415	415	415
Land building and other real estate	24 060	24 841	25 651	26 489	27 356	28 145
Machinery	70 128	72 406	74 765	77 208	79 737	82 037
Fixtures/fittings and equipment	7 643	7 891	8 148	8 414	8 690	8 941
Projects, construction in progress	1 010	1 043	1 077	1 112	1 149	1 182
	740	579	579	784	239	383
Inventories	44 074	45 506	46 988	48 523	50 113	51 558
	1 258	1 258	1 258	1 258	1 258	1 258
Land	175	175	175	175	175	175
Total tangible assets	2 414	2 452	2 491	2 531	2 573	2 611
	819	398	306	593	311	239
Investments in associated companies	5 186	5 186	5 186	5 186	5 186	5 186
Loans to associated companies	5 851	5 851	5 851	5 851	5 851	5 851
Other receivables	310	310	310	310	310	310
Total financial assets	11 347	11 347	11 347	11 347	11 347	11 347
	4 887	4 925	4 964	5 004	5 046	5 084
Total non-current assets	581	160	068	355	073	001
						101
Trade receivables	86 745	89 563	92 481	95 502	98 631	475
Other receivables	32 300	32 300	32 300	32 300	32 300	32 300
		121	124	127	130	133
Total receivables	119 045	863	781	802	931	775
		180	376	579	788	998
Bank deposits and cash	-19 564	382	506	139	516	030
		302	501	706	919	1 131
Total current assets	99 481	245	286	941	447	805
	4 987	5 227	5 465	5 711	5 965	6 215
Total assets	062	405	355	297	520	806
EQUITY AND LIABILITIES						
Share capital	98 276	98 276	98 276	98 276	98 276	98 276
		529	529	529	529	529
Share premium reserve	529 837	837	837	837	837	837
	1 000	1 000	1 000	1 000	1 000	1 000
Other paid-in Capital	000	000	000	000	000	000
	1 628	1 628	1 628	1 628	1 628	1 628
Total paid in capital	113	113	113	113	113	113
Total retained earnings	475 062	628	776	929	1 087	1 250

		723	924	937	931	730
Total equity	2 103 175	2 256 836	2 405 037	2 558 050	2 716 044	2 878 843
Pension obligations	8 769	8 769	8 769	8 769	8 769	8 769
		172	172	172	172	172
Deferred tax liability	172 826	826	826	826	826	826
Warranty provisions	60 626	62 595	64 635	66 746	68 933	70 921
Total non-current provisions	242 221	244 190	246 230	248 341	250 528	252 516
Non-current interest bearing debt	885 564	914 335	944 124	974 970	1 006 910	1 035 949
Total non-current provisions and interest-bearing debt	1 127 784	1 158 526	1 190 354	1 223 311	1 257 438	1 288 465
Current interest bearing debt	596 283	615 656	635 715	656 484	677 991	697 543
Trade payables	313 152	323 326	333 860	344 768	356 062	366 331
Income tax payable	57 976	59 859	61 810	63 829	65 920	67 821
Public duties and dues payable	74 027	76 432	78 922	81 501	84 171	86 598
Derivatives	34 291	34 291	34 291	34 291	34 291	34 291
Current land-related liabilities	390 397	403 081	416 213	429 811	443 892	456 694
Prepayments from customers	138 503	143 002	147 662	152 486	157 481	162 023
		156	161	166	172	177
Other current liabilities	151 474	395	490	766	230	197
Total current non-interest bearing liabilities	1 159 819	1 196 387	1 234 248	1 273 452	1 314 047	1 350 955
Total current interest bearing and non-interest debt	1 756 103	1 812 043	1 869 963	1 929 936	1 992 038	2 048 498
Total liabilities	2 883 887	2 970 569	3 060 317	3 153 247	3 249 476	3 336 963
Total equity and liabilities	4 987 062	5 227 405	5 465 355	5 711 297	5 965 520	6 215 806

Reorganized Balance sheet						
NOK thousands	2012	2013	2014	2015	2016	T
Assets						
Projects construction in progress	1 010 740	1 043 579	1 077 579	1 112 784	1 149 239	1 182 383
Inventories	44 074	45 506	46 988	48 523	50 113	51 558
	1 258	1 258	1 258	1 258	1 258	1 258
Land	175	175	175	175	175	175

						101
Trade receivables	86 745	89 563	92 481	95 502	98 631	475
Other receivables	32 300	32 300	32 300	32 300	32 300	32 300
	2 432	2 469	2 507	2 547	2 588	2 625
Operating current assets	034	122	523	285	458	892
		323	333	344	356	366
Trade payables	313 152	326	860	768	062	331
Income tax payable	57 976	59 859	61 810	63 829	65 920	67 821
Public duties and dues payable	74 027	76 432	78 922	81 501	84 171	86 598
Current land-related liabilities	390 397	403	416	429	443	456
Prepayments from customers		081	213	811	892	694
		143	147	152	157	162
Derivatives	138 503	002	662	486	481	023
	34 291	34 291	34 291	34 291	34 291	34 291
		156	161	166	172	177
Other current liabilities	151 474	395	490	766	230	197
	1 159	1 196	1 234	1 273	1 314	1 350
Operating current liabilities	819	387	248	452	047	955
	1 272	1 272	1 273	1 273	1 274	1 274
Operating working capital	215	735	275	833	411	937
Land buildings and other real estate	24 060	24 841	25 651	26 489	27 356	28 145
Machinery	70 128	72 406	74 765	77 208	79 737	82 037
Fixtures/fittings and equipment	7 643	7 891	8 148	8 414	8 690	8 941
		105	108	112	115	119
Sum fixed assets	101 830	139	564	111	784	123
Investments in associated companies	5 186	5 186	5 186	5 186	5 186	5 186
Loans to associated companies	5 851	5 851	5 851	5 851	5 851	5 851
Other receivables	310	310	310	310	310	310
Sum financial assets	11 347	11 347	11 347	11 347	11 347	11 347
Pension obligations	-8 769	-8 769	-8 769	-8 769	-8 769	-8 769
Warranty provisions	-60 626	-62 595	-64 635	-66 746	-68 933	-70 921
Non-current liabilities	-69 395	-71 364	-73 404	-75 515	-77 702	-79 690
Invested capital excluding goodwill	1 315	1 317	1 319	1 321	1 323	1 325
	997	857	782	776	840	717
		487	487	487	487	487
Trademarks	487 446	446	446	446	446	446
	1 971	1 971	1 971	1 971	1 971	1 971
Goodwill	486	486	486	486	486	486
Other intangible assets	2 483	2 483	2 483	2 483	2 483	2 483
Invested capital including goodwill	3 777	3 779	3 781	3 783	3 785	3 787
	412	272	197	191	255	132

Invested capital	2012	2013	2014	2015	2016	T
	2 103	2 256	2 405	2 558	2 716	2 878
Equity	175	836	037	050	044	843
		172	172	172	172	172
Deferred tax liability	172 826	826	826	826	826	826
Non-current interest bearing debt		914	944	974	1 006	1 035
	885 564	335	124	970	910	949
Current interest bearing debt		615	635	656	677	697
	596 283	656	715	484	991	543
	1 481	1 529	1 579	1 631	1 684	1 733
Total interest bearing debt	847	992	839	454	901	492
		-180	-376	-579	-788	-998
Bank deposits and cash	19 564	382	506	139	516	030
	1 501	1 349	1 203	1 052	896	735
Net interest bearing debt	411	610	334	314	385	463
	3 777	3 779	3 781	3 783	3 785	3 787
Invested capital	412	272	197	191	255	132

Future cash flow statement	2012	2013	2014	2015	2016	T
		313	323	333	344	354
EBITDA	303 202	059	265	833	777	724
					-101	-104
Financial expenses	-76 204	-78 680	-95 580	-98 703	937	876
Tax	-56 778	-58 652	-56 693	-58 577	-60 529	-62 291
Change in working capital	-93 619	33 749	34 943	36 182	37 467	34 063
		209	205	212	219	221
Cash flow from operations	76 601	476	936	736	779	620
Investments in tangible assets	25 094	-57 675	-59 659	-61 717	-63 849	-60 697
Investments in intangible assets	0	0	0	0	0	0
Capex	25 094	-57 675	-59 659	-61 717	-63 849	-60 697
Cash flow from investments	25 094	-57 675	-59 659	-61 717	-63 849	-60 697
		-596	-615	-635	-656	-677
Instalments	-830 222	283	656	715	484	991
		644	665	687	709	726
New loans	542 825	428	504	329	931	582
Cash-flow from finance	-287 397	48 144	49 848	51 614	53 447	48 592
		199	196	202	209	209
Free Cash Flow	-185 702	945	124	633	377	514

					-101	-104
Interest paid	-76 204	-78 680	-95 580	-98 703	937	876
Tax shield	21 337	22 030	26 762	27 637	28 542	29 365

New loans	-287 397	48 144	49 848	51 614	53 447	48 592
		191	177	183	189	182
Net change in cash flow	-527 965	440	153	182	430	594
		-191	-177	-183	-189	-182
Dividends paid		440	153	182	430	594

Equity	2012	2013	2014	2015	2016	T
	1 945	2 103	2 065	2 036	2 006	1 974
Equity primo	547	175	396	444	275	839
		155	150	155	160	164
Net income	150 756	630	241	124	181	787
Changes in warranty provisions	6 872	-1 970	-2 039	-2 112	-2 187	-1 988
		-191	-177	-183	-189	-182
Dividends	0	440	153	182	430	594
	2 103	2 065	2 036	2 006	1 974	1 955
Equity Ultimo	175	396	444	275	839	043

Capex	2012	2013	2014	2015	2016	T
	-2 414	-2 452	-2 491	-2 531	-2 573	-2 611
Tangible assets ultimo	819	398	306	593	311	239
	2 459	2 414	2 452	2 491	2 531	2 573
Tangible assets primo	378	819	398	306	593	311
Depreciations	-19 464	-20 097	-20 751	-21 429	-22 131	-22 770
Investments in tangible assets	25 094	-57 675	-59 659	-61 717	-63 849	-60 697

	2 461	2 461	2 461	2 461	2 461	2 461
Intangible assets ultimo	415	415	415	415	415	415
	-2 461	-2 461	-2 461	-2 461	-2 461	-2 461
Intangible assets primo	415	415	415	415	415	415
Amortisation	0	0	0	0	0	0
Investments in intangible assets	0	0	0	0	0	0

Capex	25 094	-57 675	-59 659	-61 717	-63 849	-60 697
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DCF Valuation	2012	2013	2014	2015	2016	T
	1	2	3	4	5	
Discount factor	93%	87%	81%	76%	71%	
		199	196	202	209	209
Free Cash Flow	-185 702	945	124	633	377	514
		173	159	153	147	140
PV Free Cash Flow	-173 213	956	156	380	826	577

3

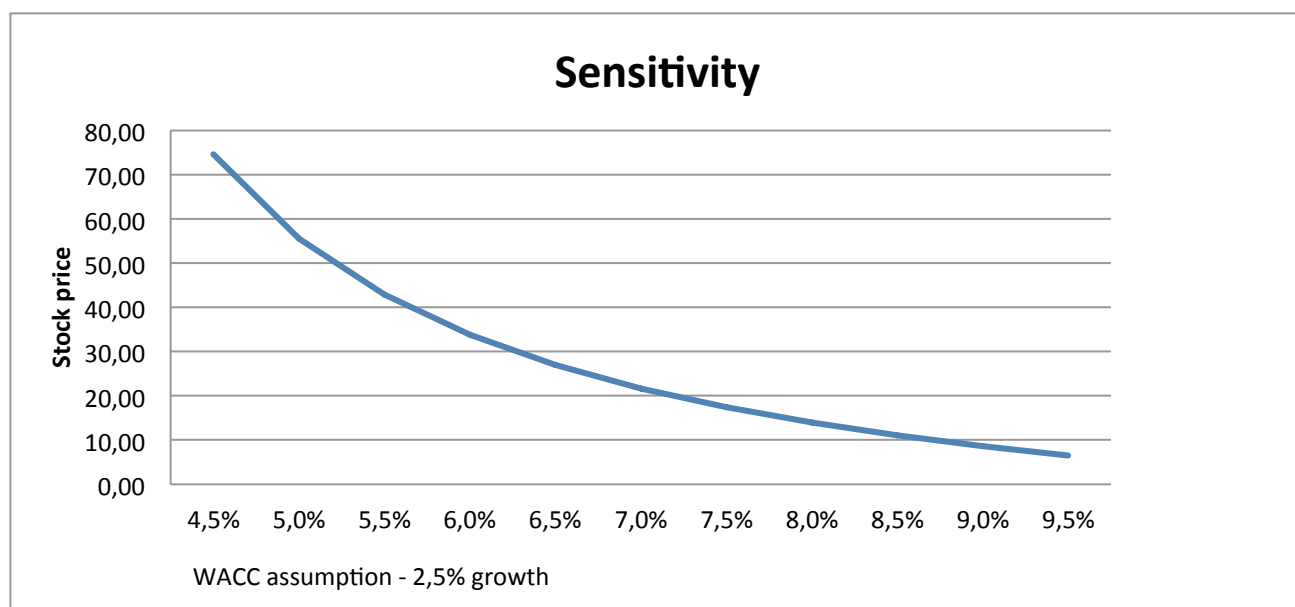
Enterprise value budget period	461 106
Enterprise value terminal period	3 140 577
Mid-year adjustment factor	111 248
	3 712
Enterprise value	931
	-1 769
Interest bearing debt	244
	1 943
EK	687
Shares	98 276
Price per share	19,78
WACC assumption	7.2%
Growth assumption	2.5%
Percentage of value in terminal period	85%

Sensitivity analysis

DCF Matrix WACC and growth assumptions

19.78	0.005	0.01	0.015	0.02	0.025	0.03	0.035	0.04	0.045
4.5%	30.96	37.21	45.53	57.19	74.68	103.83	162.1	337.0	#DI V/0 !
5.0%	25.17	29.92	36.04	44.19	55.60	72.71	101.2	158.3	329.4
5.5%	20.54	24.26	28.91	34.90	42.88	54.05	70.8	98.7	154.5
6.0%	16.75	19.73	23.37	27.93	33.79	41.60	52.5	68.9	96.2
6.5%	13.59	16.02	18.94	22.51	26.97	32.71	40.3	51.0	67.1
7.0%	10.92	12.93	15.32	18.18	21.67	26.04	31.6	39.1	49.6
7.5%	8.63	10.32	12.30	14.63	17.43	20.85	25.1	30.6	37.9
8.0%	6.65	8.08	9.74	11.67	13.96	16.70	20.0	24.2	29.6
8.5%	4.91	6.14	7.55	9.17	11.06	13.30	15.9	19.2	23.3

9.0%	3.38	4.44	5.65	7.03	8.62	10.47	12.66	15.29	18.51
9.5%	2.02	2.95	3.99	5.17	6.52	8.08	9.89	12.04	14.62



Appendix 13 – Scenario 3

Income statement assumptions	2012	2013	2014	2015	2016	T
Norway						
<i>Growth in order intake</i>	6%	6%	6%	6%	6%	2,5%
<i>Costs of goods sold</i>	-64%	-64%	-64%	-64%	-64%	-64%
<i>Payroll and personnel expenses</i>	-16%	-16%	-16%	-16%	-16%	-16%
<i>Other operating expenses</i>	-9%	-9%	-9%	-9%	-9%	-9%
<i>Tax</i>	-28%	-28%	-28%	-28%	-28%	-28%
<i>Interest-bearing debt</i>	-45%	-45%	-45%	-45%	-45%	-45%
<i>Interest rate</i>	5%	5%	6%	6%	6%	6%
<i>Depreciation</i>	-8%	-8%	-8%	-8%	-8%	-8%
Sweden						
<i>Growth in order intake</i>	6%	6%	4%	4%	4%	2,5%
<i>Costs of goods sold</i>	-64%	-64%	-64%	-64%	-64%	-64%
<i>Payroll and personnel expenses</i>	-16%	-16%	-16%	-16%	-16%	-16%
<i>Other operating expenses</i>	-9%	-9%	-9%	-9%	-9%	-9%
<i>Tax</i>	-26%	-26%	-26%	-26%	-26%	-26%

<i>Interest-bearing debt</i>	-55%	-55%	-55%	-55%	-55%	-55%
<i>Interest rate</i>	4%	4%	5%	5%	5%	5%
<i>Depreciation</i>	-11%	-11%	-11%	-11%	-11%	-11%

Balance sheet assumptions	2012	2013	2014	2015	2016	T
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Assets						
<i>Land building and other real estate</i>	1%	1%	1%	1%	1%	1%
<i>Machinery</i>	2%	2%	2%	2%	2%	2%
<i>Fixtures/fittings and equipment</i>	0%	0%	0%	0%	0%	0%
<i>Projects, construction in progress</i>	33%	33%	33%	33%	33%	33%
<i>Inventories</i>	1%	1%	1%	1%	1%	1%
<i>Trade receivables</i>	3%	3%	3%	3%	3%	3%

Liabilities						
<i>Warranty provisions</i>	2%	2%	2%	2%	2%	2%
<i>Current interest bearing debt</i>	19%	19%	19%	19%	19%	19%
<i>Non-current interest bearing debt</i>	29%	29%	29%	29%	29%	29%
<i>Trade payables</i>	10%	10%	10%	10%	10%	10%
<i>Income tax payable</i>	2%	2%	2%	2%	2%	2%
<i>Public duties and dues payable</i>	2%	2%	2%	2%	2%	2%
<i>Current land-related liabilities</i>	13%	13%	13%	13%	13%	13%
<i>Prepayments from customers</i>	5%	5%	5%	5%	5%	5%
<i>Other current liabilities</i>	5%	5%	5%	5%	5%	5%

Future Income Statement

Consolidated	2012	2013	2014	2015	2016	T
		3 288	3 472	3 655	3 847	3 995
Sales Revenue	3 102 191	322	835	120	299	254
	-1 985	-2 104	-2 222	-2 339	-2 462	-2 556
Cost of goods sold	402	526	614	277	272	962
			-548	-577	-607	-631
Payroll and personal expenses	-490 146	-519 555	708	509	873	250
			-322	-339	-356	-370
Other operating expenses	-287 733	-304 997	110	014	835	556
	-2 763	-2 929	-3 093	-3 255	-3 426	-3 558
Total operating expenses	281	078	432	800	980	769
			379	399	420	436
EBITDA	338 909	359 244	403	321	319	485
Depreciation	-19 728	-20 912	-22	-23	-24	-25

			085	244	467	407
			357	376	395	411
EBIT	319 181	338 332	318	076	853	077
			-101	-107	-112	-117
Financial expenses	-77 237	-81 871	724	063	693	026
			255	269	283	294
Net income before tax	241 944	256 461	594	013	160	051
			-69	-73	-77	-80
Tax	-66 138	-70 106	905	611	519	520
			185	195	205	213
Net income	175 806	186 355	689	402	641	531

Norway	2012	2013	2014	2015	2016	T
		2 045	2 168	2 298	2 436	2 538
Sales Revenue	1 930 051	854	605	721	644	960
	-1 235	-1 309	-1 387	-1 471	-1 559	-1 624
Cost of goods sold	232	346	907	182	452	934
			-342	-363	-384	-401
Payroll and personal expenses	-304 948	-323 245	640	198	990	156
			-200	-213	-225	-235
Other operating expenses	-178 880	-189 613	990	049	832	315
	-1 719	-1 822	-1 931	-2 047	-2 170	-2 261
Total operating expenses	060	204	536	428	274	404
			237	251	266	277
EBITDA	210 990	223 650	069	293	370	555
					-10	-10
Depreciation	-8 081	-8 565	-9 046	-9 521	021	407
			228	241	256	267
EBIT	202 910	215 084	023	772	349	149
			-55	-58	-61	-63
Financial expenses	-41 303	-43 782	486	398	469	833
			172	183	194	203
Net income before tax	161 606	171 303	537	374	880	316
			-48	-51	-54	-56
Tax	-45 250	-47 965	310	345	566	928
			124	132	140	146
Net income	116 357	123 338	227	029	314	388

Sweden	2012	2013	2014	2015	2016	T
		1 242	1 304	1 356	1 410	1 456
Sales Revenue	1 172 140	468	230	399	655	294
			-834	-868	-902	-932
Cost of goods sold	-750 170	-795 180	707	095	819	028
			-206	-214	-222	-230
Payroll and personal expenses	-185 198	-196 310	068	311	884	094

			-121	-125	-131	-135
Other operating expenses	-108 853	-115 384	120	965	003	242
	-1 044	-1 106	-1 161	-1 208	-1 256	-1 297
Total operating expenses	221	874	896	371	706	364
			142	148	153	158
EBITDA	127 919	135 594	334	028	949	930
			-13	-13	-14	-15
Depreciation	-11 648	-12 346	039	724	445	001
			129	134	139	143
EBIT	116 271	123 248	295	304	504	929
			-46	-48	-51	-53
Financial expenses	-35 934	-38 090	238	665	224	194
Net income before tax	80 338	85 158	83 057	85 639	88 280	90 735
			-21	-22	-22	-23
Tax	-20 888	-22 141	595	266	953	591
Net income	59 450	63 017	61 462	63 373	65 327	67 144

ASSETS	2012	2013	2014	2015	2016	T
			487	487	487	487
Trademarks	487 446	487 446	446	446	446	446
		1 971	1 971	1 971	1 971	1 971
Goodwill	1 971 486	486	486	486	486	486
Other intangible assets	2 483	2 483	2 483	2 483	2 483	2 483
		2 461	2 461	2 461	2 461	2 461
Total intangible assets	2 461 415	415	415	415	415	415
Land building and other real estate	24 386	25 849	27 299	28 732	30 243	31 406
Machinery	71 079	75 344	79 571	83 748	88 151	91 541
Fixtures/fittings and equipment	7 746	8 211	8 672	9 127	9 607	9 976
Projects, construction in progress	1 024 444	1 085	1 146	1 207	1 270	1 319
		911	843	040	504	363
Inventories	44 671	47 352	50 009	52 634	55 401	57 531
		1 258	1 258	1 258	1 258	1 258
Land	1 258 175	175	175	175	175	175
		2 500	2 570	2 639	2 712	2 767
Total tangible assets	2 430 502	841	569	456	081	993
Investments in associated companies	5 186	5 186	5 186	5 186	5 186	5 186
Loans to associated companies	5 851	5 851	5 851	5 851	5 851	5 851
Other receivables	310	310	310	310	310	310
Total financial assets	11 347	11 347	11 347	11 347	11 347	11 347
		4 973	5 043	5 112	5 184	5 240
Total non-current assets	4 903 264	603	331	218	843	755
				103	109	113
Trade receivables	87 921	93 196	98 425	592	038	231
Other receivables	32 300	32 300	32 300	32 300	32 300	32 300

			130	135	141	145
Total receivables	120 221	125 496	725	892	338	531
			561	837	1 129	1 408
Bank deposits and cash	23 980	293 284	200	837	122	589
			691	973	1 270	1 554
Total current assets	144 201	418 780	925	729	460	120
		5 392	5 735	6 085	6 455	6 794
Total assets	5 047 465	383	257	946	303	875

EQUITY AND LIABILITIES						
Share capital	98 276	98 276	98 276	98 276	98 276	98 276
			529	529	529	529
Share premium reserve	529 837	529 837	837	837	837	837
		1 000	1 000	1 000	1 000	1 000
Other paid-in Capital	1 000 000	000	000	000	000	000
		1 628	1 628	1 628	1 628	1 628
Total paid in capital	1 628 113	113	113	113	113	113
			863	1 055	1 257	1 468
Total retained earnings	499 291	681 959	993	784	618	219
		2 310	2 492	2 683	2 885	3 096
Total equity	2 127 404	072	106	897	731	332
Pension obligations	8 769	8 769	8 769	8 769	8 769	8 769
			172	172	172	172
Deferred tax liability	172 826	172 826	826	826	826	826
Warranty provisions	61 448	65 135	68 789	72 400	76 207	79 137
			250	253	257	260
Total non-current provisions	243 043	246 730	384	995	802	732
Non-current interest bearing debt			1 004	1 057	1 113	1 155
	897 571	951 425	811	552	156	965
Total non-current provisions and interest-bearing debt		1 198	1 255	1 311	1 370	1 416
	1 140 613	154	195	547	958	697
			676	712	749	778
Current interest bearing debt	604 368	640 630	577	090	530	355
			355	373	393	408
Trade payables	317 398	336 442	320	970	633	771
Income tax payable	58 762	62 287	65 783	69 235	72 876	75 678
Public duties and dues payable	75 031	79 533	83 995	88 404	93 052	96 631
Derivatives	34 291	34 291	34 291	34 291	34 291	34 291
			442	466	490	509
Current land-related liabilities	395 690	419 432	966	217	730	602
			157	165	174	180
Prepayments from customers	140 380	148 803	153	402	098	793
			171	180	190	197
Other current liabilities	153 527	162 739	871	892	403	725
		1 243	1 311	1 378	1 449	1 503
Total current non-interest bearing liabilities	1 175 080	527	379	412	083	492
Total current interest bearing and non-interest debt		1 884	1 987	2 090	2 198	2 281
	1 779 448	157	956	502	614	846
Total liabilities	2 920 061	3 082	3 243	3 402	3 569	3 698

		312	151	049	572	543
		5 392	5 735	6 085	6 455	6 794
Total equity and liabilities	5 047 465	383	257	946	303	875

Reorganized Balance sheet						
NOK thousands	2012	2013	2014	2015	2016	T
Assets						
Projects construction in progress	1 024 444	1 085 911	1 146 843	1 207 040	1 270 504	1 319 363
Inventories	44 671	47 352	50 009	52 634	55 401	57 531
		1 258	1 258	1 258	1 258	1 258
Land	1 258 175	175	175	175	175	175
				103	109	113
Trade receivables	87 921	93 196	98 425	592	038	231
Other receivables	32 300	32 300	32 300	32 300	32 300	32 300
		2 516	2 585	2 653	2 725	2 780
Operating current assets	2 447 511	934	752	740	418	601
			355	373	393	408
Trade payables	317 398	336 442	320	970	633	771
Income tax payable	58 762	62 287	65 783	69 235	72 876	75 678
Public duties and dues payable	75 031	79 533	83 995	88 404	93 052	96 631
			442	466	490	509
Current land-related liabilities	395 690	419 432	966	217	730	602
			157	165	174	180
Prepayments from customers	140 380	148 803	153	402	098	793
Derivatives	34 291	34 291	34 291	34 291	34 291	34 291
			171	180	190	197
Other current liabilities	153 527	162 739	871	892	403	725
		1 243	1 311	1 378	1 449	1 503
Operating current liabilities	1 175 080	527	379	412	083	492
		1 273	1 274	1 275	1 276	1 277
Operating working capital	1 272 432	407	373	328	334	109
Land buildings and other real estate	24 386	25 849	27 299	28 732	30 243	31 406
Machinery	71 079	75 344	79 571	83 748	88 151	91 541
Fixtures/fittings and equipment	7 746	8 211	8 672	9 127	9 607	9 976
			115	121	128	132
Sum fixed assets	103 211	109 404	542	607	001	924
Investments in associated companies	5 186	5 186	5 186	5 186	5 186	5 186
Loans to associated companies	5 851	5 851	5 851	5 851	5 851	5 851
Other receivables	310	310	310	310	310	310
Sum financial assets	11 347	11 347	11 347	11 347	11 347	11 347
Pension obligations	-8 769	-8 769	-8 769	-8 769	-8 769	-8 769
			-68	-72	-76	-79
Warranty provisions	-61 448	-65 135	789	400	207	137

			-77	-81	-84	-87
Non-current liabilities	-70 217	-73 904	558	169	976	906
Invested capital excluding goodwill		1 320	1 323	1 327	1 330	1 333
	1 316 773	254	704	113	707	473
			487	487	487	487
Trademarks	487 446	487 446	446	446	446	446
		1 971	1 971	1 971	1 971	1 971
Goodwill	1 971 486	486	486	486	486	486
Other intangible assets	2 483	2 483	2 483	2 483	2 483	2 483
Invested capital including goodwill		3 781	3 785	3 788	3 792	3 794
	3 778 188	669	119	528	122	888

Invested capital	2012	2013	2014	2015	2016	T
		2 310	2 492	2 683	2 885	3 096
Equity	2 127 404	072	106	897	731	332
			172	172	172	172
Deferred tax liability	172 826	172 826	826	826	826	826
Non-current interest bearing debt			1 004	1 057	1 113	1 155
	897 571	951 425	811	552	156	965
			676	712	749	778
Current interest bearing debt	604 368	640 630	577	090	530	355
		1 592	1 681	1 769	1 862	1 934
Total interest bearing debt	1 501 939	055	388	642	687	319
			-561	-837	-1 129	-1 408
Bank deposits and cash	-23 980	-293 284	200	837	122	589
		1 298	1 120	931	733	525
Net interest bearing debt	1 477 958	771	188	805	565	731
		3 781	3 785	3 788	3 792	3 794
Invested capital	3 778 188	669	119	528	122	888

Future cash flow statement	2012	2013	2014	2015	2016	T
			379	399	420	436
EBITDA	338 909	359 244	403	321	319	485
			-101	-107	-112	-117
Financial expenses	-77 237	-81 871	724	063	693	026
			-69	-73	-77	-80
Tax	-66 138	-70 106	905	611	519	520
Change in working capital	-79 535	63 172	62 623	61 867	65 225	50 215
			270	280	295	289
Cash flow from operations	115 999	270 439	397	513	332	154
			-91	-92	-97	-81
Investments in tangible assets	9 148	-91 251	813	131	092	320
Investments in intangible assets	0	0	0	0	0	0
			-91	-92	-97	-81
Capex	9 148	-91 251	813	131	092	320

Cash flow from investments	9 148	-91 251	-91 813	-92 131	-97 092	-81 320
			-640	-676	-712	-749
Instalments	-830 222	-604 368	630	577	090	530
			729	764	805	821
New loans	562 917	694 485	963	831	134	163
Cash-flow from finance	-267 305	90 116	89 333	88 254	93 044	71 633
Free Cash Flow	-142 158	269 304	267 916	276 637	291 285	279 467

			-101	-107	-112	-117
Interest paid	-77 237	-81 871	724	063	693	026
Tax shield	21 626	22 924	28 483	29 978	31 554	32 767
New loans	-267 305	90 116	89 333	88 254	93 044	71 633
			284	287	303	266
Net change in cash flow	-465 074	300 472	008	806	191	840
			-284	-287	-303	-266
Dividends paid		-300 472	008	806	191	840

Equity	2012	2013	2014	2015	2016	T
		2 127	2 009	1 907	1 811	1 710
Equity primo	1 945 547	404	599	626	611	255
			185	195	205	213
Net income	175 806	186 355	689	402	641	531
Changes in warranty provisions	6 050	-3 687	-3 655	-3 611	-3 807	-2 931
			-284	-287	-303	-266
Dividends	0	-300 472	008	806	191	840
		2 009	1 907	1 811	1 710	1 654
Equity Ultimo	2 127 404	599	626	611	255	015

Capex	2012	2013	2014	2015	2016	T
	-2 430	-2 500	-2 570	-2 639	-2 712	-2 767
Tangible assets ultimo	502	841	569	456	081	993
		2 430	2 500	2 570	2 639	2 712
Tangible assets primo	2 459 378	502	841	569	456	081
			-22	-23	-24	-25
Depreciations	-19 728	-20 912	085	244	467	407
			-91	-92	-97	-81
Investments in tangible assets	9 148	-91 251	813	131	092	320
		2 461	2 461	2 461	2 461	2 461
Intangible assets ultimo	2 461 415	415	415	415	415	415
	-2 461	-2 461	-2 461	-2 461	-2 461	-2 461
Intangible assets primo	415	415	415	415	415	415
Amortisation	0	0	0	0	0	0
Investments in intangible	0	0	0	0	0	0

assets

			-91	-92	-97	-81
Capex	9 148	-91 251	813	131	092	320

DCF Valuation	2012	2013	2014	2015	2016	T
	1	2	3	4	5	
Discount factor	93%	87%	81%	76%	71%	
Free Cash Flow	-142 158	269 304	267 916	276 637	291 285	279 467
PV Free Cash Flow	-132 597	234 299	217 416	209 396	205 656	4 189 160

Enterprise value budget period	734 170
Enterprise value terminal period	4 189 160
Mid-year adjustment factor	148 392
Enterprise value	5 071 722
	-1 769
Interest bearing debt	244
EK	3 302 478
Shares	98 276
Price per share	33,60
WACC assumption	7,2%
Growth assumption	2,5%
Percentage of value in terminal period	83%

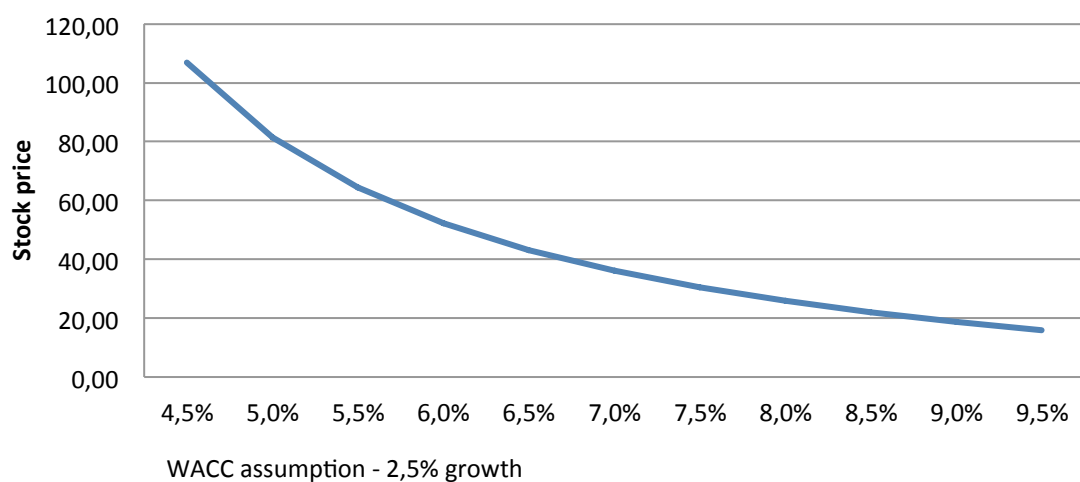
Sensitivity analysis

DCF Matrix WACC and growth assumptions

							0.035	0.04	0.045
33.60	0.005	0.01	0.015	0.02	0.025	0.03	22.5	24.6	26.7
4.5%	48.57	56.90	68.01	83.56	106.89	145.76	143.52	151.79	160.04
5.0%	40.83	47.18	55.33	66.20	81.42	104.25	102.2	108.8	115.7

							31	41	2
5.5%	34.65	39.61	45.82	53.80	64.44	79.34	101.69	138.94	213.43
6.0%	29.58	33.56	38.42	44.50	52.31	62.73	77.32	99.19	135.66
6.5%	25.36	28.61	32.50	37.26	43.21	50.86	61.06	75.34	96.76
7.0%	21.79	24.48	27.66	31.47	36.13	41.96	49.45	59.43	73.42
7.5%	18.73	20.99	23.62	26.73	30.46	35.03	40.73	48.07	57.85
8.0%	16.07	17.99	20.20	22.78	25.83	29.48	33.95	39.54	46.72
8.5%	13.75	15.39	17.27	19.43	21.96	24.95	28.53	32.90	38.38
9.0%	11.70	13.12	14.73	16.57	18.69	21.16	24.09	27.59	31.88
9.5%	9.88	11.12	12.51	14.08	15.88	17.96	20.38	23.55	26.68

Sensitivity



Appendix 14 – Multiple Analysis

Company	Current 12m forward EV/EBIT	Avg. 12m forward EV/EBIT	EV potential to historical level
AF Gruppen ASA	6.3	6.6	5%
BWG Homes ASA	11.9	8.7	-27%
Fornebu			
Utvikling AS	22.3	24.6	10%
JM AB	4.9	8.3	69%
NCC AB	7.1	8.4	18%
PEAB AB	9.7	9.3	-4%
Skanska AB	9.4	8.3	-12%
Veidekke ASA	7.3	8.5	16%
Industry average	9.86	10.34	10%

Ticker	Current 12m forward P/B	Avg. 12m forward P/B	EV potential to historical level
AFG NOR equity	3.62	2.82	-22%
BWG NOR equity	0.8	1.01	24%
FBU NOR equity	0.6	0.54	-10%
JM SS equity	2.28	2.91	28%
NCC SS equity	1.82	2.04	12%
PEAB SS equity	1.37	2.05	50%
SKAB SS equity	2.56	2.43	-5%
Veidekke NOR equity	2.83	3.35	18%
Industry average	1.99	2.14	0.12

Ticker	EV potential to historical level		
	Avg. 12m forward P/E		
AFG NOR equity	9.9	10.6	7%
BWG NOR equity	10.2	8.6	-16%
FBU NOR equity	14.9	18.8	26%
JM SS equity	8.5	12.3	45%
NCC SS equity	8.8	10.9	24%
PEAB SS equity	9.1	9.5	4%
SKAB SS equity	14.7	14	-5%
Veidekke NOR equity	9.1	10.6	16%
Industry average	10.65	11.91	0.13

Company	Current 12m forward EV/EBIT	Avg. 12m forward EV/EBIT	EV potential to historical level
BWG Homes	11.70	8.70	-26%
Industry average	9.84	10.34	10%

Ticker	Current 12m forward P/B	Avg. 12m forward P/B	EV potential to historical level
BWG Homes	0.83	1.01	22%
Industry average	1.99	2.14	12%

Ticker	Current 12m forward P/E	Avg. 12m forward P/E	EV potential to historical level
BWG NOR equity	9.39	8.60	-8%
Industry average	10.55	11.91	14%

Current stock value 9.91

Multiples	Valuation	in% of current stock value
EV/EBIT	31.34	216%
P/B	39.33	297%
P/E	11.36	15%
Weighted price	27.34	176%

Appendix 15 – DuPont Analysis

DuPont analysis

	2007	2008	2009	2010	2011
ROIC (after tax)	7.5%	6.5%	4.9%	5.5%	6.1%
ROIC (before tax)	10.4%	9.1%	6.9%	7.7%	8.5%
EBIT Margin (before tax)	14.4%	10.9%	8.4%	8.8%	9.8%
Turnover rate	72.4%	83.1%	81.7%	87.2%	87.2%

EBIT analysis segments

	2007	2008	2009	2010	2011
EBIT Norway	14.5%	11.0%	10.8%	11.3%	6.3%

EBIT Sweden	14,1%	10,9%	7,0%	7,6%	5,6%
EBIT Consolidated	14,4%	10,9%	8,4%	8,8%	9,8%

Trend analysis						
	2007	2008	2009	2010	2011	Average
Operating income Norway	100	89	100	99	116	101
Operating income Sweden	100	184	114	146	144	138
Other units	100	-5128	0	26700	201850	44704
Total operating income	100	123	105	116	126	114
Norway OPEX	N/A	N/A	100	98	122	107
Cost of goods sold	N/A	N/A	100	98	119	106
Payroll and personal expenses	N/A	N/A	100	102	132	111
Other operating expenses	N/A	N/A	100	94	125	106
Sweden OPEX	N/A	N/A	100	128	129	119
Cost of goods sold	N/A	N/A	100	128	112	113
Payroll and personal expenses	N/A	N/A	100	132	124	119
Other operating expenses	N/A	N/A	100	122	118	113
Total operating expenses	100	128	112	124	133	119
Operating results before depreciation (EBITDA)	100	96	64	73	88	84
Depreciation Norway	100	114	104	92	92	100
Depreciation Sweden	100	170	143	146	176	147
Depreciations other units	100	393	563	707	705	493
Operating results (EBT)	100	94	61	71	86	82
Tax on core operations	100	94	61	71	86	82
NOPAT	100	94	61	71	86	82

	2007	2008	2009	2010	2011	Average
Assets						
Projects construction in progress	100	128	171	169	290	172
Inventories	100	61	53	71	60	69
Land	100	114	102	108	136	112
Trade receivables	100	73	18	20	16	45
Other receivables	100	61	54	76	74	73
Operating current assets	100	102	88	91	125	101
Trade payables	100	71	45	62	82	72
Income tax payable	100	128	76	93	103	100
Public duties and dues payable	100	89	86	264	134	135
Derivatives						
Current land-related liabilities	100	55	69	73	90	77
Prepayments from customers	100	140	233	32	407	182
Other current liabilities	100	58	62	87	80	77
Operating current liabilities	100	73	72	80	109	87

Operating working capital	100	141	109	108	149	121
Land buildings and other real estate	100	139	132	161	148	136
Machinery	100	106	80	84	80	90
Fixtures/fittings and equipment	100	102	83	97	127	102
Sum fixed assets	100	111	89	98	95	99
Investments in associated companies	100	104	8	10	8	46
Loans to associated companies	100	100	114	148	110	114
Other receivables	100	83	9 571	10 863	135	4150
Sum financial assets	100	104	45	54	15	64
Pension obligations	100	114	130	53	48	89
Warranty provisions	100	81	89	96	112	96
Non-current liabilities	100	89	99	86	97	94
Invested capital excluding goodwill	100	140	103	104	137	117
Trademarks	100	105	97	102	102	101
Goodwill	100	94	88	92	92	93
Other intangible assets	100	87	73	63	48	74
Invested capital including goodwill	100	107	93	96	105	100

Invested capital	2007	2008	2009	2010	2011
Equity	100	90	97	110	114
Deferred tax liability	100	89	65	77	76
Non-current interest bearing debt	100	97	83	77	69
Current interest bearing debt	100	235	134	126	237
Total interest bearing debt	100	125	94	87	104
Bank deposits and cash	100	74	124	133	201
Net interest bearing debt	100	128	92	85	99
Invested capital	100	107	93	96	105

ROE analysis					
	2007	2008	2009	2010	2011
ROIC (after tax)	7.50%	6.53%	4.94%	5.55%	6.13%
ROIC (before tax)	10.42%	9.07%	6.86%	7.71%	8.51%
EBIT Margin (before tax)	14.39%	10.91%	8.40%	8.84%	9.76%
Turnover rate	72.43%	83.13%	81.73%	87.16%	87.21%
Financial Gearing					
FGEAR	95.25%	134.60%	90.49%	73.05%	82.40%
Spread	4.53%	2.84%	-0.13%	1.46%	2.42%
Borrowing rate	-4.37%	-6.45%	-6.77%	-5.39%	-4.83%
Net borrowing rate					
Net financial costs	-66008.0	-104930.0	-103994.0	-76904.0	-81291.0

	0	0	0	0	0
	17822.1			20764.0	21948.5
Tax	6	28331.10	28078.38	8	7
	-			-	-
	48185.8	-	-	56139.9	59342.4
Net financial costs (after tax)	4	76598.90	75915.62	2	3
Net borrowing rate	2.97%	3.69%	5.07%	4.09%	3.70%
ROE					
ROE (excluding transitory items)	11.82%	10.35%	4.82%	6.61%	8.12%
ROE (including transitory items)	11.81%	-5.34%	4.24%	9.48%	8.19%

Appendix 16 - WACC

Debt	38.00%
Equity	62.00%
Tax	28.00%
Market risk premium	7.00%
Risk-free interest rate	3.50%
Return - equity	7.42%
Return - debt	9.54%
Beta	1.12
WACC	7.21%

Nibor	2,27%
Addition	6%
Return debt	8,27%

Asset backed debt	66.00%	5.46%
Non asset backed debt	34.00%	4%
Weighted return debt	100.00%	9.54%

Appendix 17 – BWG House models and projects

Block Watne apartments in Sandnes, Norway



Block Watne project in Manstad, Norway



House model ALM, by Block Watne



House model Furubakken by Block Watne



House model Lund by Block Watne



House model Arholma by Myresjøhus



House model Seljegård by Hetlandhus



House model Almhult by Smålandsvillan

