Valuation of Byggmax Group AB

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Andreas Ekenberg
Supervisor: Edward Vali
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EXECUTIVE SUMMARY

The purpose and main objective of this report was to estimate the intrinsic value per share of the Swedish DIY retailer Byggmax as of April 16, 2015 by using renowned models, market practice and applicable public information.

Company valuation has become more complex in recent years due to political instability in multiples regions, uncertain economic prospects and unpleasantly low inflation together with low to negative interest rates. Although these factors add complexity to the valuation process, it creates an opportunity for new insights and reflections.

The valuation was carried out by a structured approach, covering aspects from larger macroeconomic drivers to firm specific factors. The valuation process was initiated by an introduction of the DIY industry and key players in Sweden, Norway and Finland followed by a brief presentation of Byggmax. Afterwards, a strategic analysis was performed, addressing the macroeconomic environment, industry characteristics and company specific attributes using theoretically accepted frameworks such as PEST, Porter's five forces and value chain analysis. The most important findings reviled a very competitive industry comprising of undifferentiated goods with a plethora of competing retailers, reducing industry wide profitability. However, the company specific analysis showed that Byggmax has a very efficient organisation and a unique position in the market, with its primary activities revolving around growing and improving the network of stores.

The strategic analysis was followed by a financial analysis, scrutinizing Byggmax's financial performance in relation to one of its main competitors, Hornbach. The analysis focused on profitability, sales growth and liquidity and concluded that Byggmax is a very profitable company without a significant liquidity risk.

The main findings from the strategic and financial analysis were summarized in a SWOT analysis, showing that Byggmax has a very successful discount strategy, enabling high profitability. The main concerns were found to be related to industry characteristics, creating a downward trend in profitability.

The findings were collectively used to forecast future cash flows as a basis for a DCF valuation, resulting in an intrinsic value per share of SEK 53, corresponding to a 10 per cent discount to the observed share price of SEK 59.5. The estimated cost of capital was estimated to be 7.23 per cent, with a cost of equity of 8.88 per cent and a cost of debt/COL of 3.58 per cent.

CONTENTS

1. INTRODUCTION

1.1 PROBLEM DISCUSSION

The current market environment is unseen and particularly interesting from a financial perspective, with stock valuations at, or close to, all-time highs in combination with a low to negative interest rate environment. Furthermore, the macro environment continues to face numerous challenges with low inflation, slow GDP growth and geopolitical issues. All these factors bring additional complexity to valuation, making it a particularly interesting exercise at this very moment.

Nevertheless, despite the slow economic recovery, some firms are able to show impressive organic growth in an environment where organic growth is hard to come by and highly valued (Bloomberg 2015). From that point of view, it is particularly interesting to value a fast growing company and see if the expected cash flows are enough to support current valuation. In addition, smaller and less analysed firms offer an excellent opportunity to add insights to both an industry and a company that get little attention in media and by analysts in general.

Byggmax, a Swedish discount do-it-yourself retailer fulfils all criteria and has displayed impressive growth since its inceptions in 1993, expanding from one store to a store network of 112 stores in Sweden, Norway and Finland. Despite the very ambitious expansion, showing a compounded annual growth rate of 9.1 per cent between 2008 and 2014, operating margins have been high in a very competitive industry (Byggmax 2015).

The ability to maintain profitability while expanding is impressive but it is even more so in an industry comprised of undifferentiated goods characterized by price pressure. The performance is even more compelling when considering that K-rauta, one of its main competitors has lost almost SEK 1bn since 2007 and two other competitors have been forced to close down (Dagens Industri 2015).

Considering that, Byggmax makes an excellent valuation case and a thorough analysis of the industry and the company's competitive advantages will reveal if the historical performance is likely to sustain in the future. But more importantly, is the market able to value Byggmax correctly or are expectations set too high?

The aim of this thesis is to arrive at a valuation estimate and then elaborate on any discrepancies with the observed market value and its probable causes. The selected topic is highly aligned with the author's interests and will add valuable personal insights and knowledge in this particular field in finance.

1.2 RESEARCH QUESTION

The combination of a rapidly expanding company, sustained profitability and an industry comprised of undifferentiated goods make Byggmax a stimulating company to analyse and value. To evaluate the observed market valuation of Byggmax, relevant valuation theories and market practices will be used to answer the scope of this thesis:

"What is the intrinsic value per share of Byggmax as of April 16, 2015?"

To fully evaluate Byggmax and arrive at a valuation estimate, the main research question is dissected into sub-questions, which will serve as an outline for this thesis and subsequently answered in their context in relevant sections:

- Which are the industry's main characteristics and drivers?
- How influential is the macroeconomic environment on operations?
- Are key trends present and important for the industry's future performance?
- How does Byggmax sets itself apart from main competitors?
- How has the financial performance been and which drivers are prominent?
- How is the financial performance expected to be in the future?
- What is the appropriate cost of capital?
- Which variables are most influential on the valuation?
- How will more optimistic or more pessimistic assumptions change the valuation?
- How does the intrinsic valuation compare to traded comparable companies?

1.3 DELIMITATIONS

To maintain the scope of this thesis and only scrutinize the most relevant and driving factors of the company's value, several delimitations are set. Moreover, delimitations are set to only account for information available before and on April 16, 2015, meaning that the valuation and its underlying assumptions are valid as of that date. This report is based solely on public information and accessible data sources that are available to the ordinary investor, i.e. annual and year-end reports, financial databases and market research. Since valuation requires judgment in all steps through the process and can be performed in numerous ways, the valuation is performed using theoretically accepted approaches and the most applied among industry professionals. Furthermore, the report will emphasise on applying valuation theories rather than elaborating and discussing their accuracy. Nevertheless, it is important to stress that the author realizes the possible shortcomings and limitations of the applied models and theories but as they are widely accepted and applied, they are considered adequate to yield an analytical sound answer to the research question.

1.4 SCIENTIFIC VIEW

The applied scientific view in this paper is selected by the nature of the research question and the type of sources used, i.e. secondary. The selection of scientific view is important since it displays how the world is viewed, which translates to how assumptions are made and how the research process is conducted. Thus, social constructionism is believed to be most adequate.

Pragmatism means that the selection of which scientific view to apply is secondary to the research question, namely that the nature of the research question should decide on which view to apply. However, pragmatism is not a rigid view and allows for alterations in the view if deemed appropriate. This suggests that the research itself is of more importance than the selected view and could be conducted in whatever way perceived to be most appropriate (Saunders et al. 2009).

Even though pragmatism is appealing due its flexibility it is believed that a more specific distinction is preferable, but the scientific view is selected to best suit the research question, in accordance with pragmatism. Ontology refers to the perceptions on how the world functions and can be separated into objectivism and subjectivism. Objectivism means that social entities exist but social actors within them do not influence them and similar organizations would naturally behave similarly. In contrary, subjectivism holds the view that organisations are a product of social actors' actions and beliefs and is constantly in flux, commonly referred to as social constructionism (Saunders et al. 2009).

Social constructionism is believed to be most suitable due to the exclusive use of secondary sources, applications of models and frameworks that to some extent are affected by subjective preferences or decisions in this paper. By recognizing that there is no objective truth, the used data and models are critically assessed. In similarity, the valuation is also based on assumptions and preferences and should consequently be viewed as subjective.

2. STRUCTURE

The report is outlined in ten parts and aims to provide a logical linkage between the introduction in the first part and the conclusion in the last one. Figure 2.1 illustrates the structure of the report.

FIGURE 2.1 REPORT STRUCTURE
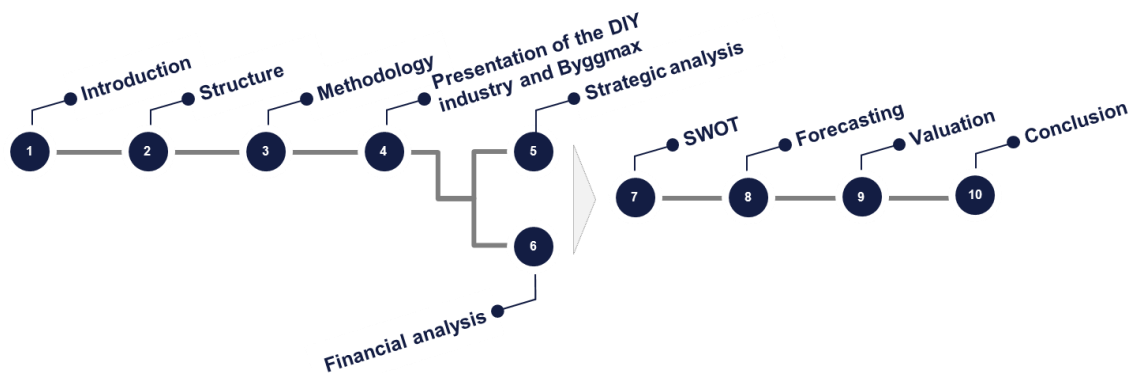
Source: Author's illustration

2.1 PRESENTATION OF THE DIY INDUSTRY AND BYGGMAX

This part will provide an overview of the do-it yourself (DIY) industry, i.e. its composition and key drivers. It aims to introduce the market in such a way that the subsequent introduction of Byggmax and its main competitors is easily digestible and comprehensible. The introduction of Byggmax aims to provide a brief description of the company's history, strategy, geographical footprint and stock price development. It is fundamental to understand the company's business concept in order to evaluate and follow the line of reasoning in the subsequent parts. In addition, the main competitors will be briefly described.

2.2 STRATEGIC ANALYSIS

The objective in this part is to examine the markets in which the company operates and the external factors affecting them, and what kind of strategic challenges it brings. The analysis will be based on PEST, Porter's five forces followed by a value chain analysis where the company's primary and secondary activities are examined. Findings in this part will be instrumental in explaining the historical financial performance and forecasting future cash flows.

2.3 FINANCIAL ANALYSIS

This part examines the historical financial performance of the company by reformulating the financial statements to separate the company's operating and financial activities in order to

see the underlying operating profitability and drivers. In addition, the financial performance is compared to Hornbach, one of Byggmax's competitors.

2.4 SWOT

The findings from the strategic and financial analysis will be summarized and concretized into key strengths, weaknesses, opportunities and threats (SWOT) to create a clear transition into the forecasting section.

2.5 FORECASTING

The next part of the analysis combines findings from previous sections in order to forecast future profitability based on past performance and expected development going forward. The forecasting period is divided into two parts, one explicit period of ten years ending in 2024, and the subsequent period being the implicit period aiming to capture all future cash flows after 2024.

2.6 VALUATION

The valuation will rely on discounted cash flow (DCF) valuation to find the intrinsic value per share of Byggmax as of April 16, 2015. Moreover, the DCF valuation will be accompanied by an economic value added (EVA) valuation and a multiples analysis to provide additional data points to support the intrinsic valuation. Lastly, the valuation's sensitivity to changes in key variables is analysed by sensitivity analysis and scenario analysis, examining two scenarios that rely on fundamentally different assumptions on future performance.

2.7 CONCLUSION

As a final step, the findings in the report will be summarized and concluded together with personal reflections regarding the results and explanations to any discrepancies between the estimated share price and the observed share price.

3. METHODOLOGY

The report will take the standpoint from an investor's perspective and thus only use publicly available information such as financial reports, prospectuses, financial data banks, online resources and market research, i.e. only secondary sources.

The main purpose of the report is to arrive at a valuation estimate of Byggmax and the iterative process to that estimate will to a large extent be based on Koller, Goedhart and Wessels' (2010) "*Valuation: Measuring and managing the value of companies*" and Petersen and Plenborg's (2012) "*Financial Statement Analysis: Valuation, Credit analysis, Executive compensation*". Specifically the work by Koller et al (2010) is highly regarded in both the world of academia and amongst industry professionals, rendering an in-depth analysis of the presented theories both redundant and outside the scope of this report.

The strategic analysis will start by an analysis of the external factors by applying the PEST framework, analysing the political, economic, social and technological factors. The industry characteristics will be analysed following Porter's five forces to identify the most influential forces. Lastly, the strategic analysis will be concluded by an analysis on company level by applying a value chain analysis in order to fully understand the company's operations and its competitive advantages. The strategic analysis and the applied frameworks have mostly been based on Grant's (2010) *"Contemporary Strategic Analysis"* but complemented by additional sources where deemed appropriate. Moreover, Byggmax will be benchmarked against its main competitors throughout the strategic analysis in order to understand the relative differences between the companies.

4. THE DIY INDUSTRY IN EUROPE

The industry is mostly referred to as do-it-yourself, DIY or home improvement depending on origin. The DIY market can be divided into the following segments: decorative materials, electrical hardware, hardware, non-decorative materials and tools. Decorative materials include products such as paint, wallpaper and woodcare. Electrical hardware covers lights, sockets, electronic wiring, switches etc. Hardware includes e.g. nuts and bolts, screws, mountings and locks. Non-decorative refers to lumber, bricks, cement, doors, windows and other building supplies and tools covers both manual and power tools. The DIY market is characterized with numerous retailers, ranging from small, local and independent stores to large international chains that operate mega stores (Marketline 2013).

Figure 4.1 displays the historical and estimated market value of the European DIY market, which was valued at EUR 159m in 2013. The growth between 2009 and 2013 was relatively modest with a compounded annual growth rate (CAGR) of 2.4 per cent. The future is believed to be more promising with an estimated CAGR of 4.0 per cent between 2014e and 2018e, taking the estimated market value to a total of EUR 194m in 2018e.

FIGURE 4.1 EUROPEAN DIY MARKET
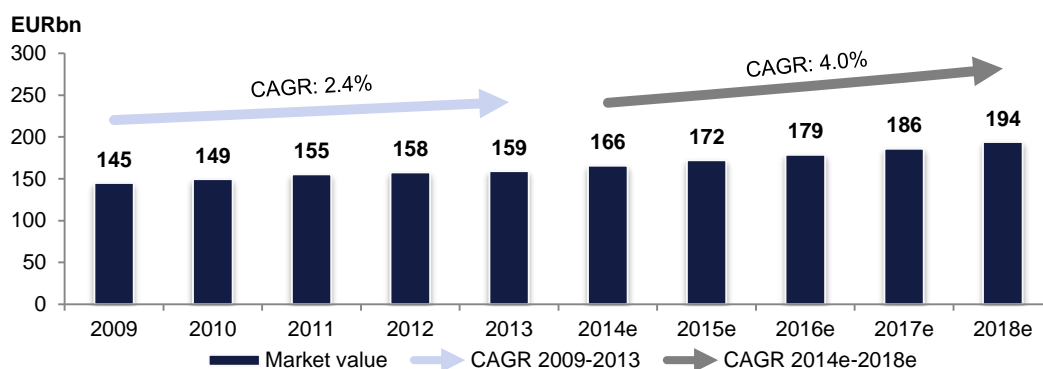
Source: Author's illustration based on data from Marketline (2013)

Figure 4.2 displays three segmentations of the DIY market and corresponding shares. The largest segment in the DIY market based on figures for 2013 was non-decorative materials, i.e. lumber, nuts and bolts etc. The non-decorative segment constituted 38 per cent of the market, followed by decorative materials, hardware, electrical hardware and tools with 28 per cent, 13 per cent, 13 per cent and 8 per cent respectively.

The geographical distribution portrays that Germany is by far the largest market with 28 per cent of total market value. The second largest market is France with 15 per cent of the market, followed by Italy, Spain and the UK, together representing 20 per cent of the market. The remainder of 38 per cent is the rest of Europe's aggregated sales.

FIGURE 4.2 SEGMENTATION
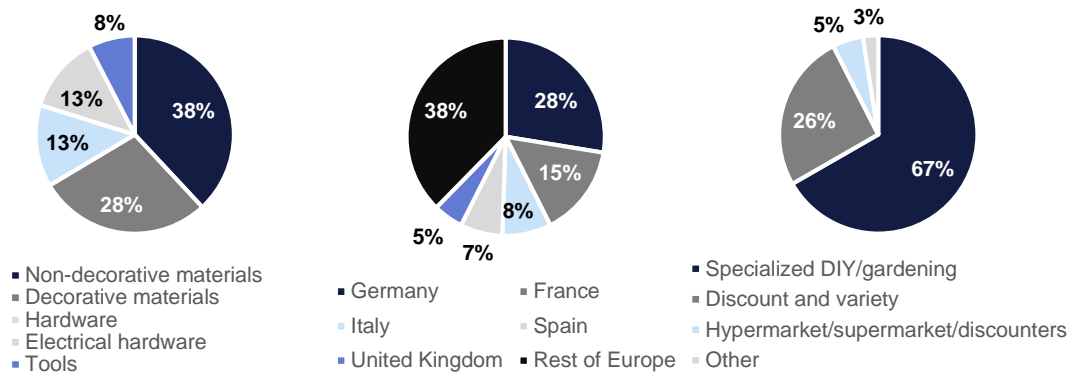
Source: Author's illustration based on data by Marketline (2013)

Sales counting towards the total DIY market value are conducted from a number of different outlets, where some retailers are fully focused on DIY whereas others sell DIY products as complements to its core business. As can be seen in figure 4.2, specialized DIY/gardening retailers are the most common type of retailer, representing approximately two thirds of the total market value. The second largest type of vendor is discount and variety retailers.

4.1 THE NORDIC DIY MARKET

Based on data compiled by Mintel International Group, Byggmax states that the DIY markets in Sweden, Norway and Finland have grown more than other European markets since 2009, and collectively represent approximately 5 per cent of the entire European market. On a per capita basis, Norway has the highest sales figures in the DIY market (Byggmax 2015).

Byggmax also highlights the attractiveness of the Swedish and Finnish markets in terms of sales per capita, which are among the highest in Europe according to data by Mintel International Group (Byggmax 2010b).

4.2 VALUE DRIVERS

Byggmax has identified key drivers and trends in the Swedish, Norwegian and Finnish DIY markets and considers ownership and turnover rate on the property market, the DIY tradition and macroeconomic variables as most important (Byggmax 2010b).

4.2.1 OWNERSHIP AND TURNOVER RATE ON THE PROPERTY MARKET

Owning as opposed to renting your home is an important parameter in determining the demand for carrying out DIY projects. Historically, the level of ownership has been high in

Sweden and Norway compared to other European countries, whereas renting is more common in Finland, albeit owning is increasing. Moreover, DIY demand is positively affected by increasing housing prices and high turnover rates (Byggmax 2010b).

4.2.2 DIY TRADITION

The DIY tradition is an important driver in demand and the DIY culture is considered to be strong in Sweden, Norway and Finland. An increasing number of television shows and magazines relating to home decorating and remodelling has been one important aspect in developing the strong DIY culture. Furthermore, hiring labour has been relatively expensive in the Nordics and has thus added incentives for DIY (Byggmax 2010b).

4.2.3 MACROECONOMIC VARIABLES

The third important influence in the demand for DIY products is the general economic climate and consumer sentiment, where GDP growth and disposable income is particularly important. A healthy development of the economy in general and disposable income in particular is important largely due to the fact that DIY projects are financed by debit rather than credit (Byggmax 2010b).

4.3 KEY COMPETITORS

DIY retailers range from small to large and from independent to international retailers. Some have operations in very specific markets whereas the larger retailers are present in numerous markets. Byggmax's concentration to Sweden, Norway and Finland exposes them to several competitors, where some are present in each of those markets. The key competitors are selected based on geographical presence, operational similarities and availability of information, and will be used for comparative purposes throughout this report where applicable. The following four competitors are deemed to be the most suitable competitors:

TABLE 4.1 KEY COMPETITORS

Company	#Stores in Sweden	#Stores in Norway	#Stores in Finland
Byggmax	83	17	12
Bauhaus	17	3	5
Beijer	76	0	0
Hornbach	5	0	0
K-rauta (*Inc. the Byggmakker brand)	20	82*	42

Source: Author's illustration based on data from Bauhaus (2015), Byggmax (2015), Beijer (2015), Hornbach (2014) and by Kesko (2015)

4.4 BYGGMAX OVERVIEW

Byggmax is a Sweden based company offering quality building materials and other supplies in the DIY segment at low prices through its chain of 112 stores in Sweden (72), Norway (27), Finland (13) and its online store. Byggmax has a selected product range of approximately 2,000 items such as lumber, doors, windows, tools and gardening products. However, the product range covers most of the items needed for building a house. In the end of 2014, Byggmax had a market capitalization of approximately SEK 3.2bn and its major shareholders included Swedish institutional investors and Norges Bank Investment Management (Byggmax 2015).

TABLE 4.2 – HISTORICAL DEVELOPMENT

YEAR	EVENT
1993	Byggmax, albeit under a different name, was established and the first store opened with the same idea as today, to offer building materials of high quality and other supplies at very competitive prices.
1999	The names for all existing stores are changed to Byggmax to offer a more cohesive image towards customers.
2000	A central customer service centre opens to answer customer inquiries all days during the week.
2006	The Swedish Private Equity firm Altor takes a controlling stake in the company and starts to execute its strategy to continue the expansion in Sweden and later on, abroad.
2007	The international expansion is initiated with the first international store opening in Hamar, Norway, followed by an additional four stores throughout Norway. During the same year the Byggmax card is introduced, with 60 days of credit.
2008	Just one year after the first store opening in Norway, the first store is inaugurated in Turku, Finland. An additional six stores are opened in Sweden and five in Norway during the year.
2009	Byggmax ventures online and opens its online store, which offers the same inventory as the physical stores with home delivery. At this point in time, home delivery for bulky construction material is considered to be very rare.
2010	Byggmax becomes a quoted company after a successful IPO and starts trading at SEK 46 on Nasdaq Stockholm.
2011	The online store is expanded to offer an extra 3,600 items that were previously only available by order.
2013	The new store concept Byggmax 2.0 and professional tradesmen services at a fixed rate are introduced.
2014	Seven stores are opened during the year and at the year-end Byggmax had 112 stores with sales of approximately SEK 3.5bn.

Source: Author's illustration based on data from Byggmax (2015) and Byggmax (2010a)

4.4.1 VISION AND GOALS

Byggmax has a simple vision, specifically to be the world's best DIY retailer and similarly only has two explicitly communicates goals (Byggmax 2015).

- – Display an organic growth rate of at least 15 per cent on top line by opening additional stores and increase sales in already existing ones.
- – Achieve an EBIT margin (to net sales) of at least 11 per cent.

4.4.2 STRATEGY

Byggmax has three defined strategies in order to achieve the highly set targets of a yearly organic growth of at least 15 per cent and an EBIT margin exceeding 11 per cent: 1) store network expansion, 2) operational excellence and 3) business development (Byggmax 2015).

4.4.2.1 Store network expansion

Byggmax sees viability for and targets 95 stores in Sweden, 60 stores in Norway and 25 stores in Finland, totalling 180 stores (112 stores as of December 31, 2014) in current geographical markets. Byggmax also contemplates if they are to venture into new markets but a decision is yet to be taken. An additional 7 to 13 new stores are planned to open during 2015 (Byggmax 2015).

4.4.2.2 OPERATIONAL EXCELLENCE

Byggmax continuously strives to streamline operations and become more efficient in every part of the value chain, including utilizing economies of scale that the business model relies upon and lowering costs. Margins are also improved by developing new store concepts and improving selling channels while newly opened stores become fully profitable two to three years after opening (Byggmax 2015).

4.4.2.3 BUSINESS DEVELOPMENT

Business development aims to improve systems and processes such as IT, procurement, selling channels as well as modifying the product range, mainly to account for seasonal differences in demand. One of the most influential initiatives was the introduction of the online store, which is continuously being enhanced with new features (Byggmax 2015).

4.4.3 SHARE PRICE DEVELOPMENT

Byggmax became a quoted company after a successful IPO in 2010 and has since then traded in the range of SEK 28 to SEK 64. Figure 4.3 also illustrates that Byggmax has been outperformed by the OMXS30 since its listing.

FIGURE 4.3 SHARE PRICE DEVELOPMENT
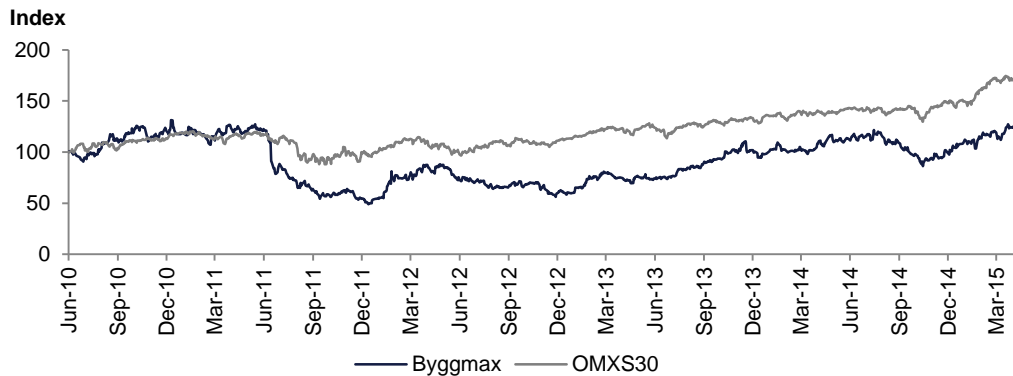
Source: Author's illustration based on data from Nasdaq (Nasdaq 2015a; Nasdaq 2015c)

− June 2011, the Q2 report is significantly below market sentiment with higher costs than anticipated in relation to new store openings and weaker demand for building supplies. In addition, new stores were opened later in the year than anticipated and the online store experienced technical difficulties. The share traded down significantly on the report (Dow Jones 2011).

− January 2012, the Q4 report is welcomed by the market and the share rises on the news. Sales, EBIT and net income figures were better than expected and an increase in dividends to SEK 1.80 from SEK 1.50 per share is proposed (Dow Jones 2012).

− October 2013, Byggmax introduces professional building services at a fixed rate and the first evaluation of Byggmax 2.0 shows great promise, with both higher sales and improved margins compared to similar sized stores (Byggmax 2013b; Byggmax 2013c).

− November 2013, the main owner Altor and Fredrik Cappelen, the Chairman of the Board, together sold shares corresponding to 16.5 per cent of Byggmax's shares outstanding. After the transaction, Altor's stake corresponds to 19.6 per cent of the capital and votes (Dow Jones 2013).

− April 2014, Altor sells its remaining stake of 19.6 per cent through an accelerated bookbuilding (Dow Jones 2014).

− October 2014, the Q3 report is mainly positive with high sales growth, promising results from the converted stores to Byggmax 2.0 and increased sales online (Nyhetsbyrån Direkt 2014).

5. STRATEGIC ANALYSIS

According to Grant (2010), the basis of a successful strategy is how well a firm can utilize its structural capital and resources in an efficient way to reach long term targets in the industry in which they operate, including industry structure and competitive landscape.

The strategic analysis will cover the most influential forces on Byggmax's operations in order to understand its past, current and future market standing. A thorough strategic analysis will give explanatory power to the financial analysis and help to identify any competitive advantages and industry characteristics, which will give guidance for future growth and profitability.

First, this report will analyse the macroeconomic environment by addressing political, economic, social and technological factors (PEST). Second, Porter's framework addressing the five forces affecting the industry will be applied. Third, Byggmax will be analysed by the means of a value chain analysis and conclude the strategic analysis.

The findings from the strategic and financial analysis will then serve as inputs in a summarizing SWOT analysis to create a logical transition into the forecasting section.

FIGURE 5.1 STRATEGIC ANALYSIS STRUCTURE

Source: Author's illustration

5.1 MACROECONOMIC ENVIRONMENT – PEST

The PEST model is a renowned model and powerful tool when analysing the macroeconomic environment and its impacts. Macroeconomic factors can have significant impact on whole industries and ultimately a particular company; hence it is crucial to fully evaluate current forces to properly estimate a firm's future risks and prospects. The first factor to investigate is the political environment, including laws and legislation, taxation levels, political stability and other policies. The second parameter to analyse is the economic environment and its outlook, such as business sentiments, GDP development, level of inflation and interest rates, unemployment rate and disposable income. The third factors is the social environment, or sociocultural, which includes underlying trends in tastes and preferences, demographics and distribution of income. The last aspect to consider is technology and its implications, e.g. technological shifts, innovations and opportunities (Petersen & Plenborg 2012).

5.1.1 POLITICAL

Byggmax is currently present in only three countries and thereby mostly affected by the political environment in those countries. However, emphasis will be put on Sweden since the majority of its operations are located there. The political risk Byggmax faces is estimated to be relatively small since its operations are neither complicated nor controversial.

The main political uncertainty that has an impact on the demand for building materials in Sweden is the so-called ROT deduction (Sw. ROT-avdrag), which makes it possible for individuals to make tax-deductions of up to SEK 50,000 for the labour cost associated with maintenance, remodelling or any extension either in, or in relation to, your home or holiday home. The deduction corresponds to 50 per cent of the labour cost. It is worth noting that this does not include the cost related to building materials (Skatteverket 2015).

The ROT deduction has been increasingly used among the population since its current form was introduced in 2008. In 2012, almost 960,000 people made ROT deductions, up from 640,000 in 2009 (Swedish Parliament 2014). Reducing this possibility to deduct labour costs will increase renovation and remodelling costs for households and most likely decrease demand for related services and supplies.

The deduction has been a politically loaded topic and was unlikely to change after the Swedish election in 2014. However, in opposite to the previously communicated stance in the question, the Social Democrats proposed a decrease to a deduction rate of only 30 per cent, instead of the current 50 per cent (Social Democrats 2015).

The proposed change will definitely affect the demand for building services and supplies negatively. However, Byggmax has most of its sales stemming from consumers, which should limit the effects somewhat. One could also argue that if labour costs are to increase, the demand for cheaper building supplies could increase. Nevertheless, the most logical conclusion is that the demand would suffer, albeit to a lesser extent.

Another politically loaded issue is the taxation for companies, which has been subject to reductions since the change in government in 2008. The marginal tax rate for Swedish companies is currently 22 per cent, which is slightly below the average of the European Union (Konjukturinstitutet 2013). A reversal of the marginal tax rate is possible but unlikely due to the adverse effects it will cause. However, other adjustments to the current taxation policy are under investigation. For instance, the Swedish Committee on Corporate Taxation (2014) proposed that only financial costs equalling financial income may be deducted as opposed the current scheme where there is no upper limit. In addition, a standard deduction of 25 per cent of the taxable profit will be instated, effectively reducing the tax rate from 22 per cent

to 16.5 per cent. This suggestion aims to prevent moving profits by using high interest rates and to equate debt with equity. The implications of such a change is impossible to predict before a more detailed proposal is presented. Nonetheless, it is an uncertainty worth considering and would affect both capital structure and profitability measures if instated.

5.1.2 ECONOMIC

The economic environment is instrumental when addressing the impact on current and future sales levels and thus cares for particular consideration. This part will focus on the economic factors in Sweden, Norway and Finland that have the most impact on Byggmax's operations such as GDP development, disposable income, the housing market and price levels of raw materials.

5.1.2.1 GDP

Gross domestic product (GDP) is used as a measure for the size and health of an economy and this part will consider real GDP growth rates, which are adjusted for inflation. A healthy and growing economy will affect the willingness and ability amongst the population to undertake any remodelling, extension or other DIY projects, thereby affecting Byggmax's sales. The real GDP growth rates in table 5.1 are displaying an optimistic view up until 2019e, returning to more normal levels of growth, compared to relatively low levels of growth in 2013 and 2014e. Sweden is expected to grow by approximately 2.6 per cent on an annual basis between 2015e and 2019e, which is about 0.6 percentage points more than Norway during the same period. Finland however is expected to only grow at an average rate of 1.6 per cent between 2015e and 2019e, which is significantly lower than Sweden and Norway, albeit from much lower levels in 2013 and 2014e.

TABLE 5.1 – REAL GDP GROWTH RATES

	2013	2014e	2015e	2016e	2017e	2018e	2019e	Avg '15e-'19e
Sweden	1.6%	2.1%	2.7%	2.7%	2.6%	2.5%	2.4%	2.6%
Norway	0.6%	1.8%	1.9%	2.0%	2.1%	2.1%	2.1%	2.0%
Finland	-1.2%	-0.2%	0.9%	1.6%	1.7%	1.8%	1.8%	1.6%

Source: Author's illustration based on data from International Monetary Fund (2014)

The Swedish market is the most important one for Byggmax and a continued strong economic activity will be crucial for future growth. Conversely, the relatively weak economic activity in Norway and Finland has been affecting the group's profitability negatively. According to Byggmax (2015), both the Norwegian and Finnish market performed below expectations and contributed to lower than anticipated margins. If the low economic activity in especially Finland is to continue it is possible that the planned expansion might be revised.

5.1.2.2 DISPOSABLE INCOME

Disposable income is related to GDP since it measures the economic activity and development, but it better portrays how households are affected from year to year and their spending power, i.e. how much capital households are able to spend. In its essence, the indicator shows the maximum amount that can be spent on the consumption of goods and services, without lending or using financial and non-financial assets (OECD 2013).

TABLE 5.2 – NET NATIONAL DISPOSABLE INCOME

	2010	2011	2012	2013
Sweden, SEKm	2,967,846	3,100,001	3,117,888	3,211,942
Growth, YoY		*4.5%*	*0.6%*	*3.0%*
Norway, NOKm	2,180,225	2,365,749	2,534,688	2,590,252
Growth, YoY		*8.5%*	*7.1%*	*2.2%*
Finland, EURm	152,084	159,081	160,643	161,195
Growth, YoY		*4.6%*	*1.0%*	*0.3%*

Source: Author's creation based on data from OECD (2015a)

The figures in table 5.2 display the level of net disposable income in local currency for each country and the yearly growth rate. Interestingly, Sweden is closely followed by Norway in absolute terms of disposable income even though Sweden is a larger economy, indicating that Norway is an attractive country for retailers. Furthermore, all countries have experienced growth in disposable income, although Finland is lagging behind, in accordance with the lower GDP growth. These figures further anchors the poor performance Byggmax has seen in Finland and casts further doubt about the country's attractiveness for Byggmax. Conversely, Norway appears to be a more suitable market in terms of purchasing power.

5.1.2.3 HOUSING PRICES

The demand for Byggmax's products has historically been positively affected by a healthy housing market and an increasing number of property transactions. In addition, low interest rates have further driven the willingness and capabilities among consumers to carry out general maintenance and DIY projects of various sizes (Byggmax 2010b).

From the baseline index of 100 in 2010, it is evident from figure 5.2 that the Norwegian property market has seen the greatest increase in prices since 2010. Both Sweden and Finland experienced little change in prices from 2010 to the third quarter in 2011 were prices started to decline before they bottomed out in the second quarter in 2012. Since then, Sweden has experienced a steady increase in housing prices whereas Finland had seen a reversion. Even

though it is impossible to derive the exact benefits the positive housing market brings it is safe to assume that a continued sound price development is beneficial for Byggmax.

FIGURE 5.2 HOUSING PRICES DEVELOPMENT

Index, 2010=100
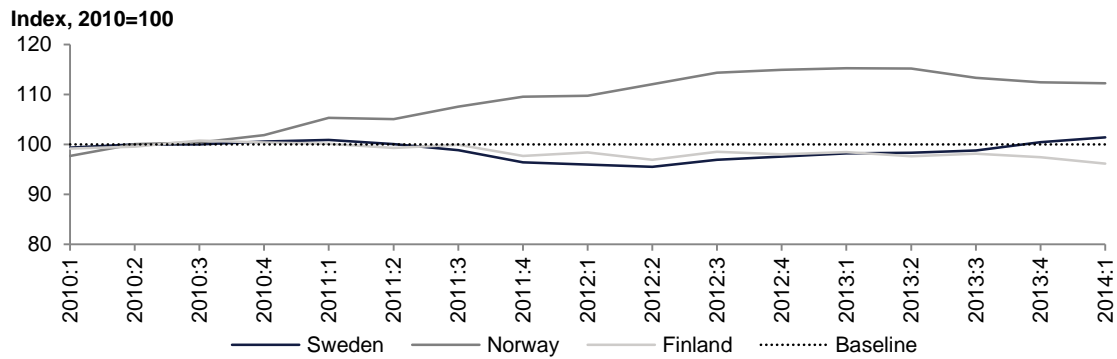
Source: Author's illustration based on data from OECD (2015b)

5.1.2.4 RAW MATERIALS

The prices of raw materials also pose as an external factor affecting Byggmax's operations, and specifically the price of lumber since it is the largest product group. However, the price level is also important since Byggmax always strive to have lower prices than its competitors, which means that increased purchase prices cannot always be pushed over to the end-customer in full without losing the competitive advantage. Nevertheless, a general increase in the input prices should affect all retailers and limit the exposure for Byggmax.

5.1.3 SOCIAL FACTORS

The third factor to evaluate in the PEST analysis is the social one, such as variations in demographics and underlying demand for the products and services (Petersen and Plenborg 2012).

Byggmax has identified the underlying trend for DIY in Sweden, Norway and Finland as an important parameter for future demand for its products and services. DIY has historically been popular in all three countries, especially since the mid 1990's when an increasing number of media outlets for DIY, home decorating and interior design emerged. Furthermore, hiring professional labour has been relatively expensive, thus increasing the incentive to do the projects without hiring help (Byggmax 2010b).

The social factor is one of the most important factors for Byggmax's success and highlights the attractiveness of the Nordic market. The well-rooted DIY mentality in the Nordics could

work in favour for Byggmax in times with slow economic growth when budgets for renovations shrink and price become a more important parameter. Thus, the demand for Byggmax's products should continue to be strong going forward.

5.1.4 TECHNOLOGICAL FACTORS

The last factor to consider is technology and its effects. Since Byggmax's business model involves relatively basic goods, the technological aspect is not fundamental from a product perspective. However, it is more important from an operational view including multichannel sales and effective inventory management.

First, Byggmax was a pioneer when introducing its online store and offering home deliveries of building materials, which was unseen in the Swedish DIY market. Thus, it is important for Byggmax to continue its development of its online offering, both to reach a broader customer base but also to facilitate sales in the physical stores. An example of this is the introduction of retailing building services, which are easily ordered through the online store and greatly simplifies the hiring process of professional tradesmen for customers. The simplicity in buying materials bundled with the labour at fixed costs greatly simplifies for customers and is a strong competitive advantage. However, Bauhaus is offering a similar service but the phenomenon has not yet reached all competitors.

Second, efficient IT-systems are important due to the high level of automation in procurement and keeping inventory levels satisfactory and efficient. This is particularly important due to the high volumes and quick turnover rates, which is the essence in offering very competitive prices.

5.2 INDUSTRY ANALYSIS – PORTER'S FIVE FORCES

This part of the report will analyse the DIY industry using Porter's five forces. By using the five forces as a framework for the analysis, it is possible to examine the competitiveness of the industry and ultimately its attractiveness and ability to generate returns in the long run (Grant 2010).

FIGURE 5.3 PORTER'S FIVE FORCES

```
                    ┌─────────────────────┐
                    │  Potential entrants  │
                    └─────────────────────┘
                              ▲
┌──────────────────┐     ┌─────────────────┐     ┌──────────────────┐
│ Power of suppliers│ ◄──│ Industry rivalry │──► │  Power of buyers  │
└──────────────────┘     └─────────────────┘     └──────────────────┘
                              ▼
                    ┌─────────────────────┐
                    │      Potential       │
                    │     substitutes      │
                    └─────────────────────┘
```
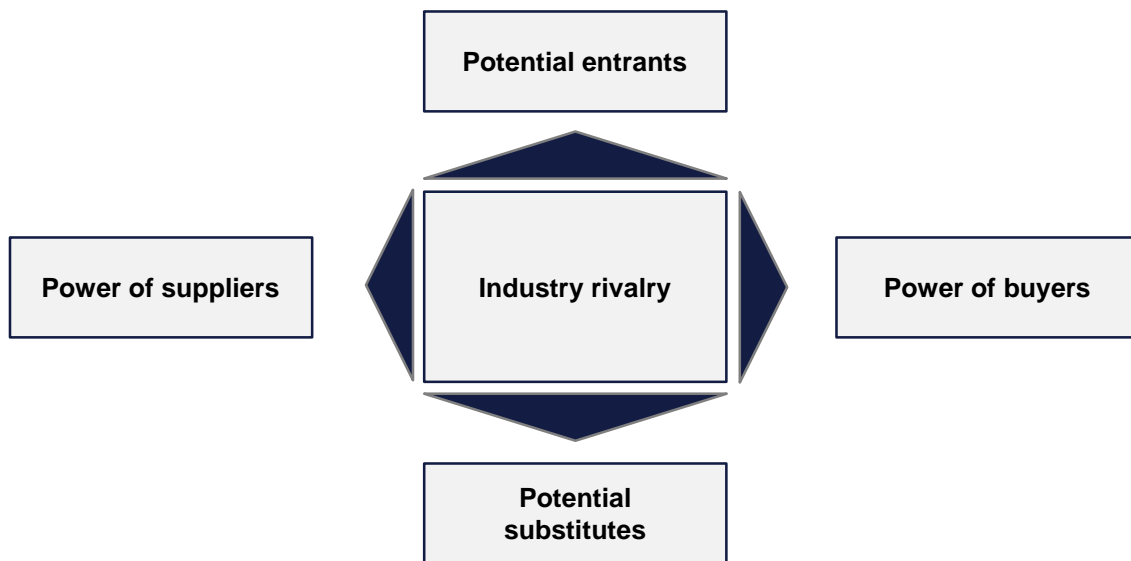
Source: Author's illustration

5.2.1 THREAT OF ENTRY

The first variable to consider is the likelihood of new entrants in the market and if there are any significant barriers to entry, e.g. economies of scale, product differentiation and the amount of capital required to enter the market. New entrants will increase competition in the market and aims to gain market shares by introducing new products or by driving prices downwards, ultimately resulting in lower industry returns (Grant 2010).

The industry in general does not offer particular barriers to entry for new retailers, which is a common trait in many retail markets. In addition, there is no need for significant investments to enter the market on a small scale and the market consists of undifferentiated products with low brand recognition. However, the main issue for new retailers is to achieve economies of scale in order to be competitive on a pricing level since the industry is characterized with very low switching costs. Moreover, economies of scale do not only allow for lower prices, it also increases accessibility to suppliers. Lastly, large DIY retailers vary in popularity depending on localization since the concept of large stores usually are located in the outskirts of cities, which does not appeal to all customers. On an aggregate level, the threat of new entrants is considered to be moderate (Marketline 2013).

Byggmax has established itself as a price-leading provider of building materials, not only by offering low prices but they are also perceived to be the cheapest alternative. In a survey conducted by the Swedish magazine Vi i Villa, 1,769 detached house owner answered a questionnaire about DIY retailers. 80 per cent responded that Byggmax has the lowest prices and

low prices were the second most important parameter when selecting a retailer after a wide product selection (Vi i Villa 2013).

Together, Byggmax, Beijer, Bauhaus, K-ratuta and Hornbach, represents trusted and widely recognized retailers, which further cements barriers to entry for new entrants.

Another factor that limits new entrants is the increasing importance of providing an online offering together with physical locations, where it is possible to be inspired and researching products and projects at the customer's convenience. Together with the bundling of professional tradesmen services that Byggmax has introduced, new entrants would have to offer either more convenient locations, better prices or in general a better offering, something that will be hard to achieve for new entrants without significant investments.

5.2.2 BARGAINING POWER OF BUYERS

The second factor to analyse is the relationship with the buyers in the industry, including the size and number of buyers, product differentiation, switching costs and the financial performance of the buyers. In short, it is the relative strength between the buyers and the industry that is of interest. If the buyers have an advantage over the industry they have the power to bargain and put pressure on industry returns (Grant 2010).

The industry comprises of a majority of small buyers that mostly are individuals, something that greatly reduce the relative strength of the buyers who lack financial capacity to influence the industry. To a certain degree, this is counteracted by the low switching costs in the industry. Moreover, the increased popularity for home decorating among the public has further deteriorated the relative strength among buyers due to the increased demand. However, buyers do not face any significant switching costs and purchases can easily be postponed. In conclusion, the buyer power is considered to be moderate (Marketline 2013).

The typical Byggmax customer is a detached house owner in the age between 25 and 60 years old (Byggmax 2015). Evidently, this customer group is rather large and due to Byggmax's strategy to be the most affordable DIY retailer, it is safe to assume that a large portion of the customers are price sensitive. As previously mentioned, price is the second most important parameter when detached house owner select their retailer. Also, they can easily do their purchases elsewhere due to very low switching costs and the undifferentiated products. Thus, the buyers do have the power to affect Byggmax if they fail to offer the lowest prices. This can lead to pressure in margins and financial performance going forward.

5.2.3 COMPETITION FROM SUBSTITUTES

The third factor in the analysis regards potential substitutes and the risks associated with such substitutes. The analysis becomes increasingly difficult as the products becomes more complex. If adequate substitutes do enter the market they will limit future returns in the industry (Grant 2010).

The broader DIY industry does not have any imminent substitutes that will greatly challenge the industry structure. However, the most possible substitute is hiring professional trades-men to carry out the project for the customer's account, including providing the material. This does obviously come at a cost but must also be compared to the opportunity cost in terms of the time required for doing the work by yourself. This alternative is greatly dependent on the origin since the culture for DIY is diverse between countries. For instance, the DIY culture is much more rooted in Germany than in e.g. Turkey. In sum, the risk for potential substitutes is considered as weak (Marketline 2013).

For Byggmax, the risk for potential substitutes might be regarded as even lower than for the industry as a whole due to its presence in countries where the DIY culture is strongly anchored. In addition, Byggmax offers professional tradesmen services, which further reduces the risk for substitutes.

5.2.4 POWER OF SUPPLIERS

The fourth part in the analysis regards suppliers and their relative strength in the industry, e.g. supplier concentration, industry importance, product and services dependence. Suppliers have the ability to adjust prices and qualities, thereby affecting industry margins (Grant 2010).

The industry has a vast amount of supplier ranging in size and product offering, thus reducing the supplier power. In most cases, suppliers have to make an effort in order for retailers to take on their stock and changing supplier is often not associated with any cost for the retailer. Moreover, suppliers find it hard to push price increases down-stream onto the retailers. Retailers also have the possibility to utilize private labels where adequate and further diminishing supplier power. However, high quality and the ability to supply large quantities are an important factor for many retailers. In conclusion, suppliers are considered to have moderate power in the industry (Marketline 2013).

The general view on suppliers in the industry is very applicable to Byggmax. First, Byggmax aims to have a minimum of two suppliers per product group. Second, they are among the largest buyers in current markets, thereby making them a very important client for the supplier. To some extent, particularly in lumber, Byggmax is able to cooperate with suppliers

regarding specifications, manufacturing and marketing of the products that Byggmax purchases. Third, Byggmax is able to be very profitable even though they offer very competitive prices and has managed to lower its cost of goods sold (Byggmax 2015).

This suggests that the suppliers are not able to adjust prices upward and supress margins for Byggmax and that the risk associated with higher input prices is somewhat mitigated. Furthermore, Byggmax will continue to strengthen its relative position as operations are expanded.

5.2.5 RIVALRY BETWEEN COMPETITORS

Investigating the competitive landscape in the industry and the degree of that rivalry concludes the analysis. The level of rivalry is dependent on industry growth, number of competitors, overcapacity, capital intensity and exit barriers. The level of competition will vary between industries and set the level of potential returns in the industry (Grant 2010).

The industry is composed of numerous players in varying size, ranging from smaller and local retailers to international chains of DIY stores. The products and services offered by the retailers are relatively homogenous, although smaller variations in product selection and services are present. In combination with very low switching costs in the market and the undifferentiated nature of the industry, the rivalry in the industry is considered to be strong (Marketline 2013).

The Swedish, Norwegian and Finnish markets resemble the European market to a large extent with both smaller and larger retailer with different focus on products and services. Byggmax considers Beijer, Bauhaus, K-rauta and local and independent retailers to be the most prominent competitors in the Swedish market (Byggmax 2015). Additional competitors include Byggmakker (K-rauta) that dominates the Norwegian market and the Finnish market is dominated by Rautakesko's store concepts K-rauta and Rautia (Byggmax 2015). Other competitors not named by Byggmax include expanding Hornbach. From the sheer number of well-known competitors it is evident that the industry rivalry between current competitors is strong. Furthermore, Cheapy and Silkan have been forced to close down due to lack of profitability in recent years and K-rauta has been losing almost SEK 1bn since 2007 in the Swedish market (Dagens Industri 2015). In conclusion, the competitive environment is fierce and will drive profitability levels lower as companies are competing for the customers.

5.2.6 SUMMARY OF PORTER'S FIVE FORCES

The industry is characterized with numerous retailers all offering very similar products and services with very low switching costs for the customer. Although it does not require significant investments to enter the market, economies of scale is important in order to be competitive in a market where customers are very price sensitive, thus exercising buyer power. The most obvious substitute is the DIY market is using professional tradesmen instead. However, it does come at a cost and the threat for substitutes is regarded as weak. Suppliers are not able to exercise any significant power towards the retailers, mainly due to the sheer number of them and the undifferentiated products. The undifferentiated products and the low switching cost for customers have resulted in a very competitive market with many retailers targeting the same customer base.

5.3 COMPANY ANALYSIS

The last step in evaluating the strategic position is an analysis of the company and its competitive advantage in relation to its main competitors. The company analysis will be conducted by a value chain analysis that describes the business and its most important primary and supporting activities. By elaborating on the primary and supporting activities it is possible to identify a company's main strengths and deduce its strategy's effectiveness (Grant 2010).

The analysis will elaborate on Byggmax's main activities that have the most impact on its value creation and clearly display differences and relative advantages between Byggmax and its key competitors named in section four. Due to Byggmax's clear strategy to be price leading most of its activities relate to be as effective as possible and create a cost advantage over its competitors. However, Grant (2010) stresses that just being able to be more cost effective than competitors is unsustainable in the long run as its relatively easy to replicate.

5.3.1 PURCHASING AND LOGISTICS

Byggmax's ability to create value is dependent on how well they can execute its strategy and deliver high quality building materials at very competitive prices. Thus, the first part in the value chain relates to the product range and its effects.

Byggmax only markets approximately 2,000 items in store whereas larger retailers in the industry can have as many as 100,000 products. However, 2,000 items are satisfactory for most DIY projects since the inventoried products cover most of what is needed when building a house (Byggmax 2015). Hornbach have another strategy and offers a complete range of

products with the average store having approximately 50,000 articles (Hornbach 2014). Bauhaus aims to have the largest product range and currently has over 150,000 articles (Bauhaus 2015).

Byggmax has a central distribution centre but most products are delivered directly to the stores from suppliers. To ensure efficient and timely deliveries and adequate inventory levels Byggmax utilizes an enterprise resource planning system (ERP system), which automatically handles approximately two-thirds of the orders (Byggmax 2015).

The focused product range enables Byggmax to have larger volumes on single items and is one of the most important factors in keeping costs low and delivering very low prices to customers. The very slim product range is one of Byggmax's main competitive advantages and essential to its success. However, one could argue that this could easily be replicated by its main competitors but that would mean a complete revision of their strategy, which is highly unlikely.

5.3.2 OPERATIONS

Byggmax's most important asset is its store network in which sales are conducted. Further expansion of stores is necessary in order to achieve targeted growth, take additional market shares and increase volumes. Furthermore, refining the store concept and enhancing additional selling channels such as the online store is equally important to increase sales.

5.3.2.1 STORES

As previously mentioned, Byggmax operates 112 stores of which 83 are located in Sweden. Bauhaus has a network of 17 stores in Sweden, Beijer has 76 stores in Sweden, K-rauta has a total of 20 stores in Sweden and Hornbach operates five stores in Sweden. This exemplifies the tradition of independent retailers together with the historically strong presence of Beijer. The number of stores is also related to the previous part and is a product of strategy. Byggmax has fewer products and smaller stores and can thereby sustain more stores whereas the full service providers have fewer and larger stores. The clear strategy and widespread presence Byggmax has is a competitive advantage and unique among the larger players. Obviously, the focused product range has downsides and does not attract the entire addressable market such as professionals that need specific products. However, it serves it purpose and works towards increased volumes and economies of scale.

Most of Byggmax's increase in sales is related to new stores, whereas sales in existing stores are more volatile year-on-year. Byggmax has been able to open an average of ten stores per year between 2010 and 2014. A new store generally takes between four to six weeks to open

once access to the premises has been granted. Set up costs are limited and a store is estimated to be profitable after one year and operating at full potential within two to three years. Ideally, a store is opened just before or during the summer holidays when the demand for DIY peaks. The most important factors in selecting a site for a new store include accessibility, demographics and level of disposable income in the catchment area (Byggmax 2015).

FIGURE 5.4 STORE EXPANSION

Number of stores
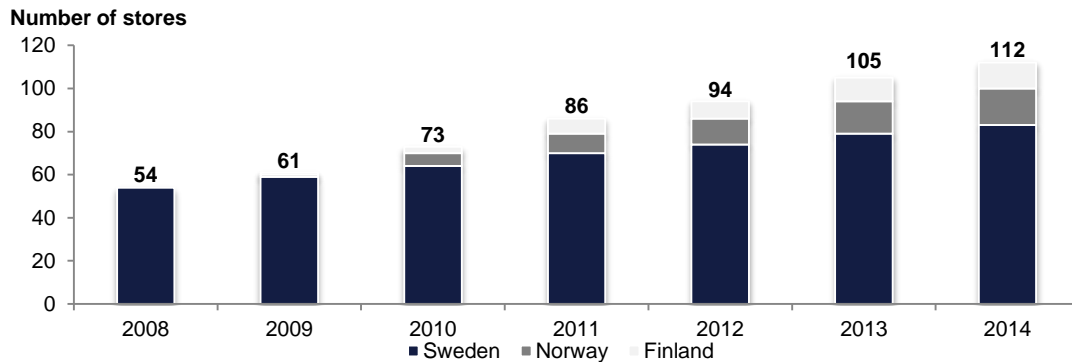
Source: Author's illustration based on data from Byggmax (2015)

In comparison, Beijer increased its presence in Sweden in the latest fiscal year by acquiring two independent stores and eleven of the sister company Cheapy's stores when they discontinued operations (Beijer 2015). Moreover, Hornbach was able to open seven stores in total whereof four were located in Germany and one was located in Sweden (Hornbach 2014). Even though Beijer managed to re-brand already existing stores, most of Byggmax's larger competitors do not expand at the same pace. The ability Byggmax has to expand to new locations and markets is a clear competitive advantage and one of its major strengths.

5.3.2.2 STORE LAYOUT

A Byggmax store is easily recognizable due to a uniform store layout and product range, albeit variations can occur due to difference in premises size. This includes homogeneous inventory, marketing efforts and selling techniques. All stores offer drive-in opportunities and renting a trailer is complementary. The stores are planned in such a way that browsing, purchasing and loading require little assistance from staff (Byggmax 2015).

The uniform and well-planned store is a crucial part in Byggmax's strategy. By designing the store to require as little assistance from staff as possible, a typical Byggmax store has between four and six full time employees (FTEs) during low season and between five and fifteen FTEs during high season (Byggmax 2010b). The total number of FTEs in the group in relation to the number of stores corresponds to approximately six employees per store (Byggmax 2015). This figure is particularly interesting in relation to Beijer that has approximately 17

FTEs per store (Beijer 2015), Hornbach that has approximately 86 FTEs per store (Hornbach 2013) and K-rauta that has approximately 36 FTEs per store in Sweden (K-rauta 2014). However, this does not account for the difference in size between the players and the size of the stores but it clearly displays that Byggmax is operating a very efficient organisation. Moreover, the sparsely manned stores give Byggmax a cost advantage over its main competitors and opening new stores does not require significant investment in training new personnel. This competitive advantage is purely cost related and would be easy to replicate for its competitors. As previously stated though, it is not manageable without drastically modifying their strategies, rendering the competitive advantage difficult to copy.

5.3.2.3 BYGGMAX 2.0

Byggmax 2.0 is a new store concept that was introduced in 2013 and is designed to increase sales using the same space by simplifying the purchasing process for customers. It includes additional products, clearer communication and ultimately providing better control over the sales process. The four initial test stores in Sweden that were opened in 2013 had on average 7 per cent higher sales compared to same size stores. Furthermore, around 60 per cent of the increase in sales was due to the additional products that also have margins exceeding the product average of 8 percentage points (Byggmax 2014).

FIGURE 5.5 BYGGMAX 2.0
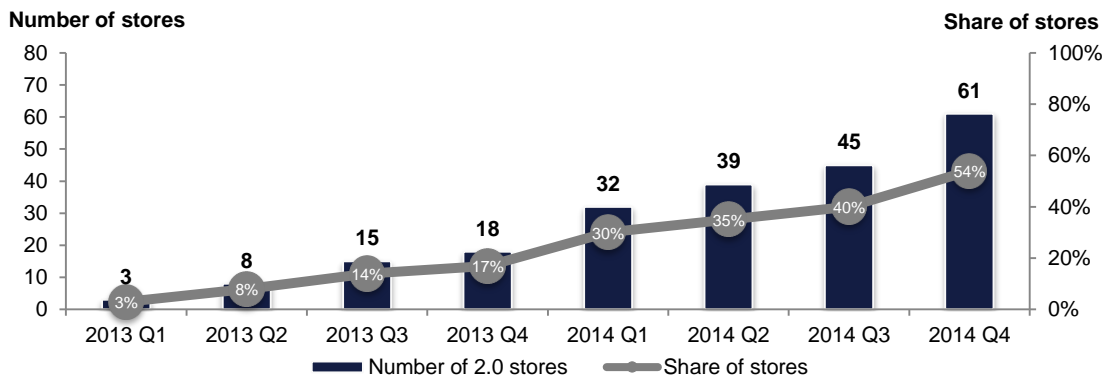
Source: Author's illustration based on data from Byggmax (2015; 2014)

During 2014, 35 stores were converted to the new store concept making it a total of 61 stores, or 54 per cent of all stores. A further 20 to 30 stores are planned to be converted in the spring of 2015 and all new stores are designed with Byggmax 2.0 (Byggmax 2015).

The success of Byggmax 2.0 will be instrumental in the future profitability and growth prospects of Byggmax. Particularly because sales in comparable stores has been declining and that new locations are becoming scarcer after every new opening.

5.3.3 SALES AND MARKETING

The sales function is very much related to the stores, its layout and concept as previously described. The online store only accounts for small portion of group sales but serves an important communication channel and will become more important further on.

5.3.3.1 THE ONLINE STORE

The online store was introduced in 2009 and has become an increasingly important channel for sales and marketing. The online site offers comprehensive descriptions and images of the full product range as well as updated information regarding prices and inventory levels in every store. In addition to the standard product range available in stores, the online store has additional products available. All products on the online store are available for purchase including delivery service (Byggmax 2015).

The online store is an important asset for Byggmax and critical to attract both new and old customers. First, online retailing is becoming a more accepted way of purchasing regardless of industry, type of product or service. Thus, without an adequate online platform a large share of potential customers will be overlooked. Second, the online store gives customers the chance to browse the inventory and get inspired by various guides and tips. Lastly, the online store offers additional items that are not available in the store. This is an effective way to increase the product offering without increasing inventory levels in stores and to some extent compensate for the very narrow products range in stores.

Bauhaus, Beijer and K-rauta also have an online offering whereas Hornbach does not, meaning that Byggmax does not have a unique position. Having an online store cannot be regarded as a competitive advantage today whereas the lack of any will be considered a disadvantage. Nevertheless, it does increase the entry barriers for smaller and independent retailers.

5.3.3.2 PRICING

The overall pricing strategy uses competitors' prices as a starting point from which a price can be set in order to have the lowest prices. Hence, prices are not set from a pre-determined mark-up. This process is on-going and Byggmax is constantly monitoring the competitive landscape to offer the lowest prices and at the same time ensure profitability. Prices are decided centrally and not on a store by store basis, which ensures a cohesive pricing strategy. In addition, Byggmax never makes use of any discounts to any customer in order to be a chain with constantly competitive pricing. To further anchor the pricing strategy with customer, Byggmax offers a "lowest price guarantee". This guarantee will give the customer the lower cited price and an additional discount on that amount (Byggmax 2015).

The pricing strategy is essentially what defines Byggmax and is present all through the organization. However, as price is such an important parameter in the DIY market it also defines the industry to some extent. In an industry with undifferentiated products and numerous players, Byggmax has managed to effectively execute its strategy and reached a unique position in the Nordic DIY space.

6. FINANCIAL ANALYSIS

This part will focus on the financial statements of Byggmax and aims to provide an understanding of the company's current financial position and its historical performance. The analysis will be based on reported income statements, balance sheets and cash flow statements, complemented by the supplementary notes. The analysis will be based on the methods presented by Koller, Goedhart and Wessels' (2010) "*Valuation: Measuring and managing the value of companies*" and by Petersen and Plenborg's (2012) "*Financial Statement Analysis: Valuation, Credit analysis, Executive compensation*".

6.1 CHOICE OF PEERS

A company's financial performance is not suitable to be analysed in isolation but rather in comparison to similar companies in the same industry. Thus, the financial performance of Byggmax will be analysed in conjunction with one of its peers.

As described in section four, Byggmax's main competitors are all specialized DIY retailers where some are larger international retailers and other are more focused on the Nordic market. Bauhaus, Beijer (Wolseley), Hornbach and K-rauta (Kesko) are true competitors and especially Beijer has a similar number of stores in the Swedish market and would be suitable for an in-depth comparison with Byggmax. However, Beijer is part of a larger group (Wolseley), a fact that would make a refined financial analysis difficult due to limited available information. The same reasoning applies to Bauhaus that's privately held and K-rauta that's part of Kesko, rendering Hornbach the most suitable peer for financial comparison. Hornbach is a quoted company on the German exchange and is one of the largest DIY retailers in Europe and operates 141 stores in nine countries, including five stores in Sweden (Hornbach 2014). Thus, Hornbach is competing in the same market as Byggmax and share the same exposure to economic and industry forces.

Even though the publicly traded Kesko is not suitable for financial benchmarking it is a suitable peer for valuation purposes and will be included in the peer group in the multiples valuation. The peer group will be augmented by international DIY retailers and a more thorough explanation of peers will be presented in section nine.

6.2 PREPARATION OF THE FINANCIAL STATEMENTS

The traditional format for income statement, balance sheet and cash flow statement is not suitable for financial analysis since it does not separate operating activities from financing activities. Thus, one is required the reorganize the financial statements and classify items as

either operating, non-operating or sources of financing in order to correctly analyse the economic performance (Koller et al. 2010). Moreover, Hornbach has a fiscal year ending on the 28th of February and has been calendarized to a fiscal year end of December 31 in order to be comparable to Byggmax.

6.3 ACCOUNTING POLICY

Byggmax's historical financial statements in this report follow the International Financial Reporting Standards (IFRS)/International Accounting Standards (IAS), the Swedish Annual Accounts Act and RFR 1 issued by the Swedish Financial Reporting Board (Byggmax 2015).

Hornbach-Baumarkt-AG Group's historical financial statements in this report also follow IFRS as stipulated by the EU (Hornbach 2014).

6.4 ACCOUNTING QUALITY

Accounting policies are mere frameworks with room for interpretation, estimation issues and even manipulation. In order to ensure that historical financial statements display a fair view of historical performance and can with comfort be used when projecting future financial performance it is, necessary to assess the quality of the historical accounts.

Petersen and Plenborg (2012) has a broad definition of what accounting quality is and how it should be assessed. They argue that accounting quality is dependent on the scope of the analysis and the assessment of accounting quality should be conducted with the purpose of the analysis in mind. For equity valuation such as DCF, EVA and multiples the historical accounting numbers are used to forecast future performance and needs to be consistent in recognition over time and distinguish between reoccurring and non-occurring items.

Byggmax has a very simple business model and operates in a relatively uncomplicated industry. The historical financial statements does not contain large amounts of revenue generated from sources other than the core business. In similarity, special items such as restructuring costs, write-downs or other significant line items that significantly reduce conformity over the years are also not present (Byggmax 2015; Byggmax 2014; Byggmax 2013a; Byggmax 2012; Byggmax 2011).

The second part in consistency between accounting numbers over a period of time relates to the application of the same accounting policy. However, change in policy can be voluntary or mandatory and the most important thing is therefore to understand why certain changes have been made. Sales and revenue recognition is of particular interest since the majority of

other line items are either directly or indirectly linked to sales in a DCF valuation and should thus be given particular consideration (Petersen & Plenborg 2012).

Byggmax has not changed its accounting policy on how revenue is recognized in the last five fiscal years. Furthermore, revenue is recognised once upon delivery at fair value net of VAT, discounts and returns (Byggmax 2015; Byggmax 2014; Byggmax 2013a; Byggmax 2012; Byggmax 2011).

Accounting policy can be divided into conservative accounting and liberal accounting. The treatment of development costs clearly displays the difference between the two, where conservative accounting expense development costs and liberal accounting capitalize the development cost. The difference in policy does not affect DCF and EVA valuation but it will affect multiples (Petersen & Plenborg 2012).

Byggmax is capitalizing development costs and could thus be considered to adhere to more liberal accounting (Byggmax 2015). However, the capitalized expenses every year are relatively small and does not materially change profitability measures. Furthermore, return on invested capital (ROIC) is less affected from year to year if development costs are capitalized rather than expensed (Petersen & Plenborg 2012).

In conclusion, Byggmax's financial statements are transparent and the simple business model and uncomplicated industry further limits the possibility for misleading accounting. Hence, the historical financial statements are believed to present a representative picture of the financial performance and be indicative for future estimation.

6.5 REFORMULATION OF THE BALANCE SHEET

By reformulating the balance sheet it is possible to calculate the invested capital (IC), which is the total amount of capital invested in a firm needed for core operations. Invested capital is calculated by separating and classifying line items into operating assets and liabilities, non-operating assets and debt and equity and equivalents. The reformulation of invested capital is used to thoroughly analyse the underlying operating profitability (Koller et al. 2010).

The reformulated balance sheet for Byggmax and Hornbach can be viewed in its completeness in appendix 1.2 and 1.3. The following subsections will address three of the most significant adjustments to the reorganized balance sheets.

6.5.1 CAPITALIZATION OF OPERATING LEASES

It is possible for companies to either buy an asset outright or to lease the asset for a period of time. In specific cases, the asset and corresponding liability may not be recorded on the

balance sheet but rather be classified as a rental expense on the income statement with the future lease obligations reported in the notes, i.e. operating lease. Since different leasing policies can skew the asset base, the adjustment is needed in order to remove an artificially low asset base with corresponding adjustments to the income statement, where operating income must be adjusted for the rental expense (Koller et al. 2010).

Both Byggmax and Hornbach have operating leases, mainly related to the rent of premises (Byggmax 2015; Hornbach 2014). The value of the leased assets is not disclosed by neither Byggmax nor Hornbach and has to be estimated. The value of the leased assets will be estimated by the method prescribed by Damodaran (1999), where the asset value is estimated by discounting the future lease obligations by the pre-tax cost of debt:

$$Asset\ value_{t-1} = \sum^{n} PV\ of\ future\ rental\ payment\ obligations$$

The adjustments to the financial statements following the capitalization of the operating leases will be an increase in net other operating assets on the asset side, and an increase in debt and debt equivalents on the liability side. The estimated lease interest is then added back to the operating profit in the income statement.

6.5.2 OPERATING CASH ADJUSTMENT

Cash can be considered either as crucial for operations or excess where the excess part is excluded from invested capital due to its low return and liquidity. Large excess cash holdings will therefore skew invested capital upward and lower profitability measures. According to an examination of the S&P 500 index conducted by Koller et al (2012), non-financial firms required a minimum cash balance of approximately two per cent of sales for daily operations.

However, this figure is highly dependent on the industry characteristics and especially Hornach is holding a significant cash reserve, which suggests that operating cash could be larger than two per cent. Due to the large difference between the two excess cash will be set at two per cent and five per cent for Byggmax and Hornbach, respectively.

6.6 REFORMULATION OF THE INCOME STATEMENT

In addition to the adjustments made on the balance sheet that impacts the income statement, further adjustments are needed in order to calculate net operating profit less adjusted taxes (NOPLAT). NOPLAT is the after-tax operating profit available to all investors, i.e. equity and debt holders (Koller et al. 2010).

6.6.1 TAXES

In order to arrive to NOPLAT, an adjustment to taxes has to be made to separate taxes related to operations and the tax shield obtained by positive leverage (Petersen & Plenborg 2012). Hence, the tax shield relating to the net financial expense including the expense related to the operating lease adjustment is added back to the tax expense obtained from the income statement.

6.7 PROFITABILITY ANALYSIS

The main drivers behind a company's value creation can be derived from either its profitability, i.e. ROIC or from growth (Koller et al. 2010). The first subsection will analyse the profitability of Byggmax and Hornbach and the relative performance between the two. The following subsection will address the growth aspect and its contribution to value creation.

The analysis will be approached by breaking down the return on equity (ROE), subsequently analysing ROIC and its composition due to the direct linkage between ROE and ROIC (Koller et al. 2010). Figure 6.1 describe the structure of the analysis based on the method presented by Plenborg and Petersen (2012).

FIGURE 6.1 ROE BREAKDOWN
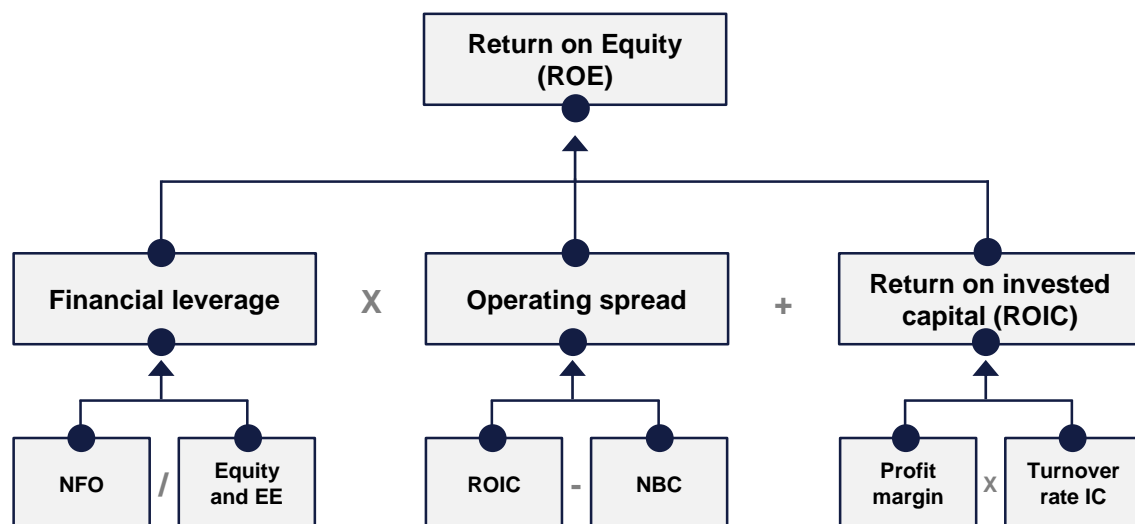
Source: Author's illustration based on Petersen and Plenborg (2012)

6.7.1 RETURN ON EQUITY

The return on equity will be calculated as comprehensive income divided by average equity and equity equivalents. Average equity is used to account for the fact that book values are recorded at a single point in time whereas income is generated throughout the year.

$$ROE = \frac{Comprehensive\ income}{Average\ Equity}$$

FIGURE 6.2 ROE
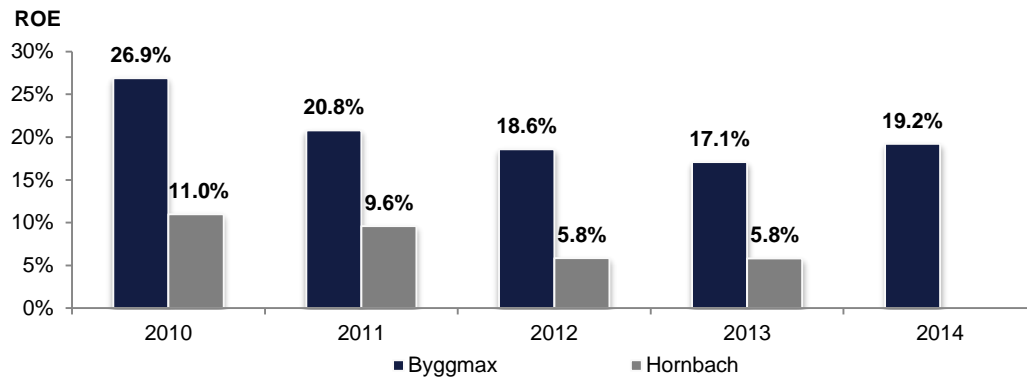
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

Figure 6.2 displays a clear difference between Byggmax and Hornbach in terms of the return on equity. Both Byggmax and Hornbach generated their highest return on equity in 2010 with 26.9 per cent and 11.0 per cent, respectively, before experiencing a decline the following years. The most interesting observation is that both retailers are experiencing similar development. Unfortunately, Hornbach's different fiscal year means that 2014 figures are unavailable making a deduction of a trend break harder.

Clearly, Byggmax is able to generate higher returns than Hornbach but in order to understand the driver behind the results, a breakdown of the components is required. The next level in the calculation of ROE splits the operating part (ROIC) from the financing part (financial leverage and operating spread).

6.7.1.1 FINANCIAL LEVERAGE

Financial leverage works as a kicker for ROE and can either raise or decrease the return. When the operating spread is positive, i.e. ROIC is greater than the net borrowing cost (NBC), ROE is positively affected by financial leverage. Conversely, ROE is negatively affected when the NBC exceeds ROIC (Petersen & Plenborg 2012). Financial leverage (FLEV) is defined as net financial obligations (NFO) divided by average equity and equity equivalents.

$$Financial\ leverage = \frac{Average\ NFO}{Average\ Equity}$$

FIGURE 6.3 - FLEV
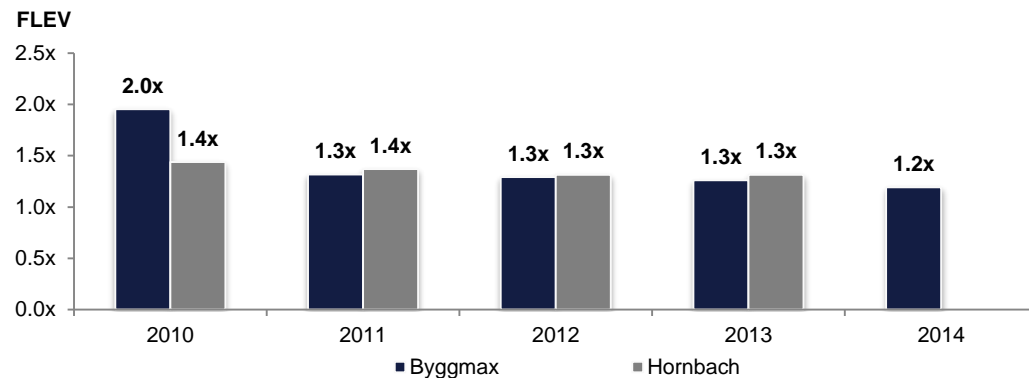
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

From figure 6.3 it is evident that both Byggmax and Hornbach have very similar financial leverage and both retailers have reduced leverage over time. The reduction in financial leverage explains the reduction in ROE for both but more interestingly is that the great difference in ROE is due to operational differences rather than financial ones.

6.7.1.2 OPERATING SPREAD

The operating spread shows the difference between ROIC and NBC, effectively gearing up ROE when the spread is positive and conversely lowers the return when the measure is negative. The operating spread is defined as:

$$Operating \; spread = ROIC - NBC$$

FIGURE 6.4 OPERATING SPREAD
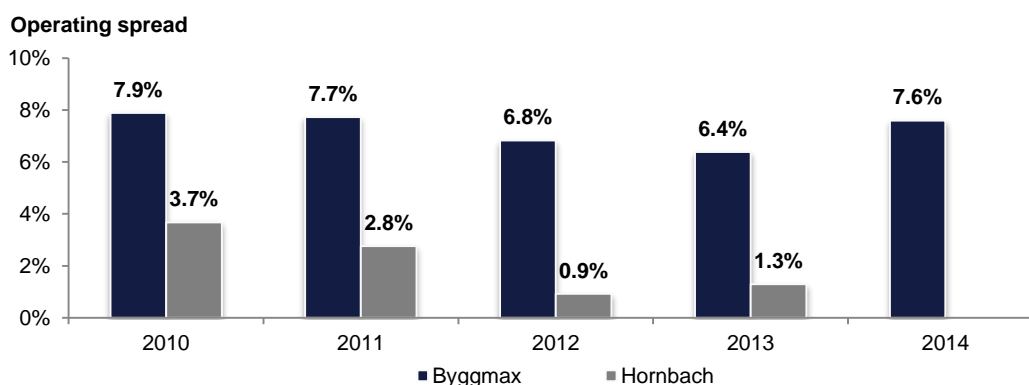
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

The difference in the operating spread clearly explains the great difference in ROE between the two retailers. Byggmax is able to maintain a high spread in the five year period whereas Hornbach is just slightly positive. Even though the difference is large between the two they

are moving in tandem. This indicates that both are affected by industry forces that affect profitability negatively.

NBC is an approximation of the cost of debt and is calculated as net financial costs in relation to net financial obligations. It is worth noting that NBC is a blunt approximation of the company's true borrowing rate since it among others includes other financial items such as currency gains and losses and must thus be considered with caution (Petersen & Plenborg 2012). Despite the measure's drawbacks it is worth considering due to its implications in determining the operating spread.

FIGURE 6.5 NET BORROWING COST
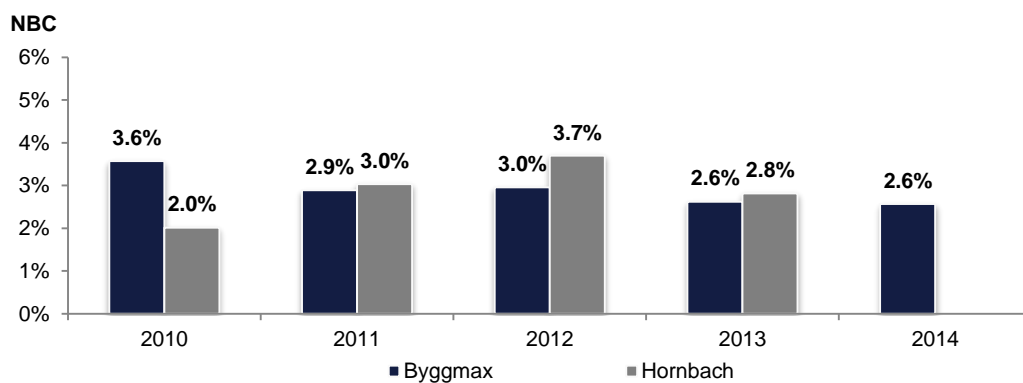
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

Both Byggmax and Hornbach have similar NBC with some variations over the years. Since the difference in NBC is not significantly lower for Byggmax, the operating spread is mainly driven by ROIC. ROIC will be examined in the next subsection and elaborate on possible explanations as to why Byggmax and Hornbach have such difference in operational profitability.

6.7.2 ROIC

ROIC is a central measure when analyzing profitability and acts as a key value driver. Value is created when a company has ROIC exceeding its cost of capital and value is positively affect by how much it can raise it and for how long it can manage to sustain it (Koller et al. 2010).

$$ROIC = \frac{NOPLAT}{Average\ IC} = Profit\ margin \times Turnover\ rate\ IC$$

FIGURE 6.6 RETURN ON INVESTED CAPITAL
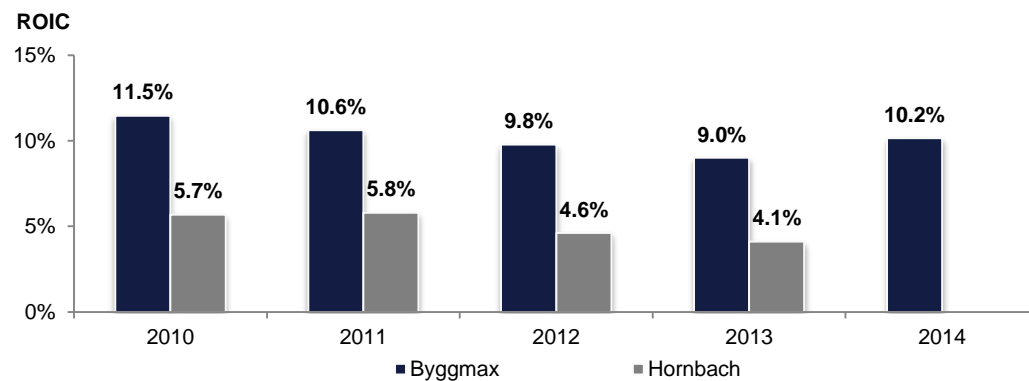
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

As previously concluded, Byggmax is having a considerably higher ROIC than Hornbach and they are seemingly experience a decline from 2010 and 2011 where ROIC peaked. In addition, 2014 is a turning point with significantly higher ROIC than in 2013, which also was observed in ROE. The overall decline is interesting but should not be a surprise when considering the main finding in the strategic analysis. First, the goods for sale are undifferentiated, switching costs are low and new retailers can enter the market relative easy, albeit at a small scale. Thus, it is expected for industry returns to be suppressed as more retailers enter the market and compete for purchases of price sensitive consumers.

To some extent, the DIY industry can be compared to the consumer electronics market where products also are undifferentiated, switching costs are low and consumer are very price sensitive. There is also numerous retailers of different sizes and it is easy to enter the market on a small scale. The Swedish consumer electronics market is suffering from price pressure and lower profitability and several retailers have left the market after years of losses (Marketline 2014; Dagens Nyheter 2013).

Even though the consumer electronics industry is different it shares similar traits with the DIY market and could indicate that lower returns will persist. Another interesting observation is the difference in ROIC and that it is most likely a product of the difference in business models. Byggmax has a narrow product range but more and smaller stores whereas Hornbach is the opposite, with a large product range and fewer but bigger stores. Another possible explanation is the strong DIY trend in the Nordics with some of the highest DIY spending in Europe. Byggmax is concentrated to those market whereas Hornbach is present in countries where DIY is not as widespread.

6.7.2.1 PROFIT MARGIN

ROIC can be broken down further to analyse what factors that drive the measure, i.e. profit margin and turnover rate on IC. Sustaining high profit margin is hard due to competition but it can be accomplished in specific industries with competitive advantages and product characteristics (Petersen & Plenborg 2012). The profit margin is defined as:

$$Profit\ margin = \frac{NOPLAT}{Net\ sales}$$

FIGURE 6.7 PROFIT MARGIN
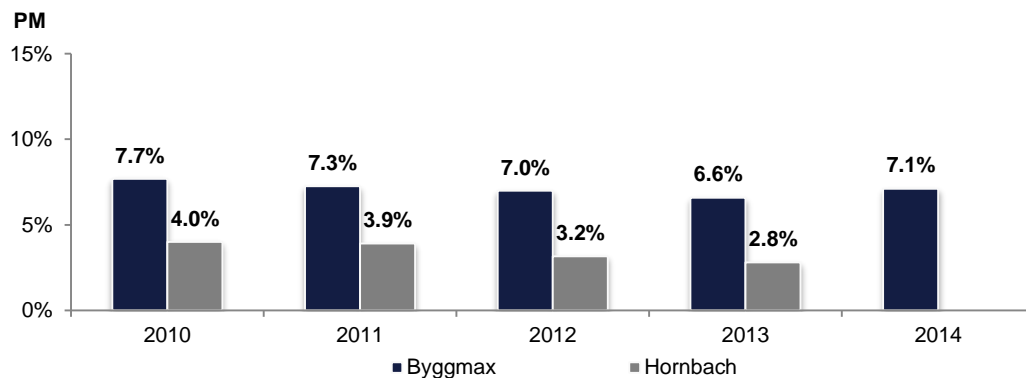
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

The decline in profit margin is the main determinant in the lower ROIC and the suppressed margins also portray the same story of an industry affected by competitive forces. The profit margin bottomed in 2013 but it is not possible to conclude a trend reversal without additional data points. However, Byggmax's improvement between 2013 and 2014 is largely due to the introduction of Byggmax 2.0 that has more products with higher margins than stores with the old layout. In addition, margins should also be positively affected as more sales are conducted online. The reversal in 2014 could also indicate that the market is saturating to some extent and that the closing of Cheapy and Silkan momentarily eased the competition.

6.7.2.2 TURNOVER RATE IC

The other driver affecting ROIC is the turnover rate on invested capital, i.e. the employment of invested capital. The turnover rate is usually a product of industry characteristics where high turnover rates need to compensate for low profit margins, e.g. in the capital light service sector where profit margins usually are suppressed (Petersen & Plenborg 2012). The turnover rate is defined as:

$$Turnover\ rate = \frac{Net\ sales}{Average\ IC}$$

FIGURE 6.8 TURNOVER RATE INVESTED CAPITAL
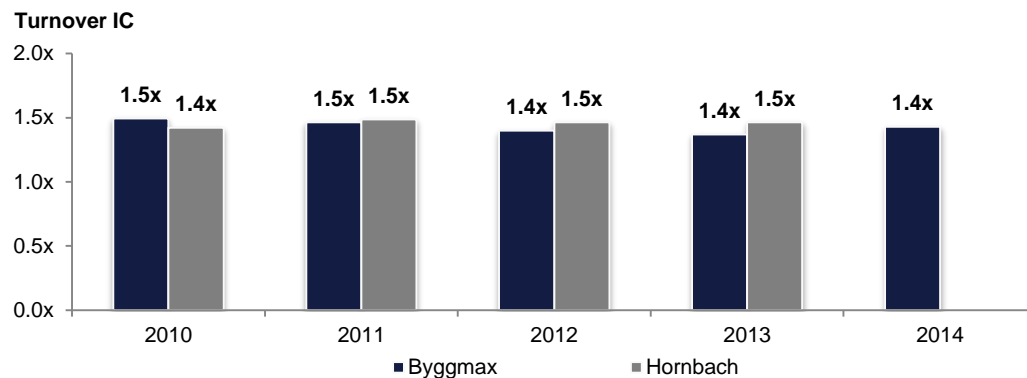
Turnover IC

Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

The turnover rate of the invested capital has been stable over time for both Byggmax and Hornbach in the range of 1.4x to 1.5x. For the first time in the profitability analysis, Hornbach is performing better than Byggmax. However, the slightly faster turnover rate is not close to be good enough to compensate for the significantly lower profit margins, rendering in considerably lower ROIC. The similarity in turnover rates is interesting since the difference in profit margin is substantial. This indicates that Byggmax has been able to find a very attractive business model and is able to execute it well. It is also worth to highlight that more than half of Byggmax's IC is goodwill related to Byggmax Group AB's acquisition of Byggmax AB in 2010 (Byggmax 2010b).

6.8 ECONOMIC VALUE ADDED (EVA)

As previously mentioned, value is created when ROIC exceeds the cost of capital, i.e. the weighted average cost of capital (WACC). The excess return is expressed as EVA (Petersen & Plenborg 2012).

For simplicity, the estimated WACC of 7.23 per cent in section nine is used as a proxy for the historical WACC. The estimated WACC is not necessarily equal to the historical WACC and the shortcoming is understood but sufficient for illustrative purposes. Figure 6.9 shows that Byggmax is a value creating company and has been one the last five years.

FIGURE 6.9 ECONOMIC VALUE ADDED
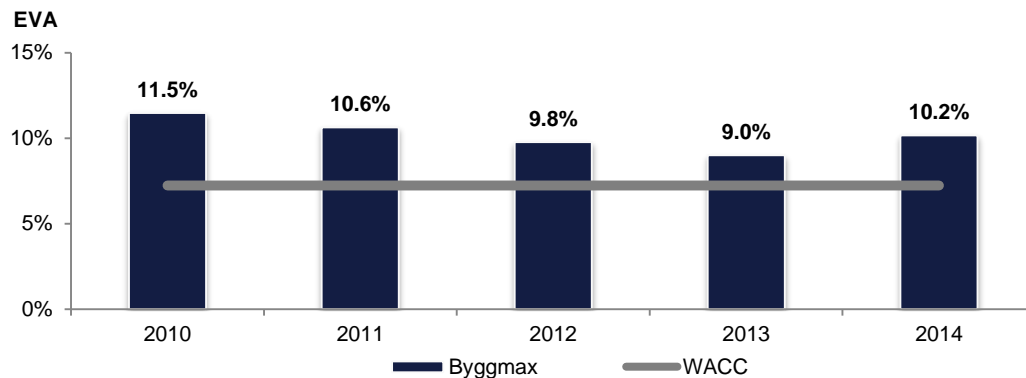
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

6.9 GROWTH ANALYSIS

A company can create value either by increasing its ROIC in relation to its cost of capital or by growing its operations, thereby increasing its revenue streams. However, growth does not come without cost and in order to maximize value creation it is important to balance growth and ROIC (Koller et al. 2010).

The analysis of Byggmax's growth will be instrumental in determining its sustainability when put in relation to its ROIC. It will also provide a deeper understanding of where growth is stemming from when the composition is analysed, which will serve as inputs in the forecasting section. The analysis will begin with the overall corporate growth, followed by a breakdown and lastly concluded by comparing the increase in sales in relation to the number of new stores opened and sales increase in existing stores.

6.9.1 CORPORATE GROWTH

Byggmax has grown its operations with net sales of SEK 2,773m in 2010 to SEK 3,547m in 2014, equivalent to a CAGR of 6.3 per cent or a total increase of 27.9 per cent. The variation in growth has been substantial, ranging from a sales increase of 13.5 per cent in 2010 to only 3.5 per cent in 2012, which can be observed in figure 6.10. Byggmax (2015) states that their ambition is to organically increase sales by more than 15 per cent per year, a goal that is very optimistic considering current levels of growth.

6.10 CORPORATE GROWTH
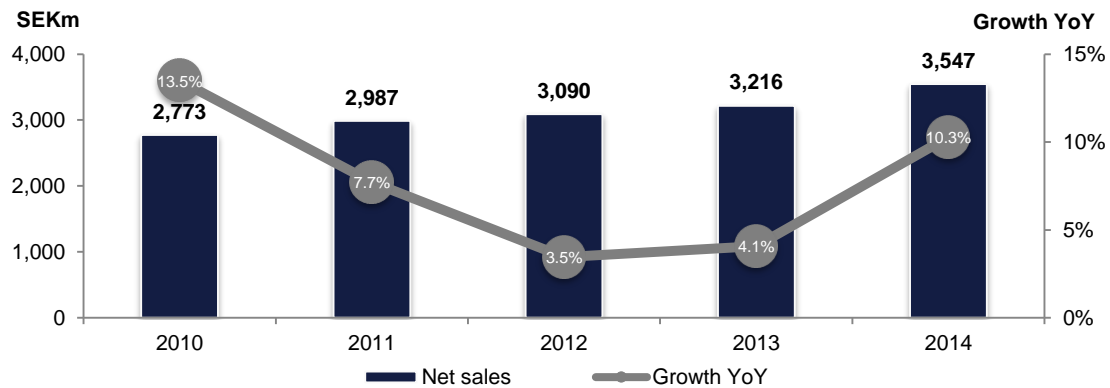
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011)

The increase in sales is attributable to opening new stores, increased sales in existing stores and to a small extent currency effects. Figure 6.11 clearly displays that the sales increase from non-comparable stores, i.e. newly opened stores is the main growth driver. It also explains the impressive sales growth in 2010 of 13.5 per cent, of which 11.5 per cent was due to sales in new stores. However, sales growth has since been stagnating with the exception of 2014, which showed an impressive year-on-year growth. The most worrying observation is that sales are decreasing in comparable stores in three out of five years. This indicates that the observed competitive forces in the strategic analysis is present and affect the financial performance of the market constituents. Byggmax (2015; 2014; 2013a; 2012; 2011) mentions that they have observed a declining market in 2011 and 2012 and that Norway and Finland performed below expectations in 2013 and 2014 driven by future economic uncertainty. This is especially applicable to Finland where the economic growth has been sluggish in general and the disposable income in particular.

FIGURE 6.11 SALES BREAKDOWN
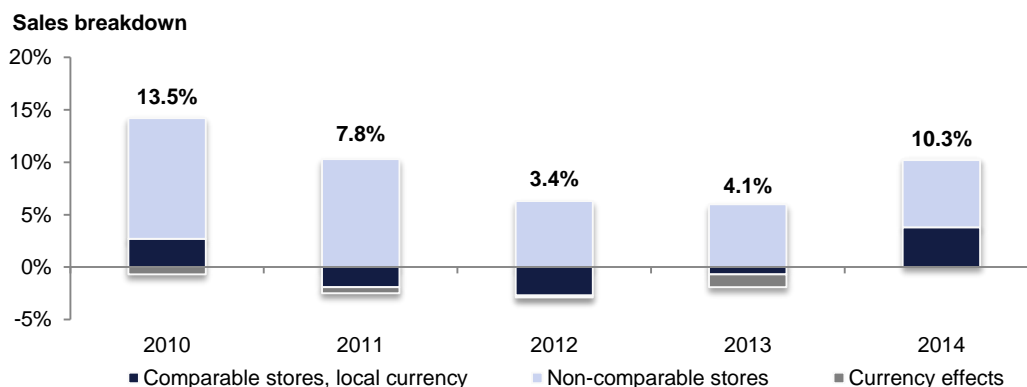
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011)

6.9.1.1 BYGGMAX 2.0

Converting stores to Byggmax 2.0 is crucial for Byggmax in order to reverse the declining sales in comparable stores and improve margins. The first store was converted in 2013 when the profit margin was at its lowest level. The full effect of converting stores to 2.0 is difficult to predict but it is clear that 2014 had an operating margin of 0.7 percentage points higher than in 2013. Additionally, sales in comparable stores increased for the first time since 2010 by 3.8 per cent in 2014. This further indicates that the Byggmax 2.0 concept is working. This is in line with the communicated benefits of Byggmax 2.0 with more sales on the same amount of space and margin improvement (Byggmax 2015).

FIGURE 6.12 – SALES GROWTH AND EBIT MARGIN

Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011)
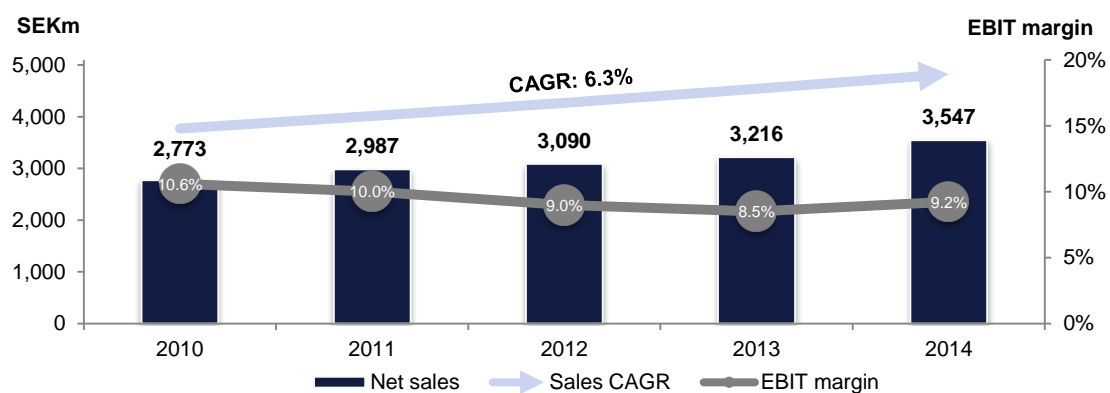
6.9.2 NEW STORE OPENINGS

The store expansion was presented in section five but now the expansion of stores will be analysed in conjunction with the financial performance.

FIGURE 6.13 – STORE EXPANSION

Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011)
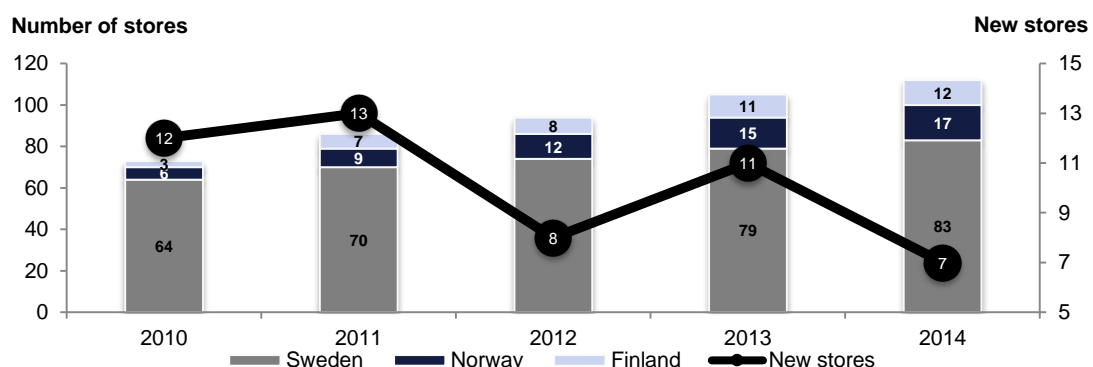
Byggmax (2015) states that a new store will contribute to profitability within one year and then reach full profitability within two to three years. This is particularly interesting since it would indicate that profitability would increase as more stores mature. However, this is hard to deduce from the illustrations in figure 6.12 and 6.13 since fierce competition has been concluded. Nonetheless, the high number of stores that were opened in 2010 and 2011 have been affecting profitability negatively and considering that fewer stores have been opened in the following years it is possible that operating profitability is to improve going forward.

6.10 LIQUIDITY RISK

In order to achieve a more comprehensive view regarding a company's financial performance and health it is important to review its financial stability in terms of short-and long term liquidity. It is not only the risk of running into financial distress that limited access to sufficient liquidity causes, it also limits the company's ability to carry out investments, financial costs might increase and its access to the capital market might be weakened (Petersen & Plenborg 2012).

The analysis will initiate by measuring the short-term liquidity risk by the current ratio, followed by more long-term measures such as the interest coverage ratio and EBITDA to net debt. Lastly, the capital expenditure ratio will be evaluated to see if capital expenditures can be funded by cash flow from operations.

6.10.1 CURRENT RATIO

The current ratio aims to measure the ability a company has to cover its current liabilities by its current assets, making a higher ratio more preferably. Due to different industry characteristics it is not desirable to examine the value in absolute numbers but rather analyse the change over a period of time (Petersen & Plenborg 2012). The current ratio is defined as:

$$Current\ ratio = \frac{Current\ assets}{Current\ liabilites}$$

Even though Byggmax and Hornbach are active in the same industry, they are operating with different short-term risk. Hornbach's risk is considered low as the current assets exceed the current liabilities by a satisfactory level, which can be seen in figure 6.14. Byggmax however, has a very low coverage ratio that can be regarded as troublesome. The majority of Byggmax's current assets consist of inventory whereas the current liabilities mainly relates to accounts payable and short-term debt, which has been increasing due to a shift from longer maturities. As of December 31, 2014, Byggmax had an unutilized credit facility of SEK 99.2m, mitigating the risk somewhat (Byggmax 2015).

FIGURE 6.14 CURRENT RATIO
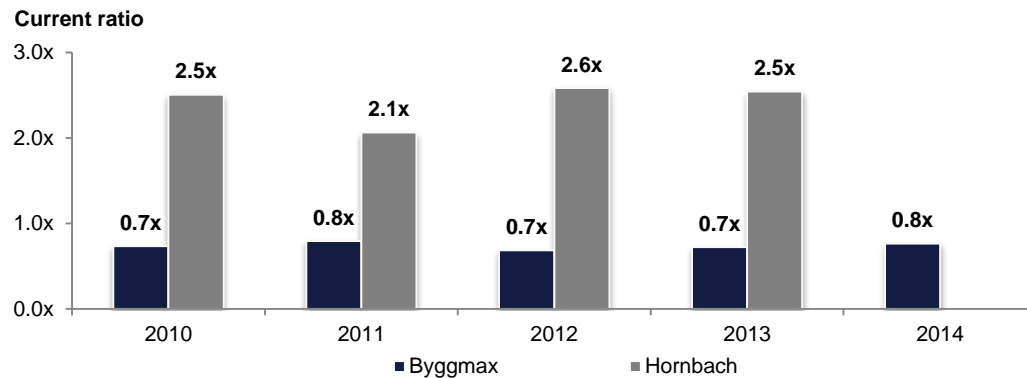
Current ratio

Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

6.10.2 INTEREST COVERAGE RATIO

The interest coverage ratio measures the long-term liquidity risk by assessing cash flow from operations in relation to net financial expenses (Petersen & Plenborg 2012). The interest coverage ratio is defined as:

$$Interets\ coverage\ ratio\ (cash) = \frac{Cash\ flow\ from\ operations}{Net\ financial\ expense}$$

FIGURE 6.15 INTEREST COVERAGE RATIO
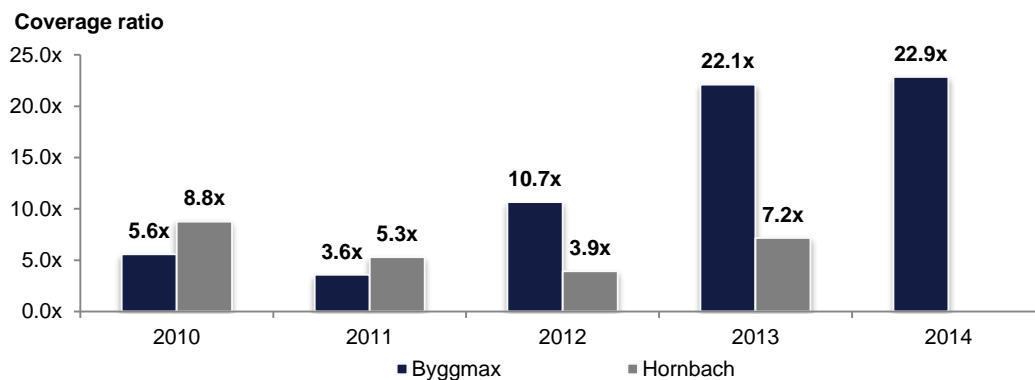
Coverage ratio

Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

The most interesting takeaway from figure 6.15 is the improvement Byggmax has achieved in the five year period. The improvement is due to a combination of a decrease in net financial expenses driven by short-term maturities and increased cash flow from operations. In contrast to the current ratio where Byggmax displayed unsatisfactory levels, the interest coverage ratio suggests that Byggmax is more than able to cover its financial expenses.

6.10.3 NET DEBT[1]/EBITDA

This ratio is commonly used in the financial industry, e.g. in buyouts and in credit analysis and is similar to the interest coverage ratio. However, it is more accurate when a company carries larger amounts of convertibles, low-interest debt or short-term debt that needs to be refinanced into longer maturities with higher interest rates (Koller et al. 2010). The ratio is defined as:

$$Coverage = \frac{Net\ debt}{EBITDA}$$

FIGURE 6.16 NET DEBT/EBITDA
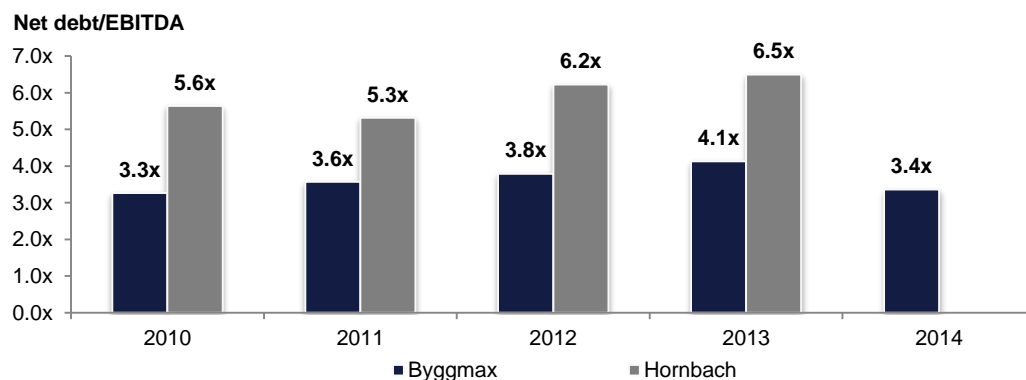
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

Byggmax's net debt in relation to EBITDA has been in the range of 3.3x to 4.1x, which can be considered as a healthy and normal level. Hornbach on the other hand has net financial obligations in relation to EBITDA in the range of 5.4x to 6.3x. These levels are somewhat high and the unwanted trend of increased leverage is cumbersome and suggests increased financial risk.

6.10.4 CAPITAL EXPENDITURE RATIO

This ratio measures a company's ability to fund its investments by using cash flow generated from operations. The ratio will vary in tandem with the variation in capital expenditure but a ratio greater than one suggests that cash flow from operations are sufficient to internally fund capital expenditure (Capex) (Petersen & Plenborg 2012). The following definition is used:

$$Capital\ expenditure\ ratio = \frac{Cash\ flow\ from\ operations}{Capital\ expenditure}$$

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[1] Net debt and NFO are used interchangeably

FIGURE 6.17 CAPITAL EXPENDITURE RATIO
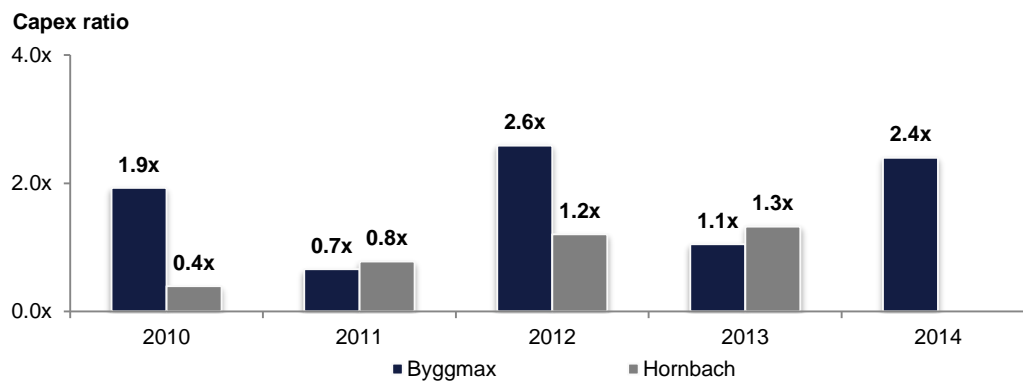
Capex ratio

Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011) and Hornbach (2014; 2013; 2012; 2011)

Both retailers have a ratio exceeding one most of the years and thereby able to use cash flow from operations for necessary investments. The ratio reassures that Byggmax is able to carry out its growth strategy and open new stores and converting stores to Byggmax 2.0. In addition, Byggmax (2015) states that the costs associated with opening a new store is limited. This further ensures that the targeted growth strategy should not be in danger due to limited funds.

6.10.5 LIQUIDITY RISK CONCLUSION

The measures above are mostly displaying satisfactory figures and the assessment shows that Byggmax is a financially stable company with no immediate risk to run into financial distress. Figure 6.3 also illustrated that Byggmax has decreased its financial leverage since 2010 and effectively becoming less risky.

7. SWOT

The company's key strengths, weaknesses, opportunities and threats are identified from the findings in the strategic and financial analysis and summarized in a SWOT analysis. The strengths and weaknesses in the analysis relate to internal factors whereas the opportunities and threats addresse external factors. The major factors are presented table 7.1 below and elaborated on in the following subsections.

TABLE 7.1 SWOT

Strengths	Weaknesses
– Clear business strategy – Focused product range – Pricing – Profitability – Unique market position	– Margins are stressed by the expansion in Finland and online – Relatively small in relation to competitors – Declining sales in comparable stores
Opportunities	**Threats**
– New markets – Barriers to entry – Market growth – Economic recovery in Finland	– ROT – Undifferentiated products – Low switching costs – Competition – Price fall in the housing market

Source: Author's illustration

7.1 STRENGTHS

Byggmax is a well-known DIY retailer in Sweden, Norway and Finland and has consistently been operating with the same strategy it had since its inception in 1993, to offer high quality building materials at low prices. Byggmax's key strength is the very focused product assortment consisting of only around 2,000 items. The narrow product range and the high volumes have given Byggmax the ability to exercise economies of scale to have sufficiently low purchasing prices to be able to be profitable while offering some of the industry's lowest prices. Moreover, prices are set to be lower than its competitors instead of adjusting the purchase price by a mark-up and sales campaigns are non-existent.

The successfulness of the strategy is also dependent on the efficient organization with a low cost level in order to deliver satisfactory operating margin. This is achieved by the drive in opportunities, the online store, well-developed ERP-systems, affordable store locations and functional logistics, all working towards less human interaction in the value chain and more resources available for selling efforts towards customers in the stores. The very slim organization was particularly evident on a store basis when compared to its main competitors in section five.

Another prerequisite for continued growth is the opening of stores, which have been proven successful this far. New stores are continuously being opened without requiring much capital and are expected to be fully profitable within two to three years. To successfully source new store locations and getting the stores operational in a short time frame has been one of the most influential factors in Byggmax's success. The widespread store network is also one of its key strengths as most of its competitors focus on fewer but larger stores.

Byggmax's combined strengths has enabled them to achieve a unique position as a high quality discount retailer with a widespread network of stores.

7.2 WEAKNESSES

The store expansion, investments in the online platform and professional tradesmen services have put pressure on margins, resulting in an EBIT margin of 9.2 per cent in 2014, which is far from the goal of an EBIT margin of 11.0 per cent. Margins are expected to be affected by as much as -0.9 percentage points in 2015 as investments in the online platform and the expansion in Finland continues to be costly (Byggmax 2015).

Byggmax is only present in Sweden, Norway and Finland whereas some of its major competitors are either present in more markets or significantly larger in size. This does not only make Byggmax more vulnerable to downturns in specific market and especially Sweden, but it can also weaken their relationships with suppliers going forward. Byggmax is very dependent on access to quality suppliers and in order to continue to procure at favourable prices they must continue to be a major customer, also relative to its main competitors.

Another internal factor that has been peculiar to Byggmax is the negative trend with declining sales in comparable stores between 2011 and 2013. The trend was reversed in 2014, mainly due to the implementation of Byggmax 2.0 in more stores. Nevertheless, the trend is cumbersome and should be an important focus area for Byggmax.

7.3 OPPORTUNITIES

Byggmax has communicated that additional markets are continuously being evaluated, although a definite decision has not been taken (Byggmax 2015). Byggmax has the experience to venture into new markets and an expansion in Europe would not be a surprise. The most logical step would be to enter Germany. First, Germany is close both geographically and culturally. Second, Germany is the single largest DIY market in Europe, accounting for almost 28 per cent (Marketline 2013). Third, the DIY culture is well established in similarity to Sweden, Norway and Finland (Marketline 2013).

Even though it requires relatively little capital to enter the market new entrants must obtain a critical mass in order to achieve economies of scale to be truly competitive. In an industry were price is one of the most important parameters it is crucial to have enough volume to achieve favourable prices from supplies.

The DIY market has historically been strong in the Nordics and is expected to be so going forward with adequate growth rates expected. Furthermore, the economic development is showing promise, especially in Finland. An improved economic outlook in the Finnish market could be a major driver in improving Byggmax's situation in the country and end the sub-par performance.

7.4 THREATS

Byggmax is exposed to external factors were the most prominent include regulations, industry characteristics and macroeconomic factors affecting the DIY industry. The most imminent change in the regulatory landscape is the proposed change of the ROT-deduction. If the proposed reduction in the deduction is passed, it will increase costs for hiring professional tradesmen and reduce the demand for building supplies. However, to what extent it will affect Byggmax's sales is difficult to predict.

The industry's characteristics are a major threat since it has many forces that can limit industry and company returns. First, the industry involves mostly undifferentiated products were it is difficult to achieve any advantage over competitors. Second, buyers face very low or no switching costs and can easily postpone purchases. Third, the industry comprises of many players, including international mega chains and smaller independent retailers. The competition has already made some players in Sweden to leave the market and others have experienced large losses, e.g. K-rauta (Dagens Industri 2015). The intense competition is likely to continue and promote financially strong players.

As previously mentioned, Byggmax's sales has been positively affected by a positive housing market and a reversal of house prices would have adverse effects. Both the Swedish and Norwegian housing markets have performed well and are reaching very high levels, especially in the capital regions. If prices are able to continue to rise is debatable but a significant price correction would most likely create severe economic effects and limit demand for building supplies.

8. FORECASTING

This section aims to forecast the future financial performance based on the previous information and analysis in this report, namely the macroeconomic environment, the industry forces and company specific abilities. As all financial forecasting is based on no more than educated assumptions it involves a high degree of uncertainty. In order to account for that uncertainty a more optimistic case and a more pessimistic case will be presented in the valuation section.

8.1 SETTING THE FORECASTING PERIOD

As the time goes by the uncertainty for every assumption becomes larger. Thus, it is preferable to divide the forecasting into an explicit period and then value the remaining cash flows as a perpetuity. The most important parameter to consider when deciding on the length of the explicit forecasting period is if steady state has been achieved, i.e. when the company's capital earns a constant rate of return (Koller et al. 2010).

Koller et al. (2010) further argue that the explicit period should be between ten and fifteen years in most cases. A shorter period commonly underestimates the company's intrinsic value or it has to be compensated in the continuing value. They also recommend that the explicit period is split into two part, the first lasting for the first five to seven years while the second lasts for the remainder. The first period will be as comprehensive as possible whereas the second period focuses on fewer drivers and is less detailed.

Following those guidelines, the explicit forecasting period will extend for ten years, i.e. from 2015e-2024e since that period will be sufficient to forecast the expansion of stores and enough to converge to the steady state. Furthermore, the more detailed period will stretch for the first five years, i.e. 2015e-2019e and the second period will stretch for the remainder of the period i.e. 2020e-2024e. After 2024e the terminal period begins as Byggmax is estimated to have reached the steady state and grow at a constant rate. For simplicity and to maintain consistency with the calculation of the cost of capital in section nine, the growth rate is assumed to be 0.58 per cent, equal to the risk-free rate. The problem is discussed further in the section regarding the cost of capital in section nine.

8.2 INCOME STATEMENT

The following subsections will address the forecast of the line items on the income statement. The full projected reformulated income statement can be viewed in its completeness in appendix 1.6.

8.2.1 NET SALES FORECAST

The first line item to be forecasted is net sales. This driver will be given particular considerations since it is the most influential variable in terms of valuation. It is not only an indicator of the business's prospects but is also affects other line items, either directly or indirectly.

Byggmax generate most of its sales in its physical stores in Sweden, Norway and Finland while only a small portion relates to online sales. In addition, the growth in sales either stems from the opening of new stores, increased sales in existing stores or currency effects. Thus, the most transparent method to forecast sales would be a bottom up analysis where the main driver in sales is related to the total number of stores. Furthermore, since currency effects are a very small part in the overall growth and not suitable to forecast, it will be excluded going forward, i.e. assumed to be zero.

As previously mentioned and illustrated in figure 6.13, Byggmax has opened an average of 10 stores in the last five years and targets 7 to 13 new stores per year. The range of new stores has also been between exactly in the targeted range, with 7 new stores in 2014 and 13 new stores in 2011. In addition, Byggmax sees potential for 180 stores in current markets and plans to reach that number (Byggmax 2015). Thus, the analysis will be based on the communicated intentions and the historical rate Byggmax has been able to open new stores.

Estimating the number of stores is difficult since the range is relatively large and new stores are to a certain degree dependent on the availability of locations. Also, the average the last three years has been only 9 new stores, which is one less than the five year average. This could be an indicator that new suitable locations are harder to find and stalls the expansion somewhat. Another critical assumptions is whether or not Byggmax will expand to new markets or limit the total stores to 180. Since Byggmax has been opening stores and entered new markets historically it would be wrong to assume that no additional expansion would occur.

Thus, Byggmax is estimated to open 9 stores in first eight years of the explicit forecasting period followed by a decline to 8 new stores per year for the remainder of the forecasting period, resulting in 200 stores in 2024e. 8 new stores per year is also the average number stores Byggmax has opened since its inception in 1993. Even though the industry is populated my by many players, the economic outlook, the barriers to entry and the strong DIY mentality in the Nordics gives support for the planned expansion. Furthermore, opening new stores has been one of Byggmax's key strengths and nothing indicates that it will change in the future.

The second step in estimating the growth in net sales is to put the number of new stores in relation to the increase in sales. Since stores are opened throughout the year, a two-year

average of the number of opened stores is perceived to be a better estimated of the new stores' contribution. Historically, every new store has on average contributed with increased sales of 0.8 per cent between 2010 and 2014. This is equivalent to approximately SEK 23m in additional sales per new store. However, sales attributable to new stores have varied fairly substantially with additional sales corresponding to SEK 30m in 2010 and only SEK 18m in 2012. The variation is less the last four years and 2010 seems to be more of an outlier. Hence, the last four years are a more appropriate time period to use as an estimate for future sales stemming from the opening of new stores. The four year average is 0.7 per cent of sales, or an equivalent of SEK 21m per store and will serve as the estimate in the explicit period. Since net sales increase over time, the contribution from additional stores will naturally be smaller percentage wise but will in absolute terms be approximately SEK 21m. This means that every new store will on average over the explicit period add an additional SEK 21m to sales. Additionally, the figure should be relatively constant over time since each store is more or less identical. Also, Byggmax has explicit criteria on where to locate new stores and since the opening of new stores wears off over time, the importance in selecting good locations should naturally increase, i.e. profitability should be prioritized.

After the main driver has been estimated, the third and last step in estimating future growth in net sales is how sales in existing stores will develop over time. Figure 6.11 displays a great variation in increased sales from existing stores, from -2.7 per cent in 2012 to 3.8 per cent in 2014 with an average of 1.2 per cent. The strategic and financial analysis reviled four main forces affecting sales.

First, the strategic analysis concluded that the DIY market is very competitive with a plethora of competitors. The products are undifferentiated and price is one of the most important parameters when customers chose a retailer. In combination with Byggmax's pricing strategy to always have the lowest prices, sales is affected by its competitors' prices. This leads to downward pressure in prices and sales are affected negatively.

Second, the implementation of Byggmax 2.0 shows great promise and has been able to increase sales in store sales using the same area as before. The indicative evaluation showed sales increase of 7 per cent and the converted stores delivers as anticipated (Byggmax 2015). The implementation of Byggmax 2.0 started in 2013 and in the outcome of 2014 a total of 61 stores had been converted, a further 20-30 stores are planned to be converted in the first half of 2015 and all new stores will have the new layout (Byggmax 2015).

Third, the omni-channel strategy where the online store offers a wider product selection than the physical stores together with its convenience should be positive for sales. Since sales from the online store is not reported separately it will be included in the estimation in the sales

development in existing stores. The introduction of professional tradesmen services should also contribute positively.

Fourth, new stores are opened throughout the year and are operating at full capacity first after two to three years. This means that sales in existing stores would improve as more stores mature, naturally increasing sales in existing stores.

In conclusion, estimating sales in existing stores involves a high degree of uncertainty since there is no clear trend and different forces are counteracting. However, most parameters suggests that Byggmax will be able to increase like-for-like sales in the short term but the industry's high degree of competition suggests continued price pressure. Thus, sales in existing stores is projected to increase by 3 per cent in 2015e and decline by 0.5 percentage points every year, levelling out at 0.5 per cent in 2020e and stay at that level for the remainder of the explicit forecasting period. Other revenue has historically been very small and since the line item is not part of Byggmax's core operations it will be set to zero.

Overall, this yield a smooth reduction in growth as expansion stalls and the long-term industry effects force down industry returns. The CAGR between 2014 and 2019e is 6.7 per cent, which is close to the CAGR between 2010 and 2014 of 6.3 per cent. The CAGR for the full period between 2014 and 2024e is 5.3 per cent and is considered as an achievable target for an expanding firm. Table 8.1 summarizes the forecasting assumptions.

TABLE 8.1 NET SALES FORECAST 2015E-2024E

	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e
New stores	9	9	9	9	9	9	9	9	8	8
Sales increase due to new stores	5.6%	5.4%	4.5%	4.5%	3.6%	3.6%	3.6%	3.6%	3.4%	2.4%
Sales increase in existing stores	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.5%	0.5%	0.5%	0.5%
Sales increase	**8.6%**	**7.9%**	**6.5%**	**6.0%**	**4.6%**	**4.1%**	**4.1%**	**4.1%**	**3.9%**	**2.9%**

Source: Author's illustration

8.2.2 COST FORECAST

The cost forecast will be projected on a group level and consists of goods for resale, other costs and personnel costs. Goods for resale, personnel costs and other costs will be projected as a percentage of net sales.

Goods for resale is estimated to decline the first three years in the forecasting period and then converge back to 69.0 per cent of net sales. The first decline is primarily driven by the historical reduction and the findings in the strategic analysis, which indicated that increased volumes entail economies of scale and that the suppliers have a relative subordinate position.

However, the strategic analysis also revealed intense competition resulting in lower gross margins making further reductions in goods for resale unlikely.

Other costs is projected to increase to 12.0 per cent in 2015e and then return to the three-year average of 11.7 per cent due to the communicated extra costs associated to Finland and the online store. Other costs is then assumed to increase again to 12.0 percent in 2020e due to international expansion, which the net sales forecast relies upon. The remainder of the period is estimated to have continued increased other costs of 12.0 per cent of net sales.

Personnel costs is estimated stay at 9.6 per cent of net sales in 2015e and then decrease by 0.1 percentage points until 2019e where it levels out at 9.2 per cent and then stay constant for the remainder of the period. The decrease is driven by higher sales in same-sized store due to Byggmax 2.0 and increasing online sales. Furthermore, personnel costs is expected to stay stable over time since Byggmax operates a very slim organization with as little staff in stores as possible.

Depreciation and amortization is estimated separately and not linked to net sales as other line items in the income statement. First, depreciation is linked to net property, plant and equipment (PP&E) and more specifically, the trailing two-year average. By linking depreciation to capital expenditures instead of sales it avoids an incorrect increase as sales grow even though new investment has not been carried out (Koller et al. 2010). Depreciation will be projected to be 27.7 per cent of net PP&E going forward, which is the five year average. Second, amortization will be related to capitalized expenses for development work forecasted as a percentage of the last three years. This line item is fairly insignificant and thereby set to 33.5% per cent of capitalized development work.

TABLE 8.2 COST FORECAST 2015E-2024E

	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e
Goods for resale/Net sales	68.5%	68.4%	68.3%	68.5%	68.7%	69.0%	69.0%	69.0%	69.0%	69.0%
Other costs/Net sales	12.0%	11.7%	11.7%	11.7%	11.7%	12.0%	12.0%	12.0%	12.0%	12.0%
Personell costs/Net sales	9.6%	9.5%	9.4%	9.3%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%
Depreciation/Avg. net PP&E	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%
Amortization/Avg. cap. dev. costs	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%

Source: Author's illustration

8.2.3 NET FINANCIAL EXPENSE FORECAST

The net financial expense will be the net of financial income and financial expenses. Historically, financial income and financial expenses have been consisting of other line items than interest such as exchange rate gains and change in fair value of swaps and derivatives. Since

those items are not part of the core business and not suitable to forecast, only interest income and interest expense will be included in net financial expense.

Financial income, i.e. interest income has been very close to zero and actually slightly negative in 2014 due to negative interest rates. Byggmax is projected to earn zero per cent on its average cash and cash equivalents between 2015e and 2019e and 0.5 per cent between 2020e and 2024e.

Financial expense, i.e. interest expense has been approximately 1.5 per cent in the last three years in relation to the two-year average of the book value of interest bearing debt. Thus, the interest expense is estimated to be 1.5 per cent the first five years, i.e. between 2015e and 2019e. In similarity with the expected interest income, the interest expense is estimated to increase by 0.5 percentage points in the remainder of the explicit forecasting period.

8.2.4 TAX RATE FORECAST

The effective tax has varied historically, mostly because of the reduction of the Swedish statutory tax rate to 22 per cent in 2013. Even though Byggmax has the majority of its sales in Sweden, the tax rates in Norway and Finland will also affect the effective tax rate. On the basis of that, using the effective tax rate is considered to be the superior alternative to the statutory tax rate. Thus, the average effective tax rate between 2013 and 2014 of 22.7 per cent will be used as a proxy in the explicit forecasting period.

8.2.5 NET OPERATING PROFIT LESS ADJUSTED TAX

After the entire income statement has been forecasted by estimating the individual line items, it is possible to get an aggregated measure of profitability in term of NOPLAT. By reviewing the historical NOPLAT level and the forecasted NOPLAT margin, i.e. profit margin, it is easier to see if the individual items together reflect the overall estimation thesis.

Figure 8.1 shows a steady increase in NOPLAT driven mainly by the anticipated expansion of stores. In addition, the NOPLAT margin experience the most negative drop between 2014 and 2015e due to increased costs in relation to the situation in Finland, the expansion of professional tradesmen services and improvements in the online offering. The NOPLAT margin is estimated to be anchored at lower levels due to the intense industry competition and stabilize just below 7 per cent compared to 7.7 per cent in 2010.

FIGURE 8.1 NOPLAT FORECAST 2010-2024E
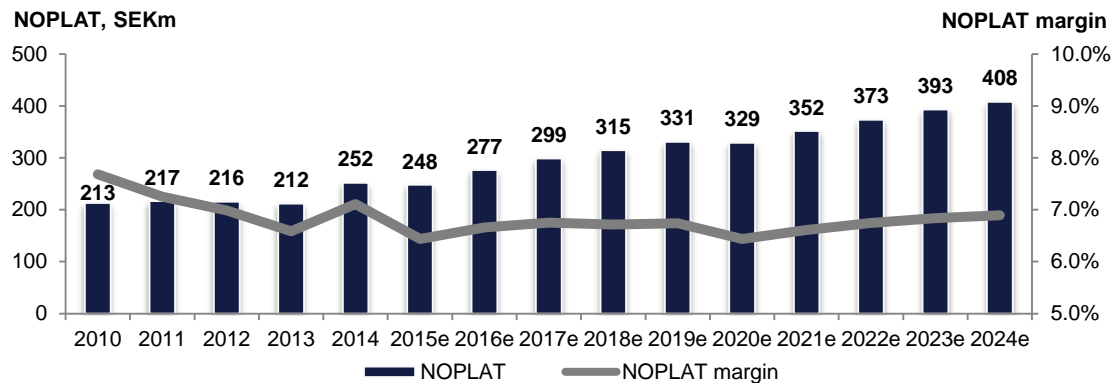
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011)

8.3 BALANCE SHEET FORECAST

A complete forecast of the individual lines on the balance is necessary to arrive at the free cash flow (FCF) and the invested capital. The reformulated forecasted balance sheet will provide information on net working capital and other operating assets and can be seen in appendix 1.7.

8.3.1 OPERATING WORKING CAPITAL

The operating capital consists of several line items on the balance sheet where the most influential ones are operating cash, other current assets, inventory, accounts payable and accrued expenses and deferred income. The operating working capital has been increasing in terms of net sales, starting at 4.2 per cent in 2009 and ending at 7.2 per cent in 2014 with a peak in 2013 of 7.9 per cent. The operating working capital is estimated to gradually increase to 9.8 per cent of net sales in 2019e before staying constant for the remainder of the explicit forecasting period. The main driver behind the increase in operating working capital is the increase in inventory, which has been notable. The increase is most likely due to the increased online sales in combination with Byggmax 2.0, i.e. a larger product range. Operating cash and cash equivalents also rise to the assumed level of 2.0 per cent of net sales in 2016e, effectively driving up operating working capital.

TABLE 8.3 OPERATING WORKING CAPITAL FORECAST 2015E-2024E

	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e
Operating current assets	20.8%	22.6%	23.1%	23.1%	23.6%	23.6%	23.6%	23.6%	23.6%	23.6%
Operating current liabilities	13.4%	13.5%	13.6%	13.7%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%
Operating working capital	**7.4%**	**9.1%**	**9.5%**	**9.4%**	**9.8%**	**9.8%**	**9.8%**	**9.8%**	**9.8%**	**9.8%**

Source: Author's illustration

8.3.2 NET OTHER OPERATING ASSETS

Net other operating assets consist of net PP&E, capitalized operating leases (COL), other long-term receivables, goodwill, intangible assets and cumulative amortization. Koller et al. (2010) argue that amortization is to be added back to the calculation of invested capital since acquired intangibles are irreplaceable and does not diminish as fixed assets do.

Net other operating assets have varied around 65 per cent of sales between 2010 and 2014 and are expected to gradually decrease to approximately 51 per cent in 2024e. Net operating assets have two counteracting effects where the fixed assets gradually increase in terms of net sales to revert somewhat in the end of the period whereas intangible assets including goodwill will drive IC in relation to net sales downwards.

The main driver in the initial increase is net PP&E, which is driven by investments in fixed assets. Investments in fixed assets in terms of net sales are projected to stay at the current level of 3.8 per cent in 2015e and then gradually decrease as all stores are converted to Byggmax 2.0. Investments are projected to be 1.5 per cent of net sales in 2020e and onwards, which is equivalent to more normalized levels.

Capitalized operating leases is assumed to stay at 24 per cent in the explicit forecasting period since the ratio has been close to that level historically and is not expected to change materially going forward. Moreover, capitalized operating leases are related to the renting of stores and should follow the rate of which new stores are opened, i.e. increasing net sales.

The counteractive driver is mainly goodwill, which is assumed to stay constant over time, effectively representing a smaller share of net sales as time goes by. The current goodwill post of SEK 1,051m is mostly stemming from Byggmax Group AB's acquisition of Byggmax AB in 2006 (Byggmax 2010b). Since acquisitions are absent historically and not part of Byggmax's strategy, there is no projected change in goodwill going forward.

TABLE 8.3 NET OTHER OPERATING ASSETS FORECAST 2015E-2024E

	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e
Fixed assets	33.2%	33.6%	33.6%	33.2%	32.6%	31.7%	31.1%	30.6%	30.3%	30.1%
Intangible assets	29.6%	27.8%	26.5%	25.3%	24.4%	23.8%	23.1%	22.4%	21.7%	21.3%
Invested capital	**62.8%**	**61.4%**	**60.1%**	**58.5%**	**57.1%**	**55.5%**	**54.2%**	**53.0%**	**52.1%**	**51.4%**

Source: Author's illustration

8.4 RETURN ON INVESTED CAPITAL

Figure 8.2 displays the historical and projected development of ROIC. ROIC is displayed including and excluding goodwill since the exclusion of goodwill is a better measure of the

underlying profitability (Koller et al. 2010). ROIC without goodwill clearly displays the decrease in profitability as industry forces put pressure on margins to a level perceived achievable in the long run.

FIGURE 8.2 RETURN ON INVESTED CAPITAL FORECAST 2010-2024E
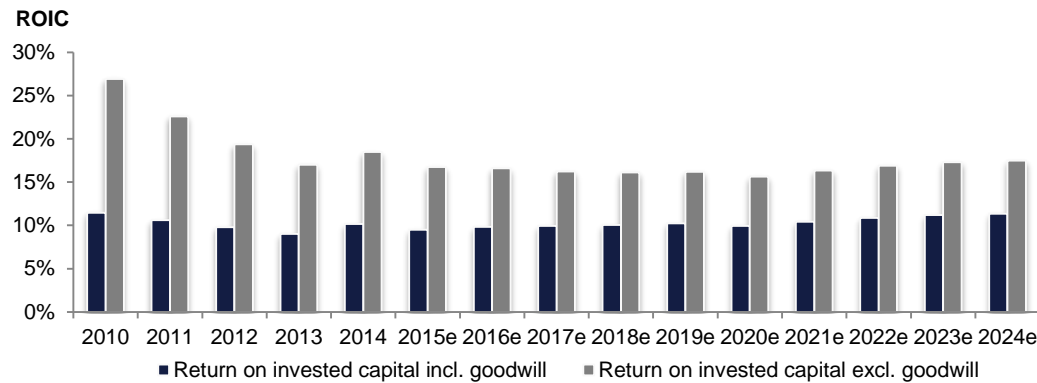
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011)

8.5 FREE CASH FLOW FORECAST

The FCF is derived from NOPLAT by deducting the increase in IC. FCF has been volatile due to significant variation in investments in IC between years. Going forward, FCF is suppressed by investments in Byggmax 2.0 but as stores are converted investments are lowered and FCF is positively affected. As investments in IC becomes more stabilized so is FCF, which is natural for an expanding company.

FIGURE 8.3 FREE CASH FLOW FORECAST 2010-2024E
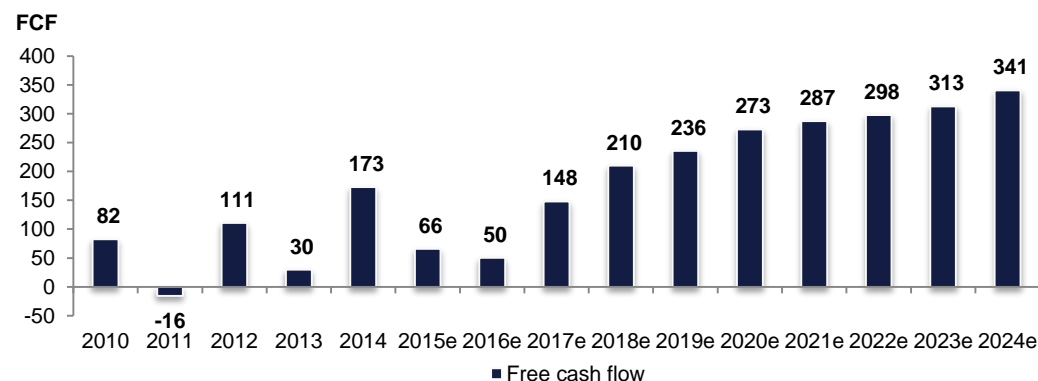
Source: Author's illustration based on data from Byggmax (2015; 2014; 2013a; 2012; 2011)

9. VALUATION

This part will use all the information and reflections made in the previous sections and answer the scope of this report, i.e. estimating the intrinsic value per share of Byggmax as of April 16, 2015. The section begins by an introductory overview of the applied valuation models followed by explanations and elaboration on key inputs and variables. Next, the intrinsic value is estimated by a DCF and EVA model accompanied by a sensitivity analysis where two additional cases are examined. Lastly, a trading multiples valuation will be conducted in order to have additional data points to support the cash flow based models.

9.1 VALUATION MODELS

Several valuation models exist and the valuation process is as much a matter of personal preferences as theoretical justifications. However, some models have stronger foothold among professionals and academics and will be favoured in this report. The most renowned models are DCF and EVA, although they yield the same results they add different insights and are preferably used as complements (Koller et al. 2010).

9.1.1 DISCOUNTED CASH FLOW

The DCF model arrives at the enterprise value (EV) by discounting the FCF a firm generates. The cash flows are claimable by all types of investors, i.e. equity holders, debt holders and other non-equity claimants and are thereby discounted by the WACC. The equity value, i.e. the value addressable to equity holders is reached by deducting all non-equity and debt claims from the EV (Koller et al. 2010). The methodology can be presented as below (Petersen & Plenborg 2012):

$$EV = \sum_{t=1}^{n} \frac{FCF_t}{(1 + WACC)^t} + \frac{FCF_{n+1}}{WACC - g} \times \frac{1}{(1 + WACC)^n}$$

t = time period
n = number of periods in the explicit period
g = long-term growth rate

The model is divided into two parts where the first term on the left hand side of the equation represents the cash flow in the explicit forecasting period. The second part of the equation relates to the terminal value and is estimated as a perpetuity (Petersen & Plenborg 2012).

The DCF approach has gained its well-renowned popularity mainly because of its flexibility and dependence on cash flow rather than accounting based earning. It also enables a transparent linkage between key value drivers, which is instrumental in determining value creation (Koller et al. 2010). The DCF model also disregards market conditions as it relies solely on

cash flow in contrast to valuing a company based on comparable trading companies or comparable transactions, which are highly sensitive to market sentiment (Rosenbaum & Pearl 2009).

The DCF has shortcomings and they are important to understand. The main problem in a DCF valuation is the dependence on its inputs and assumptions on which the valuation is based upon. Unrealistic, overly optimistic or otherwise flawed assumptions on future performance will lead to an unusable end product with little analytical value (Rosenbaum & Pearl 2009). The other major disadvantage is that a large share of the estimated value is derived from the terminal value, which makes it highly dependable on relevant inputs in order not to skew valuation results (Koller et al. 2010).

9.1.2 ECONOMIC VALUE ADDED

Advocates of the EVA model, mostly academics, favour the models ability to distinguish when and how value is created as opposed to a DCF valuation. EVA measure how much value is created in each individual period by deducting a capital charge from the operating profit. The capital charge is derived from the firms WACC and the amount of IC. Apart from discounting EVA instead of free cash flow with the WACC, the methodology in moving from EV to equity value is identical, resulting in identical result (Koller et al. 2010). The EVA model can be illustrated as below (Petersen & Plenborg 2012):

$$EV = IC_0 + \sum_{t=1}^{n} \frac{EVA_t}{(1 + WACC)^n} + \frac{EVA_{n+1}}{WACC - g} \times \frac{1}{(1 + WACC)^n}$$

$EVA_t = NOPLAT_t - (IC_{t-1} \times WACC)$
t = time period
n = number of periods in the explicit period
g = long-term growth rate

As previously mentioned, the main advantage of applying an EVA model is that is easy to see when value is created. Additionally, it is possible to model ROIC as the key value driver for EVA (Koller et al. 2010). EVA is not flawless and has inherent limitations, Shrieves and Wachowicz (2001) point out the reliance on accounting numbers as the main issue. They further argue that the accounting treatment of investments such as R&D requires particular care in order to fairly estimate invested capital.

9.2 WEIGHTED AVERAGE COST OF CAPITAL

Since the free cash flow is claimable by equity holders, debt holders and other non-equity claimants, the cash flows need to be discounted by an appropriate rate that represents the firms blended cost for capital, i.e. the WACC. Thus, the WACC represents the opportunity

cost for all types of investors when investing in a particular company instead of another company facing the same risk (Koller et al. 2010). The formula for calculating the WACC is (Petersen & Plenborg 2012):

$$WACC = \frac{E}{EV} \times r_e + \frac{NFO}{EV} \times r_d \times (1 - t)$$

E/EV = target equity-to-value ratio (market values)
NFO/EV = target net debt-to-value ratio (market values)
r_e = cost of equity
r_d = cost of debt
t = company's tax rate

The standard WACC equation only considers two types of sources of capital, i.e. equity and debt. However, this formula must be augmented to account for the capitalization of operating leases that was conducted in section six in order keep consistency with free cash flow and the cost of capital (Koller et al. 2010). By following the recommendation of Koller et al. (2010), the adjusted calculation is as follow:

$$WACC = \frac{E}{AEV} \times r_e + \frac{NFO}{AEV} \times r_d \times (1 - t) \frac{COL}{AEV} \times r_{COL} \times (1 - t)$$

AEV = Adjusted EV including COL
COL/AEV = target COL-to-adjusted value ratio (market values)
r_{COL} = cost of COL

The adjustments include the extra term in the right hand side of the equation where COL has been added multiplied by the after-tax cost of COL. In addition, the value has been modified to include COL in the capital structure and is thus denoted as AEV, adjusted enterprise value.

The subsequent sections will use the presented methodology above to estimate Byggmax's cost of capital. That includes the following inputs; the cost of equity, the after-tax cost of debt, the after-tax cost of COL and the estimated capital structure.

9.2.1 COST OF EQUITY

The cost of equity, i.e. the annual return equity investors deem necessary for the undertaken risk of investing is not directly observable in the market and must thus be estimated. The most preferred method is the Capital Asset Pricing Model (CAPM) and is presented as (Rosenbaum & Pearl 2009):

$$Cost\ of\ equity\ (r_e) = r_f + \beta(r_m - r_f)$$

r_f = risk-free rate
r_m = expected market return
β = levered beta

The three variables that need to estimated are; the risk-free rate, the levered beta and the market risk premium. The following sections will elaborate and estimate each input.

9.2.1.1 RISK-FREE RATE

Theoretically, the risk-free rate should be the rate of return that is possible to earn with zero risk. However, no investment is truly risk-free in practice so government bonds are often used as proxies for the risk-free rate. The most important factors when deciding which government bond to use include duration and denomination. First, the duration of the bond should match the duration of the projected cash flows. Second, the bond should be denominated in the same currency as the company's cash flows (Koller et al. 2010).

Since Byggmax is based in Sweden and has its majority of cash flows stemming from the Swedish market and are denominated in SEK, it is natural to select a Swedish government bond. Moreover, the ten-year government bond is deemed to be most appropriate and had a yield of 0.259% as of April 16, 2015 (Sveriges Riksbank 2015).

The extremely low interest rate of approximately 0.3 per cent creates issues for valuation purposes that have not been presented before. Damodaran (2015) at Stern School of Business discusses the problem and how to approach it in valuation. He argues that the problem can be approached in a few ways; normalize the interest rate, use intrinsic interest rate, use the low interest rate or a combination where the current low interest rate is used in the beginning of the forecasting period and then normalize the level at the end of the explicit period. He further argues that the most suitable solution would be to use the current low interest rates, but he stresses the importance to keep other inputs consistent. This would imply that the terminal value would be set at a level consistent with the risk-free rate. He further reasons that this does not necessarily indicates that nominal growth rates will be that low but it ensures consistency between the cash flows and the cost of capital.

Even though the suggestion is to use the current interest rate without normalization, a smaller adjustment seems appropriate due to the significant drop over a relative short period of time. Furthermore, the extremely low interest rate is a product of quantitative easing and a negative repo rate, which is unlikely to be permanent. However, without any normalization, i.e. accepting the current interest rate environment, the interest rate measured over a period of

time seems more appropriate in order to avoid any temporary discrepancy. Thus, the three-month average of the Swedish ten-year government bond will be used in favour of a single day yield. As of April 16, 2015, the three-month average of the Swedish ten-year government was 0.58 per cent and will be used in the estimation of the cost of capital henceforth (Sveriges Riksbank 2015).

9.2.1.2 MARKET RISK PREMIUM

The market risk premium displays the difference between the expected return of the market and the risk-free rate. The market risk premium (MRP) is not observable in the market and needs to be estimated. However, the estimation process can be conducted in numerous ways and involves great uncertainty. The three most common methods are to: 1) use historical returns to forecast future returns 2) regress current market variables to forecast future returns and 3) back-solve for the market risk premium using DCF valuation. In general, the estimates based on these most common models indicates that the market risk premium varies between 4.5 and 5.5 per cent (Koller et al. 2010).

TABLE 9.1 MARKET RISK PREMIUM ESTIMATION

Source	Market	Period	Market risk premium
PWC	Sweden	2015	6.80%
Damodaran	Sweden	2015	5.75%
PWC	Sweden	2014	5.60%
Sörensson	Sweden	2010	4.50%

Source: Author's illustration based on data from Damodaran (2015), PWC (2015; 2014) and Sörensson (2011)

The table above displays various estimates of the market risk premium in the Swedish market. The most noteworthy is the increase in the risk premium, especially from PWC as the same methodology has been applied for both the data points. According to PWC (2015), the estimation is based on a survey where asset managers, investment bankers and private equity professionals regarding the required rate of return. The increase in the risk premium of 1.2 percentage points from the previous year is driven by lower interest rates.

Due to the recent shift towards a low interest rate environment, it could be argued that a paradigm shift has occurred and previous perception regarding the level of the market risk is obsolete. Thus, the recent estimate from PWC of 6.80 per cent will be used in the calculation of the cost of capital throughout this report. Furthermore, the average risk-free rate was approximately 0.6 per cent during the survey period (PWC 2015). Since the estimated risk-free rate that will be used throughout this report also corresponds to 0.6 per cent, the calculation of the cost of capital shares the same assumptions.

9.2.1.3 BETA

The parameter beta measures the covariance between the stock's return and that of the entire market, i.e. the systematic risk (Berk & DeMarzo 2011). Beta is yet another variable that is non-observable in the market and needs to be estimated. The most common estimation methods include regression to obtain the raw beta or using peer or industry betas (Koller et al. 2010). The raw beta in this report will be estimated by regression using the market model (Koller et al. 2010):

$$r_i \; = \; \alpha \; + \; \beta r_m \; + \; \varepsilon$$

r_i = stock's return
r_m = historical market return
α_m = intercept
β = covariance with the market
ε = error term

Table 9.2 displays the levered beta when regressed against the OMXS30, which is used as a proxy for the return of the market. Different periods yield different results where the longer periods of three and five years indicate a beta value in excess of one, whereas the last twelve months show a beta value of less than one. Since the process in estimating beta involves several decisions, it is important to acknowledge the key factors and base the estimation on the right premises.

TABLE 9.2 BETA ESTIMATION

Period	Levered beta
1 year	0.92
3 years	1.39
5 years[2]	1.22

Source: Author's illustration based on data from Nasdaq (2015a) and Nasdaq (2015c)

Koller et al (2010) describe the most important factors when deciding on the appropriate approach to estimate the beta, including the length of the measurement period, return period and how to proxy the market by an index. First, they argue that the most common length is five years, which is also the preferred length for most of the financial data providers (excluding Bloomberg that uses two years). Longer periods would provide additional data points but that also increase the risk for material changes in the firm specific risk, e.g. changed capital structure or business model. Second, the return period is the interval of which returns are

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[2] The five-year period is based on prices from 4 years and 11 months due to listing in June 2010

measured. As prices are constantly updated, the interval could range from intraday movements to daily, monthly and so forth. They recommend measuring returns on a monthly basis since shorter periods can lead to a downward bias, mainly in less liquid assets. Lastly, they argue that the market return should be estimated by a well-diversified value-weighted index.

On the basis of those guidelines, the most appropriate estimation is believed to be based on monthly returns over a five-year period with the OMXS30 serving as the market return proxy, resulting in a beta of 1.22.

9.2.1.4 CAPM

With the inputs from the previous sections, calculating the cost of equity according to the CAPM is now possible. The cost of equity is estimated to be 8.88 per cent, as a result of the following calculation:

$$8.88\% \; = \; 0.58\% \; + \; 1.22 \; \times \; 6.8\%$$

9.2.2 AFTER-TAX COST OF DEBT

The second parameter to be estimated in order to calculate the WACC is the after-tax cost of debt. Since Byggmax does not have publicly traded debt, the cost-of debt must be estimated. Petersen and Plenborg (2012) suggest that the after-tax cost of debt can be calculated by deducting the tax shield from the risk-free rate plus an adequate credit spread, such as:

$$r_d \; = \; (r_f + r_s)$$

r_d = cost of debt
r_f = risk-free rate
r_s = credit spread

9.2.2.1 CREDIT SPREAD

The only variable that has not yet been assessed is the credit spread and since Byggmax is not officially rated, the credit spread and rating need to be estimated. Table 9.3 compiled by Petersen and Plenborg (2012) displays the spreads over a two-year period for the different rating classes. Due to the large deviation between highs and lows the average will used in the estimation process.

The credit institutes use different models to determine the credit rating but they essentially covers the same aspects and aim to evaluate the financial health of a firm and its ability to service its obligations (Petersen & Plenborg 2012).

TABLE 9.3 ESTIMATED CREDIT SPREAD

S&P credit spread	AAA	AA	A	BBB	BB	B
High	1.9%	2.4%	3.6%	4.7%	11.2%	13.1%
Low	0.6%	0.7%	0.8%	1.3%	2.6%	3.2%
Average	1.3%	1.6%	2.2%	3.0%	6.9%	8.2%

Source: Author's illustration based on data from Petersen and Plenborg (2012)

Petersen and Plenborg (2012) list numerous financial ratios covering different aspects of a firms financial health and its corresponding credit rating. By applying the suggested ratios and the corresponding rating intervals, the most suitable rating is believed to be BBB, entailing a credit spread of 3.0 per cent. The BBB rating is given to companies that are believed to be able to service its obligations but sensitive to market changes (Standard & Poor's 2015).

TABLE 9.4 ESTIMATED RATING

S&P credit spread	AAA	AA	A	BBB	BB	B	CCC	3 year average
EBIT interest cover, times		X						20.5
EBITDA interest cover, times		X						24.6
FOCF/Total debt, %				X				7.9%
FFO/Total debt, %					X			12.6%
Return on capital, %					X			9.6%
Operating income/revenue, %						X		8.9%
Long-term debt/capital, %				X				34.5%
Total debt/capital, %				X				54.8%

Source: Author's illustration based on data from Byggmax (Byggmax 2015; 2014; 2013a) and Petersen and Plenborg (2012)

9.2.2.2 CALCULATION OF COST OF DEBT

The risk-free rate has already been estimated to be 0.58 per cent, the tax rate is projected to be 22.7 per cent going forward and the credit spread is estimated to 3.0 per cent based on a BBB rating. This results in a cost of debt of 3.58 per cent.

9.2.3 COST OF CAPITALIZED OPERATING LEASES

The cost of COL was discussed in section six when the capitalization of operating leases were addressed. The cost of COL was decided to be equal to the cost of debt to estimate the value of the COL and is consequently also used in the calculation of the cost of capital. This means that the cost of COL is equal to 3.58 per cent.

9.2.4 CAPITAL STRUCTURE

The last input needed to calculate the WACC is the distribution of the different types of capital, i.e. the distribution of equity, debt and COL. The weights in the capital structure should be determined based on the targeted capital structure and market values are preferable as opposed to book values (Koller et al. 2010).

The market value of equity corresponds to the market capitalization, i.e. the share price multiplied by shares outstanding. As of April 16, 2015, the share price was SEK 59.5 and the total shares outstanding was 6,737,045 (Nasdaq 2015b). This results in an equity value of SEK 3,592m.

The market value of debt is unobtainable due the absence of quoted debt. In cases like these, it is acceptable to use the book values of debt instead since they are a relatively good approximation of the market value (Koller et al. 2010). As of December 31, 2014, Byggmax's NFO was SEK 482m.

Obtaining the market value for COL is as problematic as for NFO and the same principles apply. Hence, the latest estimated book value was SEK 853m as of December 31, 2014 and will be used as the approximation of the market value.

Together, the market value of equity and the approximated market value using book value of NFO and COL add up to SEK 4928m, i.e. the AEV. The corresponding weights for equity, NFO and COL are 73 per cent, 10 per cent and 17 per cent, respectively. Since the capital structure has been relatively stable over time, the latest capital structure will serve as the targeted capital structure and is expected to stay constant over time.

9.2.5 CALCULATION OF WACC

With the estimated inputs in the previous sections, the estimated cost of capital is 7.23 per cent.

$$7.23\% = 8.88\% \times 73\% + 3.58\% \times (1 - 22.7\%) \times 10\% + 3.58\% \times (1 - 22.7\%) \times 17\%$$

9.3 VALUATION

This section will estimate the value of Byggmax according to the models presented in the beginning of this chapter. The DCF and EVA models will estimate the share price as of April 16, 2015. For comparison, the share closed at SEK 59.5 on the same date on Nasdaq Stockholm (Nasdaq 2015b).

The FCF are the ones derived and estimated in section eight and discounted by the WACC that was calculated in the previous section. The discounting factor assumes a mid-year discounting, or more specifically, a mid-period discounting. This is most noteworthy in 2015e, which is not a full year. The FCF in subsequent years are discounted in the middle of the year, which also corresponds to the middle of the period. The TV is calculated by assuming that the FCF in 2025e grows by 0.6 per cent in perpetuity. To bring back the TV to the valuation date the TV is discounted by the discounting factor in 2024e. The combined PV of the FCF and the TV constitute the EV. In order to move from EV to the price per share, NFO and COL are deducted to arrive at the equity value, which then is divided by the number of shares outstanding. The resulting share price is SEK 53, equivalent to a 10 per cent discount as of April 16, 2015.

TABLE 9.5 DISCOUNTED CASH FLOW VALUATION

SEKm	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	TV 2025e
FCF	**66**	**50**	**148**	**210**	**236**	**273**	**287**	**298**	**313**	**341**	**389**
Time factor	0.35	1.21	2.21	3.21	4.21	5.21	6.21	7.21	8.21	9.21	
Discount factor	0.98	0.92	0.86	0.80	0.75	0.70	0.65	0.60	0.56	0.53	
Part of period	0.71	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Discounted FCF	**46**	**46**	**127**	**168**	**176**	**190**	**186**	**180**	**176**	**179**	

Calculation of EV	
Free cash flow	389
Growth rate	0.6%
Terminal value	**5,848**
Discount factor	0.53
Discounted terminal value	3,076
Sum of discounted free cash flow	1,474
Enterprise value	**4,550**
NFO	-481
COL	-853
Equity value	**3,216**
Shares outstanding (millions)	60.4
Implied value per share (SEK)	**53**

Source: Author's illustration based on forecasted performance

Table 9.6 shows the EVA valuation and the estimated figures are based on the same assumptions as the DCF valuation. The NOPLAT and ROIC figures are the ones estimated in section eight and the calculation is performed following the methodology presented in the beginning of section nine. More explicitly, EVA is derived by deducting a capital charge, i.e. the starting value of IC multiplied by the WACC from NOPLAT. Each year's EVA is then discounted following the same logic as in the DCF valuation. The TV and PV of the TV are also calculated by the same methodology as in the DCF valuation. In order to arrive at the EV, the IC in 2015e is adjusted to reflect the valuation date of April 16, 2015 and added to

the PV of each year's EVA and TV. Deducting NFO and COL from the EV result in an equity value of SEK 3,216, equivalent to a share price of SEK 53.

The clear advantage in the EVA model is that is simple to see that Byggmax is able to create value every year due to the positive spread between ROIC and WACC. Another benefit is that the terminal value comprises a smaller share of the EV.

TABLE 9.6 ECONOMIC VALUE ADDED VALUATION

SEKm	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	TV 2025e
NOPLAT	248	277	299	315	331	329	352	373	393	408	411
IC	2,522	2,704	2,931	3,081	3,186	3,282	3,338	3,402	3,478	3,558	3,626
WACC	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
Capital charge	-182	-195	-212	-223	-230	-237	-241	-246	-251	-257	-262
EVA	**66**	**82**	**87**	**92**	**101**	**92**	**110**	**128**	**142**	**151**	**149**
Time factor	0.35	1.21	2.21	3.21	4.21	5.21	6.21	7.21	8.21	9.21	
Discount factor	0.98	0.92	0.86	0.80	0.75	0.70	0.65	0.60	0.56	0.53	
Part of period	0.71	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Discounted EVA	**46**	**75**	**75**	**74**	**75**	**64**	**72**	**77**	**80**	**79**	

Calculation of EV	
EVA	149
Growth rate	0.6%
Terminal value	**2,247**
Discount factor	0.53
Discounted terminal value	1,182
Sum of discounted free cash flow	716
PV IC	2,651
Enterprise value	**4,550**
NFO	-481
COL	-853
Equity value	**3,216**
Shares outstanding (millions)	60.4
Implied value per share (SEK)	**53**

Source: Source: Author's illustration based on forecasted performance

9.4 SENSITIVITY AND SCENARIO ANALYSIS

Since valuation and forecasting is highly sensitive to its inputs it is important to test the assumptions and their effect on the valuation. The assumptions robustness will be tested by a sensitivity analysis where key variables are changed and through a scenario analysis where one optimistic and one pessimistic case are investigated.

The first parameters to be examined are the WACC and the growth rate due to their strong influence on the valuation result. WACC is particularly interesting due to its composition of many variables that have to be estimated and is thus sensitive to errors. The growth rate is

interesting because of its influence on the TV, which usually constitutes a large share of the estimated EV and can alter valuation results significantly.

To get an even deeper understanding of the valuation results sensitivity to the WACC, its main variables, e.g. risk-free rate, beta, MRP and cost of debt will also serve as inputs in sensitivity tables together with the long-term growth rate.

9.4.1 VALUE SENSITIVITY: WACC

The sensitivity table displays the change in the estimated share price for different values of the WACC and the long-term growth rate. Table 9.7 displays that the estimated share price of SEK 53 is highly sensitive to even small changes in the WACC. A decrease or increase in the WACC of 0.5 percentage points result in a relatively wide range of SEK 47 (-12%) to SEK 60 (+13%). The estimated share price is not as sensitive to changes in the long-term growth rate as to the WACC since only the TV is affected by the long-term growth rate whereas the WACC affects all cash flows. It is also worth considering that an increase in the long-term growth rate should also lead to an adjustment of the WACC in order to keep consistency between the estimated cash flows and the cost of capital.

TABLE 9.7 SENSITIVITY WACC AND TERMINAL GROWTH RATE

		Terminal growth rate				
		0.2%	0.4%	0.6%	0.8%	1.0%
WACC	6.2%	66	67	69	71	73
	6.7%	58	59	60	62	63
	7.2%	51	52	53	54	56
	7.7%	45	46	47	48	49
	8.2%	40	41	42	42	43

Source: Source: Author's illustration based on forecasted performance

9.4.2 VALUE SENSITIVITY: FACTORS IN THE COST OF CAPITAL

The previous part clearly displayed the influence of just minor changes in the cost of capital and a further analysis of its drivers are consequently desirable. The cost of equity's variables begins the analysis.

As discussed when estimating the cost of capital, the current low interest rate environment has brought additional considerations into the estimation of the cost of equity and analysing different values of the risk-free rate is therefore critical. Table 9.8 displays the estimated share price's sensitivity to different levels of the risk-free rate and the long-term growth rate, also assumed to equal the risk-free rate. The change in the risk-free rate relates to the estimation of the cost of capital, including the effect on the MRP and the cost of debt/COL. The cost of capital is not very sensitive to changes in the risk-free rate and does not really alter the

estimated share price. However, the change in risk-free rate should not be analysed in isolation but rather in conjunction with the change in the long-term growth rate. Changing the risk-free rate and the long-term growth rate with 0.2 percentage points change the estimated share price by approximately 2 per cent. Another interesting observation is that the share price is positively affected by a higher risk-free rate even though it raises the cost of capital. However, that is dependent on that the terminal value is adjusted accordingly. The result is aligned with Damodaran's (2015) argumentation presented when estimating the cost of capital, that normalizing values can actually lead to higher valuations, in contrary to the initial instinct.

TABLE 9.8 SENSITIVITY RISK-FREE RATE AND TERMINAL GROWTH RATE

		Terminal growth rate				
r_f	WACC	0.2%	0.4%	0.6%	0.8%	1.0%
0.2%	7.2%	52	53	54	55	56
0.4%	7.2%	51	52	53	55	56
0.6%	7.2%	51	52	53	54	56
0.8%	7.2%	51	52	53	54	55
1.0%	7.3%	51	52	53	54	55

Source: Source: Author's illustration based on forecasted performance

Table 9.9 displays different beta values and their impact on the cost capital and the estimated share price. An increase of 0.05 in the beta value results in a decrease in the estimated share price of SEK 50 (-6%). Conversely, a decrease of 0.05 in the beta value results in an estimated share price of SEK 57 (+6%). This further stress the high degree of uncertainty in the valuation process as the end product is highly sensitive to changes in most of the parameters in the calculation of the cost of capital. This is particularly relevant in the beta estimation where several different techniques can be applied. Nevertheless, the beta estimation followed accepted guidelines and is considered valid.

TABLE 9.9 SENSITIVITY BETA AND TERMINAL GROWTH RATE

		Terminal growth rate				
Beta	WACC	0.2%	0.4%	0.6%	0.8%	1.0%
1.12	6.7%	57	59	60	62	64
1.17	7.0%	53	55	57	58	60
1.22	7.2%	50	52	53	55	56
1.27	7.5%	47	49	50	51	53
1.32	7.7%	45	46	47	48	50

Source: Source: Author's illustration based on forecasted performance

The cost of equity is an important input in the cost of capital and the MRP is fundamental in its estimation. In table 9.10 the share price's sensitivity to changes in MRP trough the cost of capital together with the long-term growth rate is displayed. The sensitivity table indicates that the MRP has significant influence on the share price and decrease (increase) of the MRP

with 0.5 percentage points yields a change of +12% (-10%) in the share price compared to the assumed MRP of 6.8 per cent.

TABLE 9.10 SENSITIVITY MARKET RISK PREMIUM AND LONG-TERM GROWTH RATE

		Terminal growth rate				
MRP	WACC	0.2%	0.4%	0.6%	0.8%	1.0%
5.8%	6.3%	64	65	67	69	71
6.3%	6.8%	57	58	60	61	63
6.8%	7.2%	51	52	53	54	56
7.3%	7.7%	46	47	48	49	50
7.8%	8.1%	41	42	43	44	44

Source: Source: Author's illustration based on forecasted performance

The cost of equity is only one part in the cost of capital and should naturally be of more significance due to Byggmax's capital structure. However, the cost of debt and the cost of COL are important parameters and should certainly also be analysed. Since the cost of debt and the cost of COL are assumed to be equal the intervals presented in table 9.11 reflect changes in both the cost of debt and the cost of COL. As believed, the estimated share price is less sensitive to changes in the cost of debt/COL than to changes in e.g. beta or MRP. Lowering the cost of debt/COL with 0.5 percentage points would result in an estimated share price of SEK 55 (+3%). Conversely, a hike in the cost of debt/COL with 0.5 percentage points would result in an estimated share price of SEK 52 (-3%).

TABLE 9.11 SENSITIVITY COST OF DEBT/COL AND LONG-TERM GROWTH RATE

		Terminal growth rate				
r_d/r_{COL}	WACC	0.2%	0.4%	0.6%	0.8%	1.0%
2.6%	7.0%	53	55	57	58	60
3.1%	7.1%	52	53	55	57	58
3.6%	7.2%	50	52	53	55	57
4.1%	7.3%	49	50	52	53	55
4.6%	7.5%	48	49	50	52	53

Source: Source: Author's illustration based on forecasted performance

The sensitivity analysis clearly displays that the valuation can be skewed by estimation errors in almost every step. It also highlights its main drivers and its effect. However, the inputs in this report have been estimated by well-known methods and with utmost care and are considered to be valid. Furthermore, the sensitivity tables also display that the observed share price as of April 16, 2015 of SEK 59.5 requires more optimistic assumptions to be fulfilled. This fact makes the next section where an upside and a downside case are presented particularly interesting.

9.4.3 SCENARIO ANALYSIS

The base case valuation in this report has been prepared through a careful analysis of the industry, the company and its financial performance and is deemed to be the most probable outcome. However, the development could be either more positive or more negative than anticipated. Hence, a more optimistic scenario (upside case) and a slightly more pessimistic scenario (downside case) will complement the main valuation and add additional insights. The two cases will be briefly presented below and the scenarios can be viewed in its entirety in appendix 1.10 and 1.11.

9.4.3.1 UPSIDE CASE

In similarity with the base case, the main driver in the upside case is sales in terms of new store openings and sales increase in existing stores. The upside case assumes that three more stores are opened every year leading to a total of 230 by the end of 2024e. The faster expansion of stores results in a CAGR of 6.5 per cent between 2014 and 2024e, which is slightly higher than between 2010 and 2014. The growth is not unrealistic by any means but sustaining growth over time is hard to achieve.

The larger volumes also increase Byggmax's power over suppliers and leads to slightly better terms in procurement rendering in reduction of goods for resale by 0.2 percentage points in each year compared to the base case. The ROIC gradually improves with the same expected dip due to international expansion and amounts to 12.1 per cent in the terminal period.

The aggregated effects of the changes in parameters yield an intrinsic share price of SEK 62, equivalent to an upside of 16 per cent compared to the base case and a 4 per cent premium to the observed share price.

The upside case clearly displays the market's estimation of continued high growth and improvement in the ROIC. The relatively aggressive growth estimations only leads to a 4 per cent premium to the observed share price and shows that the market puts high value on growth in a market where organic growth is scarce.

9.4.3.2 DOWNSIDE CASE

The downside case is modelled in the same manner as the base and upside cases, i.e. driven mainly by new stores. The downside case assumes that two stores fewer than the base case are opened every year. This result in a total of 180 stores in the end of the explicit forecasting period, which is the total number of stores that Byggmax sees viability for in current markets. Consequently, the international expansion assumed in the base and upside case is abolished and a smoother development of ROIC is subsequently observed due to absence of increased

other costs due to international expansion. In addition, goods for resale is assumed to be 0.2 percentage points higher than the in the base case due to slightly lower volumes. Furthermore, the CAGR between 2014 and 2024e is 4.4 per cent, which is 1.9 percentage points lower than the CAGR between 2010 and 2014.

The more pessimistic scenario results in intrinsic value corresponding to SEK 50, a 6 per cent decrease compared to the base case and discount of 16 per cent in relation to the observed share price.

9.5 RELATIVE VALUATION

Even though the DCF is considered to be the most superior valuation model it is however beneficial to check the accuracy using trading comparables. The relative valuation also yields interesting insights on how the market estimate future growth, strategy effectiveness etc. (Koller et al. 2010).

The relative valuation will be based on EV/Sales, EV/EBITDA and EV/EBIT, which are the most popular multiples. The enterprise multiples are not affected by the capital structure and considered to be more relevant than e.g. P/E, which is affected by the capital structure and more sensitive to differences in accounting treatment (Rosenbaum & Pearl 2009).

The relative valuation will be based on forward-looking multiples since the value of a company is based on expected future cash flow. In addition, forward-looking multiples are usually normalized making them better to project underlying operations (Koller et al. 2010). The forward-looking multiples are based on consensus estimates compiled by Factset while Byggmax's are implied from the DCF-valuation.

9.5.1 PEER GROUP

The peer group is based on the publicly traded competitors mentioned in section four, i.e. Hornbach, Kesko (the owner of K-rauta) and Wolseley (the owner of Beijer). Naturally, the peer group is augmented with European DIY retailers and groups with larger home improvement segments. The additional peers are Grafton Group, Home Retail Group, Kingfisher, Mr Bricolage and Travis Perkins.

9.5.2 EV/SALES

The EV/Sales multiples for 2015e and 2016e are significantly lower than for Byggmax, ranging from 0.2x to 0.8x. Based on the median, Byggmax is valued at only SEK 16 and SEK 17 on 2015e and 2016e, respectively. In terms of expected sales growth Byggmax is believed to grow slightly more than the peer group median. However, Travis Perkins and Wolseley are

expected to grow significantly more although they are trading at much lower sales multiples. The EV/Sales multiple has inherent limitations as it does not indicate profitability (Rosenbaum & Pearl 2009). Byggmax's higher margins motivates a higher EV/Sales multiple.

9.5.3 EV/EBITDA

In terms of EV/EBITDA the median multiples for 2015e and 2016e are 9.0x and 8.2x, respectively. By applying those multiples, Byggmax's share price is estimated to SEK 40 and SEK 44, still well below the observed share price of SEK 59.5. However, Byggmax is estimated to have an EBITDA margin well above the median of 7.5 per cent in 2015e and should thus be valued higher. Byggmax's implied EV/EBITDA in 2015e is 11.0x, which is the second highest of the peers and they also have the highest estimated EBITDA margin.

9.5.4 EV/EBIT

Byggmax has one of the highest EV/EBIT multiples compared to the peer group. The median EV/EBIT multiples suggests a valuation of SEK 39 to SEK 40. Again, Byggmax has better EBIT margin than all of its peers, supporting a higher valuation. For instance, by applying Grafton Group's 2015e multiple of 15.1x the estimated share price of Byggmax is SEK 58, which is very close to the observed share price.

9.5.5 SUMMARY OF RELATIVE VALUATION

The key take away from the relative valuation is that Byggmax has a very high valuation in all the three investigated multiples. They have the highest profitability in terms of both EBITDA and EBIT margin and should naturally be valued at higher multiples, i.e. on par with Grafton Group and Wolseley. Applying the highest EBITDA and EBIT multiples results in an estimated share price of SEK 58 to SEK 60, close to the observed share price.

TABLE 9.12 TRADED COMPARABLES

	EV/Sales		EV/EBITDA		EV/EBIT		Sales CAGR	EBITDA margin	EBIT margin
	2015e	2016e	2015e	2016e	2015e	2016e	2014-2017e	2015e	2015e
Grafton Group Plc	0.9x	0.8x	11.9x	10.3x	15.1x	12.9x	8.5%	7.5%	5.9%
Home Retail Group plc	0.2x	0.2x	5.0x	4.7x	10.4x	9.7x	6.2%	4.7%	2.3%
Hornbach-Baumarkt-AG	0.3x	0.3x	6.2x	5.6x	9.1x	7.9x	n.a.	5.4%	3.7%
Kesko Oyj Class B	0.4x	0.4x	9.2x	9.0x	14.4x	13.2x	0.9%	4.8%	3.1%
Kingfisher Plc	0.8x	0.8x	8.8x	8.3x	12.0x	11.1x	4.3%	9.1%	6.7%
Mr Bricolage SA	0.3x	0.3x	3.4x	3.0x	4.7x	4.1x	2.5%	8.1%	5.8%
Travis Perkins plc	0.8x	0.8x	9.6x	8.6x	11.6x	10.4x	12.6%	8.5%	7.0%
Wolseley Plc	0.8x	0.7x	10.3x	9.1x	11.6x	10.3x	13.1%	7.4%	6.6%
Average	**0.6x**	**0.5x**	**8.0x**	**7.4x**	**11.1x**	**10.0x**	**6.9%**	**6.9%**	**5.1%**
Median	**0.6x**	**0.6x**	**9.0x**	**8.5x**	**11.6x**	**10.3x**	**6.2%**	**7.5%**	**5.8%**
Byggmax (implied)	**1.2x**	**1.1x**	**11.0x**	**9.7x**	**14.2x**	**12.7x**	**7.7%**	**10.8%**	**8.3%**
Premium/disocunt median	*95%*	*91%*	*22%*	*15%*	*22%*	*23%*	*24%*	*44%*	*42%*

Source: Author's illustration based on data from Factset and forecasted performance

10. CONCLUSION

The sole purpose of this thesis was to evaluate Byggmax and see how the intrinsic value corresponded to that of the market as of April 16, 2015. The valuation is particularly interesting in the current market environment with very low interest rates and depressed economic outlook, making valuation of a fast growing company particularly interesting.

The valuation was performed using well-renowned models together with an extensive analysis of the DIY industry and Byggmax's market position. The analysis clearly displayed that Byggmax has a unique market position as a highly efficient, high-quality and affordable DIY retailer. However, the DIY industry was found to be highly competitive with several forces driving industry returns downwards. The observed industry characteristics together with the company's performance was fundamental in estimating future financial performance on which the DCF valuation was conducted. The intrinsic value was estimated to be SEK 53 in contrast to the observed market price of SEK 59.5, corresponding to a discount of 10 per cent.

In addition to the DCF valuation, Byggmax was also valued using traded comparables to see how the current market environment affected the valuation and how similar companies are valued. The relative valuation showed that Byggmax has some of the highest multiples compared to the peer group, supported by higher margins. The estimated share price based on the highest multiples in the peer group implied a share price of SEK 58 to SEK 60, 10-13 per cent higher than the intrinsic valuation and in line with the observed share price.

As described in the beginning of this thesis, DCF is the preferred method due to its flexibility, acceptance and reliance on estimated cash flow. The flexibility is unfortunately one of the main drawbacks when applying the DCF framework as it is prone to estimation errors, dependent on realistic forecasts and highly sensitive to changes in the WACC. Despite its shortcomings it is believed that the DCF is the most accurate method and that the underlying estimations and projections have been thoughtfully handled. The estimated discount of 10 per cent is believed to be driven by the current market environment where investors are searching for high growth and yield, ultimately driving asset prices to levels not supported by intrinsic models. The scenario analysis also showed that the current share price is reliant on very strong growth expectations and maintained profitability.

To conclude, Byggmax is a high quality company with a unique positions in market. The current valuation is however dependent on growth assumptions deemed too optimistic and consequently believed to be overvalued, as the estimated future cash flow is believed to be insufficient to support the current share price.

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LIST OF ABBREVIATIONS

AEV	Adjusted enterprise value
CAGR	Compounded annual growth rate
Capex	Capital expenditure
CAPM	Capital Asset Pricing Model
COL	Capitalized operating leases
DCF	Discounted cash flow
DIY	Do-it-yourself
ERP system	Enterprise resource planning system
EV	Enterprise value
EVA	Economic value added
FCF	Free cash flow
FLEV	Financial leverage
FTEs	Full time employees
GDP	Gross domestic product
IAS	International Accounting Standards
IC	Invested capital
IFRS	International Financial Reporting Standards
MRP	Market risk premium
NBC	Net borrowing cost
NFO	Net financial obligations
NOPLAT	Net operating profit less adjusted taxes
PEST	Political, Economic, Social, Technological
PP&E	Property, plant and equipment
RFR	Rådet för finansiell rapportering
ROE	Return on equity
ROIC	Return on invested capital
SWOT	Strengths, Weaknesses, Opportunities, Threats
WACC	Weighted average cost of capital

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APPENDIX

APPENDIX 1.0 – CAPITALIZED OPERATING LEASES – BYGGMAX

	2009	2010	2011	2012	2013	2014
Operating lease expense	98.3	105.5	116.3	113.6	146.7	171.3
Asset value	522	606	722	757	858	853
Implied interest expense	18	19	22	26	27	31

APPENDIX 1.1 – CAPITALIZED OPERATING LEASES – HORNBACH

	2009	2010	2011	2012	2013
Operating lease expense	134	139	145	149	155
Asset value	1,091	1,015	969	975	1,078
Implied interest expense	33	33	30	29	29

APPENDIX 1.2 – REFORMULATED BALANCE SHEET - BYGGMAX

SEKm	31-Dec-10	31-Dec-11	31-Dec-12	31-Dec-13	31-Dec-14
Total funds invested: Uses					
Operating assets					
Operating cash	34	23	34	33	31
Accounts receivable	2	4	8	2	2
Prepaid expenses and accrued income	24	32	27	28	44
Other current assets	41	63	52	40	54
Inventories	351	425	466	538	613
Total operating current assets	**451**	**547**	**586**	**642**	**743**
Operating liabilities					
Accounts payable	-269	-269	-279	-285	-370
Accrued expenses and deferred income	-56	-61	-70	-77	-88
Other liabilities	-8	-13	-21	-25	-29
Total operating current liabilities	**-333**	**-342**	**-370**	**-386**	**-487**
Operating working capital	**118**	**205**	**217**	**255**	**255**
Property, plant and equipment	126	141	175	194	268
Capitalized operating leases	606	722	757	858	853
Other long term recievables	1	1	11	23	21
Invested capital (excluding goodwill)	**850**	**1,068**	**1,159**	**1,329**	**1,397**
Goodwill	1,051	1,051	1,051	1,051	1,051
Intangible assets	13	22	28	30	32
Cumulative amortization	9	14	22	32	42
Invested capital (including goodwill)	**1,923**	**2,155**	**2,260**	**2,442**	**2,522**
Non operating assets					
Excess cash	0	0	0	0	0
Derivatives	4	1	1	1	1
Total funds invested	**1,926**	**2,156**	**2,261**	**2,443**	**2,523**
Total funds invested: Sources					
Short term debt	240	344	484	504	481
Long term debt	239	166	17	6	2
Derivatives	5	0	0	0	0
Capitalized operating leases	606	722	757	858	853
Debt and debt equivalents	**1,090**	**1,232**	**1,258**	**1,368**	**1,335**
Deferred tax assets	-16	-4	-2	-4	-5
Deferred tax liabilities	96	69	69	78	102
Cumulative amortization	9	14	22	32	42
Shareholders equity	459	460	460	453	455
Retained earnings	289	384	455	517	592
Equity and equity equivalents	**837**	**923**	**1,003**	**1,076**	**1,188**
Total funds invested	**1,927**	**2,156**	**2,261**	**2,443**	**2,523**

APPENDIX 1.3 – REFORMULATED BALANCE SHEET - HORNBACH

EURm	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13
Total funds invested: Uses				
Operating assets				
Operating cash	141	149	150	157
Trade recievables	4	7	6	9
Recievables from affiliated companies	1	1	2	2
Other receivables and assets	51	49	44	38
Inventories	459	476	482	505
Total operating current assets	**656**	**682**	**683**	**710**
Operating liabilities				
Trade payables and advance payments recieved for orders	-213	-189	-198	-227
Liabilities to affiliated companies	-1	-1	-1	-1
Other liabilities	-48	-55	-50	-57
Other provisions and accrued liabilities	-67	-68	-58	-69
Total operating current liabilities	**-331**	**-312**	**-307**	**-355**
Operating working capital	**326**	**370**	**376**	**355**
Property, plant and equipment	593	644	702	712
Capitalized operating leases	1,015	969	975	1,078
Other long term assets, net of liabilities	-12	-17	-18	-19
Invested capital (excluding goodwill)	**1,921**	**1,966**	**2,036**	**2,127**
Goodwill	0	0	0	0
Intangible assets	20	16	13	11
Cumulative amortization	19	25	31	31
Invested capital (including goodwill)	**1,961**	**2,008**	**2,080**	**2,169**
Non operating assets	**0**	**0**	**0**	**0**
Excess cash	282	255	167	214
Derivatives	5	0	0	0
Assets held for sale	5	0	1	0
Investment property	6	6	6	6
Financial assets	1	1	1	0
Total funds invested	**2,259**	**2,270**	**2,256**	**2,390**
Total funds invested: Sources				
Short term debt	101	25	9	7
Long term debt	339	407	373	365
Provisions for pensions	1	0	2	1
Capitalized operating leases	1,015	969	975	1,078
Debt and debt equivalents	**1,456**	**1,401**	**1,360**	**1,451**
Deferred tax assets	-11	-11	-13	-9
Deferred tax liabilities	66	64	55	55
Cumulative amortization	19	25	31	31
Shareholders equity	191	239	239	239
Retained earnings	539	553	584	623
Equity and equity equivalents	**804**	**869**	**896**	**939**
Total funds invested	**2,259**	**2,270**	**2,256**	**2,390**

APPENDIX 1.4 – REFORMULATED INCOME STATEMENT - BYGGMAX

SEKm	2010	2011	2012	2013	2014
Net sales	2,773	2,987	3,090	3,216	3,547
Other revenue	3	5	7	7	12
Goods for resale	-1,948	-2,088	-2,159	-2,228	-2,444
Other costs	-299	-334	-361	-382	-410
Personell costs	-215	-247	-273	-309	-340
Add: Operating lease interest	19	22	26	27	31
Total expenses	**-2,443**	**-2,647**	**-2,766**	**-2,892**	**-3,162**
EBITDA	**333**	**345**	**331**	**331**	**397**
Depreciation and amortization	-39	-46	-53	-57	-70
EBIT	**294**	**299**	**278**	**274**	**328**
Operating taxes	-81	-83	-62	-62	-75
NOPLAT	**213**	**217**	**216**	**212**	**252**
Net financial expense	-37	-26	-21	-9	-14
Remove: Operating lease interest	-19	-22	-26	-27	-31
Add: Tax shield	15	13	10	8	10
Other comprehensive income/expense	-3	1	-1	-7	-1
Comprehensive income for the period	**169**	**183**	**179**	**177**	**218**
Taxes					
Tax rate	27.5%	27.6%	22.3%	22.7%	23.0%
Current tax	-65	-70	-52	-54	-65
Tax shield	-15	-13	-10	-8	-10
Operating cash taxes	-81	-83	-62	-62	-75

APPENDIX 1.5 – REFORMULATED INCOME STATEMENT - HORNBACH

EURm	2010	2011	2012	2013
Net sales	2,787	2,951	2,992	3,112
Other revenue	24	22	25	18
Cost of goods sold	-1,763	-1,861	-1,890	-1,960
Selling and store expenses	-781	-820	-846	-873
Pre-opening expenses	-5	-6	-9	-10
General and administration	-107	-117	-129	-133
Other income and expenses	17	14	18	7
Add: Operating lease interest	33	31	29	29
Total expenses	**-2,606**	**-2,759**	**-2,827**	**-2,941**
EBITDA	**205**	**214**	**190**	**189**
Depreciation and amortization	-54	-57	-57	-56
EBIT	**151**	**158**	**133**	**133**
Operating taxes	-40	-43	-39	-46
NOPLAT	**111**	**115**	**94**	**87**
Net financial expense	-17	-21	-24	-19
Remove: Operating lease interest	-33	-31	-29	-29
Add: Tax shield	13	14	16	17
Other comprehensive income/expense	14	3	-5	-2
Comprehensive income for the period	**88**	**80**	**52**	**53**
Taxes				
Tax rate	26.3%	27.1%	29.3%	34.5%
Current tax	-27	-29	-23	-29
Tax shield	-13	-14	-16	-17
Operating cash taxes	-40	-43	-39	-46

APPENDIX 1.6 – REFORMULATED FORECASTED INCOME STATEMENT – BYGGMAX

SEKm	2014	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e
Net sales	3,547	3,852	4,157	4,427	4,692	4,908	5,109	5,319	5,537	5,753	5,920	5,954
Other revenue	12	0	0	0	0	0	0	0	0	0	0	0
Goods for resale	-2,444	-2,639	-2,843	-3,023	-3,214	-3,372	-3,526	-3,670	-3,821	-3,970	-4,085	-4,108
Other costs	-410	-462	-486	-518	-549	-574	-613	-638	-664	-690	-710	-715
Personell costs	-340	-370	-395	-416	-436	-452	-470	-489	-509	-529	-545	-548
Add: Operating lease interest	31	33	36	38	40	42	44	46	48	49	51	51
Total expenses	-3,162	-3,438	-3,689	-3,919	-4,159	-4,356	-4,565	-4,752	-4,947	-5,140	-5,289	-5,320
EBITDA	397	414	468	507	533	553	545	567	590	613	631	635
Depreciation and amortization	-70	-94	-110	-121	-126	-125	-120	-113	-108	-105	-103	-103
EBIT	328	320	358	386	407	428	425	454	483	509	528	532
Operating taxes	-75	-72	-81	-87	-92	-97	-96	-103	-109	-115	-120	-121
NOPLAT	252	248	277	299	315	331	329	352	373	393	408	411
Net financial expense	-14	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1
Remove: Operating lease interest	-31	-33	-36	-38	-40	-42	-44	-46	-48	-49	-51	-51
Add: Tax shield	10	9	9	10	11	11	11	12	12	12	12	12
Other comprehensive income/expense	-1	0	0	0	0	0	0	0	0	0	0	0
Comprehensive income for the period	218	218	245	265	279	294	290	312	334	353	367	371
Taxes												
Tax rate	23.0%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%
Current tax	-65	-64	-71	-77	-81	-86	-85	-91	-98	-103	-108	-109
Tax shield	-10	-9	-9	-10	-11	-11	-11	-12	-12	-12	-12	-12
Operating cash taxes	-75	-72	-81	-87	-92	-97	-96	-103	-109	-115	-120	-121

APPENDIX 1.7 – REFORMULATED FORECASTED BALANCE SHEET – BYGGMAX

SEKm	31-Dec-14	31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18	31-Dec-19	31-Dec-20	31-Dec-21	31-Dec-22	31-Dec-23	31-Dec-24	31-Dec-25
Total funds invested: Uses												
Operating assets												
Operating cash	31	27	83	89	94	98	102	106	111	115	118	119
Accounts receivable	2	4	4	4	5	5	5	5	6	6	6	6
Prepaid expenses and accrued income	44	39	42	44	47	49	51	53	55	58	59	60
Other current assets	54	58	62	66	70	74	77	80	83	86	89	89
Inventories	613	674	748	819	868	933	971	1,011	1,052	1,093	1,125	1,131
Total operating current assets	**743**	**801**	**939**	**1,023**	**1,084**	**1,158**	**1,206**	**1,255**	**1,307**	**1,358**	**1,397**	**1,405**
Operating liabilities												
Accounts payable	-370	-385	-416	-443	-469	-491	-511	-532	-554	-575	-592	-595
Accrued expenses and deferred income	-88	-100	-112	-124	-136	-147	-153	-160	-166	-173	-178	-179
Other liabilities	-29	-31	-33	-35	-38	-39	-41	-43	-44	-46	-47	-48
Total operating current liabilities	**-487**	**-516**	**-561**	**-602**	**-643**	**-677**	**-705**	**-734**	**-764**	**-794**	**-817**	**-822**
Operating working capital	**255**	**285**	**378**	**421**	**441**	**481**	**501**	**521**	**543**	**564**	**580**	**584**
Property, plant and equipment	268	331	375	400	406	393	365	346	335	329	327	326
Capitalized operating leases	853	925	998	1,062	1,126	1,178	1,226	1,277	1,329	1,381	1,421	1,429
Other long term recievables	21	23	25	27	28	29	31	32	33	35	36	36
Invested capital (excluding goodwill)	**1,397**	**1,564**	**1,775**	**1,910**	**2,001**	**2,082**	**2,123**	**2,176**	**2,240**	**2,308**	**2,364**	**2,374**
Goodwill	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051
Intangible assets	32	36	40	44	43	43	44	41	38	37	37	36
Cumulative amortization	42	53	64	77	91	105	120	134	149	162	174	187
Invested capital (including goodwill)	**2,522**	**2,704**	**2,931**	**3,081**	**3,186**	**3,282**	**3,338**	**3,402**	**3,478**	**3,558**	**3,626**	**3,649**
Non operating assets												
Excess cash	0	0	1	27	103	132	196	260	273	387	405	485
Derivatives	1	1	1	1	1	1	1	1	1	1	1	1
Total funds invested	**2,523**	**2,705**	**2,933**	**3,109**	**3,291**	**3,415**	**3,534**	**3,664**	**3,752**	**3,946**	**4,032**	**4,134**
Total funds invested: Sources												
Short term debt	481	500	550	550	550	500	450	400	300	300	200	150
Long term debt	2	0	0	0	0	0	0	0	0	0	0	0
Derivatives	0	0	0	0	0	0	0	0	0	0	0	0
Capitalized operating leases	853	925	998	1,062	1,126	1,178	1,226	1,277	1,329	1,381	1,421	1,429
Debt and debt equivalents	**1,335**	**1,425**	**1,548**	**1,612**	**1,676**	**1,678**	**1,676**	**1,677**	**1,629**	**1,681**	**1,621**	**1,579**
Deferred tax assets	-5	-8	-8	-9	-9	-10	-10	-11	-11	-12	-12	-12
Deferred tax liabilities	102	112	121	128	136	142	148	154	161	167	172	173
Cumulative amortization	42	53	64	77	91	105	120	134	149	162	174	187
Shareholders equity	455	455	455	455	455	455	455	455	455	455	455	455
Retained earnings	592	668	753	845	942	1,044	1,145	1,254	1,370	1,493	1,622	1,752
Equity and equity equivalents	**1,188**	**1,280**	**1,385**	**1,497**	**1,615**	**1,737**	**1,858**	**1,987**	**2,123**	**2,266**	**2,411**	**2,554**
Total funds invested	**2,523**	**2,705**	**2,932**	**3,109**	**3,291**	**3,415**	**3,534**	**3,664**	**3,752**	**3,946**	**4,032**	**4,133**

APPENDIX 1.8 – CAPITAL STRUCTURE

	2010	2011	2012	2013	2014	2015
Share price	57.0	26.4	29.0	48.4	52.8	59.5
Shares outstanding, m	60.4	60.4	60.4	60.4	60.4	60.4
Equity	3,441	1,594	1,751	2,922	3,185	3,592
NFO	484	510	501	510	482	482
COL	606	722	757	858	853	853
E/AEV	76%	56%	58%	68%	70%	73%
D/AEV	11%	18%	17%	12%	11%	10%
COL/AEV	13%	26%	25%	20%	19%	17%

APPENDIX 1.8 – CAPITAL STRUCTURE

APPENDIX 1.9 – BASE CASE VALUATION

SEKm	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	TV 2025e
Net sales	3,852	4,157	4,427	4,692	4,908	5,109	5,319	5,537	5,753	5,920	5,954
Other revenue	0	0	0	0	0	0	0	0	0	0	0
Goods for resale	-2,639	-2,843	-3,023	-3,214	-3,372	-3,526	-3,670	-3,821	-3,970	-4,085	-4,108
Other costs	-462	-486	-518	-549	-574	-613	-638	-664	-690	-710	-715
Personell costs	-370	-395	-416	-436	-452	-470	-489	-509	-529	-545	-548
Add: Operating lease interest	33	36	38	40	42	44	46	48	49	51	51
Total expenses	**-3,438**	**-3,689**	**-3,919**	**-4,159**	**-4,356**	**-4,565**	**-4,752**	**-4,947**	**-5,140**	**-5,289**	**-5,320**
EBITDA	**414**	**468**	**507**	**533**	**553**	**545**	**567**	**590**	**613**	**631**	**635**
Depreciation and amortization	-94	-110	-121	-126	-125	-120	-113	-108	-105	-103	-103
EBIT	**320**	**358**	**386**	**407**	**428**	**425**	**454**	**483**	**509**	**528**	**532**
Operating taxes	-72	-81	-87	-92	-97	-96	-103	-109	-115	-120	-121
NOPLAT	**248**	**277**	**299**	**315**	**331**	**329**	**352**	**373**	**393**	**408**	**411**
Remove: Net increase in IC	182	227	151	105	95	56	64	76	81	67	23
FCF	**66**	**50**	**148**	**210**	**236**	**273**	**287**	**298**	**313**	**341**	**389**
Time factor	0.35	1.21	2.21	3.21	4.21	5.21	6.21	7.21	8.21	9.21	
Discount factor	0.98	0.92	0.86	0.80	0.75	0.70	0.65	0.60	0.56	0.53	
Part of period	0.71	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Discounted free cash flow	**46**	**46**	**127**	**168**	**176**	**190**	**186**	**180**	**176**	**179**	

Calculation of EV	
Free cash flow	389
Growth rate	0.6%
Terminal value	**5,848**
Discount factor	0.53
Discounted terminal value	3,076
Sum of discounted free cash flow	1,474
Enterprise value	**4,549**
NFO	-481
COL	-853
Equity value	**3,215**
No of shares outstanding	60.4
Implied value per share (SEK)	**53**
Share price as of April 16, 2015	59.5
Premium/discount (-)	-10%

APPENDIX 1.10 – UPSIDE CASE VALUATION

SEKm	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	TV 2025e
Net sales	3,890	4,267	4,608	4,954	5,241	5,519	5,811	6,119	6,431	6,676	6,715
Other revenue	0	0	0	0	0	0	0	0	0	0	0
Goods for resale	-2,657	-2,910	-3,138	-3,383	-3,590	-3,797	-3,998	-4,210	-4,425	-4,593	-4,620
Other costs	-467	-499	-539	-580	-613	-662	-697	-734	-772	-801	-806
Personell costs	-373	-405	-433	-461	-482	-508	-535	-563	-592	-614	-618
Add: Operating lease interest	33	37	40	43	45	47	50	53	55	57	58
Total expenses	**-3,463**	**-3,778**	**-4,071**	**-4,381**	**-4,640**	**-4,920**	**-5,180**	**-5,455**	**-5,733**	**-5,951**	**-5,985**
EBITDA	**426**	**489**	**537**	**573**	**601**	**599**	**631**	**665**	**698**	**725**	**729**
Depreciation and amortization	-94	-111	-123	-129	-129	-125	-118	-114	-112	-112	-112
EBIT	**332**	**378**	**414**	**443**	**471**	**475**	**513**	**550**	**586**	**613**	**617**
Operating taxes	-75	-85	-94	-100	-107	-107	-116	-125	-133	-139	-140
NOPLAT	**257**	**292**	**321**	**343**	**365**	**367**	**397**	**426**	**453**	**474**	**477**
Remove: Net increase in IC	195	252	183	137	125	85	96	111	119	99	29
FCF	**62**	**40**	**137**	**207**	**240**	**282**	**300**	**315**	**335**	**375**	**448**
Time factor	0.35	1.21	2.21	3.21	4.21	5.21	6.21	7.21	8.21	9.21	
Discount factor	0.98	0.92	0.86	0.80	0.75	0.70	0.65	0.60	0.56	0.53	
Part of period	0.71	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Discounted free cash flow	**43**	**37**	**118**	**165**	**179**	**196**	**195**	**190**	**189**	**197**	

Calculation of EV	
Free cash flow	448
Growth rate	0.6%
Terminal value	**6,746**
Discount factor	0.53
Discounted terminal value	3,548
Sum of discounted free cash flow	1,509
Enterprise value	**5,057**
NFO	-481
COL	-853
Equity value	**3,723**
No of shares outstanding	60.4
Implied value per share (SEK)	**62**
Share price as of April 16, 2015	59.5
Premium/discount (-)	4%

APPENDIX 1.11 – DOWNSIDE CASE VALUATION

SEKm	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	TV 2025e
Net sales	3,827	4,084	4,308	4,524	4,696	4,851	5,011	5,176	5,337	5,459	5,491
Other revenue	0	0	0	0	0	0	0	0	0	0	0
Goods for resale	-2,629	-2,802	-2,951	-3,108	-3,235	-3,357	-3,468	-3,582	-3,693	-3,778	-3,800
Other costs	-459	-478	-504	-529	-549	-568	-586	-606	-624	-639	-642
Personell costs	-367	-388	-405	-421	-432	-446	-461	-476	-491	-502	-505
Add: Operating lease interest	33	35	37	39	40	42	43	44	46	47	47
Total expenses	**-3,423**	**-3,632**	**-3,823**	**-4,019**	**-4,176**	**-4,329**	**-4,472**	**-4,619**	**-4,762**	**-4,872**	**-4,900**
EBITDA	**404**	**452**	**485**	**505**	**519**	**522**	**539**	**557**	**574**	**587**	**591**
Depreciation and amortization	-94	-110	-120	-124	-122	-116	-109	-103	-100	-98	-97
EBIT	**310**	**342**	**365**	**381**	**397**	**406**	**430**	**454**	**474**	**490**	**494**
Operating taxes	-70	-77	-82	-86	-90	-92	-97	-103	-107	-111	-112
NOPLAT	**240**	**265**	**283**	**295**	**307**	**314**	**333**	**351**	**367**	**379**	**382**
Remove: Net increase in IC	173	208	132	85	77	38	45	55	59	49	19
FCF	**67**	**56**	**151**	**209**	**230**	**276**	**287**	**296**	**308**	**329**	**363**
Time factor	0.35	1.21	2.21	3.21	4.21	5.21	6.21	7.21	8.21	9.21	
Discount factor	0.98	0.92	0.86	0.80	0.75	0.70	0.65	0.60	0.56	0.53	
Part of period	0.71	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Discounted free cash flow	**47**	**52**	**129**	**167**	**172**	**192**	**186**	**179**	**174**	**173**	

Calculation of EV	
Free cash flow	363
Growth rate	0.6%
Terminal value	**5,460**
Discount factor	0.53
Discounted terminal value	2,872
Sum of discounted free cash flow	1,470
Enterprise value	**4,342**
NFO	-481
COL	-853
Equity value	**3,008**
No of shares outstanding	60.4
Implied value per share (SEK)	**50**
Share price as of April 16, 2015	59.5
Premium/discount (-)	-16%

APPENDIX 1.12 - FORECASTED INCOME STATEMENT

SEKm	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e
Net sales	3,852	4,157	4,427	4,692	4,908	5,109	5,319	5,537	5,753	5,920	5,954
Other revenue	0	0	0	0	0	0	0	0	0	0	0
Total revenue	**3,852**	**4,157**	**4,427**	**4,692**	**4,908**	**5,109**	**5,319**	**5,537**	**5,753**	**5,920**	**5,954**
Goods for resale	-2,639	-2,843	-3,023	-3,214	-3,372	-3,526	-3,670	-3,821	-3,970	-4,085	-4,108
Other costs	-462	-486	-518	-549	-574	-613	-638	-664	-690	-710	-715
Personell costs	-370	-395	-416	-436	-452	-470	-489	-509	-529	-545	-548
Total expenses	**-3,471**	**-3,724**	**-3,958**	**-4,200**	**-4,398**	**-4,609**	**-4,798**	**-4,994**	**-5,189**	**-5,340**	**-5,371**
EBITDA	**381**	**432**	**469**	**493**	**511**	**501**	**521**	**543**	**564**	**580**	**584**
Depreciation and amortization	-94	-110	-121	-126	-125	-120	-113	-108	-105	-103	-103
- Depreciation	-83	-98	-107	-112	-111	-105	-98	-94	-92	-91	-90
- Amortization	-11	-13	-14	-14	-14	-15	-14	-13	-13	-12	-12
EBIT	**287**	**322**	**348**	**367**	**385**	**381**	**409**	**435**	**459**	**477**	**481**
Financial income	0	0	0	0	0	1	2	2	2	3	3
Financial expenses	-7	-8	-8	-8	-8	-10	-9	-7	-6	-5	-4
Net interest expense	**-7**	**-8**	**-8**	**-8**	**-8**	**-8**	**-7**	**-5**	**-4**	**-2**	**-1**
Profit before tax	**280**	**314**	**340**	**358**	**377**	**373**	**402**	**430**	**455**	**474**	**480**
Tax	-64	-71	-77	-81	-86	-85	-91	-98	-103	-108	-109
Net income	**216**	**243**	**263**	**277**	**292**	**288**	**311**	**332**	**352**	**367**	**371**
Other comprehensive income/expense	0	0	0	0	0	0	0	0	0	0	0
Comprehensive income for the period	**216**	**243**	**263**	**277**	**292**	**288**	**311**	**332**	**352**	**367**	**371**

APPENDIX 1.13 – FORECASTED BALANCE SHEET

SEKm	31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18	31-Dec-19	31-Dec-20	31-Dec-21	31-Dec-22	31-Dec-23	31-Dec-24	31-Dec-25
Assets											
Current assets											
Cash and cash equivalents	27	84	115	197	231	298	367	384	502	523	604
Derivatives	1	1	1	1	1	1	1	1	1	1	1
Accounts receivable	4	4	4	5	5	5	5	6	6	6	6
Prepaid expenses and accrued income	39	42	44	47	49	51	53	55	58	59	60
Other current assets	58	62	66	70	74	77	80	83	86	89	89
Deferred tax assets	4	4	4	5	5	5	5	6	6	6	6
Inventories	674	748	819	868	933	971	1,011	1,052	1,093	1,125	1,131
Total current assets	**807**	**946**	**1,055**	**1,193**	**1,297**	**1,408**	**1,522**	**1,587**	**1,752**	**1,809**	**1,897**
Fixed assets											
Goodwill	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051
Capitalized expenses for development work	36	40	43	43	43	44	40	38	37	37	36
Property, plant and equipment	331	375	400	406	393	365	346	335	329	327	326
Other long term recievables	23	25	27	28	29	31	32	33	35	36	36
Deferred tax assets	4	4	4	5	5	5	5	6	6	6	6
Total fixed assets	**1,445**	**1,494**	**1,526**	**1,533**	**1,522**	**1,496**	**1,475**	**1,463**	**1,458**	**1,456**	**1,455**
Total assets	**2,251**	**2,440**	**2,581**	**2,726**	**2,819**	**2,904**	**2,997**	**3,050**	**3,209**	**3,266**	**3,352**
Liabilities and equity											
Current liabilities											
Short term debt	500	550	550	550	500	450	400	300	300	200	150
Derivative instruments	0	0	0	0	0	0	0	0	0	0	0
Accounts payable	385	416	443	469	491	511	532	554	575	592	595
Accrued expenses and deferred income	100	112	124	136	147	153	160	166	173	178	179
Other liabilities	31	33	35	38	39	41	43	44	46	47	48
Deferred tax liabilities	8	8	9	9	10	10	11	11	12	12	12
Total current liabilities	**1,024**	**1,119**	**1,161**	**1,202**	**1,187**	**1,165**	**1,145**	**1,075**	**1,105**	**1,029**	**984**
Long term liabilities											
Long term debt	0	0	0	0	0	0	0	0	0	0	0
Derivative instruments	0	0	0	0	0	0	0	0	0	0	0
Deferred tax liabilities	104	112	120	127	133	138	144	149	155	160	161
Total long term liabilities	**104**	**112**	**120**	**127**	**133**	**138**	**144**	**149**	**155**	**160**	**161**
Shareholders equity											
Shareholders equity	455	455	455	455	455	455	455	455	455	455	455
Retained earnings	668	753	845	942	1,044	1,145	1,254	1,370	1,493	1,622	1,751
Total shareholders equity	**1,123**	**1,208**	**1,300**	**1,397**	**1,499**	**1,600**	**1,709**	**1,825**	**1,948**	**2,077**	**2,207**
Total liabilities and shareholders equity	**2,251**	**2,440**	**2,581**	**2,726**	**2,819**	**2,903**	**2,997**	**3,050**	**3,209**	**3,265**	**3,351**

APPENDIX 1.14 – INCOME STATEMENT ASSUMPTIONS

	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e
Sales growth YoY	8.6%	7.9%	6.5%	6.0%	4.6%	4.1%	4.1%	4.1%	3.9%	2.9%	0.6%
Other revenue/Net sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Goods for resale/Net sales	68.5%	68.4%	68.3%	68.5%	68.7%	69.0%	69.0%	69.0%	69.0%	69.0%	69.0%
Other costs/Net sales	12.0%	11.7%	11.7%	11.7%	11.7%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Personell costs/Net sales	9.6%	9.5%	9.4%	9.3%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%
Add: Operating lease interest/Net sales	-0.9%	-0.9%	-0.9%	-0.9%	-0.9%	-0.9%	-0.9%	-0.9%	-0.9%	-0.9%	-0.9%
Total expenses	**89.2%**	89.6%	**89.4%**	**89.5%**	**89.6%**	**90.2%**	**90.2%**	**90.2%**	**90.2%**	**90.2%**	**90.2%**
EBITDA margin	**10.8%**	**10.4%**	**10.6%**	**10.5%**	**10.4%**	**9.8%**	**9.8%**	**9.8%**	**9.8%**	**9.8%**	**9.8%**
Depreciation and amortization	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
- Depreciation/Avg. net PP&E	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%
- Amortization/Avg. Cap. Dev. Costs	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%
EBIT margin	**8.3%**	**8.6%**	**8.7%**	**8.7%**	**8.7%**	**8.3%**	**8.5%**	**8.7%**	**8.8%**	**8.9%**	**8.9%**
Financial income/Average Cash and cash equivalents	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Financial expenses/Average interest bearing debt	1.5%	1.5%	1.5%	1.5%	1.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Tax rate	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%
Dividend	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%

APPENDIX 1.15 – BALANCE SHEET ASSUMPTIONS

	31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18	31-Dec-19	31-Dec-20	31-Dec-21	31-Dec-22	31-Dec-23	31-Dec-24	31-Dec-25
Assets											
Current assets											
Cash and cash equivalents/Net sales	0.7%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Derivatives	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Accounts receivable/Net sales	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Prepaid expenses and accrued income/Net sales	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Other current assets/Net sales	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Deferred tax assets/Net sales	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Inventories/Net sales	17.5%	18.0%	18.5%	18.5%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
Fixed assets											
Goodwill	1,051.0	1,051.0	1,051.0	1,051.0	1,051.0	1,051.0	1,051.0	1,051.0	1,051.0	1,051.0	1,051.0
Capitalized expenses for development work/Net sales	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%
Property, plant and equipment/Net sales	3.8%	3.4%	3.0%	2.5%	2.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Capitalized operating leases/Net sales	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Other fixed assets/Net sales	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Deferred tax assets/Net sales	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Current liabilities											
Short term debt	500.0	550.0	550.0	550.0	500.0	450.0	400.0	300.0	300.0	200.0	150.0
Derivative instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts payable/Net sales	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Accrued expenses and deferred income/Net sales	2.6%	2.7%	2.8%	2.9%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Other liabilities/Net sales	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Current income tax liabilities	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Long term liabilities											
Long term debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Derivative instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred tax liabilities/Net sales	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%