



# CHALMERS

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## **Evaluation of Investment Cases**

An empirical study of industries and acquisitions  
for a long-term investment firm

*Master of Science Thesis*

*in the Management and Economics of Innovation Programme*

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CHALMERS UNIVERSITY OF TECHNOLOGY

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## **Abstract**

Invest AB is a long-term investment firms currently exploring new opportunities to expand its portfolio and increase economic returns. In an effort to identify attractive investment cases, this thesis has screened and evaluated more than 40 industries in Sweden spanning from concrete and window manufacturing to outdoor products and pet stores. Based on literature and Invest AB's investment philosophy, two investment frameworks have been designed to enable an effective and structured evaluation of industries and investment cases. The frameworks encompass integral aspects relating to industry and firm analysis such as profitability, industry structure, and business models.

As a result of an extensive analysis of industries, the industries work-wear, wooden houses, and prefabricated concrete were identified as the most attractive. The three industries are characterized by strong growth, high profitability as well as favorable competitive pressure. Further, several attractive investment cases with sustainable business models, valuable capabilities, and high takeover potential were identified. For instance, the profitable precut manufacturer B4 has a leading position in the Swedish wooden house industry with its unique business model where the firm is able to cost effectively customize houses. In addition, the prefabricated concrete manufacturer C11 is an attractive investment case because of the firm's exceptional production capabilities, which has resulted in double-digit growth as well profitability during the last decade. Lastly, the most attractive investment case is the premium work-wear manufacture A12 with its unique value chain position controlling the largest retail chain in Sweden. A12 has a strong position for consolidating the highly fragmented retail sector as well as functioning as a platform for additional investments in the work-wear manufacturing industry. The identified investment cases enable Invest AB to strengthen its current portfolio with attractive firms in leading market positions and strong competitive advantages. Also, there is strong potential for the investment firm to further develop the companies in areas such as add-on investments, product offerings, and value chain activities.

**Keywords:** industry analysis, firm analysis, investment frameworks, investment cases

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# **1. Introduction**

An introduction to the overall research project is given in this chapter by presenting background, overall purpose, as well as disposition of the report.

## **1.1 Background**

During the latter half of the 20th century, several leading scholars such as Porter (1980), Grant (1991), and Wernerfelt (1984) have introduced and refined a multitude of different business and management theories for analyzing industries and firms. For instance, the seminal work *Competitive Strategy* by Porter in 1980 emphasized the importance of industry structure, which shapes competitive pressure and drives firm performance. In addition to industry structure, other important characteristics to consider are competitive landscape, growth, and value chain (Cullinan et al., 2004; Rosenbloom, 2002). Internal as well as external factors such as government policy, strategic groups, and industry concentration are also of importance for industry analysis (Grant, 2013; Porter, 1980; Besanko, 2010). With regard to firm analysis, Grant (1991) emphasizes the resource-based view where the firm's competitive advantage is derived from internal resources and capabilities. During recent years, another area that has been growing in importance within business and management research is business models. Specifically, business models include the core building blocks that define how firms create and capture value (Zott et al., 2011; Osterwalder & Pigneur, 2009). Other important aspects to include in the firm analysis are financial performance, market position, and ownership situation (Hansmann, 1988; Rosenbloom, 2002; Angwin, 2001). Thus, there are numerous factors to take into considerations when evaluating acquisitions, which require in-depth analysis of industries as well as firms. In an effort to achieve a more successful mergers & acquisitions (M&A) process, firms adopt structured frameworks with clearly defined investment criteria to evaluate investment cases (Rosner, 2005; Collan & Kinnunen, 2011; Silber & Thomson, 2010). However, the selection and relative importance of individual evaluation criteria depend on integral factors such as strategic rational of the deal and overall investment philosophy (Rosenbloom, 2002; McDonald et al., 2005; Rosner, 2005). As a consequence, there is no single, comprehensive investment framework that encompasses the most important elements of industry, firm, and investment theory, which makes it difficult for firms to achieve a successful screening and evaluation process.

Currently, the investment firm Invest AB (anonymized) faces problems with effective identification and screening of potential acquisitions while exploring new investment opportunities. Specifically, the firm lacks a comprehensive framework for evaluating industries as well as business cases. There is also considerable uncertainty regarding the definition of an attractive investment opportunity for the firm. Invest AB needs resources as well as new ideas to identify and evaluate industries and firms to invest in. Consequently, Invest AB is in need of an in-depth screening of attractive industries as well as firms to invest in. Also, Invest AB needs a customized investment framework to ensure an effective screening and evaluation process. The investment firm is part of a large conglomerate active in multiple industries. Invest AB was founded in an effort to diversify the conglomerate's business portfolio while providing long-term growth opportunities. The firm invests in leading public and non-public firms with strong financial and market positions based in Sweden. In comparison to other investment firms such as private equity funds, Invest AB has a long-term investment focus without a specific exit horizon. Further, the firm has ca. 10 billion SEK in assets and the current portfolio includes a handful of firms in industries such as retail, consumer goods, and energy.

## **1.2 Purpose**

Based on the problem description, the overall purpose of the thesis can be divided into two integral parts. Firstly, the report aims to create two structured investment frameworks for an effective and objective screening process, which will be based on literature as well as Invest AB's investment philosophy. Secondly, the frameworks will be used to identify and evaluate attractive industries and business cases. Consequently, the purpose of the thesis is:

- Create an industry evaluation framework and a business case evaluation framework for Invest AB
- Identify and evaluate attractive industries and business cases using the defined investment frameworks

## **1.3 Delimitations**

For the conducted thesis, several delimitations have been made to limit the scope of the study. In terms of evaluation of industries and firms, the process was based on Invest AB's investment situation. As a consequence, the presented results and drawn conclusions will to a certain degree be limited to Invest AB. The report also does not aim to create a generic investment framework that is suitable for all investment firms. Another important aspect not taken into consideration is the role of portfolio firms. For instance, some firms within the portfolio can function as cash

cows financing the growth of other firms. When evaluating industries and business cases, financial aspects relating to the specific acquisition such as valuations and return on investment were not calculated because of limited resources. Instead, the evaluation focused on other aspects such as business models and capabilities. Further, the investigated firms were limited to Sweden because of Invest AB's investment requirements. Finally, the report does not include an analysis of all industries in Sweden. Due to the scarce resources, a subset of all industries was analyzed. Thus, there is a risk that there are more attractive industries in Sweden than the ones investigated in the thesis.

## **1.4 Disposition**

The report starts with the literature review presenting theory relating to industry and firm analysis as well as investment frameworks. Thereafter, the method used for conducting the research is discussed in the following chapter. The chapter also includes an analysis of the overall research quality. Based on the presented literature, the frameworks used for screening and evaluating industries and firms are defined in chapter 4. The following chapter presents and discusses the result of the conducted industry analysis. In chapter 6, the identified investment cases in the three most attractive industries are analyzed using the business case framework. A discussion of the result from the business case evaluation as well as potential actions for the future is presented in chapter 7. Lastly, concluding remarks and suggestions for future research are given in chapter 8.

## **2. Literature review**

In this chapter, the theoretical foundation for the thesis is presented. Firstly, literature related to industry analysis such as competitive pressure, concentration, and strategic groups is discussed. Thereafter, theory used for analyzing firms including business models, resources and capabilities as well as complementary assets is introduced. Lastly, an introduction to frameworks for evaluating industries and business cases is given.

During recent decades, there has been considerable debate concerning the relative importance of factors such as industry structure and business-specific effects on firm performance (Hawawini et al., 2003). For example, industrial organization scholars such as Porter (1980) and Scherer (1980) argue that industry structure is the main determinant of firm performance. Specifically, industry structure influences the nature of competition, which in turn determines firm profitability (Porter, 1980). Conversely, the resource-based view with scholars such as Grant (1991) argue that profitability is driven by the firm's competitive advantage relative its rivals, which is derived from internal resources such as equipment, brand name, and distribution network. However, numerous studies by researches such as McGahan & Porter (1997), Rumelt (1991), and Schmalensee (1985) have highlighted that profitability differs across industries as well as within. Consequently, a common view is that profitability is determined by both industry structure and firm-specific factors (Besanko, 2010). Thus, industry as well as firm analysis is needed when identifying and evaluating firms to invest in.

### **2.1 Industry analysis**

Over the years, several leading scholars have introduced new methods and tools for analyzing industries and contributed to the evolution of this important area of research within management and business studies (Marszk, 2012). There are several areas that are important to consider during industry analysis such as overall market, customers, and competitive landscape. With regard to market and customers, factors to evaluate include size, growth, and customer behavior for the overall industry as well as individual segments. (Cullinan et al, 2004) The segmentation can be based on variables such as distribution channel, product category, or geographical location (Porter, 1980). In terms of competitive landscape, it is important to map out relevant firms with regard to market share, position, and main characteristics (Rosenbloom, 2002). In addition, Porter (1980) emphasizes an in-depth analysis of the industry structure in an effort to determine the competitive pressure, which influence the industry's profitability. Specifically, Porter (1980) suggests that five competitive forces including threat of entry, bargaining power

of buyers, and rivalry among existing competitors determine the competitive pressure. Other factors such as value chain, cost structure, and innovation is also of value during an industry analysis (Porter, 1980). Specifically, innovation is often closely related to industry shakeouts and changes in the competitive landscape (Klepper, 1996; Marszk, 2012). Another important aspect to consider is cyclicality, which differs across industries and increases volatility of earnings (Damodaran, 2009; Berman & Pfleeger, 1997). Further, industries evolve through different stages such as growth, maturity, and decline, which are characterized by different levels of growth, uncertainty, and risk (Porter, 1980). Consequently, an evaluation of the industry life cycle is of importance when analysing industries. Lastly, several authors including Babatunde & Adebisi (2012) highlight the importance of analyzing external factors influencing the industry such as government, social structure, and economy. Thus, there is a multitude of internal as well as external factors to identify and evaluate when analyzing industries. In this section, the most important tools, methods, and factors for the thesis are presented.

### **2.1.1 External environment**

As mentioned, it is necessary to conduct an in-depth evaluation of the external environment influencing the industry. External factors such as government policy, demographic changes, and technological changes enable new opportunities to be pursued (Grant, 2013). However, external factors might also be a threat to the industry leading to shakeouts and change in the competitive environment (Marszk, 2012). Thus, the external environment is a central determinant of the firms' overall success. Also, an analysis of external factors is a valuable input during formulation of future strategies (Babatunde & Adebisi, 2012). The external elements influencing an industry can be categorized using the PEST framework into political, economical, social, and technological factors (Grant, 2013). Political include aspects such as stability, legislation, and tax policy that provides structure and guidance to firms influencing actions and behavior (Babatunde & Adebisi, 2012; Williamson, 2000). For example, introduction of tax benefits might enable firms to pursue new business opportunities (Groba & Breitschopf, 2013). Economical encompasses factors such as interest rates, inflation, and growth that all impact the firm's financial environment (Babatunde & Adebisi, 2012). In contrast, social factors focuses on norms and values as well as demographic dimensions including population size and age distribution, which impact the demands for different products. Lastly, technological include aspects such as rate of innovation and R&D activity. Historically, technological change has had a profound impact on industries as demonstrated by

Christensen (1997) with examples such as hydraulic excavators replacing mechanical, which lead to a complete new competitive landscape.

### **2.1.2 Competitive pressure**

With seminal works such as *Competitive Strategy* (1980) and *Competitive Advantage* (1985), Michael Porter is one of the most prominent scholars within business and management thinking heavily influencing industry analysis. One of Porter's most important contributions to the field is the five forces framework that suggests that industry profitability is a result of industry structure (Marszk, 2012). Porter (1980) argues that industry profitability is determined by the collective pressure from the following five competitive forces: threat of entry, rivalry among existing firms, bargaining power of suppliers, bargaining power of buyers, and threat of substitutes, which are all described below. As a consequence, these sources of competitive pressure can be used to explain the difference in profitability across industries such as medical equipment and airlines (Grant, 2009). In addition, an evaluation of the industry structure is necessary for formulating an effective strategy to position the firm relative the competitive forces in the industry (Porter, 2007). An in-depth understanding of the industry structure can also be used to forecast industry profitably, which is of importance when making long-term investment decisions. Industry profitably can be forecasted by anticipating how changes such as new technologies or different customer behavior impact the underlying competitive forces. (Grant, 2013) Lastly, firms are able to reshape industry structure through strategies such as introducing standards to reduce supplier power that lowers the competitive pressure and increases profitability (Porter, 2007). In sum, the five forces framework is a useful tool to analyze industry structure and act as an important input to strategy formulation. However, limitations of the framework include oversimplification of value chains and difficulties regarding definition of the industry (Grundy, 2006).

As mentioned, there are five forces determining the competitive pressure in the industry. Firstly, threat of entry is a source of competitive pressure as entry of new firms increases capacity and internal rivalry, which erodes profits (Besanko, 2010). Seven major barriers to entry including economies of scale, switching costs, and capital requirements determine the threat of entry. For example, capital requirements such as necessary investments in factories, R&D, and marketing can act as a barrier to entry for new firms (Porter, 1980). Secondly, rivalry among existing firms is an integral determinant of the collective competitive pressure influencing industry profitability (Grant, 2013). Internal rivalry is a result of the nature as well as intensity of the competition in the industry. For instance, competing on price is often detrimental leading to

eroding profit margins. (Porter, 2007) There are several structural factors such as industry growth, diversity of competitors, and industry concentration determining the intensity of competition among firms (Grant, 2013). Thirdly, bargaining power of suppliers influence industry profitability. The bargaining power is high if the number of suppliers is low, products sold by suppliers are differentiated, and there is a risk of forward integration into the industry. (Besanko, 2010) Fourthly, bargaining power of buyers is another competitive force with attributes similar to the previous (Porter, 1980). Lastly, threat of substitutes limits the industry's profitability by influencing the prices firms are able to charge (Porter, 2004).

### **2.1.3 Strategic groups and generic strategies**

In addition to the five forces analysis, an integral part of industry analysis is segmenting competitors along strategic dimensions such as specialization, channel selection, and price policy (Porter, 1980). As a consequence, firms within the strategic groups share similar strategies, competences, and assets (Smith al., 1997). Aside from analyzing the competitive environment, strategic group analysis is also useful for formulating strategies, making investment decisions, and understanding firm performance (Budayan, 2008). Porter (1980) argues that there is a strong relationship between group membership and performance, which is to a great extent attributed to the existence of mobility barriers. Mobility barriers protect groups from outside competition by preventing firms from moving to a new strategic position (Cool & Dierickx, 1993). According to McGee & Thomas (1986), the three major sources of mobility barriers are industry supply characteristics (e.g. economies of scale and R&D capability), market-related characteristics (e.g. product line and geographic coverage), and characteristics of the firm (e.g. ownership and management skills). Other characteristics of the strategic group such as threat of substitutes as well as the firm's position within the group determine of firm performance (Porter, 1980).

As mentioned, several strategic dimensions can be used to categorize firms within an industry. Dess & Davis (1984) suggest that one useful approach is to form strategic groups based on Porter's generic competitive strategies. There are three generic strategies that enable firms to gain a long-term competitive position relative the five forces (Porter, 1980). Firstly, firms pursuing a cost leadership strategy are able to produce products at a lower cost than competitors, which enables them to achieve higher returns (Besanko, 2010). Consequently, cost leadership involves a strong focus on cost control and often requires large capital investments to achieve efficient production facilities (Porter, 1980). In general, the strategy is beneficial for industries with commodity products and price sensitive customers (Besanko, 2010). Conversely, firms

pursuing a differentiation strategy aims to gain a competitive advantage by creating more value than competitors through differentiation of the product with regard to dimensions such as quality, customer service, or design (Besanko, 2010). The strategy is often advantageous in industries with price-insensitive customers and requires strong marketing, engineering, and research skills. While cost leadership and differentiation strategies target the entire market, the focus strategy involves adopting either of the two strategies on a subset of the market. (Porter, 1980) By grouping the industry with regard to generic strategies, it is possible to gain an in-depth understanding of how firms create value. Thus, a valuable complement is to create an industry segmentation matrix along the two dimensions customer groups and product varieties, which indicates where firms create value. Market segmentation is a useful tool because customers have heterogeneous needs. Also, the attractiveness differs across market segments due to segment size, customer economics, and supply conditions. By carrying out industry segmentation, it is possible to gain a more in-depth understanding of competitors' strategic position as well as attractive segments of the industry. (Besanko, 2010)

#### **2.1.4 Industry concentration**

An integral characteristic of the structural environment of industries is the concentration of firms with regard to size and distribution, which influences competitive behaviors as well as performance (Besanko, 2010). Several empirical studies indicate that there is a positive relationship between seller concentration and industry profitability (Kwaka, 1979). As a consequence, fragmented industries are often characterized by more intense competition and lower profitability (Borrel et al., 2010). In contrast to concentrated industries with a few powerful firms, fragmented industries are dominated by a large number of smaller firms with no ability to individually influence industry outcomes. Fragmented industries are often found within areas such as services, retail, and wood fabrication. (Porter, 1980) According to Porter (1980), industries are fragmented because of reasons such as absence of economies of scale, low entry barriers, and diverse customer needs.

Despite risk of more intense competition and lower profitability, fragmented industries are attractive for investment firms such as private equity funds. For instance, there are often a multitude of potential acquisition targets in fragmented industries. (Borrel et al., 2010) More importantly, fragmented industries are attractive investment opportunities because of the potential for consolidation (Borrel et al., 2010; Porter, 1980). Consolidation is a strategy that allows firms to achieve a stronger market position and competitive advantage, which enables greater economic returns. During recent years, several industries such as office products, life

insurance, and steel have undergone consolidation. (Briesemeister & Fisher, 2002) In order to overcome fragmentation, there are several approaches including creating economies of scale through technological change. Another strategy is to adopt a modular product strategy that helps to overcome problems regarding diverse market needs. (Porter, 1980) Lastly, fragmented industries allow for so-called build-and-buy strategies where firms grow through add-on investments, which drives consolidation (Briesemeister & Fisher, 2002).

## **2.2 Firm analysis**

As mentioned, industry attractiveness as well as business-specific factors determine firm performance. Several authors including Grant (1991) and Rumelt (1991) argue that business-specific factors such as resources and capabilities are the most important. As a consequence, an in-depth firm analysis is needed for screening and evaluating industries and investment cases. With regard to firm analysis, there is a multitude of different factors that are of importance. For example, aspects that could be analyzed in order to evaluate the attractiveness of specific firms include market positions, growth opportunities, products, brands, and intellectual property (Rosenbloom, 2002). Other factors that could be considered are business models, resources and capabilities, competitors, value chain, and complementary assets (Teece, 2010; Grant, 1991; Porter, 1985; Teece, 1986). Also, aspects such as historical development, financial performance, sensitivity to macroeconomic factors, firm boundaries, and firm ownership are relevant (Angwin, 2001; Roberson & Verona, 2006; Hansmann, 1988). In addition, growth is an important factor as it impacts direct and relative valuation methods such as discounted cash flow models and price multiples, which are used to determine firm value (Damodaran, 2002). Finally, factors such as distribution channels, customers, and stand-alone value are worth including in the analysis (Cullinan et al, 2004).

### **2.2.1 Business models**

During recent years, the concept of business models within management and business research has grown in importance. In general, the common agreement among scholars is that business models define the process of value creation and value capture (Teece, 2010; Zott et al., 2011; Björkdahl & Holmén, 2013; Osterwalder & Pigneur, 2010). Consequently, business models are an integral part of firm analysis. Osterwalder & Pigneur (2010) describe business models as a blueprint for strategy that defines organizational structures and processes. In addition to value creation and value capture, scholars such as Teece (2010) and Osterwalder & Pigneur (2010) argue that value delivery is an essential activity that should be defined in the business model as well. Further, Teece (2010) argues that innovators lacking a refined business model will fail to

either deliver or capture value from innovation. Osterwalder & Pigneur (2010) introduced a widely adopted definition of business models based on nine building blocks. These are customer segments, value proposition, channels, customer relationship, revenue streams, key resources, key activities, key partnerships, and cost structure (Osterwalder & Pigneur, 2010). Finally, business model innovation is an important area to consider. Business model innovations redefine how existing products are delivered to the customer as well as the firm's revenue model for products (Björkdahl & Holmén, 2013). In other words, Björkdahl & Holmén (2013) define business model innovation as a new logic for value creation or value capture.

### **2.2.2 Resources and capabilities**

The resource-based view focuses on firm analysis from the perspective of internal resources and capabilities, which the firm's competitive advantage is derived from (Wernerfelt, 1984; Grant, 2013). Capabilities are built from resources and can be utilized strategically to create a competitive advantage depending on industry key success factors (Grant, 2013). Wernerfelt (1984) defines resources as tangible or intangible assets under the control of the company. Examples of resources include brands, technological knowledge, skilled workers, trade contracts, and capital (Grant, 1991; Wernerfelt, 1984). As resources are combined, the firm gains the capability to perform different activities. Grant (2013) defines capabilities as the ability to utilize resources in order to achieve a desired result. Through relevant and scarce capabilities, competitive advantage can be created (Grant, 2013). In order for a competitive advantage to be attractive from an owner perspective, it has to be sustainable, which is achieved when capabilities are durable over time, difficult to transfer, and hard to replicate (Grant, 2013). Additionally, another important aspect of resources and capabilities is M&A as it allows resources not normally tradable to be acquired (Wernerfelt, 1984). As Wernerfelt (1984) notes, the value of specific resources depends on the resources currently held by the acquiring company as synergies can be achieved through the combination of different resources. Thus, the rational price that can be paid for specific resources will differ depending on the current resources of the potential buyer. Also, holding all resources of a specific character and thereby creating a dominant market position or even a monopoly is another noticeable, and potentially profitable acquisition strategy (Wernerfelt, 1984).

### **2.2.3 Value chain**

To understand competitive advantage, the discrete activities that a firm undertakes are of great importance (Porter, 1985). By mapping an organization's activities through value chain analysis, it is possible to identify the corresponding capabilities (Grant, 2013). Value chain

activities are commonly divided into primary activities involved in the transformation of resources, and support activities supporting the primary activities (Porter 1985; Grant, 2013). Porter (1985) defines five generic primary activities as inbound logistics, operations, outbound logistics, marketing and sales, and service. The generic support activities as defined by Porter (1985) are firm infrastructure, human resource management, technology development, and procurement. Depending on the industry, different activities will be of lesser or greater importance in the pursuit of competitive advantage (Porter, 1985). As mentioned, value chain activities are the building blocks of competitive advantage (Porter, 1985). Consequently, differences in value chains between competing firms or superior performance of certain key activities is likely to result in a competitive advantage (Porter, 1985). One important characteristic of the value chain is the competitive scope. Porter (1985) defines the four core dimensions of competitive scope as segment scope, vertical scope, geographical scope, and industry scope. The level of competitive scope will impact the nature of a firm's capabilities. For example, a narrow scope will allow firms to specialize and tailor activities for specific customer needs, whereas a broader scope will allow for shared activities and economics of scale (Porter, 1985). Hence, optimal scope depends on various factors such as the nature of the industry as well as the competitive environment.

#### **2.2.4 Complementary assets**

An innovating company is not necessarily able to capture value created through innovation (Lepak et al., 2007; Pisano & Teece, 2007). For example, profits might be divided between innovators, imitators, suppliers, and customers (Teece, 1986). Therefore, it is of interest to investigate profit-driving factors that will allow a company to capture value from innovation. One essential factor for capturing value is complementary assets, as described by Teece (1986). Teece (1986) defines complementary assets as the assets or capabilities necessary to successfully commercialize a product or service. Examples of complementary assets include distribution, manufacturing, services, and complementary technologies (Teece, 1986). The role of complementary assets depends on the maturity of the industry. Complementary assets are of an even greater importance in mature industries where general skills and equipment are easily available (Teece, 1986). There are various strategies for a company to access complementary assets. A company deciding to own rather than rent complementary assets will often be in a stronger position to capture value created from innovation (Teece, 1986). Thus, firm boundaries in terms of complementary asset are important to consider in firm analysis.

### **2.2.5 Firm ownership**

From an investment perspective, firm ownership is relevant as it impacts how firms are organized as well as likelihood of divestment. The ownership forms primarily considered are family owned firms, private equity held companies, and industry owned firms. Family owned firms are interesting as their ownership structure make them stable for extended periods, but more volatile in times of generation shifts. For example, 30% of family owned companies in the U.S. survive the transition to the second generation, whereas only 10% survive the transition to the third generation (Handler & Kram, 1988). Handler & Kram (1988) describes several reasons that impact the transition to a new generation, including psychological factors, family composition, and organizational aspects. Additionally, emotional factors and family tradition is often as important as financial incentives for divestment decisions (Praet, 2013). Further, founders of family owned firms are more likely to divest parts of the overall firm than their descendants (Praet, 2013). Thus, it is less likely that a second or third generation family owned company is willing to sell a part of their company. Another interesting point to note is that research on women as owners of family firms is very limited (Handler & Kram, 1988). Hence, family owned firms controlled by women might not adhere to previous studies.

Private equity firms as current owners are less complex than family owned firms because their incentives are financial. Also, predictable investment and divestment periods makes private equity activity easier to follow than for example family owned firms. Gompers et al. (2015) state that the average holding period for private equity firms is five years. In comparison to family owners and private equity firms, corporate owners usually have ties to the specific industry. Thus, the likelihood of a divestment decision extends to other factors than financial. Specifically, firm boundaries and extent of vertical integration often depend on the cost of doing business internally or through markets (Robertson & Verona, 2006). Transaction costs are low at thin crossing points, where firms or industries are more likely to split apart (Baldwin, 2008). This is in contrast to thick crossing points where transactions are numerous, complex, and interdependent (Baldwin, 2008). Hence, the industry owner's transaction costs will determine the likelihood of divestment.

## **2.3 Investment frameworks**

As mentioned, an in-depth analysis of the overall industry as well as individual firms is essential when evaluating potential investment opportunities. For instance, a market assessment provides valuable information about size, segments, trends as well as growth (McKelvey, 2002). Further,

an analysis of customers examines integral aspects such as buying criteria, switching costs, and behavior (Cullinan et al., 2004). With regard to the competitive environment, important characteristics to explore are relative market share, competitive dynamics, and strategic positions. In addition to an analysis of the industry, evaluation of investment opportunities requires an investigation of individual firms' financial performance, capabilities, and market position. Depending on the strategic aspects of the investment, an area of importance is assessment of revenue and cost synergies. (Rosenbloom, 2002)

There are numerous aspects to take into consideration when evaluating potential acquisitions. However, there is considerable uncertainty regarding selection as well as relative importance of individual evaluation criteria (Rosner, 2005; McDonald et al., 2005; Tajima, 2010). Also, the relevance of individual factors varies depending on the strategic rationale of the deal such as realization of synergies or transformation of underperforming firms (Damodaran, 2002; Rosenbloom 2002). As a consequence, several authors recommend the development and implementation of a more rigorous and formal methodology for identification, screening, and evaluation of firms (Rosner, 2005; McDonald et al., 2005; Silber & Thomson, 2010). Specifically, a more structured selection process has been identified as a central factor for improving the rate of success within M&A (Collan & Kinnunen, 2011; Silber & Thomson, 2010). Historically, there has been a high risk of failure within transactions, which has partly been attributed to firms' ineffective selection processes (Koerner, 2013; Tajima, 2010). Thus, adopting a more formal, consistent screening and evaluation methodology is a critical step towards a more successful and effective M&A process, which also include other integral phases such as valuation analysis and post-acquisition integration. Developing a target selection framework include setting clear criteria for categories such as inclusion and prioritization. For example, firms that do not meet the inclusion requirements are discarded. (Rosner, 2005) By using a numerical measurement system for prioritization, it is possible to rank different investment cases, which enables a more effective and efficient selection process. Also, there are several opportunities for designing the specific measurement system including using different weights for individual criteria depending on their relative importance. (Tajima, 2010; Rosner, 2005)

With regard to the selection of individual criteria for the screening and evaluation framework, there are numerous alternatives to consider. For instance, common dimensions are firm size, geographic location, and capabilities (Rosner, 2005). In addition, categories such as industry

structure, customer base, and competitive position are often included (Silber & Thomson, 2010). Lastly, two of the most central criteria in investment frameworks are firm profitability and industry growth (Dawson, 2006; Borrel et al., 2010; Street of Walls, 2013). In general, screening criteria varies depending on individual characteristics of the firm and the strategic rationale of the specific deal (Silber & Thomson, 2010). For example, firms considering a horizontal merger need to evaluate dimensions including revenue and cost synergies as well as potential differences in corporate culture (Damodaran, 2002; Rosenbloom 2002). Conversely, investment firms such as private equity funds often evaluate acquisitions as stand-alone investments with strong emphasis on the potential to add value through marginal improvements, financial engineering, and improved corporate governance (Gompers et al., 2015; Barber & Goold, 2007). In terms of screening and evaluation criteria, research conducted by Borrel et al. (2010) indicates that private equity firms invest in large, highly fragmented industries, which offer a wide range of potential acquisitions and enables consolidation. Also, private equity firms invest in mature industries characterized by low debt and high return on equity (Borrel et al., 2010). In general, investment firms focuses on growing and profitable industries (Dawson, 2006). Other important screening and evaluation criteria include strong market position, sustainable competitive advantage, and stable cash flows (Gompers et al., 2015; Street of Walls, 2013). Attractive industries to invest in are also those benefiting from long-term trends such as demographic or technological change (Street of Walls, 2013). Lastly, one of the most central evaluation criteria is the potential to create value through revenue growth or cost reduction (Gompers et al., 2015)

### **3. Methodology**

This chapter describes and discusses the research project's overall methodology. As a consequence, integral parts such as research strategy, data collection, and quality are elaborated upon.

#### **3.1 Research strategy**

For the design of the thesis with regard to activities such as data collection and analysis, the mixed method approach that combines qualitative and quantitative elements was used (Johnson et al., 2007). Consequently, the study draws on constructionist as well as positivist epistemologies. Mixed methods has become more accepted and commonly used in the research community during recent years (Easterby-Smith et al., 2012; Johnson et al., 2007). Specifically, quantitative methods such as surveys are useful for testing different hypothesis based on large samples of collected data. However, these methods are often inflexible and unable to effectively analyze qualitative aspects such as actions and opinions. Conversely, qualitative methods such as case studies are more flexible but are resource consuming and limited with regard to generalization. (Easterby-Smith et al., 2012) Thus, the mixed method approach combining quantitative and qualitative tools was the most appropriate and relevant research method as it enables an effective analysis of the multi-dimensional aspects associated with identification and evaluation of attractive industries and investment cases. In addition, other advantages with mixed methods relate to the overall quality of the study such as increased generalizability and validity (Easterby-Smith et al., 2012). With regard to dominance and sequencing of methods throughout the research project, quantitative tools and data such as financial information from annual reports dominated during the early phases because of the quantitative nature of the investment criteria in the industry evaluation framework. As the project progressed, qualitative methods including interviews were increasingly being used to assess more qualitative aspects such as business models and capabilities.

#### **3.2 Data collection**

For the research project, primary data in the form of interviews as well as secondary data was collected and analyzed. With regard to secondary data, one main source of information was historical financial data such as EBIT, revenue, and costs from approximately 6,000 annual reports. Official statistics including construction and demographic data were retrieved from government agencies. Another integral source of secondary data has been trade organizations such as Trä-och Möbelföretagen (TMF), which has provided valuable industry statistics and information. Lastly, other important sources have been news articles, industry reports, and

company websites. Secondary data was used because it allows access to vast amounts of data with limited resources in terms of time and cost (McCaston, 2005). Strategically selected secondary data enables access to high quality information spanning across industries, time, and countries that has been collected and analyzed by experts (Saunders et al., 2009; Boslaugh, 2007). Given the purpose of the research project to identify and evaluate attractive industries and investment cases, secondary data has been regarded as an effective and useful data collection method. However, disadvantages include potential problems with the overall quality of the data because the lack of control over the collection process. In addition, secondary data was collected for another purpose often using different definitions. (McCaston, 2005; Saunders et al., 2009; Boslaugh, 2007)

As mentioned, interviews were conducted for the collection of primary data during the research project, which is one of the most commonly used methods for collection of qualitative data (Gill et al., 2008). Interviews are useful for collecting data such as opinions, knowledge, and behavior (Easterby-Smith et al., 2012; Medbo, 1998). Thus, interviews is a valuable research tool to gain a more in-depth understanding of multi-dimensional subjects and problems. For the research project, the conducted interviews can be divided into two main categories: industry experts, and firms. Two industry experts were interviewed within prefabricated wooden houses and concrete in an effort to gain valuable insights with regard to factors such as trends, industry structure, and key success factors. Further, nine managers at the identified firms were interviewed to gain a deeper understanding of the products, business models, and capabilities. Specifically, executives such as Head of Strategy and Production Director were targeted for the interviews because they possess in-depth knowledge of their respective firms. See table 1 below for an overview of the conducted interviewed. The same questionnaire was used for all of the interviewed firms, which increases comparability and reliability (Medbo, 1998). See appendix A for the questionnaire used. In addition to the pre-specified questions, the interviews were also given a degree of flexibility that allowed other interesting areas to be explored. As a consequence, the interviews can be described as semi-structured, which are suitable for the research project as they are explanatory as well as exploratory (Saunders et al., 2009).

	<u>Firm</u>	<u>Position</u>
<b>Work-wear</b>		
	A10	<i>Sales Manager</i>
	A12	<i>Head of Product</i>
<b>Wooden houses</b>		
	B1	<i>Production Director</i>
	B3	<i>Sales Manager</i>
	B4	<i>Sales Manager</i>
	B5	<i>Head of Strategy</i>
	TMF	<i>Expert</i>
<b>Prefabricated concrete</b>		
	C11	<i>Chief Marketing Officer</i>
	C12 & C13	<i>Marketing Manager</i>
	C14	<i>Sales Manager</i>
	Chalmers	<i>Professor</i>

**Table 1 - Interviews**

### 3.3 Research process

The research project was initiated by Invest AB that wanted to explore new investment opportunities through an extensive industry and firm analysis. After the overall purpose of the project was decided based on discussions with the investment team at Invest AB and the examiner at Chalmers, an overall time plan with activities and deliverables was presented and approved. Thereafter, industry as well as business case evaluation frameworks were created for a more structured and formal evaluation process. Further, the frameworks were used and refined throughout the entire research project. See chapter 4, 5, and 6 for the specific frameworks and detailed results of the evaluation. The frameworks were based on literature regarding investment frameworks as well as industry and firm analysis. Also, Invest AB's overall investment philosophy was used as input. Interviews with the team and company material were used to gain a deeper understanding of the overall philosophy. The evaluation of industries and business cases were divided into five main phases, which are described below. For the first phase, 24 industries were identified and evaluated with regard to the first part of the framework with investment criteria such as profitability, growth, and relevant firms. General information in terms of firms, trends, and overall industry were used to rank each industry high, medium, or low. During phase 1, highly limited information was used to rank the identified industries. In general, one to five firms were used as an indication of industry profitability as well as the existence of relevant firms. As a consequence, there is a risk that attractive industries were discarded because of an unrepresentative sample, which could negatively impact the result of the study. However, the method was deemed appropriate because of the possibility to gain a general understanding of the industry at an early stage with limited resources. Based on the

conducted evaluation, industries that ranked low on any criteria were discarded as medium encompassed the minimum requirements necessary. The remaining industries along with the collected information were presented to Invest AB. Based on feedback from the team, several additional industries were discarded as well as added to the evaluation.

During phase 2, 17 industries from phase 1 along with eight new industries, which were proposed by Invest AB or the researches, were evaluated using the investment framework. In addition to the investment criteria used in phase 1, additional categories regarding industry structure such as rivalry were used. In comparison to the previous phase, more firms as well as more in-depth information from secondary sources such as industry reports and articles were used to rank the industries on each criteria. For example, five to ten firms were in general used to evaluate attributes such as profitability, relevant firms, and rivalry. Consequently, the individual ranking of firms could change between phases as more detailed information emerged. Further, industries that ranked low on any criteria were discarded. However, several industries that ranked low on some criteria were still presented to Invest AB for feedback because the investment team were interested in the results. Consequently, the evaluation of industries was not solely based on the industry investment framework. Thus, Invest AB's feedback influenced the elimination of individual industries. Thereafter, the industries that proceeded from phase 2 along with one new were evaluated in phase 3 using the investment criteria from phase 2 as well as two additional criteria. For phase 3, more detailed industry information and more firms were analyzed. For instance, 15 to 60 firms were analyzed for each industry, which constitute most of the firms in Sweden for the identified industries. The firms were identified using various tools such as trade organizations, research reports, and industry codes. Also, historical data for the time period 2004 and 2013 were collected for the firms. Consequently, a more reliable estimate and evaluation of attributes such as growth, profitability, and investment cases for the entire industry was possible based on the collected data. Based on the presented recommendations to Invest AB, the researches in collaboration with the investment team selected three industries for the final analysis. During phase 4, the three final industries were given a score of 1-10 on each investment criteria using the collected information from earlier phases.

During the final phase, the three industries were evaluated using the business case framework. Industry characteristics including growth, segments, success factors, and trends were also analyzed more in detail. For the analysis, the researchers aimed to identify and include every

active firm in each industry. For phase 4, some of the identified firms in phase 2 and 3 were discarded because deeper analysis indicated that the firms did not belong to the studied industries. Information and statistics from additional industry reports, articles, and trade organization were used. In addition, several interviews with relevant people were carried out for each industry. For instance, industry experts as well as managers at the investigated firms were interviewed for assessing attributes such as business models and capabilities. The collected information and performed analysis were presented to Invest AB as part of the final presentation. Thereafter, all of the information was aggregated for writing up the report. During this process, Additional literature research and analysis of the identified investment cases were carried out.

### **3.4 Research quality**

When evaluating the overall quality of the conducted research, there is a multitude of measures including validity and reliability (Golafshani, 2003; Easterby-Smith et al., 2012). With regard to validity, the research is considered to have high internal validity but lower external validity. Specifically, internal validity concerns to what degree the research measures what is intended to be measured (Eriksson & Wiedersheim-Paul, 2005). For the thesis, structured and formal investment frameworks have been used to identify and evaluate attractive industries and investment cases, which are based on extensive literature research as well as in-depth discussions with Invest AB. Also, the frameworks have been revised throughout the project in order to achieve a more effective and objective screening process. As a consequence, there has been strong focus on ensuring high internal validity. Potential issues include operationalization of some of the more qualitative criteria in the frameworks such as business models and capabilities. For instance, there is a risk that the sustainability of the business models is not properly assessed using the research method adopted for the project. As mentioned, a mixed method research approach that combines qualitative and quantitative elements has been used. According to Easterby-Smith et al. (2012), mixed methods increase the validity of the conducted research. Also, triangulation through multiple sources of information has been used to increase internal validity (Zohrabi, 2013). Lastly, integral parts of the research process such as data collection, selection, and analysis has been described in detail, which increases validity (Berglund, 2012).

In comparison to the internal validity, the external validity of the study is considered to be lower. External validity concerns to what extent the result of the conducted research can be

generalized beyond the specific situation of the study (Easterby-Smith et al., 2012). As highlighted, the study aims to identify and evaluate attractive industries and investment cases for Invest AB using the designed investment frameworks. Thus, the investment criteria in the frameworks are to a great extent customized based on Invest AB's overall investment philosophy. As a consequence, the result of the study will to an extent be specific to Invest AB, which negatively impacts the external validity. However, some of the results and drawn conclusion are generalizable as the frameworks are based on several generic criteria that are integral regardless of investment focus. The research is considered to have high reliability, which relates to consistency and repeatability (Thanasegaran, 2009). Reliability is partly dependent upon the researches' knowledge as well as objectivity (Berglund, 2012). Throughout the project, the researchers have aimed to be as objective as possible to increase reliability. Other measures taken to ensure high reliability include semi-structured interviews, which increase reliability (Campion et al., 1998). However, there has been a certain degree of subjectivity when evaluating the industries and cases using the designed frameworks, which might decrease the overall reliability.

## **4. Investment frameworks**

In this chapter, Invest AB's overall investment philosophy is presented. Further, the investment frameworks used for evaluating industries and business cases are introduced and discussed, which are based on presented literature as well as Invest AB's evaluation criteria.

### **4.1 Introduction**

According to several authors such as Gompers et al. (2015), Borrel et al. (2010), and Rosner (2005) as well as investment firms including Nordic Capital (2015) and Accent Equity Partners (2015), investment selection is a main source of value creation for investment firms. Specifically, designing and implementing a rigorous identification, screening, and evaluation methodology is an integral step towards a more successful investment strategy (Rosner, 2005; Silber & Thomson, 2010; McDonald et al., 2005). In general, selection frameworks have clearly defined investment criteria with regard to categories such as firm size, market position, and profitability (Street of Walls, 2013; Borrel et al., 2010). Also, other important criteria for investment firms include growth, competitive dynamics, and geographical location (Rosner, 2005; Silber & Thomson, 2010; Dawson, 2006). Thus, developing a more formal and consistent selection framework based on Invest AB's investment philosophy as well as relevant literature is of importance for effective screening of acquisitions.

Currently, Nordic investment firms such as private equity funds have adopted rigorous screening and evaluation frameworks with specific investment criteria. For instance, the geographical focus of many firms is limited to the Nordics or Northern Europe (Ratos, 2015; Accent Equity Partners, 2015; Polaris Private Equity; 2015). In general, investment firms have clearly defined requirements regarding size of investment such as EUR 5-50 million for Accent Equity Partners (2015). Other investment requirements include market-leading firms with stable cash flows and strong sustainable competitive advantage with regard to product portfolio, brands, and operational capabilities (Nordic Capital, 2015; EQT, 2015; Accent Capital Partners, 2015). The firms emphasize other characteristics to take into consideration including competitive dynamics, market size, and distribution channels. In terms of industry focus, the evaluation criteria varies across firms and ranges from sector specific such as infrastructure to investments in all industries (EQT, 2015; Accent Equity Partner, 2015) One of the most central criteria when evaluating investment cases is the potential to add value through revenue growth (e.g. new products or geographical markets), operational improvements (e.g. outsourcing or

consolidation of production facilities), and strategic repositioning (Ratos; 2012; EQT; 2015; Nordica Capital, 2015).

With regard to Invest AB, the firm has several investment requirements that need to be taken into consideration when designing evaluation frameworks. As mentioned in chapter 1, Invest AB was founded in an effort to diversify the conglomerate's business portfolio and expand into new growth areas. Therefore, no investments should be made in companies active in the same industries as the current portfolio firms. Additionally, Invest AB is a long-term investor without an exit horizon. In terms of industries, the firm favors stable industries with long product lifecycles and revenues ranging from three to ten billion SEK. Further, industries should be in line with macro trends identified by Invest AB such as shifting demographics, continued urbanization, and increased environmental focus. Invest AB seeks to acquire leading, well-managed Swedish private or public companies with sustainable competitive advantage and potential to expand internationally. Target companies should show organic growth and have revenues ranging from 500 to 700 million SEK. As mentioned, Invest AB is a long-term investor favoring sustainable and stable investments. Consequently, investment cases involving startups, turnarounds or restructuring cases are of no interest. Finally, no investments are made into industries such as armaments, public sector, and pornography that could harm the reputation of the owner.

## **4.2 Industry evaluation framework**

In an effort to enable a more structured, effective screening and evaluation of industries analyzed in this thesis, two investment frameworks have been designed: industry evaluation framework and business case evaluation framework. The industry evaluation framework was used to screen the investigated industries by evaluating main characteristics. Specifically, the framework was used for identification and prioritization of the three most attractive industries for Invest AB. Thereafter, the business case evaluation framework was used to evaluate and rank the identified investment cases in each of the three industries. The two frameworks have been designed with regard to Invest AB's overall investment philosophy as well as literature on areas such as industry structure, investment frameworks, and competitive advantage presented in the literature review. Specifically, there are numerous areas of research within industry, firm, and investment analysis. However, this thesis along with the two presented frameworks are based on a few limited areas, which have been regarded to be the most relevant given Invest AB's situation as well as purpose of the study. With regard to the industry

evaluation framework, there are clearly defined requirements for each criteria. The industries were evaluated on the criteria using three levels: high, medium, and low. The medium level encompasses the basic attributes that each industry must fulfill. As a consequence, industries scoring low in any category were eliminated going forward unless the investment team at Invest AB specifically requested to proceed with the industry to the next phase. The industry evaluation framework is divided into four integral parts: financial characteristics, Invest AB, industry structure, and specific investment, which are described below.

Firstly, the financial characteristics part of the framework screens and evaluates the basic characteristics of the industries with regard to profitability, growth, and market size. Specifically, scholars such as Porter (1980), Borrel et al. (2010), and Dawson (2006) as well as investment firms such as Nordic Capital (2015), EQT (2015), and Accent Capital Partners (2015) have emphasized the importance of these core attributes for industry analysis and investment selection. In terms of industry profitability, this attribute has long been regarded as a determinant of industry attractiveness (Porter, 1980; Wernerfelt & Montgomery, 1986). For instance, high profitability is an indication of a favorable industry structure with low competitive pressure in terms of factors such as industry rivalry, threat of entry, and bargaining power of buyers (Besanko, 2010; Porter, 1980). As mentioned, industry profitability influences firm performance, which drives economic returns from the investment (McGahan & Porter, 1997; Koller et al., 2010). Also, Invest AB has highlighted industry profitability as an integral requirement when evaluating investments. The required profitability for the high, medium, and low levels are based on discussions with the investment team as well as the authors' own analysis. In addition to profitability, another important factor to take into consideration during screening and evaluation of industries is growth (Dawson, 2006). Growth gives an indication of the overall state of the industry as well influencing industry rivalry and economic returns (Porter, 1980; Koller et al., 2010). Also, growth is regarded as a determinant of the overall attractiveness of an industry (Wernerfelt & Montgomery, 1986). In terms of the minimum growth required, this is based on Invest AB's requirement that the growth of the industry needs at least to be on par with the level of inflation. The last part of the financial characteristics section of the framework is market size. Based on discussions with Invest AB's investment team as well as conducted analysis, the most optimal market size is 3-10 billion SEK. A market size of this magnitude is necessary given Invest AB's requirements with regard to firm size, top 3 market position, and significant potential for organic growth as well as add-on acquisitions. Specifically, all industries with a market size of 3-10 billion SEK are ranked high. In order to

simplify the evaluation process, the framework regards industries that are too large as equally unattractive as industries that are too small. For example, industries that are too small often have fewer or no relevant firms as well as limited ability for organic growth (Borrel et al., 2010). In contrast, industries that are too large often have several potential acquisition targets. However, these industries in general do not simultaneously fulfill Invest AB's requirements on firm size and top 3 market position. See table 2 below for the financial characteristics part of the framework.

	<b>Growth</b>	<b>Profitability</b>	<b>Market size</b>
<b>High</b>	> 5%	> 5%	3-10 bn SEK
<b>Medium</b>	2-5%	2-5%	1-3 or 10-15 bn SEK
<b>Low</b>	< 2%	< 2%	0-1, >15 bn SEK

**Table 2 – Financial characteristics**

Secondly, the Invest AB part of the framework screens and evaluates industries with regard to relevant firms and portfolio fit, which are two of the most critical criteria for Invest AB. In order to simplify the screening of industries, the attributes necessary to qualify as a relevant firm is based on three integral characteristics: firm size between 300-1,000 MSEK, 5% EBIT margin, and top 3 market position. These attributes are easily verified and are regarded by the investment team as core characteristics of an attractive firm. As mentioned, Invest AB's target firm size is 500-700 MSEK, however, the target size has been expanded to 300-1,000 MSEK in an effort to widen the pool of potential candidates. For instance, it is possible to create a firm with 500-700 MSEK in annual revenues by consolidating smaller firms through acquisitions. Further, the evaluation of each industry in terms of high, medium, and low is based on the number of relevant firms identified. In addition to relevant firms, the other aspect taken into consideration in this part of the framework is portfolio fit, which is based on several dimensions. For instance, Invest AB do not invest in industries such as public sector, gambling, and armaments as well as industries close to the firm's core business. Also, portfolio fit considers other dimensions such as capital requirements and the team's experience with the industry. See table 3 below for the Invest AB part of the industry evaluation framework.

	<b>Relevant firms</b>	<b>Portfolio fit</b>
<b>High</b>	$\geq 3$	<i>Yes/no</i>
<b>Medium</b>	<i>1-2</i>	
<b>Low</b>	<i>0</i>	

**Table 3 – Invest AB**

Thirdly, the industry structure part of the framework analyses industry rivalry, customer buying power, and firm concentration, see table 4 for the evaluation criteria. Based on input from Invest AB's team as well the authors' own analysis, these three attributes were regarded to be the most important in this section. For instance, industry rivalry is often regarded as the most central determinant of the overall competitive pressure, which influences industry profitability (Porter, 1980; Besanko, 2010). Also, competitive dynamics, which is to a great extent determined by industry rivalry, is an integral aspect to evaluate during investment selection (Rosner, 2005; Street of Wall, 2013; Nordic Capital, 2015). Aspects such as industry growth, diversity of competitors, and entry barriers are used to determine the overall level of industry rivalry. In addition to rivalry, customer buying power is examined as it impacts profitability as well as the main characteristics of the industry (Porter, 1980). Also, Invest AB has valuable experience from industries with fragmented customer base. Lastly, the industry structure part of the framework also examines industry concentration. Specifically, fragmented industries are regarded as attractive because of the wide range of potential firms available as well as the potential for consolidation through add-on acquisition, which is a highly attractive strategy according to Invest AB's investment team.

	<b>Industry rivalry</b>	<b>Buying power</b>	<b>Fragmentation</b>
<b>High</b>	<i>High differentiation etc. Many buyers etc.</i>		<i>High</i>
<b>Medium</b>	<i>Normal</i>	<i>Normal</i>	<i>Normal</i>
<b>Low</b>	<i>Low differentiation etc. Few buyers etc.</i>		<i>Duopoly/oligopoly</i>

**Table 4 – Industry structure**

Lastly, the final part of the framework focuses on the attractiveness of potential investment cases as well as the overall risk profile of the industry. By analyzing the external environment, potential risks relating to areas such as technological change and legislation are assessed. This is an important criteria because of Invest AB's risk averse investment philosophy. The attractiveness of relevant investment cases in each industry is evaluated using the business case evaluation framework focusing on aspects such as firm profitability, competitive advantage, and ownership, which is described in the next section. The existence of attractive investment cases

is one of the most critical criteria during investment selection. Table 5 displays the investment criteria included in this part of the framework.

	<b>Risk</b>	<b>Investment cases</b>
<b>High</b>	<i>Low</i>	<i>One or several attractive investment cases</i>
<b>Medium</b>	<i>Medium</i>	<i>One or several moderately attractive investment case</i>
<b>Low</b>	<i>High</i>	<i>No investment cases</i>

**Table 5 – Specific investment**

In addition to the factors included in the industry evaluation framework, there are several others such as value chain, industry life cycles, and macro trends that are relevant when analyzing industries. These factors were taken into considerations during the screening and evaluation of industries. However, they were not part of the investment framework.

### **4.3 Business case evaluation framework**

The business case evaluation framework is designed to evaluate and rank the investment cases. Similar to the industry evaluation framework, the business case evaluation framework ranks each investment case criteria in one of three categories. In order to allow for a more detailed comparison, a scale from one to ten is applied. One to three represents a low rating, four through seven falls within a medium rating, and eight to ten a high rating. The business case evaluation framework is divided into three parts: magnitude of competitive advantage, sustainability of competitive advantage, and takeover potential.

Firstly, the magnitude of competitive advantage is measured through profitability and growth. Specifically, three-year EBIT margin and CAGR are used as measures. Profits exceeding the industry average can be attributed to competitive advantage (Grant, 1991). An investment case exceeding the industry average profitability by two percentage points or more is rated between eight and ten. Business cases with a profitability of less than the industry average plus two percentage points but higher than the average minus two percentage points are rated four through seven. Business cases with a profitability of less than the industry average minus two percentage points are considered low, and rated on a scale from one to three. In addition to profitability, growth is a highly relevant measure to analyze as growth impacts the magnitude of future profits as well as firm value (Damodaran, 2002). For the business case evaluation framework, growth is rated using the same logic as profitability, see table 6 below.

	<b>Growth</b>	<b>Profitability</b>
<b>8 - 10</b>	<i>&gt; Industry average + 2%</i>	<i>&gt; Industry average + 2%</i>
<b>4 - 7</b>	<i>Industry average <math>\pm</math> 2%</i>	<i>Industry average <math>\pm</math> 2%</i>
<b>1 - 3</b>	<i>&lt; Industry average - 2%</i>	<i>&lt; Industry average - 2%</i>

**Table 6 – Magnitude of competitive advantage**

Secondly, the sustainability of the competitive advantage is evaluated with regard to business model as well as resources and capabilities, see table 7 below. This part of the investment framework is more difficult to quantify than the other parameters of the business case framework. Thus, the rating of business models, and resources and capabilities is based on a qualitative analysis rather than a more quantitative evaluation similar to the growth and profitability categories. The business model considers the major aspects of value creation and value capture as described by scholars such as Teece (2010) and Björkdahl & Holmén (2013). Depending on the specific business case, different building blocks of the business model such as customer segments, channels, and value proposition are investigated more thoroughly (Osterwalder & Pigneur, 2009). Also other factors including geographical strength, and business model innovation are considered (Teece, 2010). Resources and capabilities consider the internal resources and capabilities of the firm as outlined by Wernerfelt (1984). Additionally, resources and capabilities are analyzed from a value chain perspective as defined by Porter (1985). Invest AB is a long-term investor mainly targeting mature industries. Therefore, complementary assets as introduced by Teece (1986) are a particularly important factor to consider, as the importance of complementary assets increases when an industry matures.

	<b>Business model</b>	<b>Resources &amp; capabilities</b>
<b>8 - 10</b>	<i>Strong</i>	<i>Strong</i>
<b>4 - 7</b>	<i>Medium</i>	<i>Medium</i>
<b>1 - 3</b>	<i>Weak</i>	<i>Weak</i>

**Table 7 – Sustainability of competitive advantage**

Finally, the takeover potential of the investment cases are reviewed by evaluating ownership structure. Ownership structure is a highly relevant factor to consider, as it determines if and when an acquisition will be possible. To rank high, the identified firms should be for sale or open for takeover bids in the near future. Examples of ownership structures that would rank from eight to ten are private equity held companies approaching the divestment period or family owned companies with an owner approaching retirement lacking an obvious heir. (Wendy et al., 1988, Gompers et al., 2015) Investment cases ranking between four and seven have owners

who could potentially be willing to sell, but are not actively seeking new owners. For example, an industry owner could be interested to sell a subsidiary such as an upstream supplier if transaction costs are low and the business is non-core (Baldwin, 2008). Finally, a low ranking is reserved for owners who are unlikely to sell their company in the foreseeable future. Such cases include an industry owner who would experience higher transaction costs through markets than through owning that business directly. Also, other less attractive ownership situations include family owned firms after a generation shift. (Robertson & Verona, 2006; Praet, 2013) See table 8 below for the evaluation criteria.

	<b>Ownership</b>
<b>8 - 10</b>	<i>PE, 60+ Owner</i>
<b>4 - 7</b>	<i>Industry non-core business</i>
<b>1 - 3</b>	<i>Industry core business, 30+ Owner</i>

**Table 8 – Takeover potential**

As mentioned in the literature review, there is a multitude of factors that could be considered in firm analysis. Several factors not listed in the framework were also considered in the process of selecting and evaluating investment cases. Such factors include future growth opportunities and synergies between potential acquisition targets. The categories selected were deemed most important from the perspective of Invest AB as a long-term investor.

## **5. Evaluation of industries**

The evaluation of the identified industries was divided into four major phases, which are presented and discussed in this chapter. Supporting data for the evaluation of industries are found in appendix B-D.

In an effort to identify attractive industries and firms to invest in, the industry evaluation framework presented in chapter 4 was used to screen and evaluate potential industries identified during the course of the thesis. Specifically, over 40 different industries were screened using the industry evaluation framework in order to identify and rank the three most attractive industries for Invest AB. To exemplify the conducted analysis, three industries that are not included in the top 3 are presented and discussed more in-depth in each phase. For the top three industries, the identified firms have been anonymized on request from Invest AB. The evaluation process is divided into four major phases where for each phase the identified industries were evaluated using the defined investment criteria. As a consequence, industries that did not meet the minimum requirements were eliminated. For each phase, the level of detail in the analysis increased and more categories of the investment framework was taken into consideration. Thus, the evaluation of individual industries could change between phases as more detailed information regarding criteria such as growth, profitability, and industry rivalry emerged. Each phases ended with a meeting with the investment team at Invest AB where industries meeting the minimum requirements were presented for feedback.

### **5.1 Phase 1**

During phase 1, 24 industries spanning from building material and outdoor products to medtech and sporting goods retailers were identified. These industries were thought to be attractive investment opportunities for Invest AB given the defined criteria in the industry evaluation framework as well as the firm's current investment portfolio. The industries were evaluated with regard to growth, profitability, market size, and relevant firms. As mentioned, these four investment criteria evaluate core characteristics of the industry, which are central during investment selection (Dawson, 2006; Accent Capital Partners, 2015; EQT, 2015). Further, these four criteria can be regarded as the most basic requirements that an industry need to fulfill in order to qualify as attractive. Based on general information concerning main competitors, trends, and overall industry, characteristics such as profitability, growth, and market size were estimated, which was used to evaluate industries on each investment criteria. Following the

conducted analysis, 20 industries such as furniture, building material, and agriculture products ranked at least medium on each of the four criteria and were presented to Invest AB's investment team. Conversely, five industries including veterinary clinics and convenience stores ranked low on at least one criteria and were eliminated. See table 9 below for the results of the evaluation.

<b>Presented</b>	<b>Growth</b>	<b>Profitability</b>	<b>Market size</b>	<b>Relevant firms</b>
Building material	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>	<i>High</i>
Furniture	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>	<i>High</i>
Outdoor products	<i>High</i>	<i>High</i>	<i>High</i>	<i>High</i>
Sports & exercise products	<i>High</i>	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>
Financial services	<i>Medium</i>	<i>High</i>	<i>High</i>	<i>Medium</i>
Broadband	<i>High</i>	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>
Alternative energy	<i>High</i>	/	/	/
Clothing retailers	<i>Medium</i>	<i>High</i>	<i>Medium</i>	<i>Medium</i>
Woodworking	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>
Chemical products	<i>Medium</i>	<i>High</i>	<i>Medium</i>	<i>Medium</i>
Medtech	<i>Medium</i>	<i>High</i>	<i>Medium</i>	<i>Medium</i>
Agriculture products	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>
Candy, sweets, and cookies	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>	<i>High</i>
Military applications	<i>Medium</i>	<i>High</i>	<i>Medium</i>	<i>Medium</i>
Infrastructure	<i>Medium</i>	<i>High</i>	<i>Medium</i>	<i>Medium</i>
Supply chain solutions	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>
Biotech	<i>High</i>	<i>High</i>	/	<i>Medium</i>
Fitness centers	<i>High</i>	<i>High</i>	<i>High</i>	<i>High</i>
Public sector	<i>Medium</i>	<i>High</i>	<i>Medium</i>	<i>High</i>
<b>Discarded</b>				
Automotive spare-parts chains	<i>Low</i>	<i>Medium</i>	<i>Low</i>	<i>Low</i>
Veterinary clinics	<i>High</i>	<i>High</i>	<i>Medium</i>	<i>Low</i>
Convenience stores	<i>Medium</i>	<i>Medium</i>	<i>Low</i>	<i>Low</i>
Home appliance chains	<i>Low</i>	<i>Low</i>	<i>High</i>	<i>Low</i>
Sporting goods retailers	<i>Medium</i>	<i>Medium</i>	<i>Medium</i>	<i>Low</i>

**Table 9 – Phase 1 industry evaluation**

According to the conducted evaluation in phase 1, one of the most attractive industries overall was fitness centers with chains such as SATS and Nordic Wellness, which was the only industry that ranked high in all categories. The market for fitness chains has grown 10% annually between 2006 and 2011, which is driven by an ageing population and an increased focus on health (Olsson, 2013; Holm, 2014). With over 1,200 gyms and 1,1 million active users, the Swedish market is in excess of 3,6 billion SEK (Olsson, 2013; Widmark, 2012). The fitness

market is profitable as three of the largest chains SATS, Fitness24Seven, and Actic had combined revenue of 1.7 billion SEK and an average EBIT margin of 11% during 2013. Consequently, there are several attractive firms in the market, which is an important investment criteria (Borrel et al., 2010). Fitness centers scores high on all investment criteria, which makes it an interesting industry for Invest AB as strong growth and high profitability are indications of an attractive industry (Wernerfelt & Montgomery, 1986). The industry has been characterized by increasing consolidation during recent years where large chains such as SATS are replacing smaller, independently owned gyms, which often constitute an attractive investment opportunity (Privataffärer, 2012; Porter, 1980; Borrel et al., 2010). However, there are indications of increasing competition and possible over expansion. Also, the industry has experienced increasing activity from private equity firms such as Altor and IK Investment Partners. (Holm, 2014)

In addition to fitness centers, another interesting industry is clothing retailing that ranked medium to high in all categories. Clothing retailing is a large market in Sweden where a significant amount of the household consumption is spent on clothes (Ekonomifakta, 2015). During 2014, sales in physical clothing stores were in excess of 50 billion SEK and online sales reached 4 billion SEK (Sternö & Nielsén, 2015). However, it is most likely possible to find smaller segments such as low-end menswear that are suitable for Invest AB. As a consequence, the industry is ranked medium with regard to the market size investment criteria. In terms of growth, sales of clothes in Sweden grew with 3.5% during 2014 (Sundberg, 2015). In an effort to gain a basic understanding of the industry profitability, the clothing retail chains Dressman, Indiska, Bik Bok, Lindex, Poco Loco, JC, Kappahl, MQ, and Brothers & Sisters were briefly analyzed. These chains had for 2013 an average EBIT margin of 7.6% on combined revenue of 13.5 billion SEK, which is an indication of moderate to low competitive pressure (Porter, 1980). Thus, clothing retailers seems to be an attractive industry for Invest AB. Lastly, other trends such as changing consumer behavior driving growth in the future are strengthening the investment case (Sundberg, 2015).

In contrast to fitness centers and clothing retailers, one industry that was found to be less attractive was automotive spare-parts chains. For instance, the Nordic automotive spare-parts market has experienced negative or low growth since 2012 (Mekonomen, 2015). Further, the market size in Sweden was estimated to be in excess of 20 billion SEK, which was calculated using Mekonomen's market share (Redeye, 2011; Mekonomen, 2014). Also, no relevant firms

fulfilling the necessary requirements such as top 3 market position and firm size between 300-1,000 MSEK were found. However, the industry profitability was ranked high based on analysis of the large chains Mekonomen, Biltema, Autoexperten, AD Sverige, and Atoy. These firms had total revenues of 11 billion SEK and an EBIT margin of 5.9% in 2013. Due to the low growth, lack of relevant firms, and large market size, automotive spare-part chains did not present an attractive investment opportunity for Invest AB and was discarded. Also, the industry is characterized by increasing competition and price pressure (Mekonomen, 2013).

## Proceed

	Investment team input
Furniture	<i>Positive (profitable industry with several interesting firms)</i>
Outdoor products	<i>Positive (profitable industry with several world-leading companies in Sweden)</i>
Sports & exercise products	<i>Neutral (analyze further)</i>
Financial services	<i>Neutral (already analyzed a few segments, but are interested in insurance)</i>
Broadband	<i>Neutral (Sceptical, but curious)</i>
Alternative energy	<i>Neutral (need to analyze business models)</i>
Building materials	<i>Neutral (interested, but sceptical to the overall industry, analyze concrete furthe</i>
Clothing retailers	<i>Neutral (need to analyze the consumption in Sweden within retail)</i>
Woodworking	<i>Neutral (difficult industry with high fixed costs, need to find attractive segments)</i>
Chemical products	<i>Positive (find niche segments)</i>
Medtech	<i>Positive (existing industry with several world leading firms)</i>

## Proposals Invest AB

Light materials	<i>Positive (excited about the industry, positive growth outlook)</i>
Work-Wear	<i>Positive (exciting industry with high margins and strong Swedish players)</i>
Food safety	<i>Positive (potentially a high-growth industry in 5-10 years)</i>
Pet stores	<i>Positive (interested in creating a big-box player to transform the industry)</i>
Bike Stores	<i>Positive (interested in creating a big-box player to transform the industry)</i>
Watch Stores	<i>Positive (interested in creating a omnichannel retailer)</i>

## Discard

Agriculture prodcuts	<i>Negative (do not believe in the industry, have similar investments)</i>
Candy, sweets, and cookies	<i>Negative (poor portfolio fit)</i>
Military applications	<i>Negative (poor portfolio fit)</i>
Infrastructure	<i>Negative (capital intensive, borders to public sector)</i>
Supply chain solutions	<i>Negative (sceptical to the industry, also exposed to shipping)</i>
Biotech	<i>Negative (high risk, no industry experience, long time to revenue)</i>
Fitness centers	<i>Negative (overexposed/saturated industry, e.g. PE activity, historic growth etc.)</i>
Public sector	<i>Negative (poor portfolio fit)</i>

**Table 10 – Phase Invest AB feedback**

As a result of the conducted evaluation, 19 out of the 24 identified industries were presented to the investment team at Invest AB at the end of phase 1, see table 10 for the results of the meeting. The team was positive towards the four industries furniture, outdoor products, chemical products, and medtech, which were regarded as interesting and attractive industries. Further, the team was neutral to an additional seven industries including building material,

financial services, and clothing retailers. For instance, building material was regarded as an interesting industry but further analysis with regard to factors such as trends and segments were needed. The investment team discarded eight of the presented industries during the meeting. Seven out of the eight industries were discarded due to aspects related to portfolio fit, which was discussed more in-depth during the meeting. For example, public sector and military applications are industries that Invest B do not invest in. In addition to the presented industries, the investment team proposed six more industries such as work-wear and light materials that had the potential to be attractive investment opportunities. Pet stores, bike stores, and watch stores were attractive because of the potential to consolidate these highly fragmented industries. Specifically, the team was inspired by Iduna Group's consolidation of the Swedish jewelry market. Currently, the Iduna Group controls the three major retail chains Guldfynd, Hallbergs Guld, and Albrekts Guld. (Iduna, 2015)

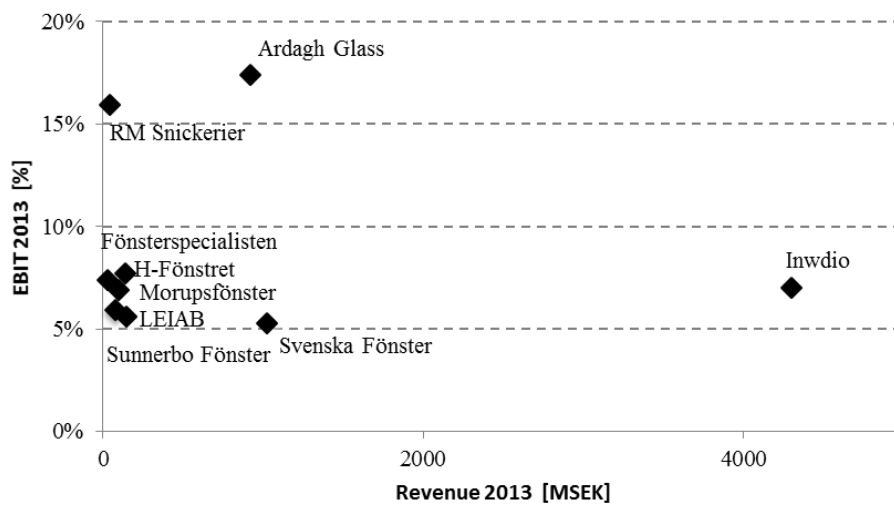
## **5.2 Phase 2**

During the second phase, the 17 industries that proceeded from phase 1 along with an additional eight new industries were evaluated. With regard to the new industries, baby retail and manufacturing were proposed by Invest AB while the other industries such as window manufacturing, hobby stores, and products for the elderly were introduced by the authors. In comparison to phase 1, the industries were evaluated more in-depth with regard to competitors, trends, and industry characteristics. In addition to the investment criteria used in phase 1 such as profitability and growth, the additional criteria portfolio fit, industry rivalry, buying power, and industry concentration were included in the evaluation framework. These factors evaluate integral characteristics of the industry relating to attributes such as structure and are vital for understanding competitive pressure, potential for consolidation, and customer behavior, which are all important during investment selection (Porter, 1980; Besanko, 2010; Rosner, 2005; Silber & Thomson, 2010). As a result of the evaluation, seven industries including big box hardware chains, clothing retailers, and woodworking were discarded. An additional nine industries such as bike stores were ranked low in at least one category but were still presented to Invest AB as the investment team had explicitly requested to be informed of the analysis. In total, 18 industries were presented to the investment team, see table 11 below.

<b>Presented</b>	<b>Growth</b>	<b>Profitability</b>	<b>Market size</b>	<b>Relevant firms</b>	<b>Portfolio fit</b>	<b>Industry rivalry</b>	<b>Buying power</b>	<b>Fragmentation</b>	<b>Recommendations</b>
Concrete	Medium	High	High	High	Yes	Medium	Medium	Medium	Proceed
Pet stores	Medium	High	High	Medium	Yes	Medium	Medium	High	Proceed
Work-Wear	Medium	High	High	High	Yes	Medium	Medium	Medium	Proceed
Furniture	Medium	High	Medium	High	Yes	Medium	Medium	High	Proceed
Insurance firms	Medium	High	High	Medium	Yes	Medium	High	Medium	Proceed
Medtech	Medium	High	Medium	Medium	Yes	High	High	Medium	Proceed
Window manufacturing*	High	High	High	Medium	Yes	Medium	Medium	Medium	Proceed
Products for the elderly*	High	High	High	Medium	Yes	Medium	Medium	Medium	Proceed
Watch Stores	High	Medium	Medium	Low	Yes	High	Medium	High	Uncertain
Light materials	High	Low	/	Low	No	/	Low	High	Uncertain
Outdoor products	High	High	High	High	Yes	Medium	Medium	High	Uncertain
Food safety	High	Medium	/	Medium	Yes	High	Medium	Low	Uncertain
Sports & exercise products	High	High	Medium	Medium	Yes	Low	Medium	High	Uncertain
Bike Stores	High	Medium	Medium	Low	Yes	Medium	Medium	High	Uncertain
Optician chains*	Medium	High	High	Medium	Yes	Medium	Medium	Low	Uncertain
Baby products**	Medium	Medium	Medium	Medium	Yes	Low	Medium	High	Uncertain
Broadband	High	Medium	Medium	Low	Yes	Medium	High	Low	Do not proceed
Alternative energy	High	/	/	Low	Yes	Low	Low	Medium	Do not proceed
<b>Discarded</b>									
Clothing retailers	Medium	Medium	Medium	Medium	Yes	Low	Medium	Medium	
Woodworking	Low	Medium	Medium	Low	Yes	Low	Medium	Medium	
Chemical products	Medium	High	Medium	Low	Yes	Medium	Medium	Low	
Hobby stores*	Medium	Low	Medium	Low	Yes	Medium	Medium	High	
Kitchen utensils chains*	Medium	Medium	Medium	Low	Yes	Medium	Medium	Medium	
Big box hardware chains*	High	Medium	Medium	Low	Yes	Low	Medium	Medium	
Bathroom products*	Medium	Medium	Medium	Low	No	Medium	Medium	Medium	
*Proposed by authors					** Proposed by Invest AB				

**Table 11 – Phase 2 industry evaluation**

One of the new industries for phase 2 was window manufacturing, which ranked high on several investment criteria including profitability and growth. It is an interesting industry that has undergone considerable change during recent years and is currently characterized by increased focus on cost efficiency, environmental aspects, and design (Inwido, 2014). Also, the industry is experiencing strong growth that amounted to 8% during 2014 (TMFa, 2015). In general, the market for window manufacturing is driven by consumer confidence, tax benefits, and economic growth (Hancap, 2013; Inwido, 2014). According to TMFb (2015), the market for window manufacturing in Sweden is 4 billion SEK. An analysis of ten leading window manufacturers indicates that the average EBIT margin during 2013 was 8%. As figure 1 below highlights, there are at least two relevant firms in the industry. Thus, window manufacturing ranks high on growth, profitability, and market size while medium on relevant firms.



**Figure 1 – Window manufacturing**

The largest firm in Sweden is Inwido, which is partly owned by the private equity firm Ratos (Ratos, 2015). During the last decade, Inwido has consolidated the Swedish industry through acquisitions of firms such as Norsjöfönster, Hajom, and Erafönster (Öhlin, 2005; DN, 2005; Imap, 2006; Inwido, 2014). Apart from Inwido, Ardagh Glass, and Svenska Fönster, the window manufacturing industry is highly fragmented with nearly 80 of the 140 manufacturers in Sweden being one-man businesses (TMFc, 2015). Consequently, the industry was ranked medium with regard to concentration. As mentioned, window manufacturing is growing and competitors are unequally balanced, however, switching costs are low (Inwido, 2014). Based on these structural factors, the level of rivalry in the industry is estimated to be medium. Lastly, windows are sold using multiple distribution channels to industrial customers as well as consumers, which likely impact bargaining power (Inwido, 2014). Due to differences in purchasing volumes and low switching costs, the industry is ranked medium with regard to buying power.

As mentioned in the previous section, pet stores were proposed by the team at Invest AB as a prospective industry to invest in. Currently, the industry is undergoing structural change from smaller, privately owned pet stores to larger chains such as Grizzly backed by private equity firms. The pet store industry is an attractive investment opportunity because it is insensitive to business cycles and characterized by stable growth. (Åkesson, 2012) The industry grows 2-4% annually on a total market size of 2-3 billion SEK (Zoorf, 2015; Åkesson, 2012). In an effort to estimate the average profitability, five stores from Arken Zoo and five stores from Djurmagazinet were analyzed, which are the largest two chains in Sweden (Zoo Support, 2015).

See figure 2 below. During 2013, the ten stores had an average EBIT margin of 5% on combined revenue of 88 MSEK. Thus, the industry ranked high on market size and profitability while medium on growth.

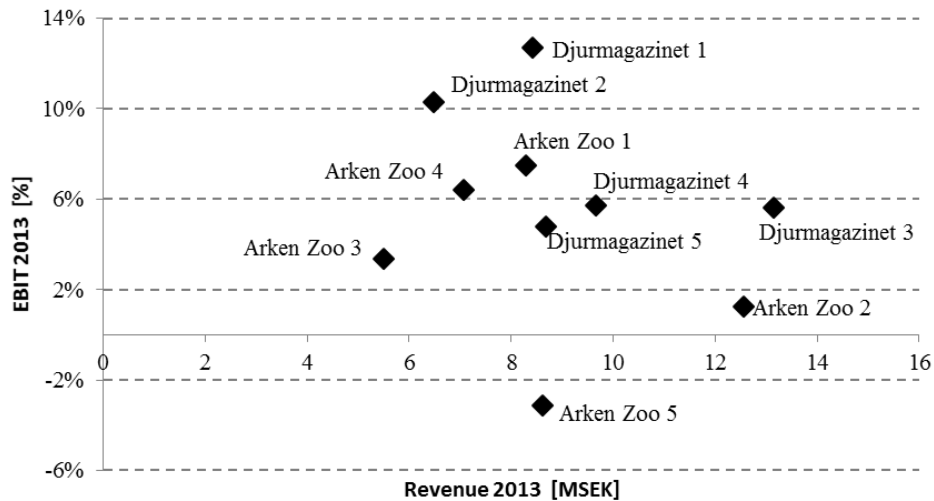


Figure 2 – Pet stores

Considering industry concentration, there are over 600 pet stores in Sweden, which are mostly privately owned (Åkesson, 2012). The two large chains Arken Zoo and Djurmagazinet with a total of 110 stores and combined revenue of 800 MSEK are structured as franchises with independently owned stores (Zoo Support 2015; Braganza, 2015, Arken Zoo, 2015). There are also relatively low entry barriers and absence of economies of scale, which are all characteristics of fragmented industries (Porter, 1980). As a consequence, the pet store industry is ranked high on fragmentation. The pet store industry is ranked medium on industry rivalry because of low fixed costs, stable industry growth, and moderate switching costs. In terms of bargaining power of buyers, it was ranked medium because of moderate switching costs, undifferentiated products, and numerous buyers. In sum, pet stores seem to be an attractive industry because of the structural transformation towards greater consolidation, stable growth, and good profitability.

One industry that was discarded during phase 2 was woodworking that encompasses firms processing wood into various products such as planks, manufactured boards, and roof trusses. The industry ranked low on growth, relevant firms, and industry rivalry. Specifically, the Swedish industry has experienced low or negative growth since the financial crisis in 2008 (Skogsindustrin, 2013). A more in-depth analysis of the industry indicated that there were no

relevant firms fulfilling the necessary criteria: 5% EBIT margin, firm size between 300-1,000 MSEK, and top 3 position.

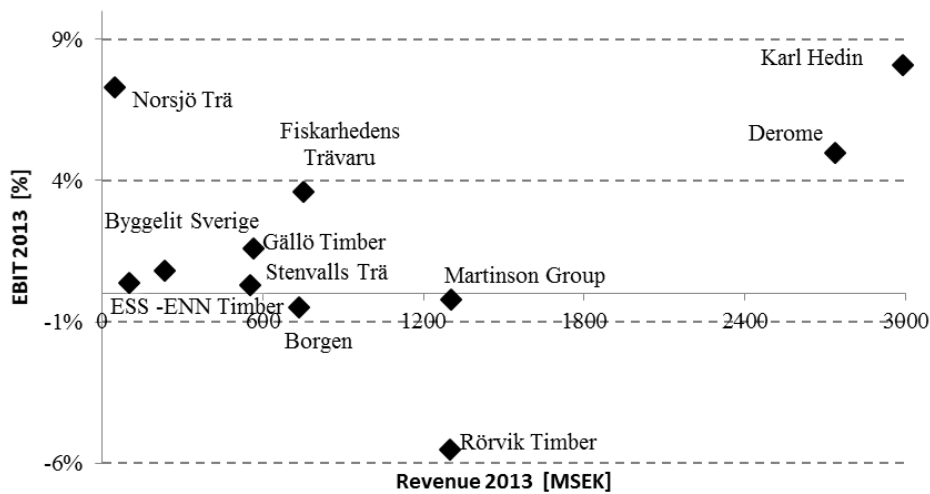


Figure 3 – Woodworking

Further, the woodworking industry is characterized by high fixed costs, low growth, undifferentiated products, as well as low switching costs, which are all determinants of industry rivalry (Porter, 2007; Besanko, 2010). As a consequence, the competition among firms is assumed to be fierce, which influences profitability negatively and is strengthened by an analysis of several firms in the woodworking industry. The 11 analyzed firms had an average EBIT margin of 3.2% in 2013, see figure 3 above. In general, the woodworking industry is often characterized by low economic returns (Besanko, 2010; Grant, 2013). Thus, the industry was discarded because of fierce competition, low growth, and lack of relevant firms.

As a result of the evaluation during phase 2, 18 out of the 25 industries were presented to the investment team at Invest AB. Based on Invest AB's feedback along with the authors' suggestions, ten industries proceeded to the next phase for further analysis, see table 12 below. The team was positive towards work-wear and outdoor products because the industries are highly profitable and there are several leading brands in Sweden. Also, these industries offer manufacturing as well as retail investment opportunities. In general, Invest AB was interested in industries enabling attractive buy-and-build strategies such as work-wear, outdoor products, concrete, and furniture. During the meeting with the investment team, eight industries including financial services, bikes stores, and food safety were discarded because of factors such as lack of relevant firms and capital requirements. Window manufacturing was discarded because of

limited investment opportunities following Ratos's transformation of the industry with the manufacturer Inwido.

<b>Proceed</b>	<b>Investment team input</b>
Concrete	<i>Positive (proceed with the industry, analyze segments/value chains/geographical monopolies)</i>
Pet stores	<i>Positive (analyze potential for big box retailer, e.g. Grizzly + 10 biggest individual stores)</i>
Work-Wear	<i>Positive (interesting industry with several attractive investment cases, both retail &amp; manufacturing)</i>
Furniture	<i>Positive (analyze both B2C &amp; B2B, potential for buy and build?)</i>
Medtech	<i>Neutral (difficult industry with large, established players)</i>
Products for the elderly	<i>Positive (analyze Swedish manufactures, in line with macro trends)</i>
Watch Stores	<i>Positive (analyze potential for buy and build through acquiring the 10 largest stores)</i>
Light materials	<i>Neutral (emerging industry, not in line with portfolio, analyze trends)</i>
Outdoor products	<i>Positive (exciting industry with regard to both retail + manufacturing)</i>
Baby products	<i>Positive (proceed with retail &amp; manufacturing, analyze the potential for a big box omnichannel retailer)</i>
<b>Discard</b>	
Insurance firms	<i>Negative (not able to fulfill the necessary capital requirements)</i>
Window manufacturing	<i>Negative (Ratos has already transformed the industry, sceptical about future growth opportunities)</i>
Food safety	<i>Negative (emerging industry, lack of relevant acquisition targets)</i>
Sports & exercise products	<i>Negative (emerging market with high international competition, close to Midsona)</i>
Bike Stores	<i>Negative (too many bread and butter firms)</i>
Optician chains	<i>Negative (lack of relevant firms &amp; investment opportunities)</i>
Broadband	<i>Negative (lack of relevant firms &amp; too high concentration)</i>
Alternative energy	<i>Negative (emerging industry with high risk and lack of relevant firms)</i>

**Table 12 – Phase 2 Invest AB feedback**

### 5.3 Phase 3

During phase 3, ten industries from phase 2 along with the new industry prefabricated wooden houses were evaluated using the framework. The industry evaluation framework included the investment criteria from phase 2 such as profitability, relevant firms, and industry rivalry as well as the new criteria risk and investment cases. Specifically, risk is an integral aspect to include because it evaluates the overall risk related to legal, technological, and macroeconomic aspects. The other criteria analyze the attractiveness of potential investment cases, which is one of the most central aspects during industry evaluation. The industries were analyzed more in-depth with regard to firms, characteristics, and trends during phase 3. For the evaluation, 20 to 60 firms were identified and analyzed in each industry. As a result of the evaluation, medtech and light material were discarded while nine other industries were presented to Invest AB. Four out of the nine industries including concrete, work-wear, and prefabricated wooden houses were recommended to proceed to phase 4. In addition, four other industries such as pet stores, products for the elderly, and watch stores were not recommended to proceed. Lastly, outdoor products was classified as uncertain awaiting feedback from Invest AB. See table 13 below for the evaluation in phase 3.

<b>Presented</b>	<b>Growth</b>	<b>Profitability</b>	<b>Market size</b>	<b>Relevant firms</b>	<b>Portfolio fit</b>	<b>Industry rivalry</b>	<b>Buying power</b>	<b>Fragmentation</b>	<b>Risk</b>	<b>Investment cases</b>	<b>Recommendations</b>
Work-wear	Medium	High	High	High	Yes	Medium	Medium	Medium	High	Medium	Proceed
Prefabricated wooden houses	High	High	High	High	Yes	Medium	Medium	High	Medium	Medium	Proceed
Concrete	Medium	High	High	High	Yes	Medium	Medium	Medium	Medium	Medium	Proceed
Furniture	Medium	High	High	High	Yes	Medium	Medium	High	Medium	Medium	Proceed
Outdoor products	High	High	Medium	High	Yes	Medium	Medium	High	Medium	Low	Uncertain
Products for the elderly	High	High	High	Medium	Yes	Medium	Medium	Medium	Medium	Low	Do not proceed
Watch Stores	High	Medium	Medium	Low	Yes	High	Medium	High	Medium	Low	Do not proceed
Pet stores	Medium	Medium	High	Medium	Yes	Medium	Medium	High	Medium	Low	Do not proceed
Baby products	Medium	Medium	Medium	Medium	Yes	Low	Medium	High	High	Low	Do not proceed
<b>Discarded</b>											
Medtech	Medium	High	Medium	Low	Yes	High	High	Medium	Low	Low	
Light materials	High	/	/	Low	No	/	Low	High	Low	Low	

**Table 13 – Phase 3 industry evaluation**

One industry that scored high on several investment criteria including growth and profitability was outdoor clothing. The market for outdoor activities in Sweden was nearly 100 billion SEK in 2009. Further, 15 billion SEK was spent on outdoor equipment while the clothing group was in excess of 7 billion SEK. (Fredman et al., 2013) The outdoor industry has experienced strong growth since the early 2000s (Sveriges Radio, 2013). In an effort to analyze the industry more in-depth, outdoors manufactures were divided into two strategic groups: clothing and equipment, see table 41-42 in appendix D for the identified firms. Between 2011 and 2013, the clothing group had an average EBIT margin of 13% and the equipment group 10%. The firms in the clothing group grew with 5% per year between 2011 and 2013 while the firms in the equipment group grew with 1%. In addition, Sweden has several leading firms such as Fjällräven, Peak Performance, and Hestra. Thus, the outdoor industry ranked high on growth, profitability, and relevant firms while medium on market size. The level of industry rivalry was considered medium because of differentiated products, high industry growth, and diverse competitors. As tables 41-42 in appendix D highlights, there are numerous firms in the industry, which is an indication of high fragmentation. Based on the analysis of the studied firms, the industry is insensitive to business cycles. However, outdoor products was still ranked medium on risk because of the strong growth in online retailing, which might lead to a transformation of the retail industry and lower profits. Lastly, the outdoor industry was ranked low on investment cases. Specifically, there are several attractive firms such as Fjällräven, Peak Performance, and Didriksons with strong growth, high profitability as well as sustainable business models. However, it will most likely be hard and expensive to acquire any of these firms, which motivates the low ranking on the criteria. For example, a listed apparel company in Denmark owns Peak Performance and Didriksons was acquired by the Norwegian private equity firm Herkules in 2014 (IC Group, 2015; Willners, 2014). The retail market was also analyzed, however, it was less attractive because of lack of relevant firms, low profitability,

and threat of online retailers. In sum, the outdoor industry is an attractive industry with regard to several factors including growth, profitability, and rivalry. However, the industry was classified as uncertain because the lack of available investment cases.

Furniture ranked high on several investment criteria. Sweden is a leading manufacturer of furniture with higher growth and profitability than most other countries in Europe. The Swedish furniture industry has grown 25% since the financial crisis. In addition, the Swedish production of furniture exceeded 25 billion SEK during 2012. (TMF, 2014) However, the furniture industry was ranked high on the market size criteria because of the possibility to divide the industry into smaller groups. The furniture industry was divided into several strategic groups based on the following product focus: home furniture, office furniture, and miscellaneous, see tables 38-40 in appendix D for the analyzed firms. Based on this grouping, home furniture, office furniture, and miscellaneous had an average EBIT margin of 6%, 3%, and 7% respectively between 2011 and 2013. The industry was ranked high on relevant firms because there are several firms across the three groups that fulfill the necessary requirements. According to TMF (2014), the Swedish furniture industry competes on design and comfort rather than price. The lack of price competition in combination with diverse competitors and product differentiation motivates a medium ranking in terms of industry rivalry. In addition, the report describes the industry has highly fragmented with nearly 90% of the firms having less than nine employees (TMF, 2014). As a consequence, the furniture industry ranked high on profitability, market size, relevant firms, and fragmentation. Based on overall analysis of potential investment cases, there are several firms such as Brod vik, Scandinavian Business Seating, and Svedbergs that ranked high on the business evaluation criteria including growth, profitability as well as resources and capabilities. Thus, the furniture industry was regarded as attractive and recommended to the investment team at Invest AB.

In comparison to outdoor products and furniture, products for the elderly was not recommended to Invest AB despite high growth and profitability. Currently, products for the elderly is a fast growing industry with products such as rolling walkers, smart alarms, and phones (Andersson & Marklund, 2009; Vårdguiden, 2015). New legislation that enables the elderly to choose their own means of assistance might enable new growth opportunities (Hjälpmiddelsinstitutet, 2014). For the analysis of the industry, the studied firms were divided into three groups based on product focus: movement, home, and hearing, see tables 44-46 in appendix D. The movement category had an average EBIT margin of 11%, home had 7%, and hearing had 18% between

2011 and 2013. Further, the three categories grew with an average annual rate of -1%, 11%, and 7% respectively during the same period. Thus, the industry was ranked high on growth, profitability, and relevant firms while medium on market size. The industry was ranked medium on rivalry, buying power, and concentration based on factors such as product differentiation and distribution of firms. As tables 44-46 highlights, most of the firms in the industry are below 100 MSEK in annual revenue. Other firms above 100 MSEK including Permobil, Doro, and Liko are either listed or recently acquired for several billion SEK (Doro, 2015; Bergin, 2013; Sveriges Radio, 2008). Consequently, the industry was ranked low on investment cases despite several profitable and growing firms with strong capabilities.

<b>Proceed</b>	<b>Investment team input</b>
Work-wear	<i>Positive (excited about both retail &amp; manufacutring, investigate potential for buy &amp; build)</i>
Prefabricated wooden houses	<i>Positive (interesting industry and analyze segments etc. further)</i>
Prefabricated concrete	<i>Positive (proceed with prefabricated concrete, attractive segment)</i>
<b>Discard</b>	
Furniture	<i>Negative (lack of sustainable business models and relevent investment cases)</i>
Outdoor products	<i>Negative (high PE activity, lack of investment cases, competition from online retailers)</i>
Products for the elderly	<i>Negative (lack of relevent investment cases)</i>
Watch Stores	<i>Negative (unattractive investment cases)</i>
Pet stores	<i>Negative (high PE activity, saturated market, too many bread and butter stores)</i>
Baby products	<i>Negative (strong competition from online retailers, market too small)</i>

**Table 14 – Phase 3 Invest AB input**

For the meeting with Invest AB at the end of phase 3, nine out of the eleven evaluated industries were presented, see table 14 above. Based on the data, given recommendations, as well as feedback from the investment team, the three industries work-wear, prefabricated wooden houses, and concrete will be the main focus in the rest of the thesis. Specifically, these three industries were the most attractive for Invest AB based on an overall assessment of the included criteria such as profitability, growth, and investment cases. In termzs of the concrete industry, the further analysis will focus on prefabricated concrete, which was the most attractive group. Lastly, several of the industries such as outdoor products, products for the elderly, and watch stores were discarded because of lack of investment cases.

## 5.4 Phase 4

During phase 4, the information collected in phase 1 through 3 were used to rank the three industries work-wear, prefabricated wooden houses, and prefabricated concrete. The industries were ranked for each investment criteria in the industry evaluation framework using a numerical

ranking with the following attributes: 8-10 (high), 4-7 (medium), and 1-3 (low). For the ranking, the same weights were used for all of the investment criteria. This section aims to introduce and rank the final three industries. A more in-depth description and analysis of the industries as well as evaluation of individual business cases are given in the next chapter.

The industry with the highest overall score among the top three was work-wear. Sweden has several leading companies including A10, A12, and A5 that produces products such as shoes, gloves, and helmets for workers in the construction, production, restaurant, and healthcare segments (A10, 2015; A12, 2015; A5, 2015; A21, 2015). During phase 1 through 3, ca. 20 different producers were identified with a combined annual turnover of 9.2 billion SEK for 2013, see table 31 in appendix D. The analyzed firms had an average EBIT margin of 3% between 2011 and 2013, which is attributed to the poor performance of A21. Excluding A21, the industry had an EBIT margin of 9%. Also, 40% of the studied firms had an average EBIT margin over 10% during 2011 and 2013. Further, 70% of the firms had an average EBIT margin over 5% during the same time period. The analysis also indicates that the work-wear industry has grown during the last few years. In addition, an analysis of the retail industry was carried out, which indicated that the industry was dominated by independently owned stores with high profitability and 5-20 MSEK in annual revenue, see table 32. Thus, the work-wear industry received high scores on profitability, market, size, and relevant firms while a medium score on growth. Also, work-wear received a score of ten on portfolio fit because of the industry's strong fit with current investments as well as the investment team's previous experience and knowledge. In terms of industry rivalry, the industry received a five because of low switching costs, modest growth, and diverse competitors. The industry was ranked high on fragmentation because of numerous manufactures as well as retailers, which enables attractive opportunities for consolidation. Lastly, work-wear was given the highest score on investment cases because of several attractive firms such as A10, A12, and A7 with strong growth, high profitability, sustainable business models, and favorable ownership situations in both manufacturing and retail, which will be discussed further in the next chapter. See table 15 for the evaluation of the three industries.

	Growth	Profitability	Market size	Relevant firms	Portfolio fit	Industry rivalry	Buying power	Fragmentation	Risk	Investment cases	Total
Work-wear	6	9	10	9	10	5	6	8	8	10	8.1
Wooden houses	8	9	10	9	7	6	7	9	6	8	7.9
Prefabricated concrete	9	8	10	8	7	7	5	9	5	9	7.7

**Table 15 – Evaluation of top three industries**

The industry with the second highest score after work-wear was prefabricated wooden houses. The industry produces wooden houses that are to various degrees prefabricated in factories for faster delivery, higher quality, and lower cost than traditional manufacturing methods (Eliasson & Sandberg, 2011; Eskilsson, 2014). During 2013, the production of prefabricated wooden houses in Sweden was 9 billion SEK (TMFc, 2015). Currently, the industry is experiencing strong growth that amounted to 25% between in 2014 (TMFd, 2015). In an effort to analyze the industry more in-depth, 31 firms were identified in Sweden, see tables 33-34 in appendix D. The studied firms had an average EBIT margin of 6% between 2011 and 2013. Further, the top 50% of the firms had an average EBIT margin above 10% during the same period. There are several attractive firms such as B3 and B4 for Invest AB. Thus, the industry ranked high on growth, profitability, market size, and relevant firms. Prefabricated wooden houses ranked lower on portfolio fit than work-wear because of Invest AB's lack of knowledge of the industry as well as cyclicalities. In terms of rivalry among firms, the industry scored a six because of medium fixed costs, numerous firms, and strong growth. The industry scored the highest on the buying power criteria out of the three because of numerous buyers and differentiated products. The industry is characterized by low economies of scale, diverse market needs, and relatively low entry barriers, which are drivers of fragmentation. Also, there are more than hundred firms active in the industry (TMFa, 2015). As a consequence, prefabricated wooden houses scored a nine on fragmentation. With regard to risk, the industry scored a six because of sensitivity to business cycles. For instance, the production in Sweden dropped with nearly 30% between 2008 and 2009. Also, the industry is moving toward an increasing degree of automation, which could impact industry structure (Eliasson, 2010). Finally, prefabricated wooden houses scored an eight on investment cases because of firms such as B1 and B4 with strong growth, high profitability, and strong capabilities.

Lastly, prefabricated concrete was ranked third behind work-wear and wooden houses with an overall score of 7.7. Prefabricated concrete include individual components such as beams and wall elements as well as complete structures for multi-story buildings (Svensk Betong, 2015). The market for prefabricated concrete products in Sweden was 7 billion SEK in 2006 (Byggmaterialindustrierna, 2008). Several firms were identified and analyzed to estimate

industry profitability and growth, see table 36 in appendix D. The identified firms had an average EBIT margin of 5% between 2011 and 2013. Further, the top 50% had an average EBIT margin of 11%. With regard to growth, the studied firms grew with an average of 5% per year between 2011 and 2013. As table 36 highlights, there are several firms including C11 and C14 that fulfill requirements such as firm size between 300-1,000 MSEK and minimum EBIT of 5%. Thus, prefabricated concrete scored high on growth, profitability, market size, and relevant firms. Similar to wooden houses, concrete ranked lower on portfolio fit than work-wear because of Invest AB's lack of industry experience as well as the considerable cyclicity. In addition, strong growth, diverse competitors, and relatively low fixed costs characterize prefabricated concrete. Consequently, the industry achieved the best score out of the three firms in terms of rivalry. However, prefabricated concrete received the lowest score on customer bargaining power because of few buyers and large volumes. Further, the industry scored poor on risk because the sensitivity to business cycles. For instance, the studied firms' revenue dropped considerably during the financial crisis. With regard to investment cases, prefabricated concrete scored between work-wear and wooden houses because the industry offers several attractive investment opportunities such as C11 that scores high on the business case evaluation framework.

## **6. Evaluation of business cases**

In this chapter, the three industries work-wear, wooden houses, and prefabricated concrete are analyzed more in-depth. Also, the evaluation of the identified business cases is presented. Supporting data for the industry and business case analysis is given in appendix E-G.

### **6.1 Work-wear**

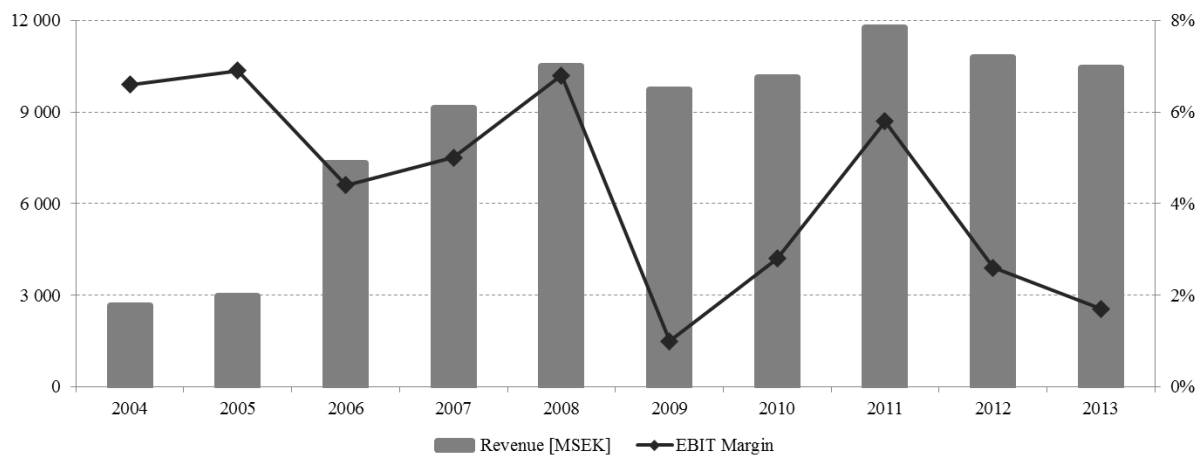
Based on the evaluation of industries in chapter 5, work-wear ranked first before wooden houses and prefabricated concrete. The industry scored high on several investment criteria such as profitability, relevant firms, and attractive investment cases. For the industry, the firms A12, A10, A8, and A5 were identified as potential investments and are evaluated using the business case framework in this section.

#### **6.1.1 Industry analysis**

The work-wear industry includes products such as shoes, clothes, gloves, helmets, and protective masks for workers in industries including construction, forestry, and healthcare (A21, 2015; A10, 2015; A9, 2015). Sweden has several leading brands such as A10, A5, and A8 with strong market positions in the Nordics and are currently expanding to new countries including Germany, France, and the U.S. (A10, 2015; A5, 2015; A8, 2015). As a consequence, the Swedish work-wear industry is highly export driven with a strong international presence. As an example, foreign markets account for more than 50% of A10's total revenue (A10, 2011). Further, the domestic market for work-wear in Sweden is large. For example, the employers' organization Svenskt Näringsliv represents 295,000 workers in industry, 250,000 workers in hotels and restaurants, 100,000 workers in construction, and 15,000 workers in forestry and agriculture (Svenskt Näringsliv, 2011).

For the more in-depth analysis of the work-wear industry, 35 firms within manufacturing were identified and analyzed. Further, 122 individual stores as well as chains were investigated for the evaluation of the work-wear retail sector, which is discussed later in this section. See appendix E for more detailed data of each individual firm. During 2013, the identified manufacturing firms had total revenue of 10.4 billion SEK and an average EBIT margin of 1.7%. See figure 4 below. The poor performance during recent years is attributed to the large work-wear group A21, which had a turnover of 4.3 billion SEK in 2013. Specifically, A21 has a three year compound annual growth rate of -8.7% and an average EBIT margin between 2011 and 2013 of -2.8%. By excluding A21, the manufacturing industry had an average EBIT margin

of 8.3% between 2011 and 2013, which is high relative to the other investigated industries. Further, the industry has grown significantly between 2004 and 2013.



**Figure 4 – Work-wear (manufacturing)**

During the analysis of the manufacturing industry, the identified firms were grouped with regard to product focus and price. In terms of product focus, the firms were divided into the following categories: equipment, clothes, diversified, shoes, and gloves. The diversified firms produce products from several categories such as equipment, clothes, and shoes. See appendix E for the firms in each category. The largest group was diversified (7.9 billion SEK) followed by equipment (1.3 billion SEK), clothes (0.7 billion SEK), shoes (0.25 billion SEK), and gloves (0.25 billion SEK). Thus, the diversified group accounted for ca. 75% of the entire manufacturing industry. It is also one of the most interesting group with high profitability and attractive investment cases. For example, the group had an average EBIT margin of 9.3% between 2004 and 2013 (excluding A21). Also, the group include four of the most relevant and attractive investment cases with strong growth, high profitability, and strong capabilities: A5, A8, A10, and A12. For instance, A12 is a profitable manufacturer focused on the high-end of the market and is vertically integrated downstream through the control of A21, which is the largest work-wear chain in Sweden (Head of Product A12, 2015). In addition, there are several attractive niche manufactures as potential add-on investments such as A62, A3, and A60 with three year EBIT margins spanning from 13% to 23%. See table 16 below for summarizing statistics of the four strategic groups.

	<b>3- Y EBIT</b>	<b>3-Y CAGR</b>	<b>10-Y EBIT</b>	<b>10-Y CAGR</b>	<b>Revenue 2013</b>
Equipment	4.9%	5.4%	3.6%	7.2%	1,288,494,000
Diversified	2.5%	0%	3.9%	23%	7,930,131,000
Diversified*	9.8%	19.8%	9.3%	12.9%	3,584,597,000
Clothing	8.6%	1.7%	9.0%	4.5%	713,252,000
Shoes	-1.7%	-7.7%	2.7%	-0.5%	254,388,000
Gloves	15.5%	2.9%	14.7%	10.3%	247,718,000
	<i>*Excluding A21</i>				<b>10,433,933,000</b>

**Table 16 – Work-wear segmentation (manufacturing)**

Thereafter, the second largest group is equipment with products such as helmets, protective masks, and straps. During 2011 and 2013, the EBIT margin was 5% on an average turnover of 1.2 billion SEK. The dominant firm is A59 with a market share of 70%, which is a large supplier of protective gear distributing internal as well as external brands (A59, 2015). The rest of the segment is niche manufactures such as A9 and A55 with strong growth and high profitability. Clothes is the third largest group with products for various industries including restaurants, healthcare, and construction. The group is highly profitable with an average EBIT margin of 8.7% between 2011 and 2013. Additionally, the segment has historically also been highly profitable with an average EBIT margin of 9% over the last ten years. However, clothes has shown modest growth during the same period. As table 55 in appendix E highlights, the clothing segment is highly fragmented with most firms between 30 MSEK and 80 MSEK in annual revenue. The last two groups are shoes and gloves, which are both ca. 250 MSEK in size. Two manufactures focused on shoes were identified A14 and A20 with an average EBIT margin of -1.6% between 2011 and 2013. Further, A70 was identified as the single specialized manufacture of gloves in Sweden. Thus, most firms produce more than one category of products.

As mentioned, 122 firms with total revenue of 3 billion SEK in 2013 were identified and investigated for the analysis of the retail sector, which include individual stores as well as chains. The total growth between 2004 and 2013 was nearly 100% and the average EBIT margin was 5%, see figure 46 in appendix E. In addition to specialized work-wear stores, products are also sold in diversified stores such as Ahlsell and directly to large companies, however, these distribution channels will not be analyzed further. For the analysis, the investigated firms were divided into five main categories: chains, physical stores, physical & online stores, online stores, and profile stores. Profile stores sell profile work-wear as well as other profile products such as giveaways (A74, 2015). The average store size ranged from 12 MSEK for physical stores to 18 MSEK for physical & online stores. Retail chains was the

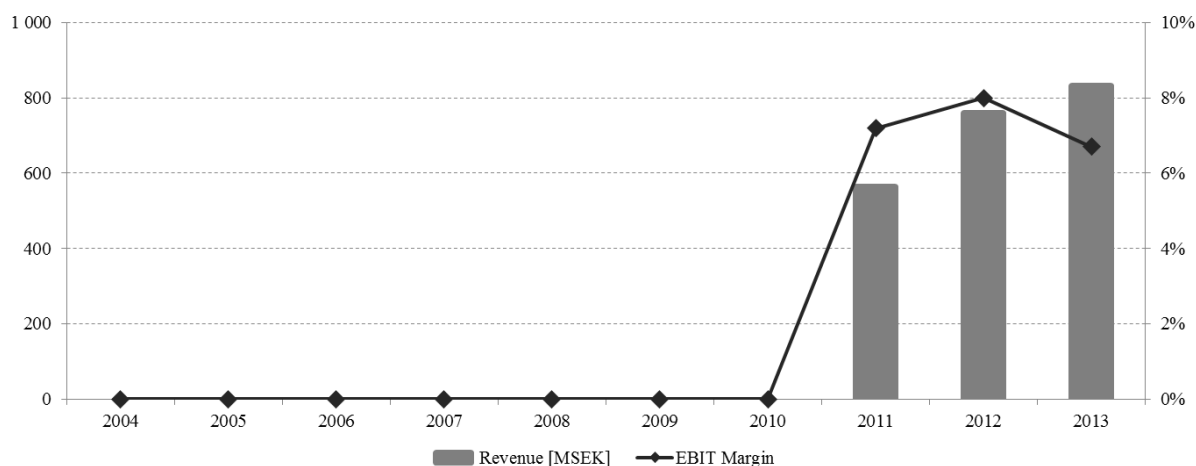
largest segment with ca. 980 MSEK in annual revenue and EBIT margin of 4.4% for 2013. Thus, chains only accounted for 30% of the total retail sector, which indicates that the industry is still highly fragmented with numerous smaller, privately-owned stores. Consequently, the retail work-wear industry offers opportunities for consolidation. As highlighted by table 58 in appendix E, there are five main work-wear chains in Sweden. Further, the largest chain A21 account for 60% of the segment and 20% of the total retail sector, which is owned by the leading work-wear manufacturer A12. Physical stores with 550 MSEK in revenue accounted for nearly 20% of total sales during 2013. The group has grown 70% between 2004 and 2013. The group physical and online stores has exhibit strong growth while maintaining a high profit margin during recent years, which indicates that the industry is moving towards online distribution channels. Further, online stores has shown the highest growth as well as profitability. For instance, the online segment grew with 50% between 2011 and 2013 at an average EBIT margin of 12%. Lastly, profile stores accounted for 30% of total retail sales. The large presence of profile stores is an indication that a considerable portion of work-wear is purchased as profile products. See table 17 below for the identified retail groups.

	<b>3- Y EBIT</b>	<b>3-Y CAGR</b>	<b>10-Y EBIT</b>	<b>10-Y CAGR</b>	<b>Revenue 2013</b>
Chains	4.4%	6.3%	5.1%	6.9%	983,184,000
Physical stores	5.8%	1.8%	5.5%	5.9%	554,633,000
Stores & online	7.0%	2.6%	5.8%	7.5%	475,632,000
Online stores	11.6%	23.8%	11.5%	/	74,339,000
Profile stores	4.7%	7.4%	4.4%	9.6%	937,446,000
					<b>3,025,234,000</b>

**Table 17 – Work-wear segmentation (retail)**

### **6.1.2 Business case analysis**

The first business case is A12, which is a private equity owned manufacturer of premium clothes and shoes for workers. With a strong focus on development of quality products, and outsourced production, A12 has a strong position on the Swedish market. (Head of Product A12, 2015; A12, 2015) As mentioned, A12 controls A21, which is the largest retail chain for work-wear in Sweden with over thirty stores selling A12's products as well as external brands. During recent years, A12 has exhibited strong growth and profitability. For instance, the year over year growth since 2011 has been 21.4% (data for 2010 were not available because of a restructuring the same year). As a consequence, A12 ranked ten on growth the criteria. In terms of profitability, A12 had an EBIT margin of 7.3% over the last three years, which is considerably higher than the industry average of 3.8% (which is compared to the manufacturing as well as retail sectors because the control of A21). See figure 5 below for financial data.



**Figure 5 – Financial data A12**

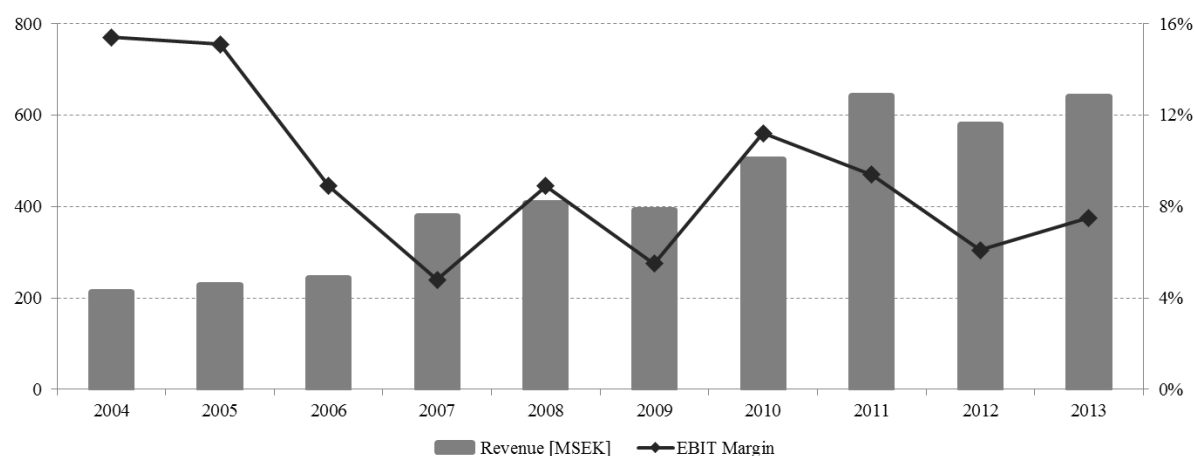
Considering the business model of A12, the products are distributed nearly exclusively through A21's stores (A21, 2015). Through the high degree of downstream integration, the firm does not depend on external retailers for distribution of its products, which is unique in the Swedish work-wear industry. Additionally, A12 has pursued a focused differentiation strategy by targeting the premium segment, which is less price sensitive than the lower segments. As the production of A21 is completely outsourced, the company has potential to adjust capacity at a rapid rate. (Head of Product A21, 2015) However, there is a risk for channel conflict as A21 sells products from competitors as well. Further, the transition to online retail channels might negatively affect A21's current retail position. The firm is rated nine on the business model criteria because of the control over distribution and high-end market position. See table 18 for the result of the evaluation. In terms of resources and capabilities, A12 ranked high. For instance, the firm through A21 controls an extensive sales network with numerous stores, which is an important complementary asset in a mature industry. Additionally, A12 has advanced research and development capabilities for specialized high-end work-wear and a strong established brand (Head of Product A12, 2015). From an ownership perspective, A12 is a highly interesting investment case as it is owned by a private equity company since 2010. Therefore, A12 is ranked nine on takeover potential.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
10	8	9	10	9	9.2

**Table 18 – Business case evaluation A12**

A10 is a successful mid-tier manufacturer of clothes, gloves, shoes, and other products for sectors such as construction, forestry, and manufacturing in the Nordics (A10, 2015; Sales Manager A10, 2015). Currently, the firm is expanding to additional markets in Europe such as

Germany and United Kingdom. (A10, 2015) Considering that A10 has higher profitability and growth than the industry average, the company has a distinctive competitive advantage in the manufacturing industry. Specifically, A10's three year CAGR of 8.3% is significantly higher than the average growth of 1.0% in the work-wear manufacturing sector, which motivates a score of nine. See figure 6 below. With regard to profitability, the firm had an average EBIT of 7.7% between 2011 and 2013. Compared to the industry average of 3.4%, A10 is therefore ranked eight on profitability, see table 19 below for the evaluation.



**Figure 6 – Financial data A10**

In terms of business model, the firm has a broad value proposition targeting a wide range of customers in several different product categories. Through its position in the mid-tier segment, the firm is able to target a large market with both heavy and light users. (Sales Manager A10, 2015) With several factories in Asia, the firm controls most of the production, which enables greater control of the value chain and potential for increased quality assurance (A10, 2015). Further, A10's vertical integration upstream has potential to reduce the time to market for new products as well as increased control over production capacity. However, controlling manufacturing might increase the firm's exposure to economic downturns compared to outsourced production, which is more flexible with regard to adjusting output. Additionally, A10 has a strong and well-known brand in the work-wear industry. As a consequence, A10 is rated eight on resources and capabilities. Lastly, the privately-owned A10 is rated high on takeover potential as Invest AB's team is optimistic about a potential acquisition.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
9	9	8	8	7	8.2

**Table 19 – Business case evaluation A10**

The manufacturer A8 serve the Nordics and Europeans markets with a wide range of mid-priced work-wear products (A8, 2015). Due to structural changes in 2011 impacting revenues, the exact growth during recent years is not accessible, see figure 53 in appendix E. However, the firm is rated a seven based on an estimate of the organic growth. Further, A8 is highly profitable with an average EBIT margin of 10.1% between 2011 and 2013, see table 20 below for the evaluation on each investment criteria. With several products outside work-wear such as ladders and tools, the firm has a broad value proposition targeting a broad range of customers (A8, 2015). Thus, A8 is not solely dependent on the performance of the work-wear industry. Similar to A10, the firm owns production facilities Southeast Asia and Eastern Europe, which allows for faster time to market and increased quality control. Additionally, A8 has a well-known and respected brand among consumers in Northern Europe. (A8, 2015) As a consequence, the firm ranked seven on resources and capabilities. Currently, a long-term investor similar to Invest AB owns A8. Based on feedback from Invest AB, a potential sale of A8 is highly unlikely, which motivates a low score on takeover potential.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
7	9	7	7	3	6.6

**Table 20 – Business case evaluation A8**

Lastly, the final business case A5 is a profitable manufacturer of shoes and gloves in the mid-tier price segment currently controlled by the founding family (A5, 2015). Similar to the other analyzed work-wear firms, the recent financial performance of A5 has been strong. For instance, the firm had an average annual growth rate of 3.2% over the last three years. Further, A5 has had an average EBIT margin of 11.0% between 2011 and 2013, which is an indication of a significant competitive advantage. Thus, the firm ranked high on growth as well as profitability, see table 21. Considering A5's business model, the firm is a specialized niche manufacturer of shoes and gloves (A5, 2015). The narrow focus on protective gear for hands and feet is unique among work-wear manufacturers in the Nordics. Further, A5 has several specialized, established brands that enables the firm to secure a strong market position in the Northern Europe. In terms of manufacturing, the firm uses in-house production facilities in Finland as well as external suppliers. (A5, 2015) In comparison to A8 and A10 with production in Asia, the firm's factories in the Nordics allow for lower transportation costs and greater control of the production. Also, the mix between in-house production and outsourcing allows for increased flexibility. Therefore, A5 is ranked eight for resources and capabilities. A5 is a stable family company that recently saw a shift of control to the next generation (A5, 2015).

The investment team at Invest AB believes the likelihood of a sale is low at best. Consequently, A5 is ranked two on takeover potential.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
7	10	8	8	2	7.0

**Table 21 – Business case evaluation A5**

In sum, there is a significant difference between the scores of the investment cases in the work-wear industry. A12 is ranked highest with an average score of 9.2 followed by A10 with 8.2. An interesting observation is the difference in value chain and firm boundaries between the two firms. Specifically, A12 is integrated forward into retail, whereas A10 is integrated backward into production. With a score of 6.6 and 7.0 respectively, A8 and A5 ranked lower than the two other firms. Regarding additional investments within the work-wear manufacturing industry, there are several interesting firms with attractive market positions as well as high profitability and growth. Attractive firms include A9, A1, A3, A7, and A65, see appendix E for more information.

## **6.2 Prefabricated wooden houses**

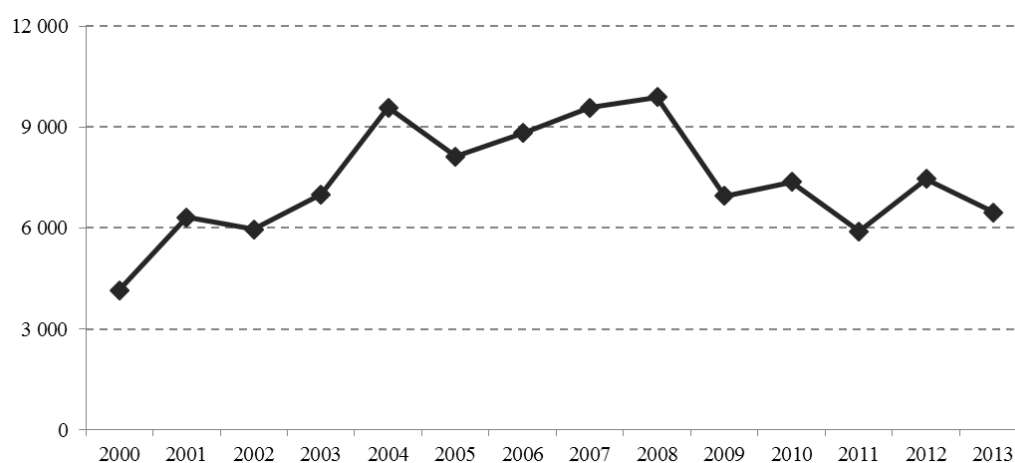
Prefabricated wooden houses ranked second behind work-wear in the industry evaluation and scored high on several criteria including profitability, relevant firms, and attractive investment cases. The firms B5, B3, B1, and B4 were identified as potential investment cases for Invest AB. The firms will be individually evaluated using the business case framework. See appendix F for more specific details about each investigated firm.

### **6.2.1 Industry analysis**

As mentioned in the previous section, wooden houses are to various degrees prefabricated in factories before final assembly at the building site, which increases quality, reduces costs, and enables faster delivery in comparison to traditional construction of houses. In general, there are two main categories within prefabricated wooden houses: modules and precut (Hus.se, 2015). Further, modules can be divided into two additional categories based on the construction design: plane and volume element (af Wåhlberg, 2012). Plane elements are two-dimensional wall elements that are produced in factories and assembled on site. In comparison, wall elements are three-dimensional elements that are fitted with additional parts such as kitchen, bathroom, and electricity directly in the factory. (B2, 2015; B5, 2015) Thus, houses built using volume elements is the most prefabricated and standardized wooden house category. Conversely, precut houses are built on site using individual planks that are precut in the factory

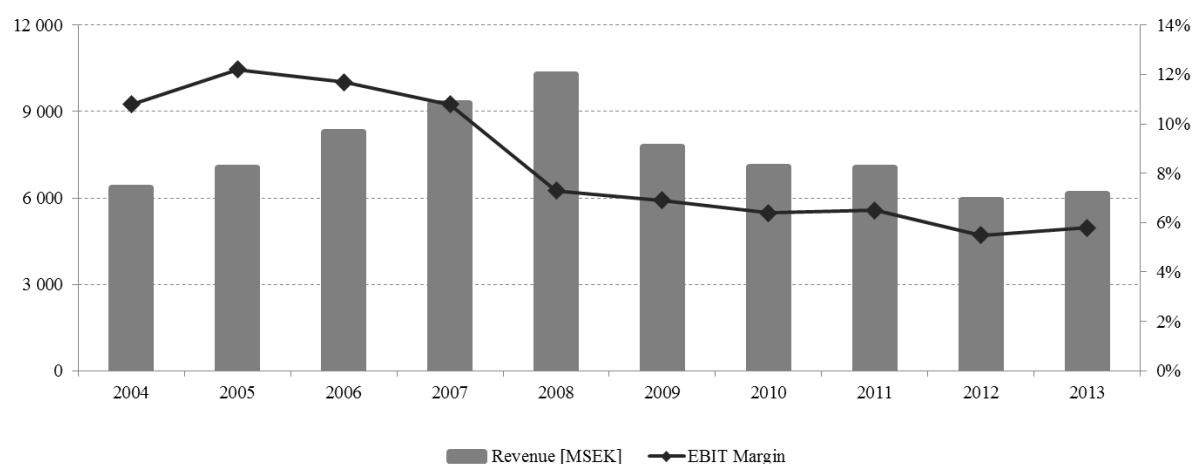
based on the construction design (B4, 2015). Precut often offer greater design flexibility than modules, however, modules enables faster assembly and higher quality (Eskilsson, 2014). Today, the Swedish wooden house industry is dominated by module manufacturers, with only a few firms such as B4 and B50 focusing on precut (Eskilsson, 2014; Hus.se, 2015). Further, the level of design flexibility and individual customization differs across manufactures. For instance, manufactures such as B2 (2015) and B5 (2015) focuses on a few, highly standardized houses while manufactures such as B8 (2015) only produces individual houses based on the customer's design.

During the last decade, the construction of detached one-family houses in Sweden has grown steadily from ca. 4,150 in 2000 to ca. 6,500 in 2013, which represent an increase of nearly 60%. See figure 7 below. In general, 80% of the detached one-family houses in Sweden are prefabricated wooden houses (TMF, 2012). Further, the construction of houses increased with 27% during 2014, which is indication that the industry is experiencing strong growth (TMFc, 2015). As figure 7 highlights, the construction in Sweden is cyclical. For example, the construction of houses dropped with 30% between 2008 and 2009. In addition to the overall economy, the construction is driven by interest rates, availability of land lots, and production costs (af Wåhlberg, 2012; Lindberg, 2004). The three regions that dominate the construction of detached one-family houses in Sweden is Stockholm with 20%, Gothenburg with 14%, and Malmö with 8%. See table 67 in appendix F for more detailed data. In addition, data regarding order intake in the wooden house industry from TMFd (2015) confirms the strong growth, see figure 60. Specifically, the order intake grew with more than 50% during 2012 and 2014.



**Figure 7 – Construction detached one-family houses (Sweden)**

For the industry analysis, 46 firms were identified and analyzed with regard to factors such as revenue, product variants, and ownership. During 2013, the studied firms had annual revenues of 6.7 billion SEK and an average EBIT margin of 5.5%, see figure 8. In comparison, data from SCB indicates that the total prefabricated wooden house industry in Sweden was 9.1 billion SEK in 2013, however, a wider industry definition was used (TMFc, 2015). The average EBIT margin since 2004 has been 8.2%, which is an indication of an attractive industry with favorable competitive pressure. Further, the profit margin was as high as 7% during the financial crisis because house manufactures are able to cost effectively adjust production levels (Edgren, 2015). The analysis of the identified firms indicates that the industry is fragmented as the top 10 firms such as B2, B9, and B10 account for 70% of the total revenue while the remaining 36 firms such as B14 and B33 account for 30%.



**Figure 8 – Prefabricated wooden houses**

In an effort to analyze the industry more in-depth, all of the studied firms with annual revenue exceeding 50 MSEK were divided into different strategic groups based on dimensions such as pricing strategy and construction design. Following the analysis, a strong relationship was found between pricing strategy and profitability. See table 22 below. For instance, the lower priced firms accounted for nearly 100% of the total profits. Specifically, the firms were divided into four different pricing categories based on their average price per square meter: low ( $<13,000/\text{m}^2$ ), mid-low ( $13\text{--}15,000/\text{m}^2$ ), mid-high ( $16\text{--}18,000/\text{m}^2$ ), and high ( $>19,000/\text{m}^2$ ). See appendix F for the individual firms in each group. Firstly, the low segment with the two firms B2 and B5 is the most profitable group in the industry with an average EBIT margin of 21% between 2004 and 2013. Specifically, the two firms have the highest degree of prefabrication in the industry offering a very limited set of variants that are highly standardized. Further, the

low-end segment is going well in both good and bad times as low-cost, standardized houses are always in demand. (Edgren, 2015)

	<b>3- Y EBIT</b>	<b>3-Y CAGR</b>	<b>10-Y EBIT</b>	<b>10-Y CAGR</b>	<b>Revenue 2013</b>
Low: < 13,000	15.1%	-2.6%	16.5%	7.0%	1,498,010,000
Mid-low: 13,000-15,000	10.3%	-1.8%	8.6%	1.2%	1,134,382,443
Mid-low*: 13,000-15,000	15.5%	3.3%	12.2%	3.4%	924,128,443
Mid-high: 16,000-18,000	0.0%	-4.4%	3.2%	4.6%	3,024,155,850
High: > 19,000	0.8%	4.6%	2.1%	3.6%	473,708,838
	<i>*Excluding B12</i>				<b>6,130,257,131</b>

**Table 22 – Prefabricated wooden house (price segmentation)**

Secondly, the mid-low group offers less standardized, higher priced houses than the previous segment. The firms in the group focuses less on first-time buyers and more on customization than the low segment (Head of Strategy B5, Sales Manager B3, 2015, B2, 2015). Similar to the previous group, the mid-low segment is highly profitably with an average EBIT margin of 7.3% between 2004 and 2013. The significant drop in profitability and revenue between 2008 and 2010 is attributed to the poor performance of B12. Excluding B12, the segment had an average EBIT margin of nearly 12% during the same period. The segment has also several leading firms such as B1 and B3 with high profitability, attractive market positions, and strong brands (Edgren, 2015; Sales Manager B3, 2015; Production Director B1, 2015). Thirdly, the mid-high segment is the largest group with more than 3 billion SEK in revenue during 2013. Several of the largest firms such as B9 and B10 are in this group. As figure 66 in appendix F highlights, the average EBIT margin has been negative since 2010. An analysis of the cost structure across all four segments indicates that the mid-high firms were not able to effectively adjust their cost positions following the financial crisis, which to a great extent explains the low profit margins today. Lastly, the fourth segment is the smallest group with less than 500 MSEK in annual revenue. Specifically, the firms focus on high-end houses that are highly customized for each customer's individual needs (B8, 2015; B28, 2015). Similar to the previous group, the high-end firms have relatively low profitability, see figure 68 in the appendix. In addition, the studied firms were grouped with regard to pricing strategy and construction design. As figure 9 highlights, there is strong relationship between individual groups and profitability. For instance, low price and volume elements are highly profitably while mid-low price and volume elements are not. Further, firms with mid-low price and plane elements are significantly more profitable than firms with mid-high price and plane elements.

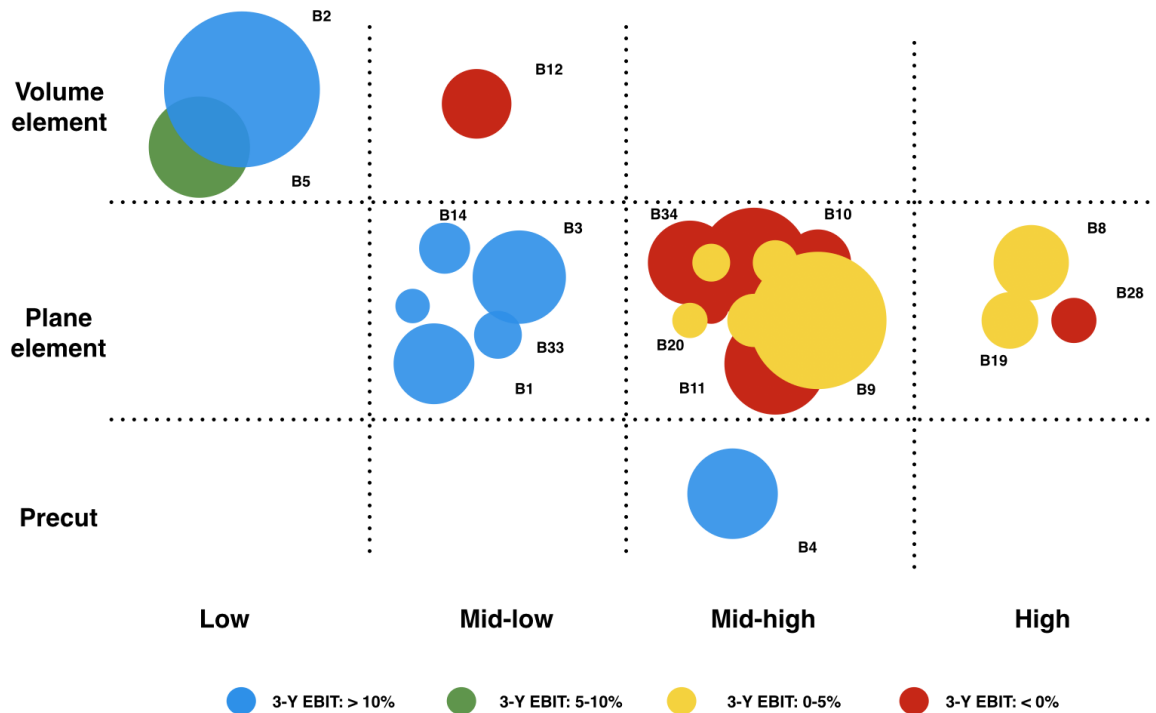
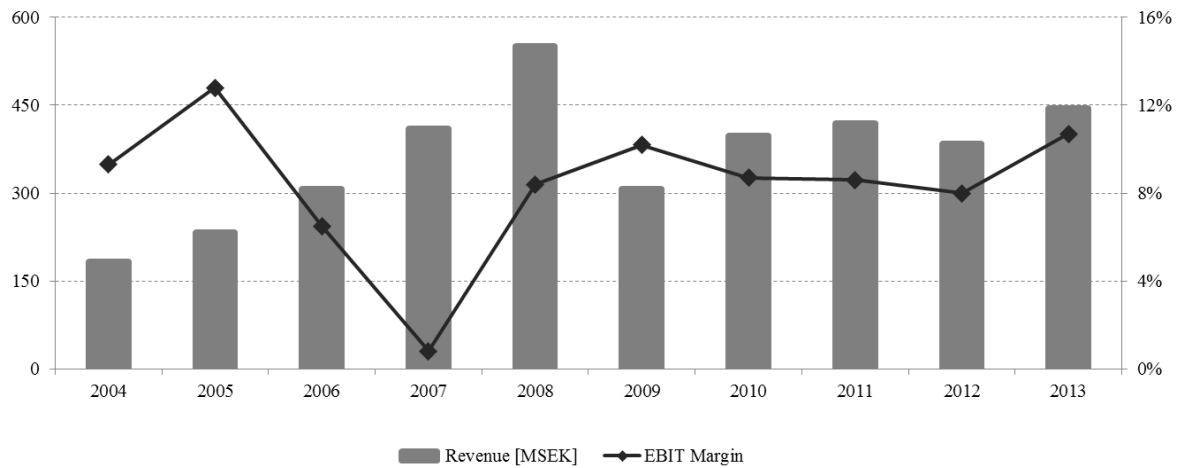


Figure 9 – Price segmentation vs. construction design

Currently, the wooden house industry is undergoing a transformation towards a higher degree of prefabrication (Edgren, 2015). House manufacturers will likely follow the automotive industry, which is characterized by greater atomization as well as flexibility (Eliasson, 2010; Edgren, 2015). Historically, the level of atomization in the industry has been low and there are significant opportunities for improvement (Eliasson & Sandberg, 2011). Further, the industry is characterized by consolidation, which is partly driven by the increasing degree of prefabrication (Edgren, 2015). Finally, there are several factors that are integral for success in the industry. According to Edgren (2015), the most important factor is the final product delivered to the customer. As a consequence, effective manufacturing with few quality errors as well as turnkey contracts where the firm takes full responsibility for final assembly of the house are of great importance. Also, the sales organization is vital for success in the industry.

### 6.2.2 Business case analysis

B5 is a leading wooden house manufacturer with 450 MSEK in revenue focusing on first-time buyers in the low-end of the market with a limited set of highly standardized houses (B5, 2015; Head of Strategy B5, 2015). Specifically, the firm uses a handful of core platforms to offer different combinations of houses (B5, 2015). The firm had an average EBIT margin of 9% between 2011 and 2013, see figure 10.



**Figure 10 – Financial data B5**

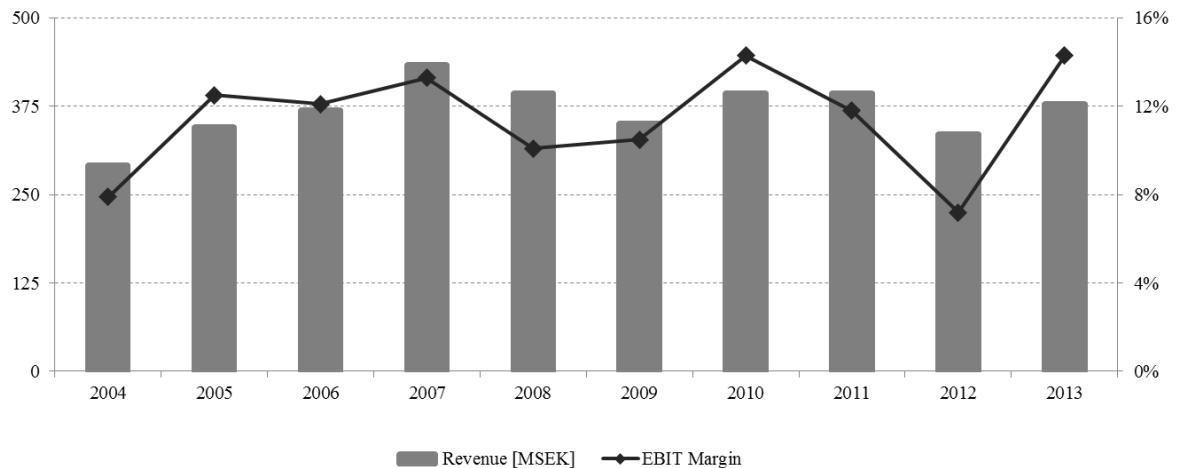
B5 has a strong, sustainable business model with regard to integral building blocks such as customer segments, value proposition, and channels, which enables the firm to create as well as capture value. By targeting the low-end of the market with low-cost, standardized houses, the firm is able to effectively target an attractive customer segment with a unique value proposition. As mentioned, low-cost volume element houses are in demand during economic upturns as well as downturns (Edgren, 2015). In addition, B5 is favorably positioned between the cost-leader B2 and the mid-low segment. In terms of channels, the firm takes full responsibility of the final assembly of the houses through turnkey contracts, which is one of the most critical success factors in the industry (B5, 2015; Edgren, 2015). B5 also has valuable resources and capabilities, which allows the firm to gain a competitive advantage. Specifically, the firm has strong integrated product development, manufacturing, and sales capabilities that enables the firm to cost effectively produce houses that fulfill customer needs (Head of Strategy B5, 2015). Additionally, B5 is the most developed firm in the industry with regard to automation. The high degree of automation and prefabrication with volume elements reduce the risk for quality errors, which is an import success factor. (Edgren, 2015) However, a larger Nordic housing firm owns B5 together with B9 (B5, 2015). As a consequence, the takeover potential is considered low. See table 23 for the evaluation.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
9	8	8	9	3	7.4

**Table 23 – Business case evaluation B5**

The next firm B3 is an old, established wooden house manufacturer active on the Swedish as well as Norwegian and German markets (B3, 2015). With regard to growth and profitability, the firm ranked similar to B5. For instance, B3's average EBIT margin between 2011 and 2013

was 11%, see figure 11. The firm offers a wide range of houses spanning from simple, standardized houses to more expensive, customized variants (B3, 2015). As a consequence, the firm competes with low-end firms such as B5 as well as high-end such as B9. In general, B3 targets more mature and experienced buyers seeking to customize their houses (Sales Manager B3, 2015).



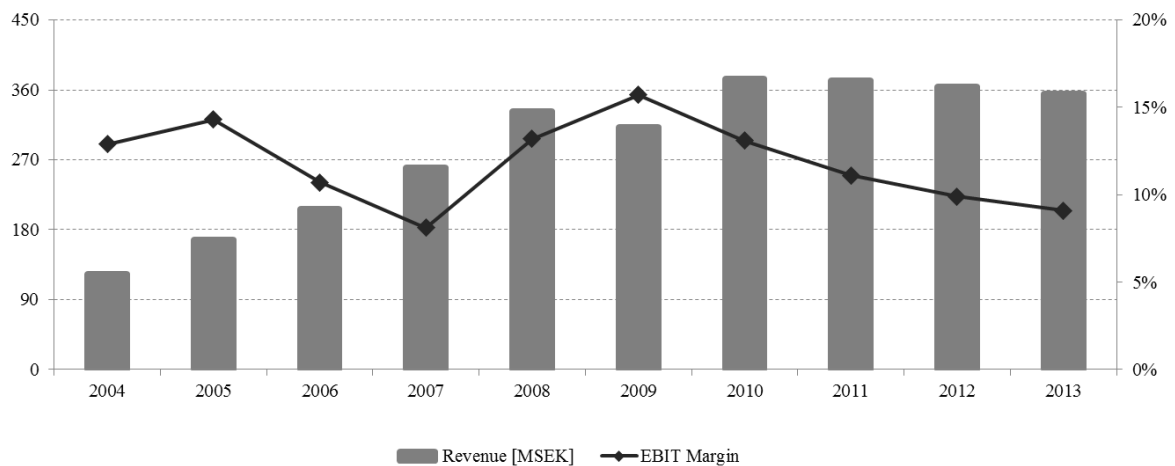
**Figure 11 – Financial data B3**

In contrast to B5, B3 does not offer turnkey contracts for assembly (B3, 2015). Thus, the firm does not take full responsibility of the final assembly of the house, which is an important success factor. Due to the lack of turnkey contracts as well as customer segments and value proposition, B3 ranked lower on the business model criteria than B5, see table 24. For instance, the firm targets a wider range of customers with a less focused value proposition. However, B3 ranked slightly higher on resources and capabilities. Specifically, B3 controls valuable resources such as sawmill, factory, and transportation, which enable the firm to control a large part of the value chain (B3, 2015). Also, the firm has built a strong, quality brand among consumers during the numerous years in business, which is of outmost importance in the wooden house industry (Sales Manager B3, 2015; Edgren, 2015). Further, the management's competence and long-term perspective enables the firm to perform well during economic upturns and downturns (Edgren, 2015). In terms of ownership, B3 ranked a six because the firm is currently undergoing a generation shift. As a consequence, there is still a chance for takeover.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
8	9	6	7	6	7.2

**Table 24 – Business case evaluation B3**

B4 is the leading precut wooden house manufacturer in Sweden with strong presence in the Nordics (B4, 2015; Edgren, 2015). In Sweden, B4's geographic strength is in Svealand but the firm is currently expanding to other parts of the country (Sales Manager B4, 2015). During the last decade, the firm has experienced strong growth while maintaining a high profit margin. For instance, B4 grew 200% at an average EBIT margin of 12% between 2004 and 2013. See figure 12 below.



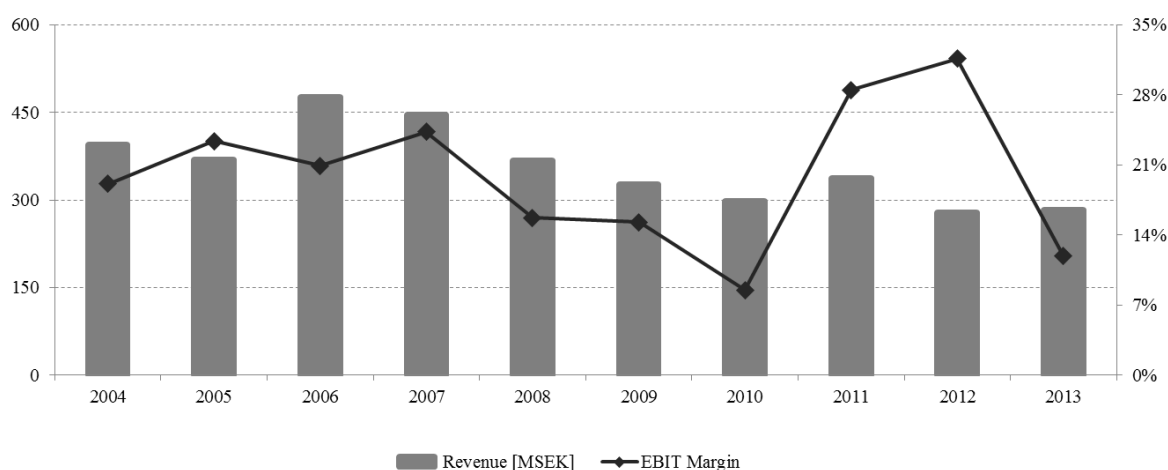
**Figure 12 – Financial data B4**

In terms of business model, the firm scored an eight, which indicates a strong, sustainable business model. B4 has a unique value proposition on the Swedish market where the firm is able to offer highly customized, architect-designed houses to a low price (Edgren, 2015; Sales Manager B4, 2015). The firm relies on external suppliers to deliver the precut material to its distribution central, which is then delivered to the construction site for assembly (B4, 2015). As a consequence, the absence of in-house production might enable the firm to more effectively adjust to fluctuations in demand during economic downturns. With regard to revenue streams, B4 along with the three other firms buys and develops land for construction of houses, which is an increasing trend within the industry (Edgren, 2015). B4 has strong resources and capabilities that enable the firm to gain a valuable competitive advantage in the industry. The firm has strong design capabilities that allow rapid and effective creation of customized houses. Similar to the other firms, B4 has also a strong and extensive sales organization with 40 agents in 30 cities. With regard to ownership, a sale is likely as B4 is currently owned by a private equity firm (B4, 2015). See table 25 for the evaluation.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
7	9	8	8	8	8.0

**Table 25 – Business case evaluation B4**

Lastly, the fourth firm B1 is an established wooden house manufacturer producing year-round houses as well as vacation homes (B1, 2015). In fact, B1 and B4 are the only firms among the four investment cases that are active in the vacation homes segment. Based on the conducted analysis, B1 along with B2 were the only two firms in the entire industry that consistently had an EBIT margin around 20%. For example, B1 had an average EBIT margin of 24% between 2011 and 2013, see figure 13.



**Figure 13 – Financial data B1**

In terms of geographical strength, the firm is strong in Stockholm, Gothenburg, and Halland, which are three of the largest and most important regions for construction of detached, one-family houses in Sweden (Production Director B1, 2015). The firm scored a six on the business model criteria because of the less focused value proposition as well as lack of target customer segments. For instance, B1 sells a wide range of house models to any potential customer that might be interested in the product (Production Director, 2015). However, the firm scored significantly higher on resources and capabilities. The firm has valuable resources in the form of a strong, quality brand among consumers and competitors as well as a solid financial position, which are important attributes in the wooden house industry (Production Director B1, 2015; Edgren, 2015). Further, B1 has strong manufacturing capabilities and are able to effectively produce high quality houses (Production Director B1, 2015). As a consequence, the firm is able to gain a competitive advantage. Lastly, the current owner is nearing retirement. As mentioned, this is one of the most attractive ownership situations that motivates a score of eight on takeover potential, see table 26.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
7	10	6	8	8	7.8

**Table 26 – Business case evaluation B1**

In sum, B4 ranked first with 8.0 followed by B1 (7.8), B5 (7.4), and B3 (7.2). As table 23-26 highlights, the identified firms received relatively high scores on the investment criteria, which indicates that all four firms are attractive investment cases. In addition, two add-on investments were identified: B33 and B14. More specific details are found in appendix F.

### **6.3 Prefabricated concrete**

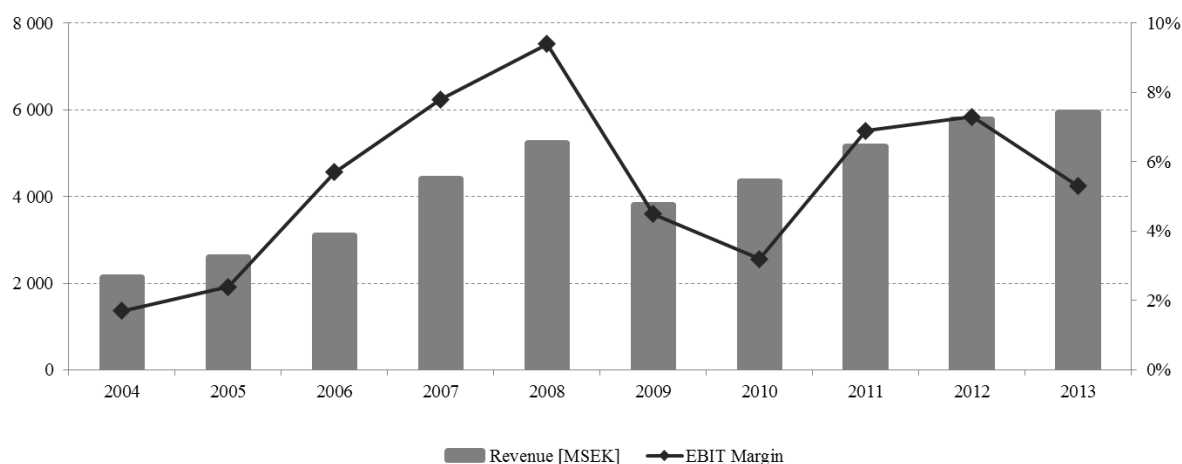
With an overall score of 7.7, prefabricated concrete ranked third behind work-wear and wooden houses. The industry scored high on several investment criteria including growth, fragmentation, and investment cases. Based on the conducted industry evaluation, the following business cases were identified: C11, C2 & C14, and C12 & C13, which are presented and discussed in this section. See appendix G for more detailed industry and firm data.

#### **6.3.1 Industry analysis**

The concrete industry in Sweden can be divided into the three groups: ready-mix concrete, prefabricated concrete, and diversified, see tables 35-37 in appendix D. Based on the identified firms in the previous chapter, the largest group is diversified followed by ready-mix concrete and prefabricated concrete. For the following analysis, the prefabricated concrete group is investigated more in-depth. Specifically, prefabricated concrete is molded in factories for assembly at the construction sites, which decreases costs and construction time as well increases quality (Svensk Betong, 2015; Bröchner, 2015). From a value chain perspective, the raw materials cement, ballast, and additives are mixed to create concrete, which is molded into a pre-specified shape at the factory. Thereafter, the elements are transported to the building site for assembly into various constructions such as multi-storey buildings and warehouses. (C14, 2015; C11, 2015; Bröchner, 2015) Depending on the vertical scope of the firm, additional activities related to construction are also undertaken. Such activities include project planning, design, and final assembly of prefabricated concrete elements. (C13, 2015; C16, 2015; Bröchner, 2015)

For the analysis of the prefabricated concrete industry, 24 firms were identified and analyzed, see tables 80-82 in appendix G. During 2013, the firms had combined revenues of 5.9 billion SEK and an average EBIT margin of 5%. Further, the firms grew 180% between 2004 and 2013 at an average EBIT margin of 5.4%. As figure 14 highlights, the prefabricated concrete industry is cyclical. For instance, revenues dropped nearly 30% during the financial crisis from 5.2 billion SEK in 2008 to 3.8 billion SEK in 2009. However, the industry has recovered since the crisis with a growth of 55% between 2009 and 2013. As mentioned, the prefabricated concrete

industry is fragmented, with the four largest companies controlling 60% percent of the market in 2013. Additionally, the industry is stable as the rate of entry-and exit of firms is low. For firms with revenues exceeding 100 MSEK in 2013, 90% were active in 2005. The market structure for prefabricated concrete in other Scandinavian countries is similar to that of Sweden, with the exception of Finland where firms are more diversified manufacturing prefabricated concrete as well as ready-mix concrete. See appendix G for additional data on the prefabricated concrete industries in Denmark, Norway, and Finland.



**Figure 14 – Prefabricated concrete**

During the analysis, the firms in the prefabricated concrete industry have been divided into three strategic groups: system providers, components providers, and infrastructure. This grouping is based on the categorization of prefabricated concrete made by the trade organization Svensk Betong (2015). System providers constructs complete concrete structures such as parking houses, arenas, and residential buildings. Conversely, component providers produce individual prefabricated elements including pillars, walls, and staircases. As a consequence, system providers have greater vertical scope, undertaking more value-added activities related to construction. The final group provides roadside separators, water pumping stations, and bridges for infrastructure purposes. (Svensk Betong, 2015; C13, 2015; C11, 2015; C43, 2015; C42, 2015) System providers is the largest group with revenues exceeding 4.2 billion SEK in 2013. Historically, the segment has seen strong growth with three year CAGR of 11% and 9% respectively. Further, the average profitability between 2011 and 2013 was 6.6%, see table 27 for an overview of the group. Also, there are several interesting firms such C11, C32, and C13 with strong growth, profitability as well as capabilities. With the exception of C16 that controls 50% of total revenues, the segment is fragmented with several smaller firm such as C33, C32,

and C20. However, C16 has grown slower than the other firms, which has increased fragmentation.

	<b>3-YEBIT</b>	<b>3-YCAGR</b>	<b>10-YEBIT</b>	<b>10-YCAGR</b>	<b>Revenue 2013</b>
System providers	6.6%	11.3%	5.0%	10.1%	4,226,543,000
Component providers	4.8%	8.7%	6.5%	17.8%	1,394,401,000
Infrastructure	11.5%	17.5%	11.4%	16.1%	310,406,000
					<b>5,931,350,000</b>

**Table 27 – Prefabricated concrete (segmentation)**

The component provider group is the second largest, with combined revenues of 1.4 billion SEK in 2013. For the period 2011 to 2013, the year over year growth was 9% and the average EBIT margin was 5%. As table 81 in appendix G highlights, the segment is fragmented as most firms are in the range of 50-100 MSEK in annual revenues. Also, the firms manufacturing component elements are more vulnerable to economic downturns than the industry as a whole, which is highlighted in the figures 75 and 80 in appendix G. Similar to the previous group, there are several attractive firms such as C34 and C12 with high profitability and strong market positions. Lastly, the infrastructure group is the smallest with total revenues of 300 MSEK for 2013. Further, all of the infrastructure firms have less than 100 MSEK in revenues. However, the size of the infrastructure segment is somewhat misleading, as several of the diversified concrete firms are active within infrastructure. The infrastructure group is highly profitable with an average EBIT margin of 11.5% over the last three years.

The three key success factors of the prefabricated concrete industry are capacity utilization, efficient production, and geography (Bröchner, 2015). Firstly, capacity utilization is important for profitability, as fixed costs for prefabricated concrete production plants are high. Specifically, skilled labor as well as specialized factories contribute to high fixed costs. (Bröchner, 2015) Further, high capacity utilization is more critical than absolute size of the production plant, which is highlighted by figure 77 in appendix G. As the figure highlights, there is no relationship between size and profitability. Secondly, efficient and effective production is important as labor costs increases with the complexity of the products. Also, the production of precise prefabricated concrete is complex and competing firms use similar raw materials. As a consequence, effective production is an important success factor in the prefabricated concrete industry. Thirdly, geographical location is a key success factor due to transport limitations. For instance, the transportation of prefabricated concrete is costly, as products are often large and heavy. Thus, transportation cost account for a considerable share of total costs. The value added and complexity of products determines the economically viable

distance that concrete can be transported (Bröchner, 2015). In terms of geographic location, the most profitable prefabricated concrete firms are in Västra Götaland, Småland, and Östergötland. See appendix G for more detailed information regarding geography and financial performance. As a consequence of transportation distances and complexity of production, there is potential for local monopolies.

### 6.3.2 Business case analysis

C11 is a premium manufacturer of prefabricated concrete in the system provider segment, focusing mainly on residential buildings (Chief Marketing Officer C11, 2015). It is a highly profitable and stable family owned company with 440 MSEK in revenues, located in Västra Götaland. The firm has a unique competitive advantage in the concrete industry in general and in the system provider segment in particular. During the last ten years, C11 has exhibited strong growth while maintaining an EBIT margin well-above industry average. Between 2011 and 2013, the firm grew more than 100% at an average EBIT margin of 20%, see figure 15. Consequently, C11 is rated ten for growth, and ten for profitability.

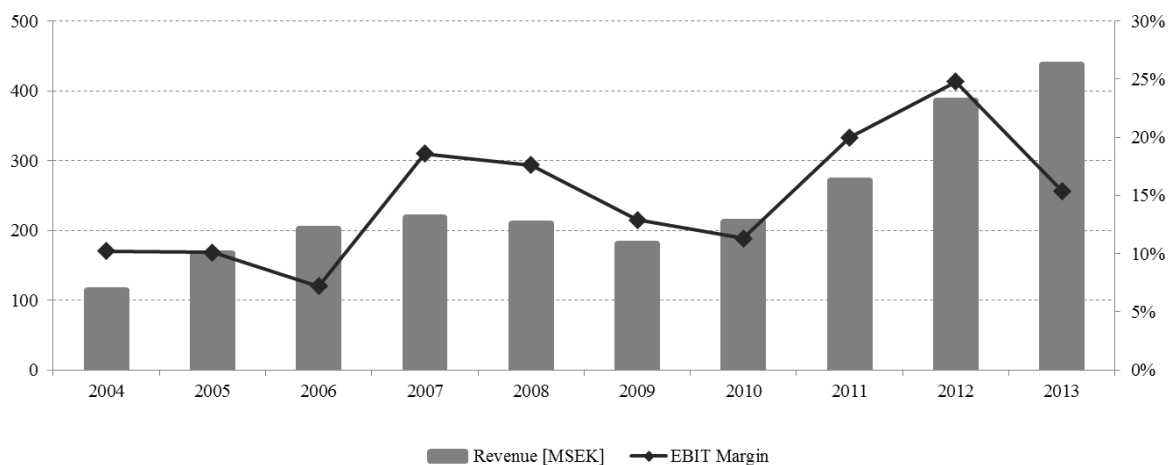


Figure 15 – Financial data C11

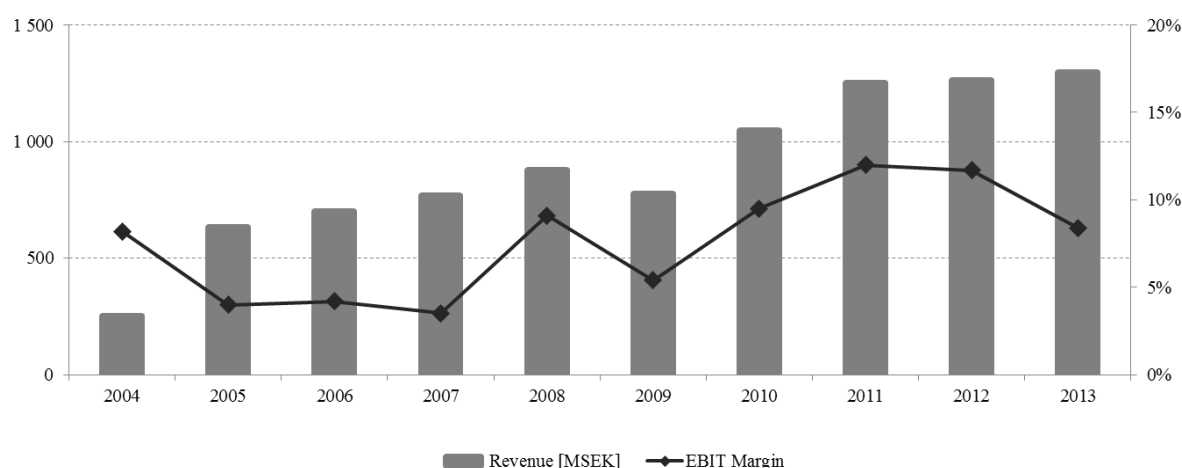
There are several factors that allow C11 to outperform its competitors, which is partly attributed to the business model. In terms of positioning, C11 is positioning in the premium segment with a focus on precision (Chief Marketing Officer C11, 2015). As a consequence, the firm competes on other dimensions than price. Further, the firm has an attractive value proposition with a strong focus on the customer through the entire construction process as well as a favorable geographical position. Thus, C11 is rated eight on the business model criteria. Considering resources and capabilities, the firm has valuable manufacturing capabilities. Specifically, C11 has worked continuously with production improvements and optimization of the construction

process as a whole, which increases quality and reduces costs throughout the entire value chain (C11, 2015). While some competitors dismiss skilled labor in economic downturns, C11 has an outspoken strategy to maintain competence in the company even when demand is low (Chief Marketing Officer C11, 2015). As a consequence, the firm has an advantage relative competitors with regard to production of more advanced and precise concrete systems. From a takeover perspective, C11 is not an optimal acquisition target as the CEO is a member of the owner family in the middle of his career. See table 28 for the evaluation.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
10	10	8	9	6	8.6

**Table 28 – Business case evaluation C11**

The second business case is the combination of the prefabricated concrete manufacturer C14 and the ready-mix concrete firm C2. The two companies are tightly linked in terms of organization, resources, and ownership (C2 & C14, 2015). In 2013, C2 & C14 had combined revenues of 1.3 billion SEK. Considering magnitude of competitive advantage, C2 & C14 had a three year CAGR of 7% and an average EBIT margin of 11% between 2011 and 2013, see figure 16. Compared to the industry averages of 11.0% CAGR and 6.5% EBIT margin, C2 & C14 is highly profitable but has weaker growth. Therefore, C2 & C14 is ranked three on growth and nine on profitability.



**Figure 16 – Financial data C2 & C14**

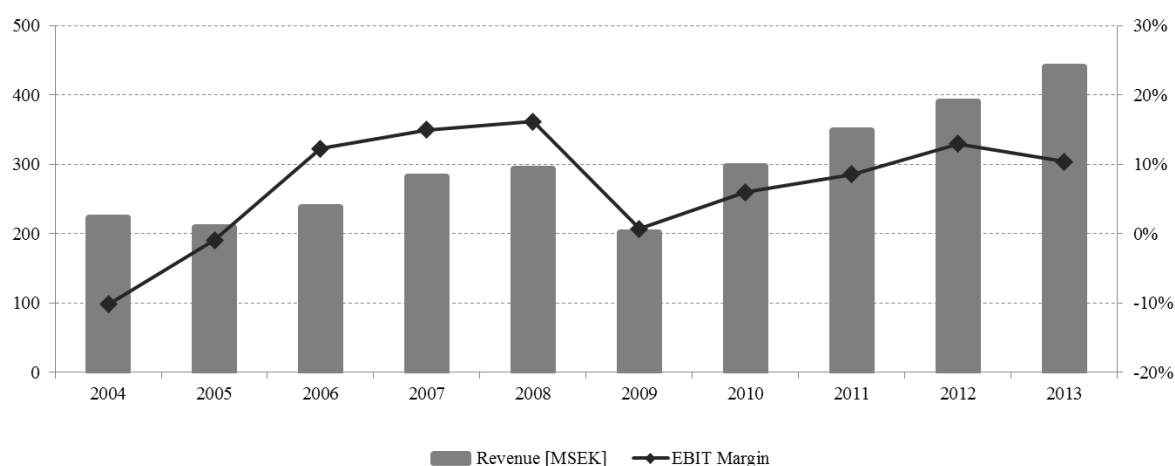
Further, the combined firms has a strong, sustainable business model. In contrast to the other investment cases, C2 & C14 has a leading market position in the business as well as consumer segments. Additionally, C14 provides complete concrete systems as well as individual components (Sales Manager C14, 2015). Thus, the firm is active in two different strategic

groups. The broad value proposition in combination with C2 & C14's advantageous geographical location in southern Sweden enables the firm to successfully reach a wide customer base. In terms of resources and capabilities, C2 & C14 has a strong, established brand among businesses as well as consumers. See table 29 for the evaluation. In addition, the business case has capabilities related to ready-mix as well as prefabricated concrete products. Also, C2 & C14 has an extensive sales network, and strong customer relations. (Sales Manager C14, 2015; C2 & C14, 2015) However, there is uncertainty regarding effective capacity utilization as C2 & C14 has multiple production sites across Sweden. Also, prefabricated concrete is rarely made by the same company that makes ready-mix concrete, which could be considered a strength as well as a liabilities. Lastly, the takeover potential is high as C2 & C14 is a second-generation family firm with an owner nearing retirement without an obvious successor (C2 & C14, 2015).

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
3	9	9	7	10	7.6

**Table 29 – Business case evaluation C2 & C14**

The final business case within prefabricated concrete is the combination of C12 and C13 with a total revenue of 440 MSEK for 2013. Specifically, C12 is active within the component segment while C13 provides complete concrete systems. Currently, C12 is owned by C13, which in turn is controlled by one of the largest construction companies in Sweden. (C12 & C13, 2015) As a result there is extensive cooperation between the two firms, which make a stand-alone sale of either firm unlikely. From a financial perspective C12 and C13 has performed well both on their own and as one entity over the last three years. The combined CAGR and EBIT margin between 2011 and 2013 were 12% and 11% respectively. Consequently, the business case is rated high on growth as well as profitability. See figure 17 for financial data.



**Figure 17 – Financial data C12 & C13**

Similar to C2 & C14, C12 & C13 operate within the component and system provider segments. Further, C13 focuses on industrial as well as residential customers, which allows the company to address a large customer base. (Marketing Manager C13, 2015) However, the links to the industry owner is a potential liability if the construction company account for a major share of sales. Additionally, C13 lacks a clear geographical focus, which could become a weakness if local firms are too dominant in specific regions. Therefore, C12 & C13 is ranked medium on business model, see table 30. Considering resources and capabilities, C12 has valuable production capabilities. Specifically, the firm focuses on Lean Production and Just in time (C12, 2015). However, the firm uses a specific concrete material, which could be an advantage as well as a disadvantages depending on future developments regarding factors such as customer preferences and environmental standards. Also, C13 has several smaller production facilities, which could make full capacity utilization and large-scale economics difficult. In terms of takeover potential, construction companies seldom owns firms in the prefabricated concrete industry. As mentioned, C12 & C13 are tightly integrated, which could make a combined sale possible. However, there is considerable uncertainty regarding the industry owner's future plans for C12 & C13.

Growth	Profitability	Business model	Resources & capabilities	Takeover potential	Total
7	9	6	6	6	6.8

**Table 30 – Business case evaluation C12 & C13**

Based on the conducted analysis of the business cases, C11 had the highest score (8.6) followed by C2 & C14 (7.6) and C12 & C13 (6.8). As table 28-30 highlights, C11 had the highest score despite moderate takeover potential. Thus, C11 is the most attractive investment case in the prefabricated concrete industry, however, it could be difficult to acquire. Finally, there are several smaller and highly profitable manufacturers that could be of interests as add-on investments. The most attractive companies are C41 and C43 within infrastructure, and C34 within components. See appendix G for further data on the additional investments.

## 7. Discussion

The following chapter covers concluding remarks on the business case analysis in the previous chapter. In addition, a more in-depth discussion of the most attractive investment case A12 is given.

### 7.1 Concluding remarks on business cases

For each of the investigated industries, several attractive investment cases were identified during the business case analysis. Specifically, there are multiple highly profitable and fast growing firms such as A12, B4, and C11. The difference between a great and an exceptional business case is dependent on factors such as sustainability of the business model, complementary assets, and potential for strategic improvement. Firstly, the work-wear industry has two highly interesting business cases A12 and A10. By controlling the largest work-wear chain in Sweden, A12 has a unique position with invaluable complementary assets. A12 has a strong value proposition in the premium segment with advanced work-wear products such as flame retardant clothing. Further, A10 is an attractive investment case with strong growth and profitably during recent years. In contrast to A12, A10 does not own the distribution channel, but is integrated backwards to a greater extent with in-house production. Both investment cases have strong brands and favorable ownership structures. The two other firms A5 and A8 scored high on investment criteria such as profitability, business model, and capabilities. However, the business cases are less attractive because of low takeover potential.

Secondly, the business cases in the prefabricated wooden house industry would be highly relevant for Invest AB given an acceptable acquisition price. For instance, the firms ranked high on growth, profitability, and business model. However, the investment cases in the wooden house industry have limited opportunities outside of increasing profitability and organic growth. From a strategic perspective, there are limited possibilities to increase competitiveness through business model innovation and building competitive barriers using complementary assets. Thirdly, there are two interesting investment cases in the prefabricated concrete industry. As indicated in the analysis, C11 has a unique position in the industry with extraordinary growth and profitability. Further, the firm has a strong market position and excellent production capabilities. However, the owner family is highly active, and deemed unlikely to sell. Similar to the business cases in the prefabricated wooden house industry, the potential to increase competitiveness through strategic actions is considered low. The second attractive business case within the prefabricated concrete industry is the profitable firms C2 & C14. The takeover

potential is high as the owner is nearing retirement. However, there is uncertainty regarding the future success of the firm as a significant share of revenues as well as profits stem from ready-mix concrete. Lastly, C12 & C13 is considered less attractive because of the current ownership situation.

## **7.2 Strategic positioning and future potential of A12**

As highlighted in section 6.1, there are several integral reasons for the attractiveness of A12. For instance, A12 has exhibited strong growth while maintaining a high profit margin. The firm is only second to C11 in terms of magnitude of competitive advantage. A12 has a strong value proposition as well as research and development capabilities necessary to innovate competitive materials for the high-end work-wear market. However, it is from a value chain perspective that A12 differs distinctively from competitors such as A5 and A10. The competition in the industry is to various extents integrated upstream into production, whereas A12 is downstream integrated with the control of A21 that is the dominant retail chain in Sweden. Additionally, the investment case is interesting as there is significant potential for growth strategies. Specifically, there are multiple strategies for increasing competitiveness, realizing synergies, and raising barriers to entry through complementary assets, which are discussed in the following section. Finally, A12 is owned by a private equity company and is approaching time of divestment.

The strategic potential of A12 has been divided into two areas: retail and product offerings. In terms of retail, A12 has through A21 a unique vertical scope controlling distribution. During recent years, A21 has started to consolidate the otherwise highly fragmented work-wear retail sector. With the exception of a few smaller chains, A21 is the only retail chain in the work-wear industry. Through an increased consolidation of the fragmented Nordic market, A21 could achieve an even stronger market position. With A21 increasing its share of the Swedish retail market, A12 can grow its sales further. In addition, A21's stores sell products made by A12 as well as its competitors. In the future, the share of competing products sold through A21's stores could be gradually reduced. As discussed by scholars such as Teece (1986), complementary assets are important to control in mature industries such as work-wear. Through the retail chain, A12 has potential to take market shares from competing manufactures, and create considerable barriers to entry.

Regarding an expansion of current product offerings, A12 has potential to be an excellent base for a buy-and-build strategy where new products can be distributed through A21's extensive

networks of stores in the Nordics. With A12 as the main platform, manufactures such as A9, A62, A1, A3, and A61 could be of interest as potential add-on investments. For example, A9 is a niche producer of protective masks, which could be a relevant addition to A12's current value proposition. Alternatively, another company with advanced capabilities in flame retardants such as A62 would ensure a dominant position for A12 in the Nordics. Another possibility could be to expand into new segments such as hotels and restaurants, as well as healthcare. An expansion into these markets could be achieved through an acquisition of A1. From a strategic perspective, an add-on investment such as A61 could be the most interesting. In contrast to A12, A61 serves the lower price segments. Through a budget brand, A12 could expand its revenues by entering other segments without diluting the value of the firm's premium brand. With a product offering spanning a wider range of product areas and price ranges, competing manufacturers' products sold through A21's stores could be replaced at a higher pace. In sum, A12 along with A21 have strong positions in the Nordic market for work-wear. Through the right strategic decisions, their market positions could be strengthened even further.

## 8. Conclusion

This thesis aimed to identify, screen, and evaluate industries and business cases for Invest AB, which is currently exploring new investment opportunities to expand the business portfolio and drive economic returns. As a consequence, two investment frameworks were developed for an effective and structured screening as well as evaluation. Based on literature as well as Invest AB, the frameworks encompassed factors such as financial characteristics, business models, and takeover potential. Today, Invest AB lacks a structured framework customized for the firm's investment philosophy. The defined investment frameworks will enable Invest AB to more effectively screen and evaluate industries as well as firms, which is a critical step towards a more successful and structured investment strategy. Further, the frameworks is an important starting point that will allow the firm to continuously develop and refine evaluation process.

Based on an extensive analysis of the Swedish market, the three industries work-wear, wooden houses, and prefabricated concrete were identified as the most attractive using the frameworks. The industries are attractive for Invest AB because of multiple factors including high profitability, strong growth, and interesting investment cases. In each industry, several investment cases such as A12, B4, and C11 were identified and evaluated. Multiple firms have sustainable business models, strong capabilities, and favorable ownership structures. By acquiring these firms, Invest AB will be able to strengthen its current portfolio with several attractive firms with leading market positions. In addition to driving economic returns, there is potential for the investment firm to further develop the companies with regard to revenue and cost opportunities as well as add-on investments. As mentioned in the discussion, the most attractive business case for Invest AB is A12 in the work-wear industry. In addition to high profitability and strong growth, the firm has a unique value chain position through the control of the largest retail chain in Sweden. Invest AB should focus on strengthening the firm's invaluable complementary assets by consolidating the highly fragmented retail industry. Also, the investment firm should expand current product offerings through a series of add-on investments such as A9, A62, and A1, which could be distributed using the vast network of retail stores. In sum, A12 is a highly attractive business case suitable for Invest AB because of the team's experience as well investment philosophy.

Additional research that would be of interest is a refinement of the defined investment frameworks. For instance, adding weights to the evaluation criteria based on relative importance is an integral step towards a more effective and successful screening process. This

could be based on further empirical research as well as a better understanding of Invest AB's investment situation. In addition, valuations of the identified firms will allow for a more in-depth analysis of the business cases. Further, valuation is of great importance in determining the attractiveness of investment cases because of the financial aspects involved such as estimating acquisition price and return on investment. Lastly, the study focused on a limited set of industries in Sweden. Consequently, an investigation of additional industries within and outside Sweden could be of great value for Invest AB.

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# Appendix

In the following sections, data and information used during the thesis is presented.

## Appendix A

The main questionnaire used for interviewing firms is found below:

### Strategy/business model

- Position in the market (high, mid, low)
- Customer segments: type of target customers
- Main products/customers (strongest & main focus)

### Geographical strength

- Where in Sweden is the firm the strongest?
- Where in Europe is the firm the strongest?

### Competitive advantage

- What makes the firm better/more competitive than the competitors (products, customers, business model, value chain, strategy etc.)?
- What is the firm best at (manufacturing, product development, distribution etc.)?

### Competition

- Top 3 competitors?

## Appendix B

In this section, an introduction to the industries evaluated during phase 1 is given.

### Phase 1 – Presented

#### Building material

- Background: building material such as concrete, insulation, and tiles
- Motivation: numerous market-leading firms with high profit margins
- Examples of firms: C2 (revenue: 672 MSEK, EBIT: 12%)

#### Furniture

- Background: furniture for private and business customers
- Motivation: strong tradition of furniture manufacturing in Sweden with considerable export income (several Swedish firms with ca. 10% in EBIT)
- Examples of firms: Brodrik (revenue: 744 MSEK, EBIT: 8%) & Gyllensvaans Möbler (revenue: 1,191 MSEK, EBIT: 8%, produces the Billy bookshelf)

#### Outdoor products

- Background: outdoor clothes, backpacks, shoes etc.
- Motivation: attractive industry with many strong brands and high profit margins
- Examples of firms: Peak Performance (revenue 2011: 544 MSEK, EBIT: 24%) & Fjällräven (revenue: 610 MSEK, EBIT: 28%)

#### Sports and exercise products

- Background: products related to training and an active life style (manufactures and retailers)
- Motivation: high growth industry in line with macro trends in the society
- Examples of firms: Gymgrossisten (revenue: 680 MSEK, EBIT: 8%, products: clothes, nutrition, and equipment)

#### Financial services

- Background: banks, insurances firms etc.
- Motivation: high margin industry that is relatively insensitive to business cycles
- Examples of firms: Catella (revenue 2014: 1,400 MSEK, EBIT: 10%, services: wealth management, corporate finance, and funds)

#### Broadband

- Background: internet service providers
- Motivation: Sweden is a leading country within broadband (and broadband is an integral part of modern society)
- Examples of firms: Bahnhof (revenue: 460 MSEK, EBIT 14%, internet services with focus on security and protection of information)

#### Alternative energy solutions

- Background: geothermal heating, solar cells, batteries etc.
- Motivation: High growth industry with great potential
- Examples of firms: Eneo solutions (green energy solutions)

#### Clothing retailers

- Background: retail chains focusing on clothes
- Motivation: several growing firms with high profit margins
- Examples of firms: Dressman (revenue: 1,600 MSEK, EBIT: 16%) & Lindex (revenue: 3,3 billion SEK, EBIT: 10%)

#### Woodworking

- Background: manufacturing of wood related products
- Motivation: Sweden is a world leader within the industry
- Examples of firms: Karl Hedin (revenue: 2,990 MSEK, EBIT: 8%, products: planks, packages etc.)

### **Chemical products**

- Background: various chemical products
- Motivation: several attractive niche segments dominated by highly profitable firms
- Examples of firms: Bona (revenue: 1,500 MSEK, EBIT: 9%, products focus on renovation, maintenance, and floor cleaning)

### **Medtech**

- Background: medical product (e.g. equipment)
- Motivation: high profit margins, price insensitive customers, high switching costs
- Examples of firms: Elektra (revenue: 10,300 MSEK, EBIT: 20%, equipment for treatment of cancer)

### **Agriculture products**

- Background: various agriculture products
- Motivation: increasing demand for niche products due to increasing consumer awareness
- Examples of firms: Oatly (revenue: 220 MSEK, EBIT: 4.5%, strong growth, oat products)

### **Candy, sweets, and cookies**

- Background: firms producing candy, sweets, and cookies
- Motivation: high margins and insensitive to business cycles
- Examples of firms: Orkla Confectionary (revenue: 873 MSEK, EBIT: 12%, brands: e.g. Göteborgs Kex, Olw etc.)

### **Military applications**

- Background: products for the military industry
- Motivation: strong positions in niche segments and price insensitive customers
- Examples of firms: Aimpoint (revenue: 330 MSEK, EBIT: 10%, telescopic sights for the weapon industry)

### **Infrastructure**

- Background: e.g. power distribution
- Motivation: possibility to gain almost monopoly positions in certain niche segments
- Examples of firms: Mölndal Energi (revenue: 920 MSEK, EBIT: 15%)

### **Supply chain solutions/products/firms**

- Background: IT solutions, distribution channels, line haul providers etc.
- Motivation: interesting industry that motivates more in-depth analysis
- Examples of firms: Hector Rail (revenue: 620 MSEK, EBIT: 8%, line haul provider)

### **Biotech**

- Background: different products related to biotech
- Motivation: interesting industry with strong future potential
- Examples of firms:

### **Fitness centers**

- Background: fitness center chains
- Motivation: profitable industry with strong growth
- Examples of firms: SATS (revenue: 910 MSEK, EBIT: 10%) & Fitness24Seven (revenue: 237 MSEK, EBIT: 20%)

### **Public sector**

- Background: health care, retirement homes, schools
- Motivation: growth industry with high profit margins and improvement potential
- Examples of firms:

## **Phase 1 – Discarded**

### **Automotive spare-parts chains**

- Background: spare parts as well as car services
- Motivation: interesting industry undergoing change
- Examples of firms: Mekonomen (revenue: 5,700 MSEK, EBIT: 8%)

### **Veterinary clinics**

- Background: clinics offering veterinary services and products
- Motivation: potentially high margin industry characterized by consolidation
- Examples of firms: Evidensia Djursjukvård (revenue: 1,120 MSEK, EBIT: 0.8%)

### **Convenience stores**

- Background: convenience store chains
- Motivation: high margin industry that is insensitive to business cycles
- Examples of firms: ICA (revenue: 85,000 MSEK, EBIT: 12%)

### **Home appliance chains**

- Background: chains selling products such as ovens, freezers, and vacuum cleaners
- Motivation: interesting industry
- Examples of firms: Elon (revenue: 2,800 MSEK, EBIT: 1%)

### **Sporting goods chains**

- Background: large retail chains selling clothes, shoes, and equipment
- Motivation: profitable industry
- Examples of firms: Stadium (revenue: 4,850 MSEK, EBIT: 4%)

## Appendix C

The data used during phase 2 of the industry evaluation is presented in this section.

### Phase 2 – Presented

#### Concrete

Background:

- Production of concrete related products such as mortar, bricks, expanded clay etc.
- Prefabricated concrete systems/elements for houses, industries, and farms
  - o Interesting segment with high-value, customized products

Market:

- Size: mixed concrete (2008: 4,2 billion SEK), concrete products (2008: 6,6 billion SEK)
- Growth:
  - o Strong growth since the financial crisis
  - o Great potential: 75% of the Swedish population lives in a municipality with housing shortages
- Trends: prefabricated concrete elements are becoming more common (cheaper, faster, higher quality)

Pros:

- Several firms in the right size with high profit margins
- Growth potential due to considerable housing shortage
- Local monopolies because of transportation costs
- Possibility for differentiation within prefabricated concrete systems

Cons:

- Sensitive to business cycles
- Risk for price competition (undifferentiated products within certain segments)

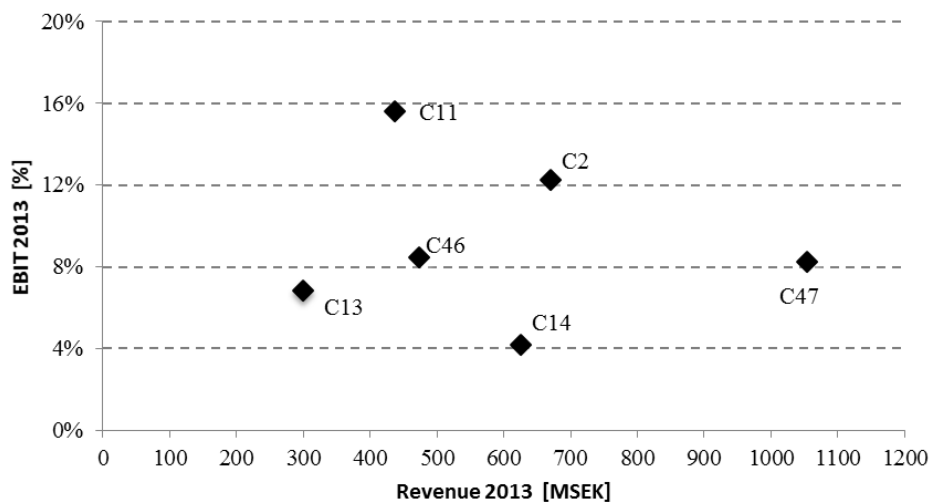


Figure 18 - Concrete

## Pet stores

### Background:

- Sales of products such as food, blankets, leashes, aquariums, animals etc.
- Three dominating chains: Arken Zoo, Djurmagazinet, and Grizzly
- Arken Zoo & Djurmagazinet merged in 2013 (110 stores with ca. 800 MSEK in revenues)

### Market:

- Size: 2.5 billion SEK (600 zoo stores)
- Growth: ca. 2-4% per year (# of pet animals have increased during several years)
- Trends: undergoing major changes
  - o Consolidation (smaller, privately-owned stores dominates today)
  - o Increasing e-commerce
  - o Focus from private equity firms with investments in firms such as Grizzly

### Pros:

- Mostly smaller, privately-owned stores (potential for consolidation)
- Chains with good profit margins

### Cons:

- The focus from private equity firms might lead to increase in acquisitions prices
- Both Arken Zoo and Djurmagazinet are franchises with independent stores (potentially difficult to acquire the necessary amount of stores)

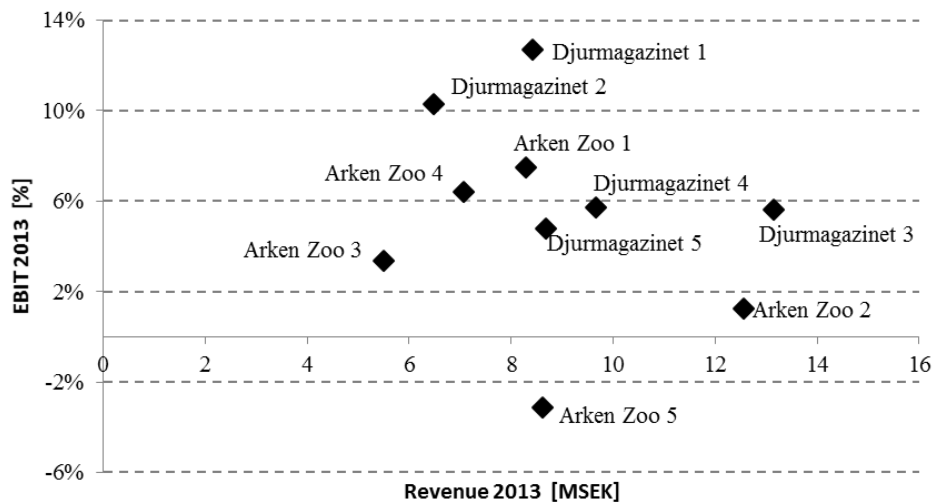


Figure 19 – Pet stores

## Work-wear

Background:

- Different types of work-wear related products such as shoes, clothes etc. (both retail & manufacturing)

Market:

- Stable market with several attractive firms
- 52% of all employees within Svenskt Näringsliv are workers (47% of the workers are within industry, construction, agriculture, or forestry)
- Considerable activity from investment firms during recent years

Pros:

- Potential to create vertically integrated firms with strong market positions

Cons:

- Risk for decline in number of workers in certain segments due to increasing degree of atomization in society

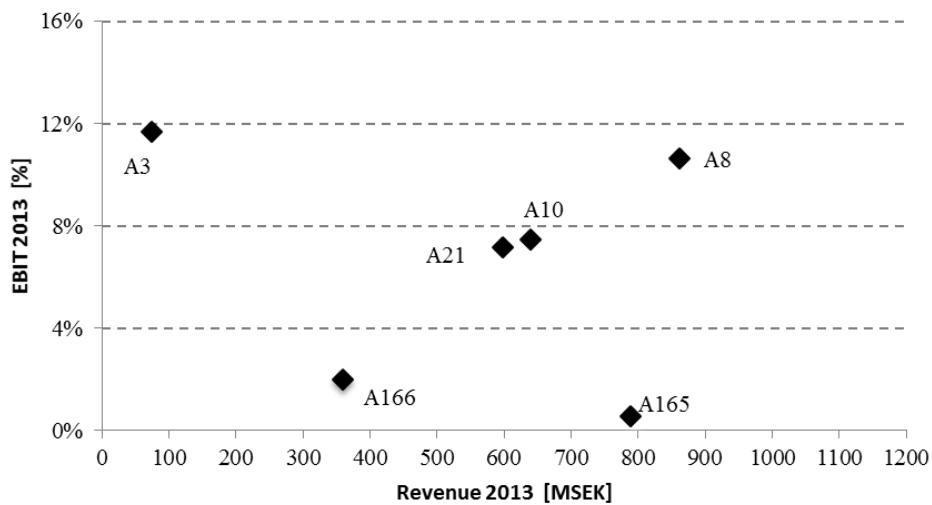


Figure 20 – Work-wear

## Furniture

### Background:

- Manufacturing of furniture for home and offices (e.g. shelves, sofas, tables etc.)
- Sweden has a long tradition of furniture manufacturing and a strong market position (access to raw materials, attractive design, high quality)

### Market:

- Size:
  - o Sweden is the 7:th largest market in Europe (production 2012: 26,000 MSEK)
  - o 17,000 work in the industry
  - o Fragmented: 88% of the firms has less than nine employees
  - o Office furniture and kitchen fixtures are the largest segments
- Growth:
  - o Sweden: Production has grown with 25% between 2003 and 2012 (declined in the rest of Europe)

### Pros:

- Several attractive, profitable firms with the right size
- The industry competes on design and quality rather than price
- Sweden has a leading position

### Cons:

- Might be hard to compete outside the premium segment (price competition with low-cost firms)

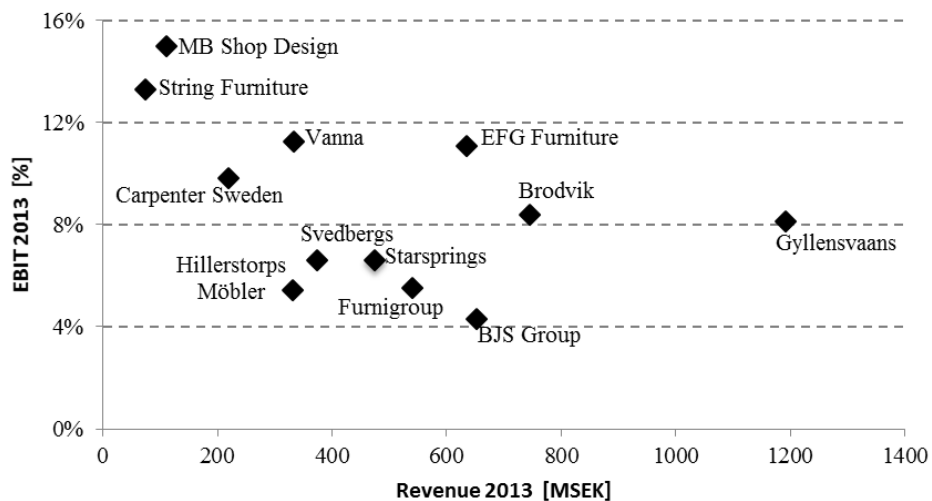


Figure 21 - Furniture

## Insurance firms

Background:

- Wide range of insurances (animals, health care, pensions etc.)

Market:

- Large domestic market with several attractive niche segments

Pros:

- Interesting industry with stable returns that needs to be analyzed more in-depth

Cons:

- Considerable capital requirements
- Hard to analyze the industry due to other accounting standards

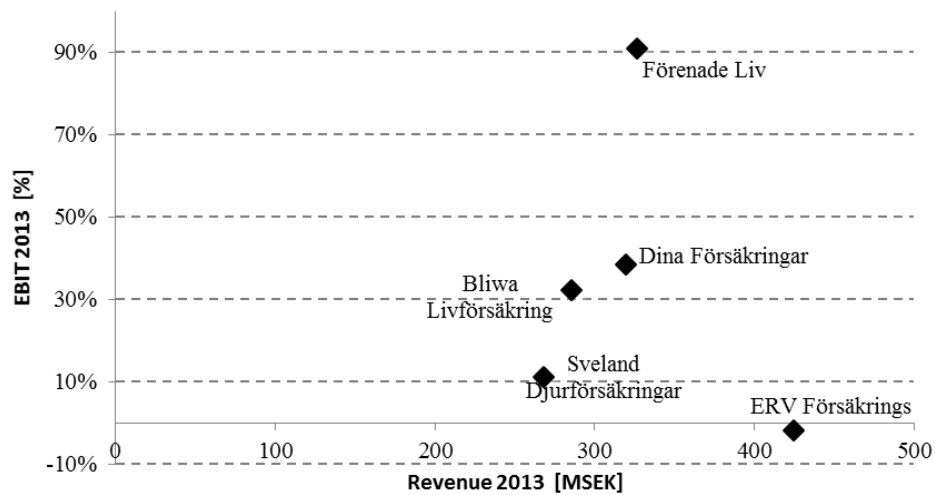


Figure 22 – Insurance firms

## Medtech

### Background:

- Products within healthcare sector such as implants, x-ray machines, dialysis machines, and pace makers
- Swedish Medtech (Swedish trade organization) has 170 members
- Sweden has a long, successful tradition within Medtech with several world leading firms (Swedish Medtech firms account for ca. 4% of the world market)

### Market:

- Size: the Swedish market is ca. 3 billion EUR
- Growth:
  - o The European market grew with ca. 4% on average between 2008 and 2013
  - o Long-term growth is driven by increased need for healthcare as well as increased demand for more effective and high quality care

### Pros:

- Growing industry (ageing population)
- Several firms have high profitability (unique products, price insensitive customers)

### Cons:

- Relatively high uncertainty and risk with regard to new technologies etc.
- Ever-changing industry with high degree of innovation

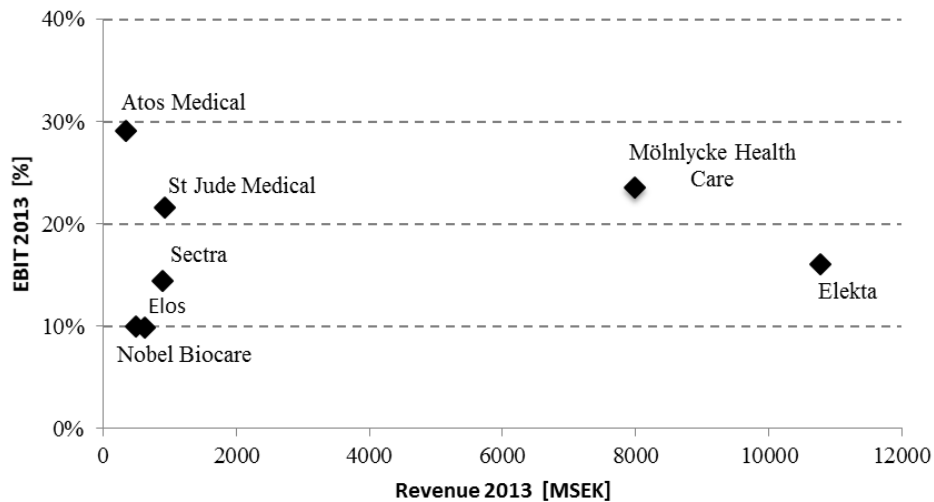


Figure 23 - Medtech

## Window manufacturing

Background:

- Windows for homes and offices/plants (70/30 for the Swedish market)
- Wood and aluminum windows account for more than 90% of the market

Market:

- Size: Nordic market (1,8 billion EUR)
  - o Sweden: 6,4 billion SEK (Sweden has ca. 40% of the Nordic population)
- Growth:
  - o Stable market without significant growth (might increase due to considerable housing shortage in Sweden)

Pros:

- Natural barriers due to transportation difficulties
- Medium buying power partly due to unaware buyers

Con:

- Ratos has a dominant position on the Swedish market (might be hard get a significant market share)

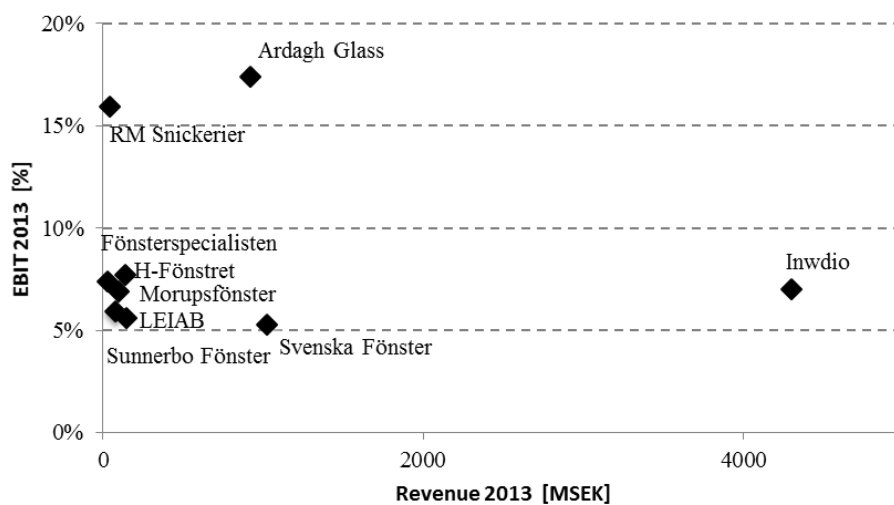


Figure 24 – Window manufacturing

## Products for the elderly

Background:

- Products for the elderly such as wheelchairs, phones, and walking frames

Market:

- Possible to find several segments with the right size

Pros:

- Several highly profitable firms with strong international presence
- Growth potential due to changing demographics (ageing population)

Cons:

- Potential risk from international firms as the industry matures

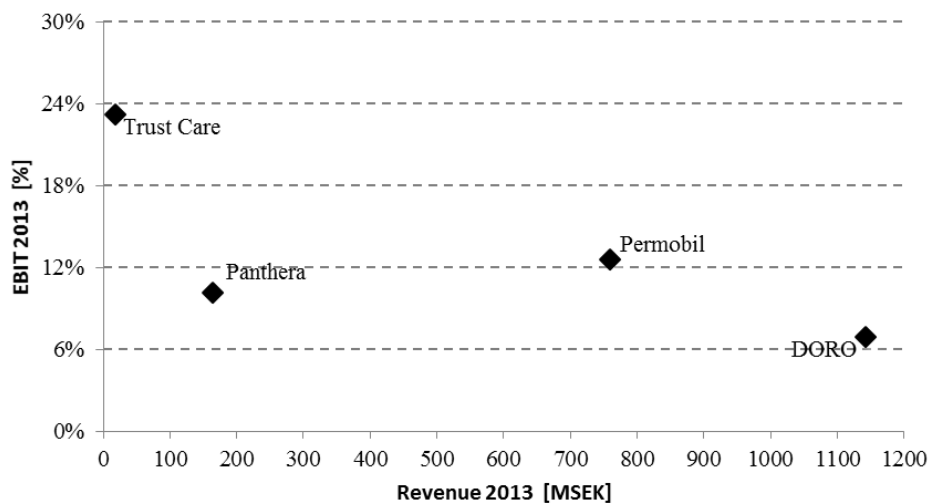


Figure 25 – Products for the elderly

## Watch stores

### Background:

- Watches and jewelry in stores (both independent and chains)
- Two large chains with private stores: Stjárnurmakarna (ca. 30 stores) & Klockmaster (ca. 50 stores)

### Market:

- Growth: grew with 6% last year
- Trends: increased focus on e-commerce

### Pros:

- Fragmented industry with numerous small, independent firms (potential for consolidation)
- Price insensitive with stable volumes

### Cons:

- Can be costly and complicated to acquire many smaller, independent actors (lack large potential acquisitions)
- Relatively low profit margin: hard to increase profitability due to the cost structure

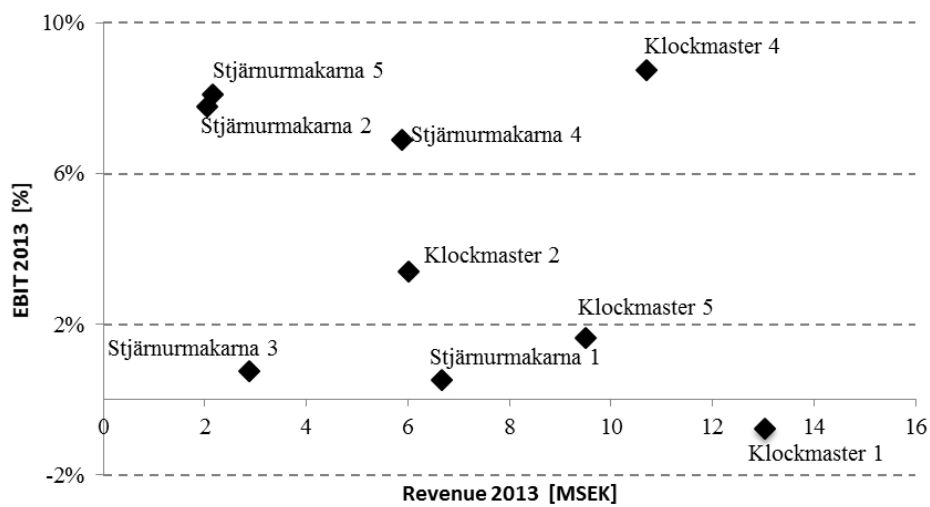


Figure 26 – Watch stores

## Light materials

Background:

- Graphene and nanotechnology

Market:

- High risk, great future potential

Pros:

- Most likely interesting in the future
- Potentially high return on investment

Cons:

- High risk due to technology uncertainty
- Lack of relevant firms

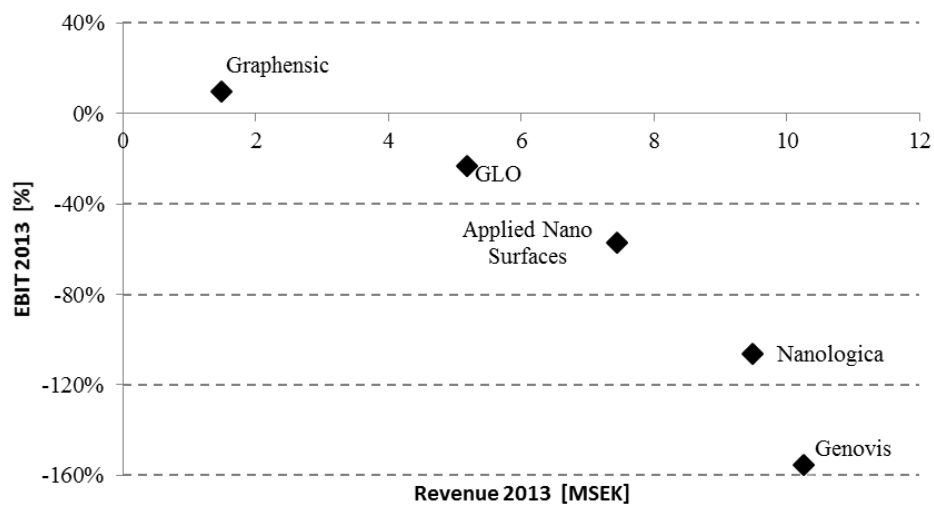


Figure 27 – Light materials

## Outdoor products

Background:

- Outdoor products such as clothes, shoes etc. (retail + manufacturing)

Market:

- Strong, attractive domestic market with potential for growth in other European countries
- Several growing firms with strong brands and high profit margins

Pros:

- Industry is in line with current macro trends (healthy life style)

Cons:

- Potentially hard to acquire firms (several firms have industry owners)

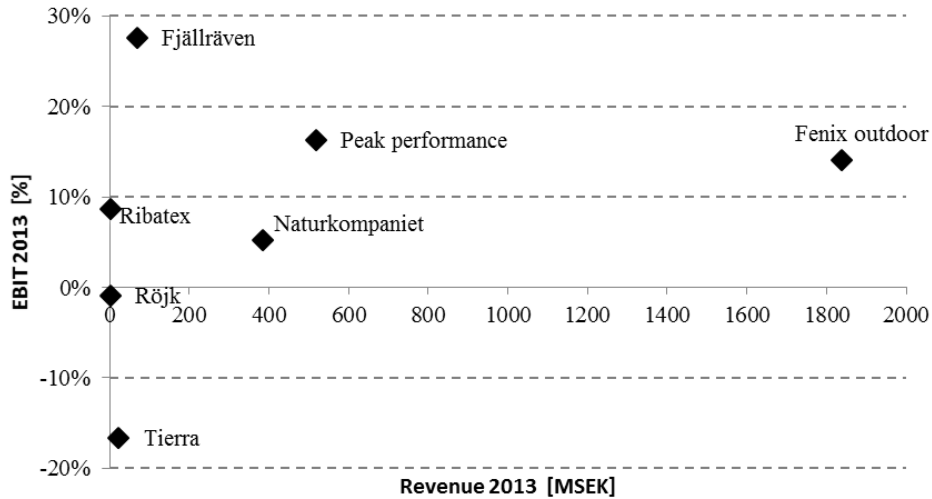


Figure 28 – Outdoor products

## Food safety

Background:

- Products and services related to food safety and analysis
- Wide range of products spanning from more technically advanced equipment to simpler cleaning products

Market:

- Size of the Swedish market depends on what type of products and services are considered
- Hard to define the market and estimate the size

Pros:

- Interesting industry with potentially large demand in the future

Cons:

- Hard to segment the market because of several large firms such as Festo and 3M

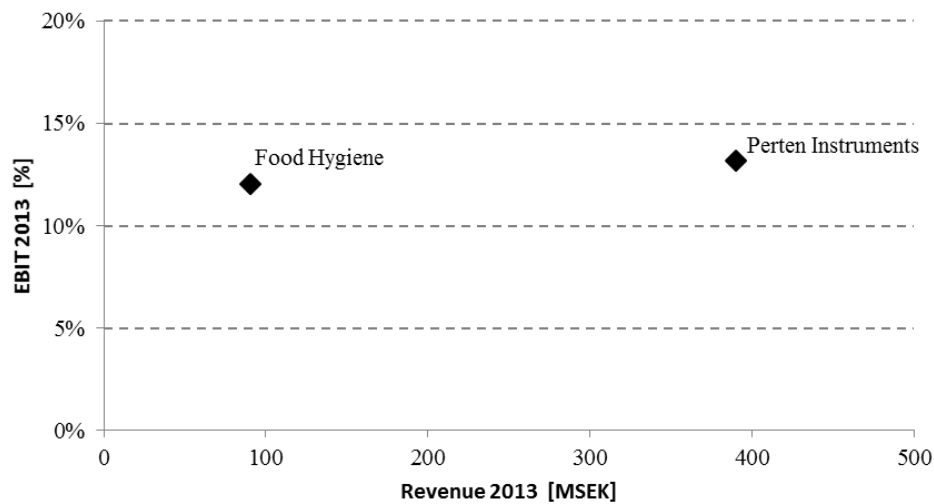


Figure 29 – Food safety

## Sports and exercise products

Background:

- Products related to training and an active life style (manufacturing and retail)

Market:

- Market is divided into several smaller segments such as nutrition, shoes, gym products, and rehabilitation equipment

Pros:

- Several firms with strong growth
- In line with macro trends (more active life style)

Cons:

- Intense competition from low-cost firms as well as e-commerce
- Firms in several segments have negative/low profitability (intense competition because of low entry barriers)

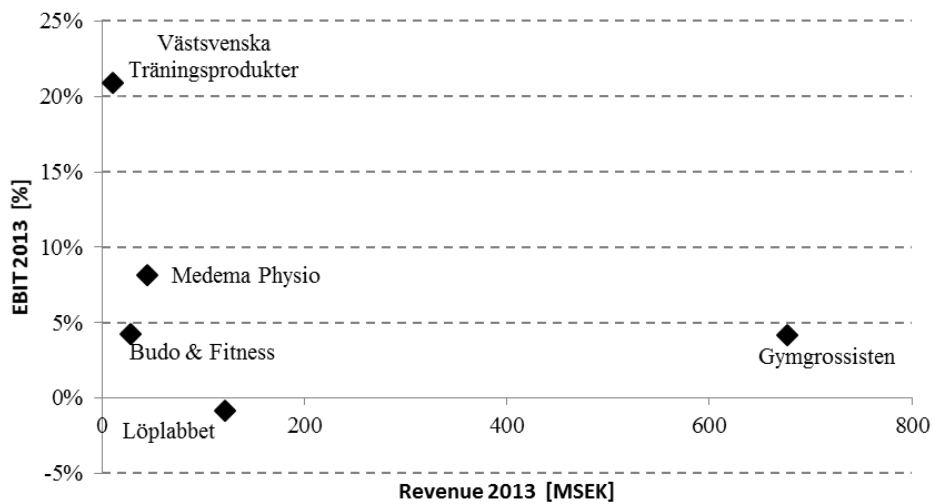


Figure 30 – Sports and exercise products

## Bike stores

### Background:

- Sales of bikes in stores and online (independent stores and chains)
- Large chains include Sportson and Cykloteket
- Bikes are also sold in other stores such as motorcycles and sport stores

### Market:

- Market: 584,000 bikes were sold during the season 2013/2014 in Sweden
- Growth: sales of bikes in Sweden increased with 17% between 2011 and 2014 (more and more people use bikes instead of cars)
- Trends: ca. 20% of the Swedish population use the bike during the winter

### Pros:

- Interesting and growing industry (in line with the increasing sustainability awareness in society)
- Fragmented industry with many small, privately-owned stores (potential for consolidation)

### Cons:

- Conducted analysis indicates relatively low industry profitability
- Might be hard to increase profitability because of small stores
- Lack of relevant firms with acceptable size

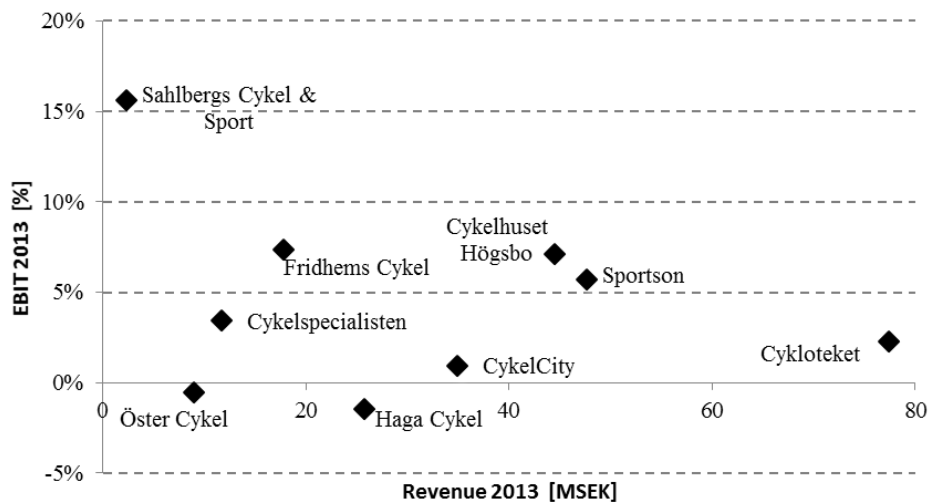


Figure 31 - Bike stores

## Optician chains

Background:

- Sales of glasses in physical stores and online
- Large chains include Synsam (170 stores), Synoptik (105 stores), and Specsavers (112 stores)

Market:

- Size:
  - o Sweden: ca. 7,200 MSEK (change glasses every three/four years)
- Growth:
  - o 8% since 2011 (from 6,692 MSEK to 7,200 MSEK)
- Trends: increased focus on e-commerce

Pros:

- Large market with several profitable firms

Cons:

- Few available firms
  - o Synsam: sold to CVC Capital Partners during 2014
  - o Synoptik: owned by GrandVision (world's largest optician chain)
  - o Specsavers: global optician chain
  - o Smarteyes: owned by Melby Gård (started in 2007)

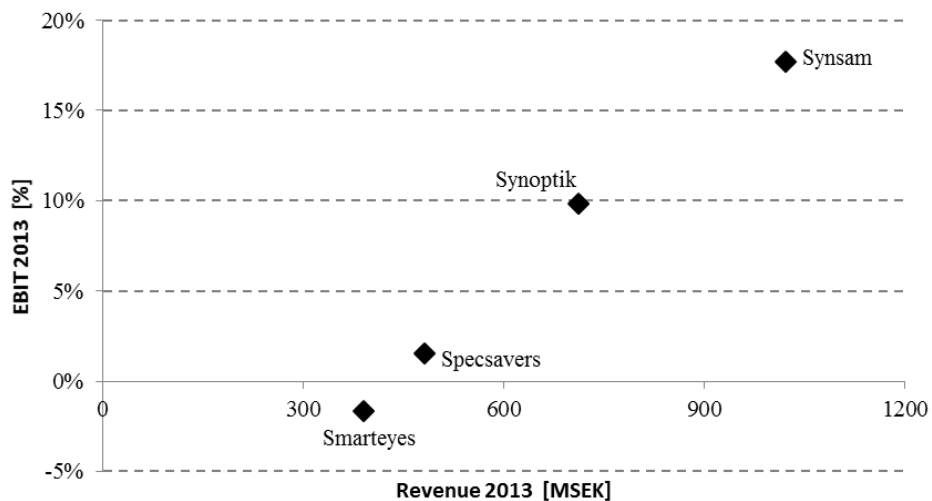


Figure 32 – Optician chains

## Baby products

### Background:

- Products such as strollers, car safety seats, and baby carriers
- Retail:
  - o The dominant chain is Babyproufsen with 47 stores (privately-owned)
  - o The market is highly fragmented with many small, privately-owned physical stores and online sites (products are also sold in toyshops)
- Manufacturing:
  - o Sweden has several internationally leading brands

### Market:

- Size:
  - o Driven to a great degree by demographic changes, macroeconomic climate, and changed in private consumption
- Growth:
  - o Number of babies born is expected to increase with 7% to 2020 (from 99,886 in 2015 to 128,756 in 2020)
- Trends:
  - o Increased focus on e-commerce: new online stores include GoBaby.se and Jollyroom.se (revenue: 130 MSEK)

### Pros:

- Fragmented retail market (potential for consolidation)
- Growth potential (demographic and private consumption changes)

### Cons:

- Low profit margins within retail (low potential to increase margins due to cost structure)
- Lack of relevant retail chains (Babyproufsen consists of privately-owned stores)

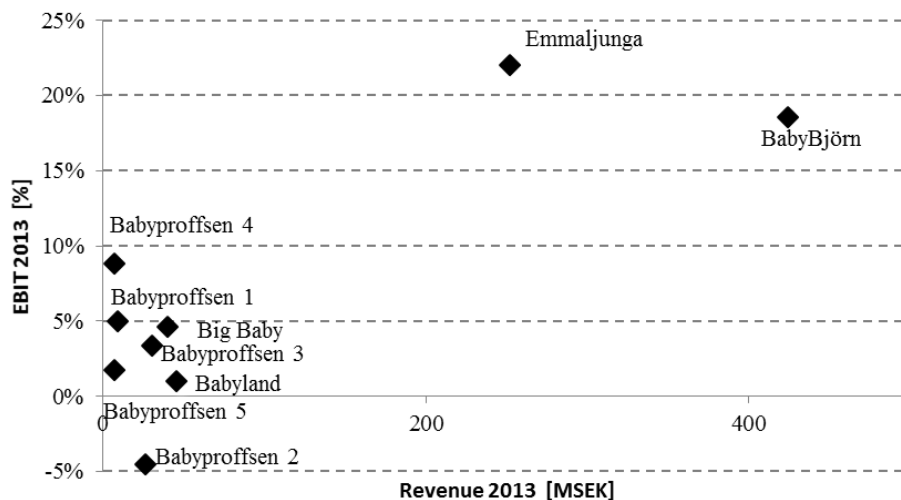


Figure 33 – Baby products

## **Broadband**

Background:

- Broadband services

Pros:

- Sweden has long been a leader within broadband with several interesting firms

Cons:

- Market is dominated by a few, very large firms (hard to identify an interesting and profitable niche segment with relevant firms)

## **Alternative energy**

Background:

- Alternative energy solutions such as geothermal heating and solar cells as well as alternative value propositions

Pros:

- High growth industry with strong potential

Cons:

- Lack of relevant firms
- Invest AB is currently exposed to the energy sector

## **Phase 2 – Discarded**

### **Clothing retailers**

Background:

- Sale of clothes in physical stores and online
- Large chains: Lindex, Dressman, JC, Brothers & Sisters

Market:

- Size: ca. 50 billion SEK (total spend on clothes)
- Growth: ca. 3.5% during 2014
- Trends: increased focus on e-commerce

Pros:

- Several large profitable firms with strong brands

Cons:

- Intense rivalry

### **Woodworking**

Background:

- Products such as planks, boards, and roof trusses

Market:

- Size: large Swedish multi-billion SEK market
- Growth: negative/low growth during several years

Pros:

- Sweden has a long tradition within the woodworking industry

Cons:

- Low growth, intense industry rivalry, and lack of relevant firms

### **Chemical products**

Background:

- Various chemical products
- Discarded because of lack of relevant firms and highly concentrated industry

### **Hobby stores**

Background:

- Stores selling different products related to hobby interests such as painting and making soap
- Discarded because of low profitability and lack of relevant firms: e.g. Panduro Hobby (revenue: 510 MSEK, EBIT: 3%)

### **Kitchen utensils chains**

Background:

- Chains selling products such as cutlery, pots, and wine glasses
- Discarded because of lack of relevant firms: e.g. Cervera (revenue: 675 MSEK, EBIT: -0.2%)

### **Big box hardware chains**

Background:

- Chains selling planks, tools, and building material
- Discarded because of intense industry and lack of relevant firms: e.g. Woody Bygghandel (revenue: 3,140 MSEK, EBIT: 0%)

### **Manufactures of bathroom ceramics & shower products**

Background:

- Discarded because of poor portfolio fit and lack of relevant firms (e.g. Ifö Sanitär was recently acquired by Geberit)

## Appendix D

The aggregated data used in phase 3 are presented in this section.

### Phase 3 – Presented

#### Work-wear

##### Summary:

- Highly interesting and profitable industry with several firms in the right size
  - o 40% of the firms within manufacturing have an average EBIT above 10% (2011-2013)
  - o 70% of the firms within manufacturing have an average EBIT above 5%
- Several interesting investment cases within both retail and manufacturing

##### Investment cases:

- Alternative 1: buy several smaller, leading firms and create something similar to Fenix Outdoor within outdoor products
- Alternative 2: buy a larger manufacturing firm such as A5 or A10
- Alternative 3: buy A12 (together with A21) and continue the expansion on the Swedish market

##### Background:

- Manufacturing and sale/distribution of work and protective gear/clothes/equipment
- Customers within industry, construction, and healthcare

##### Market:

- Manufacturing:
  - o Both larger, diversified actors such as A10 (shoes, clothes, gloves) and smaller, niche actors such as A6 (reflective gear)
  - o 40% of the firms have an average EBIT above 10% (2011-2013)
  - o 70% of the firms have an average EBIT above 5% (2011-2013)
  - o Size: the 20 identified firms had total revenue of ca. 9.2 billion SEK
- Retail:
  - o Smaller, privately-owned stores dominate the market
  - o Several stores with ca. 5-20 MSEK in revenue and acceptable EBIT margin
  - o Chains: both specialized chains such as A21 and diversified chains such as Tools
- Growth:
  - o Growth is driven by the overall economy (potential for growth during the economic upturn in the future)
- Trends:
  - o Increased focus on e-commerce

	3-Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
A1	17.9%	3.9%	14.2%	7.3%	80,568,236
A2	17.1%	14.8%	9.1%	51.6%	59,746,885
A3	14.4%	-1.7%	12.5%	8.9%	73,720,000
A4	14.1%	-3.3%	11.1%	11.4%	33,889,499
A5	11.0%	3.2%	9.6%	10.8%	964,129,811
A6	10.9%	10.1%	6.6%	10.2%	15,704,670
A7	10.6%	1.6%	8.2%	8.9%	207,653,000
A8	10.1%	-3.0%	10.0%	8.0%	862,676,000
A9	9.7%	9.6%	10.8%	8.2%	166,322,000
A10	7.7%	8.3%	9.3%	12.0%	639,548,553
A11	7.5%	8.9%	4.5%	5.0%	54,112,513
A12	7.3%	21.4%	/	/	831,695,000
A13	6.3%	0.5%	7.9%	1.7%	462,120,000
A14	5.3%	1.5%	3.4%	3.7%	63,863,000
A15	4.9%	15.8%	14.1%	2.2%	45,539,000
A16	4.9%	-2.6%	11.5%	-5.5%	78,047,000
A17	4.4%	-7.8%	8.1%	0.4%	10,026,693
A18	3.3%	-2.3%	0.4%	-6.1%	25,983,882
A19	3.0%	-12.3%	9.6%	-1.3%	37,083,368
A20	-4.0%	-10.1%	2.1%	-1.6%	190,525,775
A21	-2.8%	-8.7%	-0.3%	0.8%	4,345,534,000
					<b>9,248,488,885</b>

**Table 31 – Work-wear (manufactures)**

Chains	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
A21	5.5%	4.7%	5.3%	4.3%	600,409,000
A22	2.4%	4.6%	7.6%	14.7%	120,546,000
					<b>720,955,000</b>
<b>Store + Online</b>					
A23	11.1%	-2.3%	8.6%	-1.7%	80,361,000
A24	9.0%	4.3%	6.3%	9.1%	11,636,000
A25	8.6%	10.7%	8.6%	12.7%	1,509,780,000
A26	8.4%	-6.5%	7.7%	3.9%	6,142,000
A27	7.2%	1.6%	6.9%	4.7%	12,798,000
A28	5.8%	14.1%	/	/	22,520,000
A29	5.7%	-4.0%	8.2%	-1.1%	37,516,000
A30	3.8%	0.4%	6.0%	5.3%	46,976,000
					<b>1,727,459,607</b>
<b>Physical Stores</b>					
A31	15.4%	-9.2%	8.2%	3.2%	10,092,000
A32	12.7%	3.4%	12.9%	2.7%	10,223,000
A33	9.9%	4.5%	/	/	22,336,000
A34	8.0%	0.5%	6.1%	16.9%	54,016,000
A35	7.1%	3.7%	4.8%	0.8%	5,638,000
A36	6.2%	-1.1%	5.7%	1.4%	12,891,000
A37	5.9%	-3.5%	5.0%	2.2%	11,936,000
A38	5.7%	3.0%	4.7%	4.8%	14,482,000
A39	6.6%	1.1%	6.8%	7.2%	68,729,000
A40	4.4%	4.5%	/	/	15,625,000
A41	5.8%	14.1%	/	/	22,520,000
A42	4.6%	5.8%	/	/	16,437,000
A43	4.3%	-8.1%	2.6%	0.1%	12,330,000
A44	4.9%	0.5%	4.3%	3.0%	11,485,000
A45	2.9%	2.7%	4.0%	3.7%	17,437,000
A46	2.2%	1.9%	1.9%	4.4%	30,255,000
A47	1.8%	12.2%	/	/	4,648,000
A48	1.0%	2.7%	1.7%	15.7%	16,844,000
A49	0.0%	-6.8%	1.5%	-3.2%	38,138,000
A50	-0.5%	-7.2%	0.8%	-2.0%	10,193,000
A51	-0.9%	-4.2%	0.4%	-0.9%	2,615,000
A52	-1.3%	0.5%	0.1%	0.9%	10,656,000
A53	-1.6%	-6.7%	2.6%	-4.4%	5,997,000
A54	-2.6%	-4.0%	0.7%	-0.8%	3,286,000
					<b>428,809,000</b>

**Table 32 – Work-wear (retail)**

## Prefabricated wooden houses

### Summary:

- Market size: 8.3 billion SEK 2011
- Ca. 5,000 houses per year (Swedish market)
- Several firms with ca. 10% EBIT between 2003 and 2013 in the right size (mostly privately-owned)
- Positive future: order intake increased with 25% between 2013 and 2014
- Several smaller firms: potential for consolidation

### Investment cases:

- Alternative 1: buy several smaller, leading firms such as B1, B4, and B13 (create something similar to Inwido)
- Alternative 2: buy a larger actor and focus on organic growth

### Background:

- Manufacturing of prefabricated wooden houses (less costly, faster, higher quality than traditional building)
- Ca. 50 established firms in Sweden (several export to countries such as Norway, Denmark, and Germany)
  - o Also several smaller firms (less than 10 MSEK in revenue)

### Market:

- Firms:
  - o Manufacturing of prefabricated wooden houses (assembled by external building firms)
  - o Some firms buy land for development
  - o Attractive market with high profitability (ca. 8.2% in average EBIT between 2003 and 2014)
  - o Several interesting firms with the right size and profitability (e.g. B1)
  - o Firms over 200 MSEK account for 80% of the turnover
- Size:
  - o Total Swedish market: 8.3 billion SEK (2011)
  - o Prefabricated wooden houses account for 80% of all one-family houses
  - o Average price: 1.1 MSEK per house
- Growth:
  - o Short term: positive (order intake increased with 25% between 2013 and 2014)
  - o Long term: positive (considerable housing shortage in Sweden)

> 200 MSEK	3-Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
B1	24.0%	-1.7%	19.9%	0.5%	283,031,037
B2	21.0%	-8.9%	24.5%	0.7%	1,053,903,000
B3	11.1%	-1.4%	11.4%	2.6%	377,674,000
B4	10.0%	-1.7%	11.8%	15.7%	355,267,000
B5	9.1%	3.8%	8.4%	13.2%	444,107,000
B6	3.0%	-21.0%	4.0%	-1.1%	388,267,000
B7	2.9%	1.3%	0.1%	-2.9%	257,047,000
B8	0.8%	12.2%	1.8%	5.8%	245,943,838
B9	0.5%	-1.2%	3.4%	-2.2%	817,369,000
B10	-4.3%	-1.9%	1.2%	1.3%	523,089,000
B11	-5.2%	-2.0%	0.7%	0.2%	448,726,000
B12	-15.6%	-27.4%	-9.0%	-9.8%	210,254,000
					5,404,677,875

**Table 33 - Wooden house manufactures (> 200 MSEK)**

<b>&lt; 200 MSEK</b>	<b>3- Y EBIT</b>	<b>3-Y CAGR</b>	<b>10-Y EBIT</b>	<b>10-Y CAGR</b>	<b>Revenue 2013</b>
B13	18.1%	-6.1%	13.7%	-2.1%	71,252,000
B14	12.9%	19.4%	4.0%	1.6%	112,787,000
B15	10.0%	5.0%	10.6%	8.3%	43,932,774
B16	8.4%	39.5%	9.9%	48.8%	24,795,521
B17	7.0%	4.2%	11.1%	1.2%	32,450,000
B18	3.7%	172.6%	/	/	17,566,119
B19	3.6%	15.4%	3.2%	8.6%	139,215,000
B20	3.1%	-2.2%	4.9%	1.8%	53,950,000
B21	2.7%	8.0%	2.0%	16.0%	62,214,149
B22	2.1%	10.1%	4.8%	27.4%	49,073,180
B23	2.0%	-6.5%	5.2%	8.4%	122,894,000
B24	1.7%	9.0%	2.3%	12.0%	87,807,627
B25	1.6%	3.6%	3.6%	16.3%	103,284,000
B26	1.6%	6.6%	1.8%	5.9%	31,667,282
B27	-1.1%	-5.3%	1.1%	5.7%	40,958,899
B28	-2.1%	-13.8%	1.2%	-3.5%	88,550,000
B29	-3.6%	-25.4%	-0.3%	-1.1%	55,006,135
B30	-5.9%	-21.4%	3.5%	-3.8%	191,278,939
B31	-9.5%	-6.8%	-3.0%	-7.3%	32,631,120
					<b>1,361,313,745</b>

**Table 34 – Wooden house manufactures < 200 MSEK**

## Concrete

### Summary:

- Industry with good profitability and stable growth
- Several profitable firms in the right size and with favorable ownership situations
- 8 of 10 firms have a 3-Y CAGR over 10% and EBIT up to 20% (prefabricated concrete)

### Investment cases:

- Alternative 1: Merge several firms either within mixed concrete or prefabricated concrete
- Alternative 2: Buy a profitable firm within prefabricated concrete (several privately-owned firms in the right size and with strong market positions)

### Background:

- Production of concrete related products such as mortar, bricks, and concrete systems

### Market:

- Mixed concrete:
  - o The Heidelberg group controls 35% of the Swedish market and account for a large portion of total profits
- Prefabricated concrete elements:
  - o Several relevant firms with high profitability
  - o Market for firms with more than 100 MSEK in revenue is ca. 5 billion SEK
- Differentiated firms:
  - o Too large and complex to analysis and compare
- Growth:
  - o Strong growth since the financial crisis
  - o Considerable housing shortage: strong potential for growth
- Trends:
  - o Prefabricated concrete elements: more and more common
  - o Lower M&A activity than other industries

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
C1	19.8%	0.5%	20.0%	4.8%	1,915,087,000
C2	13.8%	3.2%	8.8%	20.8%	669,795,000
C3	8.6%	4.5%	7.9%	9.8%	1,054,292,000
C4	8.1%	2.4%	11.5%	5.9%	473,157,000
C5	7.7%	-1.8%	10.8%	14.4%	125,883,229
C6	7.6%	4.8%	6.7%	10.3%	333,982,000
C7	3.6%	0.3%	0.9%	14.3%	110,961,516
C8	1.5%	-2.6%	/	/	868,305,000
C9	0.8%	-0.3%	0.7%	8.0%	233,734,872
C10	-0.3%	3.5%	1.9%	-0.6%	2,571,200,000
					8,356,397,617

**Table 35 – Ready-mix concrete manufactures**

	<b>3- Y EBIT</b>	<b>3-Y CAGR</b>	<b>10-Y EBIT</b>	<b>10-Y CAGR</b>	<b>Revenue 2013</b>
<i>C11</i>	20.1%	27.4%	14.3%	18.0%	437,698,000
<i>C12</i>	13.4%	12.3%	14.4%	6.5%	141,550,000
<i>C13</i>	9.3%	14.9%	2.5%	5.7%	299,261,000
<i>C14</i>	7.3%	12.7%	5.6%	12.4%	625,092,000
<i>C15</i>	6.6%	12.0%	8.2%	9.5%	81,338,386
<i>C16</i>	5.0%	5.2%	4.0%	7.0%	2,171,724,00
<i>C17</i>	4.2%	42.8%	2.6%	14.3%	351,958,000
<i>C18</i>	0.8%	17.4%	4.5%	5.6%	537,178,196
<i>C19</i>	-0.3%	22.9%	5.2%	12.5%	133,014,000
<i>C20</i>	-3.2%	6.4%	1.3%	3.5%	169,150,000
<i>C21</i>	/	/	/	/	100,879,000
					<b>3,098,251,982</b>

**Table 36 – Prefabricated concrete manufactures**

	<b>3- Y EBIT</b>	<b>3-Y CAGR</b>	<b>10-Y EBIT</b>	<b>10-Y CAGR</b>	<b>Revenue 2013</b>
<i>C22</i>	13%	1%	13%	27%	1,504,597,000
<i>C23</i>	12%	2%	12%	6%	1,031,946,000
<i>C24</i>	10%	7%	9%	7%	1,177,507,000
<i>C25</i>	7%	1%	9%	4%	1,146,130,000
<i>C26</i>	6%	14%	9%	11%	356,995,000
<i>C27</i>	6%	25%	4%	12%	454,527,000
<i>C28</i>	5%	18%	/	/	4,415,984,000
<i>C29</i>	5%	18%	6%	12%	4,540,158,000
<i>C30</i>	3%	6%	3%	8%	409,569,000
<i>C31</i>	2%	-12%	4%	1%	105,225,671
					<b>15,142,638,671</b>

**Table 37 – Diversified manufactures**

## Furniture

### Summary:

- Manufacturing of furniture for homes and offices
- Interesting and attractive industry with several profitable firms
  - o Home: top 50% had an average EBIT margin of 8.7% (2011-2013)
  - o Offices: top 50% had an average EBIT margin of 10.5% (2011-2013)
- Sweden: strong market position with attractive design and high quality

### Investment cases:

- Alternative 1: buy several smaller firms with high profitability and strong positions (e.g. Conform Collection, Scandinavian Business Seating, and Rol Ergo)
- Alternative 2: buy a larger firm (e.g. Brodsvik or Gyllensvaans)

### Background:

- Sweden has a strong position: access to raw materials, attractive design, high quality

### Market:

- Size:
  - o Production: ca. 23 billion SEK (2013)
  - o Export: ca. 14.5 billion SEK (2013)
  - o Sweden: second in Europe (furniture consumption per capita)
  - o Home: 4.9 billion SEK (identified firms)
  - o Office: 7.9 billion SEK (identified firms)
  - o Miscellaneous: 5.9 billion SEK (identified firms)
- Growth:
  - o Stable growth: ca. 10% since 2009

	3- YEBIT	3-Y CAGR	10-YEBIT	10-Y CAGR	Revenue 2013
Conform Collection	13.9%	9.1%	12.7%	19.6%	173,229,000
Grythttans Stålmöbler	11.8%	1.6%	18.9%	6.2%	36,131,207
String Furniture	10.7%	31.2%	4.9%	82.6%	73,368,176
Gyllensvaans Möbler	8.3%	4.6%	7.4%	12.5%	1,234,634,016
Form 12 Brands	7.2%	149.3%	7.2%	149.3%	84,930,041
Swedese Möbler	7.1%	-2.3%	9.6%	8.4%	158,157,000
Brodsvik	6.6%	0.7%	5.0%	15.7%	744,625,000
Bema Interiör	6.5%	-2.2%	5.5%	-9.0%	67,688,000
Stolab Möbel	6.5%	-2.2%	5.8%	6.8%	67,688,494
Spaljisten	5.9%	7.2%	6.4%	10.3%	544,280,000
Furnigroup	5.4%	-6.5%	5.7%	-6.5%	644,771,950
Scapa Inter	4.5%	8.0%	4.7%	5.3%	322,978,000
Hillerstorps	4.4%	-0.8%	3.4%	3.9%	325,176,000
Tenzo	3.8%	-10.6%	5.2%	6.7%	202,067,000
Gärnsnäs	1.9%	6.3%	1.2%	9.0%	69,228,895
Bröderna Anderssons	0.7%	-8.5%	1.8%	-1.5%	67,889,000
Möbelform	0.4%	-12.1%	4.4%	-3.9%	52,675,736
Fogia Collection	-0.9%	3.0%	-0.2%	1.5%	44,120,638
					<b>4,913,638,153</b>

**Table 38 – Furniture manufactures (home)**

	3- YEBIT	3-Y CAGR	10-YEBIT	10-Y CAGR	Revenue 2013
Lanab Design	17.9%	-0.1%	18.7%	8.0%	87,107,228
Malmstolen	13.4%	4.4%	12.3%	7.2%	46,751,180
Lintex Nordic Group	12.0%	16.0%	9.4%	12.8%	138,278,058
Johanson Design	10.8%	3.3%	13.4%	5.2%	97,226,428
Scandinavian Business Seating	10.7%	-2.3%	11.5%	7.4%	482,599,000
ROL Ergo	9.2%	11.4%	6.5%	8.9%	258,077,000
Lammhults Möbel	8.6%	-17.1%	10.8%	2.2%	161,853,000
Skandiform	8.3%	1.8%	4.6%	4.3%	86,925,000
Offecct	7.8%	6.2%	6.1%	10.8%	123,242,088
S A Comfortable	6.0%	-2.0%	8.7%	5.2%	71,431,073
SA Möbler	6.0%	-2.0%	8.2%	5.2%	71,431,073
Glimakra of Sweden	5.5%	9.6%	6.0%	10.0%	60,951,000
Morgana	4.8%	-2.7%	5.6%	8.4%	63,362,272
AB Edsbyverken	3.6%	1.7%	2.6%	2.5%	346,874,892
EFG Holding	2.2%	3.6%	0.7%	-4.3%	1,232,363,000
Ragnars Inredningar	2.2%	-3.2%	6.0%	8.7%	70,246,462
Lammhults Design Group	1.7%	-7.9%	5.4%	-0.3%	607,700,000
Martela	1.4%	1.0%	-2.8%	1.0%	192,114,000
Horreds Möbel	0.6%	0.6%	1.5%	0.2%	75,972,736
Kinnarps Holding	-0.1%	-6.9%	2.1%	5.6%	3,661,234,979
					<b>7,935,740,469</b>

**Table 40 – Furniture manufactures (office)**

	3- YEBIT	3-Y CAGR	10-YEBIT	10-Y CAGR	Revenue 2013
MB Shop Design	14.3%	10.8%	11.1%	11.1%	110,572,960
Carpenter Sweden	10.3%	-8.2%	9.0%	1.1%	218,569,000
Svedbergs	9.9%	-5.3%	16.1%	0.2%	369,801,000
Starsprings	7.4%	10.1%	7.1%	11.0%	475,422,000
Vanna	7.2%	44.4%	7.2%	44.4%	333,493,000
ITAB Shop Concept	6.4%	9.2%	5.6%	17.1%	3,574,000,000
Svensson & Linnér	4.2%	5.3%	2.4%	6.3%	45,863,258
BJS Group	3.8%	4.6%	3.0%	6.5%	550,723,000
Totebo	-1.4%	2.5%	1.4%	5.4%	247,015,000
NSC Shop Concept	-1.3%	163.9%	/	/	39,684,146
					<b>5,965,143,364</b>

**Table 39 – Furniture manufactures (miscellaneous)**

## Outdoor products

### Summary:

- Interesting and attractive industry
  - o Manufacturing: several leading and profitable firms
  - o Retail: more negative (Naturkompaniet has a dominant position)

### Investment cases:

- No attractive investment cases: most relevant firms have strong, industry or PE owners

### Background:

- Outdoor products such as clothes, shoes, and equipment (retail & manufacturing)
- Sweden has several leading brands: Peak Performance, Fjällräven, and Haglöfs
- Fenix Outdoor: dominates the manufacturing and retail industries

### Market:

- Manufacturing:
  - o Top 50% within clothes had an average EBIT margin of 12.7% (2011-2013)
  - o Top 50% within equipment had an average EBIT margin of 18.3% (2011-2013)
- Retail:
  - o Naturkompaniet: 32 stores (dominates the industry)
  - o Many smaller, privately-owned firms
- Size:
  - o Total spend: 97 billion SEK (outdoor industry)
  - o Equipment: 15 billion SEK
  - o Clothes: 7.3 billion SEK
- Growth:
  - o Strong growth during the last decade
- Trends:
  - o Increased focus on e-commerce with specialized actors such as Sportamore

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
Fjällräven	28.4%	17.7%	29.1%	15.6%	590,862,421
Didriksons	19.7%	4.1%	20.1%	23.9%	225,142,000
Hestra	15.5%	2.9%	14.7%	10.2%	247,718,000
Fenix Outdoor	14.1%	11.3%	13.2%	12.9%	1,865,791,000
Peak Performance	14.0%	-1.6%	22.4%	6.3%	518,426,000
Icebug	9.9%	27.3%	6.5%	26.5%	71,948,307
Woolpower	9.3%	-8.9%	10.6%	3.8%	67,051,000
Swedteam	8.1%	1.8%	10.6%	2.0%	36,287,432
8848 Altitude	7.8%	-11.2%	11.6%	12.6%	108,014,536
Chevalier	7.1%	15.6%	5.3%	17.9%	51,383,966
Haglöfs Scandinavia	6.1%	5.1%	7.2%	7.1%	679,069,000
Grundéns Regnkläder	4.9%	15.8%	14.1%	2.2%	45,539,000
Lundhags	4.9%	9.5%	0.9%	10.0%	137,102,298
Pinewood	4.9%	-1.4%	7.6%	11.4%	74,090,356
Ivanhoe	3.8%	0.2%	4.3%	2.1%	29,559,621
Houdini Sportswear	2.8%	18.8%	2.7%	44.2%	74,925,139
Tretorn	1.7%	-7.1%	3.6%	7.4%	167,654,000
Sätilla of Sweden	1.0%	0.5%	4.8%	-31.8%	30,177,341
Klättermusen	-10.5%	7.0%	-1.0%	19.1%	46,141,509
Sege Europe	-13.8%	-19.3%	0.7%	-5.7%	28,855,000
Tierra	-13.9%	0.3%	-12.8%	-1.0%	22,644,418
					5,118,382,344

**Table 41 – Outdoor products manufactures (clothing)**

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
EKA-Knivar	25.1%	10.6%	7.9%	2.3%	16,602,874
Fällkniven	24.6%	10.5%	19.1%	10.8%	23,817,037
Tentipi	18.1%	11.9%	22.4%	8.6%	34,881,631
STIGA Sports Group	15.6%	12.8%	12.1%	12.5%	320,171,000
Hilleberg	13.8%	-2.1%	15.5%	9.3%	46,685,247
Mora of Sweden	12.6%	4.8%	6.6%	2.2%	132,969,000
POC	9.2%	9.7%	-81.0%	70.9%	145,326,000
Gränsfors Bruks	6.9%	4.7%	7.9%	4.1%	28,744,000
Primus	6.7%	-0.9%	3.5%	2.9%	88,750,000
Light my fire	4.9%	7.3%	4.5%	26.3%	43,343,158
Silva Sweden	-3.7%	-10.7%	2.0%	-2.2%	106,896,000
					<b>988,185,947</b>

**Table 42 – Outdoor products manufactures (equipment)**

Chains	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
Naturkompaniet	8.0%	-0.2%	7.7%	9.3%	386,207,897
					<b>386,207,897</b>
<b>Store + Online</b>					
Länna Sport	8.5%	9.9%	8.8%	7.0%	134,788,255
Big M	7.4%	3.6%	6.3%	27.8%	12,166,071
Äventyrsbutiken Hägglunds	7.0%	4.0%	6.3%	12.6%	24,287,891
MestUte i Eskilstuna	6.3%	-5.3%	5.3%	9.8%	4,626,853
Friluftsvägar Intrade	4.3%	8.9%	9.7%	3.9%	11,755,275
Jakt & Fiskebutiken	4.3%	-1.1%	4.1%	7.9%	7,431,273
Addnature	2.6%	28.3%	2.7%	41.0%	215,150,516
Go Nature i Halmstad	2.1%	-2.0%	2.9%	4.3%	2,276,109
Malmö Outdoor	1.92%	6.1%	1.92%	6.1%	4,912,102
Kängspecialisten Stockholm	1.8%	-6.1%	4.1%	21.3%	7,953,477
Skövde Natur & Fritid	1.6%	-1.4%	4.0%	8.2%	11,263,290
Udens Sport	1.4%	0.6%	0.3%	3.9%	20,590,408
Alewalds Sport	0.7%	7.8%	1.7%	25.8%	93,340,421
Cykel & Fjäll Specialisten	-0.4%	-3.3%	1.8%	1.8%	10,775,215
Route62	-0.2%	8.4%	5.3%	26.0%	5,433,237
Outnorth	-9.9%	66.7%	-5.3%	82.4%	164,972,503
					<b>731,722,896</b>
<b>Online</b>					
Merkantil Sverige	0.9%	16.4%	0.1%	67.0%	41,559,570
Sportamore	-36.0%	163.5%	-36.0%	163.5%	279,023,000
					<b>320,582,570</b>
<b>Physical Stores</b>					
Joens Snö & Sjösport	8.5%	1.6%	6.2%	11.6%	7,256,188
Kiruna Vildmarkshöman	6.7%	12.8%	5.1%	6.4%	11,937,319
Grönlunds Jakt & Fiske	3.1%	9.5%	5.2%	4.2%	3,221,177
Jakt & Friluftsgården i Lund	3.2%	2.7%	2.6%	13.6%	17,229,096
Walter Borg	2.6%	-1.0%	2.5%	4.0%	28,285,274
Öhammars Fiske & Uteliv	1.5%	-8.3%	1.4%	-4.2%	3,913,947
Utebutiken	0.2%	1.1%	1.3%	10.5%	14,795,146
Delsbo Vapen Jakt & Fiske	0.0%	1.7%	4.0%	3.5%	11,066,091
Fjällsport Drakguld	-0.2%	-0.9%	-1.2%	3.2%	6,709,636
MK Jakt, Fiske & Fritid	-0.5%	-5.6%	2.1%	11.5%	10,196,783
					<b>114,610,657</b>

**Table 43 – Outdoor products retailers**

## Products for the elderly

### Summary:

- Interesting and growing industry with several profitable firms

### Investment cases:

- Lack of attractive investment cases: most firms are between 20-50 MSEK

### Background:

- Products for the elderly such as phones, alarms, and wheelchairs
- Several firms are also active in the disability segment

### Market:

- Firms:
  - o Several firms within hearing, movement, and home with high profit margins and strong market positions
  - o The market is however dominated by small firms
- Size:
  - o 72% of the population over 70 are in need of products for the home (only 36% have it)
  - o 10% of the population have products for impairment (most are above 65)
  - o 240,000 use walking frames, 180,000 use canes, and 96,000 use wheelchairs
- Growth:
  - o Number of people over 80 are going to double between 2010 and 2030 (from 450,000 to 800,000)
- Trends:
  - o Increased ability to purchase products individually: market opportunity (increased need for stores)

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
Anatomic Sitt	20.7%	1.1%	16.6%	5.0%	70,470,641
Active Care	20.2%	1.6%	10.9%	8.1%	23,618,848
L & B Medical	15.9%	11.9%	16.5%	8.2%	30,107,418
Trust Care	14.8%	24.0%	14.0%	63.1%	17,938,204
Liko	13.8%	3.1%	15.2%	6.6%	440,066,000
Permobil	13.4%	-2.6%	8.7%	8.3%	760,286,000
HD Rehab	8.5%	11.1%	16.1%	-0.2%	34,485,928
Etac Sverige	8.1%	-6.3%	9.6%	1.8%	242,442,000
Panthera	7.1%	3.4%	/	/	164,833,000
Sunrise Medical	5.0%	5.0%	4.9%	2.5%	29,585,304
Minicrosser	4.7%	3.8%	0.3%	6.9%	48,547,988
Human Care HC	4.5%	-1.2%	3.5%	1.9%	221,000,000
GATE Rehab	2.6%	-7.1%	1.8%	73.7%	23,877,667
Trionic	2.0%	46.4%	/	/	5,565,078
Eurovema	-6.2%	-7.0%	-6.8%	-4.9%	34,033,000
					<b>2,146,857,076</b>

**Table 44 – Products for the elderly manufactures (movement)**

	<b>3- Y EBIT</b>	<b>3-Y CAGR</b>	<b>10-Y EBIT</b>	<b>10-Y CAGR</b>	<b>Revenue 2013</b>
Pahne Textil	17.2%	-10.4%	15.7%	7.9%	5,497,661
medi Sweden	16.6%	8.0%	12.7%	9.7%	26,423,253
NordiCare	12.9%	13.2%	7.7%	35.4%	28,039,974
Svan Care	11.8%	8.5%	6.8%	11.9%	20,706,471
Twosouls	10.7%	46.2%	/	/	11,243,756
B.I.M.A.	9.9%	12.5%	7.9%	6.6%	24,208,159
Mercado Medic	9.8%	2.2%	14.1%	2.5%	88,628,733
Zafe Care	9.7%	32.9%	8.1%	66.2%	19,080,510
Jeltec Produktion	8.8%	-5.4%	12.7%	12.5%	18,698,956
Attends Healthcare	7.7%	3.2%	3.8%	2.5%	1,020,188,000
DORO	7.5%	21.8%	1.0%	5.8%	1,142,500,000
Abilia	5.9%	-9.2%	8.1%	5.3%	72,697,594
Swereco Group	5.7%	30.5%	/	/	136,658,894
HEA Medical	5.1%	8.0%	5.3%	10.7%	10,894,267
Nutricia Nordica	3.2%	10.4%	5.0%	8.1%	271,539,541
Sanicare	2.0%	-7.3%	0.9%	-3.1%	19,563,591
					<b>2,916,569,360</b>

**Table 45 – Products for the elderly (home)**

	<b>3- Y EBIT</b>	<b>3-Y CAGR</b>	<b>10-Y EBIT</b>	<b>10-Y CAGR</b>	<b>Revenue 2013</b>
Comfort Audio	19.1%	6.7%	18.2%	21.3%	143,739,000
Bo Edin	10.0%	4.6%	12.6%	3.5%	27,093,000
					<b>170,832,000</b>

**Table 46 – Products for the elderly (hearing)**

## Watch stores

### Summary:

- Premium segment: the most attractive (estimated to be ca. 700 MSEK)

### Investment cases:

- Lack of investment cases: no relevant, attractive firms were identified

### Background:

- Manufacturing and distribution of watches (physical stores and online)
- Two larger chains: Stjärnurmarkarna (ca. 30 stores) and Klockmaster (ca. 50 stores)
- Segmentation:
  - o Premium: > 10,000 SEK, medium: < 10,000 SEK, budget: < 2,000 SEK

### Market:

- Manufacturing:
  - o Only one large firm with high profitability
- Physical stores:
  - o Few firms in the right size
- Size:
  - o Swedish market is estimated to 1,4 billion SEK
- Growth:
  - o Grew with 6% last year
- Trends:
  - o Increased focus on e-commerce (strong growth but low profitability)

	3- Y EBIT	3-Y CAGR	Revenue 2013
Daniel Wellington	44.1%	/	106,938,900
Axcent	1.1%	-1.9%	1,944,298,000
Sjö Sandström	-14.3%	-16.3%	8,081,969
Epoch Stockholm	-16.1%	-5.8%	5,265,068
			<b>2,064,583,937</b>

**Table 47 – Watch stores (manufactures)**

Smaller Stores	3- Y EBIT	3-Y CAGR	Revenue 2013
Peter Gustavssons Ur & Guld	7.8%	1.6%	2,159,031
Gyllene Ting Guld	7.1%	5.9%	6,661,125
Tidpunkten Matini Ur	6.9%	12.9%	5,876,658
Klockmäster Södergatan	3.2%	5.4%	6,006,642
Söders Urhandel	0.4%	-5.0%	2,894,481
Jannes UR	-0.2%	-1.6%	2,053,590
Watch & Jewellery WJ	-2.8%	0.4%	9,496,295
			<b>35,147,822</b>

Diversified	3- Y EBIT	3-Y CAGR	Revenue 2013
Diamant & Juvel	5.6%	3.7%	18,598,190
Lyxxa	4.8%	3.9%	32,914,560
Fritz Olsson	4.6%	1.1%	23,502,257
Fabulous Brands Sweden	4.5%	0.0%	60,393,439
Jarl Sandin	3.2%	1.7%	58,778,367
Hedens guld	0.5%	-24.2%	56,627,736
Hedbergs Guld & Silver	-8.7%	9.8%	22,193,643
			<b>273,008,192</b>

Online	3- Y EBIT	3-Y CAGR	Revenue 2013
Scandinavian Luxury	3.5%	27.1%	54,011,897
Klockkunga Sverige	7.7%	/	4,465,631
Visac AB (Klockimport)	2.2%	23.2%	1,756,326
			<b>60,233,854</b>

**Table 48 – Watch stores (retail)**

## Pet stores

### Summary:

- Market is dominated by PE owned firms such as Hööks (IKEA), Grizzly & Granngården (EQT), and Arken Zoo & Djurmagazinet (Braganza): have together 65% of the market
- Increased focus on e-commerce

### Investment cases:

- Lack of investment cases: PE firms own the large chains

### Background:

- Pet products such as food, animals, and toys

### Market:

- Firms:
  - o 600 zoo stores in Sweden (most are smaller, privately-owned firms)
  - o Average store: ca. 3.5 MSEK
- Size:
  - o Ca. 2.5 billion SEK
- Growth:
  - o Ca. 2-4% per year
- Trends:
  - o Increased focus on e-commerce and PE

Chains	3- Y EBIT	3-Y CAGR	Revenue 2013
Hööks	8.0%	14.2%	318,997,183
Grizzly	-0.5%	49.9%	162,159,327
Granngården	/	/	350,000,000
Arken Zoo & Djurmagazinet	/	/	800,000,000
			<b>1,631,156,510</b>

Gothenburg	3- Y EBIT	3-Y CAGR	Revenue 2013
5:ans Zoo	9.1%	13.1%	8,286,276
Sisjön Zoo	7.1%	14.9%	14,483,203
Djurbutikerna Amfo	3.3%	6.5%	15,218,471
Zoo Center Bäckebo	-1.7%	0.7%	6,130,266
Huversöds Hund & Kattmat	-4.4%	-2.5%	21,570,244
			<b>65,688,460</b>

Online	3- Y EBIT	3-Y CAGR	Revenue 2013
Zoo.com	2.9%	8.9%	67,486,927
Supercat	1.4%	80.2%	4,908,227
Animail	-12.7%	39.7%	59,346,726
Zoozoocom	-36.6%	239.0%	10,017,803
Vetzo	-57.6%	60.4%	2,455,050
			<b>144,214,733</b>

Table 49 – Pet stores

## Baby products

### Summary:

- Online sites: Lekmer and Jollyroom have grown with more than 60% per year and control a large part of the market
- Physical stores: low growth and profitably

### Investment case:

- Lack of investment cases: no attractive firm were identified

### Background:

- Products such as strollers, car safety seats, and baby carriers

### Market:

- Manufacturing:
  - o Two highly profitable firms: Emmaljunga (22%) and Babybjörn (19%)
- Retail:
  - o Relatively low profitability
  - o Fragmented: mostly smaller, privately-owned stores
  - o Online: strong growth (back by strong owners: CDON and Komplet)tt
- Growth:
  - o # of babies born are expected to increase with 7% to 2020
- Trends:
  - o Toy stores are selling baby products
  - o Increased focus on e-commerce

	3- Y EBIT	3-Y CAGR	Revenue 2013
Emmaljunga	21.8%	-2.2%	252,558,905
BabyBjörn	18.7%	3.4%	422,435,161
Rätt start	9.2%	-7.4%	32,445,000
Britax	-3.6%	5.8%	96,944,637
			<b>804,383,703</b>

Table 50 – Baby products manufacture

Store + Online	3- Y EBIT	3-Y CAGR	Revenue 2013
Big Baby	3.6%	49.2%	40,408,359
Baby-proffsen	0.6%	-6.7%	43,964,478
Babyland	-14.5%	/	45,744,032
			<b>130,116,869</b>

Online	3- Y EBIT	3-Y CAGR	Revenue 2013
Lekmer (CDON)	-4.4%	99.0%	316,959,000
Jollyroom (Komplett)	-5.8%	61.3%	132,473,000
			<b>449,432,000</b>

Physical Stores	3- Y EBIT	3-Y CAGR	Revenue 2013
Kattis Babyshop	10.4%	-1.6%	14,395,676
Baby City Eskilstuna	7.2%	-0.1%	8,956,130
För Smått i Helsingborg	4.8%	-4.1%	8,919,228
Babysisters	3.5%	4.4%	7,433,290
Babyringen	3.2%	20.5%	24,215,769
Baby-Hörman i Göteborg	-2.2%	-8.4%	26,240,574
Babyplanet	-2.9%	2.2%	30,141,179
Gränsens barn	-6.9%	-14.1%	18,816,214
			<b>139,118,060</b>

Table 51 – Baby products retailers

### **Phase 3 – Discarded**

#### **Medtech**

Summary:

- Discarded because of lack of investment cases

#### **Light materials**

Summary:

- Discarded because of lack of investment cases

## Appendix E

In this section, the data for evaluation of the work-wear industry is presented.

### Industry data

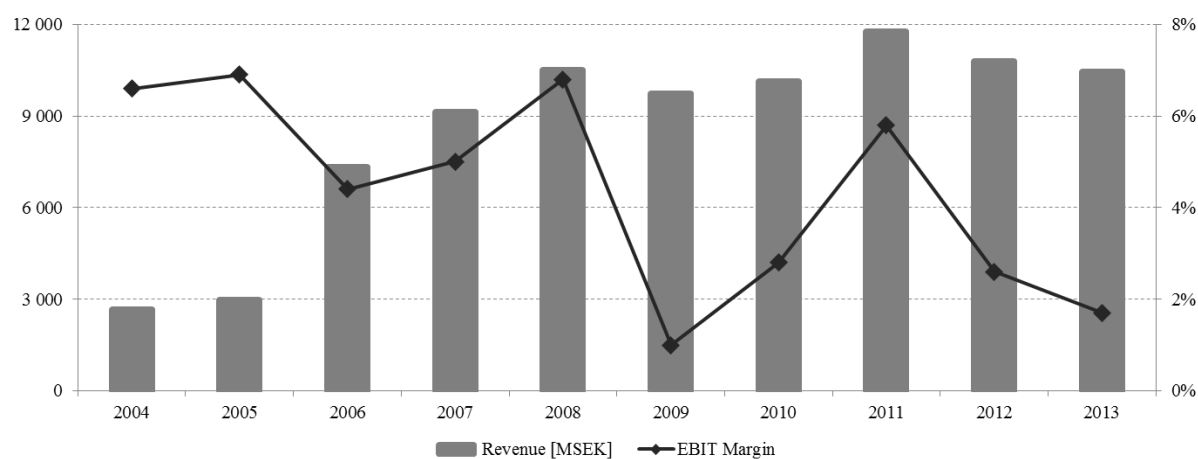


Figure 34 – Work-wear manufacturing

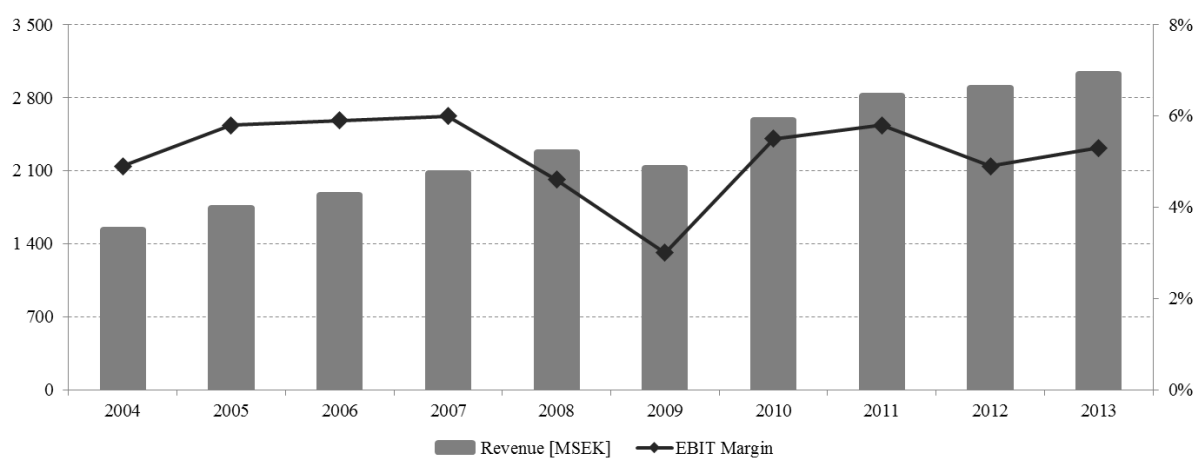


Figure 35 – Work-wear retail

## Segmentation – Manufacturing

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Products	Segment	Price	Owner
A55	21.0%	6.9%	19.2%	11.3%	33,146,325	Straps, strings	Industry	/	Private
A56	12.0%	2.8%	6.8%	5.0%	52,444,984	Helmets, parachutes	Air	/	Private
A9	9.7%	9.6%	10.8%	8.2%	166,322,000	Protective masks	Industry	/	Private
A57	8.4%	1.5%	4.8%	3.2%	98,997,741	Straps, strings	Industry	/	Private
A58	5.5%	7.3%	11.4%	5.2%	36,329,827	Etiquettes	Industry	/	Private
A59	2.6%	5.1%	1.3%	7.7%	901,254,000	Protective gear	Industry	/	Industry owner
					1,288,494,877				

Table 52 – Group 1 (Equipment manufactures)

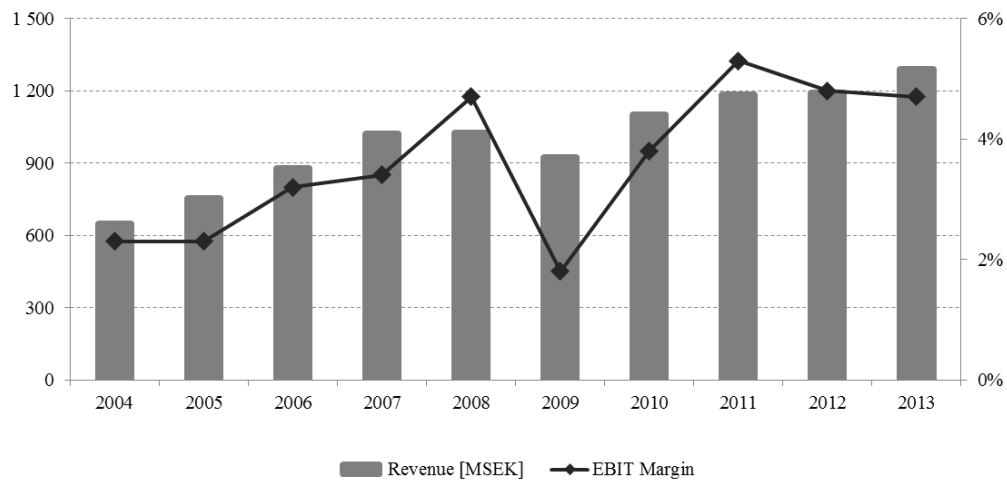


Figure 37 – Group 1 financial data (Equipment manufactures)

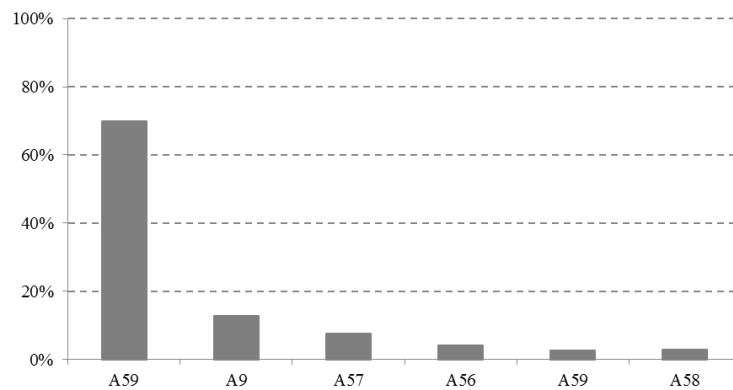
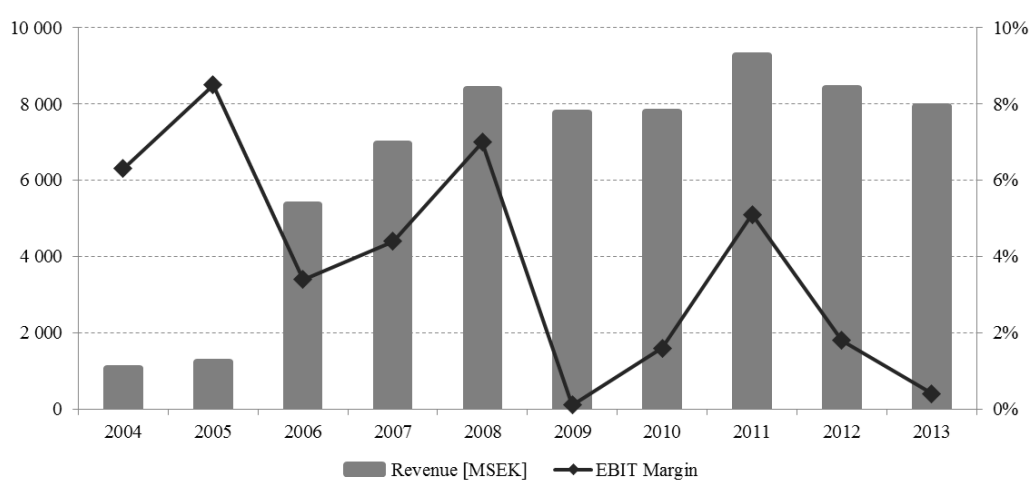


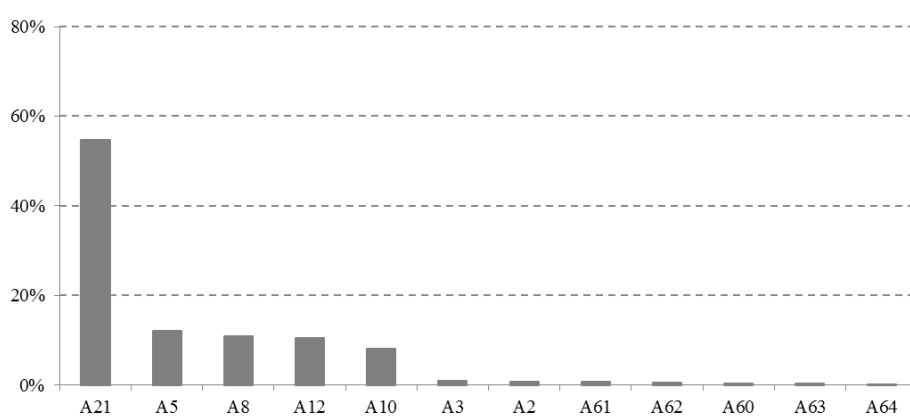
Figure 36 – Group 1 market share (Equipment manufactures)

Diversi	3- YEBIT	3-Y CAGR	10-YEBIT	10-Y CAGR	Revenue 2013	Products	Segment	Price	Owner
A60	23.4%	12.4%	14.7%	12.9%	30,905,218	Clothes, shoes	Industry	Low	Private
A2	17.1%	14.8%	9.1%	51.6%	59,746,885	Clothes, shoes	Industry	Mid	Industry owner
A3	14.4%	-1.7%	12.5%	8.9%	73,720,000	Clothes, shoes	Industry	High	Industry owner
A61	13.4%	3.3%	10.6%	18.4%	51,755,857	Clothes, gloves	Industry	Low	Private
A62	11.9%	11.0%	11.9%	8.0%	40,347,501	Clothes, gloves, shoes	Industry	/	Private
A5	11.0%	3.2%	9.6%	10.8%	964,129,811	Shoes & gloves	Industry	Mid	Private
A8	10.1%	-3.0%	10.0%	8.0%	862,676,000	Clothes, gloves, equipment	Industry	Mid	Investment firm
A10	7.7%	8.3%	9.3%	12.0%	639,548,553	Clothes, gloves, shoes	Industry	Mid	Private
A12	7.3%	21.4%	NA	NA	831,695,000	Clothes, gloves	Industry	High	Private equity
A63	5.7%	-10.3%	5.4%	30.6%	24,471,143	Clothes, gloves, shoes	Industry	/	Industry owner
A64	2.8%	-3.9%	3.6%	-5.9%	5,601,152	Clothes, shoes	Industry	Low	Private equity
A21	-2.8%	-8.7%	-0.3%	0.8%	4,345,534,000	Clothes, gloves, shoes	Industry	Mid	Private
					7,930,131,120				

**Table 54 – Group 2 (Diversified manufactures)**



**Figure 39 – Group 2 financial data (Diversified manufactures)**

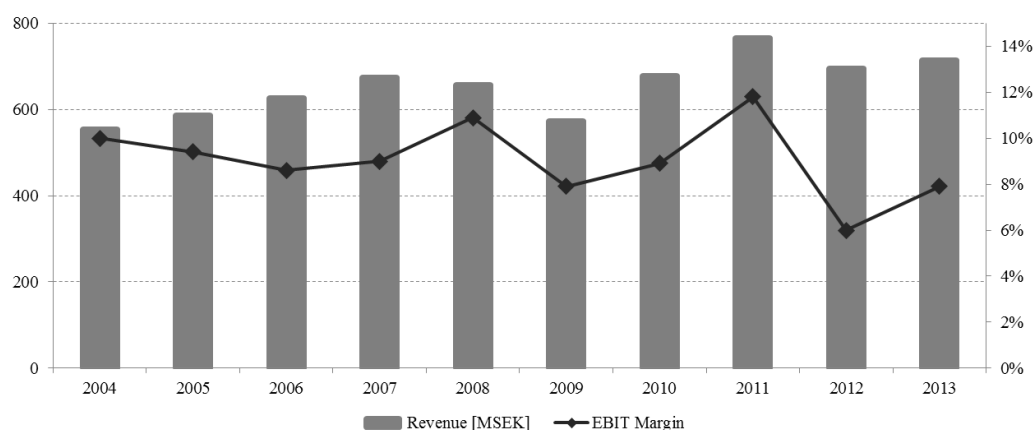


**Figure 40 – Group 2 market share (Diversified manufactures)**

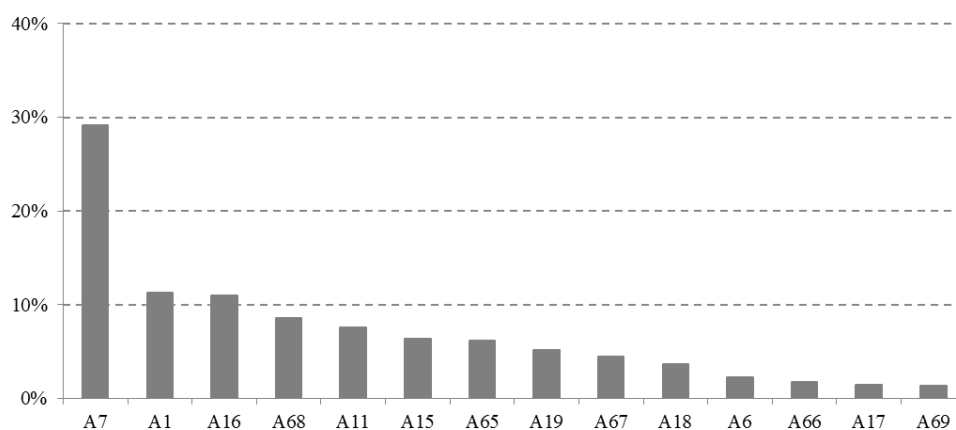
**Table 53 – Manufactures (gloves)**

	3- YEBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Products	Segment	Price	Owner
A1	17.9%	3.9%	14.2%	7.3%	80,568,236	Clothes	Healthcare, Restaurants	Low	Private
A6	10.9%	10.1%	6.6%	10.2%	15,704,670	Reflex products	Industry	/	Industry owner
A7	10.6%	1.6%	8.2%	8.9%	207,653,000	Clothes	Industry	Mid	Private
A65	9.3%	32.5%	-104.8%	66.3%	43,985,653	Clothes	Casual	Mid	Private
A66	8.0%	1.1%	3.3%	-1.7%	12,361,387	Clothes	Healthcare	Mid	Private
A11	7.5%	8.9%	4.5%	5.0%	54,112,513	Clothes	Industry	High	Private
A67	7.2%	1.1%	8.5%	3.7%	31,353,010	Clothes	Industry	/	Unkown
A68	5.5%	-6.7%	4.1%	-2.2%	61,353,000	Clothes	Casual	High	Industry owner
A69	5.4%	7.2%	2.9%	1.9%	9,480,589	Clothes	Hotel & Restaurants	High	Private
A16	4.9%	-2.6%	11.5%	-5.5%	78,047,000	Clothes	Industry	Mid	Industry owner
A15	4.9%	15.8%	14.1%	2.2%	45,539,000	Clothes	Industry	Low	Investment firm
A17	4.4%	-7.8%	8.1%	0.4%	10,026,693	Clothes	Hotel & Restaurants	Low	Private
A18	3.3%	-2.3%	0.4%	-6.1%	25,983,882	Clothes	Healthcare	Mid	Investment firm
A19	3.0%	-12.3%	9.6%	-1.3%	37,083,368	Clothes	Casual	Mid	Unkown
					713,252,001				

**Table 55 – Group 3 (Clothing manufactures)**



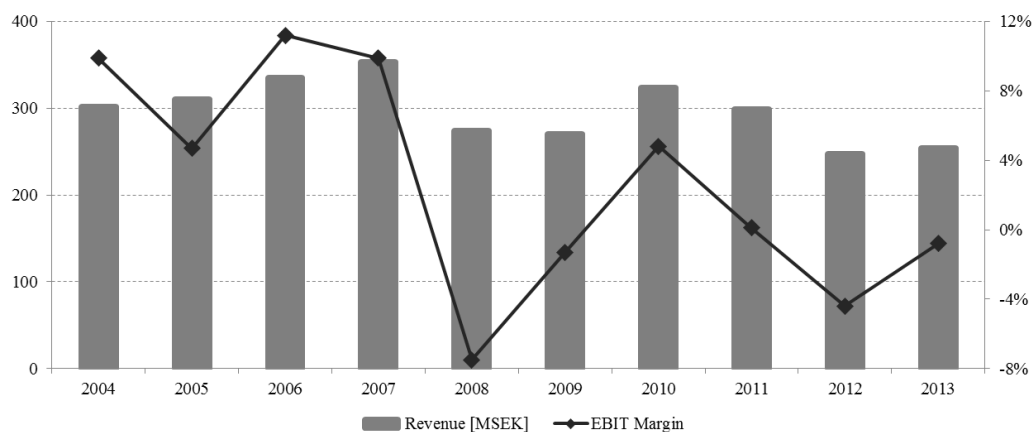
**Figure 41 – Group 3 financial data (Clothing manufactures)**



**Figure 42 – Group 3 market share (Clothing manufactures)**

	3-Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Products	Segment	Price	Owner
A14	5.3%	1.5%	3.4%	3.7%	63,863,000	Shoes	Industry	/	Investment firm
A20	-4.0%	-10.1%	2.1%	-1.6%	190,525,775	Shoes	Industry, Healthcare	/	Private
					254,388,775				

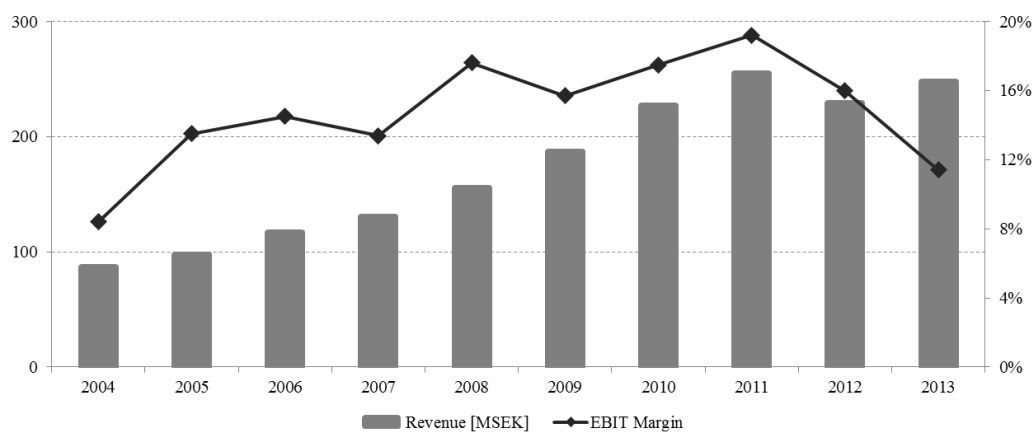
**Table 56 – Group 4 (Shoe manufactures)**



**Figure 44 – Group 4 financial data (Shoe manufactures)**

	3-Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Products	Segment	Price	Owner
A70	15.5%	2.9%	14.7%	10.2%	247,718,000	Shoes	Industry, casual	/	Private
					247,718,000				

**Table 57 – Group 5 (Glove manufactures)**



**Figure 45 – Group 5 (Glove manufactures)**

## Segmentation – Retail

	3- YEBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
A21	5.5%	4.7%	5.3%	4.3%	600,409,000
A71	5.1%	15.2%	3.3%	11.1%	79,715,000
A22	2.4%	4.6%	7.6%	14.7%	120,546,000
A72	1.5%	11.9%	2.0%	25.0%	100,570,000
A73	-1.0%	7.3%	2.2%	7.6%	81,944,126
A74	/	/	/	/	/
					<b>983,184,126</b>

Table 58 – Group 1 (Retail chains)

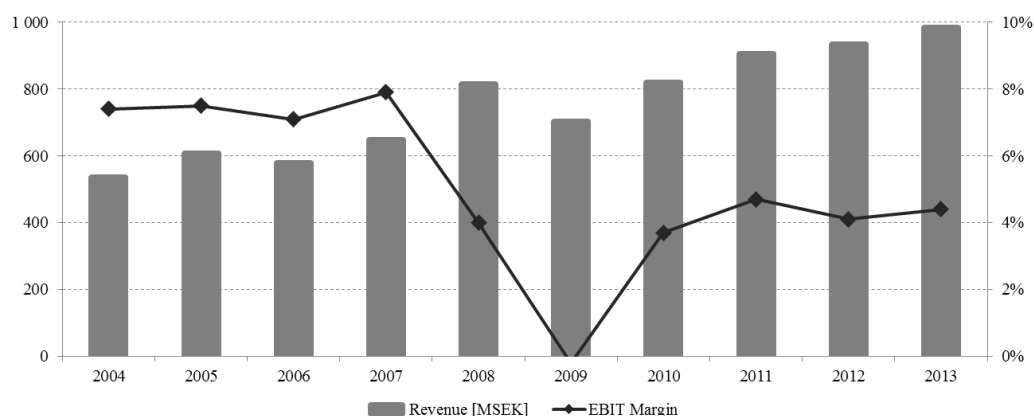


Figure 46 – Group 1 financial data (Retail chains)

	3- YEBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
A74	14.3%	8.0%	/	/	25,412,000
A75	13.7%	/	/	/	1,793,000
A76	13.6%	83.5%	/	/	25,664,000
A77	8.2%	2.9%	10.7%	24.6%	12,241,000
A78	4.1%	12.3%	6.2%	8.5%	5,159,000
A79	-26.0%	/	/	/	4,070,000
					<b>74,339,000</b>

Table 59 – Group 2 (Online retailers)

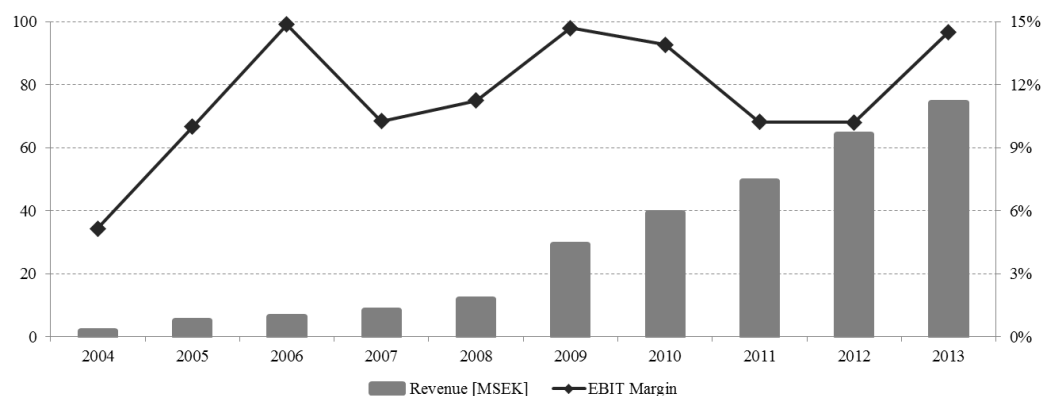
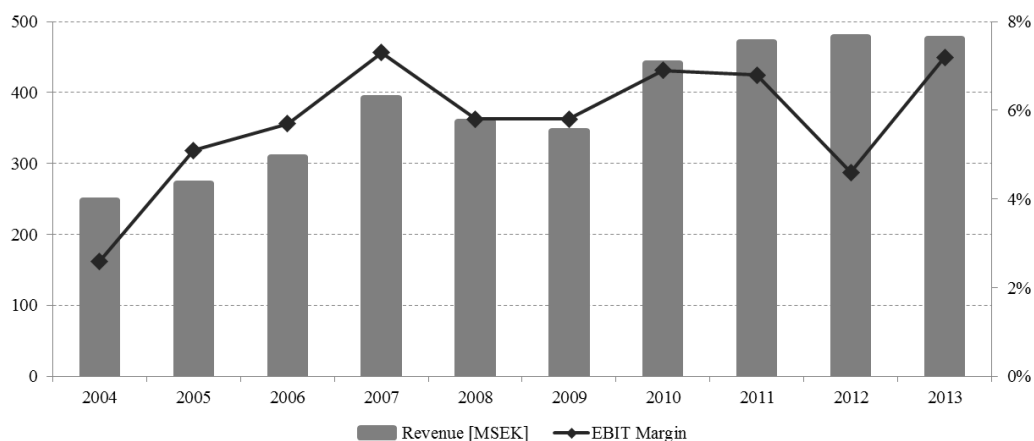


Figure 47 – Group 2 financial data (Retail chains)

A80	15.5%	-2.0%	8.8%	6.7%	13,241,000
A81	12.6%	-0.4%	11.2%	4.0%	29,768,000
A82	11.0%	8.0%	7.4%	3.6%	15,643,000
A83	10.6%	6.9%	9.0%	16.7%	35,401,000
A84	9.1%	2.1%	7.9%	11.1%	34,046,000
A85	8.1%	5.1%	7.1%	18.3%	15,581,000
A86	8.1%	0.4%	7.0%	2.5%	13,974,000
A87	7.8%	8.8%	7.2%	15.9%	18,265,000
A88	7.4%	-0.2%	4.6%	9.4%	11,476,000
A27	7.2%	1.6%	6.9%	4.7%	12,798,000
A89	6.6%	47.0%	NA	NA	16,243,000
A39	6.6%	1.1%	6.8%	7.2%	68,729,000
A90	5.7%	32.7%	NA	NA	14,525,000
A29	5.7%	-4.0%	8.2%	-1.1%	37,516,000
A91	5.5%	-6.8%	2.9%	-2.9%	3,123,000
A92	4.7%	-3.8%	2.8%	1.3%	58,172,000
A93	3.8%	4.3%	4.5%	29.5%	27,266,000
A94	2.1%	13.4%	1.2%	-0.3%	11,861,000
A95	1.7%	-2.8%	0.8%	-3.7%	19,225,000
A96	1.2%	-1.5%	0.7%	-2.6%	12,782,000
A53	-1.6%	-6.7%	2.6%	-4.4%	5,997,000
					<b>475,632,000</b>

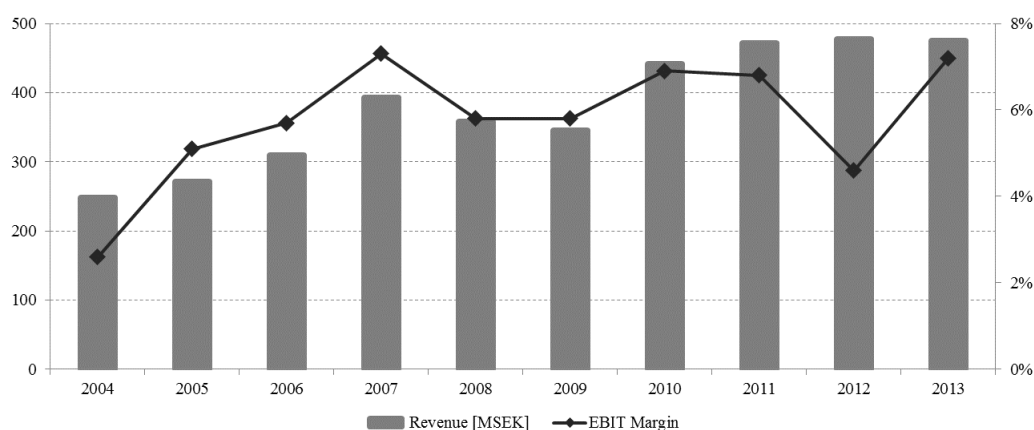
**Table 60 – Group 3 (Physical stores + online)**



**Figure 48 – Group 3 financial data (Physical stores + online)**

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
A97	18.0%	60.7%	/	/	15,587,000
A98	15.5%	/	/	/	3,405,000
A31	15.4%	-9.2%	8.2%	3.2%	10,092,000
A32	12.7%	3.4%	12.9%	2.7%	10,223,000
A23	11.1%	-2.3%	8.6%	-1.7%	80,361,000
A33	9.9%	4.5%	/	/	22,336,000
A99	9.7%	0.5%	5.5%	13.8%	15,303,000
A100	9.3%	-1.6%	9.0%	8.4%	33,691,000
A24	9.0%	4.3%	6.3%	9.1%	11,636,000
A26	8.4%	-6.5%	7.7%	3.9%	6,142,000
A101	6.6%	1.5%	2.8%	5.0%	4,883,000
A36	6.2%	-1.1%	5.7%	1.4%	12,891,000
A28	5.8%	14.1%	/	/	22,520,000
A38	5.7%	3.0%	4.7%	4.8%	14,482,000
A102	5.1%	5.0%	/	/	21,809,000
A44	4.9%	0.5%	4.3%	3.0%	11,485,000
A42	4.6%	5.8%	/	/	16,437,000
A40	4.4%	4.5%	/	/	15,625,000
A103	4.0%	/	/	/	5,798,000
A104	3.3%	-2.6%	/	/	5,883,000
A105	3.3%	-4.7%	6.2%	3.0%	24,082,000
A106	3.1%	/	/	/	3,389,000
A107	3.0%	5.6%	/	/	8,648,000
A45	2.9%	2.7%	4.0%	3.7%	17,437,000
A108	2.8%	2.9%	/	/	5,386,000
A109	2.6%	19.1%	/	/	4,514,000
A110	2.5%	29.4%	/	/	7,642,000
A111	2.4%	5.0%	3.1%	2.7%	5,288,000
A46	2.2%	1.9%	1.9%	4.4%	30,255,000
A112	1.9%	-10.4%	/	/	12,221,000
A47	1.8%	12.2%	/	/	4,648,000
A113	1.5%	15.1%	-4.2%	23.9%	8,416,000
A114	0.7%	-8.0%	1.0%	-4.1%	6,011,000
A115	0.0%	-1.6%	0.1%	-0.6%	4,123,000
A49	0.0%	-6.8%	1.5%	-3.2%	38,138,000
A50	-0.5%	-7.2%	0.8%	-2.0%	10,193,000
A116	-1.2%	-3.8%	/	/	9,711,000
A52	-1.3%	0.5%	0.1%	0.9%	10,656,000
A54	-2.6%	-4.0%	0.7%	-0.8%	3,286,000
					<b>554,633,000</b>

**Table 61 – Group 4 (Physical stores)**



**Figure 49 – Group 4 financial data (Physical stores)**

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
A117	16.9%	5.8%	NA	NA	13,117,000
A118	14.8%	11.9%	15.1%	19.2%	7,286,000
A119	14.1%	10.1%	NA	NA	23,530,000
A120	12.6%	-2.6%	7.8%	3.9%	3,159,000
A121	9.8%	10.1%	5.7%	10.4%	8,999,000
A122	9.5%	-0.7%	9.4%	24.0%	21,135,000
A123	8.8%	22.7%	7.1%	13.9%	89,465,000
A34	8.0%	0.5%	6.1%	16.9%	54,016,000
A124	7.6%	-2.1%	10.8%	0.2%	9,971,000
A125	7.6%	-0.8%	6.1%	3.1%	58,647,000
A126	7.5%	12.6%	7.5%	6.2%	11,796,000
A127	7.2%	3.8%	6.1%	12.4%	6,022,000
A35	7.1%	3.7%	4.8%	0.8%	5,638,000
A128	7.1%	-4.3%	6.3%	1.6%	10,359,000
A129	6.2%	6.7%	NA	NA	3,775,731
A130	5.8%	4.7%	4.9%	5.5%	5,957,000
A131	5.2%	36.1%	NA	NA	6,672,000
A132	5.2%	2.1%	4.6%	6.1%	12,025,000
A133	5.1%	15.2%	NA	NA	12,948,000
A134	4.6%	1.8%	2.7%	0.6%	4,615,000
A135	4.1%	-2.0%	6.2%	3.6%	8,632,000
A136	3.7%	8.0%	2.4%	2.2%	8,590,000
A137	3.6%	-8.0%	3.2%	5.7%	11,200,000
A138	3.6%	5.9%	4.6%	11.6%	106,366,000
A139	3.4%	12.7%	2.2%	7.2%	16,008,000
A140	3.4%	-3.5%	3.4%	14.0%	7,047,000
A141	3.3%	NA	NA	NA	71,352,539
A142	2.8%	13.4%	2.3%	30.3%	40,030,000
A143	2.6%	-7.3%	1.8%	-0.9%	5,937,000
A144	2.5%	4.6%	4.3%	5.8%	17,608,000
A145	2.5%	-1.3%	4.2%	0.0%	14,846,000
A146	2.4%	4.1%	6.6%	8.6%	4,469,000
A147	2.3%	2.5%	1.9%	4.0%	19,686,000
A148	2.1%	5.9%	2.8%	5.0%	10,991,000
A149	2.1%	16.3%	2.8%	17.9%	8,827,000
A150	1.7%	26.2%	3.4%	6.2%	9,750,000
A151	1.6%	12.8%	NA	NA	3,225,184
A152	1.4%	0.9%	1.2%	4.0%	39,045,000
A153	1.2%	-13.3%	2.5%	7.1%	12,290,000
A154	0.8%	-9.6%	0.8%	-4.7%	9,212,000
A155	0.7%	2.1%	1.8%	9.8%	19,581,000
A156	0.7%	0.3%	2.3%	13.8%	33,943,000
A157	0.7%	-1.8%	3.9%	4.7%	6,532,000
A158	0.4%	-2.3%	-1.4%	-6.4%	6,823,000
A159	-0.2%	5.2%	-1.0%	6.4%	29,703,000
A160	-0.8%	17.0%	0.5%	7.7%	23,754,000
A161	-1.2%	-11.7%	3.4%	-4.0%	8,491,000
A162	-1.2%	-11.9%	2.2%	-3.9%	5,601,000
A163	-1.4%	-5.5%	2.5%	-2.7%	4,901,000
A164	-11.4%	-32.5%	-2.1%	-11.5%	3,873,000
					<b>937,446,454</b>

**Table 62 – Group 5 (Profile store)**

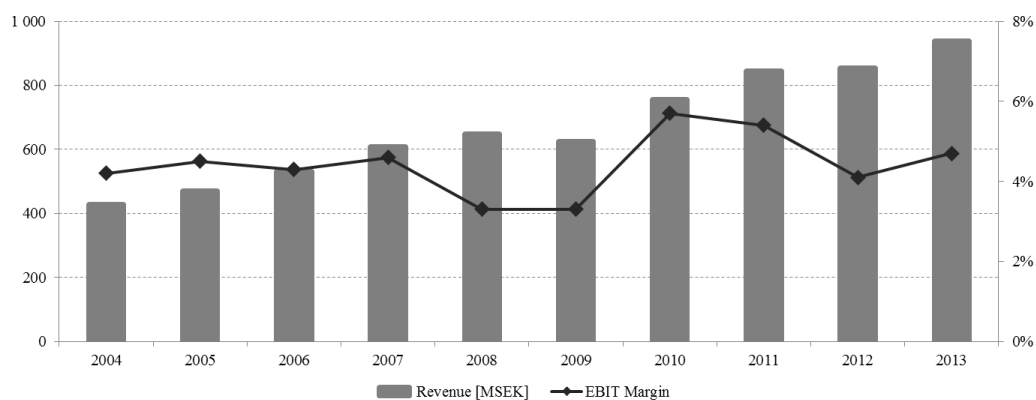


Figure 50 – Group 5 financial data (Profile stores)

## Business cases

3- YEBIT	3-Y CAGR	Revenue 2013	Products	Price
7.3%	21.4%	831,695,000	Clothes, gloves, other	High
Channels	Geography	Production		Owner
Own chain	Nordics	Outsourcing		Private equity

Table 63 – A12 description

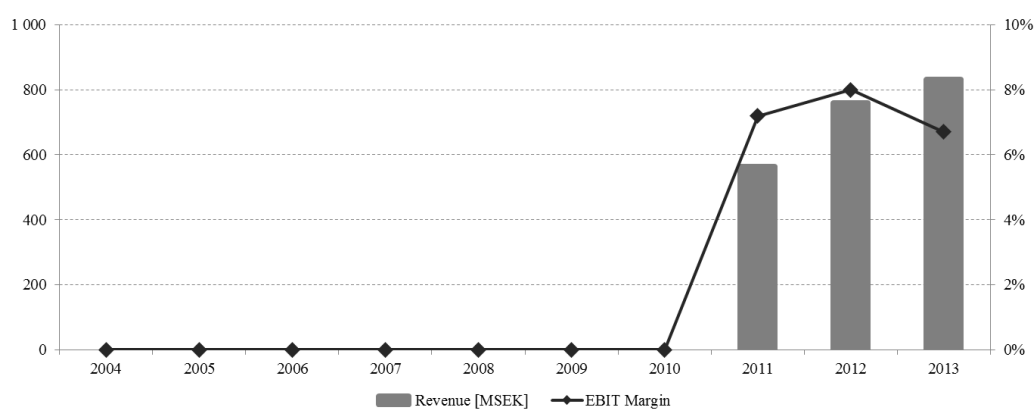


Figure 51 – A12 financial data

3- YEBIT	3-Y CAGR	Revenue 2013	Products	Price
7.7%	8.3%	639,548,000	Clothes, gloves, shoes, other	Mid
Channels	Geography	Production	Owner	
Retailers, B2B	Nordics, Europe	80% own factories & 20% outsourcing	Private	

Table 65 – A10 description

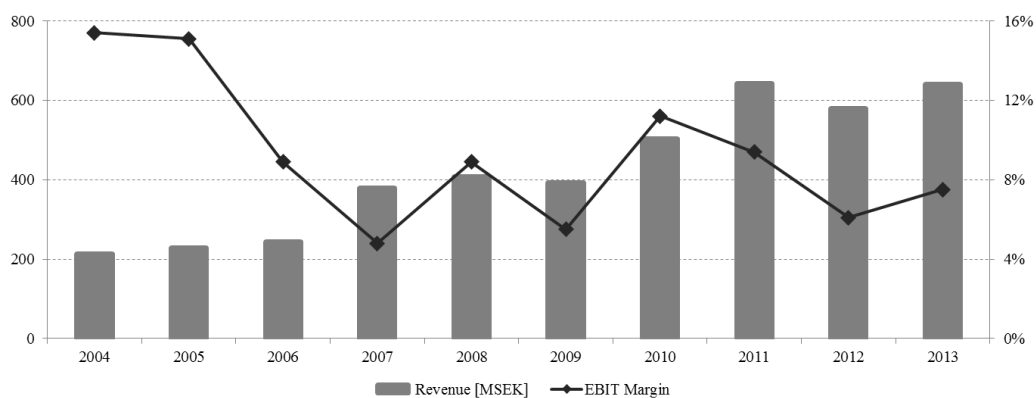


Figure 52 – A10 financial data

3- YEBIT	3-Y CAGR	Revenue 2013	Products	Price
10.1%	-3.0%	862,676,000	Clothes, gloves, equipment	Mid
Channels	Geography	Production	Owner	
Retailers, B2B	Nordics, Europe	Europé & Southeast Asia	Investment firm	

Table 64 – A8 description

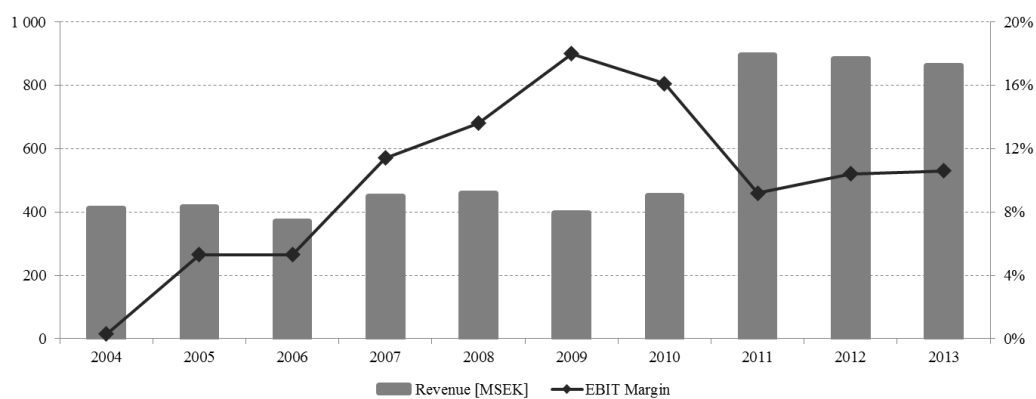


Figure 53 – A8 financial data

3- YEBIT	3-Y CAGR	Revenue 2013	Products	Price
11.0%	3.2%	964,129,000	Clothes & shoes	Mid
Channels	Geography	Production	Owner	
Retailers, B2B	Nordics, Europe	Own factories & outsourcing	Private	

Table 66 – A5 description

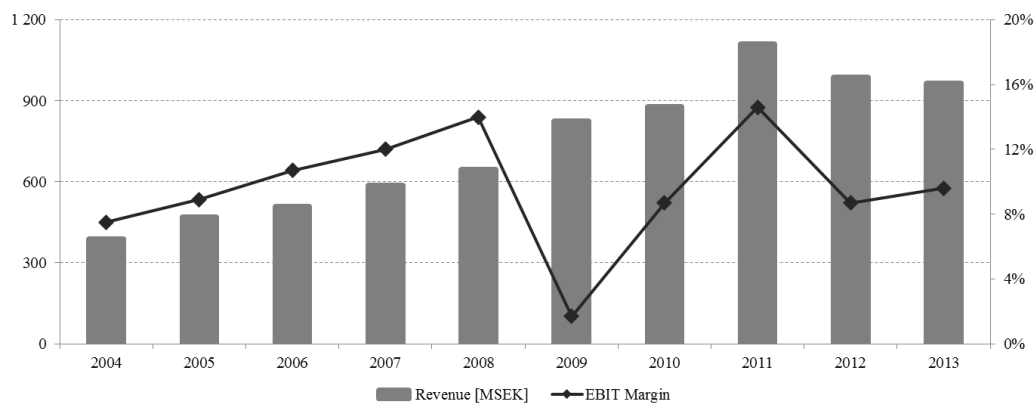


Figure 54 – A5 financial data

### Add-on investments

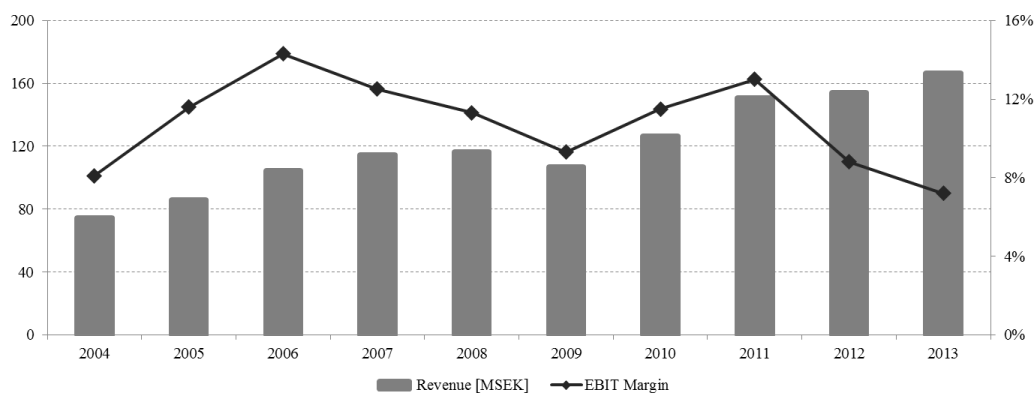


Figure 55 – A9 financial data

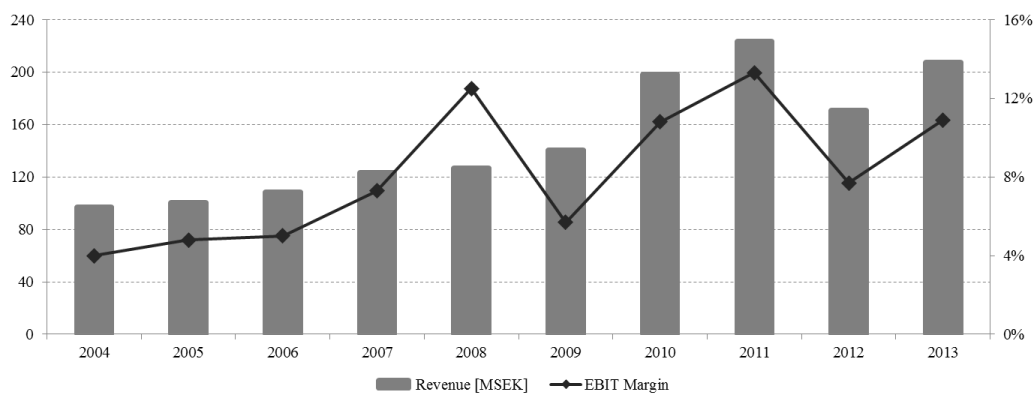
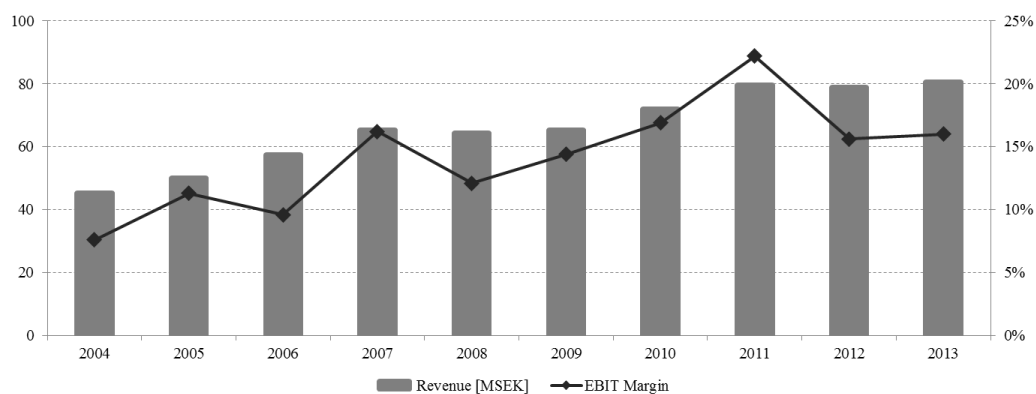
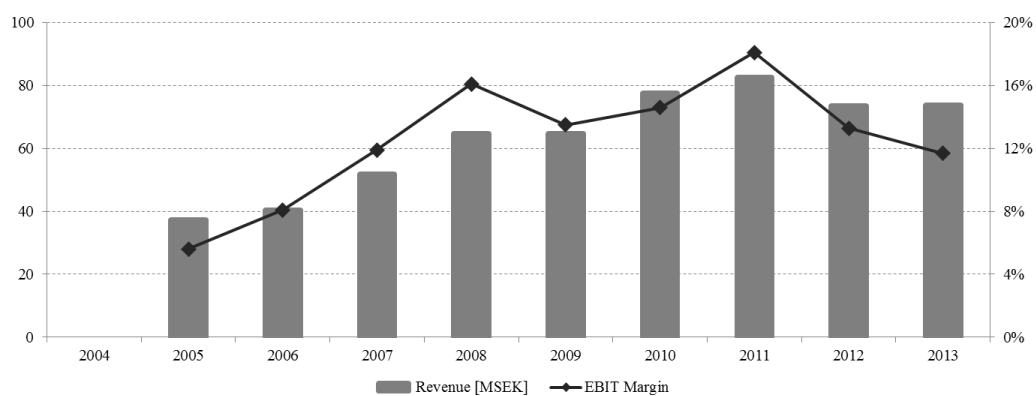


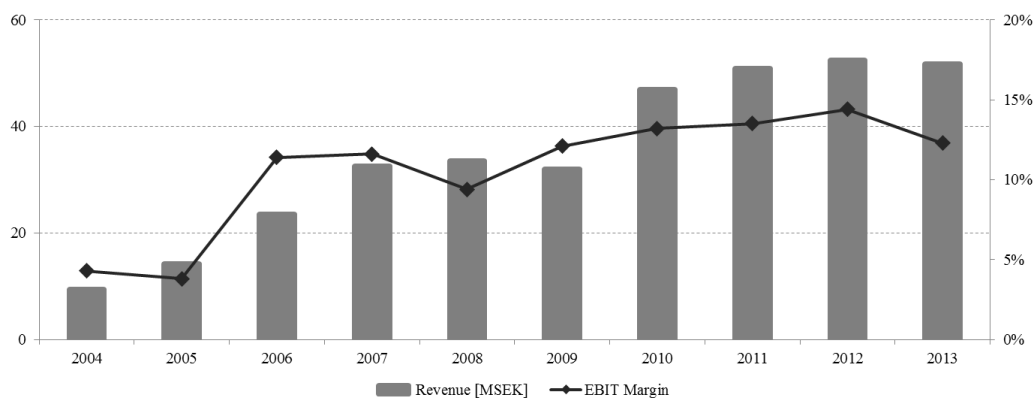
Figure 56 – A7 financial data



**Figure 57 – A1 financial data**



**Figure 58 – A3 financial data**



**Figure 59 - A61 financial data**

## Appendix F

In this section, the data for evaluation of the prefabricated wooden house industry is presented.

### Industry data



Figure 60 – Order intake (billion SEK)

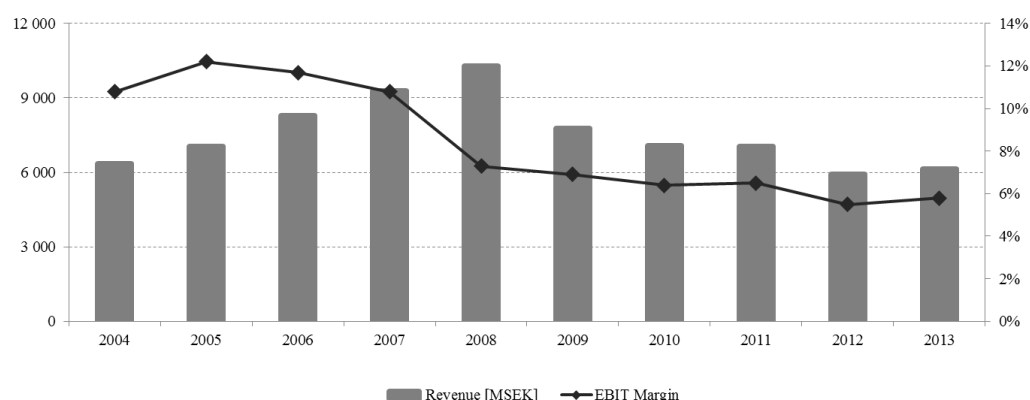


Figure 61 – Wooden house manufactures

	2011	2012	2013	Totalt	Average (%)
Stockholm	1,197	970	1,315	3,482	17%
Gothenburg	500	1,202	918	2,62	13%
Malmö	515	653	537	1,705	8%
Skåne (ex. Malmö)	546	792	481	1,819	9%
Halland	372	730	463	1,565	8%
Västra Götalands	492	450	279	1,221	6%
Uppsala	317	295	320	932	5%
Östergötalands	267	306	257	830	4%
Jönköpings	255	211	254	720	4%
Kalmar	213	261	150	624	3%
Övriga	1,292	1,767	1,535	4,594	23%
<b>Totalt</b>	<b>5,966</b>	<b>7,637</b>	<b>6,509</b>	<b>20,112</b>	

Table 67 – Construction detached one-family houses

## Segmentation - Price

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Design	Owner
B2	21.0%	-8.9%	24.5%	0.7%	1,053,903,000	Volume	Private + Investment firm
B5	9.1%	3.8%	8.4%	13.2%	444,107,000	Volume	Industry owner
					1,498,010,000		

Table 68 – Group 1 (low)

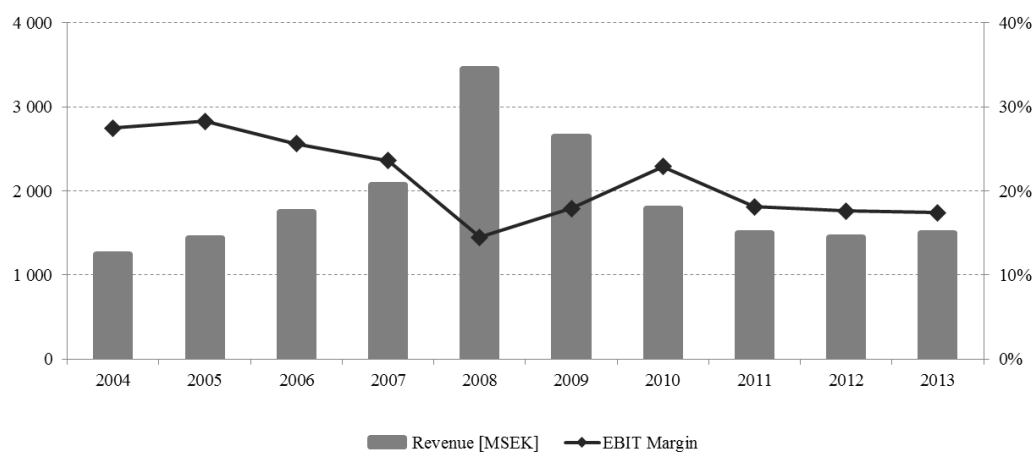


Figure 62 – Group 1 financial data (low)

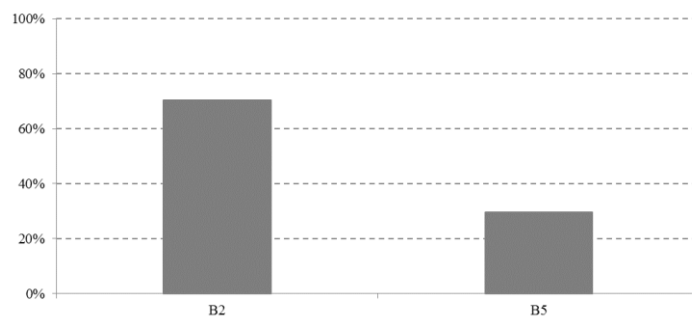
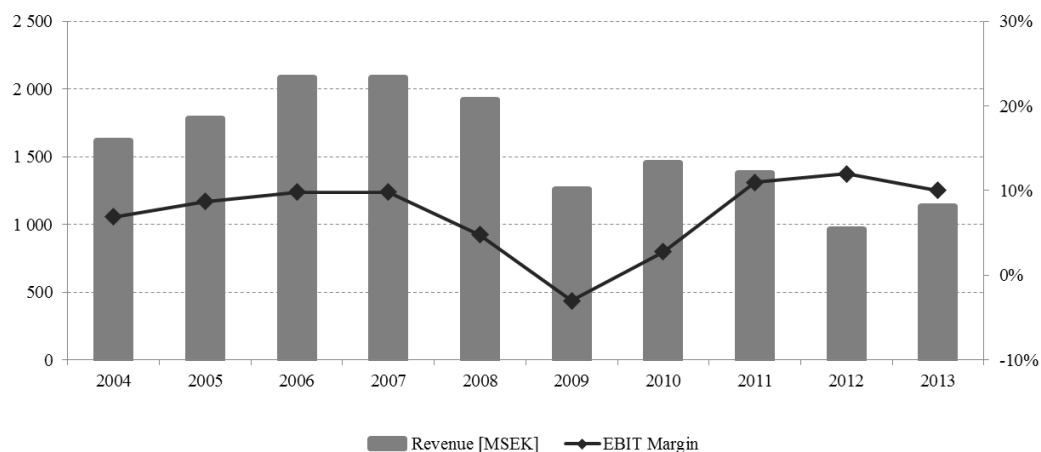


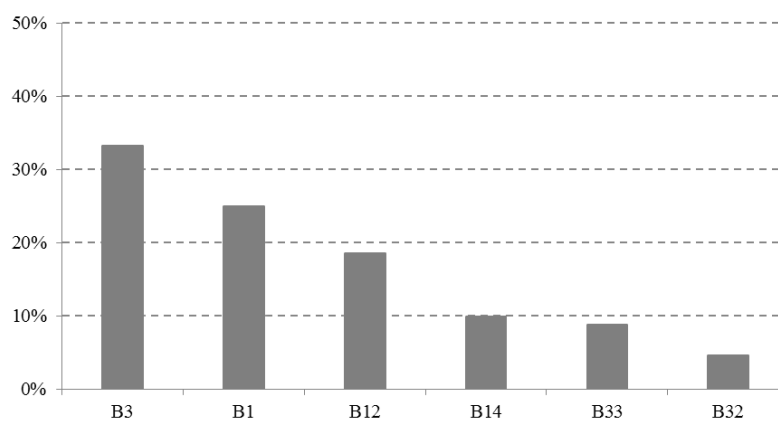
Figure 63 – Group 1 market share (low)

	3- YEBIT	3-Y CAGR	10-YEBIT	10-Y CAGR	Revenue 2013	Design	Owner
B1	24.0%	-1.7%	19.9%	0.5%	283,031,037	Plane	Private
B32	15.5%	-4.9%	13.6%	-0.5%	51,390,000	Plane	Private
B33	14.0%	5.0%	11.9%	12.6%	99,246,406	Plane	Private
B14	12.9%	19.4%	4.0%	1.6%	112,787,000	Plane	Private
B3	11.1%	-1.4%	11.4%	2.6%	377,674,000	Plane	Private
B12	-15.6%	-27.4%	-9.0%	-9.8%	210,254,000	Volume	IT_firm
					1,134,382,443		

**Table 69 – Group 2 (mid-low)**



**Figure 64 – Group 2 financial data (mid-low)**



**Figure 65 – Group 2 market share (mid-low)**

	3- YEBIT	3-Y CAGR	10-YEBIT	10-Y CAGR	Revenue 2013	Design	Owner
B4	10.0%	-1.7%	11.8%	15.7%	355,267,000	Precut	Private equity
B20	3.1%	-2.2%	4.9%	1.8%	53,950,000	Plane	Private
B21	2.7%	8.0%	2.0%	16.0%	62,214,149	Plane	Private
B23	2.0%	-6.5%	5.2%	8.4%	122,894,000	Plane	Private
B24	1.7%	9.0%	2.3%	12.0%	87,807,627	Plane	Private
B9	0.5%	-1.2%	3.4%	-2.2%	817,369,000	Plane	Industry owner
B34	-0.9%	-2.9%	0.3%	2.5%	306,554,000	Plane	Industry owner
B29	-3.6%	-25.4%	-0.3%	-1.1%	55,006,135	Plane	Investment firm
B10	-4.3%	-1.9%	1.2%	1.3%	523,089,000	Plane	Public
B11	-5.2%	-2.0%	0.7%	0.2%	448,726,000	Plane	Industry owner
B30	-5.9%	-21.4%	3.5%	-3.8%	191,278,939	Plane	Unknown
					3,024,155,850		

Table 70 – Group 3 (mid-high)

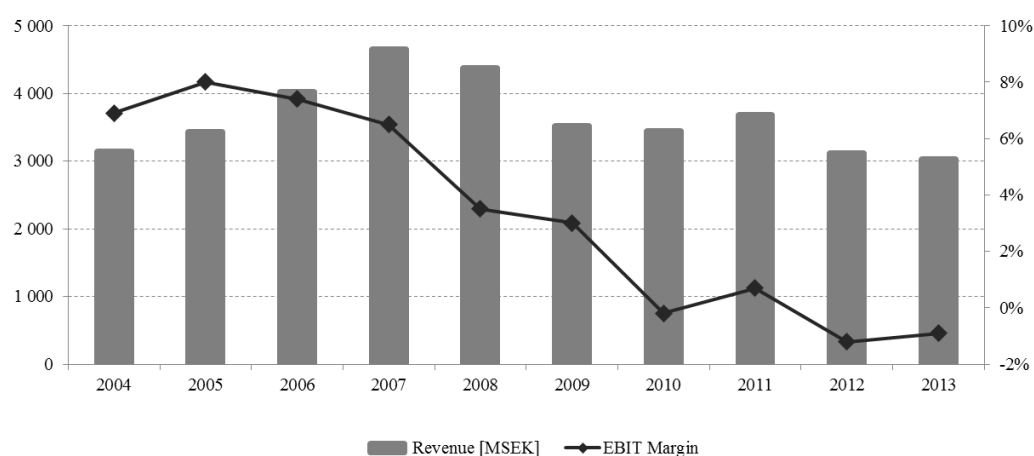


Figure 66 – Group 3 financial data (mid-high)

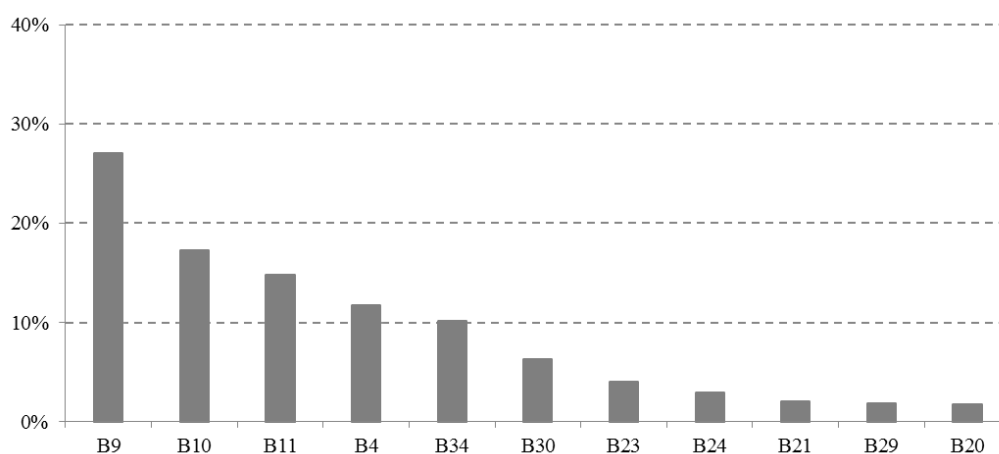


Figure 67 – Group 3 market share (mid-high)

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Design	Owner
B19	3.6%	15.4%	3.2%	8.6%	139,215,000	Plane	Private
B8	0.8%	12.2%	1.8%	5.8%	245,943,838	Plane	Private
B28	-2.1%	-13.8%	1.2%	-3.5%	88,550,000	Plane	Private
					473,708,838		

Table 71 – Group 4 (high)

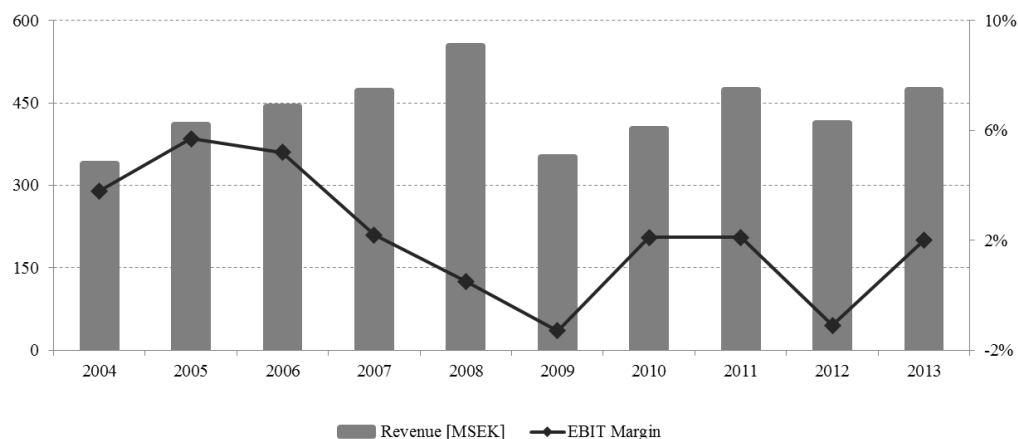


Figure 68 – Group 4 financial data (high)

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013
B35	13.2%	1.8%	14.7%	43.2%	17,276,756
B15	10.0%	5.0%	10.6%	8.3%	43,932,774
B16	8.4%	39.5%	9.9%	48.8%	24,795,521
B36	7.8%	4.9%	9.7%	8.7%	12,561,410
B17	7.0%	-4.4%	11.1%	1.2%	32,450,000
B36	5.0%	-8.0%	8.3%	-1.5%	14,063,789
B37	4.6%	-29.7%	6.6%	-5.9%	7,296,959
B38	4.3%	-10.7%	3.9%	-0.4%	12,870,486
B18	3.7%	172.6%	/	/	17,566,119
B38	3.7%	14.2%	3.3%	20.4%	17,700,202
B39	3.3%	-7.4%	6.5%	10.0%	43,309,089
B40	3.3%	/	/	/	14,825,115
B41	2.7%	-3.4%	2.6%	11.5%	33,028,661
B42	2.4%	282.3%	/	/	17,241,490
B43	2.2%	15.7%	1.2%	16.9%	45,710,553
B22	2.1%	10.1%	4.8%	27.4%	49,073,180
B44	1.6%	6.6%	1.8%	5.9%	31,667,282
B45	1.0%	9.3%	0.8%	23.8%	31,514,000
B46	-0.7%	17.7%	1.3%	7.0%	13,012,716
B47	-0.9%	6.3%	/	/	35,791,238
B27	-1.1%	-5.3%	1.1%	5.7%	40,958,899
B48	-1.7%	-6.2%	1.9%	-2.8%	3,198,181
B49	-6.0%	27.3%	-0.2%	38.6%	4,288,634
B31	-9.5%	-6.8%	-3.0%	-7.3%	32,631,120
					596,764,174

Table 72 – Wooden house manufactures (< 50MSEK)

## Business cases

3- YEBIT	3-Y CAGR	Revenue 2013	Segment	Desgin	Production	Lots/projects
9.1%	3.8%	444,107,000	Low	Volume	Own factory	Yes
# of Models	Residential	Vaction homes	Assembly	Geographical strength	Sales	Owner
17	Yes	No	Turnkey contracts	Entire Sweden	30 offices in Sweden	Industry owner

Table 73 – B5 description

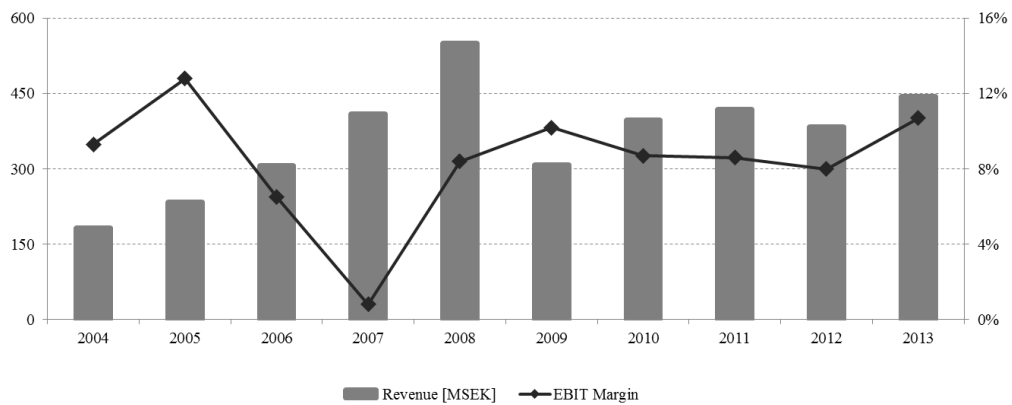


Figure 69 – B5 financial data

3- YEBIT	3-Y CAGR	Revenue 2013	Segment	Desgin	Production	Lots/projects
11.1%	-1.4%	377,674,000	Mid-low	Plane	Own factory & saw mill	Yes
# of Models	Residential	Vaction homes	Assembly	Geographical strength	Sales	Owner
50	Yes	No	Mixed contract	Gothenburg to Stockholm	30 offices in Northern Europé	Private

Table 74 – B3 description

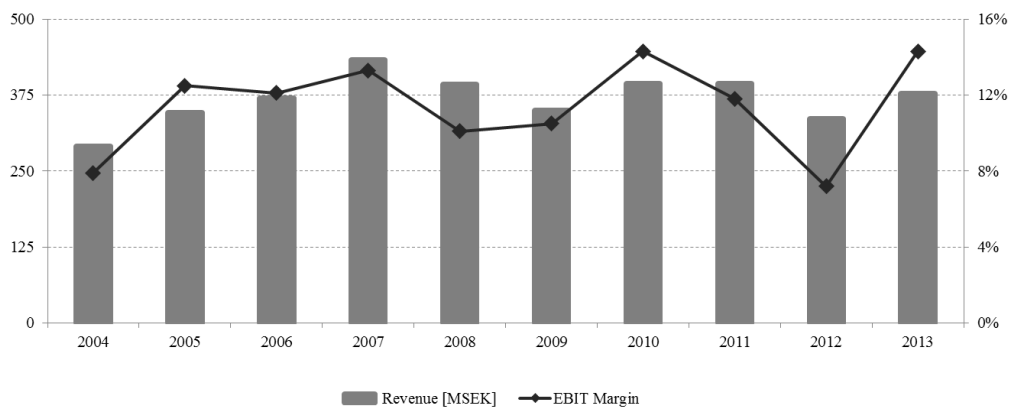
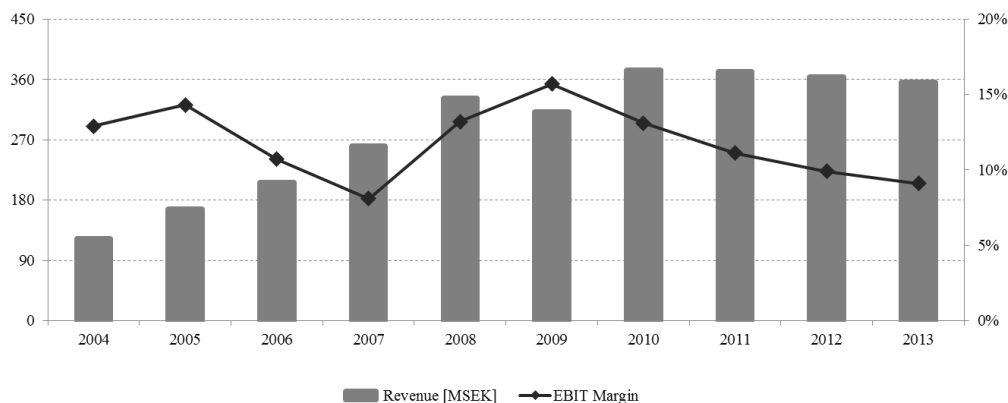


Figure 70 – B3 financial data

3- YEBIT	3-Y CAGR	Revenue 2013	Segment	Desgin	Production	Lots/projects
10.0%	-1.7%	355,267,000	Mid-high	Pre cut	Outsourcing	Yes
# of Models	Residential	Vaction homes	Assembly	Geographical strength	Sales	Owner
40	Yes	Yes	Turnkey & mixed contracts	Svealand	20 offices in the Nordics	Private equity

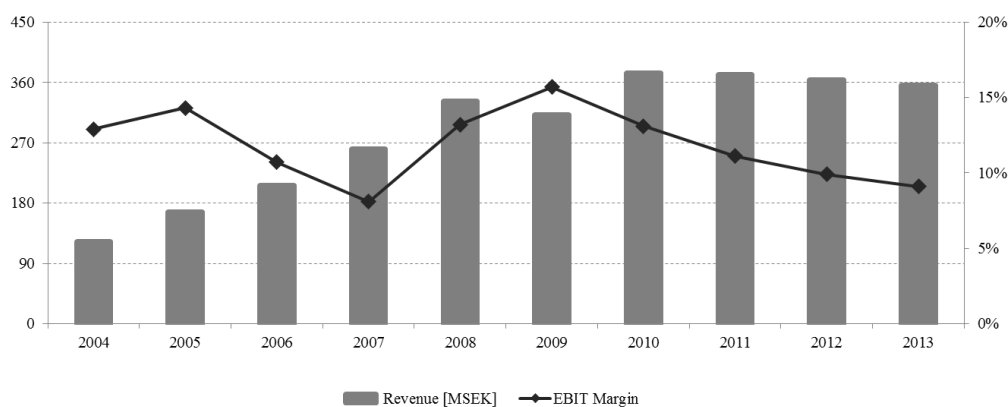
**Table 75 – B4 description**



**Figure 71 – B4 financial data**

3- YEBIT	3-Y CAGR	Revenue 2013	Segment	Desgin	Production	Lots/projects
24.0%	-1.7%	283,031,000	Mid-low	Plane	Own factory	Yes
# of Models	Residential	Vaction homes	Assembly	Geographical strength	Sales	Owner
100+	Yes	Yes	Turnkey & mixed contracts	Western Sweden & Stockholm	20 offices in Northern Europe	Private

**Table 76 – B1 description**



**Figure 72 – B1 financial data**

## Add-on investments

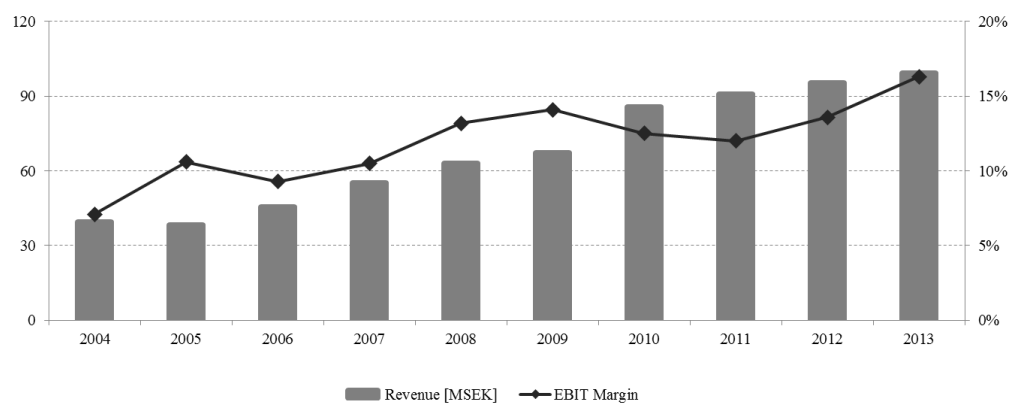


Figure 73 – B33 financial data

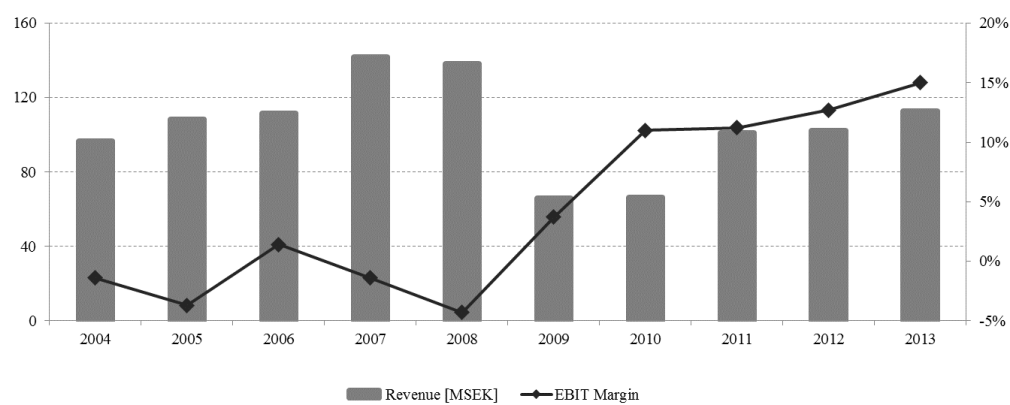


Figure 74 – B14 financial data

## Appendix G

In this section, the data for evaluation of the prefabricated concrete industry is presented.

### Industry data

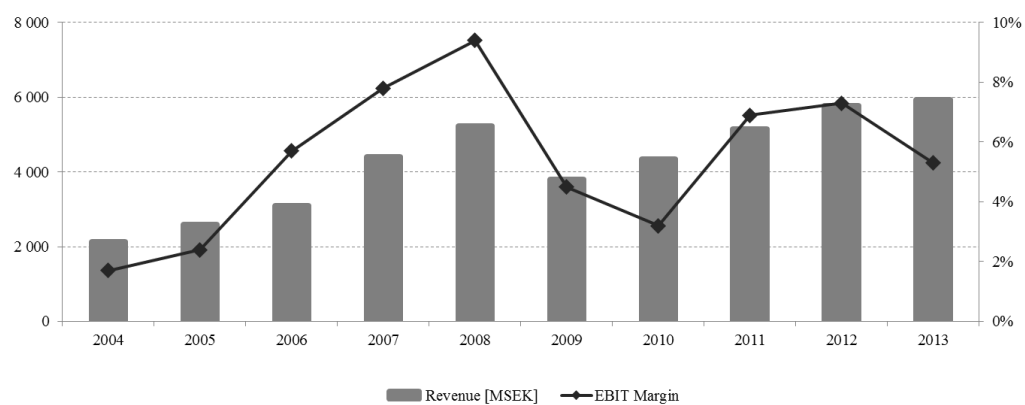


Figure 75 – Prefabricated concrete manufactures

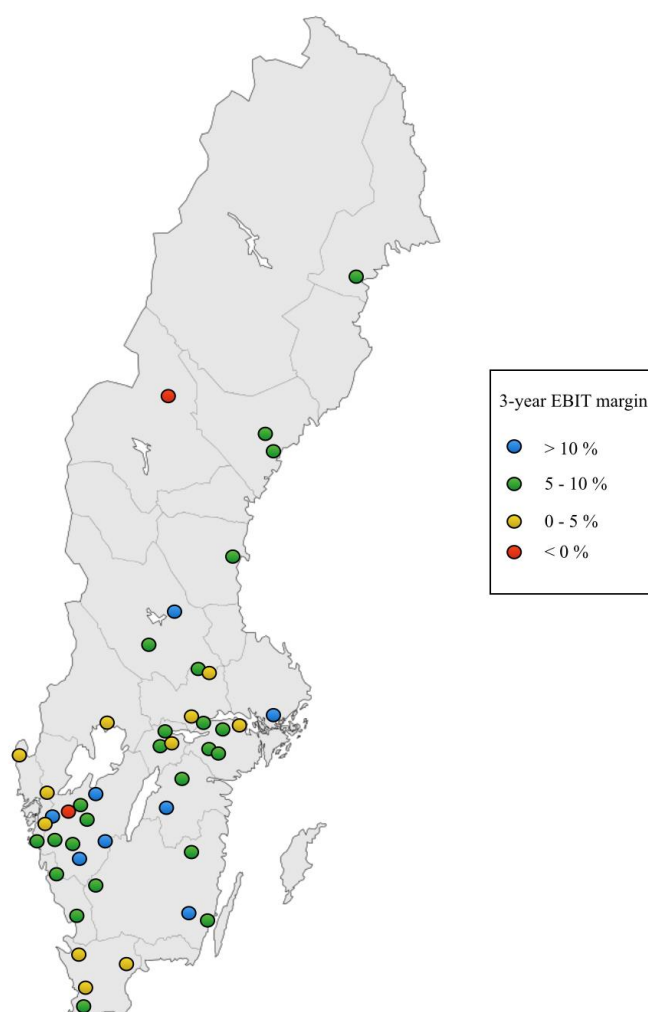
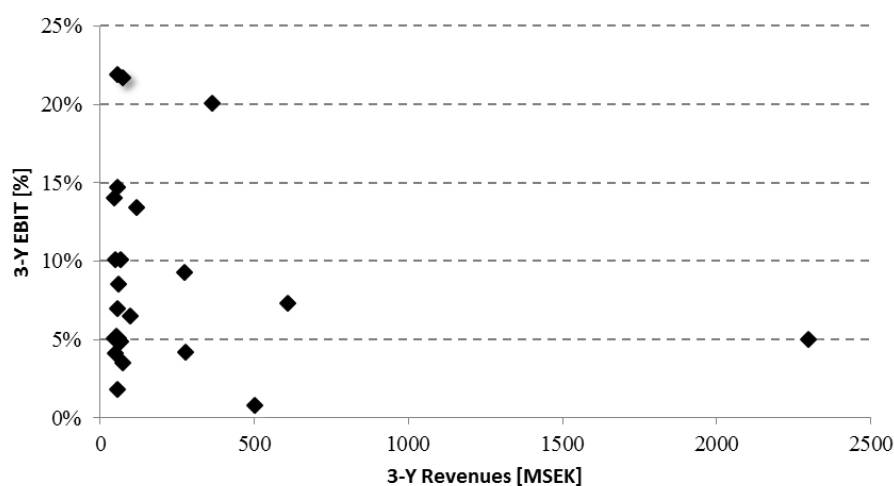


Figure 76 – Geographical location vs financial performance



**Figure 77 - Size vs profitability**

	3- Y EBIT	3-Y CAGR	Revenue 2013 (NOK)
Buskerud	15.1%	6.0%	122,137,000
Hå Element	12.1%	25.1%	76,296,000
Loe Betongelementer	9.8%	13.3%	388,464,000
Kynningsrud Prefab	7.6%	21.9%	254,683,000
Nor Element	4.4%	8.3%	186,104,000
Block Berge Bygg	3.7%	10.2%	1,143,959,000
Overhalla Betongbygg	2.6%	15.9%	258,943,000
Spenncon	2.5%	0.7%	983,343,000
Bjørn Hansen	-3.3%	12.3%	106,575,000
			<b>3,520,504,000</b>

**Table 77– Prefabricated concrete manufactures (Norway)**

	3- Y EBIT	3-Y CAGR	Revenue 2013 (DKK)
Confac	4.7%	17.0%	140,155,000
Boligbeton	4.0%	21.5%	259,575,000
CRH Concrete	2.4%	17.7%	911,204,000
Ambercon	1.3%	6.3%	308,057,000
H+H International	0.9%	2.1%	1,260,000,000
Spæncom	-0.7%	27.2%	557,700,000
			<b>3,436,691,000</b>

**Table 78 – Prefabricated concrete manufactures (Denmark)**

	3- Y EBIT	3-Y CAGR	Revenue 2013 (EUR)
Betset	10.1%	2.9%	28,310,000
Betonimestarit	5.4%	-4.8%	27,893,000
Parma	4.8%	2.0%	145,611,000
Mikkelin Betoni	2.7%	2.9%	18,311,000
Rajaville	-8.4%	-4.0%	12,357,000
			<b>232,482,000</b>

**Table 79 – Prefabricated concrete manufactures (Finland)**

## Segmentation – Manufacturing

	3-Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Factories	Owner
C11	20.1%	27.4%	14.8%	18.0%	437,698,000	Ulricehamn	Private
C32	10.1%	4.4%	9.2%	5.5%	103,593,815	Täby	Private
C13	9.3%	14.9%	2.8%	5.7%	299,261,000	Katrineholm, Bjärsta, Kalmar, Hallsberg	Industry owner
C14	7.3%	12.7%	5.6%	12.4%	625,092,000	6 factories (e.g. Borensberg, Vara)	Private
C16	5.0%	5.2%	4.4%	7.0%	2,171,724,000	7 factories (e.g. Herrljunga, Örebro)	Industry owner
C17	4.2%	42.8%	3.1%	14.3%	351,958,000	Udevalla	Industry owner
C33	3.5%	7.8%	1.2%	6.0%	68,066,000	Strömstad	Industry owner
C20	-3.2%	6.4%	1.3%	3.5%	169,150,400	Strömsund	Investment firm
					4,226,544,000		

Table 80 – Group 1 (System providers)

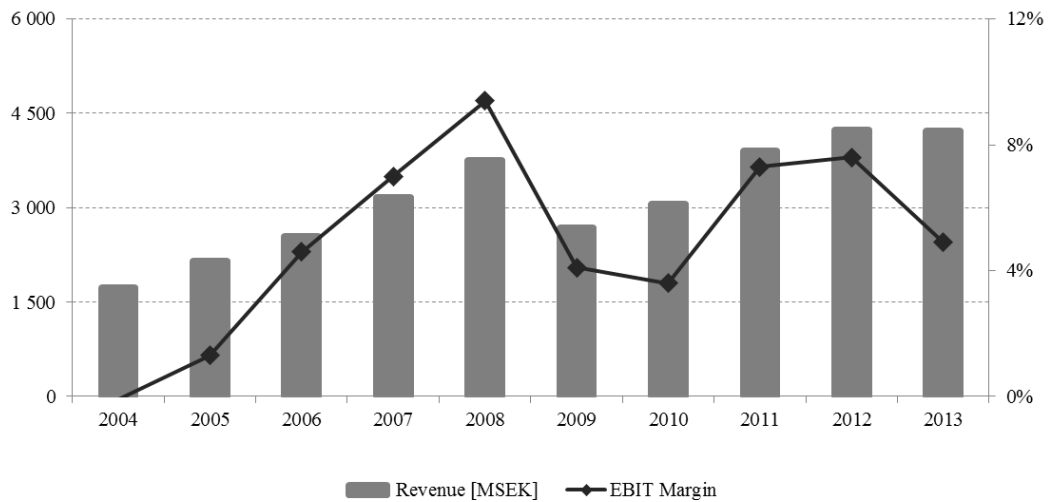


Figure 78 – Group 1 financial data (System providers)

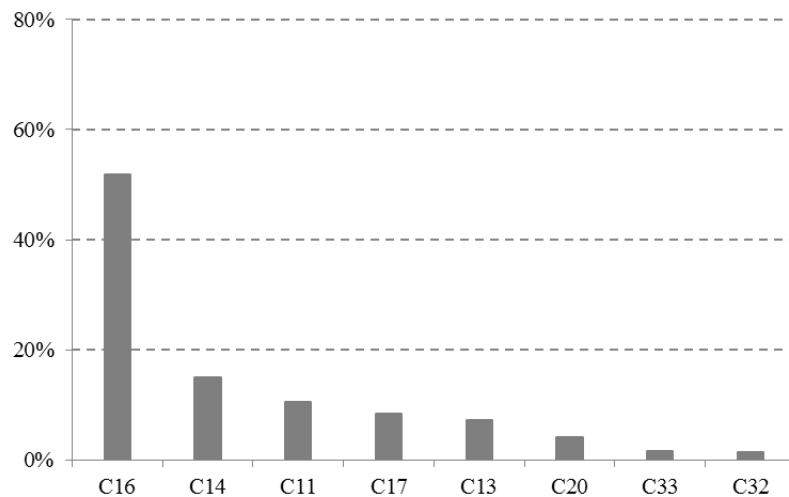


Figure 79 – Group 1 market share (System providers)

	3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Factories	Owner
C34	21.7%	4.8%	16.5%	9.2%	73,266,154	Tranemo	Private
C12	13.4%	12.3%	14.3%	6.5%	141,550,000	Ucklum	C13
C35	10.1%	17.4%	10.5%	8.0%	53,940,472	Nybro	Industry owner
C36	7.0%	22.8%	9.4%	22.1%	76,041,000	Björbo	C11
C37	6.5%	-1.3%	2.5%	0.4%	96,279,000	Hedared, Bollebygd, Eskilstuna	Industry owner
C38	5.1%	31.6%	6.0%	23.6%	71,667,000	Smålandsstenar	Industry owner
C21	5.1%	/	/	/	100,879,000	Öjebyn	Industry owner
C39	4.9%	11.8%	7.1%	15.5%	66,153,015	Kumla, Karlstad	Private
C40	4.1%	25.6%	/	/	44,434,00	Norberg	Private
C18	0.8%	17.4%	4.5%	5.6%	537,178,196	5 factories (e.g. Kristianstad)	Private
C19	-0.3%	22.9%	4.8%	12.5%	133,014,626	Sollebrunn, Poland	Private
					1,394,402,000		

Table 81 – Group 2 (Component providers)

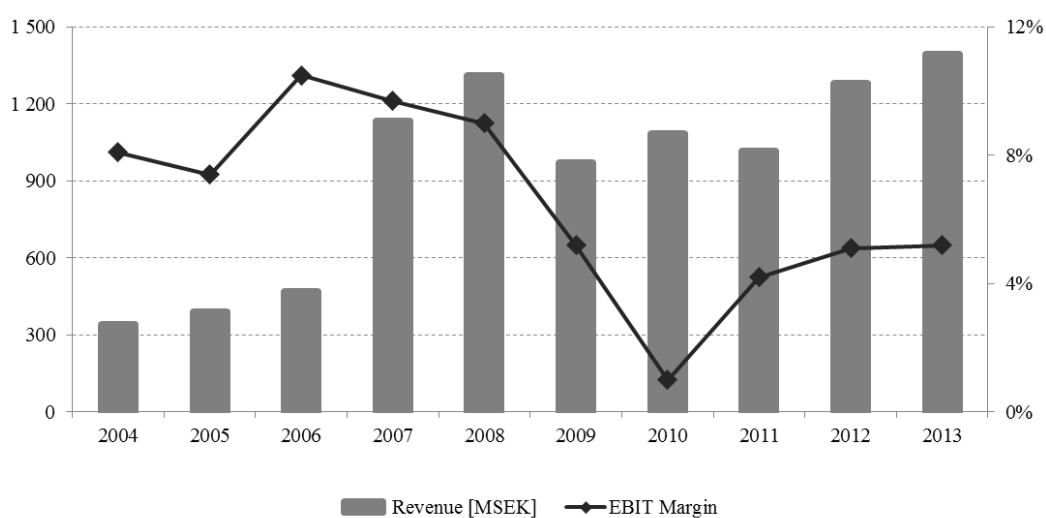


Figure 80 – Group 2 financial data (Component providers)

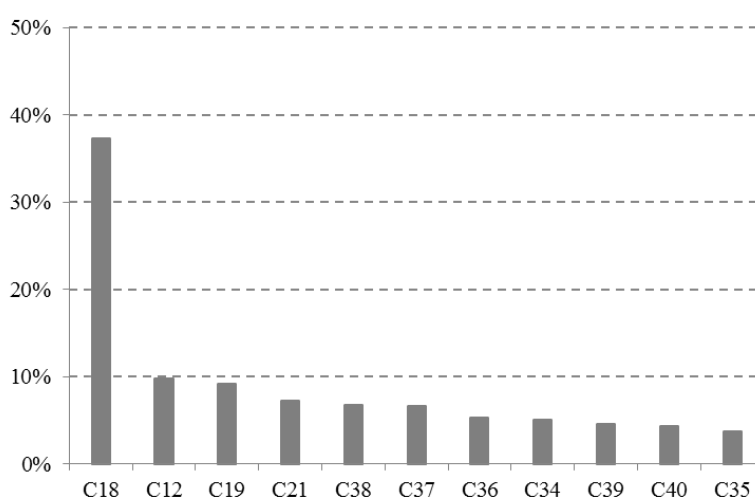
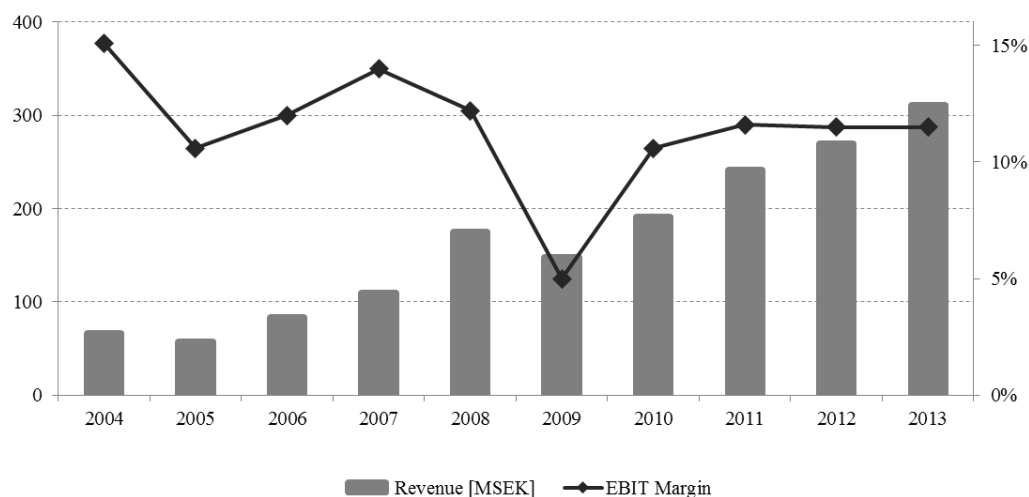


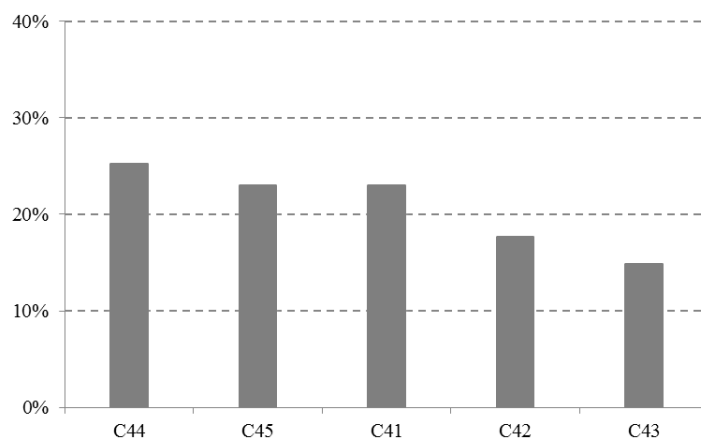
Figure 81 – Group 2 market share (Component providers)

	3-Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Factories	Owner
C41	21.9%	18.3%	23.5%	11.2%	62,762,783	Tranås	Private
C42	14.7%	7.7%	16.2%	21.6%	57,733,196	Vinninga	Private
C43	14.0%	3.7%	8.8%	6.7%	48,604,754	Rättvik	Private
C44	8.5%	38.5%	4.2%	14.0%	82,212,038	Halmstad	Unknown
C45	1.8%	10.9%	-11.4%	19.5%	59,094,000	Älvängen	Industry owner
					310,407,000		

**Table 82 – Group 3 (Infrastructure)**



**Figure 82 – Group 3 financial data (Infrastructure)**



**Figure 83 – Group 3 financial data (Infrastructure)**

## Business cases

3- YEBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Segment
20.1%	27.4%	14.8%	18.0%	437,698,000	System
Factories		Geographical strength		Price	Owner
Ulricehamn		Westen Sweden, Stockholm, Skåne		Premium	Private

Table 83 – C11 description

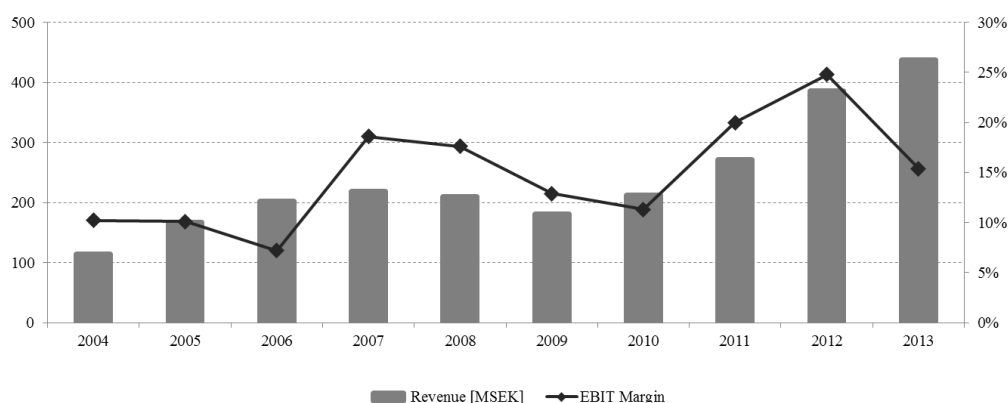


Figure 84 – C11 financial data

3- YEBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Segment
7.3%	12.7%	5.6%	12.4%	625,092,000	System
13.8%	3.2%	8.8%	20.8%	669,795,000	Mixed concrete
Factories		Geographical strength		Price	Owner
Borensberg, Göteborg, Hultsfred		Gothenburg, Malmö		Mix	Private
Katrineholm, Vara, Östra-Grevie		Stockholm (Mälardalen)			

Table 84 – C2 & C14 description

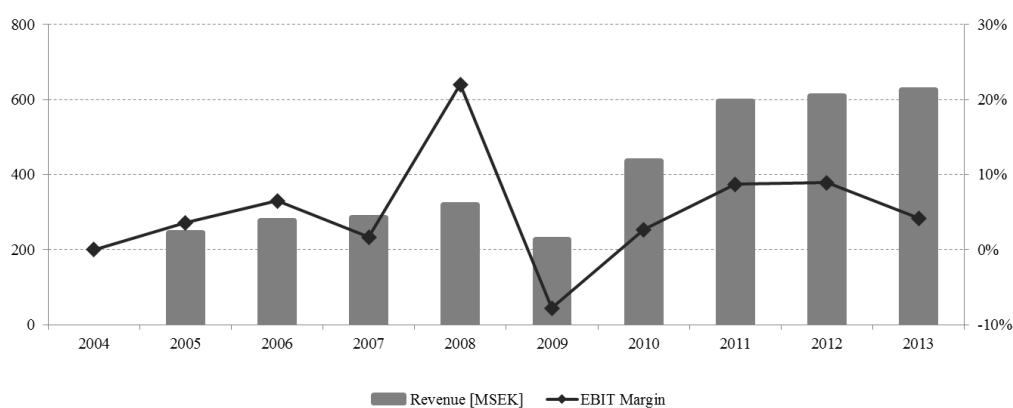


Figure 85 – C14 financial data

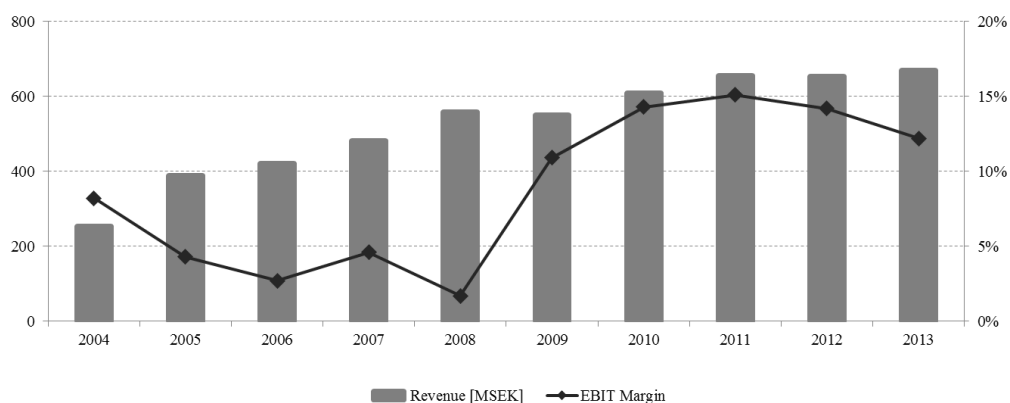


Figure 86 – C2 financial data

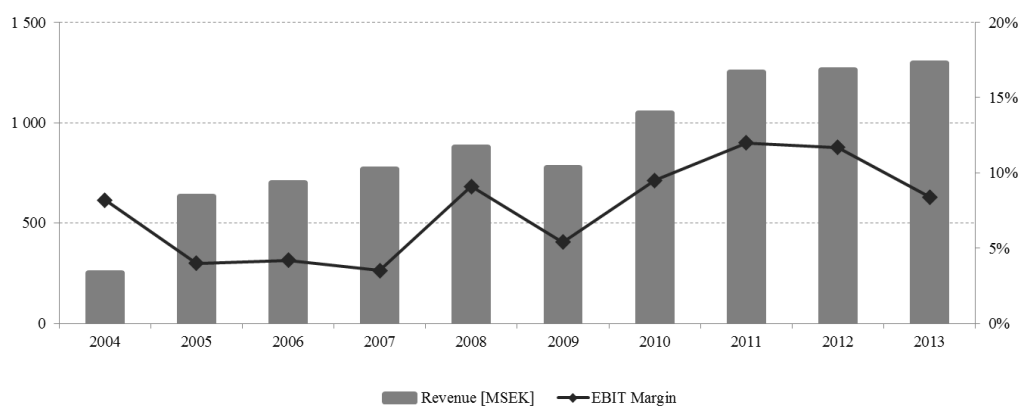


Figure 87 – C2 & C14 financial data

3- Y EBIT	3-Y CAGR	10-Y EBIT	10-Y CAGR	Revenue 2013	Segment
13.4%	12.3%	14.3%	6.5%	141,550,000	Components
9.3%	14.9%	2.8%	5.7%	299,261,000	System
Factories		Geographical strength		Price	Owner
Ucklum		Stockholm/Mälardalen		/	C13
, Bjärsta, Kalmar, Hallsberg		Stockholm/Mälardalen		/	Industry owner

Table 85 – C12 & C13 description

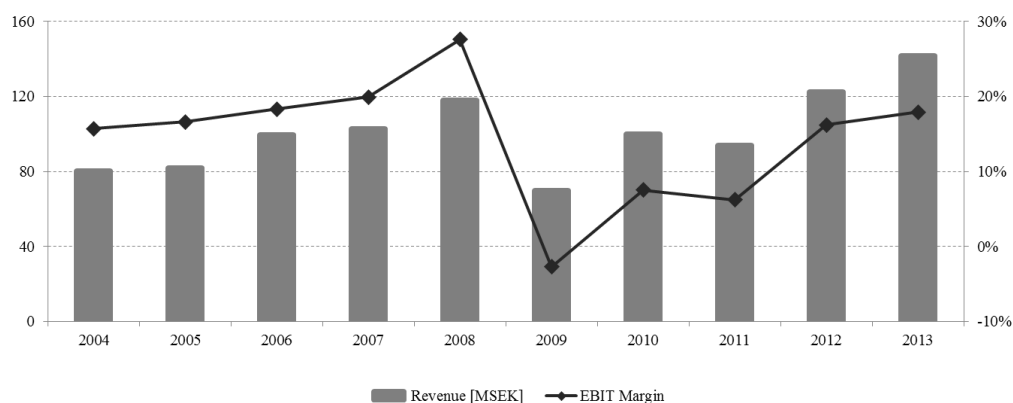


Figure 88 – C12 financial data

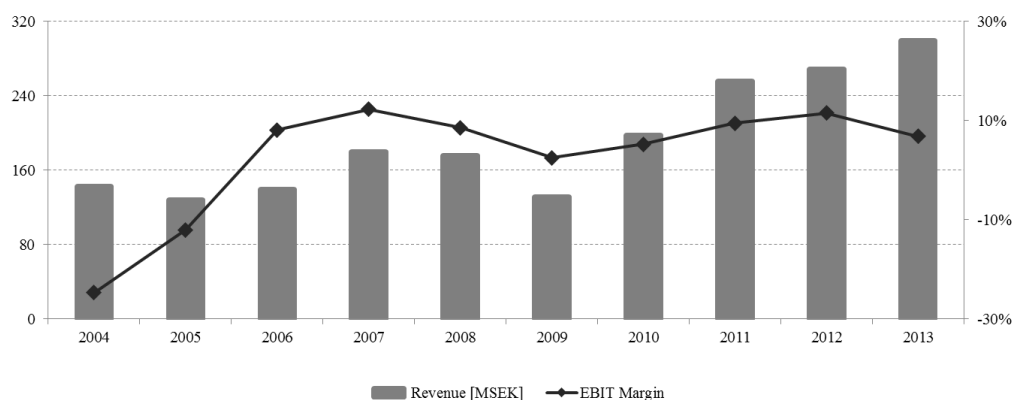


Figure 89 – C13 financial data

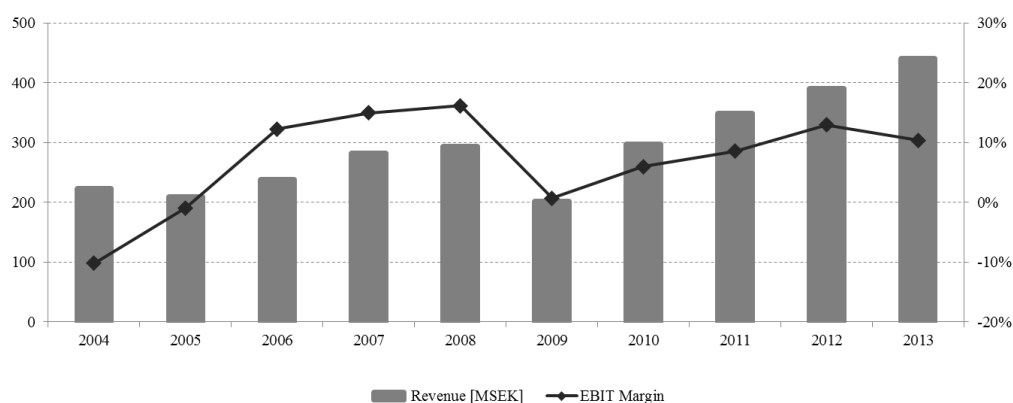


Figure 90 – C12 & C13 financial data

### Add-on investments

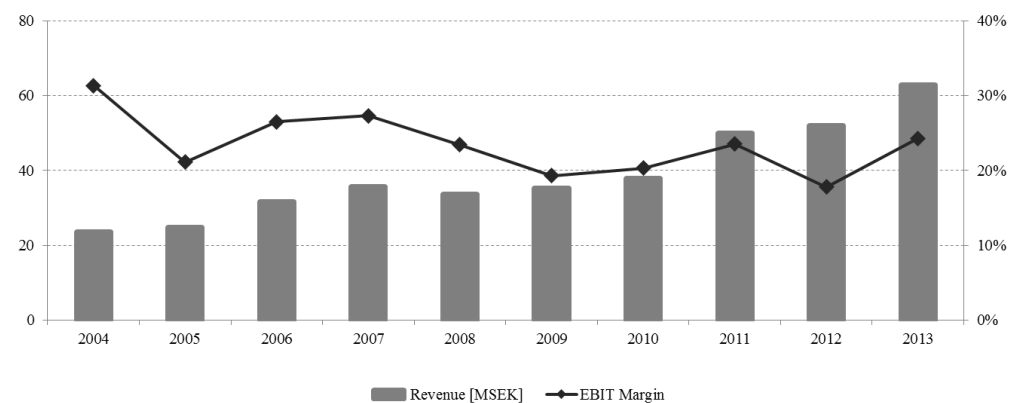


Figure 91 – C41 financial data

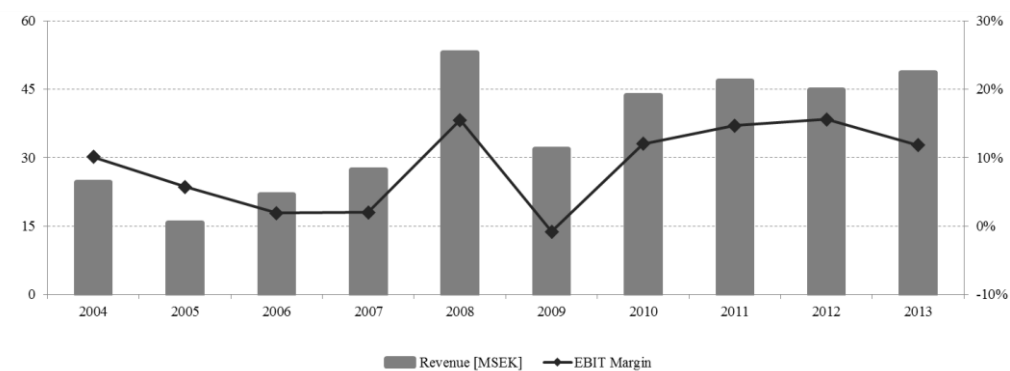


Figure 92 – C43 financial data