Technology changes and the Norwegian accounting industry: A profitability analysis perspective

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I. Abstract

This thesis analyzes the Norwegian accounting industry using the framework of strategic management accounting. The perspective chosen is that of a strategic profitability analysis. Focus is placed on how the development and adoption of new technology are affecting the industry, and how the industry can adapt to changes.

The empirical data has been collected using two case studies and a small sample of firms. The thesis starts with a macro- and industry analysis of factors influencing the Norwegian accounting industry. Second, an analysis of profitability on the basis of a sample of twenty firms from across the country is conducted. Third, an analysis of the most important drivers of profitability is completed. Finally, changes and challenges caused by the development and adoption of new technology are described. The discussion is continued further with a suggestion to how the two case firms can adapt to changes caused by technology.

The analysis revealed that the influence from technology is strong and that profitability has been rather good. However, we might expect the larger firms to dominate the industry in the future. The small- and medium sized firms are currently the most profitable. Important drivers of profitability are related to scale, capacity utilization, learning and spillovers, technology, and interrelationships. The main challenge caused by technology is that revenue is lost due to automation as tasks takes less time to complete. Firms can therefore no longer keep up with the degree of invoicing they were used to. For the smaller firms, a focus strategy is suggested as a «solution» to the challenges. The larger firms are better off with a differentiation strategy, or even a low cost strategy.
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III. Preface

This master thesis represents the final completion of my studies at the Norwegian School of Economics in Bergen (NHH). I am very thankful for the skills and knowledge I have acquired through these years of studying.

The process of writing the thesis has been interesting and educational, but also challenging at times. Through these months of hard work, I have analyzed the Norwegian accounting industry and gained in-depth knowledge of its challenges. It has been very exciting to use what I have learned over these past years on a practical case.

The choice of topic for this thesis is based on what I learned in one of the courses at NHH, Strategic Profitability Management and Pricing. This course taught me how management accounting fits into the strategic planning and development of firms.

I would like to thank the managers at Sum Regnskap AS and Visma Services Lillestrøm AS for taking some of their valuable time to be interviewed and answer any questions I had throughout the process. Without you, this thesis could not have been possible to complete. I would also like to thank my supervisor Rafael Heinzelmann for his constructive feedback and comments throughout the process. His supervision has been very valuable to me.

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Øystein Røttereng Brendemo
1.0 Introduction

The accounting industry in Norway is in an exciting industry to analyze. The industry seems to be in a transition in the way it has evolved over the last few years. It is changing from being a service for accounting required by the law, to become a strategic service in assisting managers and owners in important business processes (Spandow, 2014). Today, the industry is facing both technological and structural changes. First and foremost, the changes happen because the adoption of technology has led to an increase in the automation of the «traditional» tasks within the work process. An important driving force behind the evolution and adoption of technology is the software provider. Their contribution helps to make the work process more effective and interact with clients in a new way (NARF, 2013).

The «voices of the industry» are clear about the changes and its consequences for the industry. In an interview with Sum Regnskap AS, their chairman described these changes as a disruptive event. The chairman believes the industry will change dramatically within the next few years, and it is a possibility that many of the accountancy firms we know today are unable to make the necessary changes in order to stay competitive. In the industry today, traditional tasks are disappearing, firms are offshoring/outourcing to low cost countries, and new government regulations are reducing administrative demands on companies (Kleppen, 2014). If accountancy firms do not adapt, many of them will not exist in the years to come (Fjelberg, 2012).

This thesis will explore the profitability in the accounting industry in Norway, and it also seeks to describe how the industry can adapt to changes brought by technology. The goal is first to describe how the profitability is today, analyzing revenue- and cost drivers. Cost- and revenue drivers will help to indicate where they earn profits today, and where they might have challenges adapting to changes in the future. The knowledge of profitability and the challenges that lay a head will be utilized to exemplify how the industry can position itself for the near future.

Within management accounting, strategic management accounting can be used to provide the «tools» needed to analyze the industry. Strategic management accounting is (among other things) focused on collecting competitor information, exploiting cost reduction opportunities, and matching accounting emphasis with strategic positioning (Lord, 1996, pp.354-355). These
tools allow for a thorough analysis of the important elements in the Norwegian accounting industry and how firms can position themselves in the near future.

1.2 Research question

A number of studies have focused on the Norwegian accounting industry. For example, a recent study by Gårseth-Nesbakk & Åmo (2012) focused on exploring factors related to profitability. This thesis is somewhat inspired by this study. However, this thesis is more focused on how changes in technology affects the industry and how firms can adapt to the subsequent changes. Based on this background, a strategic profitability analysis of the accounting industry in Norway is analyzed by the following research question:

*What are drivers of profitability for an accountancy firm today, and how can they adapt to changes in technology?*

In order to answer the research question, four sub-questions will help to answer the main research question:

1. *What characterizes the arena of competition within the accounting industry in Norway?*
2. *How is the current profitability in the accounting industry today?*
3. *Which drivers are important for the overall profitability in the accounting industry?*
4. *What are the challenges the Norwegian accounting industry is facing, and how can they adapt?*

The sub-questions will help to structure the thesis in such a way that information is presented chronologically. They are the «red thread» of the thesis. The first question will help to shed light on the external- and internal factors influencing the Norwegian accounting industry. Here, some of the main challenges external to the firms in the industry are located. The second question builds on the first question by describing the profitability for a sample of firms. This helps to locate important drivers of profitability in sub-question three. These three questions help to identify challenges and how to overcome them, which is the topic in the fourth question.
1.3 Refinements
The thesis is based on the Norwegian accounting industry only. The purpose is to get a deeper view into the profitability and challenges the industry is facing, rather than statistical generalization. Hence, a small sample of firms is analyzed. Two case firms are also used to get information regarding the changes and challenges. Since the effect of adopting technology can be seen as individual from firm to firm, the case studies are only two examples of the effects of automation. In order to keep a realistic outlook on the future, the future is defined as no longer than 5-10 years ahead.

1.4 Structure
The thesis is divided into 9 chapters, this introduction included. It will start with a literature review of the core of the theoretical foundation in chapter 2. Then, in chapter 3, the theoretical framework is presented. Chapter 4 is a presentation of the methodology used to answer the research question. Chapter 5 to 8 is the actual analysis. It will start in chapter 5 with an external (macro)- and industry analysis. In chapter 6 and 7, the current profitability and drivers of profitability is analyzed. In chapter 8, the challenges faced in the industry are discussed, and solutions to these challenges are presented. Finally, chapter 9 is a summary of the findings.

2.0 Literature review
This chapter will present a literature review of the theoretical foundation. The theoretical foundation is based on the field of contemporary management accounting, with an emphasis on strategic management accounting (SMA). Because of the external orientation and focus on strategic positioning for competitive advantage, SMA contains a toolbox that seems very relevant in studying an industry that is facing challenges. In light of the purpose of this thesis, the literature review is explicit on reviewing literature most relevant for the scope of this paper. The review will start with a brief summary of the evolution of SMA, before reviewing some studies relevant to the objective of this thesis.

2.1 The evolution of strategic management accounting
SMA was first «introduced» in the late 1980’s as one of the range of techniques and approaches designed to restore the lost relevance of management accounting (Roslender & Hart, 2003, p.256). Coad (1996, p.392) writes; “SMA is an emerging field whose boundaries
are loose and, as yet, there is no unified view of what it is or how it might develop. The existing literature in the field is both disparate and disjointed”. SMA was different from many of the parallel developments in that it had an external orientation. According to (Roslender & Hart, 2003, p.256), Bromwich and Bhimani were two of the main academic advocates at the time. Their observation presented in 1989 was that SMA provided a means of releasing management accounting from the factory floor (Roslender & Hart, 2003, p.256).

Lord (1996, p.347) argues that many of the techniques and elements of SMA may in many cases already be found in firms. “The techniques for gathering and using information necessary for survival in a hostile and competitive environment may be part of the operational management of firms” (Lord, 1996, p.347). “The information may not have been quantified in accounting figures, and may not be collected and used by management accountants” (Lord, 1996, p.347). Shank & Govindarajan (1993) ask the question whether the new ideas in management accounting really are new wine, or merely old wine recycled in new bottles. Their contribution is what is known as strategic cost management (SCM). However, their view on strategic cost management is considered as a perspective on a new accounting regime, i.e., SMA (Wickramasinghe & Alawattage, 2007, p.244).

The «introduction» of SMA was a response to the critique of traditional accounting systems. The relevance-lost debate originated from the American professors Johnson and Kaplan (Drury, 1990, p.123). They claim in their book that practitioners of management accounting were using techniques which no longer provided relevant information to current business problems (Drury, 1990, p.123). The accounting systems used by private companies produced data that were too aggregated, arrived too late, and too influenced by the demands for external usage to decide on what to produce, how to produce, and at which prices products should be sold (Bjørnenak, 2010, p.49). As a solution to this problem, Johnson focused on quality- and process management, while Kaplan introduced new versions of traditional methods for calculations and scorecards (Bjørnenak, 2003, p.22). In order to regain the position of management accounting in firms, new solutions such as activity based costing, time driven activity based costing, and balanced scorecards were introduced (Bjørnenak, 2003, p.22).

Another debate followed in Scandinavia about the lost relevance of budgeting (Bjørnenak, 2010, p.51). One important figure in this debate was Jan Wallander, criticizing budgets as a management accounting tool because firms were using budgets to systematically look into the
future (Bjørnenak, 2010, p.51-52). This debate is later defined as the «beyond budgeting» debate. In Norway, and internationally, the spread of beyond budgeting is low. Even though many firms recognize the weaknesses of traditional budgeting they still use budgets in management accounting (Bjørnenak, 2010, pp.52-53).

Bjørnenak (2003, p.22) states that management accounting tools are often presented in three levels within the organization: The strategic level is about the development, implementation, and communication of the firm’s strategy. The administrative level is about managing the use of resources and performance. The operational level is about supervising the work processes. The two debates mentioned above criticized that firms were using too much time on the administrative level within the organization (Bjørnenak, 2003, pp.22-23). Of particular importance to this thesis, the debate focused on the weakness of the detachment from the enterprise’s strategies and strategic planning exercises represented by conventional accounting (Wickramasinghe & Alawattage, 2007, p.243). Instead of focusing on the long-run strategic decisions (c.f. SMA), conventional accounting systems are mostly focused on short-run operational decisions (Wickramasinghe & Alawattage, 2007, p.243). The trend today is to have more focus on the strategic and operational level within the organization (Bjørnenak, 2003, p.23).

The term «strategic» is intended to give SMA a long-term outlook (Roslender & Hart, 2003, p.256). Simmonds (1981, 1982, in Roslender & Hart, 2003, p.256) used SMA to identify an externally oriented approach used to collect and analyze data on costs, prices, sales volumes, market shares, cash flow and resource utilization for both the firm itself and its competitors. The objective of analysis is to get information on the relative competitive position of a firm in an industry. Consequently, financial accuracy is less important than to derive insights that can inform the future strategy of a firm (Roslender & Hart, 2003, p.256). The strategic aspect was also linked to the growth of global competition. This new global competition led Michael E. Porter (1980, 1985) to grasp the idea of competitive strategy and competitive advantage. The idea of competitive advantage was considered at the heart of a firm’s performance in competitive markets (Porter, 1985, p.XV). The role of accounting was also challenged as firms and academics understood that long-term profitability is won through improved customer satisfaction (Johnson, 1992, p.XI, in Wickramasinghe & Alawattage, 2007, p.238).
It is difficult to refine all the different directions within SMA. Lord (1996, pp.354-355) has made a summary of the main themes discussed in the literature as described in the following: First, in order to compare the firms to other companies in the market, the collection of competitor information is important. Information is gathered on competitor’s pricing, costs and volume, and information to determine market share. Second, the firms must focus on exploitation of cost reduction opportunities. A focus on continuous improvements is emphasized including finding ways to reduce costs and/or enhance differentiation by exploiting linkages in the value chain, thus increasing executional cost drivers and getting structural cost drivers to the optimal level. And finally, matching of accounting emphasis with strategic position would direct firms to place different emphasis on elements of traditional management accounting, depending on the strategic position chosen. Cost leader strategies would, e.g., focus on standard costing for performance assessment, and using product costs for pricing decisions. Product differentiators would, e.g., focus on marketing cost analysis as products change to meet market demand. Further, Lord (1996, p.352) argues that cost driver analysis is important no matter which strategic position is chosen.

Bjørnenak (2003, p.24) tries to identify directions into which SMA has evolved among the different and many publications over the years. In his opinion, the three main directions of management accounting and strategic positioning, strategic profitability analysis, and strategic communication and scorecards have been given more attention than others.

According to Bjørnenak (2003, p.24) it was K. Simmonds that introduced strategic positioning analysis as a system for reporting to support the development of business strategy (Simmonds, 1981, 1986, in Bjørnenak, 2003, p.24). He also mentions Michael E. Porter (1980) to have formed another connection between management accounting and strategic positioning when introducing the differentiation- and cost leader orientations (Bjørnenak, 2003, p.24). Porter’s generic strategies can be used for a firm to outcompete other firms in an industry (Porter, 1980, p.35). In terms of management accounting, Porter (1985) also introduced cost drivers and value chain analysis to create and sustain superior performance. An attempt to create a list of cost drivers was also done by Riley, which is regarded as an even better list (Riley, 1987, in Shank & Govindarajan, 1993, p.20).
2.2 Research and developments within SMA

Despite the potential positive effects of using SMA for achieving a competitive advantage, many accountants and managers do not explicitly use SMA, or are aware of these potential benefits. Many of the studies completed within the field of SMA have had a focus on documenting the actual use of SMA techniques.

Earlier studies within SMA often focused on describing the widespread use of SMA, and on whether SMA was really something new. Dixon (1998) investigated the practical implication of SMA within a dynamic business environment on the basis that SMA suggests that an organization must develop accounting information for strategic purposes and a number of strategic information tools. SMA allows a firm to be more aware of its external environment, but the information and analysis needed for an organization to use and develop SMA might outweigh the benefits. This is especially if the information is subjective, lacking in validity, and not a priority in achieving a competitive advantage (Dixon, 1998, p.279). The company used in the study concluded that the information provided by SMA was interesting, but not critical for their survival. Information about their competitor’s costs, cost structure, prices, and product profitability would only act as an indicator alongside other information (Dixon, 1998, p.278).

Roslender & Hart (2003) concluded in their case studies that the term SMA had very little significance among the great majority of practitioners they studied in the UK. Despite of this, the majority of respondents in the research were positive about the benefits of exploring the potential of greater cooperation between management accounting and marketing management (Roslender & Hart, 2003, p.273). According to Roslender & Hart (2003, p.255), SMA can best be understood as an approach to accounting for strategic positioning. A similar type of study was conducted by Guilding, Cravens & Tayles (2000). The study surveyed companies in USA, the United Kingdom, and New Zealand locating SMA practices appraised. Their findings suggest that competitor accounting and strategic pricing were most frequently used in firms (Guilding, Cravens & Tayles, 2000, p.128). Also, even though they score relatively low, strategic costing, quality costing, and value chain costing were considered important (Guilding, Cravens & Tayles, 2000, p.128). They do, however, conclude that a potential for greater use of SMA practices exist in all the countries that were examined (Guilding, Cravens & Tayles, 2000, p.113).
Other studies conclude differently when researching SMA’s effect on companies. A study by z Rosli, Said & Mohd (2015) concludes that SMA has an enhancing effect on both management and performance in Malaysian government-linked companies. SMA usage has a significant effect on the firms performance, and that the business strategy and IT-solutions also have a significant effect on SMA usage (z Rosli, Said & Mohd, 2015, p.41). Collier & Gregory (1994) explored the use of SMA in six major UK hotel groups. Their conclusion was that the finance functions in hotel groups is becoming increasingly involved in SMA (Collier & Gregory, 1994, p.21). The contribution from SMA is present in planning and in exercises on the market conditions and competitor analysis. The high degree of competitiveness among the hotel groups in the market together with the relatively homogenous nature of the industry is consistent with the widespread adoption of SMA. The authors therefore conclude that SMA is becoming an integral part of the finance function, and that SMA is no longer in its «infancy» (Collier & Gregory, 1994, p.21).

Nixon & Burns (2012a, p.225) directs attention to some of the developments within the research of SMA: For one thing, the velocity and nature of changes in the external environment continue to transform the strategic management (SM) tools and concepts. This affects both SM and SMA. Second, as mentioned above, empirical research has focused on the adoption and implementation of SMA techniques supporting competitive and marketing strategies (Langfield-Smith, 2008, in Nixon & Burns, 2012a, p.225). Third, a strengthening of links between SM and SMA literature is considered to be beneficial (Tomkins & Carr, 1996; Nyamori et al., 2001; Bhimani & Langfield-Smith, 2007, in Nixon & Burns, 2012a, p.225). The linkage can provide a broader dimension in SMA. And finally, SMA techniques have not been adopted widely, and are not well understood (Langfield-Smith, 2008, p.204, in Nixon & Burns, 2012a, p.225). This view is in contrast with the academic and practice-oriented SM literature that has developed rapidly (Nixon & Burns, 2012a, p.225).

The short lifecycle of SM tools and concepts can be consistent with why SMA techniques have not been adopted widely. Compared with SM, SMA has had rather little impact on managerial discourse and practice (Seal, 2010, p.95, in Nixon & Burns, 2012b, p.239). SMA can be seen as focusing on the first-era view of SM, which focuses on the external environmental factors, while SM evolved into the resource-based view of the firm. This external view was enhanced by Porter’s model of industry analysis and generic strategies (Nixon & Burns, 2012b, p.229). The resource-based view of the firm has been overlooked by
the SMA literature (Nixon & Burns, 2012b, p.229). SMA researchers should begin to explore the concepts and techniques used by the SM literature. It is suggested that the techniques within SMA and between SMA and related literature should be developed to complement the SM framework (Nixon & Burns, 2012, p.229). SMA together with performance measurement and management can help to integrate the fragmented developments of SMA and SCM to a «body of knowledge» (Nixon & Burns, 2012, p.241). The body of knowledge for SMA would have the building blocks of the SM literature, practice, related strategy-oriented literatures, and an integrated set of management accounting techniques (Nixon & Burns, 2012b, p.241).

2.3 Literature review of relevant studies

There are also studies about the accounting industry in Norway. One study was conducted by Gårseth-Nesbakk & Åmo (2012). Their objective was to map the overall profitability within the accounting industry in Norway and to get knowledge about the drivers of profitability and other factors related to profitability. Information about the industry was gathered using financial statements, surveys, and interviews with different accountancy firms in Norway (Gårseth-Nesbakk & Åmo, 2012, p.VII). On this basis they presented a general perception and discussion of profitability in the accounting industry in Norway. The background for their research report was that the Norwegian Association for Authorized Accountants [NARF] had discovered that some firms in the accounting industry in Norway were struggling with low- and even negative profitability (Gårseth-Nesbakk & Åmo, 2012, p.I).

The strength of this research report is that they are able to communicate different trends and challenges that many firms face. For example they conclude that the smaller accountancy firms are the most profitable, and that profitability even decrease with size. Despite of this, many firms communicated that that they have a goal to grow and increase their relative size in the market (Gårseth-Nesbakk & Åmo, 2012, p.VII). Another strength with this report is that they locate strategies to increase profitability based on information about the challenges that many firms face (Gårseth-Nesbakk & Åmo, 2012, pp.90-100). In light of their study, this particular thesis will focus on changes brought by the adoption of more IT-technology in the Norwegian accounting industry. The study by Gårseth-Nesbakk & Åmo (2012) does not seem to focus specifically on the challenges brought by technology and how firms can position themselves in relation to these challenges.
Other studies have been conducted within the accounting industry in Norway with strategic perspective to help further understand the drivers of profitability. For example, a study by Tobiassen & Gooderham (2002) researched the ability for accountancy firms to deliver advisory services to small- and medium sized businesses. They concluded that advisory services were only a priority for a small amount of firms. Many other firms intend to start offering advisory services, but it takes time and effort to build this competence. Firms need to focus on a long-term strategic intention about advisory services, deliver high-quality services, build good relations, and work to create a demand for advisory services (Tobiassen & Gooderham, 2002, p. iii). They also suggest that employees within firms specialize in certain tasks (Tobiassen & Gooderham, 2002, p.iii).

Another study by Barkovitch (2013) was based on the report by Gårseth-Nesbakk & Åmo (2012). The thesis studied how the handling of customers is affecting the overall profitability. Through interviews with managers in accountancy firms, a number of factors affecting profitability were located. Some of the most important factors were a sensible customer strategy, good routines and systems, continuously assessing the customer portfolio, specialization of the customer portfolio, and developing healthy customer relationships (Barkovitch, 2013, p.80). Common for all of these factors is that they contribute to a good and effective organization of the work done by the accountancy firm. There are benefits to achieving good flow and efficiency for an accountancy firm. The costs associated with the handling of customers are reduced, and a more effective use of the time available is achieved (Barkovitch, 2013, p.80). The thesis thus contributes to the use of SMA in this paper by focusing on factors within strategy that accountancy firms must plan for.

Studies similar to this thesis have also been done based on other industries other than the accounting industry. Bachmann & Hanstad (2013) used Norwegian savings banks as their case to researched differences in profitability. Norwegian savings banks are facing consolidations, strict regulations, and rapid changes in technology (Bachmann & Hanstad, 2013, p.5). A PESTEL-analysis and Porter’s five forces were used to analyze the competitive arena. Furthermore, the study analyzed financial statements and used cost drivers and an ABC-analysis to find drivers of profitability. They analyzed correlation of their different findings to see if the drivers they located were actually affecting the overall profitability. Their main finding is that cost efficiency seems to explain differences in profitability in combination with a firm’s size, its range of products, and alliance membership (Bachmann &
Hanstad, 2013, p.5). Their study also focused on what might be important to focus on the future. Their outlook however, was not based on any theories on positioning the firm strategically.

Sandvik & Undlien (2014) used a similar approach as the one described above to research profitability among micro-breweries in Norway. Their theoretical foundation also used a PESTEL-analysis and Porter’s five forces to analyze the competitive arena. A profitability tree developed by Jakobsen and Lien in 2001 was used to further research differences in profitability to see how to create value through increased market size or value per product. To locate drivers of profitability, cost drivers by Porter and Riley were used, supplemented with an ABC-analysis. Their findings suggest that profitability can be explained through scale-, complexity-, and experience in production. Distribution of products and presence in the market place are also important strategic factors (Sandvik & Undlien, 2014, p.2). As in the study above, they also try to explain important factors to consider about future strategic positioning, but they are not using any theories on strategic positioning.

3.0 Theoretical foundation

The theoretical foundation for this thesis is presented in the following paragraphs. Based on the literature review above, the thesis will use some of the tools within SMA. The theories/frameworks are presented in the order of their appearance in the analysis. The review will start with the external perspective of the industry. Then, focus is placed on analyzing the industry before moving on to challenges in the industry and strategic positioning.

3.1 The macro-environment of the firm

It is important for a firm to get a sense of the world outside of the organization. For the purpose of this thesis, technological changes and other factors outside of the firm can help to shape the industry. The PESTEL framework is one way of analyzing the macro-environment of a firm. As described by Johnson, Scholes & Whittington (2011, p.65) the PESTEL framework categorizes environmental influences into political-, economic-, social-, technological-, environmental- and legal factors. These factors are not independent of each other. They also have an impact on the drivers of particular industries, markets, and individual firms. An important aspect of the framework is that it can be used to look at the future impact
of the environmental factors (Johnson, Scholes & Whittington, 2011, pp.65-68). The individual factors are presented below.

As described by Johnson, Scholes & Whittington (2011, p. 68), the political factors include government stability, taxation policy, foreign trade regulation, and social welfare policies. Economic factors include business cycles, GNP trends, interest rates, money supply, inflation, unemployment, and disposable income. Social factors include population demographics, income distribution, social mobility, lifestyle changes, attitude towards work and leisure, consumerism, and levels of education. Technological factors include government spending on research, government- and industry focus on technological effort, new discoveries/developments, speed of technology transfer, and rates of obsolescence. Environmental- and legal factors include environmental protection laws, waste disposal, energy consumption, competition law, employment law, health and safety, and product safety.

3.2 Industry analysis
For the industry analysis, Michael E. Porter’s five forces framework is chosen. Porter’s framework views the profitability of an industry as determined by five sources of competitive pressure (Grant, 2010, p.69). The influence of the five forces described below helps to determine the potential profit in the industry (Porter, 1980, p.3).

![Figure 1: Porter's five forces framework (Porter, 1980, p.4)](image)

**Threat of entry** is dependent on if there are barriers of entry and the potential reaction from firms already present in the market (Porter, 1980, p.7). Porter (1980) identifies six barriers of
entry in an industry. These are economies of scale, product differentiation, capital requirements, switching costs, access to distribution channels, and government policy.

*Rivalry between existing firms* will affect profitability. The intensity of competition between firms is the result of interactions between a number of factors, such as numerous or equally balanced competitors, slow industry growth, lack of differentiation or switching costs, high exit barriers, high strategic stakes, and diverse competitors (Porter, 1980). Rivalry can be expressed through, e.g., price competition and advertising battles (Porter, 1980, p.17).

*Competition from substitutes* can set a maximum limit to the pricing of products firms can charge, because substitute products can perform the same function as the product offered in the industry (Porter, 1980, p.23). In order to position relative to substitute products, it might require collective industry actions (Porter, 1980, p.23).

*The bargaining power of buyers* is related to the fact that buyers play competitors against each other to, e.g., forcing lower prices and more quality in their services. Buyers have more power if, e.g., there are few switching costs or the products offered in the industry are rather undifferentiated (Porter, 1980, pp.24-25).

*The bargaining power of suppliers* is often analogous to the bargaining power of buyers. Their power lies in that they, e.g., can threaten to increase prices or reduce quality of services. In general, a supplier is powerful if, e.g., the suppliers’ products are important for the buyer, or the number of buyers is high relative to the number of suppliers (Porter, 1980, pp.27-28).

### 3.3 Limitations about the PESTEL- and five forces framework

The PESTEL- framework is of only limited value if the factors are seen as independent. The important changes happen because of a combination of the most important factors (Johnson, Scholes & Whittington, 2011, p.69). Another important weakness is subjectivity in the research of different factors. When analyzing external factors it can be difficult to stay objective enough to give an accurate presentation. It is also difficult to locate all the relevant changes and «predict» their impact on an industry. The resulting analysis can then be skewed in terms of the impact of individual factors. This is a very important implication in this thesis.
When discussing, e.g., the technological factors, there might be other developments or a combination of developments that are more important than what is actually discussed.

When using the five forces framework, Besanko et al. (2013, p.259) mentions a number of limitations. First, little attention is placed on the factors that affect demand because it ignores changes in consumer income, tastes, and firm strategies for boosting demand. Second, the focus on the industry as a whole ignores that individual firms might have properties that protect them from competitive forces. Third, the role of the government is not mentioned, except when it is a supplier or buyer power. However, the PESTEL- framework will account for some of this impact in this thesis. Finally, the five forces framework is qualitative, meaning that it, e.g., does not show how to estimate the cost of entry (Besanko et al., 2013, p.259).

3.4 Profitability analysis and drivers of profitability

There are many techniques and tools available for a profitability analysis. The aim of this analysis is to gain insight into the current profitability, and the drivers of profitability. The analysis will start with an analysis of different profitability measurements of a sample of firms. Later, an analysis of revenue- and cost drivers is conducted. This analysis will help to form the external outlook in the accounting industry.

3.3.1 Measuring profitability

The purpose of a performance measurement system in this thesis is to give an overview of the profitability in the accounting business in Norway, and not just one individual company. One method of comparing (c.f. benchmarking) companies is to compute financial measures of performance. Kaplan & Atkinson (2014, p.442) mention two main reasons for the widespread use of financial performance measures; 1) measures articulate directly with the organization’s long-run objectives, which are almost always purely financial 2) financial performance measures provide an aggregate view of an organization’s performance. An aggregate financial performance measure can act as a summary measure of the success of the organization’s strategies and operating tactics (Kaplan & Atkinson, 2014, p.442).

For the purpose of measuring profitability, several key measures are used. The Norwegian Society of Financial Analysts recommends that companies calculate return on assets, return
on capital employed, and return on equity (Gjesdal & Johnsen, 1999, p.111). Return on operations is also calculated in this thesis because ordinary valuation methods focus on operational related capital (Gjesdal & Johnsen, 1999, p.111).

**Return on assets (ROA)**

\[
\frac{Earnings \ before \ interest \ costs \ and \ taxes}{Total \ assets} = Return \ on \ assets
\]

ROA measures a company’s success in using assets to earn income. This information is useful for stockholders and creditors who are financing the organization. The numerator is the sum of net income plus interest expense (earnings before interest costs and taxes). The interest expense is added because back to determine the real return on assets regardless of the financing choices (Horngren, Harrison & Oliver 2012, pp.598-599).

**Return on capital employed (ROCE)**

\[
\frac{Earnings \ before \ interest \ costs \ and \ taxes}{Total \ assets - interest \ free \ debt} = ROCE
\]

ROCE is a profitability measure and a common measure for a firm’s ability to generate profit out of sales or investment (c.f. working capital/capital employed) (Wickramasinghe & Alawattage, 2007, p.269). The numerator is the sum of earnings before interest and taxes. In the denominator, the capital employed is found by subtracting interest free debt from the total sum of capital (Gjesdal & Johnsen, 1999, p.111).

**Return on operations**

\[
\frac{Operating \ result}{Total \ assets - Non \ operating \ assets - interest \ free \ debt} = Return \ on \ operations
\]

The numerator is the sum of earnings before interest and taxes. In the denominator, non-operating assets and interest free debt is subtracted. If there are no non-operating assets in the balance sheet, then ROCE is the exact same number as return on operations (Gjesdal & Johnsen, 1999, p.111).
Return on equity (ROE) after taxes

\[
\frac{\text{Net income after taxes}}{\text{Sum of equity}} = \text{Return on equity after taxes}
\]

The numerator is made up of the net income after taxes. This is the sum that will increase (or decrease) the firm’s equity. The denominator is the firm equity (Gjesdal & Johnsen, 1999, p.111). The rate of return on equity is calculated on common stockholders equity, which shows the relationship between net income available to the common stockholders and their equity invested (Horngren, Harrison & Oliver 2012, p.599).

Common size

Benchmarking is a good practice of comparing a company with other leading companies, and it often uses a common-size analysis in a graphical manner to highlight differences (Horngren, Harrison & Oliver 2012, p.729). In order to compare a company with others, a common-size analysis can be used. A common-size analysis only reports percentages by showing each item to its base amount, which is the 100% figure. Every other item on the statement is then reported as a percentage of that base (Horngren, Harrison & Oliver 2012, pp.727-729). How this tool is used is described in detail in the relevant chapter.

3.3.2 Revenue drivers

Bhimani et al. (2012, p.235) describes a revenue driver (c.f. income driver) as a factor that affects revenues. Revenues are inflows of assets received in exchange for products or services provided to customers. Examples of revenue drivers are units of output sold, selling prices, and levels of marketing costs. According to Drury (2005, p.993), within SMA, an organization can seek to gain competitive advantage by its pricing policy.

Profitability change whenever technology, regulation, market information, consumer preferences, or relative costs change (Nagle, Hogan & Zale, 2011, p.17). Companies that grow profitably in changing markets often need to break old rules and create new pricing models, but most companies make pricing decisions in reaction to change rather than in anticipation of it (Nagle, Hogan & Zale, 2011, p.17). As further explained by Nagle, Hogan & Zale (2011, pp.21-22), the objective of strategic pricing is profitability. In addition to the price levels, strategic pricing requires to ensure that products and services include those features
that customers are willing to pay for without increasing costs more than they add value. Also, it is about creativity in how you collect revenue so that customers who get more value from your products and services pay more for them (Nagle, Hogan & Zale, 2011, p.22).

A successful pricing strategy embody the three principles of value based (differences in pricing to customers and changes over time reflect differences or changes in the value to customers), proactive (anticipating disruptive events, such as changes in technology), and profit-driven (its success at pricing is evaluated by what it earns relative to alternative investments rather than by the revenue it generates relative to its competitors) (Nagle, Hogan & Zale, 2011, p.22).

A pricing strategy further involves five sets of choices that build upon one another (Nagle, Hogan & Zale, 2011, pp.23-30): 1) Value creation (products and services should add value for a customer), 2) Price structure (capture the best possible price from each segment of customers), 3) Price and value communication (the pricing strategy must justify the price charged in terms of the value of the benefit provided), 4) Pricing policy (the rules or habits that determine how a company varies its prices when faced with factors other than value and cost to serve that threaten its ability to achieve its objectives), and finally 5) Price level (price setting). In order for the pricing strategy to be successful, an ongoing adjustment and evaluation of the five different elements must be done. Strategic pricing requires a careful development of organizational structure, systems, individual skills, and culture (Nagle, Hogan & Zale, 2011, p.31).

3.3.3 Cost drivers

“In strategic cost management (SCM) it is acknowledged that cost is caused, or driven by, many factors that are interrelated in complex ways” (Shank & Govindarajan, 1993, p.19). Understanding the behavior of costs means understanding the interplay of the set of cost drivers at work in any given situation (Shank & Govindarajan, 1993, p.19). In the SMA setting, Lord (1996, p.352) describes cost drivers as the causes of costs, and that the analysis of cost drivers is important for the strategic positioning of the firm no matter what kind of strategic position that is chosen.
Porter (1985) made initially a comprehensive list of 10 cost drivers to explain cost behavior. Porter’s list can be regarded as a first attempt to create a list of cost drivers. Riley has made a list he regards as better (Riley, 1987, in Shank & Govindarajan, 1993, p.20). For the purpose of this thesis, both the cost drivers of Porter and Riley are used to complement each other.

- **Porter’s cost drivers**

Porter (1985, p.70) explains that that the cost behavior depends on a number of structural factors that influence costs. These are called cost drivers. Diagnosing the cost drivers for each activity allows for an understanding of the sources of its relative cost position, and how it can be changed. Cost drivers can differ among firms in the same industry if they employ different value chains, and the firms relative cost position in the value activity depends on its standing vis-à-vis important cost drivers (Porter, 1985, p.70). The cost drivers are structural causes of the cost of an activity and can be more or less under a firm’s control (Porter, 1985, p.70). Different cost drivers often interact to determine the cost behavior of a particular activity. Consequently, no single cost driver is ever the only determinant of a firm’s cost position (Porter, 1985, p.70). Porter (1985, pp.70-84) identifies 10 categories of cost drivers that determine the cost structure of a firm. These cost drivers are presented in the following:

The first category is *economies or diseconomies of scale*. Economies of scale can result from performing activities differently and more efficiently at larger volumes, or result from efficiencies from production at higher scale from less than proportional increases in the infrastructure needed to support an activity as it grows. Diseconomies of scale can arise if the complexity and costs of coordination is increased as a result of an increase in scale. Economies of scale must be distinguished from capacity utilization, as an increase in utilization spreads fixed costs over a larger volume and is not more efficient at a larger scale (Porter, 1985, pp.70-73).

*Learning and spillovers* can lower the cost of a value activity over time because of an increase in efficiency. Learning is often the accumulation of many small improvements and can include changing the layout, labor efficiency improvement, and procedures that increase the utilization of assets. Spillover is achieved as industries, suppliers, consultants, and employees learn from each other. The rate of learning may stem less from learning from one firm, and more from total industry learning (Porter, 1985, pp.73-74).
Pattern of capacity utilization has an effect on costs when a value activity has substantial fixed cost associated with it. Fixed costs create a penalty for under-utilization. The ratio of fixed to variable cost indicates the sensitivity of a value activity to utilization. A firm that changes its utilization from time to time will have higher costs than one that keeps its utilization constant (Porter, 1985, pp.74-75).

The category Linkages is affected by how other activities are performed. The two broad types include (1) linkages within the value chain, and (2) vertical linkages with the value chains of suppliers and channels. The linkages create an opportunity to lower the total cost of the linked activities. Linkages are subtle and require joint optimization or coordination of activities across organizational lines (Porter, 1985, pp.75-78).

Interrelationships are achieved through interrelation with other business units within a firm, or through intangible interrelationships involving the sharing of know-how between separate but similar value activities. Sharing is one way to, e.g., achieve scale or exploit the learning curve faster. Sharing of know-how can transfer learning from one activity to another (Porter, 1985, p.78).

The driver integration is affected by the level of vertical integration in a value activity. A firm must make choices of, e.g., if it should own/produce its own software system instead of contracting with an IT company. Integration can thus reduce costs by avoiding suppliers or buyers with considerable bargaining power. It can also lead to economies of joint operation. Integration can also raise costs if it creates inflexibility, or if suppliers can deliver better and cheaper substitutes. The level of integration must also be analyzed with the firm’s strategy in mind (Porter, 1985, p.79).

Timing is often connected with a first-mover advantage. The first brand in a market may have lower costs of establishing and maintaining the position. Disadvantages might also occur to first-movers as late-movers can benefit from avoiding high product- or market development costs. Late-movers can also better tailor their supply chain to prevailing factor costs (Porter, 1985, pp.79-80).
Discretionary policies independent of other drivers reflect a firm’s strategy and often involve deliberate tradeoffs between cost and differentiation. These policy choices are often quite independent of other cost drivers. Policy choices include product mix and variety of products offered, level of service provided, buyers served, and technology chosen. Choice of policies play an essential role in differentiation strategies, as differentiation often rests on policy choices that make a firm unique in performing value activities, and raising costs in the process (Porter, 1985, pp.80-82).

Location often stems from policy choices but can also be treated as a separate cost driver. The geographical location of a value activity can affect its cost, as can its location relative to other value activities. The location affects cost through, e.g., cost of labor, customers, and infrastructure. Location has some influence on the cost of almost every value activity (Porter, 1985, pp.82-83).

Institutional factors include factors such as government regulation and other factors that are not in the firm’s control. There is, however, possible to influence these factors or minimize their effect on the firm or industry (Porter, 1985, p.83).

Porter (1985, p.84) states that the cost drivers often interact to determine the cost of an activity. The interactions can either reinforce or counteract each other, but cost drivers often reinforce or are related to each other in affecting cost. Cost drivers can counteract each other, meaning that improving one position vis-à-vis one driver may worsen the position vis-à-vis another (Porter, 1985, p.87). Identifying the cost drivers may not be easy. One way of determining costs is to have interviews with experts or individuals who have extensive knowledge of a value activity (Porter, 1985, p.88).

- Riley’s cost drivers
As described by Shank & Govindarajan (1993), Riley’s list of cost drivers is broken into two parts. The first category is comprised of structural cost drivers drawing upon the industrial organization literature (Scherer, 1980, in Shank & Govindarajan, 1993, p.20). The five strategic choices of scale, scope, experience, technology, and complexity were drivers of costs for the given product group. It is interesting, especially for the purpose of this thesis, that technology has been pretty much ignored by managers because technology is considered to be
such a thorny topic area. The structural driver given most attention from economists is experience (Shank & Govindarajan, 1993, p.21).

Shank & Govindarajan (1993, pp.20-21) describe five structural cost drivers: In the same way as Porter, Riley was also concerned with scale. Scale is concerned about how big an investment to make in manufacturing, R&D, and in marketing resources. The second factor is scope. Scope is concerned about the degree of vertical integration. Horizontal integration is more related to scale. The third factor is experience. Experience is linked to how many times in the past the firm has already done what it is doing. The fourth factor is technology. Technology is about what type of process technology that is used at each step of a firm’s value chain. The fifth factor is complexity. Complexity is concerned with how wide a line or products of services to offer to customers (Shank & Govindarajan, 1993, pp.20-21)

The second category of cost drivers is the executional drivers of costs. These are determinants of a firm’s cost position hinged on its ability to execute successfully (Riley, 1987, in Shank & Govindarajan, 1993, p.21). Executional drivers are monotonically scaled with performance, while the structural drivers are not. Hence, for the structural drivers of cost, more is not always better (Shank & Govindarajan, 1993, p.21). Executional drivers include work force involvement, total quality management, capacity utilization, plant layout efficiency, product configuration, and exploiting linkages with suppliers and/or customers. For the executional drivers, more is always better (Shank & Govindarajan, 1993, p.22).

Shank & Govindarajan (1993, p.22) describes the six executional drivers: The first executional driver is work force involvement. The focus here is the commitment to continual improvement. The second factor is total quality management, which is about beliefs and achievements regarding product and process quality. The third factor is about capacity utilization, given the scale choice on plant construction. The fourth factor is plant layout efficiency. Efficiency is concerned with how efficient the layout is. The fifth factor is product configuration. This cost drivers is concerned whether the design or formulation is effective or not. The sixth factor is concerned with exploiting linkages with suppliers and/or customers (Shank & Govindarajan, 1993, p.22).
3.4 Porter’s generic strategies

According to Porter (1985, p.1) competition is at the core of the success or failure of firms. It is the competition that determines a firm’s activities, and the competitive strategy is the search for a favorable competitive position within an industry. Hence, the competitive strategy aims to establish a profitable and sustainable position against the forces that determine industry competition (Porter, 1985, p.1). A firm’s capacity to create and sustain superior performance depends on the combination of two major factors; 1) the attractiveness of the industry in which the firm operates, and 2) the firm’s relative competitive position (Porter, 1985, in Wickramasinghe & Alawattage, 2007, p.261).

Strategic positioning is a very important aspect within SMA. For the purpose of this thesis, a business level strategy is chosen. At this level, strategies become competitive game plans to achieve competitive advantage by strategically positioning the firm (and its products/services) in a competitive structure. The competitive structure is the industry in which the firms operate (Wickramasinghe & Alawattage, 2007, p.261).

After having done the different analyses described above, Porter’s generic strategies are used as a framework to how the industry can adapt to changes and challenges. Porter (1980, pp.35-40) describes three generic strategies that can be used to establish a position within a market and get in control of the five forces that shape profitability (c.f. five forces framework). A firm can either choose one strategy, or a combination of them, to establish a strategic position in the long run. The strategy can help to eventually outcompete the other firms in the industry.

Cost leadership

The goal here is to achieve the lowest cost in the business. To become a cost leader the firm must be aggressive in building efficient-scale facilities, continuously search for cost reductions, tight cost and overhead control, avoid marginal customer accounts, and cost minimization in, e.g., R&D and service (Porter, 1980, p.35). Cost leadership is an advantage because the firm can be profitable even if competitors are cutting prices (Porter, 1980, pp.35-36). In order to become a cost leader, a high market share or access to low cost resources is needed. It might be necessary at first to invest considerably and take losses in order to gain market share and thus more influence on buyers and suppliers. The losses can later be returned to the company (in terms of higher margins) and then reinvested to get an even better (or sustained) cost advantage (Porter, 1980, p.36).
Differentiation
This strategy seeks to differentiate a firm’s products or services in such a way that they are unique from other competitors (Porter, 1980, p.37). A firm can differentiate on, e.g., design, branding, technology, attributes, customer service, and suppliers. The ideal for a firm is to differentiate on several aspects (Porter, 1980, p.37). This strategy protects itself from competitors by providing a product or service to customers that they are not willing to switch from. This means lower price sensitivity. Choosing this strategy may sometimes be associated with a lower market share and not being able to become a cost leader (Porter, 1980, pp.37-38).

Focus
The focus strategy «focuses» on a particular type of customer group, a particular product or category, or a geographical market (Porter, 1980, p.38). The goal is to serve a specific target group in the best way possible under the presumption that the firm is more effective in serving a targeted group than firms using the cost leader- or differentiation strategy on a wider market. This can lead to differentiation through being better able to satisfy a particular group but also cost leadership within the narrow target group (Porter, 1980, p.38). A firm who successfully establishes themselves in the focus strategy can more easily earn profits. The strategy also allows for choosing the target groups that are least able to switch to substitute products, or targeting where competition is at its weakest (Porter, 1980, p.39).

3.5 Weaknesses and limitations about the cost drivers and generic strategies
According to Johansen & Mikkelsen (2014, p.169), Porter’s contribution to strategy is that of an «outside-and-in» view. This view is based on the external environment of the firm, but does not give a complete picture of the variation, complexity, and the diversity in organizations (Johansen & Mikkelsen, 2014, p.174). The argument is based on that some firms are able to survive in industries despite of the fact that most of the other firms have gone out of business. The resource-based view of the firm is an alternative to Porter’s external view. This view is regarded as «the inside-and-out» view. In the resource-based view, differences in profitability can be explained in terms of a firm’s internal resources (Johansen & Mikkelsen, 2014, p.174).
According to Shank & Govindarajan (1993, p.22) there is no clear agreement about the list of cost drivers. There is also a range of other tools for analyzing costs. Within operations management for example, we find tools of just-in-time and the theory of constraints. However, the cost drivers mentioned by Porter (1985) seem to be rather general, in that they can be adapted to a service firm.

4.0 Methodology

The goal of this thesis is to describe profitability, describe drivers of profitability, and how the industry can adapt to changes in technology. “Decisions made during the research design process ultimately impact the degree of confidence readers can place in the conclusions drawn from a study, the degree to which the results provide a strong test of the researcher’s arguments, and the degree to which alternative explanations can be discounted” (Bono & MacNamara, 2011, p.657).

In methodology, a distinction is made between qualitative and quantitative research. Quantitative research is primarily about using numbers for research and analysis. A qualitative research approach is largely using texts for research and analysis (Johannessen, Christoffersen & Tufte, 2011, p.103). A quantitative approach has been chosen to answer the research question. This approach is often associated with a type of research where theory comes first, and influences the rest of the research process (Ghauri & Grønhaug, 2010, p.15). This form of research is hence related to a deductive approach where conclusions are drawn through logical reasoning. The researcher builds hypotheses from existing literature, which can be subjected to empirical scrutiny and therefore be accepted or rejected (Ghauri & Grønhaug, 2010, p.15).

4.1 Research design

“The research design is the overall plan for relating the conceptual research problem to relevant and practicable empirical research” (Ghauri & Grønhaug, 2010, p.54). It provides a plan for data collection and its analysis (Ghauri & Grønhaug, 2010, p.54).

Based on the scope of the research question, a descriptive research design is chosen. It is descriptive because of the aim to uncover drivers of profitability, by drawing on archival data and interviews by the means of existing theories. These empirical results will help to form
strategies into how the accounting industry can adapt to changes in the future. The research question is thus a structured question, as opposed to an unstructured question. An unstructured question is best suited for an explorative design where you rely more on an inductive approach (Ghauri & Grønhaug, 2010, p.56). The research question here is a structured one because the question in scrutiny is clearly defined and the researcher knows what type of information is needed to answer the question.

4.2 Research method

The research method is referred to the techniques used to collect data (Ghauri & Grønhaug, 2010, p.54). Because of the scope of the research question, this research will be conducted using two case studies in addition to historical financial data for a small sample of firms. A case study approach is often linked to descriptive or explanatory studies (Ghauri, 1983; Bonoma, 1985, in Ghauri & Grønhaug, 2010, p.109), and they are suitable when the phenomenon in scrutiny is difficult to study outside of its natural setting or when the concepts and variables are difficult to quantify. This is often because there are too many variables, which makes an experiment or survey method inappropriate (Bonomo, 1985; Yin, 1994, in Ghauri & Grønhaug, 2010, p.109). By using two cases, this type of case study can be called a comparative case study. The same questions are asked in a number of organizations in order to compare them and draw conclusions (Ghauri & Grønhaug, 2010, p.110). The case firms in scrutiny are Sum Regnskap AS from Stavanger (hereby referred to as Sum), and Visma Services Lillestrøm AS (hereby referred to as Visma).

**Sum Regnskap AS**

Sum is an accountancy firm whose business is to offer accounting services and other consultancy services naturally related to accounting (Sum annual report, 2013) (see appendix 1). Sum was founded in 2010 and has grown considerably since the startup. The company has been chosen because it has an ambition to grow and prosper in the accounting industry despite of the challenges and changes the industry is facing. Also, the managers at Sum are communicating an innovative- and systematic way of looking at these challenges. According to Sum, many accountancy firms have been «sleeping on the desk» in terms of grasping the challenge brought forward by changes in technology, and are not prepared for the changes at hand.
Visma Services Lillestrøm AS

Visma Services Lillestrøm AS (Visma) is a subdivision of the consolidated Visma Services AS located in Bergen. Visma Services AS is a subdivision of the larger Visma Holding Norge AS located in Oslo (Visma group annual report, 2013, p.66). For the purpose of this thesis, focus is placed on Visma Services AS and their local office in Lillestrøm for information. In the same way as Sum, Visma’s business is to offer accounting services, but they also have revenue from their clients outsourcing accounting, payroll services, management accounting, and advisory services (Visma Services AS annual report, 2013) (see appendix 1). Visma is chosen because it is the leading Nordic supplier of software and services related to accounting and administrative management. Their goal is to automate and simplify business processes in both the private- and public sector (Visma, 2015).

Together, these firms represent two different accountancy firms in the form of size and the types of services provided. Sum represents a small (but growing) company, while Visma is a large and dominating actor in the Norwegian accounting industry. They therefore represent in many ways a mirror image of how an accountancy firm is structured and operate, and are hence interesting to analyze and interview in terms of how they can adapt to changes in technology.

In order to describe profitability, a sample of firms within the accounting industry in Norway is used. A small sample of firms is chosen to get an in depth knowledge about profitability and the cost- and income drivers, rather than statistical generalization. Because of the research problem and the sample of firms, no statistical methods are used for the purpose of the thesis. The scope of the thesis is to see how the toolbox of SMA can be used to analyze a few actors in an industry and how they can adapt to changes. Focus is therefore on getting more detailed information about a few firms, rather than focusing on statistical generalization. The accountancy firms are divided into small-, medium-, and large companies. Each firm is placed in its respective category based on the number of employees and annual revenue.

4.2.1 How to collect data

The sample of firms used is picked from the online database of Proff Forvalt and Ravninfo. Firms are picked from the category 69.201, which is the business of accounting and bookkeeping according to the NACE-framwork used in the database. In order to compare the
different accountancy firms, only corporations (aksjeselskap – AS, in Norway) are included in the sample. The corporations are picked from cities and towns all over the country in such a way that the different categories have firms included from all over the country. Firms are picked in such a way that all regions of the country are represented. The regions include the northern-, middle-, western-, eastern-, and southern Norway. The implication of this is discussed further under the chapter of validity and reliability.

The data used are secondary archival data available to the general public. Secondary data is information collected by others for a purpose that can be different from the purpose here (Ghauri & Grønhaug, 2010, p.90). Another source of secondary data used are the firms annual reports. Annual reports are collected in order to study the notes and to normalize the financial statements. This secondary data represents the quantitative data used in the study because they include the financial data (numbers) used in the analysis. A list of the annual reports is found in appendix 1.

In the cases of Sum and Visma, interviews were used to acquire information. This is regarded as primary data, which is defined as original data collected specifically for the research problem (Ghauri & Grønhaug, 2010, p.90). Two semi-structured interviews were completed in each firm. The first interview was done face-to-face, and the second interview was done via e-mail and adapted to the findings in the first interview. In the semi-structured interviews, the questions asked were determined beforehand in order to make sure that both firms were asked the same (or similar) questions. A few follow up questions were asked whenever necessary in the face-to-face interviews. The interview guides are found in the appendix. By using semi-structured interviews, the managers were able to talk freely about their thoughts, but only about the relevant factors for the research problem. The interview guides were somewhat adapted individually to each firm.

The other purpose of the interviews was to get knowledge about the financial statements that is impossible to acquire without internal data. The interviews in this thesis can hence be said to be both of a qualitative and quantitative nature. The qualitative method is ideal, e.g., when we want to uncover a person’s experience or behavior on a subject matter (Ghauri, 2004; Marshan-Piekkari & Welch, 2014, in Ghauri & Grønhaug, 2010, pp.105-106). This method can be found in the way the managers are asked questions about the changes and challenges
they are facing, and what they think will happen in the future. The quantitative part is found in that they were asked to quantify certain items.

4.3 Conducting the study

The sample of firms is categorized according to revenue and the number of employees in the firm reported in 2013. The financial statements from 2014 were not available for all the firms. The firms were therefore analyzed based on financial data from 2011 to 2013. A total of 20 firms were picked out of a total of 6,106 firms registered at Proff Forvalt at the moment. Since the sample is very small, the sample categories were designed to include firms within the entire population. Because of the purpose of the thesis, the sample was picked to get a broader picture of the entire industry.

Ten smaller firms were picked with revenue between NOK 1 million - 15 million, and between 1-15 employees. Five medium firms were picked between NOK 15 million – 50 million in revenue, and from a range of 16-40 employees. Five larger firms were picked above NOK 50 million in revenue, and a number of employees of 41 and upward. The sample covers in such the entire width of corporations, except those with less than NOK 1 million in revenue. The technique used to acquire the firms can be compared with a probability sample called stratified sampling. According to Ghauri & Grønhaug (2010, p.143), in stratified sampling, the parent population (c.f. corporations in the accounting industry) is divided into a mutually exclusive and exhaustive subset (c.f. geographical regions in Norway). A simple random sample of units was then picked independently (c.f. from a town or city) from each subset.

The sample of firms is used to describe the overall profitability in the industry and help to identify important drivers of revenues and costs. This is the external focus of the research. The interviews are used to get in depth knowledge about the drivers of profitability and the manager’s thoughts about the challenges and developments in the present and the future. This is the internal focus of the study. The two cases are used as examples throughout the entire thesis. They will also form the basis when analyzing revenue- and cost drivers. Together, the goal is to utilize this information to identify important drivers of profitability and how the industry can adapt to changes in the future.
4.4 Validity and reliability

Validity in research is concerned with if the measures used in the study are actually capturing what they are meant to capture. A valid measure should be equal or as close to the true score as possible (Ghauri & Grønhaug, 2010, pp.78-79). “Reliability refers to the stability of the measure” (Ghauri & Grønhaug, 2010, p.79). In other words it is about how accurate the data is, what data are actually used, how the data is collected, and how they are analyzed (Johannessen, Christoffersen & Tufte, 2011, p.44).

4.4.1 Internal validity

Internal validity in research is about if we can find a causal relationship between two or more variables (Ghauri & Grønhaug, 2010, p.83). In this study, internal validity can be an issue when analyzing the secondary archival data about the financial statements. The secondary data has been made for another purpose than for this research. It could have been better to get access to the internal data since many cost- and revenue items are summarized in other items and hence «hidden». One example of this is the item «other operating expenses» where several costs, such as payment of rent, phone bills etc. are summarized. It might then be that the analysis of profitability is less accurate than it would have been if the internal data had been analyzed in stead.

Another potential weakness is the profitability measures used. Four measures are used in the study to get the best possible picture. Other measures could also have been used such as, e.g., economic value added (EVA). Then again, it would be difficult to calculate a cost of capital that could be used by the entire sample, and that would not be in favor of one or more of the firms. Another factor about the measurements is that some of the items in the financial statements were subtracted when calculating the profitability measures. This was in accordance with the theory, but if these items were not excluded from the measurements we would get different figures as a result.

A threat to internal validity is also the method of using interviews. It is a possibility that the managers in both Sum and Visma were biased when answering the questions. Their views might not be consistent to that of the industry in general. An alternative could have been to send out a survey to a larger sample of firms. Conversely, the survey might have reduced the personal aspect that the interviews provide, and it would be difficult to get a deeper insight
into the actual challenges and how to «solve» them. It is also a weakness that only one manager in Visma were interviewed. The other sources of information about Visma have been their annual reports and webpage. Since the local office in Lillestrøm is just one out of many across the country we might have differences in the cost structure. However, the analysis of the sampled firms revealed that the cost structure is quite similar among the firms. Also, the manager at the local Lillestrøm office stated that the costs at their office were similar to that of the other local offices in Visma.

4.4.2 External validity

External validity is concerned with whether the findings in the research can be generalized or not (Ghauri & Grønhaug, 2010, p.84). This can be considered as the principal threat to this thesis. At the same time, the purpose of this thesis is not to focus on generalization, but to analyze a few firms in order for a deeper understanding to be achieved. The threat, however, is most obvious when describing the profitability. When discussing the drivers of profitability, Sum and Visma are used as examples. Nevertheless, there might be other firms that have other factors weighing in more in terms of impacting the drivers of profitability. Other firms might also have different views on what the actual challenges are and how to overcome them.

The small sample of firms is a threat to the generalization. As was mentioned above, only 20 firms were chosen out of the 6 106 firms currently listed online at Proff Forvalt. This small sample cannot be considered representative for the entire population of corporations. A general threat of using a smaller sample is thus that the findings can be random. Including other firms in the sample other than those who are used can give a different result altogether depending on performance relative to others in the sample.

In 2009, the Financial Supervisory Authority of Norway made an overview of the industry (Bellamy, 2009). They concluded that 85% of the accountancy firms have 1-5 employees and that 95% of companies have less than 10 employees. The sample used will therefore appear to be skewed towards the larger companies. Nevertheless, the aim of this study is to analyze firms from all categories in the population. The reason is to get a better picture to how costs and revenue is affected by, e.g., size and the number of employees. A previous study by Gårseth-Nesbakk & Åmo (2012) concluded that many firms had an ambition to grow in size. It is thus interesting to see if size alone is a solution to the challenges ahead.
Since there are only a few medium- and large firms (that fits the category sizes defined here) the external validity can be regarded as better compared to the smaller category of firms. Because of this, the amount of firms in the smaller category was doubled, but the increased sample size does not do much for the generalization. The external validity is better among the larger firms, as there are only a few of these. At Proff Forvalt, only 19 corporations fit the category of being a large accountancy firm.

Another threat to external validity is the geographical aspect. The accountancy firms in the sample are picked from all over the country, but only from cities and larger towns. One might expect different findings if other firms were included from other areas as well. For example, we might expect firms in Stavanger to have more revenue than firms in northern Norway. An alternative would be to focus on a smaller region rather than the entire country. This would account for the specific local competition in a region and the local actors.

### 4.4.3 Reliability

The *quantitative data* used in this thesis are archival financial statements, annual reports, and interviews. All corporations are required to deliver their financial reports each year, and an auditor has approved the content. The financial- and annual reports must therefore be considered to have a high reliability. However, if more internal data had been used it could be easier to pinpoint exactly how much is spent on a particular cost, and in relation to the other costs. A threat to reliability lies in the small sample of firms. If other firms had been included in the sample we could see a different result. There might also be differences between geographical locations.

There is also an issue about the *qualitative data* used in the thesis. The qualitative data consist of interviews that were made with two different accountancy firms. The data depends on their subjective view and not necessarily the general population. We might see differences if other firms were included. However, the data about the developments in technology does not seem to be much different from the general perception in the industry. The challenge lies in the information regarding the drivers of profitability. Other firms might have different opinions on the drivers of profitability and the challenges that lie ahead. They might also provide a different mix of services, which affects the overall result.
5.0  Macro- and industry analysis

The aim of this chapter is to answer the first sub-question regarding the main research question:

1. What characterizes the arena of competition within the accounting industry in Norway?

The chapter will start with an analysis of the macro-environment of the accounting industry in Norway. The PESTEL-framework is used in the analysis. Second, an industry analysis is done to get a picture of the prerequisites for profitability. The five-forces framework by Michael E. Porter is used for this purpose. At the end of the chapter, a summary of the macro-environment- and industry analysis is made.

5.1  Analysis of the macro-environment

A PEST(EL)-analysis is a common approach for considering the external business environment. The underlying thinking is that firms must react to changes in the external environment, which requires a strategic fit between capabilities and the external environment (Gupta, 2013, p.35). “The prerequisite for effective environmental analysis is to distinguish the vital from the merely important” (Grant, 2010, p.64). For the purpose of the research question, the main focus here is based on the technological-, political-, legal-, and economical factors.

5.1.1  Technological factors

*Industry focus on technology*

In the accounting industry today, computers and software are the tools used in the work process. The interviews with Sum and Visma revealed that the industry in general has not been concerned with adopting and utilizing new technology. One reason mentioned is that the profitability has been good, and the firms have thus not seen much value in adopting the new technology. Another reason is that the accountants are often senior employees who have worked in the accounting industry for many years. These senior employees have been difficult to persuade to adopt new technology because they do not know what it really is and how it affects them.
The audit firm KPMG conducted a study in 2013 where they asked customers of accountancy firms about their expectations about the future (Kleppen, 2014). Traditionally, the job of an accountant has been to punch numbers and to be a bookkeeper. But, because of changes in technology, much of the transactions and communication is now going online. The changes are driven by a system referred to as «cloud computing» (c.f. cloud accounting). The new system offers a user-friendly, on-demand access to accounting- and management accounting systems. Earlier, this information was only available locally at the accountancy firms’ office. The new technology offers automation of many of the traditional tasks done by the accountant. However, several firms are already seeing a decline in working hours on vouchers by 30-40%. Cloud computing offers new opportunities for accountancy firms, but can also potentially destroy the industry if firms are not adaptable. This has already been seen in other industries facing new technology (Kleppen, 2014.).

**New developments**

There have been many developments in technology over the years that can help the work process in an accountancy firm. This paper will only focus on the most important developments available to the industry today. One new option available to the accounting industry is cloud computing. Cloud computing means storing and accessing data and programs over the Internet rather than on your computer’s hard drive. When information is stored in programs on the Internet it is available for the entire business, and not only the individual using the program locally on one computer (Griffith, 2015).

The benefits of cloud computing are many. With cloud technology, companies have access from anywhere, integration with other popular third party cloud applications and banking software, better backup, quick bug fixes, access to upgrades, and better security (Marks, 2014). Better security is an important feature with cloud technology. Many businesses agree that their data are better secured by a cloud provider whose business model is reliant on security, than with their local security within the company (Marks, 2014).

The service provided by cloud computing is often referred to as «software-as-a-service» (SaaS). In general, cloud computing includes three linkages. The first linkage is the cloud provider offering hardware for the storage of information on, e.g., servers. The second linkage is the SaaS provider offering software for customers to buy and use. The third linkage is the
actual user of the software. The cloud provider can also be the one offering software to the end user (Armbrust et al., 2010, p.51). Figure 2 is a visual presentation of cloud computing.

![Cloud computing diagram](image)

**Figure 2: Users and providers of cloud computing (Armbrust et al., 2010, p.52)**

There are many software solutions available for an accountancy firm, and an equal amount of software providers. Common for all of these providers is that they offer automation in parts of the work process (NARF, 2013). The increasing automation is making the industry more effective and enables the accountancy firm and their clients to interact in new ways. The new technology offers the firm and their client to share the same system. The new software helps to integrate the handling of invoices electronically, bookkeeping, annual reports, and disclosures. It is also possible to integrate the bank the client is using. The new software is also more easily available to clients. They can view analyses of their financial statement on-demand on any platform (computer, tablet, phone etc.) they choose. The result is more automation of manual tasks. Number punching and scanning of invoices will eventually become something of the past (NARF, 2013).

New technology and the introduction of robot process automation (RPA) is in the future expected to be a direct threat to professions that mainly consist of collecting data and information (Seikkula, 2015). RPA is on its way into the accounting industry. The costs are hence expected to be reduced by 65% as these «robots» are taking over routine- and time-consuming tasks. Many firms will focus on the Norwegian market, as increasing automation of manual tasks will reduce the salary cost. Also, more use of RPA technology will make it less interesting to outsource work processes to low cost countries, as the technology replaces these manual tasks (Seikkula, 2015). In the report «computerization and the future of jobs in Norway» it is concluded that one third of the Norwegian workforce will be exposed to automation in the next 20 years due to digitalization (Sjøberg, 2015). The researchers in the report agree that «traditional» accountants with 98% probability will be facing automation. It is, however, expected that employment will not increase in the long run, but that the work content is improved due to less time spent on trivial- and routine tasks (Sjøberg, 2015).
5.1.2 Political- and legal factors

An accountancy firm is a firm delivering accounting services to their customers. Other firms can use an accountancy firm for accounting services they are not capable of doing on their own, or have the resources to do on their own (E-economic, 2015). The accounting industry are bound and regulated by Norwegian laws. This thesis does not seek to explain or map all the different laws and regulations, but to explain the most relevant laws and regulations for the accounting industry.

The accountants Act §1 states that a person in order to provide accounting services to external firms must be authorized by the Financial Supervisory Authority of Norway (FSA) (Regnskapsførerloven [Accountants Act], 1993). In order to become an authorized accountant in Norway, a person must be in compliance with the accountant regulations. The accountant regulations include requirement on education, practice, requirement of good repute, and that the accountant lives in a country included in the European Union (EU) (NARF, 2010a).

Accounting services in need of authorization is further defined in §2 of the accountants Act; “as recognition of this Act are considered performing principal duties under accounting- and the bookkeeping Act and the preparation of reports and information for the client which the client is required to provide in accordance with the law and regulations” (translation) (FSA, 2010). The accountant Act does not define directly what is meant by services that need authorization from the FSA. The services can be found in the accounting- and bookkeeping Acts. However, the accountants Act § 2, second paragraph, states that the accountant must follow the relevant laws and regulations in accordance with the generally accepted accounting principles (FSA, 2010).

When the accountancy firm or the accountant is providing a service included in the accountants Act § 2, an authorization is needed. The bookkeeping- and accounting Acts determine which type of service that triggers the authorization requirement (FSA, 2010). There have been some issues regarding the boundaries of the authorization, and the FSA has concluded that an authorization is needed even when the accountancy firm or accountant is providing a service not included in §2, as long as the service is naturally connected to the services included in § 2 (FSA, 2010).
Another legal factor affecting the accounting industry is the exemption of audit (c.f. lapse of the statutory audit) for small- and medium businesses. From the fiscal year of 2011, small corporations are no longer required to have an auditor approving their financial statement (NARF, 2010b). In order to be exempted from an audit, the corporation must have less than NOK five million in revenue, less than NOK 20 million on their balance sheet, and that the average amount of employees does not exceed 10 people. Accountancy firms under supervision of the FSA are not exempted from the audit. The same is true for a number of other corporations, e.g., a corporation that is the parent in a group (NARF, 2010b). The exemption of the audit for some corporations is expected to increase competition within the industry (Kleppen, 2014). The implication of this change is further discussed in the industry analysis.

5.1.3 Economical factors
Outsourcing has become a hot topic in the accounting industry. An advantage for accountancy firms is that they can offer services within business functions that firms in other industries do not need to do themselves. Firms in other businesses can outsource, e.g., staff-functions to accountancy firms. By outsourcing functions they can free up capital to be invested elsewhere (Fjelberg, 2012). The current turmoil in the Norwegian oil industry is also forcing firms to think differently. Because of less revenue coming from oil, firms must focus more on their productivity. Accountancy firms are in a position to make the work process more effective by taking over administrative and manual work not connected with their primary activities (Sogn, 2015).

The new technology makes the accountancy firm and their client able to cooperate more easily than before. It is then easier for their clients to outsource work that is not part of their value creation. The accountancy firm (if it has the necessary competency) can offer the same service at a higher quality, and at a lower cost (Dahl, 2009).

5.2 Industry analysis
The five-forces model gives a clear image of the essential activity of the business. It gives an image of a «value pie» being created, and of this pie getting divided among the actors
(Brandenburger, 2002, p.58). For the purpose of the research question, focus is placed on discussing the most important factors of profitability.

5.2.1 Internal rivalry
An analysis of internal rivalry must begin by defining both the product- and geographic market (Besanko et al., 2013, p.260). In the methodology chapter it was explained that the accounting industry is categorized according to the NACE-framework. The accounting industry (number 69.201) is defined as the business of accounting and bookkeeping. There are firms placed in other categories of the NACA-framework that also offer some sort of accounting services. In this thesis, these firms are therefore treated as substitutes. The sample of firms in this thesis is collected from all over the country. Hence, there can be geographical differences in rivalry between the actors and the services they provide in their particular locations.

Concentration of firms in the market
In the interviews with Sum and Visma it was clear that the range of competitors are many. For example, the interview with Visma revealed that around the local Visma office in Lillestrøm, more than 70 firms were competing to offer accounting services to the many local customers. Since the start of the millennium, the Norwegian accounting industry has been in rapid growth from around 2000 authorized accountants to around 11 000 accountants, and 2800 accountancy firms in 2013 (NARF, 2013).

Most of the accountancy firms in Norway are rather small. When looking the number of companies at Proff Forvalt registered as an «AS» (c.f. corporation) the vast majority has a total revenue of less than NOK 4 million a year. In 2009, only 5% of the companies had more than 10 employees and 85% of the companies had 1-5 employees. The FSA saw an increase in market concentration, but the development was going slow (Bellamy, 2009).

Structure and consolidation
The adoption of new technology seems to have brought forward some structural changes in the industry. The larger accountancy firms have started to form their visions how the industry will look like in the future. Visma is one of these larger firms. They think that because of structural changes and changes in technology, it is reason to believe that the five biggest firms
in the industry will account for 80% of the Norwegian market within this decade (Krage, 2013). The bigger companies within the industry are constantly working to develop their competencies and focus on strategic development. One of the biggest accountancy firms in Norway, SpareBank1 Regnskapshuset AS, is signaling that the arena of competition within the industry is changing rapidly. An ambition of theirs is to become one of the dominating actors in the industry, and to double their business within five years. They regard themselves as the second largest financial actor in Norway today, and will use their size to influence the development within the industry and the services they provide (SpareBank 1 Regnskapshuset, 2013).

The study by Gårseth-Nesbakk & Åmo (2012, pp.32-33) concluded that traditionally, the competition among firms is often local. The number of firms in each county, municipality, or town is the potential customer basis for a firm. This was confirmed by Visma and Sum in the interviews. Even so, both of these firms have customers that are not local. The managers at Sum believe that this is a trend that will continue in the years to come. Due to cloud technology it is much easier to communicate with your accountant. They thus believe that prices and the quality of services offered are more important in the future, rather than the local presence.

Differentiation in the services offered
There does not seem to be much difference between the services that the accountancy firms are offering to their customers. Larger firms like Visma are often able to receive customers that want to outsource different services. Other than that, it does not seem to be much difference between the firms. Both firms that were interviewed reported that the competition within the industry could be quite hard, as many of their clients are price sensitive.

5.2.2 Threat of entry
Threat of entry is determined by the fact that an industry can earn a return on capital in excess of its cost of capital (Grant, 2010, p.71). The only recent and thorough study about profitability in the industry was conducted by Gårseth-Nesbakk & Åmo (2012). They conclude that the overall profitability in the industry is rather good (with a few exceptions). It is thus reason to believe that there can be potential entrants.
The reported profitability within the industry will attract new entrants in search for a piece of the profitability pie. The exemption of audit for small- and medium sized businesses (c.f. corporations) is a potential threat to profitability in the accounting industry in Norway in the future. The accountancy firms are experiencing more competition from audit firms and auditors. An increasing amount of auditors are taking authorization to work as accountants (Kleppe, 2014).

Several auditing firms are already offering accounting services to clients. KPMG is one of these companies (KPMG, 2015). Given the fact that many of these firms are focusing on recruiting highly skilled employees, it might be difficult for the smaller accountancy firms to compete with their level of expertise. There seems however to be different experiences about the exemption of audit. The manager at the local Lillestrøm office did not experience any increased competition from auditors switching to accountants.

Banks have also started to acquire accountancy firms and offering accounting services to customers. SpareBank1 is one of these banks. Through an alliance of savings banks in Norway they are now offering accounting services to customers all over the country. They acknowledge that changes are going on in the accounting industry, and that new business opportunities will be opened in partnership with the accounting industry (SpareBank1 Regnskapshuset AS, 2013).

5.2.3 Substitutes
Substitutes can potentially erode profits by stealing business and intensifying internal rivalry (Besanko et al., 2013, p.262). A typical substitute to an accountancy firm is here seen as a firm that can provide services within accounting but is not categorized as an accountancy firm as defined in the NACE-framework.

The IT-industry is a typical example. IT-companies are in a position to use their knowledge to supply the market with accounting solutions. Their products can either be designed to be used by accountancy firms, or by other firms that do not want to use an accountant. Other industries are also a threat to profitability. One example is Accountor, which is the largest company in Northern Europe offering economy- and advisory services (Accountor, 2015).
Even though the company is not defined as an accountancy firm, it still offers some of the services found in the accounting industry.

Sum regards the development in software as the biggest challenge. If software is developed that can perform the traditional accounting tasks without involving the accountant, the accounting industry is more or less out of business. For example, a consultancy firm can offer services to clients that are equal to that of the accountancy firm. But, the use of substitutes relies on customer preference. If customers still regard the accountancy firm as the best service provider, the actual threat from substitutes is reduced.

### 5.2.4 Supplier- and buyer power

Suppliers to the accountancy firms are here treated as a supplier of IT-solutions. There are several suppliers available that compete about selling their software. If there are many suppliers of software we can expect the prices to be lower because of competition.

The suppliers have power in the industry because they deliver systems that enable accountancy firms to interact with their customers. Customers demanding advanced services from accountancy firms can result in the accountancy firms requiring better software integrated with their customer. These firms can become more dependent of their software provider as it can be costly to switch supplier. The software provider thus has a lock-in effect. Visma is an example of both a user and a provider of software. In the interview with Visma it was clear that many smaller accountancy firms were using their software. The lock-in effect was mentioned as a very important factor.

Another supplier to the accounting industry is the individual employee. The accounting industry relies on rather skilled and knowledgeable employees in order to perform their services. In order to attract enough skilled people, salaries in the industry must be competitive. Sum explained in the interviews that they already were hiring more people with a master’s degree. This was due to the fact that they wanted more knowledge they could benefit in, e.g., advisory services. Interestingly, the interviews revealed that salaries were not determined on the basis of education, but on the level of experience. Gårseth-Nesbakk & Åmo (2012, p.43) concluded that it could be very difficult for firms to find competent employees.
The buyer power lies first and foremost in the option of the buyer to switch accountant with not much costs associated to it. Competition on price can happen as a result. Accountancy firms such as Visma are still able to lock-in their customers by providing them with software solutions for much of their customer demand. For Sum it was mentioned as a challenge that clients can switch accountant, because customers often own their own data. Hence, we might see that buyer power can lead some firms to reduce their prices to become more competitive.

5.3 Summary of findings in the macro-environment and industry analysis

In the macro-environment we see a development in the use of technology and RPA in the accounting industry. This technology allows for the automation of manual- and routine tasks that are very time consuming for an accountant. The technology can save money for an accountancy firm, but is also a threat for the «traditional» accountant. Many accountancy firms are already experiencing a drop in revenue because of more automation. Automation can also make it less attractive for firms to outsource bookkeeping tasks to low cost countries in the future. Accountancy firms are regulated by Norwegian laws and under the supervision of the FSA. The accountants Act determines the responsibility of the accountant. Outsourcing is a way for many firms in different industries to save cost on administrative work. The accounting industry is in a god position to provide firms with these services.

The industry analysis revealed that there are quite a lot of firms and accountants in the market. Even though the competition is regarded as local, it is a competitive environment. We can therefore conclude that there is some degree of price competition. Because of structural changes and the strategy reported by the larger corporations, we can expect an increase in the consolidation within the industry. The overall profitability seems to be rather good, making it attractive for new entrants. These are for the most part recognized as auditors switching to the accounting role or banks exploiting new technology to establish themselves in the accounting industry. There are also substitutes threatening the overall profitability. With more technology, the IT-industry is a potential substitute as they can provide firms with accounting software. These firms also have supplier power they can use to earn more money from accountancy firms that are not in a position to develop their own software. Employees have also some form of supplier power as they provide the knowledge. Their salaries affect profitability. More entrants and substitutes increase the buyer power clients have. Clients seem able to switch between accountants without much cost.
6.0 Analysis of profitability

This part will focus on describing the profitability in the accounting industry in Norway today. The aim of the chapter is to answer the second sub-question regarding the main research question:

2. How is the current profitability in the accounting industry today?

An analysis of the annual financial statements from 2011 to 2013 is used to assess the current profitability. The analysis will also draw on information from the interviews with Sum and Visma. Since most of the financial statements from 2014 are not currently available, an analysis of the 2014 numbers is not included. The chapter will start with a description of the important items in the income statement and balance sheet. Further, key figures from the firms are presented to give a description of the current profitability.

6.1 Normalization of the financial statements

When analyzing the difference in profitability from year to year, it is the result from the normal activities one is interested in. It is then worthwhile to remove any income or costs that are either random, irrelevant, or a one-time occurrence. The financial statements were analyzed simultaneously with the annual reports in order to check for any «abnormal» elements. Some of the firms also have investments in subsidiaries. Unfortunately, the annual reports are not detailed enough to accurately subtract any income or investments. There are some implications because of the level of detailing in the annual reports, especially when calculating the return on operations. These implications will be discussed wherever appropriate.

There were also a few minor differences between the numbers found at Proff Forvalt compared to Ravinfo. Some of the firms had items in the financial statements, which were not specified in the found at Proff Forvalt. Hence, these firms were compared with the annual reports and the data found at Ravinfo in order to achieve the highest level of detail in the financial statements.
6.2 Analysis of the income statement

A common size analysis allows for a visual presentation of the important items in the income statement and balance sheet. Table 1 below is a summary of the important items in the income statement of all the firms used in the analysis. A summary of the different sample categories is found in the appendix. The table shows the average numbers and their percentage expressed relative to the total operating income. The minimum-, maximum-, and median numbers are also included to give a better picture of the different items.

Table 1: Summary of the income statement

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>Average %</th>
<th>Min.</th>
<th>Max</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue</td>
<td>66 321</td>
<td>99,61 %</td>
<td>1 250</td>
<td>909 029</td>
<td>11 731</td>
</tr>
<tr>
<td>Other operating income</td>
<td>258</td>
<td>0,39 %</td>
<td>-245</td>
<td>3 870</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total operating income</strong></td>
<td><strong>66 579</strong></td>
<td><strong>100 %</strong></td>
<td><strong>1 324</strong></td>
<td><strong>909 428</strong></td>
<td><strong>11 731</strong></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>2 648</td>
<td>3,98 %</td>
<td>-11</td>
<td>30 664</td>
<td>167</td>
</tr>
<tr>
<td>Cost of wages</td>
<td>44 776</td>
<td>67,25 %</td>
<td>966</td>
<td>626 444</td>
<td>8 069</td>
</tr>
<tr>
<td>Depreciation</td>
<td>1 474</td>
<td>2,21 %</td>
<td>0</td>
<td>23 576</td>
<td>107</td>
</tr>
<tr>
<td>Write-downs</td>
<td>85</td>
<td>0,13 %</td>
<td>0</td>
<td>2 878</td>
<td>0</td>
</tr>
<tr>
<td>Loss on receivables</td>
<td>58</td>
<td>0,09 %</td>
<td>0</td>
<td>3 307</td>
<td>0</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>12 339</td>
<td>18,53 %</td>
<td>0</td>
<td>166 613</td>
<td>1 840</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td><strong>61 380</strong></td>
<td><strong>92,19 %</strong></td>
<td><strong>1 285</strong></td>
<td><strong>847 298</strong></td>
<td><strong>10 659</strong></td>
</tr>
<tr>
<td>Total operating profit</td>
<td>5 199</td>
<td>7,81 %</td>
<td>-108</td>
<td>78 335</td>
<td>817</td>
</tr>
<tr>
<td>Financial income</td>
<td>366</td>
<td>0,55 %</td>
<td>2</td>
<td>3 813</td>
<td>71</td>
</tr>
<tr>
<td>Financial costs</td>
<td>77</td>
<td>0,11 %</td>
<td>0</td>
<td>775</td>
<td>9</td>
</tr>
<tr>
<td><strong>Ordinary result before taxes</strong></td>
<td><strong>5 489</strong></td>
<td><strong>8,24 %</strong></td>
<td><strong>-109</strong></td>
<td><strong>81 960</strong></td>
<td><strong>1 089</strong></td>
</tr>
<tr>
<td>Taxes</td>
<td>1 577</td>
<td>2,37 %</td>
<td>-30</td>
<td>24 129</td>
<td>239</td>
</tr>
<tr>
<td><strong>Annual result</strong></td>
<td>3 912</td>
<td>5,88 %</td>
<td>-331</td>
<td>57 831</td>
<td>743</td>
</tr>
</tbody>
</table>

*Sales revenue* is reported as the biggest source of income, with an average of 99,61% of the total operating income. Visma Services AS is by far the biggest in the sample with an almost seven times higher reported sales revenue than Sparebank1 Regnskapshuset SMN AS in second place. The median number among the bigger firms in the sample is NOK 90 328. Only a few of the firms have *other operating income*. Accordingly, accountancy firms seem to focus most of their effort on selling accounting services. Other operating income is mostly present in the sample with the larger firms. But, Sum is the company earning relatively the most income from this source of revenue, with NOK 216 000 (3,42% of total operating income) in 2013. The managers in the interview said most of this income was from a
subsidiary. Since the level of detailing in the annual reports is very low, it is difficult to analyze the actual numbers.

The biggest expense for an accountancy firm is the cost of wages. The average in the sample is 67.25% of total operating income. The smaller firms in the sample had the highest average cost of wages (70%) relative to operating income. Even though the sample is not generalizable to the industry overall, it is tempting to speculate if this is because the smaller firms are less effective than the bigger ones.

The second biggest cost identified in the interviews is the cost of rent. The cost of rent is found in the item other operating expenses. The sample average is 18.53%, and there is very little difference between the small-, medium-, and large firms for this item. The annual reports only include aggregated numbers for this category of costs, and not the cost of rent specifically. Interestingly, only Visma Services AS and PWC Accounting AS have specified their actual cost of rent. It is therefore difficult to estimate the exact relative percentage of this cost between the firms. However, at Visma, the cost of rent was 32% of the item other operating expenses in 2013 compared to 34% in PWC Accounting AS. Other expenses included in the item «other operating expenses» are for the most part licensing of software, phone bills, office supplies, insurance of buildings, and fees to the auditor. Another category of expense, though relatively small, is the cost of sales, which on average constitutes 3.98% of total operating income. For the sample used, the large firms had the highest average cost of sales (4.18%) relative to total operating income, while the small firms had the lowest percentage (1.77%). The medium firms had a cost percentage of 3.04%.

6.3 Analysis of the balance sheet

Compared to the income statement there are greater differences between the sample categories on the balance sheet. A summary of the entire sample would therefore be skewed in favor of the bigger companies. A summary of the different sample categories is found in the appendix. The average-, minimum-, maximum-, and median numbers are calculated relative to total assets/total liabilities and equity.

Beginning with the smaller firms we can see that total current assets represents 90.62% of total assets. Much of the current assets consist of accounts receivable from customers that
have yet paid for their used services. An interesting observation is their ability to stockpile bank deposits and cash. On average, this item represents 46,18% of total assets. This can lead to the conclusion that the smaller firms are/have been very profitable over the last years. Total fixed assets only represent 9,38% of the total capital. This seems natural because of the services they offer to clients. Had they been, e.g., a manufacturing company, we would expect to see this item much higher relative to total assets.

When observing their liabilities and equity, we can see that equity represents 43,75% of total liabilities and equity. All the firms in the sample are solid in terms of their equity. Sum said in the interview that they were deliberately not using gearing as a way of growth. All of their growth (i.e. hiring more people) was due to the retained equity they had built up over the years. Another interesting observation is the absence of long-term debt. Most of the debt is short-term. Public duties payable (15,77%) such as taxes and VAT due in the near future and other short-term debt (15,89%) such as prepayment from customers and accrued wages are the two biggest items in this regard. Only one company had uncovered losses from previous years, but was now earning a considerable profit.

The medium firms in the sample are very similar to the smaller firms in terms of the concentration of assets. Though, a difference is found in total fixed assets which represents 16,52% of total assets. This is for the most part due to an increase in financial assets (5,15%) that where almost non-present in the sample of the smaller firms. Accordingly, it might seem that the bigger companies are investing more in financial assets than the smaller firms. Total current assets represents 83,48% of total assets with total receivables (34,38%) and bank deposits and cash (46,54%) representing the two biggest items. Their total of equity and liabilities is also similar to the sample of smaller firms. Their equity ratio is 36,67% with a total retained equity of 28,92%. Only PBL Regnskap AS had an uncovered loss from previous years. Looking at their annual reports they had negative results in 2006 and 2007. Of all the firms in the sample, PBL Regnskap AS is also the only company with a negative trend in 2013.

Of total liabilities (63,33%), short-term debt is the biggest item (55,32%). As with the smaller companies, this is mainly due to other short-term debt such as prepayment from customers and accrued wages. The other relatively large account is public duties payable (13,12%). Long-term debt represents only 8,01% with pension liabilities (3,71%) and long-term debt to
financial institutions (3.86%) as the two biggest accounts. The equity ratio is also a solid 36.67% for the medium sized companies.

The large firms are on the asset side somewhat different from the other firms in the sample. Of total assets, the total of fixed assets represents 32.33% and current assets 67.67%. An interesting observation is that most of the total fixed assets consist of goodwill, which is an intangible asset. Goodwill seems to occur on the balance sheet because the larger corporations are often acquiring smaller accountancy firms and software providers in order to grow. Also, R&D was only found among the larger firms.

Despite what was expected, financial assets are modest among the larger firms. Only Visma and Sparebank1 Regnskapshuset SMN AS have invested money in stocks. Of current assets, the biggest items are accounts receivable (28.47%) and bank deposits and cash (35.01%). This is similar to the other firms in the sample. The larger firms are also able to save cash. It is interesting to speculate if the larger firms are better off investing some of this money. However, all the firms in the sample seem determined to only focus on their primary business. Having bank deposits and cash could also be a safer way of investing in growth rather than borrowing money.

When observing equity and liabilities it is clear that the larger firms are also solid in terms of their equity (39.39%). The largest ratio of equity relative to total capital belongs to PWC Accounting AS with 68.31% in 2011. The lowest equity ratio belongs to Netledger AS with 10.57%. The other firms are distributed around the average ratio. Long-term debt (3.60%) is almost non-existent among the larger firms with deferred tax (2.77%) representing most of the debt. Total current debt (57.01%) is by far the biggest liability. As with the smaller firms, public duties payable (15.90%) and other short-term debt (33.45%) account for most of the short-term (current) debt.

6.4 Analysis of performance
To get a better view of the historical profitability, financial measures are used in the evaluation of the sampled firms. This is referred to as benchmarking. The financial measures are calculated from 2011 to 2013. In the denominator, average numbers are used because some of the sampled firms have differences in total capital (and other items) from year to
year. For example, Sum had a total capital of NOK 272 000 in 2010 and NOK 2 898 000 in 2013. Using average numbers in the denominator will better reflect the development from year to year. This is especially true for companies that are in a rapid state of growth since they are also operating on equity (and any liabilities) gathered in the same year.

Four measures are used to give a better view of the profitability: return on assets, return on capital employed, return on operation, and return on equity. The financial measures are calculated before taxes, with the exception of return on equity. For the purpose of this thesis, the objective is to find differences between the different categories of firms. A key to correct measurements is to maintain consistency between the numerator and denominator (Gjesdal & Johnsen, 1999, p.110). The subtracted items to insure consistency are mentioned under each relevant measure.

Return on assets (ROA)
The ratio has been calculated using earnings before interest and tax (EBIT) in the numerator and average total assets in the denominator.

<table>
<thead>
<tr>
<th>Category</th>
<th>Average %</th>
<th>Min. %</th>
<th>Max. %</th>
<th>Median %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>17,92</td>
<td>-6,52</td>
<td>63,19</td>
<td>16,59</td>
</tr>
<tr>
<td>Small</td>
<td>16,76</td>
<td>-6,52</td>
<td>63,19</td>
<td>13,54</td>
</tr>
<tr>
<td>Medium</td>
<td>23,23</td>
<td>4,00</td>
<td>32,69</td>
<td>27,20</td>
</tr>
<tr>
<td>Large</td>
<td>14,95</td>
<td>2,32</td>
<td>26,63</td>
<td>16,15</td>
</tr>
</tbody>
</table>

The sample average ROA from 2011 to 2013 is 17,92%. The medium sized firms have on average the highest ratio (23,23%), the smaller firms (16,76%), and the large firms (14,95%). The biggest ratio (63,19%) is found in Sum in 2013. From 2012 to 2013 they had a growth in EBIT of 481,98% while their total capital only grew with 143,32%. Sum has grown a lot the last years, and is continuing to grow. The lowest reported ratio of -6,52% was found at VS Regnskap AS, also among the smaller firms. This was due to a drop in income with the cost of labor kept stable from last year. The company recovered in 2013 and ended up with a ROA of 13,40%.

Return on capital employed (ROCE)
In order to maintain consistency between the numerator and denominator when defining the working capital, a few adjustments have been made. The nominator consists of the EBIT,
which is the same as in ROA. The denominator is different. From the total capital, the items of other short-term debt, public duties payable, accounts payable, and deferred tax assets have been subtracted. These are here considered to be interest free, and hence not included in the working capital.

Table 3: ROCE

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
<th>Min.</th>
<th>Max.</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>32,63 %</td>
<td>-16,21 %</td>
<td>103,61 %</td>
<td>29,97 %</td>
</tr>
<tr>
<td>Small</td>
<td>28,12 %</td>
<td>-16,21 %</td>
<td>103,61 %</td>
<td>26,08 %</td>
</tr>
<tr>
<td>Medium</td>
<td>41,16 %</td>
<td>10,78 %</td>
<td>66,68 %</td>
<td>37,97 %</td>
</tr>
<tr>
<td>Large</td>
<td>33,13 %</td>
<td>4,41 %</td>
<td>64,30 %</td>
<td>34,79 %</td>
</tr>
</tbody>
</table>

The average ROCE in the sample is 32,63%. As with ROA, the medium firms in the sample have the highest ratio (41,16%). The smaller companies (28,12%) and the larger companies (33,13%) have now switched places in comparison with ROA. The larger firms have in general more interest free debt to subtract from their total capital than the smaller firms. VS Regnskap AS was again the only company that had a negative ROCE of -16,21%. This happened in 2012, c.f. the discussion under ROA. Sum had a very high 103,61% in 2013. This was mainly due to strong growth in sales revenue and some income from their subsidiary.

Return on equity (ROE)

The numerator is net income after taxes because this is the only number that can be added to the total equity. The denominator is the total amount of equity in each firm. Because the ratio is calculated after taxes, tax payable and deferred taxes have been excluded from the denominator. This is done to maintain consistency in the analysis.

Table 4: ROE

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
<th>Min.</th>
<th>Max.</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>39,57 %</td>
<td>-14,39 %</td>
<td>184,66 %</td>
<td>27,97 %</td>
</tr>
<tr>
<td>Small</td>
<td>35,57 %</td>
<td>-14,39 %</td>
<td>184,66 %</td>
<td>24,66 %</td>
</tr>
<tr>
<td>Medium</td>
<td>60,09 %</td>
<td>8,75 %</td>
<td>148,23 %</td>
<td>45,65 %</td>
</tr>
<tr>
<td>Large</td>
<td>27,06 %</td>
<td>-12,04 %</td>
<td>69,58 %</td>
<td>24,25 %</td>
</tr>
</tbody>
</table>

The average ratio is 39,57%. The medium sized firms are again the firms with the highest ratios, with an average of 60,09%. Haslestad Regnskap AS and Jansson & Larsen Regnskap AS are increasing the ratio with an average of 123,40% and 77,79%. These high ratios are due to a high income after taxes relative to their total equity. Haslestad Regnskap AS has also
considerable tax payable subtracted from the total equity. The smaller firms have an average of 35,57% while the large firms have 27,06%. We, again, find the minimum values at VS Regnskap AS (-14,39%) and the maximum value at Sum (184,66%). Sum had in 2013 a large income after taxes (NOK 1 047 000), and a high number of tax payable (NOK 122 000) and deferred taxes (NOK 30 000) subtracted from their total equity of NOK 1 005 000.

Return on operations
This ratio illustrates a company’s return on operations and does not include any financial income or losses not connected to the actual operations. The result from operations is used in the numerator. To maintain consistency, the denominator consists of total capital minus non-operating assets and interest free debt (working capital). Hence, from the working capital used for ROCE, the items of financial assets and financial investments have also been subtracted. The item financial investment is found among the current assets.

Table 5: Return on operations

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
<th>Min.</th>
<th>Max.</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>37,31 %</td>
<td>-16,51 %</td>
<td>263,03 %</td>
<td>27,48 %</td>
</tr>
<tr>
<td>Small</td>
<td>26,36 %</td>
<td>-16,51 %</td>
<td>106,07 %</td>
<td>24,18 %</td>
</tr>
<tr>
<td>Medium</td>
<td>64,59 %</td>
<td>10,14 %</td>
<td>263,03 %</td>
<td>46,12 %</td>
</tr>
<tr>
<td>Large</td>
<td>31,93 %</td>
<td>3,79 %</td>
<td>70,98 %</td>
<td>33,00 %</td>
</tr>
</tbody>
</table>

The average number is 37,31%. The medium firms are again on the top with an average of 64,59%. The very high ratio of 263,03% is found at Pluss-Økonomi AS in 2011 among the medium firms. The «unusual» ratio occurs because the total of interest free debt and non-operating assets are very high relative to the total capital. According to the annual report, the non-operating assets include an investment in two subsidiaries. This investment is estimated to NOK 1,5 million in 2011. As discussed about the balance sheet, accountancy firms have quite few fixed assets relative to their total capital. If, e.g., much of the fixed assets are financial assets (c.f. Pluss-Økonomi As), return on operation will be very high. Because of an increase in total capital from NOK 4 674 000 in 2012 to NOK 9 730 000 in 2013, Pluss-Økonomi As are left with a ratio of 39,80% in 2013.

The smaller- and larger firms are more equal to the average- and median ratios. Among the large firms, Netledger AS has the lowest ratio of 3,79% in 2013, with a drop from 19,41% in 2012. PWC Accounting AS has also a low number in 2013 with 6,87%.
6.5 Summary of findings about the profitability

Based on the results of the analysis of profitability we see that the medium sized corporations are the most profitable. They have a higher score on every measurement. The different measurements have a tendency to fluctuate quite a bit from year to year in all three categories. The smaller firms have a higher ROA and ROE than the larger firms, and the larger firms have a higher ROCE and return on operations than the smaller firms. In terms of ROCE, the larger firms have a better score than the smaller firms because their EBIT is relatively bigger than the total capital less interest free debt. The same is true in terms of return on operations. In measurement, non-operating assets are also subtracted. The larger firms have an «advantage» over the small firms in that they in general have more financial assets.

When measuring ROA, the study by Gårseth-Nesbak & Åmo (2012, p.34) stated that the smaller corporations are more profitable, and that ROA is reduced with size. This is also the case in this study. However, we do see an increase in profitability among the medium sized companies. Due to the sample size, the observed result can be a coincidence. Still, grounded on the overall results in this sample it might seem that the larger firms are better at generating profits on the basis of their working capital (ROCE) and operations. The medium firms are nonetheless the most profitable firms in the sample. It is thus fair to say that size alone is not the main driver of profitability. All in all, it is fair to say that the small- and medium firms are «winners» in terms of profitability in this sample.

The firms have most of their income from sales revenue. There are a few firms that have some financial income, e.g., from subsidiaries but these numbers are rather small. Accordingly, firms seem most interested in focusing on their core activities. In the next chapter follows a deeper discussion of the drivers of profitability.

7.0 Drivers of profitability

This chapter will describe and discuss different revenue- and cost drivers found in the accounting industry. The aim of the chapter is to answer the third sub-question regarding the main research question:

3. Which drivers are important for the overall profitability in the accounting industry?
The analysis is based on the interviews with Sum and Visma, and the analysis of profitability in chapter 6. Sum and Visma will also be used as illustrations through the entire chapter.

7.1 Revenue drivers
Accountancy firms provide a service they sell to customers. Their total sum of revenue relies for the most part on the price they are able to charge their customers. This chapter will focus on describing where their revenue comes from, and how they price their services. Visma and Sum are used as examples, as data regarding their drivers of revenue were acquired through the interviews. The theoretical foundation is based on the framework by Nagle, Hogan & Zale (2011).

Sum Regnskap AS
For Sum, most of their revenue comes from bookkeeping. Their services are for the most part connected to registering turnover, payrolls, and keeping track of customer journals and their general ledger. Two other, and more profitable sources of income, are advisory services and annual settlements for their customers. They earn more on these types of services because the price is higher, but only a modest part of their total revenue accounts for these services.

Since 2011 the company has been in a steady state of growth. In 2011, they had sales revenue reported in their annual report of NOK 1 250 123 with a total of two employees. In comparison, they had NOK 6 090 660 and nine employees in 2013. Not only have their revenue increased but they are also earning more per employee, with NOK 676 740 in 2013 compared to NOK 625 062 in 2011. This trend was not as positive in 2012 compared to 2011 with sales revenue of NOK 3 385 973 and seven employees. This is only a NOK 483 710 per employee. The growth in revenue is due to an increase in the total number of customers and a growth in prices due to the general growth in the consumer price index (CPI).

A general trend among the accountancy firms is that they are using standard prices rather than individual prices for each customer. Visma has a somewhat different model (see discussion below). Standard prices is not in-line with the price structure explained by Nagle, Hogan & Zale (2011), where each segment of customers should be priced differently to get as much revenue as possible from each customer. Sum defends the pricing strategy by claiming they
want their prices to be predictable. They are also determined not to reduce prices to be competitive towards certain clients.

Sum mentions that the NARF (the Norwegian Association of Authorized Accountants) has suggested their members to start using unit pricing. This is transferrable to what Nagle, Hogan & Zale (2011) mean by a pricing policy. When faced with an event other than value and cost (c.f. changes in technology) a company must change their rules and habits to earn revenue. Sum believes their customers are thinking about prices per hour, and that unit pricing is a way of hiding costs. A per hour price of NOK 600 could in reality be NOK 900 once all the extra costs due to unit pricing has been added. Some of the bigger customers belonging to Sum have a fixed price they pay in advance, or at the end of the year. One problem about allowing customers to pay a fixed amount for services is that some clients’ pay less in total than if they had used pricing per hour. However, they feel it is better to keep these important customers rather than changing their prices.

A problem with increasing automation is that customers are more aware of the time spent on each task. At Sum they are even using stopwatches to be as accurate as possible when sending out invoices to clients. This increases transparency, but it reduces their total revenue at the same time. However, this is in-line with the principles of value creation as explained by Nagle, Hogan & Zale (2011). When they are only charging their customers for the work (c.f. value) that they actually do, they are within the principle of value creation.

Sum also say they would like to charge the highest price possible, but charging a higher price means more expectations from their customers. Their pricing model is thus in-line with the principle of price and value communication. They do not wish to use sophisticated pricing models to get more from their customers. The increase in automation means that their employees are more effective with their time and have more spare time on their hands. Rather than charging their clients for this free time, they want to have their employees do something else of value. This means that they have to find other sources of work, or reduce the number of employees. They even mention leaving the accounting industry completely if they are unable to compete.
Visma Services AS

Visma consider itself as a market leader, and feel less threatened by competition. Remember that the interview was done with a local office. Other offices within Visma Services AS might have other sources of revenue and provide other services than the office in scrutiny.

Of their total revenue, 40% is coming from operating payroll services for some of their clients. Other firms outsource this service to Visma because they have an experienced and efficient team providing the service. Another 45% of their revenue is earned by working as consultants/advisors for their clients. When working as consultants/advisors, employees are «hired» by the client and work as anything from a controller, accountant, accountant manager, or providing IT-support. Much of this work is done at the actual work place of their client. When working at the work place of their clients they are often using the client’s own software. Since Visma has software for all types of accounting they are able to sell more of these products to their clients. This is within the principle of value creation as explained by Nagle, Hogan & Zale (2011), because the products can offer more value for their client. In general, Visma is experiencing a strong growth in outsourcing services in the total market, and Visma recognize itself as the leading quality provider in the Nordic market (Visma group annual report, 2013, p.34).

The other 15% of revenue is earned from traditional bookkeeping. Their clients themselves do much of this work when operating the accounting software provided by Visma. Much of this work has been outsourced to Romania to save costs (ref. cost drivers). While saving costs, they are also able to sell their other services to clients that they have a better margin on. This is because their employees are spending less time on bookkeeping. We can already see a difference from Sum in the services they provide. A bigger firm seems better able to provide professional services that the smaller firms are unable to do. Sum mentioned this explicitly by stating that it is dangerous to be a small firm during disruptive events. Visma states that the larger companies are also better able to set their own prices. Much of this advantage is due to the fact that, e.g., Visma has developed in-house software. The smaller firms are often using software from Visma that they need to pay a license to use. The extra license cost is then «moved» over to their customers resulting in an increase in price.

Visma is also using standardized prices to customers, but they have a rather sophisticated pricing model they refer to as a «price matrix». The price matrix account (among other things)
for the type of service provided, access to IT-software (MyVisma), unit pricing, and the number of hours to be used. This is more in-line with the recommendations from the NARF. The advantage of this system is that customers are given a more precise outlook on the total price, but the actual price can deviate from the proposition. This is also in-line with what Nagle, Hogan & Zale (2011) explains as the price level. A larger client is often more in need of several services and their total price is higher because of the price matrix.

Another interesting observation about Visma is that they examine the overall profitability of their clients. Customers are divided into categories of A, B, and C clients where A-clients are the most profitable. Some of the smaller clients are less profitable because they require more work, thus reducing their overall margin. Customers are sometimes also a problem, either because they are not profitable or are difficult to cooperate with. In these cases, Visma tries to find a solution, but will get rid of the client if a better solution is not to be found. Sum is also concerned about the overall profitability of their clients. However, they consider all customers as useful to them because they help building a network of clients.

7.2 Cost drivers

An analysis of cost drivers is important for the strategic positioning of the firm independent of the strategic position chosen (Lord, 1996, p.352). Porter’s ten cost drivers will form the basis of the analysis. Riley’s cost drivers will supplement the analysis where applicable. The most important cost drivers revealed in the interviews with Sum and Visma and the analysis of profitability are discussed below. The interviews and the analysis above revealed that the cost structure in an accountancy firm in general is rather uncomplicated. Both the interviewed firms reported much of the same details about costs, but there are some differences that are explained below.

The managers in the interviews also stated that it was not that much focus on costs, with the exception of outsourcing mentioned in Visma. They did not invest much effort in reducing costs, but where rather concerned with being as efficient as possible with what they already had. Both Visma and Sum were specific about the fact that they were not using any models to calculate costs either. The only time this was an issue was when they were sending invoices to customers. They then needed to work out how much time they had spent on the client and how a specific unit price (c.f. Visma) had been affected.
7.2.1 Scale and capacity utilization

Both Porter and Riley include scale as a driver of costs. As described in the theory chapter, scale is concerned with both economies- and diseconomies of scale. Economies of scale must be distinguished from capacity utilization. Capacity utilization is about spreading fixed costs over a larger volume and is not about being more efficient at a larger scale, which is the definition of economies of scale (Porter, 1985, p.71).

Growth

Many of the firms in the sample are experiencing growth from 2011 to 2013. Among the smaller firms, Sum had the largest growth from a total capital of approximately NOK 578 000 in 2011 to NOK 2 898 000 in 2013. This is an increase in total capital of 401,38%. They also revealed in their interview that they have an explicit desire to grow both in size and in the services they provide. In 2014 they opened a new office in Tønsberg as an expansion of their business.

Growth is also a priority among the larger companies. A good example is Sparebank1 Regnskapshuset SMN AS. They have set a goal of continuous growth in becoming one of the dominating actors in the accounting industry (Sparebank1 Regnskapshuset, 2013). The study by Gårseth-Nesbakk & Åmo (2012) revealed that many of the firms in their sample wanted to grow and to be more profitable. But, they revealed that the cost of coordination increased with size, and reduced the overall profitability. As a result, many of the accountancy firms chose to reduce their size to get rid of these extra costs. In the sample in this thesis we can spot a similar pattern to what was found in the study by Gårseth-Nesbakk & Åmo (2012). When firms are divided according to the number of employees, return on assets (ROA) are lower for the largest companies in the sample. The average ROA is 14,95% for the larger companies, and 16,76% for the smaller companies. The medium sized companies are also more profitable, with an average of 23,23%.

Employees

Since the biggest cost item found in accountancy firms is the cost of wages, it is a good thing to compare the different firms in the sample in terms of their sales revenue per employee. When a company grows it is natural to hire more people. This in turn drives up the total cost
of wages. If the cost of wages is under-proportional relative to firm size, we can expect firms with more employees to be more profitable per employee. Figure 3 below is a presentation of sales revenue per employee in 2013 for the different categories of firms. In the appendix is a summary of all the firms in the different categories in 2013.

![Chart: Sales revenue per employee (NOK 1000)]

**Figure 3: Sales revenue per employee**

From the sample of firms it is clear that the medium sized firms have the most revenue per employee. The larger firms have only marginally more revenue than the smaller firms. Among the medium firms it is Jansson & Larsen Regnskap AS in Stavanger that helps to increase the average number. The company has NOK 1 612 000 in revenue per employee in 2013. If we remove the company from the sample there is not much difference between the medium- and larger sized firms.

Based on the ratio of sales revenue per employee it is not clear that size alone is enough to create economies of scale. We do see a slight increase among the larger- and medium firms, but an employee might be just as effective in a smaller company relative to a larger company. This factor was also revealed in the interviews. Both Visma and Sum were focused on continuously increasing their efficiency as this increases the per employee margin. If the cost of wages is to be under-proportional to size, a firm can, e.g., establish teams that increase productivity per hour.

Another interesting figure to analyze is the rate of operational result per employee. Even though a company has much revenue per employee, it is not predetermined that they also end up with a good result. Figure 4 is a summary of the sample average from 2013. A summary of all the firms in 2013 can be found in the appendix.
The medium firms are again on top of the list. This is due to Jarle Taraldsen Regnskapskontor AS that had NOK 172 000 in operational result, and Jansson & Larsen Regnskap AS which had NOK 203 000 per employee in 2013. These two firms are significantly different from the other firms in the sample. Despite of these to, there is not much difference between the size-categories in the sample.

The main reason for the difference among the firms (despite of the cost of wages) is the item *other operating expenses*. As explained above, this item includes items such as the cost of rent, insurance of buildings, office supplies, and phone bills. The cost of rent is the second biggest cost to an accountancy firm. The financial statements and annual reports did not include any details about these individual items specifically. In fact, the only item specified was the cost of rent reported by Visma Services AS and PWC Accounting AS. For Visma, the item represents 32% of other operating expenses, and 34% for PWC Accounting AS.

Among the medium firms this item is clearly a factor that affects the operating result. Jansson & Larsen Regnskap AS and Jarle Taraldsen Regnskapskontor AS have only 13% and 15% of other operating expenses relative to sales revenue. The firm with the lowest operating result was PBL Regnskap AS with 31% of other operating expenses relative to sales revenue. Among the small- and larger firms it was not much difference in terms of other operating expenses.
Capacity utilization

To find out more about how employees affect the overall result, both Visma and Sum were asked about the workload, salaries, and the level of education among their employees. In Visma, about 20% have a master’s degree compared to Sum which has level of 21.43%. Interestingly, salaries in both firms did not account for the level of education. Salaries were dependent on experience and the overall quality delivered. While Visma does not hire more people with a master’s degree now than they used to, Sum were focused on hiring people with more skills and knowledge in the last recruiting process. They wanted more people with skills and knowledge, as they want to grow and expand on their services.

Neither firm sees a difference in productivity among employees in terms of the level of education. They can only see a difference when they account for the level of experience. In Sum, every employee is expected to have a rate of invoicing of about 1800 hours, or 90% of the time used. In Visma this number is 1950 hours dependent on their actual position in the office, but every employee is expected to invoice their client for approximately 95% of the time used. It might seem that Visma expects more than Sum in terms of workload. This affects the capacity utilization as the employees in Visma are expected to deliver more hours each year. Both Sum and Visma were concerned with increasing the efficiency and keeping the level of invoicing from each employee to clients as high as possible. Other than keeping the rate of invoicing to a high degree it is difficult to measure in numbers the effect of efficiency in accountancy firms. Managers register the effect of efficiency in their «surveillance» of employees. The measurement of invoicing per employee helps to increase the capacity utilization. When employees have a fixed target each month the utilization is kept at a steady state that insures a stable profitability from every employee.

An interesting observation is that neither Sum nor Visma reported to have a bonus system included in their salaries. It was a general perception in the two firms that a bonus system could easily create the wrong incentives. Since the employees have a fixed salary, an increase in automation due to technology has an effect on the pattern of capacity utilization. Sum and Visma are experiencing slightly more customers per employee than they used to. This is a trend they expect to continue in the future. Sum refers to the auditing industry where they say employees often have more clients than in the accounting industry. With the cost structure in both Sum and Visma, this change is positive for the pattern of capacity utilization. It means
that they can have more revenue earned per employee. But, at the time they do not always have more work to do for their employees.

7.2.2 Learning and spillovers

Learning and spillovers is concerned with efficiency, and is an important category of cost drivers mentioned by Porter. The cost driver category is comparable with Riley’s cost driver, experience. Experience is about how many times in the past the firm has done what it is doing (Shank & Govindarajan, 1993, p.21). Because the cost of wages is so important for profitability, the improvement of labor efficiency is vital for an accountancy firm.

Both Sum and Visma invest quite a lot of money on learning and «vocational training». Sum states that they spend more time on learning and the development of employees than other firms they compare with. The reason is that they are interested in further developing their company and they are trying to build competencies to handle future challenges. They therefore have their employees take part in different courses both internal and external to the firm. The external courses are for the most part about keeping the authorization as registered accountants. The internal courses are usually seminars and workshops where they develop new strategies and plan ahead. It is estimated that they spend NOK 20 000 - 40 000 a year on each employee, but there are many hidden cost that are difficult to measure. The seminars and strategy meetings have been combined with a social gathering for the entire company. For example they travelled to Vilnius earlier in 2015 for their strategy meeting. This trip was estimated to cost NOK 95 000.

Sum is focused on having their employees share knowledge and «best practices» with the other employees. They, however, do not seem to have specialized teams in the same way as Visma. A recent example of learning and spillovers was an efficiency improvement in their software discovered by one of their employees. This discovery was enhanced and incorporated in their IT-software, saving valuable time in the accounting services provided to customers. The increase in automation has also resulted in less time spent on each customer. The time saved is used in such a way that employees can learn from each other. Interestingly, they report that it does not take long for a new employee to be ready for work. Their training and sharing of knowledge between colleagues allows them to quickly take part in the work process.
For the local office at Visma Lillestrøm it is a bit more difficult to measure exactly how much money they spend on training/developing their employees. The training in Visma consists for the most part of courses taken over the Internet. These courses are available internally in Visma and they are the same for all employees. The costs of these courses are for the most part measured in the time spent on each course. Each hour spent on a course is an hour that could have been used productively on a client, and it is of course individual differences in the time spent on these courses.

A good example of learning and spillovers is the payroll team at the Visma Lillestrøm office. The office is always focused on increasing productivity per hour. To their knowledge, an experienced employee is much more productive than a less experienced employee. The learning effect is found in the internal working process. A Visma office is positioned to handle the demand they face in the local market the office operates in. Instead of having their employees do all the services they offer, they have their employees specialize in certain services. The team allows for specialization of the services provided. This specialization results in less time spent on each client, and thus a more effective team. The spillover effect is achieved because their knowledge is transferred to other offices in Visma and also within the local office itself. Hence, they share experience and best practice within the office.

### 7.2.3 Linkages and integration

Linkages and integration are important cost drivers to discuss in the accounting industry because of outsourcing (c.f. offshoring). Whether to outsource or offshoring activities within the accounting industry itself has become a hot topic both in Norway. One of the popular countries to outsource accounting services to is Sri Lanka. Because of the low cost of wages in Sri Lanka, some accountancy firms are exploiting this opportunity to lower costs because of the increasing competition within the industry in Norway (Fossum & Nordby, 2012).

The question of outsourcing activities affects linkages because the production of a value activity is divided between two (or more) firms. This can affect both linkages within the value chain and vertical linkages (linkages with the value chain of suppliers). Integration is affected because an input in an accounting service involves choices of integration. For example, bookkeeping can be seen as an input in the process of preparing the annual report. If this
activity is outsourced, the accountancy firm can focus on providing other services that have better margins. This will help to increase the total revenue of a firm.

**Sum Regnskap AS**
Sum does not see outsourcing of activities as the way to go forward. They consider this solution as a temporary step between how things are done today, and what might become of the industry in the future. Sum expects the benefit of outsourcing to low cost countries to be gone in a few years when fully automated accounting systems can handle the tasks better (c.f. RPA technology). Relying on outsourcing of activities will only make the transition to a fully integrated accounting system more difficult. The managers are hence preparing their organizational culture to grasp this opportunity when available.

They have, however, been in contact with actors in Eastern Europe and Sri Lanka and seen how they can help their business. They recognize that these firms save costs in the accounting process, but are they are not convinced that this is the next step forward. Outsourcing of these tasks might also lead to challenges in coordination with the activities performed in Norway. This results in hidden costs in the firm and frustration among the employees if communication and coordination proves difficult. Accounting is the core activity in the business. In general, outsourcing this critical component can reduce the overall product they provide for their clients. They might also end up with a less complete image of a client if they are no longer performing all the activities associated with accounting. This in turn can end up making it less valuable for their clients to get counseling/advisory services from their accountant.

**Visma Services AS**
Visma has another view on outsourcing. The interviews revealed that their business model is based on providing their customers with automated accounting software, and they are looking to reduce the costs of their value activities. For this reason they have established a business unit in Romania (c.f. offshoring). In Romania, the employees are working with bookkeeping activities such as performing the manual tasks of registering invoices and scanning documents. Their work is then transferred to the IT-reporting systems used by the offices in Norway.

The business unit in Romania has grown considerably, from about 30 employees a few years ago to approximately 250 employees today. The top management in Visma is encouraging all
of their offices to outsource as much of their bookkeeping as possible to Romania. In Oslo alone, they outsourced work equivalent to 23 employees last year (in 2014). This year (2015), the Lillestrøm office has a budget of 2500 hours of work to be outsourced to Romania, and the number does not seem to stop increasing. “We send as much work as possible to Romania in order to keep our cost as low as possible” says the manager at the Lillestrøm office.

The reason for the increase in outsourcing is because they need to reduce the cost of bookkeeping in order to stay ahead in the competition with the other accountancy firms in Norway. They estimate that the price for an hour of bookkeeping in Romania is NOK 120 compared to NOK 700 in Norway. The reduction in cost is mainly due to the lower wages in Romania. The benefits for Visma are noticeable in the price offered to their clients for services and the margins on each service. They earn more on each client when including the Romanian business unit in the production (vertical linkage). Another advantage is that employees in Norway that were previously performing bookkeeping activities are now available for other activities. These activities (c.f. the discussion under revenue drivers) are contributing more to the revenue overall than if they had continued with bookkeeping. Outsourcing thus offers new opportunities for Visma. Employees with years of experience are now more able to provide, e.g., advisory services that is more valuable for Visma and their client.

7.2.4 Technology, linkages, and interrelationships

Technology is mentioned by Riley as an important structural cost driver, and is concerned with the technologies used at each step of the process. This driver is not mentioned directly by Porter. However, this cost driver can be mentioned in relation to technology because timing can result in a first-mover advantage, e.g., by being the first (or best) company to take a particular action (Porter, 1985, pp.79-80).

Vertical linkages and technology are together an important driver of costs for many accountancy firms. Only a few firms, such as Visma, are actually producing their own software. Other companies have bought or are licensing software to use in their work process. This is then a cost for the companies that use software developed by others, and at the same time a source of revenue for the software provider. Both firms want to use more technology in their work process, and they also convince their clients to begin upgrading their systems and
incorporate technology to automate their processes. This helps to improve efficiency in the accounting process and it allows, e.g., Visma to sell more of their IT-products to customers.

The increase in automation changes the work process. The interviews revealed that the companies invest more of their time working with coordinating their employees and find new ways of organizing the work process. These are considered to be hidden costs because they result from changes in the work process that the firms must address. According to Sum, these are quite large costs because of the time spent on both communicating with the software provider and the customer. The communication with the software provider is often related to new development and streamlining the end product. Sum reports to spend approximately NOK 100,000 a year on software. This number does not account for all of the hidden costs as mentioned above. At the same time, Sum does not have any costs associated with implementing software at their client’s location. They also report to have costs associated with the IT-systems they develop in their subsidiary company. They did not estimate the cost of this, but they do have developers helping them in Vietnam. For the company overall, the actual cost of software is estimated to NOK 150,000 each year.

The local office in Visma Lillestrøm was also asked to estimate the costs related to technology. The manager did not have the exact numbers related to these costs, because they are reported through the Visma group, and not the individual office. For the purpose here, the Visma group annual reports from 2011 to 2013 have been used to acquire the necessary data. The local offices in Visma do not have any direct costs associated with the use of their own software since these costs are transferred to the client. The costs that are directly linked to software are the research and development of new software, and the acquisition of other companies. These investments are made for the purpose of the entire Visma group and not Visma Services AS alone. Research and developments in the Visma group is thus connected to work process in the local accounting offices.

This affects both the cost drivers of linkages and interrelationships. For example, when a local office is in need of support, they rely on the business unit within the Visma group that has developed the software. This affects the vertical linkages in the organization. It also affects interrelationships as the local offices can share, e.g., know-how with the business unit responsible for the software. It can also allow for Visma to benefit from economies of scale as research and development (and support) is centralized in the organization, and then shared
with the other «sister» units. An example of interrelationships in Sum is the cooperation between their main office in Stavanger and their «sister» unit in Tønsberg they opened in 2014. They are able to move work between the units to utilize capacity and special knowledge between the offices. Since they are using a web-based accounting system, they can easily move tasks between the offices. Also, Skype allows them to coordinate and talk to each other without much cost. Hence, they feel they can operate both offices as one unit though they are geographically far apart.

In 2011, Visma invested NOK 337 314 million in the research and development of software (Visma group annual report, 2011). In 2012 and 2013 the numbers were NOK 317 639 million and NOK 695 844 million. Costs that are included in research and development are included the salary cost in the respective department and the proportionate share of the operating expenses of this respective department (Visma group annual report, 2013). Visma’s growth is driven in large on an increasing focus on SaaS/Cloud software and has invested substantial development resources in SaaS technologies and products. The cash flow from investment activities was NOK (-) 409,4 million of which NOK 326,8 million were related to acquisitions. Visma states that they in 2014 were focusing these acquisitions on SaaS and transaction-oriented businesses, and that these acquisitions will complement the internal R&D investments focused on developing SaaS/Cloud solutions for their primary product areas (Visma group annual report, 2013, pp.31-36).

7.2.5 Summary of findings about the drivers of profitability
Both Sum and Visma have revenue from much of the same services, but the proportion of revenue from each service was different. Interestingly, the Visma office in Lillestrøm earned 40% of their revenue from payroll services, and only 15% from bookkeeping. Sum is more dependent on providing bookkeeping services, but they are trying to increase revenue from other sources in line with the technological development and demand from customers. Despite of their growth, they are experiencing less revenue from bookkeeping due to an increase in automation. The pricing strategy is also different. While Visma has a sophisticated pricing model, Sum relies on standard prices, and even fixed prices for some of their customers. Their pricing model does not seem adapted to the increasing automation. Visma has a broader range of services and they have sourced much of their bookkeeping to Romania to save costs.
When analyzing the cost drivers it is difficult to find proof of economies of scale. The larger firms have more revenue per employee than the smaller firms, but the smaller firms were more profitable per employee. The medium firms were on top in both categories. It is therefore difficult to say that the cost of wages is under-proportional to company size. The increase in revenue seems to be more related to experience and the number of clients per employee. This increases capacity utilization. Learning and spillovers is also of importance. Both firms invest in vocational training and further development. In addition, both firms share knowledge with other business units in order to become more efficient.

Technology is an important cost driver. The Visma group is investing in R&D and acquisitions. Sum has also considerable costs associated with technology, but some of the costs are hidden, and hence difficult to measure. The automation caused by technology has made outsourcing and offshoring attractive, but opinions on the benefits differ. However, both firms agree that money can be saved at least in the short run. In general, none of the interviewed firms were focused on reducing costs. The reason is that they did not see any opportunities to do so, as they have a relatively uncomplicated cost structure where most of the costs are associated with the cost of labor and other fixed costs. They therefore focus more on being more efficient with what they already have.

8.0 Strategic positioning of the Norwegian accounting industry

This chapter will focus on how actors in the Norwegian accounting industry can adapt to technological changes, and what these changes/challenges are. The aim of this chapter is to answer the fourth and final sub-question regarding the main research question:

4. What are the challenges the Norwegian accounting industry is facing, and how can they adapt?

To answer the sub-question, data from the interviews and the above discussion is used. The theoretical foundation is based on Michael E. Porter’s generic strategies. The generic strategies are used as a broad framework to explain how the industry can adapt to changes. A generic strategy is originally meant to give a firm competitive advantage relative to competitors (Porter, 1980, p.35). Visma and Sum are therefore used as examples on how
firms can position themselves strategically in the accounting industry, rather than the industry as a whole.

8.1 What challenges are the firms currently facing?

Both firms were asked in the interviews which changes they experience today and how it affects their company. In the accounting industry, computers and software are the tools used in the work process. The interviews revealed that there have been considerable changes in the technology used and adopted in the work process in the last few years. Sum stated that there have been different perceptions within the industry about the adoption of new technology. “A few years ago, no one was really talking about the changes that the increasing automation brought with it”, said the chairman in Sum. They claim the NARF and many other accountancy firms were more interested in, e.g., pricing policies rather than accepting the changes and find new solutions.

For Sum, a major change has been that they are now working even more closely with their client. “A few years ago the accountant only received a binder with documents and talked to the customer when the job was done”, said the chairman at Sum. The challenge is now to set up the process for interacting with their customers in new ways because IT-solutions enables Sum to be an integrated part of their clients business. Their focus is now shifted towards building the competence and the business culture required in order to stay innovative and competitive. In light of this development, the managers at Sum consider the accounting process to have been «passive» a few years ago. A passive process means that they were only doing the work that the accounting regulations required and did not ask their clients any questions. Today, the accounting process is more about being proactive and creating opportunities. To prepare for the future, Sum must focus on leadership, work processes, and hiring the right people. The company must also adapt to the appropriate technology to meet the demands of customers, and be able to utilize the new opportunities offered.

Another change mentioned is the expectations they face from their clients. The firms in the accounting industry want to sell more hours to customers, but their customers on the other hand are not interested in this development. They want more work to be done in fewer hours, and technology is in favor of their needs. Thus, Sum has to accept that they can no longer keep up with a high degree of invoicing from each employee as they were used to in the past.
This change reduces the overall income and results in more vacant hours for each employee. They then have to switch their focus to selling, e.g., more advisory hours and helping customers with other tasks. The development is seen as an opportunity and a challenge at Sum. Rather than focusing on pricing strategies that many other firms are doing, they try to come up with new ways to earn revenue. Instead of trying to spend more time one client, they try to succeed in spending less time. “The focus is always to be the best option for our customer”, the managers at Sum said.

For the local office in Visma, their office manager says they experience more and more automation caused by IT-software. With the use of Visma’s own software, the customer is more closely linked to the work process, and it is easier for the accountant to «monitor» the client and provide accurate feedback. The accountants at Visma are now working more and more as controllers, project leaders, and advisors for their clients. They also see more automation in the traditional bookkeeping work as a result. Visma can provide their customers with software that enables them to do tasks such as the scanning of invoices themselves, and keep track of their performance. This reduces the time spent by each employee.

Despite of this, the manager at the Lillestrøm office does not see a decline in revenue. Since the office provides a range of services, they can rely on other sources of income other than traditional bookkeeping. Outsourcing of bookkeeping to Romania and the increasing automation has resulted in a benefit where they are able to provide services with a better contribution margin. A strategy for the local office in Lillestrøm is, e.g., to have their employees’ work with their clients at their actual work place, providing them with services they cannot do themselves. The office manager stated that an accountant cost three times as much as using an employment agency, but it does not require any training by the client. Selling this service is hence very lucrative for Visma. “We arrive at the workplace of our client, get the job done, and leave again”, says the manager at Visma Lillestrøm.

Despite that changes in technology has not affected their revenue much, they do face some challenges. One challenge is that they have to rely on their employees to be more technical. More and more of their work with clients is about adapting the software to their particular firm and correcting any errors that the client has done. They also have to use much of their time to educate their clients in how to use the software. This is quite a challenge for the senior employees. The challenge lies in «transforming» these employees from working primarily
with accounting activities to be proactive and provide their clients with advisory services and selling IT-software. Since the office has many employees who have been in the business for a long time, this «transformation» can be quite a challenge. If the employees cannot solve the problem directly themselves, they have to rely on the technical support available within the Visma group. These are the people who created the software. The employee at the local office then becomes a linkage between their client and the technical support staff, which can at times be frustrating for both the employee and the client.

Sum does not have the same challenge because they consider their employees to be quite young compared to the industry overall. This is a strategy chosen by Sum in order to be more competitive. They consider younger employees to be more proactive and at the same time being better at grasping the opportunities that the new technology offers. With an increase in automation, they are now facing a new situation most firms are not prepared for.

### 8.2 What will happen in the near future?

It is difficult to construct an image of how the future will look like. Nevertheless, the managers in the two firms were asked about what they thought the accounting industry would look like in 5-10 years. Their thoughts will help in the positioning for the future.

The managers at Sum were specific in the interviews that there will be fewer authorized accountants in the near future. But, they also believe that the accounting profession will be much more exciting. Software will take over more of the tasks that traditionally belonged to the accountant. These are tasks that are all about gathering information, but at the same time does not create any value. Some of the revenue is therefore lost to the software companies. Sum believes that software and accounting will melt-together because the process of accounting and the software solutions are linked together. “We become a facilitator,” say the managers at Sum. Their job can, e.g., be to help companies adapting accounting software in corporation with the software provider, but also help with the process of developing the software. The chairman at Sum believes that the introduction of more technology will attract young people as the technology allows firms to do things they were unable to in the past. The accountancy firms can, e.g., be more involved in the development of their client.
Both the chairman and CEO at Sum see growth as a way to stay competitive in the years to come. “I believe the smaller accountancy firms will disappear”, said their chairman. One reason behind his «prophecy» is that he believes that technology will melt-together with firms in different industries. This evolution will require bigger business environments with more competencies that the smaller accountancy firms are unable to acquire.

Sum mentions two scenarios for the near future. The first scenario is, as mentioned above, that they cooperate more with the software providers and become a facilitator. They see a possibility that the accountancy firm will evolve more into the auditing process and economic-/financial advisory. An advantage that the accountancy firm holds is that they own much information about their clients and their processes. The CEO in Sum refers to their motto they have adapted from Warren Buffet, “Accounting is the language of business”. Sum can show their clients the value of their numbers and ask the right questions. This knowledge can be utilized when selling advisory services to clients. They can then offer services a consultancy firm such as Accenture is providing at the moment.

The second scenario is the direct opposite of the first scenario. The chairman at Sum operates with a scenario in which the accounting industry is made instinct by, either individually or a combination of, banks, consultancy firms, and software companies. The accounting industry is made obsolete because they are unable to meet new customer demands and technical solutions. Their competitors/substitutes are offering services their former clients regard more valuable and less costly. One challenge in this regard is to hire people who are not rooted in the «old» accounting industry, and are willing to change.

A key factor in this development is access to customers. The chairman at Sum uses banks as an example. The chairman says that a new accounting system is on the way that allows for the accountancy firms and their clients to avoid using the online banking system completely. This is a problem for the bank because they are not able to promote and sell their own products. The firm in contact with the customer has the power because they are in a position to promote their products and services. “Without communication with the customer, you cannot deliver”, said the chairman at Sum. Whoever is allowed to communicate with the end customer is the one who is able to sell their services.
At the local office in Lillestrøm, the manager believes the increase in automation and outsourcing will force them to sell even more advisory hours and software solutions to clients. Selling more software to their clients has a lock-in effect on their customers because they become more and more dependent on the services provided by Visma. They also expect to see more firms outsourcing tasks to the accounting industry. These are tasks that companies do not have the necessary competency to do themselves, or they want a specialist to handle. For the local office in Lillestrøm, this development means more focus on, e.g., payroll-services. The goal is then to sell more and more of these services while the bookkeeping process is done in Romania.

The office manager was naturally more concerned with the development at the local office. To get more information about what Visma thinks about the future, their annual report and website contains information about their thoughts on the future. Visma expects a growth in demand for software (SaaS), ERP solutions, and outsourcing services. Their expectation is grounded on the basis that their customers continue with a thigh cost control and productivity measures. By offering SaaS solutions in the market, Visma hopes to attract new groups of users and offer growth opportunities through the enhancement of existing products already installed at their customer’s site (Visma group annual report, 2013, p.36). The division director in Visma BPO (Business Process Outsourcing) believes that structural changes will lead to a consolidation of the total market. The five largest actors in the accounting market are believed to account for 80% of the total market (Krage, 2013). Visma has also noticed more and more competitors establishing themselves with tailored products within specific niches in the market (Krage, 2013).

8.3 How can the industry adapt to the changes?

The generic strategies by Michael E. Porter are used as a broad framework to discuss the possibilities to adapt to the changes. The analysis will begin with a discussion of the current strategy in light of the generic strategies. A discussion on suggested improvements will follow. It is futile to plan too far into the future. The scope of the recommendations here is thus based on what we know at the moment, and no more than 5-10 years ahead in time. The study by Gårseth-Nesbakk & Åmo (2012) mention some strategies to increase profitability. Some of these strategies/suggestions are included in this thesis in order to discuss how the firms can adapt to changes. Their arguments help to strengthen the further discussion.
**Visma Services Norge AS**

Beginning with how the larger firms can adapt, Visma is used as an example. Compared with the generic strategies, the current strategy in Visma Services seems to be a mixture of both a differentiation- and a cost leadership strategy. This is a bold statement taken into consideration that Visma Services Norge AS is only a part of the larger Visma group. The Visma group is located in the entire Nordic region, and there might be differences between the different units. For the purpose in this thesis, only Visma Service Norge AS is under scrutiny. The Visma group is divided into three categories. The categories are Visma software small and medium businesses (SMB), Visma software government and large accounts (GLA), and Visma business process outsourcing (BPO). Visma Services Norge AS is a subdivision of Visma Holding Norge AS, which is under the consolidated Visma AS (Visma group annual report, 2013, pp.14-21). Visma Services Norge AS is the actual firm registered to provide accounting services in Norway.

The *differentiation strategy* can be found in the way they develop and utilize their own software. It seems that Visma is offering a service that in some cases is unique and differentiated from other software providers. They offer a wide range of specially tailored software solutions that they offer clients in different markets. These software solutions are differentiated because they offer an automation alternative to the traditional accounting services. Their software allows for the automation of a process that the interviews revealed were considered to be manual just a few years ago. The software is unique in the way that many rival accountancy firms are buying software from Visma to use in the work process.

We find traces of a *low cost leadership* strategy in the way they have offshored bookkeeping tasks to Romania. Offshoring is done to stay competitive in an increasingly competitive industry. The entire Visma group is also offshoring activities to other countries than Romania. Lithuania, Poland, Ireland, and Spain are also part of the value chain. These countries are related to software development and accounting/payroll outsourcing, and are necessary to develop new SaaS solutions, win larger consultancy contracts, and to be competitive in outsourcing (Visma group annual report, 2013, p.8). Despite of this, Visma Services AS does not seem dedicated to be following a low cost strategy. It seems unlikely that the software, with the quality delivered, will be of a lower cost than any other software provider. According to the interviews with Sum, the Visma software is expensive to use relative to others.
What can Visma do different to adapt to changes brought by technology? The question is a difficult one since Visma has fully embraced automation through software technology. From a business standpoint, Visma should encourage their clients to automate their processes more. A potential strategy is then to lower their prices on the software they sell to clients. If they are able to offer software at a lower cost than their competitors they can gain a larger market share. At the same time they can maintain, or even increase, the price level on software sold to other accountancy firms. By lowering their own prices they gain market shares, and at the same time make their competitors less able to compete. By selling software to the mass of the «population», it can be more natural to also include Visma in the outsourcing process. The lock-in effect is enhanced further, and Visma gains even more market share in a growing market.

The strategy today seems to be having many local offices around the country that are offering services in the local market. Looking thorough their annual reports from 2011 to 2013, many of the acquisitions done over the last few years have been local accounting offices. This can admittedly be a good way of growth because the number of competitors is reduced, and the overall client portfolio is increased. It is also a good way to acquire new practices and skilled personnel. But, it might be better in the future to reduce the number of local offices and rather build a handful of larger and more specialized offices around the country. This idea is comparable to what Gårseth-Nesbakk & Åmo (2012, p.96) mean by being conscious about the size of the company relative to the defined goals of the company.

By gathering employees in centralized offices, Visma can better exploit the effect of learning and spillovers. By composing specialized teams across the country they can exploit this opportunity across all of their services. Since the focus was not on reducing costs but rather to be more productive with what they have, it seems this can be a good solution. It is also worth looking at exploiting synergies between the Nordic countries. For example, it is worth placing work intensive tasks (in terms of the number of hours used) in countries that have lower wages. Much of the actual bookkeeping is already done in Romania, but there might be a possibility to utilize capacity within the Nordic countries as well. This is also in line with what Gårseth-Nesbakk & Åmo (2012, p.93) mean by exploiting the working capacity.
We should, however, be careful in considering this option when considering that the Visma «boss», Øystein Moan, is regarded as an experienced and highly skilled manager in exploiting mergers and acquisitions. His experience and determination has led Visma forward since the early 2000’s and has strategic in cooperating with their previous- and current owners (Ekeseth, 2011). We can thus assume that Visma is positioned in a good way relative to their current corporate structure.

Visma should also focus on recruiting more young people. Focus on recruiting the right people was also mentioned by Gårseth-Nesbakk & Ámo (2012, pp.96-97). In the interview with the manager at the local Lillestrøm office it was clear that they had many senior employees that were experiencing difficulties in adapting to the new automated work process. One of the reasons for this is that few employees actually quit. In order to change, it is necessary to hire people who are not «rooted». Surveys have been completed to locate the most popular employers among students. Among the engineering students, Visma was not mentioned among the 112 companies listed (Karrierestart, 2015a). It seems Visma is less popular among engineering students. However, in another study among IT-students, Visma is number 22 of a total of 30 companies listed (Gjendem, 2015). Among business students, Visma is rated as number 24 of 100 companies in 2015. This was an improvement from number 32 in 2014 (Karrierestart, 2015b). The numbers look promising for Visma, but they should still focus on increasing their popularity. One approach is to communicate to the students the changes and challenges the industry is facing. Highlighting the challenges can attract entrepreneurs and new visionaries.

**Sum Regnskap AS**

Sum has transformed from being a small company of only 1 employee in 2010 to become 14 employees at this point (March) in 2015. The company has hence grown considerably in only 5 years in line with their growth strategy. At the moment it seems that Sum is experimenting with a range of many different services, rather than focusing on becoming specialized in just a few. For example, they are offering courses, services within business development, and strategy seminars. These services are just a few of the «extra» services they offer in addition to the «traditional» accounting and bookkeeping services.

Porter (1980, pp.41-44) describes a situation in which a firm is «stuck in the middle» between the three different competitive strategies. A firm in this position is according to Porter (1980,
pp.41-42) almost guaranteed low profitability. For example, it can loose high-volume customers in demand of low prices, or it can loose the high-margin customers to competitors who are better differentiated. Without any specific focus or change of course, Sum can quickly find itself «stuck in the middle» between different strategies. At the moment, profitability in Sum is a very solid average of 32.65% measured in return on total assets from 2011 to 2013. However, if they are unable to focus their competencies on delivering a high quality service, a reputation can quickly spread among their clients.

The problem of not focusing on a particular strategy is that they lose focus and become vulnerable. Sum mentioned in the interviews that they, e.g., operated with an agreed fixed amount each year for services with some of their important clients. A threat for Sum is if these customers are lost to other accountancy firms. It seems that these customers are more interested in a low price than spending money on other services. If another accountancy firm offers the same service at a lower price, switching accountants can be done without any particular costs for the client.

The scenario above is very real taken into consideration what larger actors such as Visma and Sparebank1 Regnskapshuset AS are able to offer. It has been mentioned before that both Visma and Sparebank1 Regnskapshuset AS were interested in more growth and market share. These can also be able to deliver a better service at a lower cost than Sum. Their size is an advantage because they can utilize bigger teams to offer a more streamlined service than smaller offices such as Sum are able to offer. It is likely that Sum (and other small- and medium sized firms) can lose the majority of the customer basis to these firms if customers find them more attractive, e.g., due to a lower cost or if they provide a better range of services.

Focusing on a low cost strategy seems difficult for the small- and medium sized firms. The increasing automation will require more use of software that they (presumably) must acquire from a software provider. The cost that the software provider had in development is then transferred to the end user (client) or directly to buyer (the firm). This will in turn increase the price to the client or reduce the margin for the firm. An alternative is to reduce salaries for the accountant, but this option seems less likely. A differentiation strategy seems also to be of little value as the larger firms, e.g. Visma, seems better able to provide better and more differentiated software and services. Their effort in R&D and the acquisition of other
companies is impossible to compete with. Spending money on developing software seems like a waste of capital for the smaller firms. For them it seems better to utilize the available software on the market.

A focus strategy is likely a better option for Sum and other small- and medium sized firms. In the focus strategy the firm has a particular buyer group, segment of the product line, or a geographical market (Porter, 1980, p.38). Since it is likely that the larger actors are able to serve the broader market at a lower cost, a focus strategy can be beneficial for Sum. They stated that their portfolio was based primarily in the Stavanger region, but that they also had national- and even a few foreign customers. It might be better if Sum is able to focus on a narrower set of clients. The study by Gårseth-Nesbak & Åmo (2012, pp.90-99) suggested some ideas about how accountancy firms can increase their profitability. These suggestions were based on what was revealed from their large sample of firms. Some of these ideas are comparable to a focus strategy suggested in this thesis. Of particular interest to this thesis, the idea of being selective in terms of products offered and which industries/markets to focus on is very important. In addition, their ideas of being selective in choosing clients, building a multi-dimensional price model, and to increase prices are important. These suggestions/ideas will hence be included in the following discussion, as they fit well into a proposed focus strategy. The suggestions by Gårseth-Nesbak & Åmo (2012) help to strengthen the suggestion of following a focus strategy as explained by Porter (1980).

Through a focus strategy, a firm can achieve both differentiation by meeting the needs of a particular target group, and lower costs in serving the narrow market. If not both, at least one of the advantages can be achieved (Porter, 1980, p.38). In order for the strategy to work, Sum must focus on a handful of services and a narrow market. First, Sum must locate the most important customers. These are not necessarily customers that currently provide the best margin for Sum, but also those that are less interested in switching to another firm if the price is lower. In other words, locating the clients who recognize a strong horizontal differentiation (Besanko et al., 2013, p.313). These are, e.g., customers that have been working closely with Sum since the beginning, and that Sum has a good relationship with. These clients can help to build a strong reputation for Sum in their specific customer segment. A strong reputation can again help to attract new clients in the same segment. In order to locate these «strategic» clients, a customer profitability analysis (CPA) can be exploited from the toolbox of SMA.
CPA can allow Sum to «map» its customers and see whether their individual clients are profitable or not (Bjørnenak & Helgesen, 2009, p.100).

In order decide upon the services offered to clients, a CPA analysis can also help to locate what type of service their segmented customers require (Bjørnenak & Helgesen, 2009, p.102). This can allow Sum to specialize their service portfolio and benefit by advancing on the learning curve. It is also easier to decide upon which software they should use in order to meet the needs of their clients. As a result, it might be possible to establish teams of employees who are specialized, rather than having every employee do the same things. The cost driver of learning and spillovers can hence make Sum more efficient. Even though this is not a goal for Sum, they can end up serving more customers with fewer employees.

The benefits of following a focus strategy can be many. The most important one is about the cost drivers. When the customer segment and services to offer have been decided upon, the specialization of software (technology) and the benefits from exploiting learning and spillovers can result in lower costs. First of all, capital is saved in spending less money on different types of software for licensing and maintenance. The capital saved can be used to invest in more growth or hiring qualified people to raise the level of competency. Alternatively, on the revenue side, prices can be lowered to attract more price-elastic customers (c.f. less horizontal differentiation).

Even though Sum does not believe in offshoring/outsourcing of bookkeeping to low cost countries, it is an option worth looking into. Sum believes future software solutions will make this option obsolete, but in the mean time they are loosing money «hand over fist». The time and money saved on offshoring/outsourcing will free up capacity to be used elsewhere. It can also mean they do not have to have as many employees in Norway as they currently do. Another potential benefit is efficiency through capacity utilization. Each employee can have more clients, hence increasing the rate of invoicing for each hour spent. Designing a price model in the same way as, e.g., Visma is also a smart move. The pricing model should be designed so it reflects/captures the value creation provided to clients and the resources used by Sum. This measure will also help to increase the overall price, as was suggested by Gårseth-Nesbakk & Åmo (2012, pp. 91-92).
Following a focus strategy can provide Sum with both differentiation and potentially also becoming a low cost provider. This way, further growth is not necessary. If they wish to grow further they can encourage their clients to outsource administrative work and other processes not related to their core activities. As was revealed in the interviews with Visma, 40% of their revenue came from payroll services to other firms. In order for this strategy to work, Sum should construct teams in the same way as Visma, where the employees are specialized in their tasks. This can increase the cost drivers related to capacity utilization and economies of scale.

8.4 Summary of findings about the strategic positioning

Technology brings more automation to the accounting industry. The increasing automation and IT-software allow companies to interact more with their clients. The problem for many firms seems to be that they earn revenues mostly based on hourly wage rates, e.g., bookkeeping. When this process is automated, less time is spent on each client, and revenue is reduced. This development is likely to continue in the future, and we might see competition from actors outside of the accounting industry. The result can be that other industries melt-together with accountancy firms to provide services. In any case, a focus on having other firms outsource administrative work to accountancy firms seems like an important source of revenue in the future. The increasing automation and IT-software allow this transition to happen as firms can share information more easily.

To overcome these challenges, the larger firms might be better off in focusing on a differentiation strategy, or even a low cost strategy. If a low cost strategy is chosen, the firm should try to serve the broader market and pay attention to the firms that are more concerned about price. In any case, a differentiation strategy seems profitable for firms such as Visma because they develop their own software they can integrate their clients in. This has a beneficial lock-in effect.

The smaller- and medium firms are better off with a focus strategy. They can utilize, e.g., a customer profitability analysis to find customers and segments to place their effort in. A focus strategy can help to reduce costs because the firm is able to invest only in technology to serve its particular market. It will also help to develop specialized employees that are more
productive. Revenue can be increased because they can focus on customers with a higher margin, and get rid of clients that reduce the overall profitability.

9.0 Main conclusion

The purpose of this thesis has been to describe and analyze the current profitability in the Norwegian accounting industry, and discuss how the industry can adapt to changes brought by the adaption of new technology. In the analysis, attention was placed on the drivers of profitability, and how the industry can adapt to the challenges it faces brought by technology. The following research question was used as a basis for the research:

What are drivers of profitability for an accountancy firm today, and how can they adapt to changes in technology?

In order to structure and answer the research question, four sub-questions were formed. A short summary of the findings is made in the following.

1. What characterizes the arena of competition within the accounting industry in Norway?

The PESTEL-analysis revealed some of the external elements that affect the industry. Technology must be considered as the most important external factor. The industry is also under strict regulation by Norwegian authorities and laws. The industry analysis revealed that the concentration of firms in the market is high, but because of structural changes it is reason to believe that the larger firms will dominate the industry in the near future. The profitability has been seen as rather good in a previous study. This can attract potential entrants, especially with the exemption of audit (lapse of the statutory audit) for smaller corporations.

2. How is the current profitability in the accounting industry today?

In terms of ROA, the smaller firms are more profitable than the large firms in the sample. However, the larger firms in the sample have a better ROCE and return on operations. In any case, the medium sized firms are better in all measurements. It is thus fair to say that size alone is not the main driver of profitability. The measurements fluctuate quite a bit from year to year, and some of the firms are even loosing money. The majority of income comes from
sales revenue, indicating that accountancy firms are focusing on their core activities. The biggest costs are related to the cost of wages.

3. Which drivers are important for the overall profitability in the accounting industry?

Visma and Sum earn revenue from much of the same sources, but there is a difference in the proportion of revenue from each service offered. While Visma is not experiencing a drop in revenue, Sum states that they do have less revenue from bookkeeping activities. This is due to an increase in automation.

Important drivers of costs are scale, capacity utilization, integration, linkages, and technology. The cost structure in accountancy firms seems to be rather uncomplicated. The focus is hence to be more productive/efficient with what they already have. In this regard, focus on linkages, learning and spillovers, and integration is important. Both firms are embracing the automation brought by technology. The local Visma Lillestrøm office has an advantage because it can utilize technology from the entire Visma group. Sum is more dependent on buying software from a software provider.

4. What are the challenges the Norwegian accounting industry is facing, and how can they adapt?

Both firms regard the adoption of technology as the main challenge because of automation. However, it allows for better cooperation with customers. At the same time, both firms are looking to expand on their services. A differentiation strategy seems to be best for the larger firms. They can also try to incorporate a low cost strategy if they focus on serving the broad market. For the small- and medium sized firms, a focus strategy seems more applicable. Customer profitability analysis (CPA) can be used to locate the narrow market. When focusing on a narrow market they can save money on making specific investments, and increase the margin on their core of customers. In both cases, some of the suggestions by Gårseth-Nesbakk & Åmo (2012, pp.90-99) to increase profitability were also found beneficial in this thesis for strategic positioning.
Through the four questions above, the main research question has been answered. The first three questions answered the first part of the main research question, \textit{“What are drivers of profitability for an accountancy firm today”}. These are summarized in the first three questions above. The fourth sub-question answered the last part of the main research question, \textit{“..., and how can they adapt to changes”}. The four sub-question have hence been «the red thread» throughout the thesis.

9.1 Contribution to existing research
This thesis offers first and foremost a contribution to the existing research about the Norwegian accounting industry. It offers insight into how SMA can be used to analyze an industry with the purpose of strategic positioning. SMA allows for an external viewpoint and benchmarking of competitors in order to position a firm strategically. As was emphasized in the study, the industry is facing challenges brought by changes in technology. This thesis shows that the tools within SMA allow for a systematic processing of the competition within the industry, the current drivers of profitability, and how to position a firm strategically in order to face future challenges. The literature review revealed that SMA has not been widely used or adopted within firm management. This thesis is hence also an attempt to show that SMA is a valuable tool to be use in the strategic planning within a company.

9.2 Suggestions to further research
The competition within the Norwegian accounting industry seems to rather local. This thesis focuses on describing profitability based on a small sample of firms from all over the country. It could be interesting to study a sample(s) from different geographical areas in Norway in order to capture local variances and competition within a narrow geographical market. Accounting for these local differences could lead to a better understanding on how firms can position themselves strategically for competitive advantage. Another suggestion would be to use the framework presented in this thesis on other industries that are facing challenges. Many other industries are facing challenges due to the automation of manual tasks. SMA can help to locate and analyze these challenges and position the industry (c.f. firms) in the future. It could also be interesting to complete the same study as this one in the accounting industry a few years from now using case studies. It would be interesting to see how the industry has changed as they adapt more to automation, and to see what their thoughts are about the future.
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Appendix

Appendix 1: Empirical data used in the thesis and brief description of sample

- Interviews with the case firms

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Firm</th>
<th>Length of interview</th>
<th>Type of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman &amp; CEO</td>
<td>Sum Regnskap AS</td>
<td>1 hour</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>Chairman</td>
<td>Sum Regnskap AS</td>
<td>Not recorded</td>
<td>e-mail</td>
</tr>
<tr>
<td>Office leader (Department leader)</td>
<td>Visma Services Lillestrøm AS</td>
<td>1 hour</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>Office leader (Department leader)</td>
<td>Visma Services Lillestrøm AS</td>
<td>Not recorded</td>
<td>e-mail</td>
</tr>
</tbody>
</table>

- Annual reports from the sample of firms

<table>
<thead>
<tr>
<th>Firm</th>
<th>Type of data</th>
<th>Years</th>
<th>Sample category size and location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tet Kristiansand AS</td>
<td>Annual report</td>
<td>2011, 2012, 2013</td>
<td>Small,</td>
</tr>
</tbody>
</table>
**Brief presentation of the sampled firms (Information from 2013 is presented because its usage in the thesis)**

**Small firms: Revenue NOK 1-15 million and 1-15 employees**

**Aktiva Solsiden AS**
Located in Trondheim, the firm had a turnover of NOK 5 785 890 in 2013 and 6 employees. The annual result was NOK 88 192.

**Averdi Narvik AS**
Located in Narvik, the firm had a turnover of NOK 4 883 251 in 2013 and 7 employees. The annual result was NOK 437 215.
GN-Regnskap AS
Located in Arendal, the firm had NOK 2 171 390 in turnover in 2013 and 3 employees. The annual result was NOK 132 290.

On Time Regnskap AS
Located in Oslo, the firm had NOK 2 739 812 in turnover in 2013 and a total of 4 employees. Their annual result was NOK 94 607.

Regnskapssentret AS
Located in Brønnøysund, the firm had NOK 2 712 170 in turnover in 2013 and a total of 4 employees. The annual result was NOK -27 149.

Skedsmo Regnskapskontor AS
Located at Skedsmokorset, the firm had a turnover of NOK 12 852 817 in 2013 and 11 employees. The annual result was NOK 1 273 491.

Sum Regnskap AS
This was one of the case firms. A more thorough presentation is found in the methodology chapter. Located in Stavanger, the turnover in 2013 was NOK 6 307 082 and they had 5 employees in 2013. The annual result was NOK 1 047 482.

TET Kristiansand AS
Located in Kristiansand, the firm had NOK 8 748 867 in turnover in 2013 and a total of 9 employees. Their annual result was NOK 344 259.

VS Regnskap AS
Located in Haugesund, the company had NOK 3 608 173 in turnover in 2013. They had a total of 6 employees and an annual result of NOK 128 942.

Økonomiservice AS
Located in Trondheim, the company had NOK 2 417 110 in turnover and a total of 3 employees in 2013. The annual result was NOK 143 086.
Medium firms: Revenue NOK 15-50 million and 16-40 employees

Haslestad Regnskap AS
Located in Oslo, the firm had a turnover of NOK 44 648 800 and a total of 42 employees in 2013. The annual result was NOK 1 528 395.

Jansson & Larsen Regnskap AS
Located in Stavanger, the company had NOK 37 079 871 in turnover and 23 employees in 2013. The annual result was NOK 3 942 102.

Jarle Taraldsen Regnskapskontor AS
Located in Steinkjer, the firm had a turnover of NOK 19 636 634 and 19 employees in 2013. The annual result was NOK 3 503 562.

PBL Regnskap AS
Located in Bodø, the company had NOK 29 455 781 in turnover and a total of 36 employees in 2013. The annual result was NOK 252 338.

Pluss-Økonomi AS
Located in Kristiansand, the company had NOK 19 529 682 in turnover and 24 employees in 2013. The annual result was NOK 1 013 079.

Large firms: Revenue NOK 50 million and upward, 41 employees and upward

Netledger AS
Located in Oslo, the company had NOK 58 038 870 in turnover and 65 employees in 2013. The annual result was NOK -330 720.

PriceWaterhouseCoopers Accounting AS
Located in Oslo, the firm had NOK 77 597 185 in turnover in 2013 and 57 employees. The annual result was NOK 1 705 326.

Sparebank1 Regnskapshuset SMN AS
Located in Trondheim, the firm had NOK 133 034 000 in turnover and a total of 152 employees in 2013. The annual result was NOK 9 951 000.

**Tveit Regnskap AS**

Located in Skjold, the company had NOK 103 013 942 in turnover and 150 employees in 2013. The annual result was NOK 7 622 220.

**Visma Services AS**

With the main office located in Bergen, their annual turnover in 2013 was NOK 909 029 466 in 2013. They had a total of 957 employees and an annual result of NOK 46 328 758. The case firm Visma Service Lillestrøm AS is one of several companies included in Visma Services AS. The local office in Lillestrøm is the case firm in scrutiny here.

Appendix 2: Summary of income statement small firms

<table>
<thead>
<tr>
<th>Small firms</th>
<th>Average</th>
<th>Average %</th>
<th>Min.</th>
<th>Max</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue</td>
<td>4 651</td>
<td>99.65 %</td>
<td>1 250</td>
<td>12 853</td>
<td>4 011</td>
</tr>
<tr>
<td>Other operating income</td>
<td>16</td>
<td>0.35 %</td>
<td>0</td>
<td>216</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total operating income</strong></td>
<td>4 668</td>
<td>100.00 %</td>
<td>1 324</td>
<td>12 853</td>
<td>4 011</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>83</td>
<td>1.77 %</td>
<td>0</td>
<td>454</td>
<td>11</td>
</tr>
<tr>
<td>Cost of wages</td>
<td>3 267</td>
<td>70.00 %</td>
<td>966</td>
<td>9 374</td>
<td>2 714</td>
</tr>
<tr>
<td>Pension costs</td>
<td>29</td>
<td>0.63 %</td>
<td>0</td>
<td>77</td>
<td>33</td>
</tr>
<tr>
<td>Depreciation</td>
<td>35</td>
<td>0.75 %</td>
<td>0</td>
<td>181</td>
<td>26</td>
</tr>
<tr>
<td>Write downs</td>
<td>-</td>
<td>0.00 %</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Loss on receivables</td>
<td>5</td>
<td>0.11 %</td>
<td>0</td>
<td>76</td>
<td>0</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>879</td>
<td>18.83 %</td>
<td>237</td>
<td>1 915</td>
<td>830</td>
</tr>
<tr>
<td>Cost of rent</td>
<td>-</td>
<td>0.00 %</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>4 269</td>
<td>91.46 %</td>
<td>1 285</td>
<td>11 214</td>
<td>3 676</td>
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<tr>
<td><strong>Total operating profit</strong></td>
<td>399</td>
<td>8.55 %</td>
<td>-108</td>
<td>1 701</td>
<td>184</td>
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<td>52</td>
<td>1.11 %</td>
<td>2</td>
<td>427</td>
<td>13</td>
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<tr>
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<td>9</td>
<td>0.20 %</td>
<td>0</td>
<td>68</td>
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<td><strong>Ordinary result before taxes</strong></td>
<td>441</td>
<td>9.45 %</td>
<td>-109</td>
<td>1 802</td>
<td>189</td>
</tr>
<tr>
<td>Taxes</td>
<td>119</td>
<td>2.54 %</td>
<td>-30</td>
<td>499</td>
<td>57</td>
</tr>
<tr>
<td><strong>Annual result</strong></td>
<td>323</td>
<td>6.91 %</td>
<td>-79</td>
<td>1 303</td>
<td>131</td>
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Appendix 3: Summary of income statement medium firms

<table>
<thead>
<tr>
<th>Medium firms</th>
<th>Average</th>
<th>Average %</th>
<th>Min.</th>
<th>Max</th>
<th>Median</th>
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<tbody>
<tr>
<td>Sales revenue</td>
<td>26 437</td>
<td>98,48 %</td>
<td>11 477</td>
<td>42 649</td>
<td>26 337</td>
</tr>
<tr>
<td>Other operating income</td>
<td>407</td>
<td>1,52 %</td>
<td>0</td>
<td>2 269</td>
<td>0</td>
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<tr>
<td><strong>Total operating income</strong></td>
<td><strong>26 844</strong></td>
<td><strong>100 %</strong></td>
<td><strong>11 477</strong></td>
<td><strong>44 649</strong></td>
<td><strong>26 337</strong></td>
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<td>815</td>
<td>3,04 %</td>
<td>-11</td>
<td>2 397</td>
<td>594</td>
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<tr>
<td>Cost of wages</td>
<td>13 836</td>
<td>51,54 %</td>
<td>1</td>
<td>30 572</td>
<td>13 293</td>
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<tr>
<td>Pension costs</td>
<td>640</td>
<td>2,38 %</td>
<td>0</td>
<td>1 607</td>
<td>395</td>
</tr>
<tr>
<td>Depreciation</td>
<td>326</td>
<td>1,21 %</td>
<td>77</td>
<td>713</td>
<td>232</td>
</tr>
<tr>
<td>Write-downs</td>
<td>192</td>
<td>0,71 %</td>
<td>0</td>
<td>2 878</td>
<td>0</td>
</tr>
<tr>
<td>Loss on receivables</td>
<td>-</td>
<td>0,00 %</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>4 315</td>
<td>16,07 %</td>
<td>0</td>
<td>11 716</td>
<td>3 477</td>
</tr>
<tr>
<td>Cost of rent</td>
<td>-</td>
<td>0,00 %</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td><strong>24 324</strong></td>
<td><strong>90,61 %</strong></td>
<td><strong>10 466</strong></td>
<td><strong>43 169</strong></td>
<td><strong>23 606</strong></td>
</tr>
<tr>
<td><strong>Total operating profit</strong></td>
<td><strong>2 520</strong></td>
<td><strong>9,39 %</strong></td>
<td><strong>289</strong></td>
<td><strong>5 268</strong></td>
<td><strong>1 981</strong></td>
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<td>324</td>
<td>1,21 %</td>
<td>27</td>
<td>831</td>
<td>270</td>
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<tr>
<td>Financial costs</td>
<td>76</td>
<td>0,28 %</td>
<td>0</td>
<td>279</td>
<td>19</td>
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<td><strong>Ordinary result before taxes</strong></td>
<td><strong>2 768</strong></td>
<td><strong>10,31 %</strong></td>
<td><strong>355</strong></td>
<td><strong>5 512</strong></td>
<td><strong>2 223</strong></td>
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<tr>
<td>Taxes</td>
<td>755</td>
<td>2,81 %</td>
<td>103</td>
<td>1 570</td>
<td>598</td>
</tr>
<tr>
<td><strong>Annual result</strong></td>
<td>2 013</td>
<td>7,50 %</td>
<td>252</td>
<td>3 942</td>
<td>1 695</td>
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Appendix 4: Summary of income statement large firms

<table>
<thead>
<tr>
<th>Large firms</th>
<th>Average</th>
<th>Average %</th>
<th>Min.</th>
<th>Max</th>
<th>Median</th>
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<tbody>
<tr>
<td>Sales revenue</td>
<td>229 546</td>
<td>99,74 %</td>
<td>25 252</td>
<td>90 029</td>
<td>90 328</td>
</tr>
<tr>
<td>Other operating income</td>
<td>592</td>
<td>0,26 %</td>
<td>-245</td>
<td>3 870</td>
<td>336</td>
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<tr>
<td><strong>Total operating income</strong></td>
<td><strong>230 138</strong></td>
<td><strong>100 %</strong></td>
<td><strong>29 122</strong></td>
<td><strong>909 428</strong></td>
<td><strong>90 664</strong></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>9 612</td>
<td>4,18 %</td>
<td>0</td>
<td>30 664</td>
<td>5 799</td>
</tr>
<tr>
<td>Cost of wages</td>
<td>122 402</td>
<td>53,19 %</td>
<td>0</td>
<td>626 444</td>
<td>35 896</td>
</tr>
<tr>
<td>Pension costs</td>
<td>4 052</td>
<td>1,76 %</td>
<td>355</td>
<td>17 914</td>
<td>2 206</td>
</tr>
<tr>
<td>Depreciation</td>
<td>5 499</td>
<td>2,39 %</td>
<td>443</td>
<td>23 576</td>
<td>1 131</td>
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<tr>
<td>Write-downs</td>
<td>149</td>
<td>0,06 %</td>
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<td>1 032</td>
<td>0</td>
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<tr>
<td>Loss on receivables</td>
<td>220</td>
<td>0,10 %</td>
<td>0</td>
<td>3 307</td>
<td>0</td>
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<tr>
<td>Other operating expenses</td>
<td>33 264</td>
<td>14,45 %</td>
<td>0</td>
<td>166 613</td>
<td>14 240</td>
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<tr>
<td>Cost of rent</td>
<td>9 737</td>
<td>4,23 %</td>
<td>0</td>
<td>53 711</td>
<td>0</td>
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<tr>
<td><strong>Total operating expenses</strong></td>
<td><strong>212 658</strong></td>
<td><strong>92,40 %</strong></td>
<td><strong>27 333</strong></td>
<td><strong>847 298</strong></td>
<td><strong>81 249</strong></td>
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<tr>
<td><strong>Total operating profit</strong></td>
<td><strong>17 480</strong></td>
<td><strong>7,60 %</strong></td>
<td><strong>434</strong></td>
<td><strong>78 335</strong></td>
<td><strong>7 396</strong></td>
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<tr>
<td>Financial income</td>
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<td>0,45 %</td>
<td>42</td>
<td>3 813</td>
<td>209</td>
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<tr>
<td>Financial costs</td>
<td>212</td>
<td>0,09 %</td>
<td>10</td>
<td>775</td>
<td>67</td>
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<tr>
<td><strong>Ordinary result before taxes</strong></td>
<td><strong>18 306</strong></td>
<td><strong>7,95 %</strong></td>
<td><strong>74</strong></td>
<td><strong>81 960</strong></td>
<td><strong>8 016</strong></td>
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<td>2,31 %</td>
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<td>24 129</td>
<td>2 195</td>
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<td>5,65 %</td>
<td>-331</td>
<td>57 831</td>
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Appendix 5: Summary of balance sheet small firms

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<thead>
<tr>
<th>Assets</th>
<th>Average</th>
<th>Average %</th>
<th>Min.</th>
<th>Max</th>
<th>Median</th>
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<tbody>
<tr>
<td><strong>Intangible assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D</td>
<td>-</td>
<td>0,00 %</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patents and licenses</td>
<td>1</td>
<td>0,04 %</td>
<td>25</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>22</td>
<td>0,95 %</td>
<td>144</td>
<td>-</td>
<td></td>
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<tr>
<td>Goodwill</td>
<td>0</td>
<td>0,02 %</td>
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<td>-</td>
<td></td>
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<tr>
<td><strong>Total intangible assets</strong></td>
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<td>144</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Land, buildings and other real estate</td>
<td>32</td>
<td>1,38 %</td>
<td>346</td>
<td>-</td>
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<tr>
<td>Machinery and equipment</td>
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<td>0,23 %</td>
<td>159</td>
<td>-</td>
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<td>Movables/Inventories/etc.</td>
<td>122</td>
<td>5,29 %</td>
<td>626</td>
<td>80</td>
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<tr>
<td><strong>Total tangible assets</strong></td>
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<td>6,91 %</td>
<td>1 078</td>
<td>80</td>
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<tr>
<td><strong>Financial assets</strong></td>
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<td></td>
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</tr>
<tr>
<td>Shares and invest. in subsid.</td>
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<td>50</td>
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<td>25</td>
<td>-</td>
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<td>833</td>
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<td>Inventories</td>
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<td>Other short-term receivables</td>
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<td>Other short-term receivables group comp.</td>
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<td>-</td>
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<td>-</td>
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<td>Bank deposits and cash</td>
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<table>
<thead>
<tr>
<th>Equity &amp; liabilities</th>
<th>Average</th>
<th>Average %</th>
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<th>Max</th>
<th>Median</th>
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<td><strong>Equity</strong></td>
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<td><strong>Total retained earnings</strong></td>
<td>643</td>
<td>27,92 %</td>
<td>-166</td>
<td>1 470</td>
<td>593</td>
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<td><strong>Total equity</strong></td>
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<td>Average %</td>
<td>Min.</td>
<td>Max</td>
<td>Median</td>
</tr>
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<td><strong>Intangible assets</strong></td>
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<tr>
<td>R&amp;D</td>
<td>-</td>
<td>0,00 %</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patents and licenses</td>
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<td>-</td>
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<td>0,72 %</td>
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<tr>
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<td>38</td>
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<td><strong>Tangible assets</strong></td>
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<tr>
<td>Land, buildings and other real estate</td>
<td>501</td>
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<tr>
<td>Movables/Inventories/etc.</td>
<td>574</td>
<td>4,40 %</td>
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<tr>
<td>Total tangible assets</td>
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<td>8,25 %</td>
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<tr>
<td>Shares and invest. in subsid.</td>
<td>392</td>
<td>3,01 %</td>
<td>-</td>
<td>1 500</td>
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<tr>
<td>Invest. in group companies etc.</td>
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<td>Bonds and other long-term receivables</td>
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<td>16,52 %</td>
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<td>5 375</td>
<td>1 679</td>
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<td><strong>Current assets</strong></td>
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<td></td>
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<tr>
<td>Accounts receivable</td>
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<td>21,51 %</td>
<td>595</td>
<td>6 423</td>
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<td>Other short-term receivables</td>
<td>1 085</td>
<td>8,32 %</td>
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<td>4 054</td>
<td>365</td>
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<td>Other short-term receivables group comp.</td>
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<td>0,77 %</td>
<td>-</td>
<td>591</td>
<td>-</td>
</tr>
<tr>
<td>Payments to be received from owners</td>
<td>491</td>
<td>3,77 %</td>
<td>-</td>
<td>4 877</td>
<td>-</td>
</tr>
<tr>
<td>Total receivables</td>
<td>4 481</td>
<td>34,38 %</td>
<td>1 462</td>
<td>8 816</td>
<td>3 828</td>
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<td>Marketable shares</td>
<td>134</td>
<td>1,02 %</td>
<td>-</td>
<td>957</td>
<td>-</td>
</tr>
</tbody>
</table>

Appendix 6: Summary of balance sheet medium firms
<table>
<thead>
<tr>
<th>Equity &amp; liabilities</th>
<th>Average</th>
<th>Min.</th>
<th>Max</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>%</td>
<td></td>
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<tr>
<td><strong>Marketable obligations</strong></td>
<td>200</td>
<td>1,53%</td>
<td></td>
<td></td>
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<tr>
<td><strong>Total investments</strong></td>
<td>334</td>
<td>2,56%</td>
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<td></td>
</tr>
<tr>
<td>Bank deposits and cash</td>
<td>6 064</td>
<td>46,54%</td>
<td>386</td>
<td>12 373</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>10 878</td>
<td>83,48%</td>
<td>2 005</td>
<td>17 066</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>13 032</td>
<td>100,00%</td>
<td>4 222</td>
<td>19 106</td>
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<table>
<thead>
<tr>
<th><strong>Equity</strong></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>765</td>
<td>5,87%</td>
<td>100</td>
<td>2 174</td>
</tr>
<tr>
<td>Share premium reserve</td>
<td>253</td>
<td>1,94%</td>
<td></td>
<td>1 900</td>
</tr>
<tr>
<td>Other paid-up equity</td>
<td>2</td>
<td>0,01%</td>
<td></td>
<td></td>
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<tr>
<td><strong>Total paid-up capital</strong></td>
<td>1 020</td>
<td>7,83%</td>
<td>100</td>
<td>3 700</td>
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<tr>
<td>Retained equity</td>
<td>3 769</td>
<td>28,92%</td>
<td></td>
<td>12 618</td>
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<tr>
<td>Uncovered loss</td>
<td>-10</td>
<td>-0,07%</td>
<td></td>
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<tr>
<td><strong>Total retained earnings</strong></td>
<td>3 759</td>
<td>28,84%</td>
<td>-146</td>
<td>12 618</td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td>4 779</td>
<td>36,67%</td>
<td>1 721</td>
<td>13 218</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Long-term debt</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension liabilities</td>
<td>483</td>
<td>3,71%</td>
<td></td>
<td>2 454</td>
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<tr>
<td>Deferred tax</td>
<td>21</td>
<td>0,16%</td>
<td></td>
<td>198</td>
</tr>
<tr>
<td><strong>Total allowances for liabilities</strong></td>
<td>504</td>
<td>3,87%</td>
<td></td>
<td>2 454</td>
</tr>
<tr>
<td>Long-term debt to financial institutions</td>
<td>503</td>
<td>3,86%</td>
<td></td>
<td>2 863</td>
</tr>
<tr>
<td>Other long-term debt</td>
<td>37</td>
<td>0,28%</td>
<td></td>
<td>240</td>
</tr>
<tr>
<td><strong>Total long-term liabilities</strong></td>
<td>1 044</td>
<td>8,01%</td>
<td></td>
<td>5 218</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Short-term debt</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Certificate loans</td>
<td>1 123</td>
<td>8,62%</td>
<td></td>
<td>6 000</td>
</tr>
<tr>
<td>Short-term debt to financial institutions</td>
<td>52</td>
<td>0,40%</td>
<td></td>
<td>631</td>
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<tr>
<td>Accounts payable</td>
<td>650</td>
<td>4,99%</td>
<td>130</td>
<td>2 283</td>
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<tr>
<td>Tax payable</td>
<td>366</td>
<td>2,81%</td>
<td></td>
<td>1 303</td>
</tr>
<tr>
<td>Public duties payable</td>
<td>1 709</td>
<td>13,12%</td>
<td>574</td>
<td>3 107</td>
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<tr>
<td>Dividend</td>
<td>305</td>
<td>2,34%</td>
<td></td>
<td>1 500</td>
</tr>
<tr>
<td>Short-term group debt</td>
<td>118</td>
<td>0,91%</td>
<td></td>
<td>1 470</td>
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<tr>
<td>Other short-term debt</td>
<td>2 884</td>
<td>22,13%</td>
<td>752</td>
<td>6 130</td>
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<tr>
<td><strong>Total current debt</strong></td>
<td>7 209</td>
<td>55,32%</td>
<td>1 782</td>
<td>12 806</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>8 253</td>
<td>63,33%</td>
<td>1 936</td>
<td>17 030</td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td>13 032</td>
<td>100,00%</td>
<td>4 222</td>
<td>19 106</td>
</tr>
</tbody>
</table>
Appendix 7: Summary of balance sheet large firms

<table>
<thead>
<tr>
<th>Assets</th>
<th>Average</th>
<th>Average</th>
<th>Min.</th>
<th>Max</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intangible assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D</td>
<td>53</td>
<td>0,05 %</td>
<td>-</td>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>Patents and licenses</td>
<td>437</td>
<td>0,38 %</td>
<td>-</td>
<td>1 789</td>
<td>-</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>101</td>
<td>0,09 %</td>
<td>-</td>
<td>444</td>
<td>27</td>
</tr>
<tr>
<td>Goodwill</td>
<td>27 624</td>
<td>23,78 %</td>
<td>967</td>
<td>117 467</td>
<td>10 157</td>
</tr>
<tr>
<td><strong>Total intangible assets</strong></td>
<td>28 215</td>
<td>24,29 %</td>
<td>1 466</td>
<td>117 467</td>
<td>11 117</td>
</tr>
<tr>
<td><strong>Tangible assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land, buildings and other real estate</td>
<td>915</td>
<td>0,79 %</td>
<td>-</td>
<td>4 814</td>
<td>-</td>
</tr>
<tr>
<td>Movables/Inventories/etc.</td>
<td>4 254</td>
<td>3,66 %</td>
<td>220</td>
<td>15 900</td>
<td>1 201</td>
</tr>
<tr>
<td><strong>Total tangible assets</strong></td>
<td>5 168</td>
<td>4,45 %</td>
<td>220</td>
<td>15 900</td>
<td>1 201</td>
</tr>
<tr>
<td><strong>Financial assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares and invest. in subsid.</td>
<td>566</td>
<td>0,49 %</td>
<td>-</td>
<td>2 829</td>
<td>-</td>
</tr>
<tr>
<td>Invest. in group companies etc.</td>
<td>88</td>
<td>0,08 %</td>
<td>-</td>
<td>438</td>
<td>-</td>
</tr>
<tr>
<td>Investments in associated comp.</td>
<td>3 249</td>
<td>2,80 %</td>
<td>-</td>
<td>20 540</td>
<td>-</td>
</tr>
<tr>
<td>Equities and investments</td>
<td>12</td>
<td>0,01 %</td>
<td>-</td>
<td>61</td>
<td>-</td>
</tr>
<tr>
<td>Bonds and other long-term receivables</td>
<td>260</td>
<td>0,22 %</td>
<td>-</td>
<td>1 771</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total financial assets</strong></td>
<td>4 175</td>
<td>3,59 %</td>
<td>142</td>
<td>21 877</td>
<td>2 000</td>
</tr>
<tr>
<td><strong>Total fixed assets</strong></td>
<td>37 558</td>
<td>32,33 %</td>
<td>5 581</td>
<td>136 245</td>
<td>12 562</td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>33 072</td>
<td>28,47 %</td>
<td>4 980</td>
<td>128 424</td>
<td>13 811</td>
</tr>
<tr>
<td>Other short-term receivables</td>
<td>3 508</td>
<td>3,02 %</td>
<td>4</td>
<td>20 562</td>
<td>801</td>
</tr>
<tr>
<td>Other short-term receivables group comp.</td>
<td>1 347</td>
<td>1,16 %</td>
<td>-</td>
<td>5 006</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total receivables</strong></td>
<td>37 927</td>
<td>32,65 %</td>
<td>7 397</td>
<td>137 552</td>
<td>16 152</td>
</tr>
<tr>
<td><strong>Investments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketable shares</td>
<td>4</td>
<td>0,00 %</td>
<td>-</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>Other financial instruments</td>
<td>3</td>
<td>0,00 %</td>
<td>-</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total investments</strong></td>
<td>7</td>
<td>0,01 %</td>
<td>-</td>
<td>27</td>
<td>-</td>
</tr>
<tr>
<td>Bank deposits and cash</td>
<td>40 674</td>
<td>35,01 %</td>
<td>655</td>
<td>156 460</td>
<td>14 638</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>78 608</td>
<td>67,67 %</td>
<td>8 052</td>
<td>294 012</td>
<td>31 971</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>116 166</td>
<td>100,00 %</td>
<td>14 137</td>
<td>409 734</td>
<td>43 992</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity &amp; liabilities</th>
<th>Average</th>
<th>Average</th>
<th>Min.</th>
<th>Max</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>5 405</td>
<td>4,65 %</td>
<td>835</td>
<td>14 280</td>
<td>4 005</td>
</tr>
<tr>
<td>Share premium reserve</td>
<td>5 003</td>
<td>4,31 %</td>
<td>-</td>
<td>42 860</td>
<td>-</td>
</tr>
<tr>
<td>Other paid-up equity</td>
<td>16 956</td>
<td>14,60 %</td>
<td>-</td>
<td>78 543</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total paid-up capital</strong></td>
<td>27 364</td>
<td>23,56 %</td>
<td>835</td>
<td>91 100</td>
<td>4 420</td>
</tr>
<tr>
<td>Retained equity</td>
<td>18 392</td>
<td>15,83 %</td>
<td>-555</td>
<td>66 213</td>
<td>14 575</td>
</tr>
<tr>
<td><strong>Total retained earnings</strong></td>
<td>18 392</td>
<td>15,83 %</td>
<td>-555</td>
<td>66 213</td>
<td>14 575</td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td>45 756</td>
<td>39,39 %</td>
<td>2 970</td>
<td>153 646</td>
<td>24 109</td>
</tr>
</tbody>
</table>

**Long-term debt**
Pension liabilities 101 0,09 % - 652 -
Deferred tax 3 212 2,77 % - 18 442 -
**Total allowances for liabilities** 3 313 2,85 % - 18 910 -
Long-term debt to financial institutions 872 0,75 % - 5 632 -
**Total long-term liabilities** 4 185 3,60 % - 18 910 260

**Short-term debt**
Short-term debt to financial institutions 437 0,38 % - 4 669 -
Accounts payable 6 123 5,27 % 985 30 084 2 126
Tax payable 1 406 1,21 % - 4 319 989
Public duties payable 18 474 15,90 % 1 904 73 851 7 991
Short-term group debt 924 0,80 % - 8 520 -
Other short-term debt 38 861 33,45 % 2 372 163 369 11 964
**Total current debt** 66 226 57,01 % 7 719 267 304 25 596
**Total liabilities** 70 411 60,61 % 10 829 280 904 25 596
**Total equity and liabilities** 116 166 100,00 % 14 137 409 734 43 992

Appendix 8: Sales revenue per employee (in NOK 1000)

<table>
<thead>
<tr>
<th>Large firms</th>
<th>Employees</th>
<th>Sales revenue</th>
<th>Per employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISMA SERVICES NORGE AS</td>
<td>957</td>
<td>909 029</td>
<td>950</td>
</tr>
<tr>
<td>SPAREBANK 1 REGNSKAPSHUSET SMN AS</td>
<td>152</td>
<td>132 523</td>
<td>872</td>
</tr>
<tr>
<td>TVEIT REGNSKAP AS</td>
<td>150</td>
<td>103 014</td>
<td>687</td>
</tr>
<tr>
<td>PWC ACCOUNTING AS</td>
<td>57</td>
<td>77 417</td>
<td>1 358</td>
</tr>
<tr>
<td>NETLEDGER AS</td>
<td>65</td>
<td>56 690</td>
<td>872</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td></td>
<td>948</td>
</tr>
</tbody>
</table>

| Medium firms                 |           |               |              |
| PLUSS-ØKONOMI AS             | 24        | 19 420        | 809          |
| JARLE TARALDSEN REGNSKAPSKONTOR AS | 19       | 19 637        | 1 034        |
| PBL REGNSKAP AS              | 36        | 29 456        | 818          |
| HASLESTAD REGNSKAP AS        | 42        | 42 380        | 1 009        |
| JANSSON & LARSEN REGNSKAP AS | 23        | 37 080        | 1 612        |
| **Average**                  |           |               | 1 056        |

| Small firms                  |           |               |              |
| SUM REGNSKAP AS              | 5         | 6 091         | 1 218        |
| AKTIVA SOLSIDEN AS           | 6         | 5 750         | 958          |
| SKEDSMO REGNSKAPSKONTOR AS   | 11        | 12 853        | 1 168        |
| AVERDI NARVIK AS             | 7         | 4 883         | 698          |
| TET KRISTIANSAND AS          | 9         | 8 749         | 972          |
| REGNSKAPSSENTRET AS          | 4         | 2 712         | 678          |
| ØKONOMISERVICE AS            | 3         | 2 417         | 806          |
| ON TIME REGNSKAP AS          | 4         | 2 733         | 683          |
| VS REGNSKAP AS               | 6         | 3 608         | 601          |
| GN-REGNSKAP AS               | 3         | 2 171         | 724          |
| **Average**                  |           |               | 851          |
Appendix 9: Operating result per employee (in NOK 1000)

<table>
<thead>
<tr>
<th>Large firms</th>
<th>Employees</th>
<th>Operating result</th>
<th>Per employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISMA SERVICES NORGE AS</td>
<td>957</td>
<td>62 130</td>
<td>65</td>
</tr>
<tr>
<td>SPAREBANK 1 REGNSKAPSHUSET SMN AS</td>
<td>152</td>
<td>14 711</td>
<td>97</td>
</tr>
<tr>
<td>TVEIT REGNSKAP AS</td>
<td>150</td>
<td>9 360</td>
<td>62</td>
</tr>
<tr>
<td>PWC ACCOUNTING AS</td>
<td>57</td>
<td>2 154</td>
<td>38</td>
</tr>
<tr>
<td>NETLEDGER AS</td>
<td>65</td>
<td>434</td>
<td>7</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td></td>
<td><strong>54</strong></td>
</tr>
<tr>
<td><strong>Medium firms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLUSS-ØKONOMI AS</td>
<td>24</td>
<td>824</td>
<td>34</td>
</tr>
<tr>
<td>JARLE TARALDSEN REGNSKAPSKONTOR AS</td>
<td>19</td>
<td>3 957</td>
<td>208</td>
</tr>
<tr>
<td>PBL REGNSKAP AS</td>
<td>36</td>
<td>289</td>
<td>8</td>
</tr>
<tr>
<td>HASLESTAD REGNSKAP AS</td>
<td>42</td>
<td>1 480</td>
<td>35</td>
</tr>
<tr>
<td>JANSSON &amp; LARSEN REGNSKAP AS</td>
<td>23</td>
<td>5 268</td>
<td>229</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td></td>
<td><strong>103</strong></td>
</tr>
<tr>
<td><strong>Small firms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUM REGNSKAP AS</td>
<td>5</td>
<td>865</td>
<td>173</td>
</tr>
<tr>
<td>AKTIVA SOLSIDEN AS</td>
<td>6</td>
<td>165</td>
<td>28</td>
</tr>
<tr>
<td>SKEDSMO REGNSKAPSKONTOR AS</td>
<td>11</td>
<td>1 639</td>
<td>149</td>
</tr>
<tr>
<td>AVERDI NARVIK AS</td>
<td>7</td>
<td>620</td>
<td>89</td>
</tr>
<tr>
<td>TET KRISTIANSAND AS</td>
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<td>365</td>
<td>41</td>
</tr>
<tr>
<td>REGNSKAPSSENTRET AS</td>
<td>4</td>
<td>-30</td>
<td>-8</td>
</tr>
<tr>
<td>ØKONOMISERVICE AS</td>
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<td>58</td>
</tr>
<tr>
<td>ON TIME REGNSKAP AS</td>
<td>4</td>
<td>131</td>
<td>33</td>
</tr>
<tr>
<td>VS REGNSKAP AS</td>
<td>6</td>
<td>185</td>
<td>31</td>
</tr>
<tr>
<td>GN-REGNSKAP AS</td>
<td>3</td>
<td>191</td>
<td>64</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td></td>
<td><strong>66</strong></td>
</tr>
</tbody>
</table>
Appendix 10: Interview guide Sum Regnskap AS – (face-to-face interview)

**Introduction**
- Short presentation of who I am what I do
- Short presentation of the topic and research question
- Ask if it is OK to record the interview
- Can I contact you at a later stage if needed?
- Are there any questions before we start?

**Part 1 - About the firm and profitability**

*About the firm*
- Why did you start an accountancy firm?
- How many employees do you have today?
- Do you have an ambition to have the company grow from its current size?
- How do you think firm size affects the overall profitability?
- Which services are you providing for your clients?

*Revenue drivers*
- What are your main sources of revenue?
- Do you see a change in revenue due to changes in technology and the adoption of new technology?
- Are you using a model in the calculation of prices?
- Are prices adapted individually for each client, or are you using fixed/standard prices?
- Do you have any thoughts about which customers that are the most valuable for the company?

*Cost drivers*
- What are the main sources of costs/expenses in your company?
- Do you see any changes due to changes in technology and the adoption of new technology?
- Have you made any specific investments due to changes/more adoption to new technology?
- Are you currently working on reducing costs? If yes, how?
- Which challenges are you facing in terms of the overall costs?
- Is your company focused on outsourcing/offshoring part(s) of the work process?
- Are you using any models to calculate costs?

**Part 2 - Changes in the accounting industry**

*Changes in technology*
- Which changes in technology are you experiencing today?
- Has this change taken place over a long time, or has it been rather abrupt?
- How are the changes affecting your company?
- How do you think the industry will look like in 5-10 years?
- *Will the extra saved time from automation be spent on more counseling/advisory services of clients? (follow-up question)*

*Strategic positioning*
- How do you work to adapt to changes?
- Are you following a differentiation strategy or a low cost strategy? (follow-up question)
- How do you think the future accountancy firm will look like?
- How do you work with the employees to adapt to changes?
- What do you look for when recruiting new people?
- Are you facing local- or national competition?
- How do you see the future?

Appendix 11: Interview guide - follow-up interview via e-mail – Sum Regnskap AS

These questions were asked in order to clarify or to get additional information about what was discovered in the first interview and in the annual reports.

Scale and capacity utilization
- What are the estimated annual work hours for each employee? How many employees is this number based on?)
- How much do you spend on wages each year?
- How many of your current employees have a master’s/bachelor degree? Is there a difference in salaries between these two groups?
- Are you currently hiring more people with a master’s degree than you used to?
- Are employees with a master’s degree more effective/profitable than other employees?
- Do you see any economies of scale when your firm is growing? Are you working to achieve any economies of scale?
- How many customers/clients (ca.) do you currently have? Do you see an increase in the number of customers/clients?
- Do you see any changes between your offices in Stavanger and Tønsberg?

Learning and cooperation/interrelationships
- How much money do you spend on vocational training of each employee?
- How long does the training take? Are new employees quickly ready to work independently?
- How much do you spend on business trips with the employees? Are you having strategy meetings etc. on these trips?
- Do you see any costs associate with coordinating work between your two offices, or are they independent of each other?
- Do you experience that employees quit their job and start working in other firms or industries?

Technology
- How much do you invest in software each year?
- Are you buying any external consultancy services in order to implement new technology/software?
- What is the software cost each year? (Licensing, operation, maintenance etc.)
- Which IT-systems do you use in your work process?
- Do you have any additional costs related to your software provider?
- Do you have any costs in implementing software at your clients’ offices?
- How much of total costs (ca.) is related to software and the use of software in the work process?

Appendix 12: Interview guide Visma Service Lillestrøm AS – (face-to-face interview)

**Introduction**
- Short presentation of who I am what I do
- Short presentation of the topic and research question
- Ask if it is OK to record the interview
- Can I contact you at a later stage if needed?
- Are there any questions before we start?

**Part 1 – About the firm and profitability**

**About the firm**
- How many employees do you have today?
- Do you know if Visma has a strategy to change from where they are today? What is the current strategy?
- Which services is your office providing for your clients?

**Revenue drivers**
- What are your main sources of revenue?
- Do you see a change in revenue due to changes in technology and the adaption of new technology?
- Are you using a model in the calculation of prices? Are prices adapted individually for each client, or are you using fixed/standard prices?
- Do you have any thoughts about which customers that are the most valuable for the company?
- Are your employees focused on selling software to their clients?

**Cost drivers**
- What are the main sources of costs in your company?
- Which activities are the drivers of costs? Do you have any licensing fees for the usage of the software developed in the Visma group?
- Do you see any changes due to changes in technology and the adaption of new technology?
- Are you currently working on reducing costs? If yes, how?
- Which challenges are you facing in terms of the overall costs?
- Is your company focused on outsourcing/offshoring part(s) of the work process?
- Are you using any models to calculate costs?

**Part 2 - Changes in the accounting industry**

**Changes in technology**
- Which changes in technology are you experiencing today?
- Has this change taken place over a long time, or has it been rather abrupt?
- Are you experiencing any competition from auditors after the exemption of audit for smaller corporations took effect?
- How are the changes affecting your firm?

**Strategic positioning**
- How do you work to adapt to changes? Which strategies do you have? How do you work with the employees?
- What do you look for when recruiting new people?
- How do you think the industry must change in order to be competitive in the future?
- Are you experiencing any competition from other firms external to the accounting industry?
- How is the competition within the industry? Is it local?
- Can outsourcing/offshoring be a good alternative for other firms in the future?
- Are you cooperating with other firms or other business units within Visma? Any cooperation with software providers?
- How do you think the industry will look like in 5-10 years?

Appendix 13: Interview guide - follow-up interview via e-mail – Visma Services Lillestrøm AS

These questions were asked in order to clarify or to get additional information about what was discovered in the first interview and in the annual reports.

**Scale and capacity utilization**
- What are the estimated annual work hours for each employee? How many employees is this number based on?)
- How much do you spend on wages each year?
- How many of your current employees have a master’s/bachelor degree? Is there a difference in salaries between these two groups?
- Are you currently hiring more people with a master’s degree than you used to?
- Are employees with a master’s degree more effective/profitable than other employees?
- Do you see any economies of scale in your office? Are you working to achieve any economies of scale?
- How many customers/clients (ca.) do you currently have? Do you see an increase in the number of customers/clients?

**Learning and cooperation/interrelationships**
- How much money do you spend on vocational training of each employee?
- How long does the training take? Are new employees quickly ready to work independently?
- Do you see any difference between your office and other offices in Visma?
- Do you see any costs associate with coordination between your office and the other offices in Visma, or are they independent of each other?
- How much does the trainee program cost?
- Do you experience that employees quit their job and start working in other firms or industries?
Technology
- How much does Visma invest in software each year?
- What is the software cost (if any) each year? (Licensing, operation, maintenance etc.)
- Which IT-systems do you use in your work process?
- Do you have any costs in implementing software at your clients’ offices?
- How much of total costs (ca.) is related to software and the use of software in the work process?