



FACULTY OF EDUCATION AND BUSINESS STUDIES
Department of Business and Economics Studies

Why voluntarily return to auditing?

A study on small firms in Sweden that voluntarily returned back to auditing after abandoning it after the law changed in 2010

Lovisa Larsson
Evelina Simonsson

2019

Master Thesis, 15 Credits
Business Administration
Master Programme in Business Administration
Master Thesis in Business Administration

Supervisor: Catherine Lions
Examiner: Arne Fagerström

Acknowledgements

We would like to thank our supervisor, Catherine Lions, for her support and responses throughout our writing. All your guidance has been valuable for us and we are endlessly thankful for all your thoughts through our thesis. Furthermore, we would like to thank Saeid Hodayoun and Fazle Rahi for your expertise in statistical issues. We would also like to thank our opponents for proofreading and valuable feedback.

University of Gävle - 2019-06-03

Lovisa Larsson & Evelina Simonsson

Abstract

In 2010 the new law change regarding voluntary auditing in Sweden was implemented. The law change implies small sized companies are exempted from mandatory auditing unless they fulfil certain criteria's. Despite the fact auditing is voluntary for small sized companies some still choose to be audited. Therefore it is interesting to find out why some companies see benefits in voluntary auditing and of existing literature there is mainly focus on some characteristics for choosing auditing. It can be assumed companies that made the choice to abandon auditing evaluated costs higher than benefits but re-evaluated their decision and later returned back. Therefore it is of interest to have a closer look on these companies first abandoning auditing and later changed to voluntary auditing. To our knowledge, there is a research gap on the characteristics for choosing auditing among small sized companies in Sweden returning back to auditing when not obligated to. The aim of our study is therefore to examine the relationship between selected characteristics of the small firms in Sweden and the decision to voluntarily return to be audited again after abandoning it after the law changed. Based on existing literature, selected characteristics are firm size, ownership structure, leverage and profitability.

To achieve the purpose of this study a quantitative method with a deductive approach was applied. In order to answer our purpose, hypotheses were developed according to relevant theories and previous literature. Data regarding the companies first abandoning and then returning back to auditing were collected and downloaded from the database Retriever. Our hypotheses were tested using a logistic regression. The results indicate there is a positive relationship between firm size and the choice to return to voluntary auditing. The same was also discovered for ownership structure. Our findings cannot confirm any relationship between leverage and voluntary auditing or profitability and voluntary auditing even though our results indicate a positive relationship.

Keywords: *voluntary auditing, firm characteristics, relationship, benefits of auditing*

Sammanfattning

År 2010 verkställdes en lagförändring i Sverige gällande frivillig revision. Lagförändringen innebar att små företag blev undantagna från revisionsplikt förutsatt att de uppfyller vissa kriterier. Även fastän revision är frivilligt för små företag väljer fortfarande vissa av dem att bli reviderade. Därmed är det intressant att undersöka varför vissa företag ser fördelar i frivillig revision och i existerande litteratur ligger huvudfokus på företagsegenskaper relaterade till beslutet av revision. Det kan antas att företag som gjorde valet att överge revision bedömde att kostnaderna översteg fördelarna men senare omvärderade beslutet och återgick till revision. Därför är det av intresse att kolla närmare på dessa företag som först överger revision för att senare frivilligt återgå till revision. Enligt den kunskap vi innehar är det ett gap i forskningen när det gäller företagsegenskaper som ligger till grund för att små företag i Sverige återgår till revision även fast de inte är revisionspliktiga. Vår studie syftar därför till att granska sambandet mellan utvalda företagsegenskaper hos små företag i Sverige och beslutet att frivilligt återgå till att bli reviderade igen efter att ha övergett revision efter lagförändringen. Baserat på existerande litteratur är de utvalda egenskaperna företags storlek, ägarstruktur, skulder och vinst.

För att uppfylla syftet i den här studien har en kvantitativ metod med deduktiv ansats använts. Syftet har besvarats genom att hypoteser utvecklats utifrån relevanta teorier och tidigare litteratur. Information och data om företagen som först överger revision och sedan återvänder till revision hämtades från databasen Retriever. Hypoteserna testades sedan genom logistisk regression. Resultaten indikerar att det finns ett positivt samband mellan ett företags storlek och dess val att återgå till revision. Ett positivt samband påträffades också mellan ägarstruktur och frivillig revision. Enligt våra resultat finns det inget bekräftat samband mellan skulder och frivillig revision eller vinst och frivillig revision, även fast våra resultat visade ett positivt samband.

Nyckelord: *frivillig revision, företagsegenskaper, relation, fördelar med revision*

Table of Contents

| | |
|---|-----------|
| 1. Introduction | 1 |
| 1.1 Background..... | 1 |
| 1.2 Discussion..... | 2 |
| 1.3 Research question and research purpose..... | 5 |
| 1.4 Research contribution | 6 |
| 1.5 Delimitations | 6 |
| 1.6 Disposition..... | 7 |
| 2. Theoretical framework and literature review | 8 |
| 2.1 Rational choice theory | 8 |
| 2.2 Agency theory..... | 9 |
| 2.3 Signalling theory | 11 |
| 2.4 Advantages of auditing | 13 |
| 2.5 Disadvantages of auditing | 15 |
| 2.6 Firm characteristics | 16 |
| 2.6.1 Firm size | 17 |
| 2.6.2 Ownership structure..... | 18 |
| 2.6.3 Leverage | 20 |
| 2.6.4 Profitability..... | 23 |
| 2.6.5 Other discovered characteristics | 23 |
| 2.7 Research model | 23 |
| 3. Method | 25 |
| 3.1 Philosophy of knowledge creation | 25 |
| 3.2 Research method: Quantitative | 26 |
| 3.3 Research Approach: Deduction..... | 27 |
| 3.4 Strategy choices: longitudinal, explanatory and archival | 28 |
| 3.5 Critique of sources | 29 |
| 3.6 Ethical considerations | 29 |
| 3.8 Population | 32 |
| 3.9 Data collection..... | 34 |
| 3.10 Statistical tests..... | 36 |
| 3.10.1 Descriptive analysis..... | 36 |
| 3.10.2 Regression analysis | 36 |
| 4.1 Descriptive statistics | 39 |
| 4.2 Pearson correlation & VIF..... | 41 |
| 4.3 Regression analysis | 43 |
| 4.3.1 Firm size (turnover)..... | 44 |
| 4.3.2 Ownership structure (number of members of the board of directors) | 45 |
| 4.3.3 Leverage (debt to assets) | 45 |
| 4.3.4 Profitability (ROA)..... | 45 |
| 5. Analysis | 47 |
| 5.1 Firm size | 47 |
| 5.2 Ownership structure | 48 |
| 5.3 Leverage | 50 |
| 5.4 Profitability..... | 51 |
| 5.5 Reflections about findings | 52 |
| 6. Conclusion | 54 |
| 6.1 Contributions..... | 55 |
| 6.2 Reliability, validity and limitations..... | 56 |
| 6.3 Suggestions for further research..... | 57 |

7. References..... 58

Models

Model 1: Our research model..... 24

Tables

Table 1: AB in Sweden..... 33

Table 2: AB in Sweden registered before 2010-10-31..... 34

Table 3: Descriptive statistics - No auditing..... 39

Table 4: Descriptive statistics – Auditing..... 39

Table 5: Pearson correlation test..... 42

Table 6: Variance inflation factor (VIF)..... 42

Table 7: Omnibus tests of model coefficients..... 43

Table 8: Hosmer and Lemeshow test..... 43

Table 9: Model summary..... 43

Table 10: Variation in the equation..... 44

1. Introduction

In this chapter a background of our research topic is presented and the reasons for why this study is conducted. This is followed by a discussion of previous literature and highlights a research gap. Additionally, this leads to the creation of a research question and the aim of this paper. Also, research contribution and delimitations of this study are presented.

1.1 Background

“To be or not to be audited?” (Niemi et al., 2012 p. 169). This is a question many small companies face, since today it is possible for certain companies to make their own choice if they want an external audit of their financial statements or not. This was a decision made by the European Commission (EC) allowing small companies to make external auditing voluntary. According to the EU Fourth Company Law Directive (78/660/EEC) exemptions are allowed based on turnover, balance sheet total and number of employees (Collis, 2010). The exemption from mandatory audit for small sized companies in Europe was developed as a result from where EC and national regulators stated that auditing was an immoderate burden.

There has almost been ten years since the law change regarding voluntary auditing in Sweden came into force 2010 (SOU, 2008:32). The law change implies small companies are not forced to be audited by an external auditor. According to Aktiebolagslagen 9:1 two of the following three requirements needs to be fulfilled in two consecutive years in order to be obligated to have an external auditor:

- More than 3 employees
- Total assets over 1.5 million SEK
- Net sales over 3 million SEK

In the preparations for the new law change, the audit exemption, the expectation was controversial about the possibility that many companies would abandon auditing. In different surveys made years before the enactment of the new regulation 60-80 % of the companies claimed they would still choose auditing even if they were not obligated to it by law (SOU, 2008:32, p. 260). In the investigation itself though it was expressed an

expected percentage for voluntary audit right after the law change would be 50 %. Their prediction was also that there would be a decline in the long run since companies would become aware of the alternative methods for auditing. Companies belonging to this category of companies that are not obligated to have auditing and had a strong interest of growing, were supposed to keep their external auditor in the way they were used to. This is because their achievements resulted in keeping their economical services, including the auditor (SOU, 2008:32).

Even though auditing is voluntary for small sized companies there are still those who choose to have their financial reports audited (Dedman et al., 2012). The main benefit of auditing is and has always been the assurance it provides. This assurance is valuable for the company itself and its stakeholders. Companies not obligated to auditing buy the service only for the purpose of reaching the positive aspects deriving from auditing (Blackwell et al., 1998). When it comes to decisions regarding voluntary auditing the companies themselves will have to consider the value of auditing. Focus is aimed on the costs of the audit and the perceived benefits (Lennox & Pittman, 2011).

The main reason for the initial exemption of auditing for small companies was introduced to cut costs for those companies (Dedman et al., 2014). The cost of auditing has been argued to be unreasonably high and the outcome of audit has given limited benefits for the users and therefore the costs exceed the benefits (Collis, 2010; Dedman et al., 2014; Tauringana and Clarke, 2000). Since there are companies voluntarily choosing auditing it become interesting to find out if certain characteristics can explain this. Moreover, companies can use the new law in a more flexible way, since they can review their decision to be audited or not. In particular, it is observed that there are companies that abandoned audit because of costs but later returned to voluntary audit because of the perceived benefits.

1.2 Discussion

This study focuses on which factors affecting mandatory audit exempted companies to choose voluntary auditing. In particular, the firm characteristics for those companies deciding to reverse a former abandon. In existing literature it is possible to find studies from different countries regarding characteristics impacting on voluntary auditing. A few studies have been made in the UK, where the law change of audit exemption was

implemented in 1994 (Collis, 2010; Dedman et al., 2014). Furthermore, studies in Denmark and Finland have been conducted within the same field (Collis 2010; Niemi et al., 2012). In Denmark this audit exemption was introduced in 2006 while in Finland it was introduced one year later, 2007 (Collis, 2010; Niemi et al., 2012). The requirements for this audit exemption vary between the countries and in the UK for example there are higher requirements than in Sweden. The limits in Finland and Denmark on the other hand are more similar to Sweden's.

Tauringana and Clarke (2000) investigated the relationship between the factors of managerial share ownership, company size (in turnover and in total assets), liquidity ratio and gearing ratio and their impact on voluntary auditing in small firms in UK. Support was found for that gearing ratio, size, measured in turnover, and managerial share ownership affected decisions regarding voluntary audit. Seow's (2001) study, conducted on small companies in UK, examined the relationship between voluntary audit and the characteristics ownership share, debt covenants, short- or long-term debts, cost for auditing, if the auditor performs different kinds of services and if the auditor has served the company for a longer time. The findings indicated companies with a non-director shareholder more often had an auditor. Costs for preparing the audit and debt in some ways, depending on the lenders, affected the choice of voluntary audit. Chow's (1982) study focused on large American companies. According to the findings of Chow (1982) there is a relation between leverage, debt covenants and voluntary auditing. Also some support for firm size affecting the choice of voluntary auditing was discovered. The characteristics examined were leverage, debt covenants and firm size. Dedman et al.'s (2014) study examined the determinants of voluntary audit among exempted firms in the UK, including the characteristics ownership dispersion, size and leverage among other factors and how they affect the decision of retain auditing. The findings of the study are that ownership dispersion, company size, leverage, board size and complexity have a relationship with voluntary audit. Collis (2010) examined the relationship between voluntary audit and turnover for the demand for voluntary audit on small companies in the UK and Denmark. Collis (2010) study finds out that turnover itself is not a sufficient explanation for the voluntary audit where also different types of management and agency factors have to be included. According to the findings of Carey et al., (2000) there is a relationship between the two variables leverage and ownership structure and the choice of voluntary auditing. The characteristics examined in this study were firm size, leverage

and ownership and control on family owned companies in Australia. Niemi et al. (2012) examined some characteristics on companies in Finland where they included turnover, outsourced accounting, owners' involvement in the business and leverage and their impact on voluntary auditing. The findings show a relationship between firm size, leverage and the need of a check on internal controls. Furthermore, Haw et al. (2008) investigate the determinants of voluntary auditing on listed Chinese firms that are released from mandatory audit requirements, using interim reports. The characteristics examined were firm size, profitability, tradable shares and receivables and the findings show a relationship between firm size, profitability and tradable shares.

As mentioned above there are several characteristics impacting on companies decision regarding voluntary audit where three of them are most identified according to previous studies. The three most identified characteristics are firm size, ownership structure and leverage (Carey et al., 2000; Chow, 1982; Collis, 2010; Dedman et al., 2014; Haw, 2008; Niemi et al., 2012; Seow, 2001; Tauringana & Clarke, 2000). These factors have an influence on the decision to choose auditing or not. Profitability is another characteristic not as frequently studied compared to the ones mentioned previously. Though it has been studied and a positive relationship between profitability and voluntary auditing has been discovered (Haw et al., 2008). In public companies it is rather obvious that the separation in ownership is one of the major drivers for audit demand. Though in private companies there are also several reasons beside a separated ownership, which can explain the need for auditing (Vanstraelen & Schelleman, 2017). It is argued problems regarding ownership structure exist even in private companies (Abdel-Khalik, 1993). The bigger the company grows the bigger will also the control problem become since the manager will be further away from some parts of the company. Furthermore, studies have shown firm size, measured in turnover, have an impact on a company's decision for voluntary audit (Abdel-Khalik, 1993; Tauringana and Clarke 2000). Companies with a bigger size tend to outsource their accounting to external accountants to a larger extent than companies of a smaller size (Niemi et al., 2012). This result in an agency-type of relationship between the accountant and the managers that leads to an increasing need for audit. The larger the firm size, the higher probability the company will be audited. Also leverage is higher in companies having auditing compared with companies not being audited (Dedman et al., 2014). The main reason for this is because of the financial institutions demand for reviewed information when taking decisions about lending money

to a company. The financial institutions use these reviewed reports to assess the risk of the company and therefore write the debt covenants on this basis. As a result of this it is therefore argued firm size, ownership structure, leverage and profitability are characteristics related to the decision of voluntary auditing in private firms.

There are few studies on accounting and auditing regarding small sized companies, even though they are of great importance for the economy (Ojala et al., 2016). Additionally, there is much less research on private firms comparing with public firms in the same field (Vanstraelen & Schelleman, 2017). Furthermore, it is interesting to investigate why companies see benefits in voluntary auditing and therefore a large part of existing literature on voluntary auditing focus on the firm characteristics for choosing auditing. Previous studies of the demand for voluntary auditing in small sized companies have been conducted in several countries. The laws and regulations differ between countries and therefore also the thresholds for voluntary auditing differ. Furthermore, it is interesting to study Swedish companies hence they have had the ability to voluntarily choose auditing since 2010 and it can be assumed they nowadays are aware about this choice. Because it has almost been ten years since the mandatory audit was removed in Sweden it is possible to investigate the development over time. One issue is particularly interesting. Within a cost/benefit analysis, we can assume that companies that chose to abandon voluntary auditing evaluated costs higher than benefits. But it is conceivable that this analysis is not stable over time, and that companies re-evaluate their decision time to time. This re-evaluation could lead to reverse the previous decision. Therefore it is interesting to have a closer look on these companies that at first abandoned audit and a few years later changed back to voluntary auditing. As it was investigated in previous studies mentioned above, we can expect that the characteristics impacting the most the voluntary audit decision also play a role in the decision to reverse a former abandon. This discussion highlights that there is a research gap, to our knowledge, on the firm characteristics for the small sized companies in Sweden returning back to auditing when not obligated to.

1.3 Research question and research purpose

From the discussion above and from the identified research gap, we are able to establish the following research question.

What is the relationship between mandatory audit exempted firm characteristics and the decision to voluntarily return to auditing?

The aim of our study is to examine the relationship between selected characteristics of the small firms in Sweden and the decision to voluntarily return to be audited again after abandoning it after the law changed. Based on existing literature, chosen characteristics are firm size, ownership structure, leverage and profitability. The purpose with these characteristics is to find out if they can explain the relationship in the decision to reverse a former abandon of auditing. In particular, the purpose is to examine if a firm's size, more specifically if it is a small or a large one, can explain the relationship with voluntary auditing. Furthermore, if the type of ownership structure, dispersed or concentrated, has an impact on the relationship with voluntary auditing. Additionally, if the amount of debt can explain a correlation with returning to voluntary auditing. The focus is also aimed towards profitability, if a high or low profit can explain a probable relation. Therefore, this study intend to create knowledge about small firms in Sweden that are exempted from mandatory audit, focusing on those firms that decided to abandon auditing when they were relaxed from this obligation, but later on, returned voluntarily to audit.

1.4 Research contribution

This study will contribute to the existing literature within the field of voluntary auditing focusing on some firm characteristics. Since the study emphasis is on small companies it will also contribute in a valuable way to the literature regarding small companies. Since the regulation in Sweden was changed almost ten years ago and companies now have the ability to choose voluntary audit this research will also contribute to the literature of voluntary audit. Furthermore, the empirical contribution of this study is that audit firms could benefit from our study. This study could contribute with identified firm characteristics' to support auditors to advise small companies to go for voluntary auditing. Legislators and policy makers could also receive valuable information regarding the effects of the law change.

1.5 Delimitations

This study is delimited to some firm characteristics (firm size, ownership structure, leverage and profitability) because of previous research and therefore other firm characteristics are not studied in this paper. This study is delimited to the period 2011-

2018 since it covers the maximum time framework relevant for our study, starting from the year that the law changed. The study will also be focusing only on small companies in Sweden returning to voluntary auditing after abandoning it. This means focus will not be on companies audited all the time or neither companies abandoning audit and not returning back. The companies chosen belong to the category companies exempted from mandatory auditing and therefore they are of a smaller size. This implicates companies of a larger size will not be included in our study and neither companies in foreign countries.

1.6 Disposition

The disposition of the study is the following; first, an introduction of the paper is given where the topic, a discussion and its purpose are presented, which also results in a research question. Second, a literature review with relevant literature is presented followed by the theoretical framework of this study presenting chosen theories. Third, the chosen method of this paper is presented and well motivated and explained. Fourth, the empirical results of this study will be displayed. Fifth, the empirical results will be analysed and discussed in relation with previous literature and theories. Finally, the conclusion of this paper will be presented with a summary of the main points, the study's contribution and also the limitations and the reliability and validity of this study. Further, this chapter ends with several suggestions for further studies.

2. Theoretical framework and literature review

In this chapter will the theoretical framework and previous literature of relevance to answer our research question be presented. The presentation here is the foundation of our research and also from where we build our study. Relevant criticism will be given towards selected theories in order to highlight potential shortcomings of the literature.

2.1 Rational choice theory

Rational choice theory implies people make choices that tend to maximize total benefit and utility (Herrnstein, 1990). It is not possible to directly observe utility and therefore it must be deduced from behaviour, namely, from the choices made. To certain constraints, it is said what human beings are doing when behaving is maximizing utility. As formalized in modern economic theory, economics rely on the idea that humans tend to maximize utility. When deciding between options including uncertainty and risk, the management needs to rank the alternatives in order to be able to choose the alternative that provides the highest expected benefit for the decision to be rational (Samuelson & Zeckhauser, 1988). An evaluation of benefits and drawbacks of the alternatives needs to be made, how the alternatives have been impacting on the organization before and how it could impact on the future. Wonder et al. (2008) discuss the costs and benefits of how a choice will affect the outcome of it. Furthermore, according to this theory humans are presumed to make rational acts as long as the events affecting the actions are understandable (Boudon, 2003). This explanation is in line with Slovic & Peters (2010) explanation regarding human's impact on potential risks.

There is also some criticism towards the Rational choice theory. Kiser et al. (1998) discuss critics aimed towards the theory. One of the reasons this theory sometimes is criticized is researchers' claim people do not always act rationally. Other things criticized are the difficulties adjusting for time factors and smaller and larger settings. Studies show people sometimes tend to act irrational. Arkes and Blumer (1985) focus on how sunk costs, costs already spent in a project, affect the choice to continue or not. According to traditional economy theory acting rationally means always choosing the best option (Arkes & Blumer, 1985). Arkes and Blumer (1985) use an example of paying for football tickets. One person wins a ticket and his/hers friend buys a ticket to go with him. Because of terrible weather the ticket winner tells his friend the game is of no interest anymore. The friend becomes angry and argue he paid for his tickets and that his money will be

wasted if they don't go to the game. This is not a rational behaviour according to traditional economic theory. The reason for this is the ticket price should not influence the upcoming decision since it is a sunk cost. If the friends don't find it nicer to watch the game in stormy weather than in front of the TV they should choose the TV since it is, according to the current conditions, the best option.

When the management of a company is to make a decision on voluntary auditing, it is of importance the utility of this decision is maximized by acting economically rationally (McFadden, 1999). An economical rational decision implies the company has to consider different alternatives and evaluate the benefits to the costs of being able to take the most economically advantageous decision. With certainty, it can be predicted that if the audit is removed, it is because the company reduces costs, as they avoid the cost of auditing (Samuelson & Zeckhauser, 1988). How an individual company looks at the benefits of auditing varies between companies and may depend on the company structure, competence within the company and requirements from stakeholders. According to rational choice theory users of financial information will request audit information with high audit quality (DeAngelo, 1981). This audit quality will be determined through for instance which audit firm made the auditing.

2.2 Agency theory

Agency theory is a well-known and commonly used theory in informational contexts and was first introduced by Jensen and Meckling in 1976 (Jensen and Meckling, 1976). This theory aims to explain the relationship between two parties, principals and agents. The agents are contracted by the principals to perform something on his behalf by acting in the principal's interest. This relationship implies a commitment for the agents where power and decision-making are delegated to the agents. In general, the principal and the agent refer to the management and the owners, where principals are management and agents owners. Principals often have more information available and better knowledge about the financial situation of the company. Through this theory it is possible to clarify the available information and also the risk-situation in the agent relationship (Jensen & Meckling, 1976). Since the principals delegate power and decision-making authority to the agents, the principals need to trust the agents that they act in the best interests for the principals. Though, it can be argued the agent will not constantly act in the best interests of the principal if they both, the agent as the principal, want to maximize their utility.

Individuals are driven by their own interest and accordingly the agency theory highlights the importance of incentives to get the agents' interest to be in line with the principal's. In general, there are some costs occurring to ensure the agent makes optimal decisions based on the view of the principal. Usually monitoring and bonding costs will occur in the agency relationships and in addition some divergence between the decisions made by the agent and the decisions that would maximize the welfare of the principal (Jensen & Meckling, 1976).

Over the years, criticisms have been raised to the agency theory, mainly in the social and psychological field of research (Lan & Heracleous, 2010; Wiseman et al., 2012). Some criticism to the agency theory is the assumption the human being acts economically rational, in self-interest, where the received criticism for this is a too simplified and unrealistic description of behaviour (Davis et al., 1997). Additional criticism of significance intends the agency theory fails to recognize the social context in which principal-agent relationships occur. This criticism has been met by attempting to broaden the application area of the theory to make it valid in a broader context than solely between owners and management. Wiseman, Cuevas-Rodriguez & Gomez-Mejia (2012) suggest the agency theory should be put in a broader social and institutional context in order to understand its generalizability, instead of treating certain types of relationships under certain conditions. Through this the agency theory also can be suited to new situations and therefore this theory will still be relevant (Wiseman et al., 2012). Furthermore, Eisenhardt (1989) has proposed for new directions by including additional elements of organizational research as a complement to the research of agency theory.

There is a relationship between companies with higher agency costs and auditing (Collis, 2004; Dedman et al., 2014). Studies have found higher agency costs have a positive association with a company's size, leverage and ownership dispersion. Agency costs can arise because of a separation of ownership and control in companies where external auditing on financial statements provide a solution to these agency costs (Jensen & Meckling, 1976). Agency costs increase as the company grows in size because of the argument that monitoring is fundamentally more expensive and complex in a larger company. Additionally, debt creates a potential conflict of interest and these are the agency cost of debt.

It is argued auditing helps to decrease the information asymmetry between principals and agents because of the assurance it provides and therefore the agency relationship maintenances (Collis, 2010). Generally in an agent-principal relationship linked to audit, the principal (shareholder) hires an auditor to monitor and control the agent (manager) (Khalil and Lawarrée, 1995). The manager is in a position with access to information about the business that the shareholder has no access to in the same way. As a result the principal can hire an external auditor in order to limit this asymmetry of information. The role of the auditor is to prove the manager's claim on his private information. An audit is therefore the optimal contract between the manager and the shareholder. The cost of audit can be explain as a monitoring cost for the principal and is therefore an agency cost (Jensen & Meckling, 1976). The reasoning above is best applicable on larger companies where management and ownership are usually separated between different people. Beside this, the agency theory can also be applicable on smaller companies (Collis et al., 2004). In this context the principal can be referred to all the stakeholders, not only the shareholders, for example banks and other creditors.

2.3 Signalling theory

Signalling theory originally derives from Spence focusing on the valuation of employees related to their education (Connelly et al., 2011). It was assumed a company would be able to receive information regarding an employee's quality focusing on the education of the applicant. Information about the education was therefore supposed to reduce the information asymmetry existing between the employer and the employee.

The purpose of the signalling theory is to explain the reaction of two parties when they have access to different information (Connelly et al., 2011). The information will affect individuals and corporations in their decision-making. It is assumed some information is available for everyone and some of the information is only available for a certain part of the public. This information, whether it is public or not, will affect the decision-making. The general idea with signalling theory is that information will be provided from those that have more of it to those that have less of it (Spence, 2002). Though, for the signalling to be valuable it needs to be trustworthy (Watson et al., 2002). If a company signals a value that is untrue the company will struggle in the future to be considered trustworthy again. Signalling theory can provide help in understanding why companies choose to disclose information (Watson et al., 2002).

Signalling theory has been used to explain audit quality, which can be perceived as a signal about a firm's value and provide insurance. Lenz & Ostrowski (2005) tested this in a setting for initial public offerings (IPOs) looking at how audit quality can reduce uncertainty for the investors. Auditing is assumed to be able to reduce insecurities regarding a company's financial statements and provides those using the information with an insurance regarding the financial information. (Lenz & Ostrowski, 2005). High audit quality is considered a tool for signalling. In the study support was found for that auditing works as a signal of insurance. In Chang et al.'s (2008) study audit quality related to signalling was also tested. According to the study firms with a high value choose a high-quality audit to signal their high value. The audit quality works as an indicator for potential investors and other surrounding parties. High-quality auditing is considered an important part for a well-functioning market. Since auditing is a tool for creating insurance (Skinner & Srinivasan, 2012) Audit quality is assumed to derive from two different factors namely both the legal requirements audits need to meet and also the risk of loss in reputation. High audit quality reports therefore can be assumed to result in high credibility since they signal a trustworthy reputation of the company audited.

According to the findings of Titman & Trueman (1986) audit quality will affect the perception of a firm's value. It is assumed a company with favourable information will choose a high quality auditor compare to a firm with less favourable information to present. Cost is also a factor since a company with less favourable information will neither be willing to pay a higher audit fee. Companies with favourable information on the other hand will be more willing to pay for their audit since the information presented will be more favorable for them.

One of the problems with the signalling theory research is the lack of knowledge regarding the impact of negative feedback on signalling which might affect the outcome of the signalling (Connelly et al., 2011). Also, the context where the signalling is made is assumed to have an influence on how the signalling is received. Because of the lack of knowledge regarding the impact from these issues they might have an impact on predictions made according to the signalling theory.

Watson et al. (2002) argue with support from Morris (1987) agency theory and signalling theory to some extent overlaps each other but can be used jointly. Regarding voluntary disclosures it is suggested using both theories can provide a deeper insight. Elzahar and Hussainey (2012) also used a combination of agency theory and signalling theory. Signalling theory has been used to explain voluntary disclosures (Campbell et al., 2001). Within this field it is considered companies that are better than other companies will want to signal this and therefore disclose more information voluntarily compared to those that do not have good information to present. Companies not presenting information voluntarily can even be considered to have something to hide. Therefore, it is also assumed companies always will choose disclosure over non-disclosure. Signalling theory can be used for the assumption the higher quality a company has the higher are the odds they will want to disclose information regarding their company (Craven & Marston, 1999). Focusing at the signalling theory there is support for a positive relation between firm size and the amount of disclosures. This since larger firms should have incentives to signal their quality through for instance disclosures (Craven & Marston, 1999). The findings of Elzahar and Hussainey (2012) also support larger firms will disclose more information in order to reduce information asymmetry. According to signalling theory there should be a relationship between profitability and disclosure of information (Watson et al., 2002). This since a company with a high profitability would want to signal this. Oyeler et al. (2003) however were not able to find support based on signalling theory suggesting companies with a high profitability would present more disclosures compared to other companies.

2.4 Advantages of auditing

Since auditing is not mandatory for certain companies but some still choose voluntary auditing, auditing provides some benefits. The main reason for the initial mandatory auditing exemption was introduced to make fewer costs for those small companies (Dedman et al., 2014). Previous studies imply that for a well-functioning capital market auditing of high quality is necessary where the auditors' incentives have an important role to assure this quality (Kaziliūnas, 2008). Carey et al., (2013) imply companies' involvement of an auditor when it comes to their financial reports contributes to professionalism. Auditing does not only contribute to accurate financial information, it also influences the culture, quality of management and the governance of the company (Carey et al., 2013). Auditors transfer significant knowledge to the company because of

their great range of experience with many clients. This knowledge would not otherwise be available to the company. Auditors do often have extensive experience due to all their multiple clients in the same industry. As a result of this, auditing contributes to useful knowledge in this area for the company regarding financial reporting. More specifically, when the audit is completed, the auditor has a deep understanding of the company being audited and its operations. An audit produces reliable and consistent financial information for the company and this information given from the audit can be transferred to the stakeholders of the company, informal or formal depending on the management (Carey et al., 2013).

This continues to the main benefit of auditing which is the assurance it provides (Blackwell et al., 1998). Blackwell et al (1998) imply in their study companies buy the auditing service because of the positive aspects deriving from auditing where this assurance is valuable for the company itself and also its stakeholders. More specifically this assurance signifies an auditor's evaluation of the quality of the financial information. Furthermore, the job of an external auditor contributes to improvements in companies' accounting, reporting and control systems (Carey et al., 2013). As a result of auditing the quality of financial information improves and this also reduces the risk of material misstatement through this control. Wallace (1980) argues auditing is of significance not only for external stakeholders but also for the management internally where the financial data is improved.

Auditing is important since it works as an outside ensure for people planning on investing money into a certain organisation. Auditing provides a quality guarantee for the financial information presented (Reheul et al., 2018). It has been proven NPOs (non profit organisations) also benefit from choosing an auditor that are well aware of the business and can provide potential givers with important information. Furthermore, the foundation of auditing is built on distrust of companies (Mueller et al., 2015). The purpose of the audit system therefore becomes to make sure the financial information presented by companies is trustworthy. Because of this it also becomes very important auditors themselves are trustworthy. It has been shown countries with a high investor protection tend to put high effort on auditing. High quality of auditing contributes to a better developed financial market (Francis et al., 2003).

When a company have the possibility to choose voluntary auditing the external audit is considered an expression for a wish to improve the reliance of the financial statements (Kim et al., 2011). Voluntary auditing is described as contributing to a more credible view of the company since an audit entail costs in terms of audit fees for instance.

According to Blackwell et al.'s (1998) study, borrowing interest rates are lower for companies being audited compared to companies not being audited, adjusted for firm characteristics. Auditing can therefore be considered a tool for creating trustworthiness in the debt market. Further, auditing a company's financial reports implies the management is assured of the quality (Wallace, 1980). This has a positive impact on managers' decision-making since the financial information can be more accurately assessed.

Even though the owners of small companies argue the cost of audit is high there are still some situations the benefits balance the costs (Chow, 1982). If the owners believe the benefits are of more value than the costs they choose auditing. Collis et al., (2004) argue that previous research has shown the auditor has an important role in providing advice to small companies.

2.5 Disadvantages of auditing

Auditors are considered to have a special perspective of the organisation and should share their information with potential users of the financial statement (Vanstraelen, et al., 2012). Though voices have also been raised, discussing whether audit reporting is the best information source for a company's stakeholders questions the value of audit reports. Things that have been lifted in the debate are what kind of information that should be provided by the auditors but also the times when auditing have failed to review the company's financial situation. Satava et al. (2006) also discuss the importance of integrity among auditors. It is not just enough to claim the existing rules have been followed, an auditor also must be able to make a professional judgement of the financial statements.

According to Karjalainen's (2011) the audit opinion will have an influence on the interest rate, the better statement, the lower rate. It has been shown lenders will consider both the perceived audit quality and the audit opinion. Depending on the firm size the lenders will value the information differently, for smaller firms the audit statement is more important

than the audit quality while for larger companies both the audit quality and the audit statement will influence the lender's decision. The audit opinion influence lender's decisions are also supported by Duréndez Gómez-Guillamón (2003). From that view it also indicate the audit opinion will affects investor decisions.

The views on what good audit quality is can also differ. Knechel et al., (2012) discuss there are different views on what can be considered a good audit quality. Depending on which purpose the audit is for the criteria for quality will be different. For auditors themselves audit quality can for instance be viewed as successfully completing all tasks. When it comes to users of financial reports on the other hand lack of misstatements in the financial reports can be considered a suitable measure for audit quality. This can also be related to what is called the expectation gap, namely the difference in what the public expects to receive from an audit and what it actually gets.

The outcome of audit has given limited benefits comparing with the cost of audit that has been argued to be unreasonable high and therefore the costs exceed the benefits (Collis, 2010; Dedman et al., 2014; Tauringana and Clarke, 2000). This is one of the major drawbacks with auditing, the cost it creates for the company (Dedman et al., 2014). This is therefore the main argument for removing the audit obligation. The audit requirement entails costs for the companies where the benefits are limited comparing with those costs. In Collis (2004) study the findings also show the main reason for abandon audit was because of the high costs comparing with the benefits with auditing. There are benefits for small companies with having their financial reports audited but to reduce unnecessary costs they exempt the audit if they have this possibility. In the UK the thresholds for "exempted companies" have raised through the years, since the costs have been a burden for some small companies (Collis, 2004). As a result the number of exempted companies has increased. The costs are greater in smaller companies than in larger ones, where one explanation is a greater proportion of fixed costs to variable costs.

2.6 Firm characteristics

As stated in previous chapter there are several characteristics impacting on companies' decision on voluntary auditing, where four of them are frequently identified in previous literature. These characteristics are firm size, ownership structure, leverage and profitability (Carey et al., 2000; Chow, 1982; Collis, 2010; Dedman et al., 2014; Haw et

al., 2008; Niemi et al., 2012; Seow, 2001; Tauringana & Clarke, 2000). Except these characteristics the literature has also found evidence for other factors influencing on voluntary auditing, but to a much lesser extent.

2.6.1 Firm size

There are findings in previous studies suggesting the demand for voluntary auditing has a positive correlation to firm size. To emphasis, valid companies are all in the category not obligated to auditing but the size can certainly differ. Tauringana and Clarke (2000) investigate in their study why some small companies choose to have auditing while other companies choose not to despite this exemption. The government in the UK decided to exempt small companies from mandatory auditing based on size. This exemption was based on size measured by turnover, total assets and number of employees (Tauringana & Clarke, 2000). In their study Tauringana and Clarke (2000) argue for a positive relationship between firm size measured in turnover and auditing where they point out that larger companies are more likely to be audited than smaller ones. They find a positive correlation between firm size, measured in turnover, and voluntary audit. Moreover they clarify that while small companies grow in size the transactions volume increases too and as a result errors are more expected to occur in the financial statements and in the accounting data (Tauringana & Clarke, 2000). The effect is a need for an external auditor with the expertise and competence to get an understanding for the company's business and its transactions. Furthermore, they highlight that larger companies have the probability to afford external audit. On the contrary, according to the study of Carey et al. (2000), there is no finding of a positive relationship between the demand for voluntary auditing and firm size. Despite this, they do find that it is more complex for the owners to have an insight of what happens in the business when the size of the company is larger. Dedman et al. (2014) find support in their study for a significantly positive relationship between firm size and voluntary auditing. Since larger companies are more likely to preserve the audit then, it is a possibility the firm size has an impact on other explanations for voluntary audit but according to the study of Dedman et al. (2014) there is little impact on those relationships. Dedman et al. (2014) argue for a relationship between companies with a high level of agency costs and voluntary audit. Jensen and Meckling (1976) assume agency costs increase with the firm size because the monitoring mechanisms are rather expensive and complex in larger companies.

Collis et al. (2004) find in their study that firm size, measured in turnover, has an impact on the demand for voluntary auditing but not firm size measured by balance sheet total or number of employees. The study by Collis et al. (2010) also finds a positive relationship between turnover and auditing. This study is examined in the UK and Denmark and the findings also show that the audit costs are not considered to be too substantial when taking the decision about auditing. This result is in contrast to Taurigana and Clarke (2000) who explains the audit costs are too high for smaller companies and the costs are also more likely to increase the smaller the company is. These findings are in line with the study of Niemi et al. (2012) inferring since some audit costs are fixed they drop with firm size. Moreover, Chow (1982) argues for increased marginal costs the smaller the size of a company is and therefore emphasizes the marginal cost of providing audit decreases with firm size. Also, the findings of Haw et al. (2008) are similar with these outcomes, indicating that larger firms are more likely to purchase auditing and therefore there is a relationship between firm size and voluntary audit.

The study of Niskanen et al. (2010) shows that firm size has an impact on companies' choice of type of auditor, purchasing this service from Big 4 or another certified auditing firm for example. These results suggest that larger firms are more likely to purchase the audit service from a Big 4 auditor. Furthermore, Collis et al. (2004) study reveals firm size is a driver of the demand for voluntary auditing in different regulatory settings among small companies and Niemi et al (2012) study is in line with this assessment. Niemi et al. (2012) do also underline, in line with Collis (2010), determining firm size in turnover when evaluating firm size is the most common measurement.

Based on these findings the first hypothesis is formulated as follows.

Hypothesis 1 (H1): There is a positive relationship between turnover and voluntary auditing.

2.6.2 Ownership structure

Agency theory has been a popular method for describing the demand for external auditing (Carey et al., 2000). It is assumed the management will not always have the owner's best at mind and incitements for external audit therefore exist (Chow, 1982). According to

Chow (1982) one of the major reasons firms decide to hire an external auditor is to remedy the conflicting interests existing between firm managers and shareholders.

According to the findings of Dedman et al. (2014) companies have higher incentive to purchase external auditing if their agency costs are high. The study supports large owner dispersion will contribute to the choice of voluntary audit. Ojala et al.'s (2016) study also support a large dispersion of ownership is one of the drivers of voluntary audit. Findings from the study of Seow (2001) indicate companies with non-director shareholders were more likely to choose voluntary audit. Taurangana and Clarke (2000) also investigated the role of ownership in the choice of voluntary audit where the predicted relationship between them was supported. Collis (2010) study supports that when management perceived voluntary auditing valuable and an insurer for the financial information of the company, they were also more likely to choose voluntary audit.

In Carey et al.'s (2000) study small family businesses were investigated. Their assumption was the demand for audit would have a relation to if the family were represented in the board of directors. Another factor predicted to have an impact of the choice of voluntary audit was if there were employees from outside the family engaged in the management. The greater the separation between ownership and control the higher the demand for audit would be. Carey et al. (2000) were able to find support for their hypothesis indicating that the above-mentioned factors influence the choice of voluntary audit. It is also highlighted when it comes to small family businesses there might also be other reasons for opting external audit, for example conflicts within the family. In Ojala et al.'s (2016) study interviews with owners in small family businesses indicated the family ownership itself was a reason for choosing voluntary audit. One of the specific reasons mentioned was the advantage of an outside professional opinion.

The incitement to engage an external auditor differs among companies and it can be argued small and larger companies will have different things affecting their choice for voluntary audit (Ojala et al., 2016). One of the major differences between public and private firms is the number of owners. In a public company the owners are widespread and usually have a long distance to the business operations (Kim et al., 2011). Kim et al. (2011) argue the need for external auditing is not as big in private firms as it is in public firms. This is because shareholders in private companies usually are more involved in the

everyday work. The information asymmetry is therefore assumed to be smaller in private firms compared to public firms.

On the other hand, Collis (2004) argues external audit still can be important in small private firms. For instance, when the companies are not entirely family-owned the need for external audit will be just as big as in larger companies. In cases where the owners are not involved in the day-to-day business there are also an incitement for external audit.

Characteristics of board of directors can be used as an indicator for ownership (Carey et al., 2000). Dedman et al. (2014) argue one of the company characteristics associated with agency cost is the board size. It is assumed the larger the board the bigger problems will exist regarding communication and coordination and external audit will therefore be a solution to these problems.

To the background of this our assumption is a smaller board of directors will indicate a more concentrated ownership while a larger board of directors will indicate a larger dispersion of ownership.

Hypothesis 2 (H2): There is a positive relationship between number of members of the board of directors and voluntary audit

2.6.3 Leverage

In Chow's (1982) study the relationship between a firm's capital structure and the choice of external auditing is studied. Support was found demonstrating the higher level of debt in a company the more likely is it they will engage an external auditor to review their financial statements. Another factor related to leverage examined were the debt covenants. When there were a high proportion of debt covenants based on accounting measures the probability was higher for choosing voluntary auditing. The paper of Dedman et al. (2014) studies, in line with Chow (1982), the relationship between leverage and the demand for voluntary auditing. Leverage is measured as total debt divided by total assets, a common way to measure leverage according to other studies (Dedman et al., 2014). There is evidence suggesting that agency costs are associated with voluntary audit where leverage is one measure of agency costs (Dedman et al., 2014).

Tauringana and Clarke (2000) argue highly geared companies will have greater incentives for external auditing. The underlying reason for this is lenders will have more information to base their decision on if the company is audited compared to if it is not. Sometimes lenders can even demand the financial statement is audited before approving a loan. In situations where lenders do not have fully access to a company's financial books an audit will provide a reasonable insurance for them. Support was found for that a higher proportion of debt would increase the likelihood for choosing voluntary audit. Also, according to Dedman et al. (2014) it is possible to find evidence in the literature suggesting audited financial reports among companies are required by the financial institution when it comes to lending money. Furthermore there is also evidence that lower interest rates are a result of voluntary audit. Blackwell et al. (1998) findings provide evidence where lower interest rates are connected to voluntary audit and therefore audited companies derive this benefit. These findings are in line with the study of Kim et al. (2011) who investigate the association between companies' interest rates over a long time period and voluntary audit. Some papers report voluntary audit has a positive effect on credit scores (Dedman et al., 2014). Lennox and Pittman (2011) discovered a positive relationship between credit ratings and voluntary audit of companies in the UK. This is supported by Collis (2012) findings where directors of private companies in the UK argue for this positive effect on companies' credit scores. Dedman et al.'s (2014) arguments are that companies that aim to raise the equity capital probably will retain their audit, since external auditing reliably certify the quality of the financial statements. This assurance might decrease uncertainty about the future in a company regarding growth and value and also the shareholders will be more assured in investing in those businesses. Since the result of Dedman et al.'s research show a positive relationship between leverage and voluntary auditing, this indicates audited companies have a higher level of debt comparing with non-audit companies but the authors of this study emphasize the difference is not very huge. The explanations for this might be the lenders of the non-audited companies already have sufficient inside information about the company because of long relationships (Dedman et al., 2014).

However Seow (2001) was not able to find support for the hypothesis suggesting there would be a relation between debt and voluntary auditing. An interesting finding was that companies whose loans were secured had chosen not to have their accounts audited. They were neither able to find support there would exist differences in the choice of voluntary

audit related to if the debt were long or short term. Though companies whose loans were higher tended to choose external auditing to a higher extent compare to companies with a lower loan.

Niskanen et al. (2010) were not able to find support between a firm's leverage and its choice of audit firm expected to perform high audit quality. The explanation for this is considered to be related to that lenders do not require high audit quality from small private firms, investigated in this article. Looking only at small family firms from the sample the results were somewhat different showing there is a relation between leverage and the audit firm hired. Additionally, Haw et al. (2008) were not able to find any differences in leverage between those companies choosing to engage an external auditor and those that did not.

Furthermore, Niemi et al. (2012) argue for an agency relationship between the lenders and the management of a company and therefore this is an important driver of the demand for auditing. They also argue for that companies under financial distress are more likely to want external auditing since it is in the debt providers' interest and can provide help for solving financial problems. Even because of this, these companies may not afford an auditor in a difficult financial situation. Niemi et al. (2012) findings support a positive relationship between level of debt and voluntary audit, where bank financing is one main reason for the demand for voluntary auditing. It is also argued shareholders have greater inducements to distribute wealth from the bondholder if the level of debt in a company's capital structure increases, and therefore the company's demand for auditing increases too (Carey et al., 2000). Also, the findings of Carey et al. 2000 reveal a positive relationship between the level of debt and the demand for voluntary auditing.

Based on this previous research our assumption is that the higher level of debt the more likely is it a company will engage an auditor. Therefore we formulate the following hypothesis.

Hypothesis 3 (H3): There is a positive relationship between leverage and voluntary auditing.

2.6.4 Profitability

It has been found there is a positive relationship between the choice of voluntary auditing and profitability (Haw et al., 2008). High profits reported by the management of a company increase the likeliness to engage in voluntary auditing. Niskanen et al. (2010) included ROA, as a measurement for profitability, as a control variable in their study. This included variable was assumed to control for fluctuations in information asymmetry and also the financial conditions. On the other side, Dedman et al.'s (2014) findings indicate there is a negative association between voluntary auditing and profitability. Watson et al. (2002) argue for a relationship between profitability and signalling of information and is therefore connected to voluntary auditing.

Hypothesis 4 (H4): There is a positive relationship between profitability and voluntary auditing.

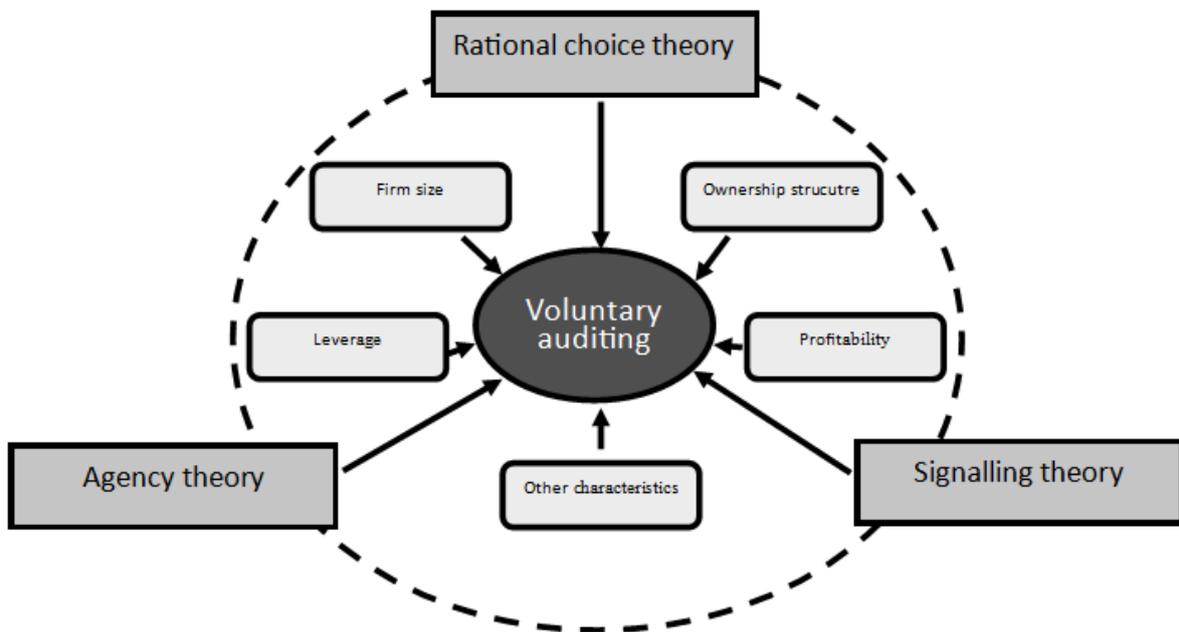
2.6.5 Other discovered characteristics

There are other characteristics the literature has found influencing on the decision for voluntary auditing except the selected ones in this study. For instance, auditor characteristics such as if the auditor has cooperated with the company for a long time or is engaged to do other services for the company have an impact on the choice for voluntary auditing (Seow, 2001). It is more common for larger companies to outsource their accounting functions (Niemi et al., 2012). It can be assumed there exists an agency relationship between the company and the accounting function, which contributes to the need of auditing. Costs related to the preparation of the audit also affect voluntary auditing (Seow, 2001). Family ownership is another characteristic mentioned in previous literature (Carey et al., 2000). Lennox and Pittman (2011) found evidence that companies audited by the big four to a higher extent continued to be audited even after a removal of the audit obligation. The reason for this was considered to be those companies had a higher need for continuing with the audit even after the requirements were removed.

2.7 Research model

The theoretical framework, which is the foundation of this paper including our hypotheses, has been chosen since it might explain the reasons companies returning back to auditing. Rational choice theory is a theory that has been around for a long time and is

relevant when it comes to decisions. Since this paper will study the relationship between some factors and the choice of voluntary auditing when it is not mandatory, this theory is further motivated as relevant. This theory is linked to agency theory and signalling theory. Agency theory focuses on information asymmetry between two parties where the audit has a control function and can therefore explain the choice of voluntary auditing. Additionally, this theory is commonly used in previous studies regarding voluntary auditing. The main benefit with auditing is the assurance it creates and this companies want to signal. Therefore the choice of Signalling theory can be motivated and it supplements the other two theories. Moreover, previous research has identified four common characteristics; size, ownership structure, leverage and profitability explaining the relationship with voluntary auditing and can therefore also motivate our hypothesis. Though there are also other characteristics which can explain the choice for voluntary auditing even if they will not be examined in this paper. Stated above results in the following model, *Model 1*.



Model 1. Our research model. Own construction.

3. Method

In this chapter various methodological approaches will be presented, where we motivate why certain approaches have been taken. Further, the data and the data collection process are submitted which is followed by a presentation of the selected statistical tests used in this study.

3.1 Philosophy of knowledge creation

The epistemological and ontological standpoints that form the basis of this study's methodological choices are presented below.

Epistemology is the doctrine of knowledge, what to know and how to achieve knowledge (Ryan et al., 2002). Two different views of epistemology are positivism and interpretivism. The philosophy and scientific approach of this paper is based on the positivist approach. The positivist tradition is a natural science method, which is suitable for studies of social reality (Bryman & Bell, 2013). This means the knowledge can be confirmed by the senses, achieved by collecting facts and the ability to create legal explanations. Within the positivist approach only observable facts create credible data that can be used to explain relationships and make general conclusions for the population. The positivist approach is used primarily in quantitative studies because knowledge is defined as facts that can be measured. An opposite approach to positivism is the perspective of interpretation where account is taken of the fact that people and nature are different. In this case it is of importance the researcher relate to the subjective meaning of social reality and captures what is special about the human.

This paper aims to examine the relationship between selected characteristics of the small firms in Sweden and the decision to voluntarily return to be audited again after abandoning it after the law changed. This implies the knowledge collected will consist of numbers and interpreted from a scientific perspective to find legitimate explanations. No consideration will be given to the companies' social context, neither to the people responsible for the companies and their result. Because of the nature of this paper a positivist approach will be adopted. Moreover, the positivist approach describes the knowledge in an objective manner and is a non-valued approach where the actor's subjective perceptions are not reflected (Saunders et al., 2016). In this study hypotheses

derived from the theory will be formulated and tested against reality, which also are based on a positivist focus.

Ontology is the doctrine of what exists and what it means that something exists (Ryan et al., 2002). Objectivism is an ontological point of view that means social phenomena and their significance has an existence independently of social actors (Saunders et al., 2016). Therefore objectivism implies social phenomena are met in the form of external facts that we cannot influence. In this study we consider objectivism as the most suitable doctrine in order to find out the relationship between selected characteristics and voluntary auditing. An objective approach in this study is motivated by the fact that the collected empirical data in this study will consist of numbers derived from companies' financial statements without acquiring knowledge from social actors. Additionally, an objective approach is adopted since the empirical data is unaffected data and is independent of social actors. An opposite approach to the objective approach is the subjective perspective where social actors have an impact. The reason this approach is not selected in this study is because perceptions of social actors are not used in this paper and therefore not of significance. This emphasis furthers the objective approach in this study.

3.2 Research method: Quantitative

This study is performed using a quantitative method. This is because our research question and aim focus on the relation between characteristics and voluntary auditing the years companies choose voluntary auditing or not. Since the purpose is to measure the relationship between the choice of voluntary auditing and company characteristics quantitative method is suitable. In quantitative method the main focus is aimed towards explaining, more than only describing (Bryman & Bell, 2011). The method is also described as having concepts needed to be defined and measurable. These measures are then used to explain the problem investigated. Quantitative method is also characterized by numerical data (McCusker et al., 2015). Measurements are described as useful when looking into small differences and avoiding things being described differently by different persons as might be the case sometimes (Bryman & Bell, 2011). Since this study focuses on looking at companies changing from no auditing and then back to voluntary auditing there is of great importance discovering minor differences. By focusing on precise measurement this information will be provided.

The researchers' part in quantitative research is also to stay objective during the process and not become personally involved. Focus is aimed towards the numerical data, where the quality of the data is an important foundation for the results in the quantitative research (McCusker et al., 2015). Another research method is qualitative method. In qualitative method focus is aimed towards words and images rather than numbers (Saunders et al., 2016). Because the research purpose in this paper focuses on auditing and certain numerical characteristics that are measurable the quantitative method is more appropriate for this study.

3.3 Research Approach: Deduction

Johnston (2014) highlights the importance of linking research to theory. Within the deductive approach focus is aimed towards which results that are assumed to be found. The assumption is derived from the previous literature and its results. The existing results are applied on the current setting where the predictions are made. Research questions are then developed in order to answer the problems of the study (Svensson, 2009). When the research is carried out the findings are related back to the previous research.

The method used in this study is deductive. The aim and research question were developed focusing on previous research. Hypotheses were generated from existing literature and theories. These hypotheses were later tested and compared to previous findings. Deductive method and hypotheses have been used by several researchers when investigating the characteristics for voluntary auditing and was therefore found suitable for this study (Chow, 1982; Collis, 2010; Niskanen et al., 2010). Our approach is deductive since the purpose of our study is to generate hypotheses from examining the existing literature in the field of voluntary auditing and to contribute with new results to the already existing literature.

Another method in research is inductive. In inductive method focus is instead aimed on first testing and developing theories according to the results (Saunders et al., 2016). In inductive method there is not as much attention paid to cause and effect. Since our purpose is looking at how certain characteristics impact the decision of voluntary auditing the deductive approach is more suitable.

3.4 Strategy choices: longitudinal, explanatory and archival

When studying a topic one of the important questions is which time horizon that should be in focus (Saunders et al., 2016). There are several options, though the focal point of this study is longitudinal. Longitudinal studies focus over a longer period where the same things are investigated for several years (Saunders et al., 2016). In this study focus is aimed towards looking at the same companies for two different years. The first year the company has chosen to abandon auditing and the other year the company has chosen to return back to auditing. One of the major advantages using a longitudinal method is it provides the possibility to study how things have developed over time (Saunders et al., 2016). Another factor making the longitudinal method advantageous is the possibility to control certain variables since the same thing is studied. In this study it is therefore possible to exclude certain factors influencing the results, which might have been the case if we had selected a random sample of companies choosing voluntary auditing and one sample not choosing voluntary auditing. Because we use the same companies in the group for both voluntary auditing and not voluntary auditing this will provide an interesting result. If not using the longitudinal method the cross-sectional method would have been an option. In a cross-sectional study the aim is to take a “snap-shot”, focusing only at one specific occasion (Saunders et al., 2016). In this case that would have been an unsuccessful method since the focus is looking at the change over time.

The purpose of this study is explanatory. The focus in explanatory studies is to explain relationships between different variables (Saunders et al., 2016). The aim of our study is to examine the relationship between selected characteristics of the small firms in Sweden and the decision to voluntarily return to be audited again after abandoning it after the law changed. This aim therefore belongs to the explanatory category. One way to answer an explanatory purpose is to find a cause-effect relationship, meaning that one identified factor might be able to explain another factor. Being explanatory is the theoretical approach for identifying if the behaviour of some factors can explain the behaviour of some other factors. The factors in this study are the characteristics firm size, ownership structure, leverage and profitability explaining the choice of returning back to voluntary auditing.

The data for this study was collected using an archival method. An archival research strategy implies data will be collected through already existing sources, for instance

through reports (Saunders et al., 2016). One important factor to consider when working with archival data therefore is to be aware of that the data originally was created for a different purpose than the particular study (Saunders et al., 2016). Though it is also highlighted using archival data is a beneficial method since it is possible to reach a large amount of data. Overall the archival research strategy is described as suitable when conducting research, though it is important to consider how suitable the data is for the study. In this case data is collected from the database Retriever where Swedish companies' annual reports are presented. The data needed for this study is found in these reports and in Retriever, therefore it can be seen suitable despite the fact this information was not originally created for this study. The data is accessible in Retriever and this has had a great impact on the choice using this data.

3.5 Critique of sources

The selected literature and theories in this study consist of peer reviewed scientific articles, implying they are reviewed before publication to maintain scientific quality. Since some of the articles in this paper are from the beginning of the 21st century, we are aware that a similar study today may look different. Primarily this is because changes may have occurred, for instance regarding regulations in the actual country. However, these selected articles are of relevance for this study and therefore they have been chosen. Moreover, we are aware there are other researchers who are not in an agreement with our findings in the literature and theory, but this is emphasized by also presenting criticism in the theory chapter. In the method chapter some course literature in terms of books have been used, well aware they are not peer reviewed. Scientific articles have been applied for the method chapter as well, but the books are used as a complement. Additionally, for the data collection the database Retriever was used where we assume the information from Bolagsverket is correct.

3.6 Ethical considerations

Taking ethical considerations into account when making a research helps to protect people, communities and environments likewise helps to make the world to a better place (Israel & Hay, 2006). It is of significance scientists act in a conscientiously way when it comes to their liberty to study the world, since they are dependent upon individuals and society's goodwill. Researchers have an ethical responsibility to ensure integrity, and to behave in an honestly, accurate and fair way in their scientific research (Steneck, 2006).

Ethical considerations are important to reflect on each day of researching and it has become more complex due to fluctuations in society, with social, political and economic fluctuations.

The financial annual reports and additional information about selected companies were provided by the database Retriever. Since this information is public no ethical implications should apply to the use of this information. In this study the companies are anonymous, and the information has been conducted in an objective way. In this paper no own opinions have been expressed that could affect the result in a non-ethical way. Additionally, no truthful or misleading information has been provided in this study. The authors of this paper have taken ethical principles into account.

3.7 Description of the variables

In this study the dependent variable is audit, divided into “auditing” and “no auditing”. In this paper “auditing” refers to companies’ where an external auditor in response to ensure the accuracy and reliability reviews financial statements. “No auditing,” means an external auditor does not review companies’ financial statements. This indicates the dependent variable is dichotomous signifying it can only yield one of these two values, 1 and 0 (Saunders et al., 2012). To achieve the aim of this paper, the identification of whether the selected companies were audited or not were decisive.

There are four independent variables chosen in this study, helping to achieve the aim of this study; to examine the relationship between selected characteristics of the small firms in Sweden and the decision to voluntarily return to be audited again after abandoning it after the law changed. Since the characteristics are size, ownership structure, leverage and profitability the selected variables are turnover, number of members of the board of directors, debt to assets and ROA. They will be further explained in this section and explanations for the choices made will be delivered. Independent variables can be continuous or categorical, or a combination of both in a model (Pallant, 2016). All of our independent variables are continuous, what signifies any value is conceivable for each variable.

In this study companies’ size has been measured with turnover and there are several reasons for this choice. The first reason is because this measure is the most common one

for calculating companies' size in prior research (Collis, 2010; Niemi et al., 2012). For instance, Carey et al. (2000), Dedman et al. (2014) and Tauringana and Clarke (2000) all use turnover in their studies as a measure when evaluating companies' size. Another reason for choosing turnover as a measure is because turnover is not disposed to manipulations or bias of accounting data (Hirschey, 2009). Likewise, using turnover as a measure for company size, measurement issues are reduced, where inflation and replacement cost errors are examples.

Regarding the ownership structure, one of the common ways to measure organizational structure is looking at the proportion of owners who are not part of the management in the organisation (Seow 2001; Tauringana & Clarke, 2000). This measure would have been preferable for this study, though the information required for the proportion of non-management shares is, to our best knowledge, not available in a current database. Instead we apply the measure of number of members of the board of directors. Number of members of board of directors has been used previously when studying ownership structure (Carey et al., 2000). It is argued number of members of the board of directors is associated with possible agency costs (Dedman et al., 2014). Therefore, it can be perceived a suitable measure for ownership structure. The prediction is the larger the number of members of the board of directors, the larger the ownership dispersion. Information regarding the number of members of the board of directors is available in the database Retriever.

In this paper the characteristic leverage has been measured as the proportion of total debt to total assets. This is in line with previous studies as Carey et al. (2000), Dedman et al. (2014) and Niskanen et al. (2010) use this method. By reviewing previous literature the conclusion is this is a frequently selected way to measure leverage in. Though there are also other measures, for example Chow (1982), measured leverage in total debt to equity and Haw et al. (2008) measured it in long-term debt to total assets. To conclude, the chosen way to measure leverage in this study is because previous literature show it is a frequently chosen way.

One of the selected characteristics in this study is profitability and it is measured in return on assets (ROA), which is earnings before interest and tax (EBIT) over total assets. The reason for selecting ROA as a measurement for profitability is because it is considered

the most efficient way to assess a company's performance (Hagel et al., 2013). This is also in accordance with the studies of Dedman et al. (2014) and Niskanen et al. (2010).

3.8 Population

The population consists of those concerned in the purpose of the study (Saunders et al., 2016). In order to answer the research question of this paper the population is made of companies that made a decision to firstly abandon audit when it became allowed by the law the year 2010, and later decided to return to it. All the companies are allowed to choose themselves whether they want external auditing or not. This means those companies are all under the thresholds specified in the ABL: over 3 million SEK in net sales, total assets over 1,5 million SEK and more than 3 employees. Two of those criteria's needs to be fulfilled for two financial years in a row.

In this study census is used. Census refers to when data from a whole specific group is collected (Saunders et al., 2016). The advantage of census is all possible members are looked in to. In this study all companies within certain selection criteria made in Retriever are studied. We chose a census method since it provides information regarding the whole specified group. Another option would have been to use a sample. In cases when it would be too impractical obtaining data from the whole population sampling is an option (Saunders et al., 2016). In this case we had the opportunity examining every company within a specific group. Because of this our results will be more reliable compared to if we had used a sample since it only consists of parts of a certain group.

Further down in this section a table will be presented to clarify all the steps in the search at Retriever to find the group of companies used in this study. Within the selection criteria made during our search in Retriever all companies first abandoning auditing and then returning is part of this study. The selection criteria made in Retriever were the following:

- Turnover: 500 000 - 5 000 000 SEK
- Employees: > 1 person
- Registration date: before 2010-10-31
- Exempted from mandatory auditing with an external auditor

The selection criterion regarding the turnover was made to avoid extreme values, such as no turnover at all or a very high one. Moreover, to avoid companies with no employee at

all or only one employee that selection criterion was made. The reason for choosing companies registered before 2010-10-31 was because they are the group having the possibility to abandon audit since they were obligated to audit before this date. This search resulted in 1073 companies. Since only the companies that had abandoned auditing earlier were of interest for this study, we only searched for them out of those 1073 companies. To find out about this we had to look at the companies annual reports to have this information regarding if they had abandon audit or not. This is since the information regarding if the companies are mandatory to audit or exempted from audit and moreover if they have an auditor or not, is not possible to find for previous years, only for today. Out of those, 107 companies were suitable for our research.

In the table below information regarding today's distribution between companies with mandatory auditing and companies exempted from mandatory auditing among Swedish Aktiebolag (AB) is presented, to show a view of how the situation looks like.

Table 1: *AB in Sweden*

| AB in Sweden | Number and % |
|--|---------------------|
| Total number of companies | 609 056 |
| Number and proportion of companies with mandatory audit | 212 561 (34,9%) |
| Number and proportion of companies exempted from mandatory audit | 396 495 (65,1%) |

In the table below information regarding today's distribution between companies with mandatory auditing and companies exempted from mandatory auditing among Swedish Aktiebolag (AB) registered before 2010-10-31 is presented, to show a view of how the situation looks like. Further, according to these companies exempted from mandatory audit the table shows the number and proportion without auditor and with auditor. Also, information is presented regarding the group of companies after the selection criteria are made.

Table 2: *AB in Sweden registered before 2010-10-31*

| AB in Sweden registered before 2010-10-31 | Number and % |
|---|---------------------|
| Total number of companies | 265 441 |
| Number and proportion of companies with mandatory audit | 147 585 (55,6%) |
| Number and proportion of companies exempted from mandatory audit | 117 857 (44,4%) |
| Number and proportion of companies exempted from mandatory audit without auditor | 112 534 (95,5%) |
| Number and proportion of companies exempted from mandatory audit with auditor | 5 323 (4,5%) |
| Number of companies exempted from mandatory audit with auditor, after selection criteria applied | 1073 |
| Number of companies exempted from mandatory audit with auditor, after selection criteria applied, but abandoned audit after the law changed | 107 (9,97%) |

To emphasize again, the number of 1073 companies was obtained after turnover, employees and registration date, since previous explained the selection criteria applied was based on this. The proportion of 107 is calculated out of 1073. This table might also clarify this elected group consisting of 107 companies, they all abandoned audit after the law changed but later returned to auditing. On this segment of selected population, we do a census study since we are able to cover all the companies in the selected group and this increases the validity of the study. Since we do a census study it does not require using any of the sampling methods.

3.9 Data collection

In this study secondary data have been used. The base of literature and theories consists of peer reviewed scientific articles obtained from databases provided by Högskolan i Gävle. Supporting method choices books have also been used.

In order to answer our research question the required data were collected in the database Retriever 2019-04-11. In Retriever basic information and annual reports for Swedish corporations are gathered. The data found in Retriever is collected from for instance Bolagsverket and can therefore be considered a reliable source. All necessary data for this study was possible to find in Retriever and it was therefore a useful source in our research. Access to Retriever was received from the library website at Högskolan i Gävle.

First of all, the companies of relevance for this study are the ones registered before 2010-10-31 since the law changed was implemented 2010-11-01. The companies selected had to be exempted from mandatory auditing. Further, since the aim of this study is to examine the relationship between selected characteristics of the small firms in Sweden and the decision to voluntarily return to be audited again after abandoning it after the law changed, we searched for the companies that had chosen auditor anyway. In Retriever it is only possible to have the current position regarding if the companies are mandatory to auditing or exempted from auditing. Unfortunately this means it was not possible to have the position regarding mandatory auditing or not for previous years, which had been an interesting number. In Retriever selection criteria can be made during searches. The selection criteria previously presented were made in this study, which resulted in 1073 companies. The upper selection criterion for turnover exceeds the thresholds for mandatory auditing. Though, since there are three requirements for mandatory auditing where total assets also are included, we still chose these selection criteria since they provided a suitable sample. One of the reasons assets is not included as a selection criterion is due to it vary a lot between industries. This implies several companies suitable for our study could have been excluded because of the selection criteria made during our search. The following task was investigating which companies out of the originally 1073 that would be suitable for this study. Since the goal was to look at companies first choosing to abandon auditing these companies had to be found. We therefore looked at the annual reports for each company between 2011-2018. Companies first abandoning auditing and then returning back, without doing it for the legal requirements, were then selected. It turned out to be 107 companies. From these companies' data were downloaded in excel for turnover, number of members of the board of directors and ROA. By using this database, the risk of miscalculation and human errors is reduced since the variables automatically are calculated from Retriever. Information regarding companies' debts and assets were also downloaded in order to calculate the debt to assets ratio, which was not possible to find directly in Retriever. The annual report from the first year the company abandoned auditing is the foundation for the group investigated without auditing. In the other group, numbers from annual reports from the first year the company chose to return to auditing is the base. Searching for the audit signature in the annual reports made this.

3.10 Statistical tests

In the following section the statistical tests of this paper will be presented. The tests conducted are a descriptive test and a regression analysis.

3.10.1 Descriptive analysis

In this paper descriptive statistics among others have been used. Descriptive statistics make it possible to describe and also compare variables numerically (Saunders et al., 2012). Since the aim of our study is to examine the relationship between selected characteristics of the small firms in Sweden and the decision to voluntarily return to be audited again after abandoning it after the law changed, two groups including the same companies have been applied. This implies numbers from different years have been practised, first from when the companies abandoned auditing and second from when they returned back to auditing. Furthermore, certain variables are used in this study and to make a clear comparison between them a descriptive analysis helps. As a result we could make a comparison between the variables and also compare the two groups, therefore we chose to make a descriptive analysis, since it enables describing and comparing variables numerically.

3.10.2 Regression analysis

In order to achieve the aim of this study, to examine a relationship, a logistic regression analysis was executed. According to the reviewed literature previous mentioned in this paper, regarding the studies of the decision of voluntary auditing, logistic regression have been used for investigation (Carey et al., 2000; Collis, 2010; Niemi et al., Niskanen et al., 2010). The practical part of the deductive method is testing the hypotheses and most common hypotheses are set up in order to find a relationship by using regression method. The result of a regression analysis will indicate if there is a relationship, a cause-effect statistically proven, and in the end if one factor (characteristics) is found to explain or not to explain another factor (characteristics). Performing a logistic regression implies to test a model to foresee categorical outcomes of the dependent variable. When using a logistic regression the dependent variable must be dichotomous, categorical, signifying it can only yield one of two values, 1 and 0 (Pallant, 2016), as in this study where it consists of “auditing” or “no auditing”. In this study we have used a procedure called binary logistic regression, since the dependent variable is dichotomous (Pallant, 2016). In this study the predictors, the independent variables, are continuous, but they can also be categorical or

a mix of both when performing a logistic regression. The choice for not using linear regressions is because they are only used when the dependent variable is a continuous variable, what signifies any value is conceivable for each variable (Pallant, 2016). When the dependent variable is dichotomous linear regression is described as inefficient (Menard, 2002).

For this research, the relationship between the categorical dependent variable; the choice of returning back to auditing after abandoning it, and the continuous independent variables; turnover, number of members of the board of directors, debt to assets and ROA are explored by performing a logistic regression model.

When conducting a logistic regression there are several assumptions to take into consideration (Pallant, 2016). One of them is sample size. If the sample size is too small there will be problem conducting the analysis. The sample size has a great impact on the statistical power in a study (Hair et al., 2006). The recommended sample size is at minimum five observations per independent variable, though 20 observations per variable is suggested for a suitable sample. In this study there are four independent variables, namely turnover, number of members of the board of directors, debt to assets and ROA. This indicates both the minimum and suggested requirement for sample size is met since our study consists of 214 observations. Another assumption is multicollinearity. It highlights the importance of controlling for intercorrelation between the independent variables (Pallant, 2016). It is preferable that these variables are not correlated to each other to a high extent since they all are supposed to explain the dependent variable. This is considered by using a Pearson correlation test performed in SPSS. A correlation test helps telling if and how variables are related to each other. This will provide a hint of the strength of the linear relationship between the variables. The correlation coefficient consists of a value between -1 and +1 (Saunders et al., 2016). If the coefficient takes on a value of -1 it indicates a perfect negative correlation and +1 indicates there is a perfect positive relation between the variables. Values of 0 instead show there is no relationship between the variables. Within business research it is not common receiving a perfectly negative or positive correlation. Numbers between -1 and +1 will still indicate a positive or negative correlation even if the variables are not perfectly related. According to Pallant (2016, p 159) two independent variables with a bivariate correlation of 0,7 or more in the same analysis are not likely to be included. The VIF (variance inflation factor) test is

another predictor of multicollinearity (Hair et al., 2006). If the VIF value is high the multicollinearity among the independent variables are high. According to Hair et al. (2006) and Pallant (2016) a common threshold value for VIF is 10. Though it is highlighted the appropriateness in value can differ between studies. Smaller sample size usually calls for a lower threshold value for VIF. A VIF test was performed in SPSS. The third assumption for logistic regression is checking for outliers (Pallant, 2016), which have been controlled for.

In logistic regression it is interesting to know how useful the model is (Pallant, 2016). In this study the Omnibus test of model coefficients, Hosmer and Lemeshow test, Cox & Snell R Square and the Nagelkerke R Square are used to predict this. The Omnibus test provides a view of how well the model performs (Pallant, 2016). A significant result will indicate the model is working well. The Hosmer and Lemeshow test is considered a very reliably test for goodness of fit. Though in order to show support for the model the significance level is supposed to be higher than 0,05. The Cox & Snell R Square and the Nagelkerke R Square provides an indication for how large part of the variability in the model, which is explained by the variables (Pallant, 2016).

4. Results

This chapter presents the results of the tests conducted in this study. The descriptive statistics of the sample is first described. Subsequently follows a correlation analysis and VIF-test providing information regarding multicollinearity. Last, the regression analysis between a company's characteristics and the choice of voluntary auditing is presented.

4.1 Descriptive statistics

In the tables below descriptive statistics regarding each variable are presented in terms of number of observations, mean, standard deviation and minimum and maximum values. Table 3 presents information regarding no auditing and table 4 presents information for auditing.

Table 3: *Descriptive statistics - No auditing*

| INDEPENDENT VARIABLES | N | Mean | Std. Dev | Min | Max |
|--|----------|-------------|-----------------|------------|------------|
| TURNOVER | 107 | 1314,378 | 1259,119 | 0 | 5285 |
| NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS | 107 | 1,196 | 0,503 | 1 | 4 |
| DEBT TO ASSETS | 107 | 0,444 | 0,266 | 0 | 0,983 |
| ROA | 107 | 0,098 | 0,279 | -0,911 | 0,923 |

Table 4: *Descriptive statistics - Auditing*

| INDEPENDENT VARIABLES | N | Mean | Std. Dev | Min | Max |
|--|----------|-------------|-----------------|------------|------------|
| TURNOVER | 107 | 2661,654 | 1297,421 | 280 | 5048 |
| NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS | 107 | 1,404 | 0,763 | 1 | 4 |
| DEBT TO ASSETS | 107 | 0,539 | 0,243 | 0,12 | 0,931 |
| ROA | 107 | 0,174 | 0,272 | -0,572 | 0,915 |

In the group where auditing had been abandoned the lowest turnover is 0 tkr and the highest turnover is 5285 tkr. The mean value for the same group consists of 1314,738 tkr. Looking at the standard deviation for turnover in annual reports not audited it is 1259,119. As can be seen in table 4, companies audited, the minimum value of turnover is 280 tkr and the maximum value is 5048 tkr. Furthermore, in this group the mean value of turnover is 2661,654 tkr and the standard deviation is 1297,421. Comparing these two groups there are differences. Regarding the minimum and maximum values, the difference in

minimum value is 280 and the difference in maximum value is 237. The minimum value is higher in the group where companies were audited, though the maximum value was lower in the same group. The mean value were 1 346, 916 tkr higher in the second group which were audited. Focusing at the standard deviation there is also a difference between the groups, where it is 38,302 higher in the group for audited companies.

Looking at the ownership structure in the group not audited the distribution between the highest and lowest number of members of the board of directors ranges from 1 to 4 persons. The mean value is 1,196 persons in the number of members of the board of directors. In the first group, not audited, the standard deviation is 0,503. In the second group, audited, the highest number of members of the board of directors is 4 and the lowest number 1. The mean value for the same group is 1,404 persons. Furthermore, the standard deviation is 0,763. Looking at the differences between those two groups there are none when it comes to the highest and lowest number of members of the board of directors. The lowest number in both groups is 1 person while the highest number is 4 persons. Though the mean is higher in the second group, where the value is 0,207 higher than in the first group. Regarding the standard deviation, it is also higher in the second group. The difference in standard deviation is 0,260 between the groups.

As can be seen in table 3 the leverage in group 1, withholding the companies not audited, the minimum value of the variable debt to assets is 0 and the maximum value is 0,983. The mean value for the same group consists of 0,444. Furthermore, looking at the standard deviation for the variable leverage for no audited firms, it is 0,266. Table 4 also shows the minimum and maximum values for the other group consisting of them with auditing. The minimum value of debt to assets is 0,120 where the maximum value is 0,931. In this group the mean value is 0,539 and there is a standard deviation of 0,243. When looking at this result the findings show some differences between the companies exempted from auditing and the ones with auditing. The minimum value has a difference of 0,120 and the maximum value differs with 0,052. The minimum value is lower and the maximum value is higher in the first group, the companies with no auditing. The difference in mean value is 0,095 where the mean value is higher for the companies audited. Additionally, the standard deviation differs with 0,023 where there is a higher value for group one.

According to table 3 above, there is a spread for ROA from -91,1% and +92,3% in the group without auditing. The mean value in the same group is -9,8%. Looking at the standard deviation it is 0,280 in reports not audited. Focusing on companies audited the ROA ranges from -57,2% to +91,5%. In the group for auditing the mean value of ROA is 17,416%. The standard deviation for the same group is 0,272.

Making a comparison between the groups regarding ROA the spread differ. In the first group, not audited, there is a spread on 183,4 while in the second group the spread is 148,7. It is 34,7 higher in the first group. Looking at the minimum values for the groups it is lower in the first group, -91,1%, compared to the second group, -57,2%. Regarding the maximum values there is hardly any difference between the groups even though the first group score 0,8 higher. Furthermore the difference in standard deviation between the groups is 0,008.

4.2 Pearson correlation & VIF

In order to control for multicollinearity Pearson correlation test and VIF-test were applied. From the correlation test we are interested in knowing about the correlation among our independent variables. The aim is to find out what the correlation is to conclude whether multicollinearity exists or not. Following tables will show the Pearson correlation and VIF-test.

Table 5: *Pearson correlation test*

| | | TURNOVER | NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS | DEBT TO ASSETS | ROA |
|--|------------------------|----------|---|----------------|--------|
| TURNOVER | Correlation | 1 | 0,089 | 0,288** | 0,148* |
| | Sig. (2-tailed) | | 0,195 | 0,000 | 0,030 |
| | N | 214 | 214 | 214 | 214 |
| NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS | Correlation | 0,089 | 1 | 0,090 | 0,053 |
| | Sig. (2-tailed) | 0,195 | | 0,19 | 0,44 |
| | N | 214 | 214 | 214 | 214 |
| DEBT TO ASSETS | Correlation | 0,288** | 0,09 | 1 | -0,154 |
| | Sig. (2-tailed) | 0,000 | 0,19 | | 0,024 |
| | N | 214 | 214 | 214 | 214 |
| ROA | Correlation | 0,148* | 0,053 | -0,154 | 1 |
| | Sig. (2-tailed) | 0,030 | 0,440 | 0,024 | |
| | N | 214 | 214 | 214 | 214 |

** Correlation is significant at the 0,01 level (2-tailed).

* Correlation is significant at the 0,05 level (2-tailed).

Table 6: *Variance inflation factor (VIF)*

| VARIABLES | VIF |
|---------------------------|-------|
| TURNOVER | 1,141 |
| BOARD OF DIRECTORS | 1,016 |
| DEBT TO ASSETS | 1,146 |
| ROA | 1,072 |

According to Pallant (2016, p 159) two independent variables with a bivariate correlation of 0,7 or more in the same analysis should not be included. The correlation test, table 5, indicates the correlation is significant at the 0,01 level for debt to assets and turnover. The correlation is significant at the 0,05 level for ROA and turnover and ROA and debt to assets. For ROA and debt to assets the relation is negative while for all the other variables there is a positive relationship. Despite there is a significant correlation between the independent variables the values are all below 0,7 and therefore it can be assumed no

multicollinearity exists in the model. Additionally, to test the multicollinearity, a VIF test was conducted. The values derived from the test are all below 1,2. As described previously the values for threshold can differ depending on the study though 10 is considered a maximum value (Hair et al., 2006; Pallant, 2016). All together these tests indicate there are no multicollinearity problems in this study.

4.3 Regression analysis

In this section the results from the logistic regression analysis are presented, showing the relationship between our independent variables and the dependent variable. The results from the regression analysis are first presented in tables below to clarify.

Table 7: *Omnibus tests of model coefficients*

| | | Chi-square | df | Sig. |
|--------|-------|------------|----|-------|
| Step 1 | Step | 57,162 | 4 | 0,000 |
| | Block | 57,162 | 4 | 0,000 |
| | Model | 57,162 | 4 | 0,000 |

Table 8: *Hosmer and Lemeshow test*

| Step | Chi-square | df | Sig. |
|------|------------|----|-------|
| 1 | 12,097 | 8 | 0,147 |

Table 9: *Model summary*

| Step | 0 | Cox and Snell R Square | Nagelkerke R Square |
|------|----------------------|------------------------|---------------------|
| 1 | 239,505 [^] | 0,234 | 0,313 |

[^] Estimation terminated at iteration number 5 because parameter estimates changed by less than 0,001.

As can be seen, the results from the goodness of fit produced from the logistic regression are presented in the tables 7, 8 and 9. The significance value from the Omnibus test is 0,000, which is below 0,05 indicating our model is supported. Moreover, the Hosmer and Lemeshow test shows a significance value of 0,147. Since this value is above 0,05 our model is supported by this test as well meaning the fit of the model is good. Furthermore, from the model summary table it can be seen the Cox and Snell R square is 0,234 and the

Nagelkerke R square is 0,313, implying that between 23,4 % and 31,3 % of the variability is explained by this set of variables.

Table 10: *Variables in the equation*

| VARIABLES | B | S.E | Wald | df | Sig. | Exp(B) |
|--|--------|-------|--------|----|-------|--------|
| TURNOVER | 0,001 | 0,000 | 30,788 | 1 | 0,000 | 1,001 |
| NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS | 0,639 | 0,266 | 5,765 | 1 | 0,016 | 1,894 |
| DEBT TO ASSETS | 0,401 | 0,662 | 0,367 | 1 | 0,545 | 1,493 |
| ROA | 0,686 | 0,589 | 1,354 | 1 | 0,245 | 1,985 |
| CONSTANT | -2,528 | 0,541 | 21,867 | 1 | 0,000 | 0,080 |

The results from the binary logistic regression are displayed in table 10. Each column describes information derived from the regression. The first column, “B” presents information regarding the relationship between the independent and dependent variable (Pallant, 2016). A positive relationship is recognised by a positive value while a negative relationship is indicated by a negative value. In this case a negative beta coefficient indicates an increase in the characteristic will decrease the probability of choosing voluntary auditing.

The “Sig”-column presents the statistical significance for each variable (Pallant, 2016). The significance level used in this test is 95%. Values below 0,05 are therefore considered significant in this model.

4.3.1 Firm size (turnover)

From the regression analysis it can be seen the beta coefficient of the variable turnover is 0,001. This result is statistically significant since the significance level is lower than 0,05 (P-value = 0,000). Since the beta coefficient is positive and it is also statistically significant our result is as expected; the companies’ size measured in turnover has a positive relationship with voluntary auditing. Important though, is to notice that the beta coefficient is very close to 0, implicating the firm size has a weak effect.

Hypothesis 1 (H1): There is a positive relationship between turnover and voluntary auditing.

Hypothesis 1 (H1) is accepted.

4.3.2 Ownership structure (number of members of the board of directors)

Our result signifies a strong positive relationship between ownership structure measured in number of members of the board of directors and voluntary auditing. Information gathered from the regression analysis show the beta coefficient is 0,639 what gives support to emphasize the strong relationship. This result is statistically significant since the significance level is below 0,05 (P-value = 0,016). This finding is in line with our expectations and therefore hypothesis 2 (H2) is supported.

Hypothesis 2 (H2): There is a positive relationship between number of members of the board of directors and voluntary audit

Hypothesis 2 (H2) is accepted.

4.3.3 Leverage (debt to assets)

The result from the regression analysis demonstrates there is a positive relationship between leverage measured in debt to assets and voluntary auditing since the beta coefficient for the variable is 0,639. However, this result is not statistically significant at all since the significance level is above 0,05 (P-value = 0,545). When P-value is greater than 0.05, the hypothesis cannot be accepted, but it does not mean that it is rejected.

Hypothesis 3 (H3): There is a positive relationship between leverage and voluntary auditing.

Hypothesis 3 (H3) cannot be accepted or rejected.

4.3.4 Profitability (ROA)

From the regression analysis it displays there is a positive relationship between profitability measured in ROA and voluntary auditing. This is because the beta coefficient is 0,686. However this result is not statistically significant since the significance level is above 0,05 (P-value = 0,245). The hypothesis cannot be accepted since the P-value is

greater than 0,05, but it does not mean it is rejected.

Hypothesis 4 (H4): There is a positive relationship between profitability and voluntary auditing.

Hypothesis 4 (H4) cannot be accepted or rejected.

5. Analysis

In the following chapter the results will be analysed in accordance with the theoretical framework and literature presented in previous chapters of this paper. Our hypotheses of this paper are further discussed and also some reflections about the findings. The structure of this chapter is in accordance with the literature review- and result chapters including the same headlines, to facilitate understanding for the reader.

5.1 Firm size

According to our results there is a positive relationship between companies' size measured in turnover and the likelihood to voluntarily return back to auditing after abandoned it earlier. This means the first hypothesis (H1) is accepted. The descriptive analysis shows the mean value for audited companies was twice as high as when they were not audited and therefore the result shows a considerably higher turnover for when the companies returned to audit comparing with when they were not audited. The regression analysis presents a statistically significant result about this positive relationship and this can be supported by agency theory. Because when a company grows in size, the agency costs increase because of more expensive and complex monitoring in larger companies. Furthermore, according to agency theory the information asymmetry increases with the size of a company and auditing is argued to provide assurance and therefore the agency relationship maintenances. Since the information asymmetry increases in line with an increasing size, also the risk situation in the agent relationship rises. This also supports our results that the demand for voluntary auditing increases in line with an increasing firm size.

Signalling theory states companies want to present positive information regarding them. It can therefore be assumed companies with positive information also will choose voluntary auditing, since this will signal good quality. This supports our results, which show an increase in size will contribute to companies' decision to return to auditing. Auditing provides insurance because the numbers are audited. According to signalling theory companies want to signal their audited financial reports since it signals credibility. The likeliness to choose voluntary auditing will therefore increase with a company's size. According to rational choice theory human beings make choices to maximize total benefit and utility. Since the information asymmetry between company's owners and the stakeholders reduces with auditing and increases with the size the decision to return to

auditing is rational. Also, since the result of this study show larger companies want to signal the quality of their information, it is rational to choose auditing and the decision to return to auditing is therefore supported by rational choice theory. Additionally, the risk is increasing with an increasing size and consequently a rational decision is to choose voluntary auditing since it reduces risk. Furthermore, this implies companies see benefits in auditing, for instance they realise auditing decreases potential risks and also gives assurance of their financial statements. When the company increases in size the benefits emerge indicating the benefits are now more valued than the costs of auditing.

The result in our study is supported by several studies previously mentioned in this paper (Collis, 2004; Dedman et al., 2014; Haw et al., 2008; Niemi et al., 2012; Tauringana & Clarke, 2000). For instance, Tauringana and Clarke's (2000) findings show there is a positive relationship between firm size and voluntary auditing. One of the reasons mentioned explaining this is a larger firm size will increase the likeliness of errors. Companies will therefore choose auditing as a way to reduce these errors. Dedman et al. (2014) also support this relation, finding firm size will have an impact on the choice of voluntary auditing. Though Carey et al. (2000) were not able to find a relation between firm size and the demand for voluntary auditing. Despite this they did find support for an increased complexity in owners insight in what happens in the company. Collis et al. (2004) study show there is a relationship between firm size and the demand for voluntary auditing in different regulatory settings. This supports our results since this study is conducted on Swedish companies with the Swedish regulatory. Additionally, the study of Niemi et al. (2012) indicates since parts of the audit costs are fixed they drop with increased firm size, which advocates a relationship between firm size and voluntary auditing. This further emphasis the fact that companies sees more value in the benefits of auditing than in the costs of auditing.

5.2 Ownership structure

Our result supports the second hypothesis (H2) that there is a positive relationship between ownership structure and the choice of voluntary auditing. According to the descriptive statistics there is no difference between the groups audited and not audited looking at the minimum and maximum values, though the mean value is higher in the group with auditing. These findings are supported by agency theory. Within agency theory it is assumed agency costs exists between owners and managers. The agency costs

derive from for instance the information asymmetry existing between owners and managers. In agency theory it is argued agency costs will increase when there is a larger dispersion in ownership. Auditing is a way to reduce agency costs providing insurance for the financial statements. It is described auditing is an optimal contract for reducing agency costs between the principal and the agent. This is because the auditor's part is to certify the financial statements are correct. Since our results show larger ownership dispersion when companies returning back to auditing it is therefore in line with agency theory.

Within signalling theory the assumption is companies want to disclose positive information. High audit quality is considered a tool for signalling indicating choosing auditing also will work as a tool for signalling. Auditing is a signal for insurance. In line with a large dispersion in ownership there will be higher incentive to signal quality to the owners, which can explain there is a positive relationship between ownership structure and voluntary auditing. Audit quality works as a signal to potential investors providing credibility. When the ownership dispersion increases the need for high auditing quality can be assumed to increase and therefore also the demand for auditing in general. In this way signalling theory provides support for the finding there is a positive relationship between ownership structure and voluntary auditing.

According to rational choice theory a company evaluates the possible alternatives and then choose the most beneficial one. Regarding ownership structure, the larger the dispersion the greater will the need be for auditing and it will therefore be a rational choice to choose auditing and this also indicates companies see benefits in auditing. When the ownership dispersion increases there will be a higher incentive for audit quality. In line with this it will be a rational choice opting for voluntary auditing.

The findings in this study are to a large extent similar to previous findings within the same area (Carey et al., 2000; Collis, 2004; Dedman et al., 2014; Ojala et al., 2016; Tauringana & Clarke, 2000). A large number of these studies derive from agency theory. Dedman et al. (2014) findings show a large dispersion in ownership will have an impact on the choice of voluntary auditing. This due to the high agency costs associated with a large ownership dispersion. Tauringana and Clarke (2000) were also able to find the same relationship. In Ojala et al.'s (2016) study ownership structure was proved to be related to the choice of

voluntary auditing. One of the referred reasons for voluntary auditing was the advantage of a professional opinion by an external part. Carey et al.'s (2000) study shows a greater separation between ownership and control will result in a higher incentive for auditing. Kim et al.'s (2011) argue the need for auditing will not be affected by ownership structure as much in small companies as in larger companies. Though our findings indicate the opposite since there is an increase in ownership dispersion when companies returned back to voluntary auditing, despite the fact we are focusing on small companies. This is in line with Collis (2004) arguing external auditing is important even in small firms.

5.3 Leverage

Our result show there is a positive relationship between leverage and voluntary auditing, though our result from the regression analysis is not statistically significant our third hypothesis (H3) cannot be accepted or rejected. This implies it is not possible to claim there is a positive relationship between leverage and voluntary return to auditing but it is neither possible to claim it is not a positive relationship. The beta coefficient in the regression analysis is positive and also the descriptive analysis indicates there is a minor increase of level of debt when returning back to auditing. Agency theory can explain a positive relationship, since according to this theory one part often has more information regarding the business and one part less information and therefore it can be explained auditing would solve this agent-relationship problem. Collis et al. (2004) state that for smaller companies the principal in the agent-relationship can be referred to as financial institutions, such as banks. Moreover, these banks want information about the companies' business before lending them money and therefore audited reports will provide reasonable assurance for them. This can also be supported by rational choice theory since this theory suggests human beings take rational decisions. For instance, it might be the case a company's application for a loan was denied by the bank for the reason their financial information was not audited and therefore not assured. Therefore accordingly with rational choice theory it is rational to make the decision to return to auditing voluntarily. Further, this also indicates the companies see benefits with auditing since if they, for instance, truly want a bank loan. Signalling theory can also support a positive relationship between debt to assets and voluntary auditing. This is because signalling theory suggests companies want to signal positive information and signalling this to a financial institution indicates they have positive information to signal, since they are audited the quality is good and therefore also positive.

Our finding in this paper regarding a positive relationship between leverage and voluntary auditing is to a large extent in line with Carey et al., (2000), Chow (1982) and Dedman et al., (2014). They all find a positive relationship in their studies and this is because they implicating the financial institutions want companies' financial information to be assured before lending money. If there would not be a relationship between leverage and voluntary auditing this would be in line with the findings of Haw et al. (2008) and Seow (2001), since they did not find a relationship in their studies. Furthermore a negative relationship could be explained by Niemi et al. (2012) stating companies under financial distress want an external auditor but have no possibility to afford one. Additionally, Dedman et al. (2014) claims in their study the audited companies have a higher level of debt in contrast to non-audited companies but the difference is not very huge. The explanations for this might depend on long relationships between the lenders of the non-audited companies and therefore they already have sufficient inside information about the business (Dedman et al., 2014).

5.4 Profitability

Our results indicate there is a strong positive relationship between companies' profitability, measured by ROA, and the likelihood to voluntarily return back to auditing after abandoned it earlier. This is because the beta-coefficient is high, though the result is not significant. Therefore hypothesis 4 (H4) is not supported and cannot be accepted but can neither be rejected. Despite the lack of a statistically significant positive relationship between profitability and voluntary auditing, the descriptive statistics show a higher ROA for when the companies were audited compared to when they were not audited.

The prediction according to agency theory was to find a positive relationship. This since agency theory points some costs occur in the agent-principal relationship to ensure the agent makes optimal decisions according to the views of the principal. Choosing auditing is a way to reduce the agency costs since it provides assurance. Though auditing in itself causes monetary costs in terms of audit fees and costs for preparing for the audit. If the owners experience that the benefits of auditing exceeds the costs of it they will choose auditing. A higher profitability implies an increased possibility to afford auditing and since auditing entails an assurance the result is that agency costs can be reduced. The

positive relationship discovered in our study indicates this is supported. This implies agency theory in this case can explain the relationship.

Audit quality can be perceived as a signal of good quality. Therefore auditing compared to no auditing also can be considered a signal of high quality. The more positive information a company can disclose the more likely is it they will implement it. Companies with favourable information will also have higher incentives paying for their audit because they will benefit from assurance of the information presented. In this case since the ROA is higher when returning back to auditing it can be assumed higher incentives to present favourable information can explain the relationship. Overall, according to our results signalling theory can provide an explanation for the relationship between voluntary auditing and profitability according to the regression analysis. The descriptive statistics also indicate the ROA is higher for the group returned to auditing and lower in the group when they are not audited. This study is in line with Haw et al.'s (2008) study presenting a positive relationship between the choice of voluntary auditing and profitability. These findings is also supported by Watson et al. (2002) whose study showed a relationship between disclosure of information and profitability. Companies with a high profitability would therefore want to signal this. This study is contradictory compared to Dedman et al.'s (2014) study finding a negative relationship between profitability and voluntary auditing. Our result is to some extent in line with rational choice theory since it suggests a higher profitability impact the choice of voluntary auditing, since it is a rational decision. A higher profitability would therefore contribute to companies' perceiving benefits instead of costs of audit and therefore chose auditing (Collis, 2004).

5.5 Reflections about findings

Some of the results in this paper are consistent with two of our hypotheses and this is therefore not surprising. Since the first hypothesis regarding firm size is supported this study confirms previous studies focusing on voluntary auditing. One explanation for companies choosing voluntary auditing when their turnover increases is because of an approximation of the criteria for mandatory auditing. On the other side, another explanation could be the one that Taurigana & Clarke (2000) state, that an increase in size leads to errors in the financial statements and in the accounting data. The results for ownership structure also supported our hypothesis and therefore existing literature.

Despite that these companies are of a small size and the number of members of the board of directors is low, it is possible to conclude that information asymmetry can exist. In small companies it is not unusual there are few managers in charge of a large part of the every day business. If the number of members of the board of directors increase with, for instance, an external part the need for auditing in order to decrease information asymmetry can still be considered important (Collis, 2004).

We were expecting a positive relationship between the characteristics leverage and profitability and the decision for voluntary auditing among small firms. This positive relationship is found, but unfortunately without statistical significance. We get the same findings for the impact of debt to assets. Regarding the lack of statistical significance for the hypothesis on debt to assets this could be explained by Dedman et al. (2014) arguing small companies usually have a long-term relation with their banks. Because of this audited financial reports will not be as important for having a loan from the banks and therefore this could be explained by the same reason. A positive relationship could be the case and if so we can see it from the perspective of the company, where it could be argued a higher level of debt to assets indicating the company intend to make investments and want to grow. Therefore it is possible to argue they want an assurance in the shape of auditing. The strong impact we thought profitability would have on the choice of voluntary auditing did exist though it was not statistically significant the hypothesis could not be accepted. Based on this, there is a need for more research in this field. We agree with Chow (1982) indicating companies' decision on voluntary auditing is because they see benefits in investing in auditing when the profits are higher.

We are aware of and it is also important to remember that all companies that abandoned and later returned back to auditing are not included in this study. Still, our result of this study is interesting even if only two of the hypotheses can be accepted and the other two can neither be accepted nor rejected. Since some of our results are surprising one explanation for this might be that knowledge on small firms are not very well-developed yet (Collis, 2010). We also agree with Collis (2010) who states existing studies on this topic are made in different countries and can therefore explain this result since there are country differences, among others regarding regulation systems and business culture. To conclude, it might be that our results compared with our hypotheses might depend on where the study is made and also because of insufficient research on small companies.

6. Conclusion

In this final chapter our research question will be answered. Further, the contributions of this study will be presented and motivated, followed by a determination of the reliability and validity of the study. Moreover the limitations of this study are presented and the chapter ends with some suggestions for further research.

In this study our purpose was to examine the relationship between selected characteristics of the small firms in Sweden and the decision to voluntarily return to be audited again after abandoning it after the law changed. In order to achieve the purpose a research question was developed in order to be answered with the intention to fulfil the purpose of the study. Our research question was; *what is the relationship between mandatory audit exempted firm characteristics and the decision to voluntarily return to auditing?* The firm characteristics selected in this study were firm size, ownership structure, leverage and profitability. In order to answer our research question rational choice theory, agency theory, signalling theory and previous literature regarding voluntary auditing were chosen as a foundation for our study.

Our results show there is a positive relationship between two of the selected characteristics and the decision to voluntarily return to auditing. These two are the characteristics firm size and ownership structure that turned out to have a positive relationship with voluntary return to auditing. Since a relationship exists, this implies they have an impact on the choice to voluntarily return to auditing. These results are in accordance with previous studies in this field (Carey et al., 2000; Collis, 2004; Dedman et al., 2014; Haw et al., 2008; Niemi et al., 2012; Ojala et al., 2016; Tauringana & Clarke, 2000). Furthermore, our results are in accordance to and can be explained by rational choice theory, agency theory and signalling theory.

For the characteristics leverage and profitability a positive relationship was discovered but it was not statistically significant. It is therefore not possible to argue with certainty these characteristics have an impact on the choice to voluntarily return to auditing. Previous literature (Carey et al., 2000; Chow, 1982; Dedman et al., 2014; Haw et al., 2008; Watson et al., 2002) has found a statistically significant support for a positive relationship between these characteristics and voluntary auditing. Furthermore, a positive

relationship between leverage and profitability is in response to and can be explained by rational choice theory, agency theory and signalling theory.

To summarize, our findings indicate there is a positive relationship between the characteristics firm size and ownership structure and the choice to voluntarily return to auditing, while a positive relationship could not be determined between the characteristics leverage and profitability and the choice to voluntarily return to auditing.

6.1 Contributions

Our theoretical contribution of this study is findings in the field of voluntary auditing regarding small companies in Sweden. This study indicates not all selected characteristics have a statistically significant determined relationship with voluntary return to auditing, in comparison with previous studies. Focus in this study has been on companies abandoning auditing and later voluntarily returning back to auditing, a field in previous research, to our knowledge, not have been studied on in Sweden. Regarding these companies only firm size and ownership structure are found to have a determined positive relationship with voluntary return to auditing. No relationship was confirmed for the characteristics leverage and profitability, though the results indicated these characteristics have a positive impact on the choice to return back to auditing. These findings indicate the previous research gap on firm characteristics related to the small sized companies in Sweden returning back to auditing when not obligated to has been covered through our study to certain extent.

The practical contribution of this study benefits auditors, since our findings contribute with information to them regarding what factors can impact on companies choice of voluntary auditing. Since companies' size have an impact, this indicate auditing firms can have a look at companies with an increased turnover who abandoned auditing after the law change. This is because it can be assumed those companies also might have a need for auditing since our study has shown an increased turnover among other companies returning back to auditing. This also applies to companies with an increased number of members of the board of directors, since ownership structure is positively related to companies returning back to auditing.

6.2 Reliability, validity and limitations

Reliability is a notion used to measure the trustworthiness and consistency of the results (Pallant, 2016; Saunders et al., 2016). Further, this implies reliability offers the repeatability of a study over time (Saunders et al., 2016). The research should be transparent so the same results would be achieved if the same procedure with identical steps were followed. This means if the compliance is good the reliability is high and if it is the other way around, the reliability is low. In this study all the steps and procedures of the data collection explained have been assured. The date for when the data in this study was collected is specified for this reason. Further, we have assured every section of the research process has been conducted in an explicit and rigorous way, to achieve reliability.

Validity refers to how well the measurements are suitable for the study (Saunders et al., 2016). To start with, in this study the indicators for each variable have been motivated above with support from previous studies. These variables have been proven useful and therefore provide validity to this study since they are suitable measures for our research purpose. A logistic regression has been used in order to answer our hypotheses. This is also a common method when investigating voluntary auditing and can therefore be considered suitable. Before testing our data suitable assumptions were controlled to ensure our data was valid. Another part of validity refers to what extent the result of the study is generalizable (Saunders et al., 2016). Furthermore, this study has limitations that are important to notice. Regarding methodological reasons, the companies selected had a turnover between 500 000 - 5 000 000 SEK the latest financial year updated at Retriever, meaning the companies with a turnover less than 500 000 SEK or more than 5 000 000 SEK were excluded from this study. Because of this selection criteria during the data collection it is difficult to argue for that our results are generalizable to companies with a turnover higher than 5 000 000 or less than 500 000 SEK the latest financial year updated at Retriever. Furthermore, companies registered after 2010-10-31 are not included in this study, indicating it might not be possible to generalize our result on those companies since they are already exempted from mandatory auditing when they start their business. Another important limitation in this study is the difficulties finding an exact number for how many companies that abandoned and later returned to auditing. This aggravates the generalizability of our results. Though this is a census study it still does not include all companies within the population of companies abandoning and later returning to auditing.

Also, this study does only include Swedish companies, what implicate our results might not be generalized on foreign companies since there are country differences like different regulations and business cultures.

6.3 Suggestions for further research

We have some thoughts about future research we would like to share. One suggestion of future research we find interesting after performing our study is to look closer into differences and similarities between industries. It would be interesting to find out if the industry a company operates in has an impact on the choice of voluntary auditing comparing with other industries. Furthermore, we find it interesting to make a similar study of the companies registered after the law change 2010, since they are not mandatory to auditing at the start-up. A study like this should then focusing on those companies choosing auditing voluntarily and by using the same characteristics like us when conducting this study, the results might be interesting comparing with ours. Another suggestion is to work more in the future with the variables, by trying other measures instead of debt to assets and ROA of the same theme but with more advanced metrics and also use transformation tests in order to find the right variables and tests. Additionally, one suggestion is to conduct a qualitative study in the same field like us, to find out what or why companies choose to return to auditing voluntarily. If conducting a qualitative method interviews can be used for seeking for detailed and underlying information from the managers involved in this decision.

7. References

- Abdel-Khalik, A. R. (1993). Why do private companies demand auditing? A case for organizational loss of control. *Journal of Accounting, Auditing & Finance*, 8(1), 31-52.
- Arkes, H. R., & Blumer, C. (1985). The psychology of sunk cost. *Organizational Behavior and Human Decision Processes*, 35(1), 124-140.
- Bryman, A., & Bell, E. (2011). *Business research methods*. Oxford : Oxford University Press.
- Blackwell, D. W., Noland, T. R., & Winters, D. B. (1998). The value of auditor assurance: Evidence from loan pricing. *Journal of Accounting Research*, 36(1), 57-70.
- Boudon, R. (2003). Beyond rational choice theory. *Annual Review of Sociology*, 29(1), 1-21.
- Campbell, D., Shrives, P., & Bohmbach-Saager, H. (2001). Voluntary disclosure of mission statements in corporate annual reports: signaling what and to whom?. *Business and Society Review*, 106(1), 65-87.
- Carey, P., Knechel, W. R., & Tanewski, G. (2013). Costs and benefits of mandatory auditing of for-profit private and not-for-profit companies in Australia. *Australian Accounting Review*, 23(1), 43-53.
- Carey, P., Simnett, R., & Tanewski, G. (2000). Voluntary demand for internal and external auditing by family businesses. *Auditing: A Journal of Practice & Theory*, 19(s-1), 37-51.
- Chang, X., Gygyax, A. F., Oon, E., & Zhang, H. F. (2008). Audit quality, auditor compensation and initial public offering underpricing. *Accounting & Finance*, 48(3), 391-416.

- Chow, C.W. (1982). "The Demand for External Auditing: Size, Debt and Ownership Influences", *The Accounting Review*, 57(2), 272-291.
- Collis, J., Jarvis R. & Skerratt L. (2004). "The demand for the audit in small companies in the UK", *Accounting and Business Research*, 34(2), 87-100.
- Collis, J. (2010). Audit exemption and the demand for voluntary audit: A comparative study of the UK and Denmark. *International Journal of Auditing*, 14(2), 211-231.
- Connelly, Brian L., Certo, S. Trevis, Ireland, R. Duane, & Reutzel, Christopher R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39.
- Craven, B.M. and Marston, C.L. (1999), "Financial reporting on the internet by leading UK companies", *The European Accounting Review*, 8 (2), 321-33.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Davis, Schoorman, and Donaldson reply: The distinctiveness of agency theory and stewardship theory. *Academy of Management. the Academy of Management Review*, 22(3), 611.
- DeAngelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183-199.
- Dedman, E., & Kausar, A. (2012). The impact of voluntary audit on credit ratings: evidence from UK private firms. *Accounting and Business Research*, 42(4), 397-418.
- Dedman, E., Kausar, A., & Lennox, C. (2014). The demand for audit in private firms: recent large-sample evidence from the UK. *European Accounting Review*, 23(1), 1-23.
- Duréndez Gómez-Guillamón, A. (2003). The usefulness of the audit report in investment and financing decisions. *Managerial Auditing Journal*, 18(6/7), 549-559.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of management review*, 14(1), 57-74.

Elzahar, H., & Hussainey, K. (2012). Determinants of narrative risk disclosures in UK interim reports. *The Journal of Risk Finance*, 13(2), 133-147.

Francis, J. R., Khurana, I. K., & Pereira, R. (2003). The role of accounting and auditing in corporate governance and the development of financial markets around the world. *Asia-Pacific Journal of Accounting & Economics*, 10(1), 1-30.

Hagel, J., Brown, J. S., Samoylova, T. & Lui, M. (2013). "Success or struggle: ROA as a true measure of business performance", *Deloitte University Press*, Available: <http://dupress.com/articles/success-or-struggle-roa-as-a-true-measure-of-business-performance/>

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (2006). *Multivariate data analysis*. Pearson Prentice Hall.

Haw, I. M., Qi, D., & Wu, W. (2008). The economic consequence of voluntary auditing. *Journal of Accounting, Auditing & Finance*, 23(1), 63-93.

Herrnstein, R. J. (1990). Rational choice theory: Necessary but not sufficient. *American Psychologist*, 45(3), 356.

Hirschey, M., 2008. "*Fundamentals of managerial economics*". Cengage Learning.

Israel, M. & Hay, I. (2006). *Research ethics for social scientists*. 1st Edition. London: Sage.

Jensen, M.C. & Meckling, W.H. (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics*, (4), 305-360

Johnston, A. (2014). Rigour in research: theory in the research approach. *European Business Review*, 26(3), 2016-217.

Karjalainen, J. (2011). Audit quality and cost of debt capital for private firms: Evidence from Finland. *International Journal of Auditing*, 15(1), 88-108.

Kaziliūnas, A. (2008). Problems of auditing using quality management systems for sustainable development of organizations. *Technological and Economic Development of Economy*, 14(1), 64-75.

Khalil, F., & Lawarree, J. (1995). Collusive auditors. *The American Economic Review*, 85(2), 442-446.

Kim, J. B., Simunic, D. A., Stein, M. T., & Yi, C. H. (2011). Voluntary audits and the cost of debt capital for privately held firms: Korean evidence. *Contemporary Accounting Research*, 28(2), 585-615.

Kiser, E., & Hechter, M. (1998). The debate on historical sociology: Rational choice theory and its critics. *American Journal of Sociology*, 104(3), 785-816.

Knechel, W. R., Krishnan, G. V., Pevzner, M., Shefchik, L. B., & Velury, U. K. (2012). Audit quality: Insights from the academic literature. *Auditing: A Journal of Practice & Theory*, 32(sp1), 385-421.

Lan, L. L., & Heracleous, L. (2010). Rethinking agency theory: The view from law. *Academy of management review*, 35(2), 294-314.

Lennox, C. S., & Pittman, J. A. (2011). Voluntary audits versus mandatory audits. *The Accounting Review*, 86(5), 1655-1678.

Lenz, H., & Ostrowski, M. (2005). Auditor choice by IPO firms in Germany: information or insurance signalling?. *International Journal of Accounting, Auditing and Performance Evaluation*, 2(3), 300-320.

McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, 30(7), 537-542.

- McFadden, D., Machina, M. J., & Baron, J. (1999). Rationality for economists?. In *Elicitation of preferences* (pp. 73-110). Springer, Dordrecht.
- Menard, S. W. (2002). *Applied logistic regression analysis*. SAGE.
- Mueller, F., Carter, C., & Whittle, A. (2015). Can audit (still) be trusted?. *Organization Studies*, 36(9), 1171-1203.
- Niemi, L., Kinnunen, J., Ojala, H. & Troberg, P. (2012). “Drivers of voluntary audit in Finland: to be or not to be audited?”, *Accounting and Business Research*, 42 (2), 169-196.
- Niskanen M., Karjalainen, J. & Niskanen J. (2010). “The role of auditing in small, private family firms: Is it about quality and credibility?”, *Family Business Review*, 23 (3), 230-245.
- Ojala, H., Collis, J., Kinnunen, J., Niemi, L., & Troberg, P. (2016). The demand for voluntary audit in micro-companies: Evidence from Finland. *International Journal of Auditing*, 20(3), 267-277.
- Oyeler, P., Laswad, F. and Fisher, R. (2003), “Determinants of internet financial reporting by New Zealand companies”, *Journal of International Management and Accounting*, 14 (1), 26-63.
- Pallant, J. (2016). “*SPSS Survival Manual - A Step by Step Guide to Data Analysis Using IBM SPSS*”, Maidenhead and New York, Open University Press.
- Reheul, A. M., Van Caneghem, T., Van den Bogaerd, M., & Verbruggen, S. (2018). Economic consequences of hiring an auditor with industry expertise: An empirical analysis among NPOs. *Nonprofit and Voluntary Sector Quarterly*, 47(1), 126-145.
- Ryan, B., Scapens, R. W., & Theobald, M. (2002). *Research method and methodology in finance and accounting. 2nd Edition*. London: Thomson.

Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of risk and uncertainty*, 1(1), 7-59.

Satava, D., Caldwell, C., & Richards, L. (2006). Ethics and the auditing culture: Rethinking the foundation of accounting and auditing. *Journal of Business Ethics*, 64(3), 271-284.

Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business Students (6:e appl.)*. Harlow: Pearson Education Limited

Seow, J. L. (2001). The demand for the UK small company audit an agency perspective. *International Small Business Journal*, 19(2), 61-79.

Skinner, D. J., & Srinivasan, S. (2012). Audit quality and auditor reputation: Evidence from Japan. *The Accounting Review*, 87(5), 1737-1765.

Slovic, P., Peters, E. (2010). Risk perception and affect. *Current directions in psychological science*, 15(6), 322-325

SOU 2008:32. *Utredning om revisorer och revision: Avskaffande av revisionsplikten för småföretag*. Stockholm.

Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review*, 92(3), 434-459.

Steneck, N. H. (2006). Fostering integrity in research: definitions, current knowledge, and future directions. *Science and Engineering Ethics*, 12 (1), 53-74.

Svensson, G. (2009). A counter-intuitive view of the deductive research process: clockwise versus anti-clockwise approaches. *European Business Review*, 21(2), 191-196.

Ryan, B., Scapens, R. W., & Theobald, M. (2002). *Research method and methodology in finance and accounting. 2nd Edition*. London: Thomson.

- Tauringana, V., & Clarke, S. (2000). The demand for external auditing: managerial share ownership, size, gearing and liquidity influences. *Managerial Auditing Journal*, 15(4), 160-168.
- Titman, S., & Trueman, B. (1986). Information quality and the valuation of new issues. *Journal of Accounting and Economics*, 8(2), 159-172.
- Vanstraelen, A., Schelleman, C., Meuwissen, R., & Hofmann, I. (2012). The audit reporting debate: Seemingly intractable problems and feasible solutions. *European Accounting Review*, 21(2), 193-215.
- Vanstraelen, A., & Schelleman, C. (2017). Auditing private companies: what do we know?. *Accounting and Business Research*, 47(5), 565-584.
- Wallace, W.A. (1980). "The economic role of the audit in free and regulated markets: A look back and a look forward", *Research in Accounting Regulation*, 17, 267–298.
- Watson, A., Shrivies, P., & Marston, C. (2002). Voluntary disclosure of accounting ratios in the UK. *The British Accounting Review*, 34(4), 289-313.
- Wiseman, R. M., Cuevas-Rodríguez, G., & Gomez-Mejia, L. R. (2012). Towards a social theory of agency. *Journal of management studies*, 49(1), 202-222.
- Wonder, N., Wilhelm, W., & Fewings, D. (2008). The financial rationality of consumer loan choices: revealed preferences concerning interest rates, down payments, contract length, and rebates. *Journal of Consumer Affairs*, (2), 243.