Why do Swedish limited companies’ switch audit-firm?
Abstract

Title: Why do Swedish limited companies switch audit firm?

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Key words: Audit firm change, mandatory audit firm rotation, audit partner rotation, agency theory, signaling theory, stewardship theory.

Purpose: The purpose of this master thesis is to establish the underlying factors that explain why companies’ switch audit firm.

Methodology: We have used a deductive approach where we have examined prior research in order to formulate our hypotheses.

Theoretical perspectives: We have chosen existing economic theories that have been used in prior studies. The theories we have applied are the agency theory, the signaling theory and the stewardship theory.

Empirical foundation: The empirical data have been collected from financial reports produced by Swedish limited companies.

Conclusions: The findings in our study demonstrate that a small amount of limited companies switch audit firm in Sweden. We found one significant result; audit quality. Therefore we can conclude that there is a relation between audit firm change and audit quality.
Acknowledgement

After ten weeks of intensive writing we can now present our master thesis. It is our hope that our study will inspire further research within the topic.

During the writing process, we have received a lot of valuable advice and recommendations from our supervisor Torbjörn Tagesson. Without his support we would not have been able to complete the thesis.

Thank you!

Lund, May 2011

Lina Hjelm Wallgren                          Charlotte Olofsson

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Definitions

Audit quality
Audit quality is explained as meeting minimum levels of standards and professional requirements as well as the ability to detect problems (Beattie & Fearnley, 1995; Francis, 2004)

Big N
The Big N refers to the world’s largest audit firms. The audit firms have undergone many mergers since the 1980s, from big eight to big five and finally big four (Hamilton et al, 2008; Abidin et al, 2010). Therefore we have chosen to name these big audit firms as Big N since they could represent the big eight, five or four. Nowadays Big N is represented by four audit firms; Ernst & Young, Deloitte Touche, PwC and KPMG (Hamilton et al, 2008).

Information asymmetry
Information asymmetry occurs when the market is not perfect and, e.g. the manager has inside information about future profitability which the market does not possess. Information asymmetry produces costs for companies to communicate to the market. (Talmor, 1984)

Moral Hazard
Moral hazard can take place in any economic situation where there are some uncertainties. Commonly, moral hazard is mentioned within the insurance industry as an unconscious behavior from the insured party. Hence, the risk behavior increase when the person knows that it has an insurance that cover accidentally costs. (Pauly, 1968)

Qualified opinion
A qualified opinion might be dispensed by an auditor if e.g. the company has not followed the required accounting rules. Since this information will be communicated to the market the company wants to avoid this opinion. (Investopedia website)
Small companies
When we mention a small company we refer to companies that have less than fifty employees and have yearly income or balance sheet turnover not higher than 10 million euro. (2003/361/EG)

Transaction costs
Transaction costs occur in an exchange of goods or services and are incurred in overcoming market imperfections. (Businessdictionary.com)

Abbreviations
ABL Aktiebolagslag (2005:551)
EU European Union
EC European Commission
GAO General Accounting Office
IFAC International Federation of Accountants
NAS Non-audit service
# Table of Contents

1 INTRODUCTION ............................................................................................................. 8  
1.1 BACKGROUND............................................................................................................. 8  
1.2 REGULATION OF AUDIT ROTATION .......................................................................... 9  
   1.2.1 US .......................................................................................................................... 9  
   1.2.2 Europe .................................................................................................................. 9  
   1.2.3 Sweden ................................................................................................................ 10  
1.3 CURRENT DISCUSSION OF AUDIT FIRM ROTATION .................................................... 11  
1.4 PURPOSE ..................................................................................................................... 13  
1.5 FURTHER OUTLINE .................................................................................................... 14  

2 METHODOLOGY ............................................................................................................. 15  
2.1 RESEARCH APPROACH .............................................................................................. 15  
2.2 THEORETICAL FRAMEWORK ...................................................................................... 16  
   2.2.1 The agency theory ................................................................................................. 17  
   2.2.2 The signaling theory ............................................................................................. 18  
   2.2.3 The stewardship theory ......................................................................................... 19  

3 LITERATURE REVIEW .................................................................................................... 20  
3.1 AUDIT FIRM CHOICE .................................................................................................. 20  
3.2 HYPOTHESIS FORMULATION .................................................................................... 21  
   3.2.1 Acquisition ............................................................................................................ 21  
   3.2.2 Company size ....................................................................................................... 21  
   3.2.3 Ownership concentration ...................................................................................... 22  
   3.2.4 Management ownership ....................................................................................... 23  
   3.2.5 Management change ............................................................................................ 23  
   3.2.6 Leverage ............................................................................................................... 24  
   3.2.7 Stock exchange listing ......................................................................................... 25  
   3.3 SUMMARY OF HYPOTHESES .................................................................................. 31  

4 EMPIRICAL METHOD ....................................................................................................... 32  
4.1 DATA SELECTION ........................................................................................................ 32  
4.2 DEPENDENT VARIABLE ............................................................................................. 33  
4.3 INDEPENDENT VARIABLES ...................................................................................... 33  
   4.3.1 Acquisition ............................................................................................................ 33  
   4.3.2 Company size ....................................................................................................... 34  
   4.3.3 Ownership concentration ...................................................................................... 34  
   4.3.4 Management ownership ....................................................................................... 34  
   4.3.5 Management change ............................................................................................ 35  
   4.3.6 Leverage ............................................................................................................... 35  
   4.3.7 Stock exchange listing ......................................................................................... 35  
   4.3.8 Qualified opinion .................................................................................................. 36  
   4.3.9 Audit quality ......................................................................................................... 36  
   4.3.10 Audit fee .............................................................................................................. 36  
   4.3.11 Non-audit service ............................................................................................... 37  

5 EMPIRICAL ANALYSIS .................................................................................................... 38  
5.1 DESCRIPTIVE DATA .................................................................................................. 38  
5.2 CORRELATION AND LOGISTIC REGRESSION ............................................................ 41  
5.3 HYPOTHESES OUTCOME (CORRELATION) ................................................................. 43  
5.4 HYPOTHESES SUMMARY (BINARY LOGISTIC REGRESSION) ....................................... 45  

VI
6 CONCLUDING REMARKS AND FURTHER RESEARCH ........................................46

6.1 DISCUSSION AND CONCLUSION ................................................................... 46

6.2 LIMITATIONS AND FURTHER RESEARCH ..................................................... 48

BIBLIOGRAPHY ............................................................................................................. 50
1 Introduction

1.1 Background

During the 18th century in the US, the industrial revolution stimulated the creation of capital markets and a separation of ownership and management emerged. As a response to the separation of owners and managers, a market for independent auditors surfaced. The purpose of the auditor was to provide a check on the managements’ performance in order to give an assurance to those who demanded the financial statements, e.g. shareholders, investors and creditors. (Imhoff, 2003)

After several accounting scandals during the 1900’s the auditing profession was highly criticized for lack of independence and for not being able to provide assurance to the investors and creditors (Imhoff, 2003). Due to the auditors’ lack of independence, a debate about mandatory audit firm rotation surfaced around the world. Audit firm rotation would lead to greater skepticism and provide a fresh new perspective on the companies’ financial statements. (Kwon et al, 2010) It would also reduce the audit firms concern of losing clients as a result of disagreements with management. However, the requirement has some implications such as increased audit fees and lack of knowledge of the company among new auditors’. (Imhoff, 2003)

Another concern that has attracted attention among regulators, market participants and academics is the rising audit market concentration. Over the last decades, the audit market has become more and more concentrated due to mergers between audit firms. In the 1980s and 1990s, the audit firm mergers reduced the global Big 8 to Big 5. (Abidin et al, 2010) The demise of Arthur Andersen reduced the audit firms to the Big Four (Hamilton et al, 2010). In addition, the regulators also distress that the market concentration would cause monopoly power and loss of objectivity and independence since only a few firms would dominate the audit market (Willekens & Achmad, 2003). According to Willekens & Achmad (2003) this trend would limit the companies audit firm choice.
1.2 Regulation of audit rotation

1.2.1 US

The recent financial scandals, e.g. Enron & Lehman Brothers, have emerged due to accounting irregularities, which have caused lack of credibility for the audit profession and financial reports. An increased concern among both legislators and financial statement users has occurred as a response to the financial scandals. As an attempt to improve the credibility of the accounting profession, the US Congress passed the Sarbanes-Oxley Act of 2002. (Chi, 2010) The legislation was enforced in 2002 to provide major change in the regulation of financial practice and corporate governance. In Section 203 of the Sarbanes-Oxley Act, mandates audit-partner rotation every five years for public companies. (Sarbanes-Oxley Act, 2002) The purpose of mandatory partner rotation is to reduce the threat of auditor independence, since some believe that poor quality in the financial statement is associated with extended auditor tenure. (Chi, 2010)

In the aftermath of audit-partner rotation, GAO (General Accounting Office) conducted a report regarding mandatory audit firm rotation as a further step towards increased audit independence. The report analyzed the potential costs and benefits with mandatory audit firm rotation and the result illustrated that 89 percent of the audit committee in Fortune 1000 public company claimed that the costs would most likely exceed the benefits. Only two percent stated that the benefits would exceed the costs. (GAO, 2004) In addition, some other studies (Kwon et al, 2010; Chi, 2010) have also raised the issue where they concluded that mandatory audit firm rotation will probably lead to increased audit independence, even though some consequences would also surface, like decreased audit quality and higher cost burden for companies.

1.2.2 Europe

The European Commission (EC) has also put the audit-partner rotation at the agenda in order to increase auditor independence. In 2006 EC implemented a directive that demanded mandatory audit partner rotation within the European Union (EU). The regulation involves listed companies’ within the union and implicate that the statutory auditors shall rotate at least every seventh year. (EU Directive 2006/43; art 42.2) The
EC has also discussed the issue of mandatory audit firm rotation to maintain objectivism and to prevent familiarity between companies’ and audit firms (EU, Green paper Audit policy: Lessons from the crisis, 2010). However, the green paper report is still new and under discussion where EC still proposes a further investigation of the pros and cons for such regulation (EU, Green paper Audit policy: Lessons from the crisis, 2010). Despite the lack of regulation of mandatory audit firm rotation, a few countries within the EU, such as Italy and Spain, has adopted mandatory audit firm rotation (Geiger & Raghunandan, 2002). However after eight years of practice, Spain abolished the regulation in 1995 since it received a lot of criticism among practitioners. Even though the regulation was implemented in order to increase audit independence, it got a lot of critique since it did not operate as expected and therefore was abolished. (Gómez-Aguilar et al, 2006) Other countries like United Kingdom, France and Austria have also put the question at the agenda, however only Austria have further investigated the issue (Kwon et al, 2010).

1.2.3 Sweden

As a result of the EU-directive (2006/43) Swedish listed companies’ have to switch audit-partner after seven years (ABL 9 kap 21a §). However, it is not mandatory for non-listed limited companies’ to switch auditor within a specific timeframe. Mandatory audit firm rotation has also been a discussed topic in Sweden the past years. Some opponents for mandatory audit firm rotation claim that it will have a negative impact on the audit firms and that the risks and costs increase. They also point out that Italy who has enforced mandatory audit firm rotation and there is no relevant evidence showing any positive effects. (Brännström, 2011)

Further, proponents for mandatory audit firm rotation argue that rotation, by referencing to the HQ-bank collapse, is needed to ensure auditor independence. For that reason, mandatory audit firm rotation should be required for listed companies’. (Brännström, 2011)
1.3 Current discussion of audit firm rotation

As we have mentioned previously, corporate scandals such as Enron, WorldCom and Global Crossing have raised concerns regarding the role of the auditor. The main criticism has been the lack of audit independence, which has resulted in decreased credibility for the financial information. (Shafie et al, 2009; Chi, 2010; IFAC, 2003) The lack of auditor independence has been a worldwide concern and the debate about mandatory audit firm rotation has been highly discussed since it is believed to be an intervention for increased confidence for the auditor, as well as increasing the audit quality (Arel et al, 2005; Lu & Sivaramakrishnan, 2009; Chi, 2010; Kwon et al, 2010). The current debate about mandatory audit firm rotation have also been highlighted since regulators and other important institutions like IFAC and GAO have argued that long-term relationship between the audit firm and their clients may impair auditor independence and consequently, the objectivity in the audit (IFAC, 2003; GAO, 2004; EU, 2010). In addition, the close relationship between audit firm and client has also raised concerns given that it could lead to an eagerness to please the company instead of being the objective third party (Arel et al, 2005). Such behavior could result in an acceptance of aggressive accounting and failure in detecting frauds (Myers et al, 2003). Henceforth, a regulation for mandatory audit firm rotation could prevent such situations.

The debate has naturally created proponents and opponents, where the proponents argue that mandatory audit firm rotation would increase the auditor’s independence, objectivity and create a fresh new perspective of the financial statements. Hence, a higher quality in the financial information would therefore take place. The opponents’ argue that it would lead to increased costs for the companies’ and lost knowledge about the business, which could result in audit failures and decreased audit quality. (Geiger & Raghunandan, 2002; Myers et al, 2003; Arel et al, 2005; Lu & Sivaramakrishnan, 2009) A further argument for not implementing mandatory audit firm rotation are highlighted in prior studies (Johnson et al, 2002; Ghosh & Moon, 2005) where they argue that audit failures are more frequent the first year when the auditor is still not familiar with the company.
The GAO study illustrated that a majority of both companies and auditors are negative towards a regulation of audit firm rotation (GAO, 2004). However, advocates of audit firm rotation believe that it will prevent auditors from becoming too aligned with managers, which can impair the independence. If the client provides significant revenue for the auditor, then they will be reluctant in jeopardizing this stream of revenue (GAO, 2004). In addition Jackson et al (2008) also argue that audit firm rotation could help prevent large-scale corporate collapses.

Despite the lack of regulation for mandatory audit firm rotation and possible consequences such as increased audit costs and reduced audit quality, a lot of companies voluntarily switch audit firm. There are many reasons why a company chooses a specific audit firm and the question is rather complex and probably varies across companies and industries (Knechel et al, 2008). Some prior studies (Bedingfield & Loeb, 1974; Beattie & Fearnley, 1995; Woo & Koh, 2001; Gómez-Aguilar & Ruiz-Barbadillo, 2003; Magri & Baldacchino, 2004; Knechel et al, 2008; Bagherpour et al, 2009) have highlighted different reasons why companies voluntarily changes audit firms, e.g. due to acquisition, management changes and being listed on stock exchange. A study that was conducted by Magri & Baldacchino (2004) in Malta, established both behavioral and economic factors as reasons for companies to change audit firm. Behavioral factors were exemplified as the relationship with the audit firm and economic factors were mentioned as audit fees, mergers and qualified opinions. (Magri & Baldacchino, 2004) The capital market emphasizes audit firm resources and reputation as important factors when deciding audit firm. Accordingly, companies tend to consider these factors when choosing audit firm since it is expected by the capital markets. In addition, the reputation and resources of the audit firms are in most cases associated with the Big N audit firms. (GAO, 2004)

The current discussion regarding mandatory audit firm rotation and the fact that companies still voluntarily change audit firm, made us curious about the inherent factors why companies switch audit firms. Much of the recent debate is mainly focused on mandatory audit firm rotation and therefore we believe we could shed some light on important factors why companies voluntarily switch audit firm. Research in this area could in particularly be valuable for audit firms, since they will be able to gain a better understanding of their clients’ motivations to switch audit
firm. Our study could possibly assist audit firms to retain their clients because of an increased awareness in this certain issue.

1.4 Purpose

As described above, mandatory audit firm rotation has been a highly debatable issue worldwide as a solution for increased auditor independence. Despite the discussion, not many countries have yet introduced this as a legal requirement, and neither has Sweden. Even though there are no legal requirements for companies to switch audit firm, several companies voluntarily decide to change audit firm. Our purpose will therefore be to determine the underlying motivations for Swedish limited companies’ to switch audit firm and to contribute a further understanding behind the incentives for companies to change audit firm.
1.5 Further outline

**Chapter 2**

- **Methodology**
  In the second chapter we will present our research approach and our theoretical framework. The aim with this chapter is to provide an understanding in how we have approached the purpose of the thesis and to explain why we have applied the chosen theories.

**Chapter 3**

- **Literature review**
  In this chapter we have conducted a literature review based on prior studies. In addition, we have formulated hypotheses with the help from previous researches.

**Chapter 4**

- **Empirical method**
  In the fourth chapter, we will present the empirical research method and how we operationalize our empirical analysis. The basis of the empirical research is a review of financial statements.

**Chapter 5**

- **Empirical analysis**
  The empirical analysis will be presented in our fifth chapter. We will describe the results from the statistical tests we have conducted and explain if our hypotheses are in line with the outcome.

**Chapter 6**

- **Concluding remarks and further research**
  We will in the final chapter present our conclusions and discuss the results by comparing them with previous studies. We will also suggest topics for further studies.
2 Methodology

2.1 Research approach

The objective of the thesis is to establish the underlying factors that are associated with an audit firm change. In order to determine the main incentives for why companies change audit firm, we find it appropriate to use a deductive approach. This is confirmed by prior studies (Williams, 1988; Johnson & Lys, 1990; Gómez-Aguilar & Ruiz-Barbadillo, 2003; Firth, 1999; Woo & Koh, 2001) which have used the same approach within the research area. Saunders et al (2009) point out the importance of reviewing current empirical articles, literature and theories in order to find applicable theories and relevant information that is suitable for the purpose of the thesis. Since there are several studies (i.e. Bedingfield & Loeb, 1974; Chow & Rice, 1982; Beattie & Fearnley, 1995; Woo & Koh, 2001; Gómez-Aguilar & Ruiz-Barbadillo, 2003; Knechel et al, 2008; Bagherpour et al, 2009) that have examined the primary reasons why companies switch audit firm it became natural to emanate existing literature and predict our hypotheses based on previous research.

In order to identify the major factors that affect a company’s decision to change audit firm, we have formed hypotheses, using previous studies as well as current economic theories. Our final objective is to empirically test our hypotheses. Our hypotheses will be tested by an examination of annual financial statements from Swedish limited companies’ during the years 2008 and 2009. We have used Swedish limited companies since they are all required to appoint an auditor according to Swedish regulation\(^1\). Furthermore, we want our results to reflect all Swedish limited companies and therefore we have selected all Swedish limited companies without making any distinctions of size or industry. By testing our hypotheses we will be able to draw upon conclusions of why Swedish limited companies change audit firm.

The literature review is based on the explanatory approach. An explanatory study emphasizes the problem to explain the relationship between the variables. The explanatory approach allows us to use statistical data to see the correlation between

\(^1\) In 2010 the regulation was reformed and small limited companies are now excepted from mandatory audit. (ABL 9 kap 1 §). Furthermore, large general partnership companies are also required to hire an auditor, but we have excluded these since their financial statements are not published at Retriever Bolagsinfo. (Bolagsverket website)
the dependent variable (audit firm change) and the independent variables, as well as collect qualitative data that can explain a certain relationship. With reference to our research question, the explanatory study is suitable since we have the possibility to review the literature with an objective mindset and draw conclusions without any predetermined opinions. (Saunders et al, 2009)

The usage of secondary data is an important complement to primary data, since it less time-consuming compared to primary data. (Bryman & Bell, 2003) When reviewing secondary literature it is of most importance to maintain a critical mindset, because all information may not be reliable or relevant. In order to provide a reliable study we will try to use sources with high credibility. The majority of references consist of articles and journals and we consider them highly reliable since they are all collected from Lund University’s database, LidHub. We also consider the articles and journals reliable because academic peers evaluate the articles’ before they are published, to assess the quality and suitability. (Saunders et al, 2009)

2.2 Theoretical framework

In order to explain why companies switch audit firm, we have decided to apply economic theories. The theories we have used are solely economic theories since we have reached the conclusion that they will best reflect the purpose of our thesis. Some previous articles (e.g. Bedingfield & Loeb, 1974; Beattie & Fearnley, 1995; Magri & Baldacchino, 2004) have studied audit firm changes from a behavioral perspective where they used questionnaires in order to reach a result. Nevertheless, behavioral factors could be difficult to apply by an examination of financial reports since behavioral studies are subjective and therefore easier to measure by using questionnaires. In addition, behavioral factors could be difficult to compare since it might present several different reasons. Seeing as we have a limited timeframe, we will not be able to both examine financial reports and conduct questionnaires, which leave us to examine the reasons with the former method. Therefore we have chosen to exclude the behavioral perspective and solely focus on economic factors that are easier to measure through financial reports. The economic theories we will apply are the agency theory, the signaling theory and the stewardship theory since they have been used in prior studies within the topic. (e.g. Bar Yosef & Livnat, 1984; Francis &
Wilson, 1988; DeFond, 1992; Joher et al, 2000; Magri & Baldacchino, 2004; Bewley et al, 2008)

2.2.1 The agency theory

The theory explains the costs that occur due to the separation between ownership and control. Such separation will generate agency costs as a result of the conflicting interests between the manager and the opposite part e.g. the shareholders and debt-holders, since both parts expect to maximize their wealth. (Jensen & Meckling, 1976; Watts, 1977; Watts & Zimmerman, 1979; Chow, 1982) In wholly owned firm, every decision will be made in the interest of the owner. However, in a company, where the manager (agent) is the decision-maker and the owners (principal) and debt-holders (principal) have limited insight, a principal agent relationship arises. (Jensen & Meckling, 1976) Agents act opportunistic in order to maximize their own wealth and this is expected by the principles and for that reason they might, for example, decrease the salary for the agent. (Christie & Zimmerman, 1994)

The auditor will have a monitoring role and accordingly, decrease the agency cost of opportunistic managers. (Christie & Zimmerman, 1994) Both parts will benefit from a monitoring function since it works as a guarantee that the manager works on the behalf of the owners’ interest. Furthermore, Jensen & Meckling (1976) also explain the information asymmetry assumption between the owner and outside equity. Accordingly, this leads to a conflict between the parts. For that reason the owner has incentives to reduce agency costs by writing contracts with outside equity.

In addition, the theory explains the situation between debt financing (principal) and owner (agent) in a situation where there are no contracts between the two. Since the agent acts in self-interest, it will result in higher risks for bondholders. However, the debt-holders realize that the owner acts in self-interest and will therefore increase the price for debts by raising the interest rate for example. Consequently, the expected self-interest results in higher costs for the owner, which the owner has incentives to reduce by implementing monitoring contracts. The situation is called “residual loss”. (Jensen & Meckling, 1976; Watts & Zimmerman, 1979)
According to the explanation of the agency theory we believe it is applicable in the thesis. The agency theory can serve as an explanation for why companies´ engage external auditors such as preventing self-interest behaviors and reduce the conflict between manager-owner-debtholder (Jensen & Meckling, 1976). Moreover, in conformity with previous research within this topic, agency theory has been frequently used when trying to establish the companies’ motivations for an audit firm change (Francis & Wilson, 1988; DeFond, 1992; Craswell, 1995; Bagherpour et al, 2009). Several studies (e.g. Jensen & Meckling; 1976; Johnson & Lys, 1989; Beattie & Fearnley, 1995; Beattie & Fearnley, 1999; Niemi, 2004) have applied agency theory in order to explain how auditor selection reduces agency costs due to their monitoring function.

2.2.2 The signaling theory
Henceforth, we have also applied the signaling theory. Several studies (e.g. Bar Yosef & Livnat, 1984; Kluger & Shields, 1991; Joher et al, 2000; Bewley et al, 2008) have used the signaling theory in order to explain appropriate variables due to audit firm changes. Bar Yosef & Livnat (1984) explain that the signaling theory is based on information asymmetry, where the managers’ possess more information about the company’s financial position compared to the owners and stockholders. The literature on signaling theory presumes that the seller of goods knows the quality of the goods, whereas the buyer is not aware of differences in quality. The buyer is not able to distinguish the quality of the diverse products and therefore they use the price of average quality as a reference point. Sellers that have higher prices for their products than the average quality will avoid trading and there are risks that the market will collapse. The signaling framework can prevent such a market failure by sellers signaling their product quality to uninformed buyers. It is assumed that the higher the signal costs are, the higher the quality will be. (Bar-Yosef & Livnat, 1984) Furthermore, several studies (Bar Yosef & Livnat, 1984; Kluger & Shields, 1991; Joher et al 2000; Bewley et al, 2008) explain that companies change audit firms since they want to signal better quality or credibility.
Due to signaling theory, Bar-Yosef & Livnat (1984) claim if the managers perceive the company as superior, they will choose a larger audit firm. The motivation behind the argument are larger audit firms will signal to the market that managers are expected to generate high future cash flows, which in turn determines the stock price of the company. (Bar-Yosef & Livnat, 1984) The signaling theory can also be applied when the managers’ want to signal credibility to the market (Firth & Smith, 1992). Financial statements need to be credible in order to give shareholders and financial institutions proper information to be able to make accurate company assessment. (Bar-Yosef & Livnat, 1984) Based on these arguments we believe that the signaling theory could explain why companies might switch audit firm and therefore this theory is applicable in this thesis.

2.2.3 The stewardship theory

The third theory we have applied is the stewardship theory. The theory assumes that managers seek an auditor in order to satisfy the shareholders need for assurance. It is based on the theory that the manager engages an auditor that will satisfy both the manager’s interests, as well the shareholders’ interest. The shareholders’ want an auditor that conducts audits in conformity with the regulation and someone who detects material misstatements, hence an auditor of quality. Subsequently, a manager may decide to change audit firm in order to satisfy the owners’ and stockholders’ expectations. (Williams, 1988) For that reason we find the stewardship theory suitable for the thesis given that it can explain a manager’s incentive to change to a higher quality audit firm. The company’s owners’ are always seeking for services of “better quality” auditors, so that the monitoring of management’s stewardship will be more effective. (Magri & Baldacchino, 2004)
3 Literature review

3.1 Audit firm choice

As we have mentioned above, there are companies that voluntarily change audit firm. Previous researches (e.g. Anderson et al, 1993; Beattie & Fearnley, 1995; Firth, 1999; Gómez-Aguilar & Ruiz-Barbadillo, 2003; Magri & Baldacchino, 2004) that we have used to formulate our hypotheses below have interchangeable measured both audit firm and audit-partner rotation in their research. Since these studies have used both audit firm and audit-partner rotation in their research we will interpret these findings analogically with companies reasons for switching audit firm. Given that the hypotheses we have formulated are dependent on either the characteristic of the company or the audit firm, we have divided and organized each hypothesis into two categories; client perspective and audit perspective.

Model 1: Factors influencing audit firm change
3.2 Hypothesis formulation

Client perspective

3.2.1 Acquisition

Several studies (Bedingfield & Loeb, 1974; Anderson et al, 1993; Firth, 1999; Woo & Koh, 2001; Branson & Breesch, 2004) have conducted researches based on acquisition as a reason why companies switch audit firm. Further, in an acquisition, both the acquired company (subsidiary) and the acquiree (parent company) usually have auditors. Due to high negotiation costs and audit fees, only one of them will remain as an auditor for the group.

According to Anderson et al (1993) the underlying reason for switching audit firm in the acquired company, eminate in (1) economies of scale by using the same auditor for the entire group and (2) lack of diversity beween the two companies. Firth (1999) also highlights cost savings and efficiency as reasons for switching audit firm after an acquisition. However, Anderson et al (1993) and Woo & Koh (2001) are also referring to increased requirements from the parent company to apply an audit firm that can provide services at a low cost due to company growth. Moreover, other studies (Johnson & Lys, 1990; Anderson et al, 1993; Firth, 1999) mention that the acquired subsidiary´s audit firm will be exchanged when the acquired companys´s audit firm is larger than the acquired subsidiary´s, due to economy of scale. Hence, two auditors´ from different audit firms´ might compromise each other, which leads to increased audit costs for the company (Anderson et al, 1993). Furthermore, Anderson et al (1993) argue that, in general, the acquirer is larger than the acquired subsidiary´s and therefore it might be more cost effective to use the acquirer´s auditor.

\[ H_1: \text{Acquisition is positivly related to audit firm change.} \]

3.2.2 Company size

According to Woo & Koh (2001) an increased company size will enhance the complexity and the agency relationship, which makes it more difficult for the owners to monitor the managers’ and debtholders’ to monitor the owners’. Bagherpour et al (2009) claim that large companies are prone to be audited by Big N since larger
companies require more resources to handle the complexity. Since mergers between Big N have increased, the competition have decreased among the big audit firms and therefore large companies’ do not have as many audit firm options as small companies do (Bagherpour et al, 2009). Accordingly, they suggest that large companies do not switch audit firms as often as smaller companies’, since small companies’ in general do not hire a Big N audit firm. Healy & Lys (1986) made a study where they investigated audit firm changes after a merger between Big N and non-Big N. Their results indicated that a small company is more prone to switch to a non-Big N after the acquisition, whereas large companies do not switch to a smaller audit firm after the merger. The arguments are based on the findings where large companies’ require more services, which Big N audit firms can provide. Healy & Lys’s (1986) findings, as well as other studies (Beattie & Fearnley, 1995; Bagherpour et al, 2009), argue that small companies’ are more likely to switch audit firm compared to large companies’. In contrast to these findings, Schwartz & Menon (1985) did not find any relationship between firm size and audit firm change.

H2: Small companies are more prone to switch audit firm.

3.2.3 Ownership concentration

According to Francis & Wilson (1988), agency costs occur due to diffused ownership. Companies with dispersed ownership have more incentives to monitor activities since agency costs increases (Jensen & Meckling, 1976) A study made by Beattie & Fearnley (1995) examine how changes in ownership structure could affect companies’ decision to switch audit firm. A diffused ownership will lead to increased costs and also reduce the possibility to affect management since there are many interests to take into consideration (Francis & Wilson, 1988).

Large companies with diffused ownership reduces related agency cost problems by separating internal decision management and control since it will diminish the opportunity for agents to expropriate individual wealth (Francis & Wilson, 1988). Accordingly, a highly complex control system increases the demand for high audit quality in order to control management. Some studies (Francis & Wilson, 1988; Woo & Koh, 2001) have found a relationship between diffused ownership and audit firm
change, whereas Bagherpour *et al* (2009) did not find a relationship between the two variables.

**H₃**: Ownership concentration is negatively related with companies changing audit firm.

### 3.2.4 Management ownership

According to Jensen & Meckling (1976) it exists moral hazard problems between managers and owners since the owner want to increase the value of the firm by taking risks, whereas the manager want to reduce risks in order to avoid decreased bonus compensation. Accordingly, by increasing the manager’s ownership in the company, the risk taking actions could enhance since the manager might benefit from being risk taker due to management ownership (Jensen & Meckling, 1976).

Prior studies (Francis & Wilson, 1988; DeFond 1992; Woo & Koh, 2001) have tested the relationship between management ownership and audit firm change. Francis & Wilson (1988) argue that agency costs could be reduced due to management ownership. Accordingly, with increased management ownership, the managers and owners will have similar interests and therefore the agency costs will decrease. In absence of management ownership, the managers will require high audit quality since they want to increase their credibility towards owners in order to increase their compensation (Francis & Wilson, 1988; DeFond, 1992).

Moreover, Francis & Wilson (1988) and Woo & Koh (2001) expected a positive relationship between management ownership and audit firm change. Even though they did not found a relationship between the variables we expect that there is a positive relationship between management ownership and audit firm change.

**H₄**: Management ownership affects companies decision to switch audit firm.

### 3.2.5 Management change

Management change refers to the situation where the incumbent management is changed to another management due to bad results (Schwartz & Menon, 1985).
Schwartz & Menon (1985) argue that failing companies’ might change management in order to rescue future operations. The stewardship theory is based on the perception that managers will choose an auditor that will reflect the shareholders expectations. Accordingly, when management has been exchanged, they might choose an audit firm that they suppose best reflects the will of the company’s shareholders’. Prior studies (Schwartz & Menon, 1985; Beattie & Fearnley, 1995; Beattie & Fearnley, 1998; Branson & Breesch, 2004) have used management change as an explanatory variable why companies switch audit firm. In addition, some of these studies (e.g. Beattie & Fearnley, 1995; Beattie & Fearnley, 1998) highlighted management change as one of the most important reasons why companies change audit firm.

According to Eichenseher & Shields (1983) the working relationship between the client and audit firm is important. Hence, lack of working relationship between the new management and the company’s audit firm might therefore initiate a change. According to Schwartz & Menon (1985) management change will result in new relationships, where the new management have pressure to improve the company results. Accordingly, switching audit firm might be one element for such improvement. Williams (1988) also explain that a new management strive for new ideas, which a new audit firm might contribute to. When a new management has been appointed they might be anxious to find new business relationships since they are expected to bring about a corporate recovery (Schwartz & Menon, 1985). Furthermore, Schwartz & Menon (1985) argue that a new management do not want to be associated with the predecessor and therefore they might change audit firm. Some prior studies (Beattie & Fearnley, 1995; Beattie & Fearnley, 1998; Woo & Koh, 2001) found a relationship between management change and audit firm change whereas Schwartz & Menon (1985) did not find any relationship.

**H5**: A newly appointed manager is positively related with an audit firm change.

### 3.2.6 Leverage

According to Jensen & Meckling (1976), information asymmetry occurs between manager-owner-debtholder. When the amount of debt increases the debt holder’s risk
increase simultaneously and this might lead to enhanced costs of debts for the company. In general, debt agreements are based on accounting numbers and therefore it is important that the accounting numbers are reliable. Hence, managers’ adopt monitoring actions, e.g. auditors, to ensure the reliability and thus reduce agency costs. (DeFond, 1992)

Woo & Koh (2001) recognized a positive relationship between the amount of debt and switching audit firm. Their result indicated that firms with high amount of leverage are more prone to change audit firm since they receive increased pressure from debtholders to deliver reliable financial statements. Some prior studies (e.g. De Fond, 1992; Woo & Koh, 2001) mention the amount of debt as a reason for companies to switch audit firm, which raise a signal that financial institutions are putting pressure on companies to switch audit firm. Furthermore, Knechel et al (2008) demonstrated that changing to Big N could reduce their interest rate, which also indicate pressure by financial institutions. In comparison with other studies (e.g. De Fond, 1992; Woo & Koh, 2001; Knechel et al, 2008), Bedingfield & Loeb (1974) illustrated that financial institutions have a slightly impact on companies decision to switch audit firm.

\[ H_5: \text{The amount of leverage is positively related with companies switching audit firm.} \]

### 3.2.7 Stock exchange listing

When companies are going to be listed at a stock exchange, the information asymmetry increases which results in enhanced demand for credible auditors. Since the majority of both existing and potential shareholders only have access to a limited amount of information i.e. financial statements, it is more important that this provided information is reliable. (Menon & Williams, 1991)

According to Beatty (1989) company owners want to reduce the uncertainty due to information asymmetry. Company owners need to signal their knowledge about future earnings and therefore they have to publish credibly financial statements in order to
attract investors. Hence, by applying a credible audit firm the company might compose such signal. (Menon & Williams, 1991)

Furthermore, by exerting a highly reputable audit firm, the company could signal credibility and henceforth attract investors. (Menon & Williams, 1991) Menon & Williams (1991) argue that a credible financial statement will reduce monitoring costs since the investors would trust the information and would not need to search for other information about the company.

Except from the shareholders, Menon & Williams (1991) argue that investment bankers also require a credible audit firm in order to certify the company value. According to the agency theory, shareholders and debtholders could predict that owners and managers are acting in self-interest and therefore a credible outsider is needed to revise the financial report (Jensen & Meckling, 1976). Accordingly, Menon & Williams (1991) argue that companies with a less credible audit firm will be charged a higher fee by investment bankers. Balvers et al, (1988) also mention that investment bankers want to preserve their reputation by avoiding mispricing and therefore they prefer a credible audit firm.

H7: Companies’ switch audit firms when they will be listed at a stock exchange.
Audit perspective

3.2.8 Qualified opinion

In line with the agency theory, shareholders and managers will act in self-interest in order to increase wealth. The decision to change audit firm may in some situations be the best interest for both parts since switching audit firm could be an attempt to suppress unfavorable information. (Kluger & Shields, 1991; Gómez-Aguilar & Ruiz-Barbadillo, 2003) The relationship between audit opinion and changing audit firm has received considerable attention in past years (Chow & Rice, 1982; Craswell, 1988; Beattie & Fearnley, 1998; Lennox, 2000; Woo & Koh, 2001; Gómez-Aguilar & Ruiz-Barbadillo, 2003) Companies change audit firm since they want to avoid qualified opinion and the related costs (Chow & Rice, 1982; Craswell, 1988; Lennox, 2000).

Prior studies (Chow & Rice, 1982; Craswell, 1988; Archambeault & DeZoort, 2001) point out that the manager’s concern about reduced compensation is an incentive to avoid qualified opinion. Furthermore, company owner want to avoid losses in stock prices and lending agreements since they want maximize the company value and therefore they try to avoid qualified opinions.

Schwartz & Menon (1985) argue that qualified opinions could impair companies’ possibility to loan money from e.g. financial institutions. Hence, a possible consequence due to qualified opinions could be increased interest rates. Craswell (1988) mention an overall negative price effect for companies due to qualified opinions and therefore companies’ will be concerned about receiving an unfavorable audit opinion, given its connection with certain costs. Gómez-Aguilar & Ruiz-Barbadillo (2003) argue that some companies’ choose to switch from a high-quality auditor to a lower-quality auditor in order to avoid a qualified opinion.

Contrary to the previous studies (e.g. Chow & Rice, 1982; Craswell, 1988; Gómez-Aguilar & Ruiz-Barbadillo, 2003) mentioned, some researches (Schwartz & Menon, 1985; Beattie & Fearnley, 1998; Woo & Koh, 2001; Branson & Breesch, 2004) did not find a relationship between qualified opinion and switching audit firm. However, the study made by Woo & Koh (2001) cannot compose any generalization due to the small sample size.
H₈: Companies will change audit firm after receiving a qualified audit opinion.

3.2.9 Audit quality

According to previous researches (Williams, 1988; Beattie & Fearnley, 1995) dissatisfaction with delivered audit quality has been a critical factor for companies decision to switch audit firm. DeAngelo (1981) argues that the auditor must have technical competence and maintain independence in order to deliver high audit quality. Craswell et al, (1995) support the relationship between the agency cost and audit quality. The demands for enhanced audit quality could occur due to managers need to satisfy shareholders and owners. If they are not pleased with the current audit quality, an audit firm change may take place. (Williams, 1988)

The signaling theory is in particularly associated with the quality of the financial statements given that audit quality is something that could be signaled to outsiders. Accordingly, (DeAngelo, 1981; Niemi, 2004; Bewley et al, 2008; Hamilton et al, 2008) indicate that Big N provides higher quality compared to smaller audit firms. In contrast to these findings, Tagesson & Öhman (2011) could not conclude that Big N will deliver higher audit quality.

DeAngelo (1981) argues that large audit firms supply higher audit quality compared to small audit firms since the former are not dependent on certain clients. Large audit firms have less incentives to “cheat” in order to retain a client which results in higher audit quality. (DeAngelo, 1981; Deis Jr & Giroux, 1992) According to Niemi (2004) larger audit firms are known to provide more accurate reports and are more informative in signaling financial distress. In the wake of the Enron scandal, former Andersen clients that demanded high quality financial statements were concerned that the demise of Andersen, and its involvement in Enron would send out negative signals to investors. Bewley et al (2008) illustrated that companies who had engaged Andersen, which was one of the Big N at the time, had done so in order to signal high quality financial reporting and therefore quickly switched audit firm when Andersen’s failure was definite.
**H₅:** In order to increase the audit quality, companies will switch to Big N audit firms.

### 3.2.10 Audit fee

Prior researches (Bedingfield & Loeb, 1974; Beattie & Fearnley, 1995; Beattie & Fearnley, 1998; Woo & Koh, 2001; Kallunki et al, 2007) have identified audit fee as the most important reason why companies’ switch audit firm, especially for small companies given that audit fees consist of a large part of their total operational income. In contrast to these studies, Magri & Baldacchino (2004) demonstrated that audit fees is less important for big companies, and in particular for those companies’ who hired a Big N audit firm since other variables like reputation and quality is more relevant. In addition, Branson & Breesch (2004) claim that mandatory audit will influence companies to choose the audit firm with the lowest audit fee.

**H₁₀:** Audit fees are positively related to audit firm change.

### 3.2.11 Non-audit service

Many audit firms provide additional services, e.g. consulting, as a complement to audit service. The provision of non-audit services (NAS) to audit clients has been a longstanding issue. Members of the Congress (US) raised the issue as early as in the late 1970s, where the main concern of the controversy was that providing NAS would affect the auditor independence. It was their belief the provision paid for NAS would give an auditor-client dependency, and the auditor would lose its objectivity. However, as the audit market has become more competitive, the audit firms have increasingly used NAS as an additional source of revenue. (Deberg et al, 1991)

In addition, NAS is a service that many large companies require as a complement to the audit. DeBerg et al (1991) conducted a research on whether a company’s decision to change audit firm is dependent on the demand for NAS. Their aim was to examine the development of the auditor-client opportunity. However, Deberg et al (1991) could not find any evidence that suggested a relation between audit firm switch and NAS. Nevertheless, even though Deberg et al (1991) did not find a positive
correlation between audit firm change and NAS, it is still our belief that companies may want to switch audit firms due to an increased demand for NAS.

**H_{II}:** Non-audit services are positively related with audit firm change.
3.3 Summary of hypotheses

H₁: Acquisition is positively related to audit firm change.

H₂: Small companies are more prone to switch audit firm.

H₃: Ownership concentration is negatively related with companies changing audit firm.

H₄: Management ownership affects companies decision to switch audit firm.

H₅: A newly appointed manager is positively related with an audit firm change.

H₆: The amount of leverage is positively related with companies switching audit firm.

H₇: Companies’ switch audit firms when they will be listed at a stock exchange.

H₈: Companies will change audit firm after receiving a qualified audit opinion.

H₉: In order to increase the audit quality, companies will switch to Big N audit firms.

H₁₀: Audit fees are positively related to audit firm change.

H₁¹: Non-audit services are positively related with audit firm change.
4 Empirical method

4.1 Data selection

Our aim of the thesis is to establish the factors associated with Swedish companies changing audit firm. Since we want to increase the awareness about the underlying incentives’ companies may have to switch audit firm we have chosen a quantitative method in order to make generalizations (Djurfeldt et al, 2003). The population consists of financial statements from randomly selected limited companies in Sweden. We have excluded those companies that have missed one or more financial reports during the years 2008 & 2009. The financial reports have been downloaded from the database Retriever Bolagsinfo, which is available at LidHub. According to Retriever Bolagsinfo there are 103 203 registered limited companies in Sweden. However we will not include those companies’ that have a lower turnover than 1000 SEK, since the majority of these companies within this category do not have complete financial statements. The final population is therefore reduced to 97 811 limited companies. The data is categorized by the company’s turnover\(^2\) and to select the accurate amount from each category we have used relative measure from each category. The sample is thereafter randomly selected from each category and we have in total collected data from 389 limited companies in Sweden. According to Saunders et al (2009) researchers commonly work with a sample size of a 95 percent level of certainty plus or minus three to five percent of its true values. Therefore we have chosen a sample size which represents a 95 percent margin error of the total population. Accordingly, we need to select at least 383 Swedish limited companies when the total population is approximately 100 000. (Saunders et al, 2009)

The objective of the thesis is to investigate if a company has switched audit firm between the years 2007 to 2008 and 2008 to 2009. In addition, we will test our eleven hypotheses by determine if any statistical significance occurs between the dependent variable (audit firm change) and the independent variables. Since we have compared financial statements from two years we received a total population of 778 cases (389 companies times two) samples.

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\(^2\) The categories are (range from the largest population): 1 000 -9 999 TSEK; 1-499 TSEK; 10 000-49 999 TSEK; 500-999 TSEK; 50 000-499 000 TSEK; 0- 1 TSEK; 500 000-∞ TSEK
4.2 Dependent variable

Based on previous studies (i.e. Bedingfield & Loeb, 1974; Chow & Rice, 1982; Beattie & Fearnley, 1995; Woo & Koh, 2001; Gómez-Aguilar & Ruiz-Barbadillo, 2003; Knechel et al, 2008; Bagherpour et al, 2009) we have concluded that companies’ voluntarily switch audit firms. Since our purpose of the thesis is to identify the primary variables associated with audit firm change in Sweden, the dependent variable is audit firm switch. To measure the variable audit firm change, we will analyze annual financial statements to see if a company has switched audit firm between the years 2007 & 2008 and 2008 & 2009. The companies that have switched audit firm will be assigned value 1, whereas companies that have not changed audit firm will receive value 0.

4.3 Independent variables

According to Anderson et al (1993), changing audit firm is relatively rare and difficult to observe since the primary variables could be difficult to detect. Nevertheless we have, based on previous research, identified eleven independent variables, which we shall test below. The independent variables are measured and compared from financial statements during the years 2008 and 2009.

4.3.1 Acquisition

Anderson et al (1993) claim that audit firm changes are more frequent in a takeover situation. Their study illustrated that the acquired subsidiary is more likely to switch audit firm. As a complement to acquisition, Woo & Koh (2001) also suggest that joint venture and mergers will be included in the measure. In order to test the relationship between acquisition/merger/joint venture and audit firm change, we will assign the dummy variable 1 to the companies that have undergone an acquisition/merger/joint venture and 0 if no acquisition/merger/joint venture have occurred. (Woo & Koh, 2001)
4.3.2 Company size

It is argued that small companies are more prone to switch audit firm than large companies. Johnson & Lys (1990) and Williams (1990) have reached the conclusion that company size and audit firm change are dependent, whereas Schwartz & Menon (1986) did not find any relationship between company size and audit firm change. Prior studies (Watts & Zimmerman, 1978; Francis & Wilson, 1988; Johnson & Lys, 1990; Mansi et al, 2004; Crabtree et al, 2006) have tested size by using total assets of the company as a proxy. Hence, we will determine the variable size by measuring total assets in TSEK.

4.3.3 Ownership concentration

Our purpose is to test whether ownership concentration has an impact on audit firm change. Previous studies (e.g. Woo & Koh, 2001; Francis & Wilson, 1988) have measured the concentration by the percentage of common stock owned by the largest single shareholder. If there is a large percentage of common stock owned by one single shareholder, it indicates a high concentration of ownership (Woo & Koh, 2001). Accordingly, we will test the variable by using the same measure as Francis & Wilson (1988), i.e. if the largest single shareholder has greater shares than 10% it will receive value 1 (high ownership concentration) and less than 10% value 0. Francis & Wilson (1988) argue that 10% has been used as a proxy in pre-studies and therefore we believe it is appropriate to use.

4.3.4 Management ownership

In addition, some studies (Francis & Wilson, 1988; DeFond 1992; Woo & Koh, 2001) have tested if the level of management ownership influences the audit firm switch. We will measure the variable management ownership by the executive director ownership percentage. (Francis & Wilson, 1988; Defond, 1992; Woo & Koh, 2001)
4.3.5 Management change

According to a number of prior articles (Schwartz & Menon, 1985; Beattie & Fearnley, 1995; Branson & Breesch, 2004) management change can affect the company to switch audit firm. According to Schwartz & Menon (1985), a new manager might switch audit firm since they want to initiate change and do not want to be associated with the previous manager. Furthermore, management change has been initiated if the executive director has been replaced (Schwartz & Menon, 1985). We will test this hypothesis by giving value 1 if the executive director has been replaced and value 0 if the executive director has retained. (Woo & Koh, 2001)

4.3.6 Leverage

Studies by Woo & Koh (2001) demonstrated a positive relationship between the amount of debt and switching audit firm. We will measure the relationship between audit firm change and leverage in accordance with prior studies (Francis & Wilson, 1988; Woo & Koh, 2001; Mansi et al, 2004; Crabtree et al, 2006) where leverage has been measured as the ratio of long-term debt to total assets.

\[ \text{Leverage} = \frac{\text{Long-term debt}}{\text{Total assets}} \]

4.3.7 Stock exchange listing

A previous research conducted by Menon & Williams (1991) has indicated that companies switch audit firm when they are going public since they want to signal high credibility. The majority of stakeholders (e.g. investment bankers and shareholders) have to rely on the information presented in the financial statements and therefore it is of most importance that the information is reliable in order to make an accurate assessment of the company. Accordingly, we will measure the stock exchange listing by assigning the value 1 if a stock exchange listing has taken place and the value 0 to companies that have not been listed on the stock exchange.
4.3.8 Qualified opinion

According to Chow & Rice (1982), a qualified opinion may affect companies’ decision to change audit firm. In order to test the hypothesis of qualified opinion we will identify if a qualified opinion has taken place. Furthermore, to be able to test the relationship, we will assign the value 1 if the company has received a qualified opinion and value 0 if the company has received a clean audit opinion (Woo & Koh, 2001; Gómez-Aguilar & Barbadillo, 2003).

4.3.9 Audit quality

Previous studies (DeAngelo, 1981; Francis & Wilson, 1988; Craven et al, 1994; Woo & Koh, 2001) have argued that Big N provides higher audit quality compared to non-Big N due to the fact they possess more resources and they are not dependent upon certain clients. Therefore we will assume that if companies want to enhance audit quality of the financial reports, they will change audit firm to Big N (DeAngelo, 1981; Woo & Koh, 2001; Gómez-Aguilar & Ruiz-Barbadillo, 2003). We will give value 1 to the companies that have a Big N audit firm and value 0 if a company has a non-Big N audit firm (Woo & Koh, 2001).

4.3.10 Audit fee

It has been established through prior studies (Eichenseher & Shields, 1983; Johnson & Lys, 1990; Beattie & Fearnley, 1995; Woo & Koh, 2001; Magri & Baldacchino, 2004) that high audit fees could influence the company’s decision to change audit firm. According to Woo & Koh (2001) a company would probably change audit firm if they can receive the same level of service to a lower audit fee. In order to measure audit fees we will determine companies audit fee during 2008 and 2009 (Woo & Koh, 2001).
4.3.11 Non-audit service

DeBerg et al (1991) argue that non-audit service (NAS) could affect companies to switch audit firm since they require other types of services apart from audit. We will measure NAS by determine the amount of NAS-fees in 2008 and 2009.
5 Empirical analysis

5.1 Descriptive data

Table 1 illustrates the results from the descriptive data analysis. We have collected data from 778 financial statements during the years 2008 and 2009. As presented in the table, 11.3 % (44/389) of our companies has changed audit firm during the years 2007 to 2008 and 2008 to 2009. In addition, we can conclude that none of these 389 companies have been listed on the stock exchange. Consequently, since the majority of the Swedish limited companies are within the turnover category 1-10 MSEK, most of the selected companies do not have the financial capacity to be listed on the stock exchange.

Furthermore, the sample selection of limited companies could also serve as an explanation for the substantial loss of data within the variables management change and management ownership since non-listed companies are not required to have an executive director (ABL 8 kap 50 § e contrario). Accordingly, a lot of companies do not have an executive director and therefore they do not publish the name of this person. Therefore we obtained lot of missing data (271 valid cases of 778) for the variable management change and management ownership. Hence, the result we have received (6,6 %) for management change and management ownership (48 %) could for that reason be misleading. The lack of information about the executive director did consequently result in incomplete information about management change and management ownership.

The result of the descriptive analysis indicates that 97,8 % of the population within the variable ownership concentration received proxy 1, which signify that almost every company have one shareholder that own more than 10 % of the total share. However, some missing data is represented within this variable (37 %), and therefore the result could be misleading.

Furthermore, the descriptive analysis illustrates a low acquisition rate, only 3,5 %. Additionally, 7,8 % of the population (778) have received a qualified opinion. Audit quality is measured by companies that have Big N as an audit firm, or has switched to
a Big N to improve their quality. The result indicate that 40.1 % of the population have appointed a Big N audit firm.

The average audit fee was 34 418 SEK whereas the average for non-audit services was 41 774 SEK. The standard deviation for both these variables is considerable high and it indicates a very wide variation. The wide variation is presumably also due to our selection of companies. The average leverage ratio is 21 % and the standard deviation for this variable is large, 58.7 %, which is an indication for a wide variation, that most likely is because we have used a sample selection of all limited companies in Sweden. Furthermore the wide variety in company size (the ratio is measured by total assets) is also illustrated in the table 4. The mean value of size is 146 672 (TSEK) and the standard deviation is 1 191 193 (TSEK) which indicates a wide dispersion in company size.
## Table 1: Descriptive analysis (n=778)

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Audit firm change (n=389)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (1)</td>
<td>44 (11.3 %)</td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>389 (88.7 %)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Acquisition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (1)</td>
<td>27 (3.5 %)</td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>751 (96.5 %)</td>
<td></td>
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<tr>
<td>3. Ownership concentration</td>
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<td></td>
</tr>
<tr>
<td>More than 10% ownership (1)</td>
<td>479 (97.8 %)</td>
<td></td>
</tr>
<tr>
<td>Less than 10% ownership (0)</td>
<td>11 (2.2 %)</td>
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</tr>
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<td>4. Management change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (1)</td>
<td>18 (6.6 %)</td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>253 (93.4 %)</td>
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</tr>
<tr>
<td>5. Stock exchange listing</td>
<td></td>
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</tr>
<tr>
<td>Yes (1)</td>
<td>0 (0 %)</td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>778 (100 %)</td>
<td></td>
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<td>6. Qualified opinion</td>
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<td>Yes (1)</td>
<td>61 (7.8 %)</td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>717 (92.2 %)</td>
<td></td>
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<tr>
<td>7. Audit quality</td>
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<td></td>
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<tr>
<td>Yes (1)</td>
<td>312 (41.1 %)</td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>466 (59.9 %)</td>
<td></td>
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<tr>
<td>8. Size (TSEK): Mean/ S.D</td>
<td>146 673 / 1 193 194</td>
<td></td>
</tr>
<tr>
<td>9. Management ownership: Mean/ S.D</td>
<td>48 % / 44.8 %</td>
<td></td>
</tr>
<tr>
<td>10. Leverage: Mean/ S.D</td>
<td>21 % / 58.7 %</td>
<td></td>
</tr>
<tr>
<td>11. Audit fee (SEK): Mean/ S.D</td>
<td>41 774 / 107 609</td>
<td></td>
</tr>
<tr>
<td>12. Non-audit fee (SEK): Mean/ S.D</td>
<td>34 418 / 268 513</td>
<td></td>
</tr>
</tbody>
</table>
5.2 Correlation and logistic regression

We have used a Spearman’s rho test to establish the correlation between the dependent variable, i.e. audit firm change and the eleven independent variables (Aronsson, 1999). In table 2 we have illustrated the results from the bivariate correlation test. We have used confidence interval at 90 % which mean that we will reject the hypothesis at P=≥ 0,1 (Francis & Wilson, 1988; García-Meca & Sánchez-Ballesta, 2009; Tagesson et al, 2005). The result from the correlation test indicates that only audit quality is significant with audit firm change at 0,1 level.

Accordingly, only one of the eleven independent variables is significant with audit firm change. However, audit fee is almost significant with P-value of 0,118. Even if the correlation test only demonstrates one significant result, we can with some uncertainties observe a positive or negative correlation between the variables and audit firm change even though we cannot exclude coincidence. Accordingly, the independent factors; acquisition, management ownership and management change, all demonstrates a positive relationship with audit firm change. In contrast, a negative correlation occurs between audit firm change and company size, ownership concentration, leverage, qualified opinion, audit quality, audit fee and non-audit services (NAS). As illustrates in model 2, we predicted that most variables were positive related to companies switching audit firm (except company size), however the result indicates a different outcome.

According to the correlation matrix, there is a strong significance between audit fee and audit firm size. Therefore we have conducted a multicollinearity test in order to detect if the strong correlation may have an impact on the logistic regression test we will conduct, which will mislead our further findings. A strong multicolllinearity between the independent variables affect the total outcome of the logistic regression. The multicollinearity test did not indicate a high variance inflation factor (VIF) between any variables. Given that there was not a high VIF (high VIF is 2,5 and above), it will not complicate the opportunity of finding a possible statistical significance in the regression test, and we can complete the test including all variables. (Djurfeldt et al, 2003)
| Table 2: Correlation coefficients for dependent and independent variables |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
|                              | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| Spearman's rho               |    |    |    |    |    |    |    |    |    |    |    |    |
| 1. Audit firm change         |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | 1.000 |    |    |    |    |    |    |    |    |    |    |    |
| Sig. (2-tailed)              |    |    |    |    |    |    |    |    |    |    |    |    |
| 2. Acquisition               |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | .045 | 1.000 |    |    |    |    |    |    |    |    |    |    |
| Sig. (2-tailed)              | .212 |    |    |    |    |    |    |    |    |    |    |    |
| 3. Company size (TSEK)       |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | -.029 | .095*** | 1.000 |    |    |    |    |    |    |    |    |    |
| Sig. (2-tailed)              | .414 | .010 |    |    |    |    |    |    |    |    |    |    |
| 4. Ownership concentration  |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | -.010 | -.100*** | .066 | 1.000 |    |    |    |    |    |    |    |    |
| Sig. (2-tailed)              | .823 | .027 | .144 |    |    |    |    |    |    |    |    |    |
| 5. Management ownership     |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | .124 | -.088 | -.410*** | -.008 | 1.000 |    |    |    |    |    |    |    |
| Sig. (2-tailed)              | .126 | .279 | .000 | .927 |    |    |    |    |    |    |    |    |
| 6. Management change        |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | .038 | .206*** | .187*** | -.032 | -.203*** | 1.000 |    |    |    |    |    |    |
| Sig. (2-tailed)              | .533 | .001 | .002 | .647 | .020 |    |    |    |    |    |    |    |
| 7. Leverage (%)              |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | -.016 | .068* | .114*** | -.039 | -.316*** | -.032 | 1.000 |    |    |    |    |    |
| Sig. (2-tailed)              | .664 | .059 | .001 | .394 | .000 | .604 |    |    |    |    |    |    |
| 8. Stock exchange            |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  |    |    |    |    |    |    |    |    |    |    |    |    |
| Sig. (2-tailed)              |    |    |    |    |    |    |    |    |    |    |    |    |
| 9. Qualified opinion         |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | -.009 | .023 | -.140*** | .034 | .170** | -.062 | .017 |    |    |    |    |    |
| Sig. (2-tailed)              | .705 | .521 | .000 | .438 | .036 | .207 | .629 |    |    |    |    |    |
| 10. Audit quality            |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | -.064* | .045 | .257*** | -.060 | -.263*** | -.084 | -.033 | -.122*** | 1.000 |    |    |    |
| Sig. (2-tailed)              | .074 | .205 | .000 | .182 | .001 | .148 | .358 | .001 |    |    |    |    |
| 11. Audit fee (SEK)          |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | -.056 | .123*** | .635*** | -.070 | -.471*** | .207*** | .063* | -.108*** | .208*** | 1.000 |    |    |
| Sig. (2-tailed)              | .118 | .001 | .000 | .121 | .000 | .001 | .081 | .003 | .000 |    |    |    |
| 12. Non audit service (SEK)  |    |    |    |    |    |    |    |    |    |    |    |    |
| Correlation                  | -.013 | .062* | .096** | -.027* | .103 | -.021 | -.068 | .001 | .141*** | .083** | 1.000 |    |
| Sig. (2-tailed)              | .708 | .083 | .007 | .548 | .209 | .730 | .828 | .978 | .000 | .021 |    |    |

*** Correlation is significant at the 0.01 level (2-tailed).
** Correlation is significant at the 0.05 level (2-tailed).
* Correlation is significant at the 0.1 level (2-tailed).
### 5.3 Hypotheses outcome (Correlation)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predicted sign</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Company size</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ownership concentration</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Management ownership</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Management change</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Leverage</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Stock exchange listing</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Qualified opinion</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Audit quality</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Audit fee</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Non-audit service</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 3 presents the binary logistic regression analysis. In total, 482 cases are represented in the analysis and 296 cases are excluded. Due to the missing data in management ownership and management change, we will exclude these variables in the regression analysis since it might mislead the results. As we also described in the descriptive analysis, none of the selected companies have been listed on the stock exchange and therefore we have excluded this in the logistic regression analysis as well.

The logistic regression analysis has an explanation rate of 36% which means that the independent variables explain to 36% why companies switch audit firm (Pallant, 2010). According to the logistic regression analysis, audit quality received a P-value of 0.211 (>0.1). Therefore the hypothesis indicates a close significance with audit firm change. In addition, acquisition also obtained a low P-value (0.146) which indicates a nearly significant result at the 0.1 level.

In similarity with the correlation test, none of the other eight hypotheses (management ownership, management change and stock exchange listing are excluded) indicate a
significant result with audit firm change. For that reason we cannot establish a relationship between these independent variables and the dependent variable, audit firm change.

Table 3: Binary logistic regression analysis

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition</td>
<td>.975</td>
<td>.670</td>
<td>2,116</td>
<td>1</td>
<td>.146</td>
<td>2,652</td>
</tr>
<tr>
<td>Company size (TSEK)</td>
<td>.000</td>
<td>.000</td>
<td>.175</td>
<td>1</td>
<td>.676</td>
<td>1,000</td>
</tr>
<tr>
<td>Ownership concentration</td>
<td>-.872</td>
<td>1,112</td>
<td>.614</td>
<td>1</td>
<td>.433</td>
<td>.418</td>
</tr>
<tr>
<td>Leverage</td>
<td>.119</td>
<td>.325</td>
<td>.134</td>
<td>1</td>
<td>.714</td>
<td>1,126</td>
</tr>
<tr>
<td>Qualified opinion</td>
<td>.149</td>
<td>.783</td>
<td>.036</td>
<td>1</td>
<td>.849</td>
<td>1,161</td>
</tr>
<tr>
<td>Audit quality</td>
<td>-.485</td>
<td>.388</td>
<td>1,563</td>
<td>1</td>
<td>.211</td>
<td>.616</td>
</tr>
<tr>
<td>Audit fee (SEK)</td>
<td>.000</td>
<td>.000</td>
<td>.351</td>
<td>1</td>
<td>.554</td>
<td>1,000</td>
</tr>
<tr>
<td>Non-audit service (SEK)</td>
<td>.000</td>
<td>.000</td>
<td>1,361</td>
<td>1</td>
<td>.243</td>
<td>1,000</td>
</tr>
<tr>
<td>Constant</td>
<td>-1,527</td>
<td>1,103</td>
<td>1,918</td>
<td>1</td>
<td>.166</td>
<td>.217</td>
</tr>
</tbody>
</table>

a. Variable(s) entered on step 1: Acquisition, Size, Ownership concentration, Leverage, Qualified opinion, Audit quality, Audit fee SEK, Non-audit service SEK.
## 5.4 Hypotheses summary (Binary logistic regression)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predicted sign</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Company size</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Ownership concentration</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Management ownership</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Management change</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Leverage</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Qualified opinion</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Audit quality</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Audit fee</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Non-audit service</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>
6 Concluding remarks and further research

6.1 Discussion and conclusion

The purpose of the thesis is to determine why companies change audit firm. The overall result indicates that only 11.3% of Swedish limited companies has switched audit firm during the years 2007 to 2008 and 2008 to 2009. Nevertheless, the change rate is quite low compared to Beattie & Fearnley (1998) and Gómez-Aguilar & Ruiz-Barbadillo (2003) who received 18% and 17% respectively. Their studies were based on companies in Great Britain, Ireland and Spain. Since we received a lower result compared to the other studies mentioned, we believe that the underlying explanation could be different corporate climates. (Nobes & Parker, 2010)

To explain some climate differences, Swedish companies have in general a high ownership concentration, compared to e.g. Great Britain (Sjögren & Kishida, 2009).

In order to explain further why prior studies have proven a higher degree of audit firm change, it would be worth mentioning that Spain has a history of mandatory audit firm rotation. Even if it is not mandatory in Spain nowadays, they might somehow have a deeper practice of switching audit firm than Swedish companies. This might explain the higher degree of audit firm change that Gómez-Aguilar & Ruiz-Barbadillo (2003) received in their research.

Another difference that might have influenced the variation in the results could be the use of questionnaire by Beattie & Fearnley (1998), while we only used companies’ financial reports in order to collect information. Accordingly, we were dependent on the information provided in the financial statements, whereas Beattie & Fearnley (1998) collected their information directly from the company.

A further factor to highlight is the sample selection. Both Beattie & Fearnley (1998) and Gómez-Aguilar & Ruiz-Barbadillo (2003) based their researches on listed companies, while we made our study on a population based upon all Swedish limited companies. Since Sweden have a high degree of ownership concentration and listed companies have dispersed ownership, it might explain the differences in the result of Beattie & Fearnley (1998) and Gómez-Aguilar & Ruiz-Barbadillo (2003) and our results. According to prior studies (Francis & Wilson, 1988; Woo & Koh, 2001) companies with diffused ownership are more prone to switch audit firm than companies with concentrated ownership.

Furthermore signaling theory might also explain why Swedish companies do not switch audit firm frequently. According to the signaling theory companies might switch audit firm because
they want to signal higher credibility to their shareholders. Since our results indicate that Swedish companies do not switch audit firm we can assume that they do not have the pressure to increase the credibility toward owners.

A further reason why Swedish companies rarely switch audit firm could be due to inadequate competition between audit firms. Thus, the increased concentration among Big N has reduced the amount of audit firms which impede the competition (Willekens & Achmadi, 2003; Ballas & Fafaliou, 2008; Abidin et al, 2010).

Moreover, the correlation test of the independent variables indicate that audit quality have a weak correlation with audit firm change (0.074). However, the outcome is not as we predicted and therefore we have to reject the hypothesis. We predicted a positive relationship between audit quality and audit firm change since prior studies (DeAngelo, 1981; Niemi, 2004; Bewley et al, 2008; Hamilton et al, 2008) have argued that companies switch to Big N in order to increase audit quality. However, the result demonstrates a negative correlation which is in line with the research by Tagesson & Öhman (2011). The result indicates that companies might switch to a smaller audit firm, which can implicate that Swedish limited companies are not inclined to increase their audit quality, thus are not prone to signal high credibility to their shareholders’. Even though the result indicates a correlation between audit quality and audit firm change, the result in the logistic regression analysis do not show the same outcome. Therefore the significant result between audit quality and audit firm change might not be completely accurate.

Despite one significant result, ten of the independent variables were not significant with audit firm change. Accordingly, we have to reject subsequent variables; acquisition, company size, management change, management ownership, ownership concentration, stock exchange listing, audit fee and non-audit services. However, audit fee is close to a significant correlation with audit firm change (0.118). The result signifies that audit fees are negatively related to audit firm change. Hence, the result indicates that companies with low audit fees are more prone to switch audit firm. Moreover, it contradicts with prior studies (e.g. Bedingfield & Loeb 1974; Johnson & Lys, 1990; Beattie & Fearnley, 1995; Woo & Koh, 2001; Magri & Baldacchino, 2004) within the topic as well as with our prediction.

Furthermore, acquisition is also worth mentioning since it received a nearly significant result in the biavirat regression analysis (0.146). It also indicates a positive relationship that is in
line with the result presented by Anderson et al (1993) and our prediction. Hence companies might switch audit firm due to an acquisition.

Our hypotheses were formulated based on previous research and none of the studies have been applied at Swedish companies. Since we only received one significant result, we can claim that factors affecting companies to change audit firm in other countries, are not applicable on Swedish limited companies. Therefore, we do not exclude the possibility that the factors we have tested cannot have an affect on audit firm change in another country.

Finally, it is our hope that we could contribute to an increased knowledge why companies switch audit firm. Our thesis have concluded that Swedish limited companies do not frequently change audit firm. The results in our study indicate that the majority of Swedish limited companies do not hire Big N audit firm, but preferably small audit firms. This information could be a valuable finding for smaller audit firms. We cannot explain with any certain evidence why companies change audit firm, but we have some indications that audit fee and acquisision might affect an audit firm change.

6.2 Limitations and further research

To conclude our thesis, we will mention some limitations with our study and propose further research within the topic. We have chosen to include Swedish limited companies in our study. Therefore we suggest a further study that will have a population including either companies in other countries or different company size or industries. Since prior studies have received a different result, we believe that these components might lead to a different outcome.

However, given that we did not find any significance (except for audit quality in the correlation matrix) between our dependent and independent variables, we can conclude that these factors might not be applicable on Swedish companies. Therefore it might be other reasons why companies switch audit firm.

Another limitation is the restricted amount of years our study is based on. We have only included two years, whereas Gómez-Aguilar & Ruiz-Barbadillo (2003), for example, have based their study on several years, 1991-1996, which may affect the outcome. Our recommendation to further research is to conduct a similar study including more years.
The recent discussion and implementation of, in some countries, mandatory audit firm rotation, makes it interesting to conduct further research within this topic (Geiger & Raghunandan, 2002; Gómez-Aguilar et al, 2006). Furthermore, another suggestion for a further study would be to conduct a qualitative study in countries that have implemented the regulation in order to analyze the outcomes of such directive. Accordingly, it would also be interesting to make a comparative study between countries that have implemented the regulation and those which have not.

We would also recommend conducting a qualitative study through interviews with companies that have switched audit firm in order to examine the primary reasons. It could also be possible to make a study in similarity to Beattie & Fearnley (1995) and use questionnaire in order to determine the main variables.
Bibliography


