



**UNIVERSITY OF GOTHENBURG**  
**SCHOOL OF BUSINESS, ECONOMICS AND LAW**

## **Master Thesis**

The Effects of Audit Committee Characteristics on Firm Financial Performance:  
A Case Study of the NASDAQ Stockholm.

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### **Abstract**

This thesis studies the effect of audit committee characteristics on firm financial performance, using ROA as the proxy. In line with agency theory, a well governed and directed firm should comparatively perform better than a firm that is not well governed and directed. On the other hand, resource dependency theory maintain that firms must be dynamic to incorporate the changing nature of environment in decision making process regarding provision of resources. More specifically, audit committee characteristics such as size and frequency of meetings should be varied to reflect demands presented by environmental factors. Taking a sample of available listed firms on NASDAQ Stockholm Sweden for years 2018 and 2019, I find that the presence of audit committee does not necessarily lead to a better financial performance. On average, ROA of firms without audit committee were higher than ROA of firms with audit committee. I equally find that both the size of an audit committee and the frequency of their meetings does not have a positive correlation with ROA but it showed that audit committee number of meetings could be used to improve the networking capital position of listed firms in Sweden. These findings suggest that agency cost of having audit committee have not yielded a commensurate return on asset. The findings of this study have significance for investors, managers, researchers, and policymakers.

**Keywords:** Audit committee characteristics, corporate governance, firm financial performance, Sweden

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## **CHAPTER 1: INTRODUCTION**

### **1.1 Introduction**

The issue of corporate governance has in recent years received a lot of attention which came on the heels of well-known corporate failures (eg, Enron and WorldCom), hence the importance to study the effect of corporate governance on firm performance (Zhou et al 2018). Audit committees and the oversight functions of the board has attracted attention of policy makers, researchers and regulators and the idea behind it is that an independent/effective board and audit committee can be used to protect the interest of the shareholders (Zhou et al 2018; Sarbanes-Oxley Act, 2002, Fama and Jensen 1983). A range of concerns with the audit committee's performance and internal audit activities (Braiotta 2000) contributed to the recent economic slump, increasing the need for effective corporate governance and accountability. A rising body of research indicates that the audit committee's features are crucial to a company's success. In corporate governance literature, independent audit committees with financial competence have been lauded for their capacity to provide an unbiased perspective on financial reporting (Chan and Li 2008; Lin et al, 2006). The value of audit committees in resolving internal organizational problems cannot be overemphasized.

This thesis sets out to investigate the effect of presence of audit committee, its size and number of meetings held on firm financial performance from a sample of listed firms in Nasdaq Stockholm Sweden. According to corporate governance literature, audit committees contribute significantly to minimizing information asymmetry between insiders and outsiders, which can help mitigate agency difficulties (Xie, et al., 2003). In line with agency theory, several researchers have found that a well governed and directed firm will invariably reduce agency cost, thus leading to a higher valuation, return on assets, return on equity and higher Tobin's Q (Gompers et al, 2003; Brown and Caylor, 2006). Also, from the viewpoint of resource dependency theory, audit committee being a committee of the board is assigned specific tasks to deliver and the ability of this committee to deliver the said mandate depends on its size, independence, financial and auditing experience of its members, number of meetings held in a year. That is to say that monitoring of financial reporting and managers' behaviors to ensure they act in the best of the owners cannot be effective if the audit committee does not have adequate members with cognate financial and audit experience, meet regularly to perform their duties and its independence is not in doubt.

Menon and Williams (1994) had earlier found a positive relationship between an audit committee's alertness, or the frequency with which it meets, and greater business performance. To this end, a lot of researchers have looked at the role of audit committees particularly as it concerns strengthening internal control systems, financial reporting, and earnings quality (Xie et al 2003; Klein 2002; Abbott et al 2004, Krishnan 2005) but none of these studies dealt with whether the role of an audit committee has any impact on firm financial performance. However, Zhou et al (2018) find no positive relationship between audit committee characteristics and firm performance of Greek listed firms. There has been a lot of studies in the US such as Klein (2002) which looks at US firms and document that independent audit committee can be deployed to reduce earnings management. Xie et al (2003) also find that forming an audit committee is associated with reduction of earnings management. Krishnan (2005) and Zhang et al (2007); conclude that firms with audit committees composed of members without financial experience are more inclined to have weakness in the internal control system.

Consequently, while it is evident that a lot of studies has been done in the developed market such as US, little or no study has been conducted to investigate to what extent audit committees' role impact firm performance in Swedish listed firms. More importantly, the motivation for this study is based on the fact that there have been conflicting findings in the literature and absence of adequate research on the effects of corporate governance practices on firm performance (Zhou et al 2018). Furthermore, most of the previous research focused more on audit committee independence but this study is diverse as it seeks to focus on other aspects of audit committee and its practice such as presence, size, and frequency of meetings.

Consequently, this study will stive to answer this research question:

*Does audit committees' presence, size and frequency of meetings positively impact firm financial performance?*

The findings of this study will be important for corporate managers, policymakers, academics and most importantly investors as they would be able to significantly gain information to make prudent financial decisions. This type of research will aid management in defining sound recommendations for establishing and staffing an audit committee.

## **1.2 Research Aim**

The study seeks to examine the impact of audit committee characteristics on firm performance focusing on a case study of NASDAQ Stockholm.

### **1.3 Research Objectives**

- i. To investigate the relationship between the presence of an audit committee and firm financial performance.
- ii. To investigate the relationship between the size of an audit committee and firm financial performance.
- iii. To investigate the relationship between audit committee meeting frequency and firm financial performance.

The remaining part of this thesis is designed as follows, chapter 2 which discusses institutional background and hypothesis development while chapter 3 explains the research method, and chapter 4 presents and discusses the empirical results of the data. Chapter 5 presents the conclusion and limitation.



## CHAPTER 2: LITERATURE REVIEW

### 2.1 Institutional Background

Just like every country of the world, Sweden has its own corporate governance code which applies to all companies whose shares or depositary receipts are publicly traded on a regulated markets such as NASDAQ Stockholm and NGM equity. The establishment of Swedish Code of Corporate Governance can be traced to the 1999 OECD which makes provision for its members to develop code of corporate governance. The current Swedish Corporate Governance Code took effect on the 1<sup>st</sup> January, 2020 (a revised version). Alander (2019) observe that corporate governance codes differ from one another, and the difference is related to the form of ownership and control prevalent in each country. Concentrated ownership and few owners' control is common in Sweden as against dispersed ownership and management control which is common in Anglo-Saxon jurisdictions (Alander 2019). Swedish Companies Act (chapter 8, Section 49a) and Swedish Corporate Code of Governance makes provision for the establishment of an audit committee. However, where a company decides not to have a separate audit committee, Swedish Companies Act requires that the entire board could perform the tasks of an audit committee as set out in Section B of chapter 8 of the Act which is also in line with the Regulation (EU) NO. 537/2014 of the European Parliament. During data collection, it was observed a reasonable number of companies within the sample have the entire board excluding the CEO performing the said tasks of an audit committee.

The Swedish Companies Act (Chapter 8 Section 49a) maintains that audit committees' members must not consist of employees of the company and at least one member shall have accounting and auditing experience. Again, an audit committee established by the board must have majority of its members independent of the executive management and the company. Additionally, at least one member who must be independent of the executive management and the company should equally be independent of the company's majority shareholder. In line with the code, the audit committee should be composed of non-executive members of the board of directors. Regarding the meeting of the committee, it is recommended that they should meet at least three times a year and at least two of those meetings should be held with the external auditor to discuss audit related matters.

Some of the common duties of an audit committee includes:

- a. Monitoring of financial reporting and the effectiveness of the firm's internal control systems, internal audit and risk management.
- b. Submission of recommendation and proposal on the improvement of the internal control systems, internal audit and risk management.
- c. To be aware of the progress of the audit, carry out reviews and satisfy itself of the independence of the external auditor.
- d. Makes recommendation to the Nomination committee on the appointment of an external auditor and determination of fees.
- e. Informs the board of directors of the result of audit and ensures it meets the requirements of EU Audit Regulation and Directive (537/2014/EU) Article 11.
- f. Prescribes procedures for the offering of services aside auditing services from the external auditor.
- g. Evaluation of quality of audit and sends the report of the evaluation to the nomination committee

## **2.2 Audit Committee Characteristics**

An audit committee's organizational structure varies according to its purpose and area of activity. According to Ciftci et al (2019), audit committees are comprised of non-executive directors who are responsible for overseeing financial reporting, internal control system and risk management system, etc. According to the Cadbury Committee (1992), one of the audit committee's key objectives is to assure the auditor's complete independence.

An audit committee should evaluate the effectiveness of the organization's accounting systems and approve them. While members of the audit committee should analyse the accounting systems' dependability, they should also ensure that the company's legal and ethical requirements, as well as fraud prevention measures, are followed. Infact, the value of an audit committee has been demonstrated by some researchers. The value of audit committee in connection with management of risk, financial reporting quality and recommendation and selection external auditors (Alqatamin, 2018). Adams & Ferreira (2009) assert that the installation of an audit committee strengthens investor confidence in earnings quality. Audit committees, according to AliGulla et al. (2018), help to mitigate the risk of financial reporting errors and abnormalities.

Audit committee according to Salleh & Stewart (2012) has also been found to be useful in resolving tensions between the management and the external auditors. The committee conduct confidential meetings with the external auditors to discuss some of these

issues. External auditors are required to conduct in-depth examinations of financial reporting, data security, organization's day-to-day operations and current professional and regulatory disclosures (Salleh & Stewart, 2012). Interim financial data must be analysed to verify its accuracy and completeness. The audit committee meets to discuss audit findings, which may include data that must be provided in compliance with auditing standards.

### **2.3 Audit Committee Independence**

Independence of the audit committee is not really an issue in Sweden since both the Swedish Companies Act (Chapter 8, Section 49) and Swedish Code of Corporate Governance makes provision for the independence of the audit committee so that the committee would be able to resist senior management's influence and pressure and be objective in the discharge of its duties. Alander (2019) maintains that independence of audit committee members is important so that non independent members will not influence the objectivity of the committee. The Act and the Code insists that an audit committee must not consist of an employee of the company and majority of its members be independent of the executive management and the company. To further emphasize the importance of this independence of this committee in Sweden, at least one member who must be independent of the executive management and the company should equally be independent of the company's majority shareholder. Major key areas of concern on the issue of independence of audit committee which Swedish Code of Corporate Governance follows has always been employment, personal and business relationships of the members of the committee and this is similar to UK Code of Corporate Governance (Alander 2019, Bédard & Gendron, 2010).

### **2.4 Audit Committee Effectiveness and the Performance of firms**

There are evidence that suggest that organizations with good corporate governance practices have better performance due to the reduced agency cost which accrues from having an effective monitoring framework in place (Zhou et al 2018; Brown and Caylor, 2006). Some researchers (Zhou et al 2018, Alqatamin 2018) have evaluated the audit committee's effectiveness by considering not just the committee's independence, but also the committee's size, composition, experience, and frequency of meetings. These characteristics have become even more critical as audit committee responsibilities have increased; however, prior research has failed to provide guidance on how to measure the effectiveness of these committees or the proportion of the aforementioned factors required to ensure effective committee.

Xie et al. (2003) finds that having a board and audit committees with financial experience is helpful in deterring management from performing earnings management. In line

with this argument, Zaman (2002) finds the establishment of an audit committee as an indispensable component of corporate governance.

According to Beasley et al (2000), audit committees help organizations reduce the possibility of financial malfeasance. The composition of an audit committee's financial competence has an effect on the committee's ability to respond rapidly to serious crises. Independent audit committees are less likely to be deceived by management, and hence are more likely to compel management to address critical concerns.

Erickson et al. (2005) examined the likelihood of a firm experiencing an accounting crisis and find that accounting scandals easily occur in a particular type of businesses. Several of the features included rapid expansion, profit management practices, audit committees with a small number of directors, and outside directors who were overburdened. Accounting crises were less likely to affect slow-growing firms and audit committees with a larger number of directors. The authors discovered that strong management, an audit committee, and an ethical organizational culture are crucial for avoiding accounting disasters. Audit committee effectiveness has also been examined in relation to internal control soundness, results showing that firms with audit committee who members have less financial and accounting experience are likely to have internal control weaknesses (Zhang et al 2007; Krishnan, 2005).

## **2.5. Theoretical Review**

### **2.5.1 Agency Theory**

Organizations, according to the agency notion, are composed of two types of people: agents and principals (Elsayed & Elbardan, 2018). Due to the modern corporate paradigm's separation of ownership and control (Jensen & Meckling 1976), shareholders and management have conflicting interests. This separation of ownership from control creates knowledge asymmetry, business owners are unable to establish whether their staff are sufficiently protecting their interests. In theory, a thorough contract is essential to align the principal's and their agents' interests. When specialists and systems such as audit and control environments are used, the connection between the agent and the principal is further reinforced. A selection dilemma, the notion goes, may arise when an agent's relationship, interests, and work performance are all uncertain. Agents may be unable or unwilling to complete their responsibilities as a result of moral hazard and biased selection (Subramaniam, 2018). The agency theory postulates that both principals and agents will act rationally in order to maximize their wealth via contracting (Elsayed & Elbardan, 2018).

Since information asymmetry and potential conflicts of interest between principals and agents is unavoidable, organizations must establish audit committees to oversee their agencies' expenditures (Elsayed & Elbardan, 2018). Managers as agents are expected to submit accurate financial reports in order for the audit committee to function effectively.

An audit committee is crucial for cost control and resolving information differences caused by principal-agency dispute. This is in line with several researchers who posit that a well governed and directed firm will invariably reduce agency cost, thus leading to a higher valuation, return on assets, return on equity and higher Tobin's Q (Zhou, 2018; Gompers et al, 2003; Brown and Caylor, 2006). The formation of audit committees significantly improves the principal-agent relationship by allowing for more open communication. Financial statements that accurately reflect a company's return on investment is one of the advantages of having an audit committee. According to Raimo et al (2020), the inclusion of an audit committee is associated with increased financial record accuracy. These results were drawn following a thorough examination of the concept of agency cost. Auditors can verify financial reporting using agency theory (Leepsa & Panda, 2017).

### **2.5.2 Resource Dependency Theory**

An organization does not operate in isolation. Organizations have external environment which it relies on to provide resources needed for its smooth operation and these environmental elements presents demands to the organization which invariably leads to cost (Pfeffer & Salancik, 1978, Zhou et al 2018). The organization must devise means to resolve any conflict that arises from its dependency on the environment to produce its resources and the board of directors are the ones positioned to handle this (Pfeffer & Salancik, 1978, Zhou et al 2018). The way and manner in which the Board and its committees are composed depends on environmental factors which are constantly changing (Pfeffer & Salancik, 1978). The changes in environment could be in form of regulations, technology, inflation etc. Board constitutes different committees and assign each specific tasks and audit committee assist the board in handling an aspect of its mandate which has been highlighted in the beginning of this chapter. Similarly, the composition of audit committee would equally depend on environmental circumstances, meaning that certain members of the committee must have what it takes (resources in form of experience) to react to the changes in the environment. This also means that the composition of audit committee cannot be static and would always reflect changes in the environment. IFRS standards are not static and one of the roles of audit committee is ensuring that the firms comply with regulations. Furthermore, audit committee's

effectiveness is also dependent on the size, number of meetings held and so on. This is also the reason both Swedish Companies Act and Swedish Code of Corporate Governance recommends that at least a member of the audit committee should have accounting or auditing experience.

## **Hypothesis Development**

### **2.6.1 Audit Committee Presence**

Members of committees are appointed by the board of directors in accordance with the organization's by-laws. Erickson et al. (2005) recommended that independent parties, rather than the CEO/chairman, initiate the process of nominating individuals for audit committee membership. Evans et al (2002) asserts that an efficient audit committee necessitates complete independence, notably during the nomination process. Individual shareholders cannot run for the board of directors without the consent of corporate management, but the audit committee, according to Chen et al (2019) looks out for shareholders' interests. According to him, executives or other directors typically nominate board nominees. Employers recognize the extent to which they may exert influence by appointing board members who will vote in their favor. Gibson (2000) asserts that the end effect is a board that places management objectives ahead of shareholder interests. With senior management in charge of the board and selecting its members, audit committees lose their flexibility of action.

Interestingly, neither the Swedish Code of Corporate Governance nor the Swedish Companies Act makes it mandatory for listed firms to form an audit committee but insist where there is none, the entire board should perform the roles of an audit committee. However, several studies have looked at incentives for voluntary formation of audit committee. Eichenseher and Shields (1985) provide evidence that suggest that the likelihood of forming an audit committee increases with the appointment of a Big-4 accounting firm. Pincus et al. (1989) equally posit that determinants for firms listed on NASDAQ Stockholm to form an audit committee are managerial ownership, firm size, board independence, leverage and Big-4 accounting firm. The authors maintained that listed firms on NASDAQ will be more inclined to form an audit committee if they have lower percentage of managerial ownership, bigger firm size, increased independence of the board, highly levered and have Big-4 as external auditors.

Zhou et al (2018) maintain that presence of an audit committee has consequences on the capital market, with earnings providing more information to investors with the presence

of the committee. Presence of audit committee enhances the quality of financial reporting by way of reduction of errors and irregularities (Zhou et al, 2018). Presence of an audit committee has also been proved to be useful in strengthening the internal control systems and reduction of earnings management. For an audit committee to perform her roles, its members should have a basic understanding of financial reporting (Bond & Dent, 2008). One member of a publicly traded company's audit committee must have prior experience as a financial officer, such as the CEO, CFO, or another senior position requiring financial oversight, or any other comparable experience and background that contributes to the individual's ability to comprehend and apply accounting principles (Bond & Dent, 2008). This explains why Swedish Companies Act (Chapter 8 Section 49a) maintains that at least one member shall have accounting and auditing experience. McDaniel et al. (2002) equally maintains that effectiveness of an audit committee is dependent on the experience and knowledge of its members. Aside the fact that financial experience is necessary for members of the audit committee (Lin et al., 2006), DeFond et al. (2005) also believe that previous board experience is beneficial for audit committee members. Accordingly, the following hypothesis is therefore formulated;

*H1: There is a positive relationship between presence of audit committee and firm financial performance*

### **2.6.2 Size of Audit Committee**

Along with outlining the committee's functions, even though most businesses agree on the optimum size of audit committees, each company's actual composition will vary. The size and composition of an audit committee have a major impact on a business's ability to generate revenue. The committee members' responsibilities are determined by the size of the business and the number of board members (Braiotta 2000).

The size of an audit committee has a higher impact on its effectiveness (Dellaportas et al. 2012). The audit committee's composition and resources must be sufficient to oversee management's activities effectively (Kalbers and Fogarty 1993). Vicknair et al. 1993 posit that an audit committee need adequate number of members to be able to carry out its controlling and monitoring functions. Although there have been inconsistent findings on the impact of size of an audit committee on firm performance, but Pucheta- Martínez & De Fuentes (2007) discover a correlation between the size of the committee and the likelihood of companies obtaining audit reports that contain errors.

Dalton et al. (1999) asserts that both small and large audit committees are unsuccessful. Large audit committees tend to lack the attention and participation of members compared to smaller ones. Conversely, a committee of smaller size is doomed to fail due to a lack of diverse viewpoints and talents (Dalton et al. 1999). Kao et al (2019) equally maintain that having a large audit committee increases the risk that a firm may obtain an audit report that contains errors and does not comply with regulatory requirements. While Klein (2002) believe that a broader audit committee benefits from the many expertise that its members bring to the table since larger audit committees have more authority and influence within the organization than smaller committees. An audit committee that is adequately sized is useful to the committee's mission. However, Mehran (1995) assert that the size of an audit committee has no discernible correlation with its success. Abdullah (2004) concluded that smaller audit committees with a greater depth of expertise and experience performed better during the financial crisis. According to resource dependence theory, an audit committee's efficacy grows linearly with its size since it has more resources available to address the firm's problems. The researchers offered the following theory in light of the factual discrepancies:

*H<sub>2</sub>: There is a positive relationship between the size of audit committee and firm financial performance.*

### **2.6.3 Audit Committee Meeting**

When boards of directors comprise larger audit committees, financial reporting quality and corporate success are more likely to improve. The ability of outside directors to communicate with the company's management has effect on their performance as directors. To retain their status as competent decision control specialists while avoiding legal liability, they must operate in shareholders' best interests and invest heavily in financial reporting process monitoring (Abbott et al., 2004).

Audit committee's effectiveness has been measured in relation to the number of meetings held by the committee in a year. Studies such as Xie et al (2003), Lin et al (2006) used number of audit committee's meetings as proxy in investigating its activities. Al-Matari (2013) posits that an audit committee that meet more often perform better because they are well equipped with information concerning the firm which enables them to provide better oversight and monitoring functions. Abbot et al (2004) discovered that companies whose audit committees holds at least four meetings a year are less likely to restate their financial reports. McMullen & Raghunandan (1996) find that companies that experienced financial turmoil had audit committees that failed to meet regularly.



Although, Alqatamin (2018) find that audit committee's meeting does not necessarily increase firm performance. Members of the audit committee are expected to be knowledgeable about business auditing and accounting, as a result of their regular discussions with auditors (Menon & Williams, 1994). Sheikh et al (2018) assert that an audit committee meeting has a statistically significant and beneficial effect on a company's performance. Lin et al. (2006) conducted an investigation of US-based enterprises to substantiate their assertions. His belief is that an excessive number of meetings may result in inefficient governance. According to the study's findings, the following are the most effective strategies for dealing with contradicting evidence:

*H3: There is a positive relationship between frequency of audit committee meetings and firm financial performance.*

## CHAPTER 3: METHODOLOGY

### 3.1 Sample Selection

This study used data from the publicly listed companies on the NASDAQ Stockholm. Quantitative data on Swedish listed firms' audit committees was manually collected for year 2018 and 2019 annual reports. The study used only 2018 and 2019 annual reports because of the time required to scan through each of them meticulously. Most of the annual reports are available on the websites of the company as well S&P Capital IQ and all the data used (excluding audit committee characteristics) are reported in Swedish Kronor. Table 1 below contains information on sample selection. A total number of 500 observations were collected from 263 companies, out of which 86 observations relates to companies without a separate audit committee or have the whole of the board excluding the CEO performing the task of an audit committee. These observations were removed from 500 observations and a further 103 observations was also removed because some of the control variables were missing (after running S&P Capital IQ(Beta) Excel pluggings).

**Table 1**

	<b>No. of Obs.</b>
Companies with available annual report listed on the NASDAQ during 2018–2019 (263 companies)	500
Less: companies with missing data on control variables	103
<b>Sample used in Model 1</b>	<b>397</b>
Less: Companies with missing data on audit committee characteristics (companies without a separate audit committee)	86
<b>Sample used in Model 2 &amp; 3</b>	<b>311</b>

### 3.2 Data Collection

Data for this study were collected from the annual reports which was downloaded from S&P Capital IQ and companies' websites. Independent variables such as presence of an audit committee, number of meetings held in a year and the size of the audit committee were manually sorted out from both the corporate governance report and other parts of the annual report. However, it was not so easy getting this information as some companies prefer not to tabulate the information in their corporate governance report while some presented it in tabular form making it easier to identify. The effect of this on data collection is that some

data could have been reported missing after using the search keyword ‘audit committee or meetings’ in the annual report. Since it is not compulsory for listed companies in Sweden to have an audit committee, some companies within the sample chose not to have a separate audit committee instead have the whole of the board members performing the duties of an audit committee with the exception of the CEO. As a result, these companies were treated as not having audit committee. There were few other companies who have audit committees but neither disclosed any information pertaining to the size of the committee and number of meetings held, they were equally treated as not having audit committee.

### **3.3 Research Design**

#### **3.3.1 Variables**

The motivation for the use of these variables is explained below. The variable of interest (presence of an audit committee, size of the audit committee and number meetings held) are shown first before the control variables.

#### **Independent variables**

##### **Presence of an Audit Committee**

This is a dummy variable where firms with an audit committee have a score of 1 while firms without an audit committee have a score of 0. This also includes firms where the whole board members except for the CEO performs the functions of an audit committee (these firms have a score of 0). Kallamu & Saat (2015) found a significant relationship between the composition of an audit committee and ROA. Similarly, Xie et al (2003) find an active audit committee to be useful in reducing earnings management. One of the reasons for which managers engage in earnings management is when their remuneration is based on financial performance (Xie et al, 2003). One can argue that when performance is good, managers’ incentives to practice earning management should ordinarily reduce. Although Zhou et al (2018) did not find any significant relationship between an audit committee composition and a better firm performance in their study of Greek listed firms. The authors suggest that the only explanation for the findings could be that Greek listed firms merely formed audit committees by way of complying to gain legitimacy but not necessary to improve performance. This explanation may not hold true for a country like Sweden. Therefore, I expect a positive relationship between the presence of an audit committee and ROA.

##### **Size of the Audit Committee**

Klein (2002) posit that the function of an audit committee is to monitor the financial reporting activities of a firm. Internal and external audits are designed to increase an organization's degree of accountability. As the size of a company's audit committee grows, a beneficial correlation is anticipated. As a result of these findings, some experts assert that a large audit committee can result in conflict and an inability to reach consensus on certain decisions. As a result, the decision-making process of the firm may be harmed, influencing other aspects of the business. However, Swedish Code of Corporate Governance recommends a minimum of three members which is also common in some European countries. Although Xie et al (2003) did not find the size of an audit committee to be significantly related to discretionary current accruals. Zhou et al (2018) did not also find audit committee size to be significantly related to firm performance. The authors suggest that the reason could be that most Greek listed firms have an average size of audit committee as 3 members with little fraction on it but in Sweden it will be interesting to see how this would change considering that some listed companies have audit committee of 5 to 6 members. Hence, Alqatamin (2018) find a positive correlation between the size of an audit committee and firm performance. As a result, I expect a positive relationship between the size of an audit committee and ROA.

### **Audit Committee meetings**

Both the Code and Swedish Act recommends that the audit committee should meet regularly to perform their functions. They are also recommended to meet with the external auditors at least once or twice a year to discuss issues relating to the audit. In view of these recommendations, it is expected that as more audit committees' meetings are held, it could lead to a positive correlation with firm performance. In the data collected relating to audit committees' meetings, it was discovered some firms met more often in a particular year due to issues that arose with the accounting year. Frequency of meetings should afford the committee enough time to meticulously perform their assigned duties. Audit committee's meetings could be higher in a particular year due to crises experienced which lowered the ROA. This may explain why there have been conflicting findings on the effect of audit committee's number of meetings on firm performance as described in the preceding chapter, In with hypothesis 3, I expect a positive correlation between number of audit committee meetings and firm performance

### **Determinants of Firm Performance**

Leverage, liquidity, organization size, and age are only a few of the financial and non-financial criteria examined in the Jordan study by Ilona (2008) and they selected these

variables due to their ease of quantification using financial statement data. According to Gupta et al. (2010), there is conflicting evidence about the relationship between higher debt use in the capital structure and corporate success. The studies of Kao, et al (2019), established a positive association between leverage and financial performance.

Hsu (2007) examined non-financial Egyptian listed companies between 1997 and 2005 and discovered that the capital structure choice had little or no effect on the firm's overall performance. While there is a vast body of literature on the relationship between a firm's capital structure and performance in industrialized countries, there is substantially less empirical evidence for this association in developing and emerging economies. According to Pucheta-Martínez & Gallego-Álvarez (2020) businesses with a strong cash level can weather unexpected events and meet their obligations even during periods of low profitability. According to Pillai & NizarAl-Malkawi (2018) liquidity has a significant impact on insurance businesses' financial success. Due to the strong correlation between liquidity and financial success, insurance companies should enhance their current assets while minimizing their liabilities. According to an alternative interpretation based on the work of (Abbott, et al., 2004), while a modest level of liquidity may benefit businesses, an excess of liquidity may harm them. As a result, they determined that the financial success of businesses is ambiguous in terms of liquidity.

According to Maymon, et al. (2018), a corporation's size has a significant impact on its financial performance. Because large firms may use economies of scale, they are more cost effective than small ones. Additionally, small businesses may lack the influence necessary to compete with larger organizations in highly competitive marketplaces, making it harder for them to compete. As businesses grow, they may confront inefficiencies, resulting in lower financial performance. According to Mehran (1995), a firm's age has minimal bearing on its financial success. Startups should not be worried about their age, as there is a negative correlation between age and financial performance. According to Merendino & Melville (2019), the longer a company has been in business, the more profitable it is, as assessed by ROA. Swiss Re reports that both smaller and younger enterprises expand at a higher rate than older businesses. On the other hand, Rothschild (2006) discovered no statistically significant correlation between a firm's age and profitability. When investors gain knowledge and become less concerned about the company's future, financial performance declines.

In view of the above findings, I decided to control for the following variables.

### **Control Variables**

**Firm size:** This is natural logarithm of the summation of total non-current assets and total current assets. Basti et al. (2011), Dogan (2013) and Alqatamin (2018) find a positive correlation between ROA and firm size, meaning that firms with larger total assets earn more profits. In line with these studies, I expect a positive correlation between ROA and firm size.

**Firm age:** Some studies have measured firm age either in relation to the year of listing on stock exchange or year of incorporation (Zhou et al (2018). This study measure firm age as current year minus the year the firm was incorporated. Following the study of Akben-Selcuk (2016) who studied the effect of firm age on profitability and find that older firms record lower profit than younger firms. In this study, I expect a negative correlation between firm age and ROA.

**Leverage:** This is arrived at by dividing the total debt by total equity. In line with Akben-Selcuk (2016) who find a negative correlation between ROA and leverage, meaning that firms that uses more debt are less profitable. Again, since Zhou et al (2018) did not find a significant relationship between ROA and leverage, I expect a negative relationship between ROA and leverage.

**Current ratio:** Is the ratio of current asset to current liabilities. These studies (Akben-Selcuk 2016; Zhou et al 2018) document a positive relationship between ROA and current ratio, indicating that profitable firms tend to be more liquid. Therefore, I expect a positive relationship between ROA and current ratio.

**Total receivables:** This is the natural logarithm of total trade receivables of the firm used in the study of Zhou et al (2018) to control for its effect on firm performance. This also represents the complexity of operation. I expect either a negative or positive relationship between this variable and ROA because firms with high receivables may mean that these firms may have financing problems as cash that would have been used for viable projects are left in the hands of customers.

**Big-4:** In line with the study of Zhou et al (2018), this is a dummy variable of 1 if the external auditor of the firm is affiliated to one of the Big-4 auditing firm and 0 if is not. A positive sign is expected if having a BIG-4 improve performance.

## **Dependent Variable**

### **Return on Assets (ROA)**

Kallamu & Saat (2015) noted that previous research adopted different measures of performance such as ROE, ROA, EPS, stock price and there hasn't been an agreed best method for measuring firm performance. Although market-based measures such as stock

price should be preferable to accounting-based measures but there are factors that affect such measures which are not within the control of the management (Kallamu & Saat, 2015). Consequently, within the domain of corporate governance research, accounting-based measures is often used because it mirrors the capacity of management in utilizing firms' resources to create wealth to the owners of the business (Kallamu & Saat, 2015).

The ROA provides insight into a business's performance by indicating the rate at which capital expenditures generate profit (Epps & Cereola, 2008). Due to the audit committees' significant influence on how a firm produces wealth, the return on assets (ROA) statistic is frequently used. The efficiency with which shareholders manage their capital is inextricably linked to the ROA of a business (Return on Assets). Inefficiency is shown by a low Return on Assets (ROA) (Mehran, 1995). The audit committee's assessment of the corporation is closely related to asset management (Latif et al. (2013). ROA is calculated using the annual earnings and total assets of the business (Epps & Cereola, 2008). Financial stakeholders can utilize audits to check that a company's stated rules and processes are being followed as intended (Mehran, 1995).

According to Latif et al. (2013), the return on assets (ROA) statistic is an excellent metric for evaluating the audit committee's efficiency because it reflects a company's soundness. Audit committees also conduct internal and external audits of financial reporting, as well as inspections of financial reporting. Again, according to Mehran (1995), raising internal audit standards will benefit any organizations' financial performance.

**Table 2 Summary of expected signs**

<b>Main Variables</b>	<b>Expected sign</b>	<b>Description</b>
ACPRES	(+)	A dummy variable equal to 1 if there is an audit committee otherwise 0
ACSIZE	(+)	This is the number of members of the audit committee
ACMEET	(+)	The number of meetings held by the audit committee in a year
ROA	(+) or (-)	Net income divided by total assets

Control Variables		
FIRMSIZE	(+)	This is natural logarithm of the summation of total non-current assets and total current assets.
FIRMAGE	(-)	Firm age is the current year minus the year the firm was incorporated.
LEVERAGE	(-)	This is arrived at by dividing the total debt by total equity
CURRENTRATIO	(+)	Is the ratio of current asset to current liabilities
TOTALREC.	(+) or (-)	This is the natural logarithm of total receivables
Big-4	(+)	this is a dummy variable of 1 if the external auditor of the firm is affiliated to one of the Big-4 auditing firm and 0 if is not.

### 3.4 Research Analysis

The collected quantitative analysis would be analyses using STATA. Regression and correlation analysis would be used to analyze the inferential statistics (Kansteiner and König 2020). Figures and tables were used to present the data as all will be reflecting on the specific regression, coefficients and descriptive analysis (Lindlof & Taylor, 2017).

### 3.5 Models Used

Since Kallamu and Saat's (2015) research, a variety of study models and regression analysis have been employed to conduct a comprehensive examination of quantitative data. While both ROA and Tobin's Q have been used to analyze firm performance, this study use ROA as a proxy for firm financial performance. The study will use the equation below to examine the relationship between the variables.



In line with the study of Zhou et al (2018), there will be three models. To test **Hypothesis 1** which says there exist strong relationship between audit committee formation and firm performance:

#### Model 1

$$ROA = \alpha + \beta_1 ACPRES + \beta_2 FIRMSIZE + \beta_3 FIRMAGE + \beta_4 LEVERAGE \\ + \beta_5 CURRENTRATIO + \beta_6 TOTALREC + \beta_7 BIG\_4 + e$$

A positive relationship is expected in model 1 if forming an audit committee leads to a better governance which invariably increase ROA.

#### Model 2

To test **Hypothesis 2 and 3**, if the effectiveness of the audit committee which is proxied by the *size of the committee* leads to a better performance.

$$ROA = \alpha + \beta_1 ACSIZE + \beta_2 FIRMSIZE + \beta_3 FIRMAGE + \beta_4 LEVERAGE \\ + \beta_5 CURRENTRATIO + \beta_6 TOTALREC + \beta_7 BIG\_4 + e$$

A positive relationship is equally expected if audit committee effectiveness positively affects ROA.

#### Model 3

To further test **Hypothesis 2 and 3**, if the effectiveness of the audit committee which is proxied by the *number of meetings of the audit committee* creates a better performance.

$$ROA = \alpha + \beta_1 ACMEET + \beta_2 FIRMSIZE + \beta_3 FIRMAGE + \beta_4 LEVERAGE \\ + \beta_5 CURRENTRATIO + \beta_6 TOTALREC + \beta_7 BIG\_4 + e$$

## CHAPTER 4: EMPIRICAL RESULTS AND DISCUSSION

**TABLE 3. DESCRIPTIVE STATISTICS OF VARIABLES**

Variable	Formation of Audit committee	No of obs.	Mean	Std. Dev.	Median	Min.	Max.
<b>ACSIZE</b>	No	121	0	0	0	0	0
	Yes	379	3.316623	1.01836	3	0	8
<b>ACMEET</b>	No	121	0	0	0	0	0
	Yes	379	4.95515	2.02644	5	0	12
<b>FIRMSIZE</b>	No	114	7.70317	2.04803	7.4246	3.67936	12.07427
	Yes	375	8.60822	1.92760	8.53026	4.41974	13.17084
<b>FIRMAGE</b>	No	113	64.33628	62.33372	42	8	413
	Yes	359	65.5376	54.93732	45	5	333
<b>ROA</b>	No	113	3.25162	13.45304	4.3644	-77.0685	27.851
	Yes	373	2.32758	12.45804	4.3238	-67.3779	29.1693
<b>TOTALREC</b>	No	113	4.95493	2.072034	5.12158	-2.09557	8.32676
	Yes	365	6.3261	2.19285	6.52165	.131905	11.37249
<b>LEVERAGE</b>	No	112	1.12694	6.08230	.294181	0	64.58363
	Yes	366	0.73956	1.4277	.58463	-8.49922	17.71677
<b>Currentratio</b>	No	92	19.01235	46.50585	4.96121	.07492	398.0476
	Yes	329	94.49246	380.3724	7.71697	.07492	2607
<b>BIG_4</b>	No	121	.90909	.28868	1	0	1
	Yes	379	0.96306	0.18886	1	0	1

### 4.1 Descriptive Statistics

Table 3 above presents the descriptive statistics for both firms with audit committees and firms without audit committees. The mean of size of audit committee is 3.31662 which indicates that most Swedish firms have an average of 3 members in the committee which is also in line with the recommendation of the Swedish Code of Corporate Governance. The mean of audit committee meetings is 4.95515 while median is 5, indicating that most

Swedish firms' audit committee meet on the average 5 times a year. This is higher than the minimum number of meetings recommended by Swedish Code of Corporate Governance. The maximum value for audit committee meeting is 12, meaning that the highest number of meetings held by an audit committee in the sample was 12 times in a particular year. The mean of firm size for firms without audit committees is 7.70317 (median is 7.4246) while that of firms with audit committees is 8.60822 (median is 8.53026). Even though there is a wide disparity between mean and median for both samples which can be explained by enormous gap between the minimum value and maximum value, Swedish firms with audit committees can be said to be bigger in size, having more total assets at its disposal. Swedish firms with audit committees tends to be older with mean of 65.5376 (median 45) compared to the mean of 64.33628 (median of 42) for firms without audit committees. To further support why Swedish firms with audit committees are bigger in size, they also have a higher mean value of 6.3261 (median 6.52165) for total receivables than firms without audit committees with mean of 4.95493 (median 5.12158). Surprisingly, Swedish firms with audit committees have a lower mean of 2.327581 (median 4.3238) for ROA compared to mean of 3.251624 (median 4.3644). Although, it may not be fully explainable at this stage why this is the case, but one can think of it as having an audit committee comes with extra cost which tends to reduce returns earned by the assets. However, all Swedish listed firms tend to have Big4Auditing firm as its external auditors, but a closer look at the mean of both samples, 0.963061 for firms with audit committees and .9090909 for firms without audit committees, shows that the former is more likely to have an audit committee.

**TABLE 4. PEARSON CORRELATION MATRIX OF VARIABLES**

<b>VARIABLE</b>	<b>ROA</b>	<b>ACPRES</b>	<b>ACSIZE</b>	<b>ACMEET</b>	<b>FIRMSIZE</b>	<b>FIRMAGE</b>	<b>TOTALREC.</b>	<b>BIG_4</b>	<b>LEVERAGE</b>	<b>CURRENTRATIO</b>
<b>ROA</b>	1									
<b>ACPRE</b>	0.00321	1								
<b>ACSIZE</b>	-0.000373	0.836***	1							
<b>ACMEET</b>	-0.0571	0.752***	0.730***	1						
<b>FIRMSIZE</b>	0.304***	0.168***	0.150**	0.185***	1					
<b>FIRMAGE</b>	0.178***	-0.00526	0.00786	0.0254	0.417***	1				
<b>TOTALREC.</b>	0.421***	0.260***	0.263***	0.260***	0.758***	0.422***	1			
<b>BIG_4</b>	-0.00137	0.0489	0.0475	0.0366	-0.0280	0.0498	0.0622	1		
<b>LEVERAGE</b>	-0.0591	-0.0671	-0.0632	-0.0324	0.0165	-0.0566	0.000685	-0.0132	1	
<b>CURRENTRATIO</b>	-0.155**	0.0810	0.0759	0.128*	-0.160**	-0.00590	-0.181***	0.0144	-0.0406	1

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## 4.2 Pearson Correlation Matrix of Variables

In order to ascertain if there exist any relationship among the variables, table 4 above presents the Pearson Correlation Matrix. Previous studies such as Kallamu and Saat 2015; Alqatamin et al. 2017 posit that a correlation of 80% among the variables of interest signals problem of multicollinearity. Consequently, the higher correlation between ACPRES with ACSIZE and ACMEET and ACSIZE and ACMEET means that the three variables of interest cannot be in the same model due to multicollinearity. Although this is not really an issue since each of the three models contains one of the independent variables. ACPRES also correlate positively with FIRMSIZE and TOTALREC indicating the fact that having an audit committee increases Swedish firms' total assets and total receivables. This can be attributable to the monitoring role of the audit committee with respect to financial reporting. The positive correlation between ACPRES and FIRMSIZE supports the finding of Pincus et al. (1989) that find FIRMSIZE as one of the determining factors for Swedish firms forming an audit committee. It is obvious that ROA is significantly and positively correlated with FIRMAGE, FIRMSIZE and TOTALREC while also negatively correlated with CURRENTRATIO. This means that as Swedish firms grow older and becomes bigger in size, the higher the ROA. FIRMSIZE also correlate positively with FIRMAGE, showing that Swedish older firms tend to have more total assets. TOTALREC correlate positively with ACPRES, ACSIZE, ACMEET, FIRMAGE and FIRMSIZE indicating that audit committee characteristics positively affect total receivables. In line with Beasley et al (2000), that find that fraudulent earnings misstatement happens in firms with fewer audit committee meetings. Total receivables being one of the tools used by management in such practices, it therefore means that as more audit committee meetings and considerable size of the committee is maintained, the committee can oversee the financial reporting and disclosure process and also monitor choice of accounting policies and principles within the firm. Since all the variable of interest affects total receivables, it means that audit committee can be used to restrain management from using total receivables to perform earnings misstatement. High positive coefficient between TOTALREC and FIRMSIZE is expected as the former forms part of the later, meaning that the larger the FIRMSIZE of Swedish firms, the more complex its operation becomes. As CURRENTRATIO is negatively correlated with ROA, FIRMSIZE and TOTALREC, it is positively correlated with audit committee number of meetings held, meaning that audit committee is afforded more time as they meet to monitor management policies regarding working capital position.

**TABLE 5. OLS-ESTIMATES FOR AUDIT COMMITTEE PRESENCE AND FIRM PERFORMANCE**

<b>MODEL 1</b>			
<b>VARIABLES</b>	<b>(1) ROA</b>	<b>(2) ROA</b>	<b>(3) ROA</b>
<b>ACPRES</b>	-3.057** (1.324)		
<b>FIRMSIZE</b>	-0.285 (0.422)	-0.591 (0.498)	0.242 (0.892)
<b>FIRMAGE</b>	-0.00154 (0.0101)	-0.00151 (0.0114)	-0.000738 (0.0231)
<b>TOTALREC</b>	2.566*** (0.394)	2.654*** (0.454)	2.951*** (0.938)
<b>BIG_4</b>	-4.260 (7.344)	1.032 (9.621)	-10.66 (13.57)
<b>LEVERAGE</b>	-0.229 (0.150)	-0.403 (0.393)	-0.160 (0.198)
<b>CURRENTRATIO</b>	-0.00275 (0.00185)	-0.00322* (0.00175)	0.0312 (0.0288)
Constant	-3.593 (7.834)	-9.630 (10.00)	-4.337 (14.88)
Observations	397	311	86
R-squared	0.200	0.214	0.204

Standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### **4.3 OLS-Estimates for Audit Committee Presence and Firm Performance**

Table 5 presents the OLS regression results for Hypothesis 1. The table test for the association between audit committee presence and ROA and has R-Squared of 20%. The first column contains the whole sample while the second column contains only firms with audit committee and third column contains only firms without audit committee. The first column shows that ACPRES has a high negative association with ROA and therefore does not provide support for *Hypothesis 1*. When firms without audit committee (column 2) was removed from the sample, the effect of ACPRES is the resultant negative association of CURRENTRATIO with ROA, supporting the results of Table 3 that find mean and median of

ROA for Swedish firms with audit committees lower than firms without audit committees which means the benefits of having such committees does not outweigh its cost of maintenance. Also, when firms with audit committees was removed from the sample (column 3), CURRENTRATIO is no longer having a negative association with ROA. This may mean that there should be an adequate increase in ROA to compensate for money expended on having audit committee (agency cost). The negative association between ROA and CURRENTRATIO also mean that firms with audit committee takes enough risks, which agrees with the claim of Assaf Neto (2003) that says that more investment in current assets tend to lower returns. The reason according to them is that higher level of net working capital tantamount to not taking enough risk and in most cases, projects with higher risk have higher returns. There have also been studies that find negative association between liquidity and returns such as Pimentel et al. (2005), Marques e Braga (1995). On the other hand, it could also be that Swedish firms merely form audit committees to comply with regulatory requirements or for legitimacy concerns, laying credence to the findings of Zhou et al (2018) that finds that Greek firms might merely form audit committees to comply with regulatory requirements. Also, the positive association (though not significant) between BIG-4 dummy variable and ROA means that firms with audit committee are more likely to appoint BIG-4 as their external auditors compared to firms without an audit committee.

**TABLE 6. OLS-ESTIMATES FOR AUDIT COMMITTEE SIZE AND FIRM  
PERFORMANCE  
MODEL 2**

<b>VARIABLES</b>	<b>(1) ROA</b>
<b>ACSIZE</b>	-0.588 (0.544)
<b>FIRMSIZE</b>	-0.637 (0.500)
<b>FIRMAGE</b>	-0.00183 (0.0114)
<b>TOTALREC</b>	2.723*** (0.458)
<b>BIG_4</b>	1.272 (9.621)
<b>LEVERAGE</b>	-0.423

	(0.393)
<b>CURRENTRATIO</b>	-0.00315*
	(0.00175)
Constant	-7.941
	(10.12)
Observations	311
R-squared	0.217
Standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

#### 4.4 OLS-Estimates for Audit Committee Size and Firm Performance

Table 6 show the OLS regression for ACSIZE and firm performance and has R-Squared of 21.7%. The essence of this analysis is to see to what extent has the effectiveness of an audit committee which is proxied by its size affect the association of control variables with firm performance. The effect of ACSIZE is showing a negative association between ROA and CURRENTRATIO. Both OLS estimates showing the coefficient at the level of  $p<0.1$ . TOTALREC continues to have positive coefficient with ROA at the level of  $p<0.01$ , although higher than the result of Table 4, indicating the impact of ACSIZE on complexity of operation. ACSIZE is not having any significant association with ROA and therefore does not provide evidence to support Hypothesis 2. This result agrees with the findings of Mehran (1995) who find that size of an audit committee has no correlation with firm performance. However, from the perspective of resource dependency theory, the effectiveness of an audit committee should ordinarily improve as its size increases which is supported by the findings of Alqatamin (2018), the results in Table 5 contradicts such belief. The implication of this result is that size of an audit committee is as important as the experience of the members of the committee. It should also be noted that at this point that as ACSIZE does not have a significant relationship with ROA, it could have impacted positively on the financial reporting quality and monitoring of choice of accounting policies and principles of the firms (which is not the aim of this study)

**TABLE 7. OLS-ESTIMATES FOR AUDIT COMMITTEE MEETINGS AND FIRM PERFORMANCE**  
**MODEL 3**

	(1)
<b>VARIABLES</b>	<b>ROA</b>



<b>ACMEET</b>	-0.758*** (0.270)
<b>FIRMSIZE</b>	-0.626 (0.495)
<b>FIRMAGE</b>	0.573 (0.785)
<b>TOTALREC</b>	2.625*** (0.452)
<b>BIG_4</b>	0.758 (9.496)
<b>LEVERAGE</b>	-0.274 (0.390)
<b>CURRENTRATIO</b>	-0.00267 (0.00174)
Constant	-7.579 (9.981)
Observations	311
R-squared	0.236

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Standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### 4.5 OLS-Estimates for Audit Committee Meetings and Firm Performance

Table 7 above show the OLS regression for ACMEET and firm performance and has R-Squared of 23.6%. The essence of this analysis is to see to what extent has the effectiveness of an audit committee which is proxied by the number of meetings held in a year affect the association of control variables with firm performance. While CURRENTRATIO is not having a negative association with ROA compared to Model 1 and Model 2, TOTALREC continues to have a positive relationship with ROA. Although, CURRENTRATIO is not significantly associated with ROA, but it does appear that ACMEET can be used to improve the net working capital position of Swedish firms. The reason being that the negative association of CURRENTRATIO with ROA in Model 1 & 2 has now changed to insignificant negative association in Model 3. However, ACMEET is having a negative association with ROA, meaning that ACMEET does not increase financial performance, necessitating that these meetings should be channeled more to relevant financial issues that impact returns. Furthermore, the negative association between ACMEET and ROA might mean that firms where audit committee meet more tend to perform poorer in terms of returns on assets. Thus, this raises a salient point as to whether poor performing firms have audit committee that meet more (a case of causality).

#### 4.6 Robustness Check

To confirm the validity of the results and ascertain its sensitivity, I regressed the three models using future financial performance (i.e ROA<sub>t+1</sub>) (Zhou et al, 2018). The idea behind it is to reduce the effect of causality. Also, certain audit committee characteristics such as size and meetings in a particular year could be about events which would impact more on future financial performance than in the year it happened. It was also observed during data collection that some firms within the sample increased their audit committee size in a particular year while some had more meetings in a particular year. From the perspective of resource dependency theory, board of directors must device a means of providing the resources needed by the firm which are constantly affected by environmental factors. Board's decision in providing these resources is dependent on external factors. Decision to increase the audit committee size in a particular year could be in response to changes in regulation. Table 8 below shows OLS estimates for audit committee characteristics and firm future performance. For Model 1, FIRMSIZE which was not significant in Table 4 is now having a negative significant association with ROA while significant level for TOTALREC is now higher compared to results in Table 4. The reason for the negative association of FIRMSIZE with ROA could be that that investment in total assets in the current year has had effect on the ROA of the next year. CURRENTRATIO continues to have a negative significant association with ROA but is now higher compared to the previous results. I find a similar trend for Model 2. FIRMSIZE which was not significant in Table 5, is now significantly negatively associated with ROA while TOTALREC significance is now higher. ACSIZE is having a higher negative association with ROA but it is not significant compared to Table 5. For Model 3, ACMEET is still having a negative association with ROA compared to Table 6 but is slightly lower now. The three hypothesis is still rejected at this point, entailing that audit committee's presence, size and number of meetings does not necessarily lead to a better performance.

To further confirm if the inclusion of board size and number of independent directors would change the results. Table 9 presents the OLS estimates with board size and independent directors included in the models. While the significance of TOTALREC is now higher in all the models compared to previous results, the main variables of interest (ACPRES, ACSIZE and ACMEET) still does not have a positive association with ROA.

**Table 8 - OLS-ESTIMATES FOR AUDIT COMMITTEE CHARACTERISTICS AND FIRM FUTURE PERFORMANCE (using ROA<sub>t+1</sub>)**

<b>VARIABLES</b>	<b>MODEL 1 ROA<sub>t+1</sub></b>	<b>MODEL 2 ROA<sub>t+1</sub></b>	<b>MODEL 3 ROA<sub>t+1</sub></b>
<b>ACPRES</b>	-		
<b>FIRMSIZE</b>	-1.059** (0.498)	-1.082** (0.498)	-1.015** (0.496)
<b>FIRMAGE</b>	0.00266 (0.0112)	0.00238 (0.0112)	0.00232 (0.0112)
<b>TOTALREC</b>	2.844*** (0.458)	2.904*** (0.460)	2.888*** (0.456)
<b>BIG_4</b>	1.739 (9.434)	2.007 (9.424)	1.754 (9.381)
<b>LEVERAGE</b>	-0.452 (0.392)	-0.478 (0.392)	-0.400 (0.391)
<b>CURRENTRATIO</b>	-0.00506*** (0.00167)	-0.00497*** (0.00167)	-0.00462*** (0.00168)
<b>ACSIZE</b>		-0.744 (0.565)	
<b>ACMEET</b>			-0.560** (0.269)
Constant	-8.050 (9.813)	-6.029 (9.920)	-6.006 (9.807)
Observations	304	304	304
R-squared	0.240	0.244	0.251

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 9 - OLS-ESTIMATES FOR AUDIT COMMITTEE CHARACTERISTICS AND FIRM PERFORMANCE (including board size and independent directors)**

<b>VARIABLES</b>	<b>Model 1 ROA</b>	<b>Model 2 ROA</b>	<b>Model 3 ROA</b>
<b>ACPRES</b>	-		
<b>FIRMSIZE</b>	-0.256 (0.504)	-0.300 (0.505)	-0.292 (0.500)
<b>FIRMAGE</b>	0.00482 (0.0115)	0.00442 (0.0115)	0.00410 (0.0114)
<b>TOTALREC</b>	3.124*** (0.476)	3.189*** (0.479)	3.149*** (0.473)
<b>BIG_4</b>	2.486	2.762	2.154

	(9.505)	(9.505)	(9.443)
<b>LEVERAGE</b>	-0.634	-0.656*	-0.538
	(0.395)	(0.395)	(0.395)
<b>CURRENTRATIO</b>	-0.00283	-0.00277	-0.00231
	(0.00173)	(0.00173)	(0.00174)
<b>BOARDSIZE</b>	-1.118***	-1.110***	-1.012***
	(0.384)	(0.384)	(0.384)
<b>INDEPENDENT</b>	-0.0916	-0.112	0.0267
	(0.448)	(0.448)	(0.448)
<b>ACSIZE</b>		-0.594	
		(0.536)	
<b>ACMEET</b>			-0.617**
			(0.274)
Constant	-8.046	-6.330	-5.993
	(9.858)	(9.975)	(9.834)
Observations	311	311	311
R-squared	0.243	0.246	0.256

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Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## CHAPTER 5: CONCLUSION AND LIMITATION

### 5.1 Conclusion

This thesis examines the effect of audit committee characteristics on financial performance on Swedish listed firms. This study referred to the knowledge from agency theory and resource dependency theory with former suggesting that a well governed and directed firm will invariably reduce agency cost, thus culminating into a higher valuation, return on assets, return on equity and higher Tobin's Q (Zhou, 2018; Gompers et al, 2003; Brown and Caylor, 2006). Resource dependency theory entailing that resources that a firm needs for its operation depends on external environment which are constantly changing (Pfeffer & Salancik, 1978, Zhou et al 2018). Firms must be dynamic to reflect those changes in decision making process about provision of resources.

The study made use of sample of available firms listed on NASDAQ Stock Exchange Stockholm, Sweden between 2018 and 2019. I find that audit committee presence in Swedish listed firms does not necessarily lead to a better performance. This result is consistent with the findings of Zhou et al (2018) who find that audit committee presence in Greek listed firms might be due to regulatory compliance and not to improve financial performance. The mean of ROA for firms without audit committees is higher than mean of ROA for firms with audit committees which might explain the negative association of current ratio with ROA for firms with audit committees. The implication could be that the agency cost of having audit committees have not yielded the commensurate return on assets. I equally find that size of an audit committee does not have a positive correlation with ROA which was earlier hypothesized that as audit committee size increases, a positive correlation is expected (Alqatamin, 2018). Perhaps, audit committee effectiveness increases with its size in relation to financial reporting quality and monitoring of choice of accounting policies and principles of the firms and not ROA. Although, the result show that audit committee meetings do not lead to a better financial performance with a negative correlation with ROA, but it can be used to improve the net working capital position of listed firms in Sweden as current ratio is now having a reduced negative correlation with ROA which is not significant. However, the audit committees' characteristics used in this study does not provide evidence for an improved firm financial performance in form of returns on assets, but it does not mean that financial reporting quality and monitoring of choice of accounting policies had not been positively improved upon.

The findings of this study have significance for investors, managers, researchers, and policymakers. Corporate managers and boards of directors will find it useful in defining sound recommendations for establishing and staffing an audit committee. This study shed light on under-researched audit committee components such as size and number of meetings in emerging economies. Perhaps previous board experience and cognate financial experience are as important as the attributes of audit committee used in this study.

## **5.2 Limitation**

The variables of interest used in this study could have been affected by endogeneity problems. Audit committee characteristics used in this study might also be determined by characteristics of firm that simultaneously affect ROA. This equally means that there could be a case of causality in the models. The study thoroughly motivated the use of control variables, yet there could have been other salient omitted variables in the models.

Using years 2018 and 2019 could have affected the validity of the results since the effect of audit committee efforts in a particular year might be felt in the future year to come. Though, robustness checks used  $ROA_{t+1}$  and yet the result did not change as expected but a larger range of years might provide a better picture.

Lastly, data relating to audit committee characteristics were painstakingly-manually sorted out from the annual reports, meaning that accuracy of the sorting might have been affected.

## **5.3 Suggestions for Future Research**

The debate in the literature on the effect of corporate governance on firm performance is an unending one, occasioned by conflicting findings. Audit committee main role is on financial reporting quality and compliance to regulations and several studies including this one has looked at its effect on ROA on the agency theory premise that if a firm is well governed and directed, it should invariably lead to an improved performance. To reduce the effect of causality, future studies could use more lead lag variables, use exogenous events, perform 2SLS, change models.

Although ROA has been widely used a proxy for firm financial performance, future studies could employ ROE or Tobin's Q or better still use accounting outcomes rather than performance-based measures. Though finding a suitable method for an accounting outcome may be problematic.

Furthermore, study on audit committee characteristics and ROA in Swedish listed firms could be taken a bit further to include experience of the members of the committee, gender diversity and industry type. In addition, it might be interesting to know how the exclusion of financial

companies in Sweden from the sample would affect the result, owing to their distinct features and separate rules and regulations underpinning the preparation of their annual reports.

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