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Auditors' ability to assist Norwegian organizations in detecting and reducing cost originated from fraud

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Foreword

This thesis was written for our Master's degree in Master of Science in Business - Major in Accounting and Business Control at BI Norwegian Business School, Campus Oslo. The overall objective of this paper is to identify to what extent external auditors assist Norwegian organizations in identifying and reducing the cost originated from fraud.

We would like to thank everyone who answered our surveys and those who were interviewed. Lastly, a special thank you to our supervisor Elisabeth Plietzsch at BI Norwegian Business School and our external supervisor Nigel Krishna Iyer at B4 Investigate for guiding and giving feedback throughout the master thesis.

Summary

Fraud has become an increasing problem in the last 15 years. Some consequences that can arise from fraud are loss of annual revenue, damage to an organization's reputation, reduction of funds available for public goods and services, and could undermine the public's confidence in the government. External auditors are one of the most used anti-fraud controls globally. However, they rarely find fraud. We find it interesting that external auditors are one of the most used tools to handle fraud when they rarely identify any fraud at all.

In this thesis, we examine how external audit firms assist Norwegian organizations in identifying and reducing the costs originated from fraud. To examine this, we have the following research question: "*To what extent do large and small external audit firms assist Norwegian organizations which they audit, to identify and reduce the costs originated from fraud?"*. ISA 240 is the primary fraud standard used in Norway and is used as a framework throughout the paper. To answer our research question, we collected data through questionnaires and interviews from external auditors, organizations, and other groups that can explain how external auditors help Norwegian organizations with fraud. Furthermore, we used an ordered logistic regression and template analysis, respectively, to analyse the data.

The results show that, on average, external auditors rarely identify fraud in Norwegian organizations. Further, we found evidence that experienced auditors (11+ years of experience) find more fraud than auditors with less experience. Additionally, auditors who spend a certain amount of their total time on ISA 240 find more fraud than those who do not. In addition, auditing high-risk clients increases the chances of identifying fraud. However, the last result is questionable. Further, we found that auditors and associates who audit Norwegian organizations do not have enough knowledge about fraud and ISA 240 and that they do not use enough time on the aspect of fraud to properly identify and prevent fraud from happening. Lastly, we found that Norwegian organizations generally are not particularly satisfied with the auditors' work regarding potential fraud in their organizations.

1. Introduction and background

From 2008 to 2018, the average losses from fraud worldwide have increased from 4.57% to 7.15% (Gee & Button, 2019). According to The Association of Certified Fraud Examiners (ACFE) (2021a), the global report shows that 83% of the companies that have been victims of fraud used external audits of financial statements as their primary anti-fraud control. However, external audits accounted for only 4% of the detected fraud, while whistle-blowers accounted for the most with 43% (ACFE, 2021a). We can see from The ACFE (2021b) report on western Europe that the trends are the same in western Europe. It is worrying that organizations put their trust in audits when they are not the main contributor to the fraud identification. Therefore, we will in this paper investigate how large and small external audit firms assist Norwegian organizations that they audit to identify and reduce the costs originating from fraud.

In 2019 Økokrim, Norway's specialized unit for fighting environmental and economic crime had more than 11 000 reported cases of potential fraud from accountants, banks, brokers, and others (Amundsen, 2021). However, only 12 of these cases were reported and investigated further by Økokrim (Bjørnestad & Torset, 2020). Limited capacity is the main reason why Økokrim cannot investigate more cases (Langved et al., 2020). According to Amundsen (2021), fraud investigations in Norway have become more privatized. Several private companies like DNB, KPMG, and BDO offer services of internal control, fraud investigation, and suspicious transactions, among others (BDO, n.d.; DNB, n.d.; KPMG, n.d.). Comparing these companies, Økokrim has 180 employees fighting fraud, while DNB and KPMG have over 400 and 60 employees, respectively (Amundsen, 2021). From this, we can see that private companies do more against fraud than the public body.

Even though several companies like DNB and BDO offer services for fighting fraud and economic crime, auditors are by law obligated to pursue and investigate fraud when they carry out their yearly audits of companies (IFAC & International Federation of Accountants, 2004). According to ACFE (2021b), external auditors are the most used anti-fraud control in western Europe. They can, therefore, be seen as the first line of defence against fraud in organizations. However, according to ISA 240 (2004), auditors are not supposed to be the first line of

defence against fraud. ISA 240 (2004) states that those charged with governance are primarily responsible for fraud detection and prevention.

ISA 240 provides auditors guidelines on their responsibility to consider fraud when auditing financial statements. Under IFAC (2004), auditors have several responsibilities. The list of responsibilities when it comes to fraud is long. Some of these are: audit of the financial statement, risk assessment procedures, make inquiries of the management, consider unusual or unexpected relationships, identify and assess the risks of material misstatements due to fraud, response to the risk of material misstatement due to fraud, and evaluation of audit evidence. As we can see, an auditor's job with fraud is comprehensive. ISA 240 are clear in what responsibilities lie on the auditors. However, according to Hodgkinson (2019), audits are not designed to detect fraud and must, therefore, be considered a weakness in the audit process when it comes to detecting and preventing fraud.

There have been several incidents where auditors have not been able to spot fraud due to a lack of routines when it comes to ISA 240. One example is when PWC and BDO were fined for serious violations of Hvitvaskingsloven when controlled by Finanstilsynet (Solgård & Helle, 2021). Unfortunately, this is only one of many examples where the auditor has not followed ISA 240 properly. For example, EY did not discover a 20 billion scam when not asking for bank statements when auditing Wirecard (Bugge, 2020), KPMG helped their customer Ballast Nedam, hide hundreds of millions of bribery money (Kagge, 2013), and EY got fined by Økokrim for not being able to spot accounting manipulations when auditing Sponsor Service (Henriksen, 2009).

We can see from the findings above that the management relies on external auditors to identify fraud within the organization. Additionally, external auditors are the final providers in security-control and integrity testing (Lewis, 2017). Lastly, it seems that auditors' routines while auditing regarding ISA 240 is not sufficient. Based on this, it is questionable why auditors miss out on identifying fraud while auditing when the cost of fraud is increasing.

1.1 Economic fraud in Norway today

Fraud is a topic that is getting very little coverage in Norway. A quick google search seems to reveal that there is almost no fraud happening in Norway, with maybe one fraud case coverage a week. According to SSB (2022), Norway has more than 629 000 businesses, where 32,7% of these businesses have employees. If we only consider those businesses with employees, we are left with about 205 000 businesses. PWCs (2020) global survey found that 47% of over 5000 respondents have experienced fraud in their company within the last two years. Considering PWCs survey and the 11 000 cases reported to Økokrim in 2019 mentioned earlier, we find it odd that there is not more coverage on fraud cases in Norway.

Økokrim does not release a lot of data on fraud in Norway. We contacted them for data, however, they did not have time to share data with us. Information published by the Norwegian government regarding fraud could be interesting to look at. However, the Norwegian government only releases press statements about fraud happening in other countries with money that Norway has given as aid (Utenriksdepartementet, 2021). It is problematic to research a field and gain knowledge when our government and Økokrim, the organization meant to fight fraud, are unwilling to release public knowledge about fraud in Norway.

We know that fraud is happening in Norway and is a problem here as in any other country. Maybe not to the same extent as in Indonesia and Venezuela (MarketWatch, 2015), but that does not mean we can overlook the fraud that is happening in Norway. Fraud is not only an economic problem, but it also impacts people, public bodies, and services among others (Cabinet Office, 2020b). Therefore, more publicity about fraud in Norway would most likely benefit everyone, as people would understand what is happening and how we can prevent people from committing fraud.

1.2 The purpose of this thesis

As the cost of fraud increases, it is important to look at how well the auditors can assist organizations in identifying these costs. Hodgkinson (2019) states that

audits have not been designed to detect and/or prevent fraud. He also states that audits have limitations in terms of only looking at financial statements and internal control. Audits often have standard procedures and are not modified based on the company or situation under audit. Consequently, the audit testing is predictable as fraudsters are often aware of what is controlled by the auditors (Hodgkinson, 2019).

This study aims to identify the issues relating to the increasing costs of fraud and the extent to which external auditors in Norway assist organizations in identifying these costs. As we have identified, external auditors are organizations most commonly used anti-fraud control (ACFE, 2021a). On the other hand, external auditors are not one of the main reasons fraud and economic crime are detected in organizations (ACFE, 2021a). Therefore, we want to investigate what auditors are doing today to help companies detect and prevent fraud.

1.3 Research question

The overall objective of this paper is to identify to what extent external auditors assist Norwegian organizations in identifying costs of fraud. To answer this, we have come up with the following main and sub-questions:

Main question:

- To what extent do large and small external audit firms assist Norwegian organizations which they audit, to identify and reduce the costs originated from fraud?

Sub-question:

- How is the cost of fraud and economic crime recognized when audits are conducted in Norwegian public and private firms and organizations?
- What measures are taken by the external auditors to assist management to discover and minimize fraud and economic crime early?
- To what extent do the external audit firms find fraud when auditing firms and organizations?

1.4 Structure of the thesis

The rest of the paper will be structured as follows: First, we will introduce the theoretical framework, a literature review of the most relevant theories and findings, terminology, and the hypothesis. Second, we will describe the methodology we will be using in this paper, which consists of interviews and questionnaires. Third, we analyse the data we have collected and provide the findings. Lastly, we conclude where we also recommend what further research should look at and the limitations of this paper.

2. Theoretical framework and literature review

A literature review is a way to academically demonstrate knowledge and understanding of the academic literature on a specific topic placed in context (Institute for Academic Development, 2021). According to the Institute for Academic Development (2021), the purpose of a literature review is to analyse and summarize previous theories and research, identify areas of contested claims and controversy, and highlight gaps that may exist.

In this literature review we will present different topics that help us get a deeper understanding of fraud. First, we will go into detail about what fraud is, describe what a normal fraudster looks like, and elaborate on why fraud is a problem. Second, we will look at ISA 240 and highlight the most important parts of this important standard. Third, looking at fraud from a psychology perspective is interesting to give us a perspective of why people commit fraud. Lastly, we will look at previous results within the field from other countries as there is little to no data here in Norway.

2.1 What is fraud, who commits fraud, and why is it a problem?

Fraud is a term used by many, and there are several different definitions of what fraud is. Samociuk & Iyer (2003, p. 4) define fraud as "*any deliberate unethical act in business".* Comer (1998, p. 9) defines it as "*Any behaviour by which one person gains or intends to gain a dishonest advantage over another*", and the Australian Government (2017, p. B1) defines it as "*dishonestly obtaining a*

benefit, or causing a loss, by deception or other means". We are writing this paper with ISA 240 as a framework, and we will therefore use the standards definition of fraud:

> "*...an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage"*. (IFAC & International Federation of Accountants, 2004, p. 271)

From the definition, we see that fraud is done by any individual in a firm, not just the management and that fraud is not just one specific action. ISA 240 differentiates between fraud done by management (management fraud) and fraud that involves employees (employee fraud). The standard does not elaborate much on the advantages fraudsters obtain by committing fraud. However, it describes why some people may commit fraud which could be to reduce pressure from sources inside or outside the entity or achieve earnings targets (IFAC & International Federation of Accountants, 2004). Additional factors can be living beyond means, financial difficulties, and family problems (ACFE, 2021b).

IAS 240 describes a person who commits fraud as an individual who "*...possess an attitude, character or set of ethical values that allow them knowingly and intentionally to commit a dishonest act"* (IFAC & International Federation of Accountants, 2004, p. 273). The description is vague and nearly impossible to spot in real-life interaction. KPMG (2016) states that a typical person that commits fraud is a person who is between 36 and 45 years old, acts against their own entity, and is often employed in executive, finance, or sales/market function. This person has a senior management position and has worked in the entity for more than six years. What is interesting and important is that the type of fraud committed and the types of fraudsters are changing continuously (KPMG, 2016). One such change is the increased usage of technology by those who commit fraud. The increased use of technology in our modern society invites new ways to commit fraud and makes discovering fraud even more challenging. Additionally, PWC (2014) states that a typical fraudster is a male between 31 and 40 years old and has worked in the company for 3-5 years. Additionally, PWC (2016) states that the typical fraudster is becoming older and more experienced. Looking at the report from PWC in 2014 and KPMG in 2016, we see that this is the case. Lastly,

ACFE (2021b) states that men have the overwhelming majority of the fraud cases with 73%.

According to ACFE (2021b), employees commit the most fraud in western Europe with 45% of the cases, managers with 33%, and owner/executives with 17%. What is interesting though, is the median loss for the three different groups. Employees account for a median loss of $100,000, managers for $150,000, and owner/executives for $1,350,000. Additionally, on a global level, 41% of the employees who commit fraud have been employed in the entity for six or more years, and in 70% of the fraud cases, there has been collusion (KPMG, 2013). The most common type of fraud is misappropriation of assets (56% on a global level and 82% in western Europe), corruption, financial statement fraud, and revenue/assets gained from illegal acts are other often used types (ACFE, 2021b; KPMG, 2013).

The question is, why should we care about the cost of fraud? We have chosen to split the reason why fraud is a problem into three levels, organization, country, and global. The reason fraud is a problem is built on the foundation that fraud, in common with some other criminal acts, is deliberate and involves deception, and it gives the victim a loss (Jones & Tickner, 2004).

On an organizational level, the loss of fraud is typically 5-7 percent of annual revenue (Samociuk & Iyer, 2010). However, historically we have also seen that companies have gone from being multi-million businesses to worth nothing as a consequence of fraud. Examples of companies that have filed for bankruptcy as a consequence of fraud are WorldCom in 2002 and Enron in 2008 (Olya, 2021).

Secondly, the question is, why should auditors care? Audit firms can suffer big reputational hits if it becomes public knowledge that one of their clients have financial reports that are misstated (Hribar et al., 2014). Enron and Arthur Anderson are good examples of where faulty accounting led to the downfall of the world's biggest audit company at the time. Using more time to detect fraud in the financial statements will help the audit firms to save high litigation costs from lawsuits (Hribar et al., 2014; Kassem & Higson, 2012). Therefore, audit firms have an incentive to put more effort into fraud investigation.

Fraud will also affect the commonwealth in all areas of business on a country level, including benefits, taxation, procurement, grants, and internal procedures (Australian Government, 2017). According to the Australian Government (2017), a conservative estimate of the cost of fraud for Australians is over A$1 billion annually. The cost of fraud reduces the amount of funds available for public goods and services. Further, it also undermines public confidence in the government and creates public health and safety risks (Australian Government, 2017).

Globally, according to ACFE (2021a), fraud has caused a total loss of more than $3.6 billion, and each case has an average loss of approximately $1.5 million. To relate, David Beasley, head of the U.N. food agency, stated that $6 billion would save 42 million lives from experiencing famine (Lu, 2021).

2.2 Regulation of fraud

When it comes to fraud, there are varying perceptions of what kind of assurance could be expected from auditors (Kassem & Higson, 2012). The difference in perception of the auditors' responsibilities is known as the audit expectation gap. This gap shows the difference in what is expected from the public or the financial statements users and what is actually received (Alleyne & Howard, 2005; Gay et al., 1998; Geiger, 1994; Humphrey et al., 1993; Koh & Woo, 1998; Monroe & Woodliff, 1993; Porter, 1993).

According to Kassem and Higson, "*financial statements users believe auditors are responsible for detecting and preventing fraud, however in fact the responsibility of fraud detection lies upon management and not external auditors*" (2012, p. 284). A proof of this belief is that 83% of the companies that have been victims of fraud used external audits of financial statements as their primary anti-fraud control. However, external audits stood for only 4% of the detected fraud (ACFE, 2021a). External auditors are responsible for planning and performing the audit and to obtain reasonable assurance that the financial statements are free of material misstatements (SAS No.1, 1997). As we observe from this, the auditors are not directly responsible for detecting all the fraud in an organization. However, they are responsible for detecting the material misstatements arising from fraud (Kassem & Higson, 2012).

According to Kassem and Higson (2012), the main reason for these differences in perception is that the role of audit throughout history has not been well defined. An attempt to narrow down the audit expectation gap is that "*audit standards setters issued a number of standards that directly address the boundaries of external auditors responsibility for fraud detection*" (Kassem & Higson, 2012, p. 284).

Regulation of fraud started in the early 19th century, when auditors had the responsibility to provide "*absolute assurance against fraud and intentional mismanagement*" (Kassem & Higson, 2012, p. 284). Throughout the last 100 years, there have been issued several standards on external auditors' responsibility for fraud. Among them, we find SAS No.53 (1988), SAS No.82 (1997), and SAS No.99 (2002) (Kassem & Higson, 2012). Each standard clarifies and corrects previous errors and gives the auditor a clearer role in which actions are needed under the audit of a firm. The most recent and up-to-date standard that has been issued is ISA 240 (2004), which we will use as a framework in this paper. The purpose of the standard is to "*provide guidance on the auditor's responsibility to consider fraud in an audit of financial statements…*" (IFAC & International Federation of Accountants, 2004, p. 1). There are certain elements from this standard that we believe is key to knowing when it comes to fraud. Table 1 below, which we created, presents the main elements of IAS 240 related to fraud.

Subject	Description
Fraud	Two types of fraud: misstatements from misappropriation of assets and misstatements from fraudulent reporting.
Professional Scepticism	Auditors must think that there is always a possibility of fraud even though the company has a good reputation for being nice.
Collect information	Auditors are required to perform procedures to assess the risk of fraud in the company, identify and assess any risk related to material misstatement due to fraud, and evaluate risks that may result in material misstatements.
Risk of material misstatement	If there is a risk of material misstatement due to fraud in the financial statements, the audit should determine an overall response to address these risks, and additionally, design and perform more audit procedures that respond well to the identified risk.
Occurrence of fraud	The auditor does not determine if fraud has occurred. However, they are responsible for correcting any identified fraud that relates to material misstatements in the financial statements.
Prevention and detection of fraud	Those charged with governance and the management are responsible for preventing and detecting fraud. Those charged with governance have the responsibility of establishing and maintaining the internal control.
Reasonable assurance	The auditor is required to obtain reasonable assurance so that the financial statements are free of any material misstatements. It is important to assess the reliability of the information given. If the auditor has any suspicion about the documents, e.g., not being authentic or have been modified, the auditor must investigate this further by, for example, confirming with a third party.

Table 1

We must distinguish fraud from error. Fraud is an intentional act, while error is an unintentional act (IFAC & International Federation of Accountants, 2004). An error can be an incorrect accounting estimate, a mistake when gathering or processing data, or applying the incorrect accounting principles related to classification, disclosure, measurement, recognition, or presentation (IFAC & International Federation of Accountants, 2004).

ACFE has identified three primary categories of fraud which are 1) asset misappropriations, 2) corruption schemes, and 3) financial statement fraud schemes (Zager et al., 2016). ISA 240 differentiates between two intentional misstatement types: "*misstatements resulting from fraudulent financial reporting and misstatements resulting from misappropriation of assets*" (IFAC & International Federation of Accountants, 2004, p. 271). Asset misappropriation is stealing or misuse of an entity's resources which often happens in small amounts, embezzling receipts, and making the entity pay for goods or services that have not been received (IFAC & International Federation of Accountants, 2004; Zager et al., 2016). Asset misappropriation is often accompanied by records and documents which are false or misleading (IFAC & International Federation of Accountants, 2004). Fraudulent financial reporting often involves override of some of the controls by the management. Techniques that may be used are recording fictitious journal entries, advancing or delaying recognition, not disclosing facts that would have impacted the amounts recorded, and altering records (IFAC & International Federation of Accountants, 2004). Earnings management is another example of fraudulent financial reporting where the goal is to deceive its users. However, this topic has mixed views; some believe it is allowed, and others see it as fraud (Kassem, 2012). Additionally, Kassem (2017) found that external auditors spend more time on financial report fraud than any other type of fraud.

2.3 Fraud psychology

Fraud, like any crime, can be explained by three factors: motivated offenders, suitable targets, and absence of capable guardians against a violation (Cohen & Felson, 1979; Duffield & Grabosky, 2001). Further, fraud involves an incentive to commit fraud, a perceived opportunity, and rationalization of the act (IFAC & International Federation of Accountants, 2004). The fraud triangle is a model used to explain why someone is willing to commit fraud. The triangle consists of three

components where all three must be present for fraud to occur (Cressey, 1953). The three elements are perceived opportunity, perceived pressure, and rationalization. For a person to undergo fraud, he/she must see an opportunity to gain something, there must be an incentive/pressure to do so, and the person must either be able to neutralize his/her moral values or possess an attitude, characters, or ethical values that allow this individual to commit a dishonest act (IFAC & International Federation of Accountants, 2004). Appendix 1 in ISA 240 shows a comprehensive list of examples regarding the fraud triangle's three elements related to fraudulent financial reporting and misappropriation of assets.

The fraud triangle is just one of many theories/models on why people commit crimes. Sutherland's (1947) theory of differential association explains the drivers of why a person commits crimes. The theory argues that criminal behaviour is learned via interaction, and most of this learning happens via close and personal groups. Further, the theory explains that an individual will engage in criminal activity if the perceived rewards for breaking the law exceed the reward for following the law (Sutherland, 1947). Sykes & Matza's (1957) neutralization theory suggests that people must find a way to neutralize their shame if they are to undergo a criminal act. An individual must be able to find excuses and justify his/her dishonest acts (Kvalnes, 2019). Albrecth et al., (1984) found ten personal characteristics that were common among fraudsters. Among them, we have: Living beyond one's means, an overwhelming desire for personal gain, high personal debt, excessive gambling habits, pressure from family and peers, lack of recognition for his/her job performance, and an urge to beat the system. Albrecth et al., (1984) study concluded that perceived opportunity, situational pressure, and the person's level of integrity are the main elements of fraud. Individuals who commit fraud are often affected by their personality, environment, and situational variables (Duffield & Grabosky, 2001). Every individual will react and behave differently in the same environment. Further, disliking and having little respect for your victim will make it easier to treat and act dishonestly towards them (Duffield & Grabosky, 2001).

To this day, behavioural scientists have not managed to create a set of characteristics that defines a fraud perpetrator (Ramamoorti, 2008). However, two characteristics that are often used in the literature to describe those who commit fraud are greed and dishonesty. Ramamoorti (2008) suggests solutions to reduce

the risk of fraud. Among these solutions, we find: having a sound tone at the top level, a culture with integrity and ethics, background checks on new employees, swift and decisive handling of incidents of fraud to set an example, and fraud awareness training.

2.4 Previous results

There is little research on external auditors and fraud in Norway. Therefore, we need to look globally and see if there are any important findings and results that can add further knowledge to our paper. From the literature, it is agreed that the more experience an auditor has, the more likely it is for this person to detect fraud (Moyes & Hasan, 1996; Owusu-Ansah et al., 2002). Additionally, the likelihood of detecting fraud increases when an audit firm employs more staff (Owusu-Ansah et al., 2002) and as the audit organization gains more experience with detecting fraud (Moyes & Hasan, 1996). Further, Mahami & Mouloudj (2020) study confirmed that external auditors specialized within an industry and with an ethical commitment are more likely to detect manipulation in financial statements.

Auditors in Barbados gave suggestions from their own experiences on why people commit fraud (Alleyne & Howard, 2005). Among them, we find the moral values of individuals, maintaining an increasing social status, unhappy with their job, increasing debt, and the thought of not being caught. On the other hand, auditors in Egypt suggested that bonuses, securing financing, concealing financial distress, and avoiding bankruptcy were the main reasons for committing fraud (Kassem, 2017). Additionally, Kassem (2017) found that fraud related to bonuses and remuneration that were linked to financial targets was most likely to happen in large and listed companies. Further, tax avoidance is more likely in family-owned and small businesses (Kassem, 2017).

Several ways and tools exist to make auditors and people pay attention to fraud. A common way to identify fraud is to look at red flags (Kassem, 2014; Smith et al., 2005). Kassem (2014) created a framework consisting of several red flags related to asset misappropriation and what appropriate audit procedures should be conducted. A red flag from her paper is if the cost of goods sold has increased

more relative to the sales. An appropriate procedure to perform would be to review the purchase levels and compare them with previous years and industry (Kassem, 2014). Smith et al., (2005) tested 25 different red flags based on their perceived importance by auditors. 7 of the 25 were deemed important. Among them, we find: that management fails to display a good attitude towards internal controls, high dependence on debt, pressure to obtain capital, positive earnings but negative operating cash flow, and the threat of bankruptcy. Gonzales & Hoffman (2018) suggest that implementing a strong internal control reduces the perceived opportunity of committing fraud and continuous auditing as a tool to reduce fraud. Dimitrijevic et al., (2020) say that in-depth tests and sampling tests of transactions are the most effective tests for detecting distortions in the financial statements.

An interesting topic is the difference between small and large audit firms. Large audit firms invest heavily in their employees through learning courses, auditing quality and technology, robots, and AI (Deloitte, 2017; EY, n.d.; PWC, 2019; Walters, 2019). One of the reasons for the heavy investment is to be an attractive and innovative firm and give proper guidance on how to find fraud so they can avoid reputational costs if one of their auditors has failed to discover fraud. Previous research has found that clients of the big six (now the big four) audit firms are less likely to commit fraudulent activities (Carcello & Nagy, 2004). Additionally, Carcello & Nagy (2004) found that firms who commit fraud are more likely to be audited by a non-big four auditor. The same authors concluded that the big four do an overall better job when it comes to fraud.

2.5 Hypothesis

Based on what we have found and written over, we have come to the five following hypotheses which we want to test in this research paper:

As we stated over, large audit firms invest heavily in their employees. Carcello & Nagy (2004) concluded that the big four auditing firms do an overall better job when it comes to fraud. Additionally, Owusu-Ansah et al. (2002) found that the more staff that is employed in the audit firm will increase the likelihood of detecting fraud. Based on these findings, we want to test if large auditing firms in

Norway find more fraud than small- and medium firms. Therefore, we have the following hypothesis.

> **H1:** *Auditors and associates in large companies find more fraud than auditors in small- and medium companies*

As discussed earlier, an auditor with more experience is more likely to detect fraud than an auditor with less experience (Moyes & Hasan, 1996; Owusu-Ansah et al., 2002). Additionally, Moyes & Hasan (1996) stated that audit firms with more working experience with fraud potentially detect more fraud. Based on these findings, we want to see if auditors in Norway with long experience (11+ years) detect more fraud than those with lesser experience. We believe that it is reasonable to assume that associates find less fraud than auditors as they normally have less experience. Therefore, we also want to test if auditors are more likely to find fraud than associates. Associates are those who do not fulfil the requirements in Revisorloven (Revisorloven, 2020) and usually have 0-3 years of experience within the field. Auditors fulfil all the requirements under the law. Therefore, we have the following hypotheses.

> **H2:** *Auditors and associates with longer experience (11 years and more) find more fraud than auditors and associates with less experience*

> **H3:** *Auditors find more fraud than associates*

In conversations with auditors and based on our own experience, auditors divide their clients into different risk profiles, which further determine what kind of audit they will proceed with. The different profiles are low-risk, medium-risk, and high-risk. We believe it is reasonable to assume that auditors with high-risk clients will find more fraud than those with low-risk clients. We want to test whether this is true and have the following hypothesis:

> **H4:** *Auditors and associates who audit clients with a higher risk profile is more likely to detect fraud than those with low-risk clients*

As discussed earlier, ISA 240 is Norway's primary standard surrounding fraud. We believe it is reasonable to assume that auditors who spend time on ISA 240 focus more on fraud during their audits. Further, more time spent on ISA 240 can potentially increase the possibility of detecting fraud when auditing. We believe this is an interesting assumption and want to test if more time spent on ISA 240 will affect the possibility of finding more fraud with the following hypothesis:

H5: *Auditors and associates who spend more time on ISA 240 find more fraud than those who do not*

3. Methodology

In this section, we are going to elaborate on our research methodology. Methodology can be defined as "*the theory of how research should be undertaken*" (Saunders et al., 2019, p. 4). In other words, we will elaborate on how we will answer our research question. To do this, we are going to propose a research design we believe is the most relevant for our research. Further, we will elaborate on how we can test and control our research for biases, validity, and reliability. Lastly, we describe how we will analyse our collected data and how we proceeded to collect our data.

3.1 Research design

Research design is a plan that sets forth how the research question will be answered (Saunders et al., 2019). Saunders et al., define research design as a "*Framework for the collection and analysis of data to answer research questions and meet research objectives providing reasoned justification for choice of data sources, collection methods and analysis techniques*" (2019, p. 815).

Our research question will be answered with a combination of quantitative and qualitative research. Quantitative research can be referred to as a set of assumptions, techniques, and strategies that are used to study economic, psychological, and social processes through the use of numeric patterns (Coghlan & Brydon-Miller, 2014). Qualitative research is a process that seeks to gain an in-

depth understanding of different social phenomena within their respective natural settings. Qualitative research uses experiences from human beings to understand why something happens in different social phenomena. (University of Utah College of Nursing, n.d.). The reason we want to answer our research question by using both qualitative and quantitative research is to be able to get the aspects from both interviews and questionnaires. The aspect we want to achieve is to use qualitative research to gain an understanding of underlying reasons and motivation while using quantitative research to quantify behaviour (DeFranzo, 2011).

Our study aims to investigate to what extent external audit firms assist Norwegian organizations which they audit, to identify and reduce the costs originated from fraud. When answering this research question, we will focus on large and small audit firms and the organizations they audit.

We found that there is a knowledge gap in Norwegian literature, as there is no research on our subject in Norway. To try to fill this gap, we will use research interviews and questionnaires to answer our research question. The most used methods in previous research are questionnaires (the most dominant research type in this field of research) and face-to-face interviews (Alleyne & Howard, 2005; Kassem, 2017; Mahami & Mouloudj, 2020; Owusu-Ansah et al., 2002; Smith et al., 2005). The advantage of questionnaires is that we can collect and standardize quantitative data. It is also inexpensive and takes little time to complete (Roopa & Menta Satya, 2012)**.** The advantages of face-to-face interviews are that it allows us to collect more in-depth data, gives us a comprehensive understanding of a social phenomenon, and we can ask follow up questions to the participants (Marshall, 2016).

3.1.1 Research interviews

A research interview is defined as "*a purposeful conversation between two or more people, during which the interviewer asks concise and unambiguous questions and listens attentively to the interviewee talking*" (Saunders et al., 2019, p. 434). There are several types of research interviews, but we have chosen to use semi-structured interviews. Semi-structured interviews consist of a sequence of

open-ended questions that allow the interviewee and interviewer to discuss several topics in more detail (Mathers et al., 1998).

We have chosen to conduct semi-structured interviews because this type of interview is useful when we are doing explanatory research and because there is limited information about fraud in Norway (Mathers et al., 1998). Further, we also want to have the freedom to elaborate on the original response or follow a line of inquiry introduced by the interviewee.

3.1.2 Questionnaires

In addition to our interviews, we will use two different questionnaires. A questionnaire is defined as "*a list of mimeographed or printed questions that is completed by or for a respondent to give his opinion*" (Roopa & Menta Satya, 2012, p. 273). Further, according to Roopa and Menta Satya (2012), a questionnaire is the main tool used to collect quantitative primary data. As with interviews, there are several types of questionnaires. We have chosen to use a combination of open and closed questions. Open questions allow the respondent to reply in their own words without any constraints by fixed answers (Roopa & Menta Satya, 2012). In contrast, closed questions are quicker and easier to both answer and compare, as the answers are predetermined (Saunders et al., 2019). We have chosen to use a combination of open and closed questions because of the extra data we can get from the open questions and being able to compare the key questions by using closed questions.

One of the questionnaires will be addressed to public and private auditors, while the second questionnaire will be addressed to public and private organizations. With this, we want to capture the auditors' and the organization's perspectives on our research question.

3.1.3 How to test for validity and reliability

We need to consider several criteria when assessing the quality of the research design. These include transferability, credibility, validity, and reliability (Saunders

et al., 2019). Two central criteria which are important to consider in qualitative research are reliability and validity.

In this paper, we will use the validity and reliability definitions by Saunders et al., and validity is defined as the "*Extent to which data collection method or methods accurately measure what they were intended to measure*" (2019, p. 820)**.** While reliability is the "*Extent to which data collection technique or techniques will yield consistent findings, similar observations would be or conclusions reached by other researchers or there is transparency in how sense was made from the raw data"* (2019, p. 815). Using these definitions, validity and reliability can be observed as dependent on each other when considering how well a method measures something that is investigated (Middleton, Fiona, 2019b, 2019a).

According to Chung (2019), when collecting data using a survey, unreliable survey feedback is mainly caused by biased survey questions. Last (2001) defines bias as a "*deviation of results or inferences from the truth, or processes leading to such a deviation.*" Survey questions are biased when the questions lead the responders toward a certain answer. Examples of biased questions are leading and assumptive questions (Chung, 2019). Other ways that can bias our research is how we design, administer and complete our questionnaire as a whole (Choi & Pak, 2004). When creating our questionnaire, we have to consider how these biases will affect the reliability of our research.

Interviewer bias is defined as "*a distortion of response related to the person questioning informants in research. The interviewer's expectations or opinions may interfere with their objectivity or interviewees may react differently to their personality or social background. Both mistrust and over-rapport can affect outcomes*" (Oxford Reference Database, n.d.). We can split the biases that affect interviews to collect data into two groups. First are actions and behaviour made by the interviewer, which could be using certain language, phrases, or leading questions. Second, a prejudiced perspective on data from interviews could be dismissing a person or data from interviews (Interviewerr, 2019). As we can see, it is crucial for good research to control biases so they do not affect the validity and reliability of the research.

3.2 Methods for analysing the collected data

Earlier, we mentioned that we are using questionnaires and semi-structured interviews to collect data. When we have collected the data, it is important to have suitable methods to analyse it to interpret, describe and conclude. Both questionnaires and semi-structured interviews need different analysis tools to be able to get an understanding of the data. Therefore, we have chosen to use ordered logistic regression analysis for analysing the data we get from the questionnaires and use template analysis to analyse data from the interviews.

3.2.1 Ordered logistic regression

Regression analysis is a tool we can use to mathematically sort out the variables that have an impact on our analysis (Gallo, 2015). According to Yan & Su (2009), there are three types of regression: simple linear regression, multiple linear regression, and nonlinear regression. In this thesis, we will use ordered logistic regression. Ordered logistic regression (OLR) is a nonlinear model that can be used when our dependent variable consists of two or more nominal values with a sequential order (Issa & Kogan, 2014). OLR is an extension of logistic regression (Nwakuya & Maduka, 2019; Parry, 2016). OLR helps us model the relationship between one ordinal response variable and several categorical, interval, or other variables (Adejumo & A., 2013; Parry, 2016). An ordinal variable is a variable that has a clear and natural ordering of its categories (Fagerland & Hosmer, 2017; Parry, 2016). For example: “Low income”, “Normal income”, and “High income”. In this paper, we will use the question “How often do you identify fraud when you audit companies” from our questionnaire and use the answers “Never”, “Rarely”, “Sometimes”, “Medium”, and “Often” as the ordinal variable.

When using ordered logistic regression, we can use the Stata command “ologit (your model), or” to get the odds ratios (OR). ORs can provide a more straightforward interpretation than using the model parameters (Adejumo & A., 2013). By using ORs, we can compare the odds of one group to the odds of the reference group (Abreu et al., 2008). For example, if our dependent variable is “How likely is it that high school graduates apply for university,” coded as “Not likely = 0”, “Maybe = 1”, and “Very likely = 3”. We include one independent

variable, “Parents”, which refers to whether one of the parents either has a degree from a university (= 1) or they do not (= 0). If the OR for “Parents” is equal to two, then it is two times more likely that a student with a parent who has a degree from a university will apply for college than a student who does not have parents who have a degree from a university. In our analysis, we will use ORs to interpret the output from Stata.

3.2.2 Template analysis

Template analysis is a form of thematic analysis that has a high degree of structure but also offers a high degree of flexibility (King, 2012). Template analysis focuses on creating a hierarchical coding structure where the codes represent themes that are identified in the data that is being analysed (Brooks et al., 2015; Brooks & King, 2012). The template shows the relationships between themes that the researchers have defined. The themes are in a hierarchical order where the main themes are used as a heading. Under these main themes are subthemes, which can have subthemes and so on. Depending on how rich the data is, you can have several sub-themes under one main theme (Brooks et al., 2015). The advantage of using template analysis to analyse data from interviews is that the method offers flexibility to change the main themes as more and more data has been analysed (King, 2012). Further, the method offers a high degree of structure which is advantageous for any type of research design.

Template analysis is a method that consists of a few steps that need to be followed (Waring & Wainwright, 2008). Depending on how familiar you are with the topic, you may want to create a few a priori themes (Brooks & King, 2012). These themes are tentative and can be used as a start for your template. However, you should not create too many a priori themes in the beginning because we want to avoid defining the template at an early stage, and we may miss out on some themes (Brooks & King, 2012). At the beginning of your research, you can take three different positions for starting out. You can start with predefined codes, develop codes after exploring the data, or have some initial codes and refine these after you have explored the data (Waring & Wainwright, 2008). Four simple steps can be taken to develop a template analysis: 1) Create a code manual based on a priori themes or data collected, 2) Computer coding of the text, 3) Sort the data

into different segments, and 4) Establish connections between the segments (Waring & Wainwright, 2008).

3.3 Data collection process

3.3.1 Questionnaire

To collect data for our questionnaire aimed at auditors, we first needed to gather emails from the auditors. To achieve this, we needed to find and locate different auditing firms in Norway at the time. We used Finanstilsynets website and their registry to identify auditing firms. We searched in the registry for “Revisjon”, and got 343 different hits on this particular word. These 343 hits consisted of firms varying in size but all being registered auditing firms in Norway. Next, we searched on google for each firm registered at Finanstilsynet. We made an excel sheet where we wrote up the firm and their website address so we could easily look this firm up when we planned on sending the firm or the employees an email with the questionnaire. By the end of this part of the process, we had located 245 different firms and websites.

The next step was to send out the questionnaire. We decided to use Word's “Mail Merge” function as this function allows us to distribute the same email to hundreds of people simultaneously. However, all the recipients will get an individual/personalized email based on our settings. Using the excel sheet with all the different firm’s email addresses, we started to locate the personal email addresses of the different firm’s employees. If personal email addresses were not on the website, we sent an email to the “Postboks”. Of course, this is not ideal, but it was the best we could achieve in the time frame we had. Then, using the “Mail Merge” function in Word, we started to add all the email addresses to a list in Word. By the end of this part of the process, we had sent out a total of 1114 emails to both individuals working in a private auditing company and individuals working in public auditing firms.

When collecting data for our questionnaire aimed at organizations, we needed to gather emails and names of employees in different organizations. To achieve this, we needed to find and locate different organizations in Norway at the time. We

used Google's search engine and people we know on LinkedIn to identify organizations. We first looked on LinkedIn to see where our connections were working. Further, we used the Google search engine to search for the organization's websites. We were looking for names and emails to relevant people such as CFOs, accountants, and business controllers on their websites.

The next step was to distribute our questionnaire. We sent independent emails with our questionnaire to those people who had a public email address. The people who did not have a public email address were contacted through personal messages on LinkedIn. In total, we sent out 20 individual messages on LinkedIn and 26 individual emails. We ended up with 24 answers out of the 46 questionnaires that were sent out.

3.3.2 Interviews

As we sent out our questionnaire to both auditors and organizations, we conducted interviews with auditors, NKRF, a fraud expert, an employee in Revisorforeningen, and an employee at Riksrevisjonen. Most of these interviews were referrals from our external supervisor. We arranged the meetings ourselves, and all but one interview was done over Zoom and Teams. We had seven interviews with people that had different experiences with auditing. We mostly asked pre-written questions and occasionally asked follow-up questions that were not pre-written. Since those we interviewed had different backgrounds and experiences in auditing, we had to adjust our questions accordingly to the interviewee to get the best data out of the subject.

4. Findings and analysis

We will in this section present the analysis and the findings from our research. First, we will describe the data we collected from the questionnaire we sent out to auditors and associates. Here we use ordered logistic regression to analyse the data we collected. Second, we present descriptive statistics from the questionnaire for organizations and comment on these. Lastly, we use template analysis to analyse the main points which were mentioned in the interviews.

4.1 Questionnaires to auditors and associates

Before we started analysing the data we collected through our questionnaires, we needed to modify some of the answers we received. The first question we asked was what position they had in their audit firm. Some of those who answered misunderstood the question and answered senior associate, senior auditor, and partner, among others. We had to modify these answers to associate and auditor to be comparable with the rest of our sample. Further, we had to remove some of the respondents we received through our questionnaire. Respondents that were only auditing government and municipalities had to be removed, as they followed another standard, making our questionnaire and their responses irrelevant. Additionally, we only got 14 responses from this group and decided not to include this group in this part of the analysis.

There was also a misunderstanding on answering question 11 in our questionnaire. This question asked if the respondents could first click on which risk profile their clients have (low-, medium-, and high risk) and then estimate how many percent of the clients they audited were in each risk profile. For example, if they audited low- and medium-risk clients, they clicked off on the low- and medium-risk boxes and wrote 60% in the low-risk box and 40% in the medium-risk box. However, this was easier said than done. After removing the 14 respondents we stated over, we were left with 204 responses. Only 101 respondents did manage to add up to a score of 100. Therefore, we will use two different models when testing hypothesis 5. When testing the other hypotheses, we will use our large sample, which remains of 204 responses.

As we mentioned above, several of the respondents did not manage to sum up 100%. However, they did cross off what type of risk profile their clients were associated with. Therefore, we made three dummy variables that say, "If they have crossed off for auditing low-, medium- and high risk", then all three dummy variables have the value one. On the other hand, if they have only crossed off that they audit low-risk clients, then only the dummy variable "*LowRisk*" has the value of one while "*MediumRisk*" and "*HighRisk*" have the value of zero. We intended to use the original data we had collected but as a consequence of the missing responses adding the dummy variables was the best we could do with the data we had gathered.

The second model will not include the three dummy variables mentioned above. We will instead include three other variables "*LowRisk2*", "*MediumRisk2*", and "*HighRisk2*". These three variables sum up to 100, so we will not include "*LowRisk2*". Initially, this is how we intended our model to look like, and we could test whether an increase in the percentage of "*HighRisk*" (E.g., from 50% to 51%) would increase the likelihood of finding fraud. The dataset we will use to test this model only includes 101 respondents. It does not include all the respondents, but we believe it is still possible to draw conclusions from this model. We will compare the model with the full data set with the one that only includes 101 respondents. We can compare the outcome of the model with the three dummy variables mentioned above and the model that include "*LowRisk2*", and "*HighRisk2*" to see if the results are similar or different.

4.1.1 General description of the respondents

As we stated above, we wanted to gather data from auditors and associates to be able to test our hypothesis. As we can see in table 2 and as discussed earlier, after we removed some of the respondents, we ended up with 204 respondents in total. Where 68 respondents work as associates and 136 respondents as auditors. The respondents vary in age from 18 to 70, but most are above 30. As shown in the table below, 138 out of 204 respondents have 11 or more years of experience in their profession. Further, most of our respondents (152 out of 204) work in small audit companies.

Position	Freq.
Associate	68
Auditor	136

Experience	Freq.
(Years) 0-2	19
3-5	25
6-10	22
11+	138

Age	Freq.
(Years) 18-30	27
31-40	52
41-50	55
51-60	48
61-70	22

Organization Size	Freq.
Small (1-20 Employees)	152
Medium (21-100 Employees)	33
Large (100+ Employees)	19

Table 2

4.1.2 Auditors and associates ability to detect fraud

Earlier, we mentioned that 83% of the companies that have been victims of fraud used external audits of financial statements as their primary anti-fraud control and that external audits stood for only 4% of the detected fraud (ACFE, 2021a). As we can read from table 3, 85% of our respondents replied that they rarely/never identify fraud during the audit. We also see that none of our respondents replied that they often find fraud. From these findings, we can state that our respondents rarely find fraud, which aligns with ACFE (2021a).

Fraud	Freq.
Never	30
Rarely	144
Sometimes	28
Medium	2
Often	0

Table 3

4.1.3 Model

The model we are testing can be seen in table 5 under. In this table, we use the command "*ologit*", which is the Stata command for an ordered logistic regression. Earlier, we mentioned that we would use the "*Fraud*" variable as our ordinal variable (dependent variable in the model). To achieve a numerical result, we transformed the questions' responses into numerical values. "*Never*" has the value of "0", and "*Often*" has the value of "4". Therefore, our "*Fraud*" variable goes from zero to four. The same process has been done on the other variables as well, and an explanation of these can be seen in table 4 under. From table 4, we can see that we have added an "i" in front of some of the variables. Adding an "i" in front of a variable makes this variable a dummy variable, which can only take the values of "0" or "1". In our questionnaire, most questions we ask have a natural ordinal order. For example, when we asked how many years of experience the respondent had in their position, the answers that could be chosen were "*0-2 Years*", "*3-5 Years*", "*6-10 Years*", and "*11 or more Years*". Transforming these answers into numerical values, e.g., "*6-10 Years*" =2 and "*6-10 Years*" =3, and then multiplying these answers with the constant related to that variable would have reduced the quality of the data and the distance between each category would

have been assumed to be equal (Grace-Martin, 2016). Therefore, to keep the data quality, we have instead transformed all the answers to each variable as a dummy variable. To analyse the data in Stata, we transformed each answer into numerical values so we could create dummy variables out of the different answers.

Variable	**Explanation**
Fraud	"*Fraud*" refers to how often fraud has been detected during an audit throughout the respondents career. Never = 0, Rarely = 1, Sometimes = 2, Medium = 3, and Often = 4.
Position	"*Position*" refers to the respondent's position in their audit firm. Associate = 0 and Auditor = 1.
i.Experience	"*Experience*" refers to how many years of experience the respondent has in their position. 0-2 Years = 0, 3-5 Years = 1, 6-10 Years = 2, and 11 or more Years = 3
i.OrgSize	"*OrgSize*" refers to the size of the organization the auditor/associate works for. Small = 0, Medium = 1 and Large = 2.
i.TimeusedonISA240	"*TimeusedonISA240*" refers to the portion of the total time spent during audit spent on ISA 240. 0-5% = 0, 6-10% = 1, 11-15% = 2, 16-20% = 3, 21-25% = 4, 26-30% = 5 and 30%+ = 6.
i.AurditorresposibilityFraud	"*AuditorresposibilityFraud*" refers to if the auditor/associate feels it is their responsibility to identify fraud during the audit. Don't know=0, Yes = 1, and No = 2.
LowRisk	"*LowRisk*" refers to if the auditor audits clients who have a low-risk of committing fraud.

MediumRisk	"*MediumRisk*" refers to if the auditor audits clients who have a medium-risk of committing fraud.
HighRisk	"*HighRisk*" refers to if the auditor audits clients who have a high-risk of committing fraud.
LowRisk2	"*LowRisk2*" refers to the portion of low-risk clients in the total client portfolio.
MediumRisk2	"*MediumRisk2*" refers to the portion of medium-risk clients in the total client portfolio.
HighRisk2	"*HighRisk2*" refers to the portion of high-risk clients in the total client portfolio.

Table 4

The model we will be using to test our hypothesis consists of one dependent variable ("*Fraud*") and eight independent variables ("*Position*", "*Experience*", "*OrgSize*", "*TimeusedonISA240*", "*AuditorresponsibilityFraud*", "*LowRisk*", "*MediumRisk*", and "*HighRisk*"). In our model, the reference group is a person who is an associate, has 0-2 years of experience, works in a small organization, spends 0-5% of their time under audit on ISA 240, does not audit low-, medium- and high-risk clients and does not know if they are responsible for identifying fraud.

From table 5, we can see that we have a chi-square of 76.63 with a p-value of 0.000. This tells us that our whole model is statistically significant when we compare it with a null model with no predictors. Furthermore, we can also see that we have a goodness of fit of 22.21% (Pseudo R2 = 0.2221). However, this goodness of fit is not reliable unless you compare this result with other models that predict the same outcome with the same dataset. Therefore, we cannot compare the Pseudo R2 with the R2 we get from the OLS model (UCLA: Statistical Consulting Group, n.d.). Further, we can also see that some of our variables are statistically significant at the 5% and 10% levels.

```
. ologit Fraud Position i.Experience i.OrgSize i.TimeusedonISA240 i.AuditorresponsibilityFraud
>  Lowrisk MediumRisk Highrisk

Iteration 0:   log likelihood = -172.51942
Iteration 1:   log likelihood =  -139.2337
Iteration 2:   log likelihood = -134.32608
Iteration 3:   log likelihood = -134.20722
Iteration 4:   log likelihood = -134.20686
Iteration 5:   log likelihood = -134.20686

Ordered logistic regression                     Number of obs     =        204
                                                LR chi2(17)       =      76.63
                                                Prob > chi2       =     0.0000
Log likelihood = -134.20686                     Pseudo R2         =     0.2221
```

Fraud	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Position	-.1214108	.4206793	-0.29	0.773	-.945927	.7031055
Experience						
3-5	.4915815	.7059301	0.70	0.486	-.892016	1.875179
6-10	-.5442061	.7412287	-0.73	0.463	-1.996988	.9085754
11+	1.945643	.6627549	2.94	0.003	.6466677	3.244619
OrgSize						
Medium (21-100 Employees)	-.1830647	.4533614	-0.40	0.686	-1.071637	.7055072
Large (100+ Employees)	-.5837716	.6503474	-0.90	0.369	-1.858429	.6908859
TimeusedonISA240						
6-10%	-.8363369	.5064028	-1.65	0.099	-1.828868	.1561945
11-15%	-.3203445	.524644	-0.61	0.541	-1.348628	.7079389
16-20%	1.75297	.5915365	2.96	0.003	.5935795	2.91236
21-25%	.4454378	.7825767	0.57	0.569	-1.088384	1.97926
26-30%	.2542303	1.366716	0.19	0.852	-2.424483	2.932944
30%+	1.211542	.7016729	1.73	0.084	-.1637121	2.586795
AuditorresponsibilityFraud						
Yes	-.9620077	.8532799	-1.13	0.260	-2.634405	.7103901
No	-1.297429	.9501872	-1.37	0.172	-3.159762	.5649037
Lowrisk	-1.566303	.7758401	-2.02	0.044	-3.086921	-.0456842
MediumRisk	.6289801	.5498082	1.14	0.253	-.4486241	1.706584
Highrisk	.867831	.5597448	1.55	0.121	-.2292487	1.964911
/cut1	-3.07612	1.354116			-5.730139	-.4221019
/cut2	1.904114	1.320644			-.6842997	4.492529
/cut3	5.082936	1.482707			2.176883	7.988989

Table 5

```
. ologit Fraud Position i.Experience i.OrgSize i.TimeusedonISA240 i.AuditorresponsibilityFraud
>  Lowrisk MediumRisk Highrisk, or

Iteration 0:   log likelihood = -172.51942
Iteration 1:   log likelihood =  -139.2337
Iteration 2:   log likelihood = -134.32608
Iteration 3:   log likelihood = -134.20722
Iteration 4:   log likelihood = -134.20686
Iteration 5:   log likelihood = -134.20686

Ordered logistic regression                     Number of obs     =        204
                                                LR chi2(17)       =      76.63
                                                Prob > chi2       =     0.0000
Log likelihood = -134.20686                     Pseudo R2         =     0.2221
```

Fraud	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Position	.8856701	.3725831	-0.29	0.773	.3883194	2.020016
Experience						
3-5	1.6349	1.154125	0.70	0.486	.4098287	6.521987
6-10	.5803023	.4301367	-0.73	0.463	.1357436	2.480786
11+	6.998133	4.638047	2.94	0.003	1.909168	25.65194
OrgSize						
Medium (21-100 Employees)	.8327143	.3775205	-0.40	0.686	.3424476	2.024874
Large (100+ Employees)	.5577906	.3627577	-0.90	0.369	.1559174	1.995483
TimeusedonISA240						
6-10%	.4332948	.2194217	-1.65	0.099	.1605952	1.169054
11-15%	.7258989	.3808385	-0.61	0.541	.2595962	2.029803
16-20%	5.771718	3.414182	2.96	0.003	1.810457	18.40017
21-25%	1.561174	1.221738	0.57	0.569	.3367601	7.237386
26-30%	1.289469	1.762337	0.19	0.852	.0885238	18.78284
30%+	3.358658	2.356679	1.73	0.084	.8489864	13.28712
AuditorresponsibilityFraud						
Yes	.3821249	.3260595	-1.13	0.260	.0717616	2.034785
No	.2732334	.2596229	-1.37	0.172	.0424359	1.759278
Lowrisk	.2088158	.1620077	-2.02	0.044	.0456423	.9553436
MediumRisk	1.875697	1.031273	1.14	0.253	.6385061	5.510108
Highrisk	2.381739	1.333166	1.55	0.121	.7951308	7.134275
/cut1	-3.07612	1.354116			-5.730139	-.4221019
/cut2	1.904114	1.320644			-.6842997	4.492529
/cut3	5.082936	1.482707			2.176883	7.988989

Table 6

4.1.4 Hypotheses

In this section, we will go through our hypotheses and discuss the findings we retrieve from the output in our model.

4.1.4.1 *Hypothesis 1: Auditors and associates in big companies find more fraud than auditors in smaller audit companies*

From the output in table 5, we can see that working for a medium or a large organization does not affect how much fraud an auditor detects. The p-value for "*Large*" (100+ employees) is 0.369 and is not significant. This is also the case for

"*Medium*" (21-100 employees) with a p-value of 0.683. Therefore, we can not conclude that organization size does affect the auditor's/associate's possibility of detecting fraud. We reject the alternative hypothesis and can not conclude that there is an association between organization size and the auditor's/associate's ability to find fraud.

4.1.4.2 *Hypothesis 2: Auditors and associates with longer experience (11 years and more) find more fraud than auditors and associates with less experience*

From the output in table 5, we can see that people with "*11 years and more*" experience affect the ability to detect fraud. Furthermore, we can see that the p-value is 0.003 and is statistically significant at the 1% level. Therefore, we reject the null hypothesis and conclude that there is an association between years of experience and the auditor's/associate's ability to identify fraud. Further, looking at the odds ratios from table 6, we see that this number is equal to 6.999. This number tells us that someone with 11 or more years of experience is almost seven times more likely to find fraud than someone with "*0-2 years*" of experience. In general, it would be understandable to assume that a person with more experience in the field is also more likely to find fraud. This is consistent with what we believed before we got the output from the model, and the result does not surprise us.

4.1.4.3 *Hypothesis 3: Auditors find more fraud than associates*

From the output in table 5, we see that being an "*Auditor*" does not affect the ability to detect fraud. The p-value for an auditor is 0.773 and is not significant. Therefore, we can not conclude that the position affects the ability to detect fraud. Therefore, we reject the alternative hypothesis and can not conclude that there is an association between position and the ability to detect fraud. An auditor is usually a person that has more experience within the field than an associate. Therefore, it is surprising that we do not have a significant result that says auditors find more fraud than associates.

Further, a new auditor law was implemented on 01.01.2021, and additional requirements were added to become an auditor. The new law states that an auditor must have finished a master's degree in auditing and accounting

(Revisorforeningen, 2021). This was not the case in the older version of the law, where you only needed a bachelor's degree. Therefore, we believe that in the future, auditors will be able to identify more fraud than associates, as auditors then have longer education than associates, where we believe they have the possibility to teach more about fraud compared to what associates teach in their education.

4.1.4.4 *Hypothesis 4: Auditors and associates that spend time on ISA240 find more fraud than others*

From the output in table 5, we can see that spending time on ISA 240 affects the ability to defect fraud. First, we can see that the p-value is 0.099 and statistically significant at the 10% level for auditors spending "*6-10%"* of their total time spent on the audit on ISA 240. Second, the p-value for auditors spending "*16-20%*" of their total time on ISA 240 is 0.003 and statistically significant at the 1% level. Lastly, people spending "*30%+*" of their time on ISA 240 has a p-value of 0.084 and is statistically significant at the 10% level. The first thing to notice is there is a negative sign in front of the coefficient for those who spend "*6-10%*" on ISA 240. A person who spends between "*6-10%"* on ISA 240 finds less fraud than someone who only spends "*0-5%*" of their time on ISA 240. Looking at the odds ratios in table 6, these persons find, on average, 20% less fraud than the reference group.

Based on these results, we can not conclude that people who spend more of their total time on ISA 240 are able to identify more fraud than those who do not. We, therefore, reject the alternative hypothesis and conclude that more time spent on ISA 240 does not affect the auditor's ability to detect fraud. This is not consistent with what we believed before we got the output from the model, as it is reasonable to believe that auditors that spend more time on ISA 240 also are more aware of the risks of fraud. If we look at people that spend "*16-20%*" of their total time on ISA 240, this variable has a p-value of 0.003 and is statistically significant at the 1% level. Further, people that spend "*30%+*" of their time on ISA 240 have a p-value of 0.084 and are statistically significant at the 10% level. Therefore, we conclude that people spending "*16-20%*" and "*30%+*" of their total time on ISA 240 find more fraud than those who only spend "*0-5%*" of their time on ISA 240. However, we can not generalize this result for every group.

Further, we can see some inconsistencies in our findings. As mentioned above, a person spending "*6-10%*" of their total time on ISA 240 finds less fraud than someone spending "*0-5%*" of their total time. Additionally, an auditor who spends "*16-20%*" of their total time on ISA 240 is 5.77 times more likely to find fraud than those who spend "*0-5%*" of their total time on ISA 240. An auditor who spends "*30%+*" of their total time on ISA 240 is 3.35 times more likely to find fraud than the same group. If we compare the odds ratios for the group that uses "*16-20%*" of their total time and the other group that spends "*30%+*" of their total time on ISA 240, we get two very different results. Normally, you would believe that the more time you spend on ISA 240, the more likely you are to find fraud. However, this is not the case according to our data. Based on the output from the model, there may be a possibility that you do not need to spend a lot of your time on ISA 240. We could speculate that using between "*16-20%*" of your time is a sweet spot that lets the auditor focus on the task ahead of them while using some of their time on ISA 240.

4.1.4.5 *Hypothesis 5: Auditors and associates who audit clients with a higher risk profile is more likely to find fraud than those with low-risk clients*

As discussed earlier, we will use two different models to answer the hypothesis. The first model we test includes the whole dataset with three dummy variables we have created. The second model uses a reduced data set with 101 observations where we include two variables, "*MediumRisk2*" and "*HighRisk2*", that replace "*LowRisk*", "*MediumRisk*", and "*HighRisk*". The reference group in this model is an associate with 0-2 years of experience, works in a small organization, spends "*0-5%*" of their time under audit on ISA 240, does not know if they are responsible for identifying fraud, and only audits low-risk clients (See Appendix 2 for descriptive statistics).

From the output in table 5, we can see that "*LowRisk*" is statistically significant. The p-value for "*LowRisk*" is 0.044 and is statistically significant at the 5% level. However, the sign before the coefficient is negative, which means that those who audit clients with low risk find fewer cases of fraud. If we look at the odds ratio in table 6, those who audit low-risk clients find 80% less fraud than those who do not audit low-risk clients. "*HighRisk*" has a p-value of 0.121 and is not statistically significant at the 10% level. As a consequence of these results, we can

not conclude that auditors with high-risk clients identify more fraud than auditors with "*LowRisk*" clients, and we reject the alternative hypothesis. However, we can conclude that auditors who audit low- risk clients find less fraud than those who do not audit low-risk clients.

Table 7 and 8 show the model with the reduced observations. In this model, we see that "*HighRisk2*" has a p-value of 0.054 and is statistically significant at the 10% level. Looking at the odds ratios in table 8, "*HighRisk2*" has an odds ratio of 1.041, meaning that those whom only audit high-risk clients find 4% more fraud than those who only audit low-risk clients. The more high-risk clients you audit, the more likely you are to find fraud based on these results. Using the model with the reduced observations, we can conclude that we reject the null hypothesis and can say that auditors who audit clients with a higher risk profile are more likely to find fraud than those with low-risk clients.

Interestingly, we get two different results using the two models. In the first model, we created the three dummy variables, but in the second model, we used the variables as they were meant to be used, as "*HighRisk2*" is the proportion of high-risk clients of the total portfolio of clients. The three dummy variables we created may not properly reflect and capture the different risk profiles of each respondent. Since if one respondent had answered that they audit 99% low-risk clients and 1% high-risk clients, they would be categorized together with the same respondent who audits 50% low-risk clients and 50% high risk-clients. Based on these results, we feel that the reduced model is more reliable for this hypothesis as it captures more details about the risk profile. Therefore, we reject the null hypothesis and conclude that auditors who audit clients with a higher risk profile are more likely to find fraud than those with low-risk clients.

```
. ologit Fraud Position i.Experience i.OrgSize i.TimeusedonISA240 i.AuditorresponsibilityFraud
>  MediumRisk2 HighRisk2

Iteration 0:   log likelihood = -85.540429
Iteration 1:   log likelihood = -70.153204
Iteration 2:   log likelihood =  -66.96395
Iteration 3:   log likelihood = -66.767286
Iteration 4:   log likelihood = -66.766725
Iteration 5:   log likelihood = -66.766725

Ordered logistic regression                     Number of obs     =        101
                                                LR chi2(16)       =      37.55
                                                Prob > chi2       =     0.0018
Log likelihood = -66.766725                     Pseudo R2         =     0.2195
```

Fraud	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Position	.1877753	.6948157	0.27	0.787	-1.174038	1.549589
Experience						
3-5	3.173393	1.598658	1.99	0.047	.0400821	6.306705
6-10	.2954864	1.538363	0.19	0.848	-2.719649	3.310622
11+	3.408149	1.416197	2.41	0.016	.6324545	6.183843
OrgSize						
Medium (21-100 Employees)	.7931922	.6641902	1.19	0.232	-.5085967	2.094981
Large (100+ Employees)	1.119858	1.459172	0.77	0.443	-1.740066	3.979781
TimeusedonISA240						
6-10%	-1.454693	.7437855	-1.96	0.050	-2.912486	.0030998
11-15%	-1.347722	.7785899	-1.73	0.083	-2.87373	.178286
16-20%	.8914493	.7542488	1.18	0.237	-.5868511	2.36975
21-25%	-.7448755	1.133915	-0.66	0.511	-2.967308	1.477557
26-30%	1.730017	2.886686	0.60	0.549	-3.927784	7.387818
30%+	1.184874	.9333759	1.27	0.204	-.6445087	3.014258
AuditorresponsibilityFraud						
Yes	-2.395018	1.165471	-2.05	0.040	-4.679299	-.1107378
No	-2.410649	1.309812	-1.84	0.066	-4.977834	.1565353
MediumRisk2	.016986	.0125734	1.35	0.177	-.0076573	.0416293
HighRisk2	.0403544	.0209265	1.93	0.054	-.0006607	.0813696
/cut1	-2.188559	1.580666			-5.286608	.9094894
/cut2	2.908064	1.572515			-.1740087	5.990137
/cut3	5.944862	1.751681			2.51163	9.378095

Table 7

```
. ologit Fraud Position i.Experience i.OrgSize i.TimeusedonISA240 i.AuditorresponsibilityFraud
>  MediumRisk2 HighRisk2, or

Iteration 0:   log likelihood = -85.540429
Iteration 1:   log likelihood = -70.153204
Iteration 2:   log likelihood =  -66.96395
Iteration 3:   log likelihood = -66.767286
Iteration 4:   log likelihood = -66.766725
Iteration 5:   log likelihood = -66.766725

Ordered logistic regression                     Number of obs     =        101
                                                LR chi2(16)       =      37.55
                                                Prob > chi2       =     0.0018
Log likelihood = -66.766725                     Pseudo R2         =     0.2195
```

Fraud	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Position	1.206562	.8383385	0.27	0.787	.3091161	4.709535
Experience						
3-5	23.88841	38.18939	1.99	0.047	1.040896	548.2353
6-10	1.34378	2.067221	0.19	0.848	.0658979	27.40216
11+	30.20927	42.78226	2.41	0.016	1.882225	484.8516
OrgSize						
Medium (21-100 Employees)	2.210441	1.468154	1.19	0.232	.6013388	8.125288
Large (100+ Employees)	3.064418	4.471511	0.77	0.443	.1755088	53.50533
TimeusedonISA240						
6-10%	.233472	.1736531	-1.96	0.050	.0543405	1.003105
11-15%	.2598314	.2023021	-1.73	0.083	.0564878	1.195167
16-20%	2.438661	1.839357	1.18	0.237	.5560756	10.69472
21-25%	.4747934	.5383754	-0.66	0.511	.0514416	4.382228
26-30%	5.64075	16.28307	0.60	0.549	.0196873	1616.175
30%+	3.270276	3.052397	1.27	0.204	.5249204	20.37396
AuditorresponsibilityFraud						
Yes	.091171	.1062571	-2.05	0.040	.0092855	.8951734
No	.089757	.1175648	-1.84	0.066	.006889	1.169452
MediumRisk2	1.017131	.0127887	1.35	0.177	.9923719	1.042508
HighRisk2	1.04118	.0217882	1.93	0.054	.9993395	1.084772
/cut1	-2.188559	1.580666			-5.286608	.9094894
/cut2	2.908064	1.572515			-.1740087	5.990137
/cut3	5.944862	1.751681			2.51163	9.378095

Table 8

4.1.4.5.1 Comparing the two models

In this section, we will compare the two models and present what we believe are the most important differences and similarities. As we can read from table 5 and 7, there are some differences and similarities in the results from the two models. For the "Experience" variable, "*11+*" years are statistically significant in both models. Additionally, we can see that "*3-5*" years are significant in the reduced model but not in the large sample. If we look at the odds ratios for "*3-5*" years and "*11+*" years in the reduced model, we see that these numbers are very high. For "*3-5*" years, the odds ratio is 23, and for "*11+*" years, the odds ratio is 30. These odds ratios tell us that a more experienced person who performs the audit is 23

and 30 times more likely to find fraud than someone with 0-2 years of experience. If we compare the odds ratios for a person with "*11+*" years of experience, we have 7 in the full model and 30 in the reduced model. The difference between these two numbers is substantial, and, surprisingly, the two models give two very different results. They are both statistically significant, but the reduced model results imply that a person with "*11+*" years of experience is much more likely to find fraud than the full model tells us. An explanation to why the results differ so much can be that in the reduced data set, we have very few observations with 0-2 years of experience. For example, from table 9, 4 out of the total of 101 observations in the reduced dataset have 0-2 years of experience. Therefore, the reference group in the reduced model can affect the results since the reference group has so few observations.

Full dataset

Experience	Freq.
(Years) 0-2	19
3-5	25
6-10	22
11+	138

Reduced dataset

Experience	Freq.
(Years) 0-2	4
3-5	10
6-10	10
11+	77

Table 9

Further, in the full model, "*TimeusedonISA240*" was significant for those who used "*6-10%*", "*16-20%*", and "*30%+*" of their total time on ISA 240. We get similar results for the reduced model. However, only "*6-10%*" and "*11-15%*" are statistically significant at the 5% and 10% levels, respectively. As in the full model, "*6-10%*" have a negative sign in front of the constant, which says that if you only use between "*6-10%*" of your total time on ISA 240, you will find less fraud than a person who spends 0-5% of their total time on ISA 240. The same conclusion can be given for those who use "*11-15%*" of their time on ISA 240. Table 10 shows that the observations are more or less equally distributed in the two models. Therefore, we believe that the difference is a result of how much fraud is detected by the respondents in each model, as these observations are not equally distributed.

Full dataset

Time used on ISA 240	Freq.
0-5%	42
6-10%	57
11-15%	44
16-20%	25
21-25%	12
26-30%	4
30%+	20

Fraud	Freq.
Never	30
Rarely	144
Sometimes	28
Medium	2

Reduced dataset

Time used on ISA 240	Freq.
0-5%	22
6-10%	28
11-15%	20
16-20%	13
21-25%	7
26-30%	1
30%+	10

Fraud	Freq.
Never	8
Rarely	71
Sometimes	20
Medium	2

Table 10

In our reduced model, "*Auditorresponsibility*" are statistically significant. Both "*Yes*" and "*No*" have a negative sign in front of them, which means that an auditor that identifies fraud as their responsibility identifies less fraud than an auditor that does not know if identifying fraud is their responsibility. The same conclusion can be given to auditors who feel it is not their responsibility to identify fraud. We believe it is strange that both the variables are negative, especially for the group that feels they are responsible for detecting fraud. If we look at the descriptive statistics in table 11, we can see that the reference group ("*Don't know*") has few observations, which again can possibly affect the outcome of the model.

Full dataset

Auditor responsibility (Fraud)	Freq.
Don't Know	7
Yes	167
No	30

Reduced dataset

Auditor responsibility (Fraud)	Freq.
Don't Know	4
Yes	84
No	13

Table 11

4.1.5 Responsibility of detecting fraud

One of the questions we asked was, "*In your opinion, who is responsible for detecting and preventing fraud?*". We wanted to see who our respondents thought was responsible for detecting fraud and if their answers were in accordance with ISA 240. As mentioned earlier, according to ISA 240, those charged with

governance have the primary responsibility for detecting and preventing fraud (IFAC & International Federation of Accountants, 2004). As we can see in table 12, most respondents said that the "*CEO/Management*" is responsible for detecting fraud. Additionally, over half of the respondents said that "*The board*" has the responsibility. Assuming that those charged with governance are either a member of the board or the management, these responses align with what is stated in ISA 240. However, a lot of the respondents also said that the "*Internal Audit*", "*External Audit*", and "*Employees*" are responsible for detecting fraud, which is not correct according to ISA 240.

Additionally, we added an option where the respondent could write who they thought was responsible for detecting fraud. The 12 respondents who chose this option, mentioned that it was the external accountant, Skatteetaten, the bank, and the organization as a whole. These results show that most of our respondents know who is responsible for detecting and preventing fraud. However, a substantial number of respondents also chose options that are not in accordance with ISA 240.

ResponsibilityFraud	Freq
CEO/Management	177
The board	127
Internal Audit	119
External Audit	116
IT and Security Department	56
Employees	92
Don't know	1

Table 12

4.1.6 Auditor's tasks, duties, and goals regarding fraud

In this section, we attempt to test the auditor's knowledge of their tasks, duties, and goals regarding fraud in accordance with ISA 240. Question 13 (Table 13) in our questionnaire asked, "*What tasks and duties do you think the auditor has in working with fraud?*" and question 14 (Table 14) asked, "*What goals do you think the auditor has in working with fraud?*". These were multiple choice questions where the respondents could choose the options they believed were correct. In question 13, all the options are correct according to ISA 240, while in question 14, option 1, option 2, and option 3 are correct according to ISA 240. The rest of the

options in question 14 are options we made that are neither correct nor stated in ISA 240.

As shown in table 13, over 50% of those who answered had knowledge about their tasks and duties. We can see that most respondents said that "*Option 1*" was correct. In contrast, the rest of the options have a considerably lower answer rate. Therefore, we believe it is reasonable to assume that auditors have a way to go regarding their knowledge of tasks and duties regarding fraud.

Further, in table 14, approximately 80% of the respondents answered that "*Option 1*" and "*Option 2*" were correct, while only 59% said that "*Option 3*" was correct. This indicates that our respondents were more aware of "*Option 1*" and "*Option 2*" than they were of "*Option 3*". Options 4 to 6 were trick questions where we wanted to attempt to see if the respondents knew what was stated in ISA 240 on the goals of the audit regarding fraud. As we can see from table 14, several of the respondents do not have good enough knowledge about what is stated in ISA 240. Only one person said that none of the options in question 14 were correct. It would be worrisome if many of the respondents replied the same because this would indicate that auditors and associates do not know the audit goals regarding fraud. We believe it is reasonable to assume that the results from these two questions show that many of our respondents do not have good enough knowledge about ISA 240 and the auditor's tasks, duties, and goals.

Audit Tasks And Duties With Fraud	Freq.	Out of 204 respondents
Option 1	181	89 %
Option 2	157	77 %
Option 3	134	66 %
Option 4	106	52 %
Option 5	113	55 %

Option 1 - Obtain reassuring assurance that the accounts do not contain material misstatement either as a result of fraud or error.
Option 2 - Maintain professional skepticism throughout the audit.
Option 3 - Assess the possibility that management overrides controls.
Option 4 - Understand that audit actions that detect errors are not necessarily appropriate when it comes to detecting fraud.
Option 5 - Respond to identified or suspected violations of laws and regulations.

Table 13

Audit Goals With Fraud	Freq.	Out of 204 respondents
Option 1	161	79 %
Option 2	163	80 %
Option 3	120	59 %
Option 4	26	13 %
Option 5	39	19 %
Option 6	10	5 %
Option 7	1	0,5 %

Option 1 - Identify and assess the risks of material misstatement of the financial statements due to fraud.
Option 2 - Obtain adequate and appropriate audit evidence regarding the estimated risks of material misstatement due to fraud, through the design and implementation of appropriate actions
Option 3 - Deal with fraud or suspected fraud identified through the audit, in an appropriate manner.
Option 4 - Detect fraud that occurs by an external party of the organization.
Option 5 - Detect fraud that occurs through the cooperation of an internal and external party of the organization.
Option 6 - The auditor makes legal decisions as to whether fraud has actually occurred.
Option 7 - None of the above.

Table 14

4.1.7 What associates and auditors do beyond what is required by ISA 240 and what they wish they could have done

The last question in our questionnaire to the auditors asked, "*What do you do beyond what is required by law to detect fraud during the audit, and if it was up to you what would you wish you could have done under the audit of fraud?*". We added this question because we wanted to know if Norwegian associates and auditors do more work regarding fraud than what is stated in ISA 240. The respondents could skip this question, but we received 32 answers. We have split the question into two parts to elaborate on these answers. First, we elaborate on what they are currently doing beyond the scope of ISA 240. Secondly, we elaborate on what the respondents wished they had when conducting the audit regarding fraud, as the last part of the question was not answered correctly.

4.1.7.1 What are they currently doing that is beyond the scope of ISA 240

Generally, our respondents try to establish conversations with the management and staff of the organization they audit. For example, one respondent answered that he visits his clients to be able to observe and ask questions to the management and other employees in the organization. Others said that it is important to understand their client's and internal routines and assess the client's attitude. Some of our respondents also mentioned that it is difficult to override and disprove any explanation given by the management regarding fraud. Further, auditors are not able to physically monitor how assets are used by employees and owners; therefore, it is difficult to prove that employees misuse the organization's assets. Secondly, some of our respondents stated that it is challenging to conduct

sufficient investigations to uncover matters not directly related to financial accounting beyond the scope of ISA 240, as the client's willingness to pay for extra work is low.

Lastly, several respondents answered that they do tasks within the scope of ISA 240 and not more. Examples are obtaining reassuring assurance that the accounts do not contain any material misstatements, conducting a regular audit until information or data from the accounts show potential red flags, going through bank statements, and controlling transactions against the bookkeeping. Others stated that they do very little beyond the scope of ISA 240. One said that it is the auditor's responsibility to assist in detecting fraud, and one said that he does not see the point in spending much time working on fraud.

These results tell us that our respondents do very little beyond the scope of ISA 240. We can see that the respondents do not have time or the opportunity to do more than required and that some of the respondents either did not understand the question or do not have enough knowledge about what is stated in ISA 240.

4.1.7.2 What auditors wish they could have

In this section, we will elaborate on what the respondents wish they have had while auditing. Generally, the respondents replied that they wished they had more access to public registers. Two of our respondents wished they had the same access as Skatteetaten. For example, access to their client's private economy and bank accounts. Further, one person wanted more advanced tools to analyse accounts and documentation. One of our respondents also mentioned that it is too easy to manipulate incoming invoices not issued as EHF invoices and wished the bank could add text lines with the associated name on the account. Lastly, one respondent wished he could have a more practical approach to detecting fraud.

4.2 Questionnaire to Organizations

The purpose of the questionnaire was to gather additional information on the topic to compare with the responses we received from auditors and previous research we have elaborated on earlier. The questionnaire was sent out to people we know, and other organizations we believed were interesting to hear from. Since this was

only meant as additional information in our paper and not the primary data source, we will only describe the descriptive statistics to analyse the data we collected. Unfortunately, we did not receive a satisfied number of respondents to be able to analyse the data with an ordered logistic regression as the number of respondents did not meet the criteria to qualify as a normal distribution (Brock, 2022).

4.2.1 General description of the respondents

As we stated above, we wanted to gather data from CFOs, accountants, and business controllers that, through their role in their company, had some responsibility regarding fraud but also interacted with the auditors when they conducted their audits for the company. Further, we wanted to see how satisfied the organizations are with the work that the auditors do regarding fraud during the audit. From the descriptive statistics below, we can see that several CFOs and daily managers have answered. Additionally, we have answers from persons working in the finance department, procurement, and a board member. All these respondents vary in age, experience, and size of their organizations. Most of the respondents work in the private sector.

Role	Freq.
CFO	10
Daily Manager	7
Finance Department	1
Other	6

Experience	Freq.
Years 0-5	12
6-10	5
11+	7

Age	Freq.
Years 18-30	6
31-40	6
41-50	7
51-60	5

OrgSize	Freq.
Small 1-21 Employees	9
Medium 21-100 Employees	2
Large 100+ Employees	13

Public or Private	Freq.
Public	2
Private	22

Table 15

4.2.2 Responsibility of detecting fraud

In our questionnaire, one of our questions was "*In your opinion, who is responsible for detecting and preventing fraud?*". The table below shows that the responses were quite distributed between the options the respondents had to choose from. Most of the respondents (17 out of 24) said that the CEO/Management are responsible for detecting and preventing. This is in accordance with ISA 240 (2004), which states that those charged with governance have the primary responsibility for detecting and preventing fraud. When

reviewing the responses we noticed that over half of the respondents (13 out of 24) said that the employees are responsible for detecting and preventing fraud. As mentioned earlier, employees commit the most fraud in western Europe with 45% of the cases, managers with 33%, and owner/executives with 17% (ACFE, 2021b). What surprised us, is that almost half of those that answered (11 out of 24 respondents) said that the external auditor is responsible for detecting and preventing fraud. As elaborated earlier, 83% of the companies that have been victims of fraud used external audits of financial statements as their primary anti-fraud control globally (ACFE, 2021a).

Further, one of the questions we asked was, "*To what degree do you feel that auditors are responsible in helping your organizations detect fraud under the audit*". Nearly 80% (19 out of 24 respondents) said that the auditor has a medium/large degree of responsibility in detecting fraud during audits. These responses align with the ACFE report, where 83% of companies have external auditors as their primary anti-fraud control (ACFE, 2021a). As a result of these findings, we believed that a larger majority of the respondents would choose external auditors as those who are responsible for detecting and preventing fraud.

If we compare the results from the two questions in our questionnaire, there is an inconsistency between these two answers. Less than half of the respondents say that the auditors are responsible for detecting fraud. However, they say that auditors have a responsibility to help their organization substantially with identifying fraud.

ResponsibilityFraud	Freq.
CEO / Management	17
The Board	9
Internal Audit	11
External AUdit	11
IT and Security Department	6
Employees	13

AuditorResponsibilityFraud	Freq.
Small Degree	2
Medium Degree	10
Large Degree	9
Do Not Know	3

Table 16

4.2.3 Satisfaction regarding auditors work on fraud while auditing

As discussed earlier, many companies use external auditors as their primary anti-fraud control (ACFE, 2021a). Based on this, we wanted to know how satisfied the organizations are with the auditors' work regarding fraud during an audit. One of our questions was, “To what extent do you feel that auditors help your organization detect, prevent and take action in relation to fraud?”. As shown in table 17, 50% of the respondents (12 out of 24) answered that they were moderately satisfied. In addition, we asked, “To what extent do you feel the auditor is helping your organization in reducing the cost associated with fraud?”. Most answered (16 out of 24 respondents) that they were not particularly satisfied with the auditor’s work regarding reducing the costs associated with fraud. Lastly, 75% of the respondents (18 out of 24) answered that overall they were not particularly satisfied with the auditor's job when investigating potential fraud in their organization.

AuditorSupportWithFraud	Freq.
Small Degree	4
Medium Degree	12
Large Degree	5
Do Not Know	3

AuditorSupportCostOfFraud	Freq.
Small Degree	10
Medium Degree	6
Large Degree	4
Do Not Know	4

AuditorSatisfactionRegardingFraudWork	Freq.
Small Degree	7
Medium Degree	11
Large Degree	4
Do Not Know	2

Table 17

4.2.4 What do the organizations want their auditor to do regarding fraud?

The last question in the questionnaire asked, "*If it was up to you, what would you wish the auditor could do under the audit in regards to fraud of your organization?*". We wanted to understand what the organizations, in general, wanted from the auditors without referring to any laws or standards. We wanted their own unbiased opinion. This question was optional, and most chose not to respond. However, we received five responses.

One of the respondents stated that the auditor today has too much focus on political relationship maintenance and, therefore, should move more of their focus over to what they should be doing during an audit. Further, one respondent stated that the auditor spends too much time on insignificant matters that have a natural explanation but demands vast resources to locate and bring up documentation. Lastly, two respondents wished that the auditor should have a more advisory role

and share more of their knowledge with the organizations they audit. For example, assisting in implementing preventive measures and internal control.

4.3 Interviews

As mentioned, we will use a template analysis to analyse the data we collected during our interviews (See Appendix 1 for the template analysis). In this section, we will describe the data we have collected and analysed, while the summaries we have used will be added in the appendix. As mentioned earlier, we interviewed auditors in the private sector, NKRF, an employee in Revisorforeningen, a fraud expert, and an employee at Riksrevisjonen. What we write under is mostly based on what the auditors in the private sector told us with some additional input from the other interviewed people. We have not made an individual chapter for the different groups because most of what was said correlated with each other.

4.3.1 Auditors responsibility

As we mentioned at the beginning of this paper, ISA 240 is the primary standard surrounding fraud in Norway. Based on our interviews, auditors do what is asked of them regarding the standard but not much more. Several interviewees mentioned that even though auditors follow the standard, they could do more. This is the case for private, municipality, and state auditors. The standard is used as a checklist, where it is minimum effort to "tick the boxes". There is a mixed belief that auditors take ISA 240 seriously. Most argue that auditors only put in the minimal effort needed, while some state that they take the task very seriously. From the interviews, we get the impression that it is not the auditor's task to identify fraud, which is in accordance with ISA 240. Lastly, some state that auditors do not have the right competence when it comes to fraud and fraud investigation, which hinders their ability to assess firms' risks and identify fraud correctly.

The expectations the public and organizations have on auditors to detect fraud seem to be relatively high. We highlighted the gap between the expectations from the public and what auditors actually find while they audit. Several of the auditors

we interviewed mentioned that they feel there is a high expectation on auditors to find fraud versus what they find. This was also stated in the report by ACFE (2021b) mentioned earlier. One even states that the public consider auditors as the controller of society.

According to ISA 240 (2004), an auditor does not have a responsibility to advise the management regarding fraud. Even though this is not a requirement by ISA 240, we thought it would be interesting to see if Norwegian auditors advise the management. Most of those we talked to said they do advise the management regarding fraud prevention. Several of the pieces of advice given are in accordance with Ramamoortis's (2008) factors to reduce the risk of fraud. Among them, we find a culture of openness, management who abide by the laws and appear as good role models, and training of employees.

Further, preventive controls and routines to make fraud difficult to carry out, improve internal control, take advantage of data analysis, and red flags are mentioned. Lastly, 70% of businesses in Norway with employees have less than ten employees (SSB, 2022). One piece of advice that is mentioned by several of the interviewees is that one person should not have too much responsibility when it comes to, for example, handling invoices, ordering and receiving materials, and being able to change and pay out salaries. Dividing the responsibility to several employees makes a chain of tasks that makes committing fraud difficult. Because Norwegian organizations primarily consist of few people, this is difficult to implement. Most of the tips mentioned above are easier to carry out in larger organizations with many employees versus small organizations where the owner or leader has most of the responsibility.

4.3.2 Auditors and fraud in Norway

When auditors audit organizations in their portfolio, most auditors start the audit by identifying and executing a firm's risk analysis. The justification for this is to lay the foundation of what audit controls they will execute when they conduct the audit. From our understanding, this is mainly aimed at the overall audit and not specific towards fraud. One of the interviewees mentions that this risk analysis is a bit weak since very few auditors have competence on fraud. Therefore, the risk

analysis becomes unspecific and not appropriate to identify fraud. As mentioned earlier, ISA 240 is in the auditor's mind when performing the audit but does not hold a very central position while they audit.

Further, using ISA 240 in the audit does not guarantee that fraud will be discovered or identified. Lastly, resources are a subject discussed by several of the interviewees. Norwegian auditors have a timeframe on when an audit should be carried out, limiting the time used on, for example, fraud. It is more important to get the audit done in time within the resources given than to exceed the resources and possibly investigate areas that have a red flag. Those who mentioned this said that time is one of the limiting factors for investigating areas that may be exposed for fraud.

As mentioned earlier, 83% of the companies that have been victims of fraud used external audits of financial statements as their primary anti-fraud control (ACFE, 2021a). During the interviews, we discovered that auditors rarely identify fraud while auditing. This is in line with what we stated earlier: external audits stood for only 4% of the detected fraud (ACFE, 2021a). All interviewees stated that they rarely find fraud. One states that they identify fraud on 2-4% of their audits, others say every third year, and some say they have only discovered a handful of cases within a time frame of 20-25 years. One even states that through their 20+ year career, they have never identified fraud but were made aware of two cases by an accountant. An explanation for the few identified cases was that auditors rarely talked to the client throughout the year. Most of the contact takes place when the audit is being executed. The auditors look at historical numbers, making it difficult to identify fraud early. One solution to this was to start the process earlier. Further, there is no indication that there are more fraud cases in public- versus private organizations.

Additionally, it seems that there are very few seminars discussing fraud for auditors in both the private and public sectors. The lack of seminars most likely affects the auditor's ability to detect and investigate fraud when auditing. However, we were told that if there were a lot of new cases relating to fraud, the number of seminars and the focus on fraud would increase for a short period. Lastly, one interviewee stated that other actors like the media often discover fraud. Media can take a different approach than an auditor, as they work to inform

the public. If an employee finds it difficult or impossible to talk to their management about a possible fraud case, they can, for example, inform the media. In addition, the media is also great at digging after information, which can explain why they can identify fraud that auditors miss.

A common statement in our interviews was that auditors do not have good enough tools to identify fraud. Tools mentioned are Excel models, CaseWere IDEA, Power BI, and the use of red flags. We got an understanding that the auditors in the private sector have more tools than in the public sector. In one of the interviews, we were told that identifying fraud demands many resources, as they can sit and call different people for days without it necessarily leading to any findings. One mentions that they use three different sources to confirm potential findings when controlling for red flags.

One of the questions in our interviews was what tools they would like to have when conducting an audit. Several different options came up, and examples are artificial intelligence that can identify red flags, automated solutions to handle large data sets, automize easy tasks so the auditor can use more time on other parts of the audit (e.g., fraud), better data analysis tools, and tools that can easily be integrated into standard accounting systems. It was also mentioned that there was a wish to have more knowledge about fraud in auditing and more seminars around the topic.

For the future, as mentioned earlier, automatic programs and better data analysis are tools that were brought up in most interviews. For example, one person mentioned that they are collaborating with a company to produce software that can quickly process big data. This program will also be able to control bank accounts and flag suspicious transactions. We therefore, believe that digital and automated tools will take a more significant part in the future of audits and possibly increase the auditor's ability to identify fraud while auditing.

4.3.3 Additional information

As previously discussed, limited resources are a restriction. Another related point is the cost-benefit assessment. An auditor needs to fulfil their assignment according to laws and regulations and must, therefore, decide to focus on those

areas that are necessary to fulfil. Limited resources affect the assignment, and auditors may decide to focus less on fraud and fraud indicators than other parts of the assignment. Some of the interviewees said there is a correlation between audit fees and what is delivered as a service from the auditor. Further, if the customer were willing to pay more for the audit, auditors would have more time to spend on, for example, fraud than what they do today. However, as one stated, organizations do not really want to use more money on auditors, so they will most likely not be willing to pay more for the service than needed. Even though most organizations are unwilling to pay more for the audit service, auditors could be able to identify fraud more often than they do today if the auditor had more time and resources.

During the interviews, one of the interviewees mentioned that ISA 240 has some flaws and may not be good enough when it comes to fraud. Here the interviewee refers to ISA 240s lack of guidelines when working with fraud. Further, applying ISA 240 is problematic because fraud can also be related to money laundering and other regulations outside the audit standard. This issue brings up the lack of knowledge the auditors have on fraud. When other laws outside the standard are included, the fraud aspect in auditing is possibly more difficult. The interviewee's solution was to update ISA 240 so it includes more and gets easier to apply.

One issue that came up during the interviews was that Covid-19 had affected the audit process. During the pandemic, auditors have not been able to visit their clients as they did before the pandemic. Before, auditors visited their clients, and they could connect with their client's employees. By doing so, the auditor could listen to employees' conversations and possibly overhear work-related topics or events, which the auditor could confirm or deny occurred. This could result in, for example, identifying expenses that had been wrongly booked or taxes that had been misreported. However, during the pandemic, most of the communication was digital, and the auditor could not connect with their client in the same way. Therefore, the lack of physical presence could have had a negative effect on identifying fraud during the audit process.

Lastly, it was mentioned that having a board with the correct competence who asks the right questions to the auditor could sharpen the auditor's focus and be

better equipped to prevent and detect fraud. However, if the auditor and the board do not have their focus or competence on fraud, the risk of not identifying fraud will increase. Further, an auditor should be more proactive outside of the scope of the Norwegian auditor law. Auditors should take a more active role and ask the board and management more about current fraud controls and how the organization plans to tackle any future fraud-related problems.

5. Conclusion

In this thesis, the overall objective was to identify to what extent external auditors assist Norwegian organizations in identifying the cost of fraud. To answer this, our main question has been, "*To what extent do large and small external audit firms assist Norwegian organizations which they audit, to identify and reduce the costs originated from fraud?*". To help us answer the objective of this thesis and the main question, we presented five hypotheses we wanted to test to capture different aspects that could affect the ability to detect fraud. To answer these hypotheses, we used the questionnaires we sent out to the auditors and conducted an ordered logistic regression. Further, we presented the results from the questionnaire we sent out to Norwegian organizations.

First, we did not find any evidence that auditors working in large companies find more fraud than auditors working in smaller companies, which contradicts Carcello & Nagy (2004) results. Second, we found evidence that associates and auditors with 11+ years of experience find more fraud than their colleagues with less experience, which concur with findings by Moyes and Hasan (1996) and Owusu-Ansah et al., (2002). Third, we can not conclude that auditors find more fraud than associates. Fourth, we have found evidence that certain groups who spend more of their total time on ISA 240 find more fraud than those who use less time on ISA 240. However, we have inconsistencies in our results where one group who spends more time on ISA 240 than another finds less fraud than this group, and we can therefore not conclude that more time spent on ISA 240 increases the possibility of finding fraud. Lastly, we used different datasets to test whether those who audit high-risk clients find more fraud than those who audit low-risk clients. One dataset shows that those who audit low-risk clients find less fraud overall, but we can not conclude that those who audit high-risk clients find

more fraud. However, the second dataset shows that those who audit high-risk clients find on average 4% more fraud than those who audit low-risk clients.

Based on the response from our questionnaire to Norwegian organizations, our respondents are generally not particularly satisfied with the auditor's job when investigating potential fraud in their organization. Further, most respondents were not particularly satisfied with the auditor's work regarding reducing the costs associated with fraud. Additionally, the organizations want the auditor to have a more advisory role than today.

In our interviews, we found that auditors only do what is required by them at a minimum by ISA 240 and use the standard as a checklist. Further, auditors do not have the necessary skills and knowledge needed to identify and prevent fraud. The lack of knowledge is consistent with what we found in one of our open-ended questions in our questionnaire. Further, there is a correlation between audit fees and what is delivered as a service from the auditor. Since auditors have a fairly strict time frame to conduct their audit, they do not have enough time to investigate fraud fraud. Further, we found that the auditors do not have proper tools to identify fraud, there are not enough courses on the subject of fraud, and it is questionable if ISA 240 is good enough to cover the aspect of fraud.

Based on these results, we have found that auditors and associates who audit Norwegian organizations do not know enough about fraud and ISA 240. Further, they do not use enough time on the aspect of fraud to be able to assist organizations in identifying and preventing fraud from happening, and they rarely identify any fraud at all. Additionally, improved internal control is the most given advice by auditors to prevent fraud.

This thesis has provided insight on how Norwegian associates and auditors handle fraud. Fraud has become an increasing problem, and we believe we have highlighted several important aspects as to why Norwegian audit firms do not find as much fraud as the public expects.

The limitations of this thesis are that some of the questions in our questionnaire seem to be misunderstood, and we did not get enough responses from auditors and associates that work for medium and large-sized firms to get an even distribution. This could affect our findings as the majority of our respondents work for small

audit firms. Further, we received few responses from auditors who either audit the municipality or the state. Therefore, our recommendation for further research is to reformulate the questionnaire so that it cannot be misunderstood. Further, collecting more responses from medium and large audit companies so that the distribution becomes more even would also be beneficial.

Bibliography

Abreu, M. N. S., Siqueira, A. L., Cardoso, C. S., & Caiaffa, W. T. (2008). Ordinal logistic regression models: Application in quality of life studies. *Cadernos de Saúde Pública*, *24*, s581–s591.

ACFE. (2021a). *Report to the Nations | 2020 Global study on occupational fraud and abuse* (No. 11; p. 88). https://acfepublic.s3-us-west-2.amazonaws.com/2020-Report-to-the-Nations.pdf

ACFE. (2021b). *Report to the Nations | 2020 Global study on occupational fraud and abuse | Western Europe Edition* (p. 21). https://www.acfe.com/report-to-the-nations/2020/docs/RTTN-Western%20Europe-final.pdf

Adejumo, A. O., & A., A. A. (2013). Application of Ordinal Logistic Regression in the Study of Students' Performance. *Mathematical Theory and Modeling*, *3*.

Albrecht, S. W., Howe, K. R., & Romney, M. B. (1984). *Deterring fraud: The internal auditor`s perspective*. Inst of Internal Auditors.

Alleyne, P., & Howard, M. (2005). An exploratory study of auditors' responsibility for fraud detection in Barbados. *Managerial Auditing Journal*.

Amundsen, B. (2021). *Politiet overlater etterforskningen av økonomisk kriminalitet til de mistenkte*. https://forskning.no/a/1841798

Australian Government. (2017). *Commonwealth Fraud Control Framework 2017*. Attorney-General`s Department.

BDO. (n.d.). *Risikostyring*. https://www.bdo.no/nb-no/tjenester/risikostyring

Bjørnestad, S., & Torset, N. S. (2020). *Økokrim fikk 11.500 varsler om hvitvasking. Det førte bare til 12 anmeldelser.* Aftenposten. https://www.aftenposten.no/okonomi/i/nAgPwm/2020-blir-et-rekordaar-for-varsling-til-oekokrim

Brock, T. (2022). *What Is the Central Limit Theorem (CLT)?* Investopedia. https://www.investopedia.com/terms/c/central_limit_theorem.asp

Brooks, J., & King, N. (2012, April). *Qualitative psychology in the real world: The utility of template analysis* [Conference]. 2012 British Psychological Society Annual Conference, London, UK. http://annual-conference.bps.org.uk/

Brooks, J., McCluskey, S., Turley, E., & King, N. (2015). The utility of template analysis in qualitative psychology research. *Qualitative Research in Psychology*, *12*(2), 202–222.

Bugge, W. (2020, June 26). *Wirecard-revisor i trøbbel for å ikke ha avdekket milliardsvindelen*. Www.Dn.No.

https://www.dn.no/wirecard/kpmg/apas/wirecard-revisor-i-trobbel-for-a-ikke-ha-avdekket-milliardsvindelen/2-1-833966

Cabinet Office. (2020b). *International Public Sector Fraud Forum guidance*. GOV.UK. https://www.gov.uk/government/publications/international-public-sector-fraud-forum-guidance

Carcello, J. V., & Nagy, A. L. (2004). Client size, auditor specialization and fraudulent financial reporting. *Managerial Auditing Journal*.

Choi, B. C. K., & Pak, A. W. P. (2004). A Catalog of Biases in Questionnaires. *Preventing Chronic Disease*, *2*(1), A13.

Chung, L. (2019). Avoiding biased questions: 7 examples of bad survey questions. *Delighted*. https://delighted.com/blog/biased-questions-examples-bad-survey-questions

Coghlan, D., & Brydon-Miller, M. (2014). *The SAGE encyclopedia of action research (Vols. 1-2)*. https://doi.org/10.4135/9781446294406

Cohen, L. E., & Felson, M. (1979). Social Change and Crime Rate Trends: A Routine Activity Approach. *American Sociological Review*, *44*(4), 588–608. https://doi.org/10.2307/2094589

Comer, M. J. (1998). *Corporate fraud*. Gower Publishing, Ltd.

Cressey, D. R. (1953). *Other people's money; a study of the social psychology of embezzlement.* (p. 191). Free Press.

DeFranzo, S. E. (2011). Difference between qualitative and quantitative research. *Snap Surveys Blog*. https://www.snapsurveys.com/blog/qualitative-vs-quantitative-research/

Deloitte. (2017). *Deloitte announces US$200 million strategic investment in China | Deloitte China | Press release*. Deloitte China. https://www2.deloitte.com/cn/en/pages/about-deloitte/articles/pr-deloitte-announces-us200-million-strategic-investment-in-china.html

Dimitrijevic, D., Jovkovic, B., & Milutinovic, S. (2020). The scope and limitations of external audit in detecting frauds in company's operations. *Journal of Financial Crime*.

DNB. (n.d.). *Anti-hvitvasking arbeid og bekjempelse av terrorfinansiering—DNB*. https://www.dnb.no/om-oss/samfunnsansvar/Okonomisk-kriminalitet/anti-hvitvasking-og-terrorfinansiering.html?

Duffield, G., & Grabosky, P. (2001). The psychology of fraud. *Trends and Issues in Crime and Criminal Justice*, *199*, 1–6.

EY. (n.d.). *Teknologikarriere i EY*. https://www.ey.com/no_no/careers/technology

Fagerland, M. W., & Hosmer, D. W. (2017). How to test for goodness of fit in ordinal logistic regression models. *The Stata Journal*, *17*(3), 668–686.

Gallo, A. (2015, November 4). A Refresher on Regression Analysis. *Harvard Business Review*. https://hbr.org/2015/11/a-refresher-on-regression-analysis

Gay, G., Schelluch, P., & Baines, A. (1998). Perceptions of messages conveyed by review and audit reports. *Accounting, Auditing & Accountability Journal*.

Gee, J., & Button, P. M. (2019). The Financial Cost of Fraud 2019. *Crowe*, 28.

Geiger, M. A. (1994). Investor views of audit assurance: Recent evidence of the expectation gap. *Journal of Accountancy*, 60.

Gonzalez, G. C., & Hoffman, V. B. (2018). Continuous auditing's effectiveness as a fraud deterrent. *Auditing: A Journal of Practice & Theory*, *37*(2), 225–247.

Grace-Martin, K. (2016, July 1). Pros and Cons of Treating Ordinal Variables as Nominal or Continuous. *The Analysis Factor*. https://www.theanalysisfactor.com/pros-and-cons-of-treating-ordinal-variables-as-nominal-or-continuous/

Henriksen, Ø. (2009). *Ernst & Young får bot fra Økokrim*. https://e24.no/i/4d4nn9

Hodgkinson, A. (2019). Why Auditors Rarely Find Fraud. *The Protiviti View*. https://blog.protiviti.com/2019/04/04/why-auditors-rarely-find-fraud/

Hribar, P., Kravet, T., & Wilson, R. (2014). A new measure of accounting quality. *Review of Accounting Studies*, *19*(1), 506–538.

Humphrey, C., Moizer, P., & Turley, S. (1993). The audit expectations gap in Britain: An empirical investigation. *Accounting and Business Research*, *23*(sup1), 395–411.

IFAC & International Federation of Accountants. (2004). International Standard on Auditing (ISA) 240 (Revised). *The Auditor's Responsibility to Consider Fraud in an Audit of Financial Statements*.

Institute for Academic Development. (2021). Literature review. *The University of Edinburgh*. https://www.ed.ac.uk/institute-academic-development/study-hub/learning-resources/literature-review

Interviewerr. (2019). *Interviewer Bias In User Research & Steps To Conquer It*. Interviewerr. https://www.interviewerr.com/interviewer-bias/

Issa, H., & Kogan, A. (2014). A predictive ordered logistic regression model as a tool for quality review of control risk assessments. *Journal of Information Systems*, *28*(2), 209–229.

Jones, P. C., & Tickner, P. (2004). *Fraud and corruption in public services: A guide to risk and prevention*. Gower Publishing, Ltd.

Kagge, G. (2013). *Revisor hjalp med korrupsjon*. https://www.aftenposten.no/norge/i/ngzPa/revisor-hjalp-med-korrupsjon

Kassem, R. (2012). Earnings management and financial reporting fraud: Can external auditors spot the difference? *American Journal of Business and Management*, *1*(1), 30–33.

Kassem, R. (2014). Detecting asset misappropriation: A framework for external auditors. *International Journal of Accounting, Auditing and Performance Evaluation*, *10*(1), 1–42.

Kassem, R. (2017). Exploring external auditors' perceptions of the motivations behind management fraud in Egypt–a mixed methods approach. *Managerial Auditing Journal*.

Kassem, R., & Higson, A. (2012). Financial reporting fraud: Are standards' setters and external auditors doing enough? *International Journal of Business and Social Science*, *3*(19), 283–290.

King, N. (2012). Doing template analysis. *Qualitative Organizational Research: Core Methods and Current Challenges*, *426*, 77–101.

Koh, H. C., & Woo, E. (1998). The expectation gap in auditing. *Managerial Auditing Journal*.

KPMG. (2013). *Global profiles of the fraudster*. 28.

KPMG. (2016). *Global profiles of the fraudster*. 28.

KPMG. (n.d.). *Gransking og forebyggende tjenester—KPMG Norge*. KPMG. https://home.kpmg/no/nb/home/tjenester/radgivning/gransking-og-forebyggende-tjenester.html

Kvalnes, Ø. (2019). *Moral Reasoning at Work: Rethinking Ethics in Organizations*. Cham: Springer International Publishing AG.

Langved, Å., Klevstrand, A., & Trumpy, J. (2020). *Tidligere antihvitvaskingssjef i DNB: – Det er ikke noen vits i å ringe Økokrim*. Www.Dn.No. https://www.dn.no/kriminalitet/hvitvasking/okokrim/dnb/tidligere-antihvitvaskingssjef-i-dnb-det-er-ikke-noen-vits-i-a-ringe-okokrim/2-1-737499

Last, J. M. (2001). RE:"A dictionary of epidemiology, edited by john m. Last, robert a. Spasoff, and susan g. Harris". *American Journal of Epidemiology*, *154*(4), 389–389.

Lewis, K. (2017). Chapter 38—Security Certification and Standards Implementation. In J. R. Vacca (Ed.), *Computer and Information Security Handbook (Third Edition)*

(pp. 557–563). Morgan Kaufmann. https://doi.org/10.1016/B978-0-12-803843-7.00038-7

Lu, J. (2021, November 11). How $6 billion from Elon Musk could feed millions on the brink of famine. *NPR*. https://www.npr.org/sections/goatsandsoda/2021/11/11/1052719247/how-6-billion-from-elon-musk-could-feed-millions-on-the-brink-of-famine

Mahami, Z., & Mouloudj, K. (2020). *Factors affecting detection of manipulation in financial statements: An empirical study from auditors' perspective*.

MarketWatch. (2015). *Countries with the most and least online fraud*. MarketWatch. https://www.marketwatch.com/story/countries-with-the-most-and-least-internet-fraud-2015-06-03

Marshall, C. (2016). *Face-to-Face Interviews—Advantages and Disadvantages*. https://www.linkedin.com/pulse/face-to-face-interviews-advantages-disadvantages-charlie-marshall/

Mathers, N., Fox, N., & Hunn, A. (1998). *Using Interviews in a Research Project*. 34.

Middleton, Fiona. (2019a). *The four Types of Validity*. Scribbr. https://www.scribbr.com/methodology/types-of-validity/

Middleton, Fiona. (2019b). *Types of reliability and how to measure them*. Scribbr. https://www.scribbr.com/methodology/types-of-reliability/

Monroe, G. S., & Woodliff, D. R. (1993). The effect of education on the audit expectation gap. *Accounting & Finance*, *33*(1), 61–78.

Moyes, G. D., & Hasan, I. (1996). An empirical analysis of fraud detection likelihood. *Managerial Auditing Journal*.

Nwakuya, M., & Maduka, O. (2019). *Ordered Logistic Regression on the Mental Health of Undergraduate Students*. 14–18. https://doi.org/10.5923/j.ijps.20190801.02

Olya, G. (2021). *Enron and the 24 Other Most Epic Corporate Downfalls of All Time*. GOBankingRates. https://www.gobankingrates.com/money/business/most-epic-corporate-downfalls/

Owusu-Ansah, S., Moyes, G. D., Oyelere, P. B., & Hay, D. (2002). An empirical analysis of the likelihood of detecting fraud in New Zealand. *Managerial Auditing Journal*.

Oxford Reference Database. (n.d.). *Interviewer bias*. Oxford Reference. https://doi.org/10.1093/oi/authority.20110803100008737

Parry, S. (2016). Ordinal logistic regression models and statistical software: What you need to know. *Cornell University Statistical Consulting Unit*.

Porter, B. (1993). An empirical study of the audit expectation-performance gap. *Accounting and Business Research*, *24*(93), 49–68.

PWC. (2014). *Global economic crime survey 2014*. https://www.pwc.com/cz/en/hospodarska-kriminalita/assets/pdf/global-economic-crime-survey-2014-en.pdf

PWC. (2016). *Global Economic Crime Survey 2016: UK report*. 11.

PWC. (2019). *PwC network invests $3bn globally in digital training and technology to support clients and communities*. 2.

PWC. (2020). *Fighting fraud: A never-ending battle*. 14.

Ramamoorti, S. (2008). *The Psychology and Sociology of Fraud: Integrating the Behavioral Sciences Component Into Fraud and Forensic Accounting Curricula* (Vol. 23, pp. 521–533).

Revisorforeningen. (2021). *Revisorutdanningen*. Den norske Revisorforeningen. https://www.revisorforeningen.no:443/fag/ny-revisorlovgivning/nyheter-ny-revisorlov/revisorutdanningen/

Revisorloven. (2020). *Lov om revisjon og revisorer (revisorloven)—Lovdata*. https://lovdata.no/dokument/LTI/lov/2020-11-20-128

Roopa, S., & Menta Satya, R. (2012). Questionnaire Designing for a Survey. *The Journal of Indian Orthodontic Society*, *46*, 37–41. https://doi.org/10.5005/jp-journals-10021-1104

Samociuk, M., & Iyer, N. (2003). *Fraud resistance; A Practical Guide*. Standards Australia International Limited.

Samociuk, M., & Iyer, N. K. (2010). *A short guide to fraud risk: Fraud resistance and detection*. Gower Publishing, Ltd.

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (Eighth Edition). Pearson.

Smith, M., Omar, N. H., Idris, S. I. Z. S., & Baharuddin, I. (2005). Auditors' perception of fraud risk indicators: Malaysian evidence. *Managerial Auditing Journal*.

Solgård, J., & Helle, B. T. (2021, March 22). *Revisorgigantene PwC og BDO får milliongebyr for brudd på hvitvaskingsregelverket*. Www.Dn.No. https://www.dn.no/marked/revisorgigantene-pwc-og-bdo-far-milliongebyr-for-brudd-pa-hvitvaskingsregelverket/2-1-984566

SSB. (2022). *Virksomheter*. SSB. https://www.ssb.no/virksomheter-foretak-og-regnskap/virksomheter-og-foretak/statistikk/virksomheter

Sutherland, E. (1947). *Principles of Criminology*. PA: J.B. Lippincott Company.

Sykes, G. M., & Matza, D. (1957). Techniques of Neutralization: A Theory of Delinquency. *American Sociological Review*, *22*(6), 664–670. https://doi.org/10.2307/2089195

UCLA: Statistical Consulting Group. (n.d.). *FAQ: What are pseudo R-squareds?* UCLA: Statistical Consulting Group. https://stats.oarc.ucla.edu/other/mult-pkg/faq/general/faq-what-are-pseudo-r-squareds/

University of Utah College of Nursing. (n.d.). *What is qualitative research? [Guide]*. https://libguides.uta.edu/quantitative_and_qualitative_research/qual

Utenriksdepartementet. (2021, September 30). *Rapporter om økonomiske mislighetssaker* [Rapport]. Regjeringen.no; regjeringen.no. https://www.regjeringen.no/no/dokumenter/rapporter_oversikt/id2395346/

Walters, M. (2019). *KPMG expects to invest US$5 billion on digital leadership in professional services—KPMG Global*. KPMG. https://home.kpmg/xx/en/home/media/press-releases/2019/12/kpmg-expects-to-invest-5-billion-on-digital-leadership-in-professional-services.html

Waring, T., & Wainwright, D. (2008). Issues and challenges in the use of template analysis: Two comparative case studies from the field. *Electronic Journal of Business Research Methods*, *6*(1), pp85-94.

Yan, X., & Su, X. (2009). *Linear regression analysis: Theory and computing*. World Scientific.

Zager, L., Malis, S. S., & Novak, A. (2016). The role and responsibility of auditors in prevention and detection of fraudulent financial reporting. *Procedia Economics and Finance*, *39*, 693–700.

Appendix 1 - Template Analysis

AUDITORS RESPONSIBILITY

1. ISA 240
    1. Are we compliant?
2. Expectations from the public
3. Giving advice to its clients
    1. Internal control, better routines, arbeidsdeling, preventive kontroller
        i. Norway mainly consists of small businesses

AUDITORS AND FRAUD

1. What they do (responsibilities)
    1. Resources
        i. Limits their service
        ii. More resources = More likely to discover fraud
2. Discovering fraud
    1. Rare to discover
    2. Statistics
    3. Seminars
3. Tools
    1. Several tools are being used by auditors
    2. Investing in new tools
    3. Automation
    4. Artificial intelligence
    5. Easy to use tools. For both the auditor and the client

Additional information

1. Limited resources
    1. Audit fees
2. ISA 240 - Lack of guidelines
3. Covid-19

Appendix 2 - Descriptive statistics reduced dataset

Fraud	Freq.
Never	8
Rarely	71
Sometimes	20
Medium	2

Position	Freq.
Associate	22
Auditor	79

Experience	Freq.
(Years) 0-2	4
3-5	10
6-10	10
11+	77

Org Size	Freq.
Small (1-20 Employees)	82
Medium (21-100 Employees)	16
Large (100+ Employees)	3

Time used on ISA 240	Freq.
0-5%	22
6-10%	28
11-15%	20
16-20%	13
21-25%	7
26-30%	1
30%+	10

Auditor responsibility (Fraud)	Freq.
Don't Know	4
Yes	84
No	13

Low risk	Freq.
0	2
10	1
20	5
25	1
30	4
35	1
40	3
47	1
50	3
55	1
60	10
65	1
70	11
75	5
78	1
80	18
85	1
90	20
95	5
98	1
99	1
99.8	1
100	4

Medium Risk	Freq.
0	4
.2	1
1	2
2	1
4	2
5	5
8	2
9	1
10	17
15	8
17	1
18	4
20	12
25	7
30	8
33	1
35	3
38	1
39	1
40	2
45	3
50	3
58	1
60	4
69	1
70	4
80	1
95	1

High risk	Freq.
0	33
1	5
2	10
3	2
5	30
10	14
20	4
25	1
30	1
99	1

Appendix 3 - Questionnaire

Q1. Hvilken stilling har du i selskapet du jobber i?

○Revisor ○Revisjonsmedarbeider ○Annet (Vennligst spesifiser)

Q2. Hvor mange års erfaring har du innen revisjon?

○0-2 år ○3-5 år ○6-10 år ○+11 år

Q3. Alder

○18-30 år ○31-40 år ○41-50 år ○51-60 år ○61-70 år ○70+ år

Q4. Hvor stor er organisasjonen du jobber i? (Målt i antall ansatte totalt i Norge)

○Liten (1-20 Ansatte) ○Middels (21-100 Ansatte) ○Stort (100+ Ansatte)

Q5. Reviderer du kommunal/statlige organisasjoner eller private organisasjoner?

○Kommunale organisasjoner/statlige organisasjoner

○Private organisasjoner ○Begge

Q6. Hvis du reviderer begge hva er andelen av private til offentlige selskaper i prosent?

○80% (private)/20% (Offentlige) ○60%/40% ○50%/50% ○40%/60%

○20%/80% ○Ikke relevant

Q7. Hvor mye tror du av din totale tidsbruk under revisjon, blir brukt på å følge ISA 240?

○0-5% ○6-10% ○11-15% ○16-20% ○21-25% ○25-30% ○30%+

Q8. Hvor mye tror du at andre, av sin totale tidsbruk under revisjon, blir brukt på å følge ISA 240?

○0-5% ○6-10% ○11-15% ○16-20% ○21-25% ○25-30% ○30%+

Q9. Føler du at det er ditt ansvar som revisor å oppdage misligheter under revisjon?

○Ja ○Nei ○Vet ikke

Q10. Hvem har etter din mening ansvaret for å oppdage og forhindre misligheter?

☐ Administrerende direktør/ledelsen

☐ Styret i organisasjonen

☐ Internrevisjon

☐ Ekstern revisjon

☐ IT og sikkerhetsavdeling

☐ Ansatte/Varslere

☐ Annet (Vennligst spesifiser)

☐ Vet ikke

Q11. Hvis du måtte foreta et estimat hos alle dine revisjonskunder, hvor stor prosentandel av dem vurderer du risikoen for misligheter som?

☐Lav (angi prosent) ☐Middels (angi prosent) ☐Høy (angi prosent)

Q12. Hvor ofte oppdager du misligheter i bedrifter under revisjon?

○Aldri ○Sjeldent ○Av og til ○Middels ○Ofte

Q13. Hvilke oppgaver og plikter mener du revisor har i arbeidet med misligheter? (Velg alternativene du mener passer best)

☐ Anskaffe seg betryggende sikkerhet for at regnskapet ikke inneholder vesentlig feilinformasjon verken som følge av misligheter eller feil.

☐ Opprettholde profesjonell skepsis gjennom hele revisjonen.

☐ Vurdere muligheten for at ledelsen overstyrer kontroller.

☐ Forstå at revisjonshandlinger som avdekker feil ikke nødvendigvis er hensiktsmessige når det gjelder å avdekke misligheter.

☐ Reagere på identifisert eller mistanke om brudd på lover og forskrifter.

☐ Annet (Vennligst spesifiser)

Q14. Hvilke mål mener du revisor har i arbeidet med misligheter? (Velg alternativene du mener passer best)

▢ Identifisere og vurdere risikoene for vesentlig feilinformasjon i regnskapet som skyldes misligheter.

▢ Innhente tilstrekkelig og hensiktsmessig revisjonsbevis vedrørende de anslåtte risikoene for vesentlig feilinformasjon som skyldes misligheter, gjennom utforming og iverksettelse av egnede handlinger

▢ Håndtere misligheter eller mistenkte misligheter identifisert gjennom revisjonen, på en hensiktsmessig måte.

▢ Avdekke misligheter som oppstår av en ekstern part av organisasjonen

▢ Avdekke misligheter som oppstår gjennom samarbeid av en intern og ekstern part av organisasjonen.

▢ Revisor tar juridiske avgjørelser om hvorvidt misligheter har faktisk skjedd.

▢ Ingen av de ovennevnte

En revisjon skal ideelt sett kunne identifisere misligheter som har blitt utført i en organisasjon som blir revidert. Eksempler på misligheter er stjeling fra organisasjonen, privat bruk av organisasjonens eiendeler og uetisk oppførsel.

Q15. Hva gjør du utover det som er lovpålagt for å oppdage misligheter under revisjonen, og hvis det var opp til deg hva skulle du ønske du kunne gjort i henhold til revisjon av misligheter?

Åpent spørsmål

Til organisasjonen:

Q1. Rolle i organisasjonen

○Chief Finance Officer (CFO) ○Daglig leder ○Økonomiansvarlig

○Annet (Vennligst spesifiser)

Q2. Erfaring (I rollen du valgte i forrige spørsmål)

○0-5 år ○6-10 år ○11år+

Q3. Alder

○18-30 år ○31-40 år ○41-50 år ○51-60 år ○61-70 år ○70+ år

Q4. Hvor stor er organisasjonen du jobber i? (Målt i antall ansatte i hele organisasjonen)

○Liten (1-21 Ansatte) ○Middels (21-100 Ansatte) ○Stor (100+ Ansatte)

Q5. Er organisasjonen du jobber for kommunal/statlig eller privat?

○Kommunal/statlig ○Privat

Q6. Hvem har etter din mening ansvaret for å oppdage og forhindre misligheter? (Multiple choice)

▢ Administrerende direktør/ledelsen

▢ Styret i organisasjonen

▢ Internrevisjon

▢ Ekstern revisjon

▢ IT og sikkerhetsavdeling

▢ Ansatte/Varslere

▢ Annet (Vennligst spesifiser)

Q7. I hvilken grad føler du revisor er ansvarlig i å hjelpe din organisasjon i å oppdage misligheter under revisjonen?

○Liten grad ○Middels grad ○Stor grad ○Vet ikke

Q8. I hvilken grad føler du at revisorer hjelper din organisasjon med å oppdage, forhindre og iverksette tiltak i forhold til misligheter?

○Liten grad ○Middels grad ○Stor grad ○Vet ikke

Q9. I hvilken grad føler du revisor hjelper din organisasjon i å redusere kostnaden forbundet med misligheter? Eksempler på kostnader er tap av eiendeler på grunn av tyveri fra de ansatte og privat bruk av organisasjonens eiendeler.

○Liten grad ○Middels grad ○Stor grad ○Vet ikke

Q10. Sett i alt, hvor fornøyd er du med revisors jobb når det kommer til undersøkelse av potensielle misligheter i ditt firma?

○Liten grad ○Middels grad ○Stor grad ○Vet ikke

En revisjon skal ideelt sett kunne identifisere misligheter som har blitt utført i en organisasjon som blir revidert. Eksempler på misligheter er stjeling fra organisasjonen, privat bruk av organisasjonens eiendeler og uetisk oppførsel.

Q11. Hvis det var opp til deg hva skulle du ønske revisor kunne gjort i henhold til revisjon av misligheter av din organisasjon?

Åpent spørsmål

Appendix 4 - Interview questions

Intervjuspørsmål - Til revisorer (Planlagte spørsmål)

Vi skriver en masteroppgave om i hvilken grad store og små eksterne revisjonsfirmaer klarer å bistå norske organisasjoner de reviderer, med å identifisere og redusere kostnadene som stammer fra misligheter

- Kan du introdusere deg selv? Fortelle litt om erfaring og lignende.
- Hvordan tenker du revisjon som bransje ser på sitt ansvar for å oppdage misligheter ved revisjon?
- Med bakgrunn i din karriere som revisor, er det mye fokus på ISA 240 og brukte du mye tid på å følge denne mens du reviderte?
- Med bakgrunn i at saker med misligheter øker, føler du at bransjen burde ta et større samfunnsansvar med å hjelpe bedrifter å oppdage og redusere misligheter under revisjon? Eller føler du at bransjen gjør nok i dag?
- Basert på din erfaring hvor ofte finner man misligheter
- I hvilken grad føler du at revisor er ansvarlig for å oppdage misligheter under revisjon av organisasjoner?
- Hvilke verktøy blir brukt for å oppdage misligheter under revisjon og hva tenker du er de mest effektive å bruke for å oppdage eller forhindre misligheter
- Hva tenker du er de mest effektive hjelpemidlene for en revisor kan anbefale en organisasjon å bruke for å oppdage eller forhindre fraud?
- Kost/Nytte. Føler du at revisjonen av misligheter kunne vært bedre hvis man hadde hatt ressurser til det?

En revisjon skal ideelt sett kunne identifisere misligheter som har blitt utført i en bedrift som blir revidert. Eksempler på misligheter er stjeling fra bedriften, privat bruk av bedriftens eiendeler og uetisk oppførsel.

Hva gjør du utover det som er lovpålagt for å oppdage misligheter under revisjonen,
og hvis det var opp til deg hva skulle du ønske du kunne gjort i henhold til revisjon av misligheter?

Åpent spørsmål

Spørsmål til intervju 1 (Planlagte spørsmål):

- Kan dere introdusere dere selv? Fortelle litt om erfaring og lignende.
- Hvordan tenker dere revisjon som bransje ser på sitt ansvar for å oppdage misligheter under revisjonen?
- Med bakgrunn i at fraud øker, føler du at bransjen burde ta et større samfunnsansvar med å hjelpe bedrifter å oppdage og redusere misligheter under revisjon? Eller føler dere at de gjør nok med hva dem gjør i dag?
- Tror du/dere at det er mindre saker som angår misligheter i den offentlige sektoren enn den private?
- Er det mye fokus på bruk av ISA 240 blant revisorer som reviderer kommunal sektor?
- Dere holder jo blant annet kurs for medlemmene deres. Så når dere holder kurs for medlemmene deres, har dere mye fokus på å lære revisorer om ISA 240 og viktigheten av denne standarden?
- Hva tenker dere er de mest effektive hjelpemidlene for en organisasjon å bruke for å oppdage eller forhindre fraud?
- Hva tenker dere er de mest effektive hjelpemidlene for en revisor å bruke for å oppdage eller forhindre fraud
- I hvilke grad finner de eksterne revisjonsselskapene misligheter ved revisjon av norske organisasjoner?
- Hvor ofte oppdages det misligheter innenfor den offentlige sektoren?
- Hvilke verktøy blir brukt for å oppdage misligheter under revisjon?
- Hvilke tiltak iverksettes av eksterne revisorer for å hjelpe ledelsen med å oppdage og minimere misligheter, svindel og økonomisk kriminalitet tidlig?

En revisjon skal ideelt sett kunne identifisere misligheter som har blitt utført i en bedrift som blir revidert. Eksempler på misligheter er stjeling fra bedriften, privat bruk av bedriftens eiendeler og uetisk oppførsel.

Hvis det var opp til deg hva skulle du ønske revisor kunne gjort i henhold til revisjon av misligheter?

Åpent spørsmål

Spørsmål til Intervju 2 (Planlagte spørsmål):

- Kan du introdusere deg selv? Fortelle litt om erfaring og lignende.
- Hvordan tenker du revisjon som bransje ser på sitt ansvar for å oppdage misligheter ved revisjon?
- Er det mye fokus på bruk av ISA 240 blant revisorer?
- Dere holder jo blant annet kurs for medlemmene deres. Så når dere holder kurs for medlemmene deres, har dere mye fokus på å lære revisorer om ISA 240 og viktigheten av denne standarden?
- Tror du at det generelle kunnskapsnivået innen ISA 240 er tilfredsstillende?
- Med bakgrunn i at fraud øker, føler du at bransjen burde ta et større samfunnsansvar med å hjelpe bedrifter å oppdage og redusere misligheter under revisjon? Eller føler du at de gjør nok med hva dem gjør i dag?
- I hvilke grad finner de eksterne revisjonsselskapene misligheter ved revisjon av norske organisasjoner?
- Tror du at det er mindre saker som angår misligheter i den offentlige sektoren enn den private?
- Hvilke verktøy blir brukt for å oppdage misligheter under revisjon?
- Hva tenker du er de mest effektive hjelpemidlene for en revisor kan anbefale en organisasjon å bruke for å oppdage eller forhindre fraud?
- Kost/Nytte. Føler du at revisjonen av misligheter kunne vært bedre hvis man hadde hatt ressurser til det?

En revisjon skal ideelt sett kunne identifisere misligheter som har blitt utført i en bedrift som blir revidert. Eksempler på misligheter er stjeling fra bedriften, privat bruk av bedriftens eiendeler og uetisk oppførsel.

Hvis det var opp til deg hva skulle du ønske revisor kunne gjort i henhold til revisjon av misligheter?

Spørsmål til intervju 3 (Planlagte spørsmål):

- Hvor lenge har du jobbet med Fraud?
- Synes du organisasjoner i Norge gjør en god nok jobb med tanke på å sikre seg mot korrupsjon, misligheter og diverse?
- Synes du at revisorer gjør en god nok jobb med tanke på misligheter?

- Når du hjelper bedrifter med rådgivning, har tidligere revisorer foreslått tiltak som bedriften burde sette i gang? I så fall er disse tiltakene tilfredsstillende til å forhindre og avdekke misligheter?
- Hva tenker du er de mest effektive hjelpemidlene for en bedrift å bruke for å oppdage eller forhindre fraud?
- Med bakgrunn i at fraud øker, føler du at revisor burde ta et større samfunnsansvar med å hjelpe bedrifter å oppdage og redusere misligheter under revisjon?

En revisjon skal ideelt sett kunne identifisere misligheter som har blitt utført i en bedrift som blir revidert. Eksempler på misligheter er stjeling fra bedriften, privat bruk av bedriftens eiendeler og uetisk oppførsel.

Hvis det var opp til deg hva skulle du ønske revisor kunne gjort i henhold til revisjon av misligheter?

Appendix 5 - Preliminary thesis

1. Introduction and background

From 2008 to 2018, the average losses from fraud worldwide have increased from 4.57% to 7.15% (Gee & Button, 2019). According to The Association of Certified Fraud Examiners (ACFE) (2021a), 83% of the companies that have been victims of fraud used external audits of financial statements as their primary anti-fraud control. However, external audits stood for only 4% of the detected fraud, while whistle-blowers stood for the most with 43% (ACFE, 2021a). We can see from The ACFE (2021b) report on western Europe that the trends are the same globally. It is worrying that organizations put their trust in audits when they are not the main contributor to the fraud identification. Therefore, we will in this paper investigate how large and small external audit firms assist Norwegian organizations that they audit to identify and reduce the costs originating from fraud.

In 2019 Økokrim, Norway's specialized unit for fighting environmental and economic crime, had more than 11 000 reported cases of potential fraud from accountants, banks, brokers, and others (Amundsen, 2021). However, only 12 of these cases were reported by Økokrim (Bjørnestad & Torset, 2020). Limited capacity is the main reason why Økokrim cannot investigate more cases (Langved et al., 2020). According to Amundsen (2021), fraud investigations in Norway have become more privatized. Several private companies like DNB, KPMG, and BDO offer services of internal control, fraud investigation, and suspicious transactions, among others (BDO, n.d.; DNB, n.d.; KPMG, n.d.). Comparing these companies, Økokrim has 180 employees fighting fraud, while DNB and KPMG have over 400 and 60 employees (Amundsen, 2021). From this, we can see that private companies do more for society than the public body.

Even though several companies like DNB and BDO offer services of fighting fraud and economic crime, auditors are by law obligated to pursue and investigate fraud when they carry out their yearly audits of companies (IFAC, 2004). According to ACFE (2021b), external auditors are the most used anti-fraud control in western Europe. They can, therefore, be seen as the first line of defense against fraud in organizations. However, according to ISA 240 (2004), auditors are not supposed to be the first line of defense against fraud. ISA 240 (2004)

states that those who are charged with governance have the primary responsibility for fraud detection and prevention.

ISA 240 provides auditors guidelines on their responsibility to consider fraud when auditing financial statements. Under IFAC (2004), auditors have several responsibilities. The list of responsibilities when it comes to fraud is long. Some of these are: audit of the financial statement, risk assessment procedures, make inquiries of the management, consider unusual or unexpected relationships, identify and assess the risks of material misstatements due to fraud, response to the risk of material misstatement due to fraud, and evaluation of Audit Evidence. As we can see, an auditor's job with fraud is comprehensive. The standards in ISA 240 are clear in what responsibilities lie on the auditors. However, according to Hodgkinson (2019), audits are not designed to detect fraud and must, therefore, be considered a weakness in the audit process when it comes to detecting and preventing fraud.

There have been several incidents where auditors have not been able to spot fraud due to a lack of routines when it comes to ISA 240. One example is when PWC and BDO were fined for serious violations of hvitvaskingloven when controlled by Finanstilsynet (Solgård & Helle, 2021). Unfortunately, this is only one of many examples where the auditor has not followed ISA 240 properly. For example, EY did not discover a 20 billion scam when not asking for bank statements (Bugge, 2020), KPMG helped their costumer hide hundred of millions of bribery money (Kagge, 2013), and EY got fined by Økokrim for not being able to spot accounting manipulations (Henriksen, 2009).

We can see from the findings above that the management relies on external auditors to identify fraud within the organization. Additionally, external auditors are the final providers in security-control and integrity testing (Lewis, 2017). Lastly, it seems that auditors' routines while auditing regarding ISA 240 is not sufficient. Based on this, it is questionable why auditors miss out on identifying fraud while auditing when the cost of fraud is increasing.

1.1. Economic fraud in Norway today

Fraud is a topic that is getting very little coverage in Norway. A quick google search reveals that there is almost no fraud happening in Norway, with maybe one fraud case coverage a week. According to SSB (2022), Norway has more than 629 000 businesses, where 32,7% of these businesses have employees. If we only consider those businesses with employees, we are left with about 205 000 businesses. PWCs (2020) survey found that 47% of over 5000 respondents have experienced fraud in their company within the last two years. Considering PWCs survey we find it odd that there is not more coverage on fraud cases in Norway.

Økokrim do not release a lot of data on fraud in Norway. We contacted them for data, however, they did not have time to give us some data. Information published by the Norwegian government regarding fraud could be interesting to look at. However, the Norwegian government only releases press statements about fraud happening in other countries with money that Norway has given as aid (Utenriksdepartementet, 2021). It is problematic to research a field and gain knowledge when our government and økokrim, the organization meant to fight fraud, are unwilling to release public knowledge about fraud in Norway.

We know that fraud is happening in Norway, and that it is a problem here as in any other country. Maybe not to the same extent as in Indonesia and Venezuela (MarketWatch, 2015), but that does not mean we can overlook fraud that is happening in Norway. Fraud is not only an economic problem, but it also impacts people, public bodies, and services among others (Cabinet Office, 2020b). Therefore, more publicity about fraud in Norway would most likely be beneficial for everyone, as people would gain an understanding of what is happening and how we can prevent people from committing fraud.

1.2. The purpose of this thesis

As the cost of fraud increases, it is important to look at how well the auditors can assist organizations in identifying these costs. Hodgkinson (2019) states that audits have not been designed to detect and/or prevent fraud. He also states that audits have limitations in terms of only looking at financial statements and internal control. Audits often have standard procedures and are not modified

based on the company or situation under audit. Consequently, the audit testing is predictable as fraudsters are often aware of what is controlled by the auditors (Hodgkinson, 2019).

This study aims to identify the issues relating to the increasing costs of fraud and the extent to which external auditors in Norway assist organizations in identifying these costs. As we have identified, external auditors are the most common anti-fraud control organizations use (ACFE, 2021a). On the other hand, external auditors are not one of the main reasons fraud and economic crime are detected in organizations (ACFE, 2021a). Therefore, we want to see what auditors are doing today to help companies detect and prevent fraud.

1.3 Research question

The overall objective of this paper is to identify to what extent external auditors assist Norwegian organizations in identifying costs of fraud. To answer this, we have come up with the following main and sub-questions:

Main question:

- To what extent do large and small external audit firms assist Norwegian organizations which they audit, to identify and reduce the costs originated from fraud?

Sub-question:

- How is the cost of fraud and economic crime recognized when audits are conducted in Norwegian public and private firms and organizations?
- What measures are taken by the external auditors to assist management to discover and minimize fraud and economic crime early?
- To what extent do the external audit firms find fraud when auditing firms and organizations?

1.4 Structure of the thesis

The rest of the paper will be structured as follows: First, we will introduce the theoretical framework, a literature review over the most relevant theories and findings, terminology, and the research question and hypothesis. Here we will go into detail about different topics, particularly what fraud is, who the fraudsters are, the regulation of fraud, psychology, and previous research within the field. Second, we will describe the methodology we will be using in this paper, which consists of interviews and questionnaires. Third, we provide the findings from our collected data and analyze the data. Lastly, we conclude, where we also recommend what further research should look at and the limitations of this paper.

2. Theoretical framework and literature review

2.1 What is fraud, who commits fraud, and why is it a problem?

Fraud is a term used by many, and there are several different definitions of what fraud is. Samociuk & Iyer (2003, p. 4) defines fraud as "*any deliberate unethical act in business".* Comer (1998, p. 9) defines it as "*Any behaviour by which one person gains or intends to gain a dishonest advantage over another*", and the Australian Governement (2017, p. B1) defines it as "*dishonestly obtaining a benefit, or causing a loss, by deception or other means*". We are writing this paper with ISA 240 as a framework, and we will use the standards definition of fraud:

> "*...an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage"*. (IFAC, 2004, p. 271)

From the definition, we see that fraud is done by any individual in a firm, not just the management and that fraud is not just one specific action. ISA 240 differentiates between fraud done by management, management fraud, and fraud that involves employees, employee fraud. The standard does not elaborate much on the advantages fraudsters obtain by committing fraud. However, it describes why some people may commit fraud which could be to reduce pressure from sources inside or outside the entity or achieve earnings targets (IFAC, 2004).

Additional factors can be living beyond means, financial difficulties, and family problems (ACFE, 2021b).

IAS 240 describes a person who commits fraud as an individual who "...*possess an attitude, character or set of ethical values that allow them knowingly and intentionally to commit a dishonest act"* (IFAC, 2004, p. 273). The description is vague and nearly impossible to spot in real-life interaction. KPMG (2016) states that a typical person that commits fraud is a person who is between 36 and 45 years old, acts against their own entity, and is often employed in executive, finance, or sales/market function. This person has a senior management position and has worked in the entity for more than six years. What is interesting and important is that the type of fraud committed and the types of fraudsters are changing continuously (KPMG, 2016). One such change is the increased usage of technology by those who commit fraud. The increased use of technology in our modern society invites new ways to commit fraud and makes discovering fraud even more challenging. In contrast, PWC (2014) states that a typical fraudster is a male, between 31 and 40 years old, and has worked in the company for 3-5 years. Additionally, PWC (2016) states that the typical fraudster is becoming older and more experienced. Looking at the report from PWC in 2016 and KPMG in 2016, we see that this is the case. Lastly, ACFE (2021b) states that men have the overwhelming majority of the fraud cases with 73%.

According to ACFE (2021b), employees commit the most fraud in western Europe with 45% of the cases, managers with 33%, and owner/executives with 17%. What is interesting though, is the median loss for the three different groups. Employees account for a median loss of $100,000, managers for $150,000, and owner/executives for $1,350,000. Additionally, on a global level, 41% of the employees who commit fraud have been employed in the entity for six or more years, and in 70% of the fraud cases, there has been collusion (KPMG, 2013). The most common type of fraud is misappropriation of assets (56% on a global level and 82% in western Europe), corruption, financial statement fraud, and revenue/assets gained from illegal acts are other often used types (ACFE, 2021b; KPMG, 2013).

The question is, why should we care about the cost of fraud? Audit firms can suffer big reputational hits if it becomes public knowledge that one of their clients have financial reports that are misstated (Hribar et al., 2014). Enron and Arthur Anderson is a good example of where faulty accounting led to the downfall of the world's biggest audit company at the time. Using more time to detect fraud in the financial statements will help the audit firms to save high litigation costs from lawsuits (Hribar et al., 2014; Kassem & Higson, 2012). Therefore, audit firms have an incentive to put more effort into fraud investigation.

We have chosen to split the reason for why fraud is a problem into three levels, organization, country and global. The reason fraud is a problem is built on the foundation that fraud, in common with some other criminal acts, is deliberate and involves deception, and it gives the victim a loss (Jones & Tickner, 2004).

On an organizational level, the loss of fraud is typically 5-7 percent of annual revenue (Samociuk & Iyer, 2010). However, historically we have also seen that companies have gone from being multi-million businesses to worth nothing as a consequence of fraud. Examples of companies that have filed for bankruptcy as a consequence of fraud are Enron in 2008 and WorldCom in 2002 (Olya, 2021).

Fraud will also affect the commonwealth in all areas of business on a country level, including benefits, taxation, procurement, grants, and internal procedures (Australian Government, 2017). According to the Australian Government (2017), a conservative estimate of the cost of fraud for Australians is over $1 billion a year. The cost of fraud reduces the amount of funds available for public goods and services. Further, it also undermines public confidence in the government and creates public health and safety risks (Australian Government, 2017).

Globally, according to ACFE (2021a), fraud has caused a total loss of more than $3.6 billion, and each case has an average loss of approximately $1.5 million. To relate, David Beasley, head of the U.N. food agency, stated that $6 billion would save 42 million lives from experiencing famine (Lu, 2021).

2.2 Regulation of fraud

When it comes to fraud, there are varying perceptions of what kind of assurance could be expected from auditors (Kassem & Higson, 2012). The difference in perception of the auditors' responsibilities is known as the audit expectation gap. This gap shows the difference in what is expected from the public or the financial statements users and what is actually received (Alleyne & Howard, 2005; Gay et al., 1998; Geiger, 1994; Humphrey et al., 1993; Koh & Woo, 1998; Monroe & Woodliff, 1993; Porter, 1993).

According to Kassem and Higson, "*financial statements users believe auditors are responsible for detecting and preventing fraud, however in fact the responsibility of fraud detection lies upon management and not external auditors*" (2012, p. 284). A proof of this belief is that 83% of the companies that have been victims of fraud used external audits of financial statements as their primary anti-fraud control. However, external audits stood for only 4% of the detected fraud (ACFE, 2021a). External auditors are responsible for planning and performing the audit and to obtain reasonable assurance that the financial statements are free of material misstatements (SAS No.1, 1997). As we observe from this, the auditors are not directly responsible for detecting all the fraud in an organization. However, they are responsible for detecting the material misstatements arising from fraud (Kassem & Higson, 2012).

According to Kassem and Higson (2012), the main reason for these differences in perception is that the role of audit throughout history has not been well defined. An attempt to narrow down the audit expectation gap is that "*audit standards setters issued a number of standards that directly address the boundaries of external auditors responsibility for fraud detection*" (Kassem & Higson, 2012, p. 284).

Regulation of fraud started in the early 19th century where auditors had the responsibility to provide "*absolute assurance against fraud and intentional mismanagement*" (Kassem & Higson, 2012, p. 284). Throughout the last 100 years, there have been issued several standards on external auditors' responsibility for fraud. Among them, we find SAS No.53 (1988), SAS No.82 (1997), and SAS No.99 (2002) (Kassem & Higson, 2012). Each standard clarifies and corrects previous errors and gives the auditor a clearer role in which actions are needed

under the audit of a firm. The most recent and up-to-date standard that has been issued is ISA 240 (2004), which we will use as a framework in this paper. The purpose of the standard is to "*provide guidance on the auditor's responsibility to consider fraud in an audit of financial statements…*" (IFAC, 2004, p. 1). There are certain elements from this standard that we believe are key to knowing when it comes to fraud. We have under-created a table with these elements.

Subject	**Description**
Fraud	Two types of fraud: misstatements from misappropriation of assets and misstatements from fraudulent reporting
Professional Scepticism	Auditors must think that there is always a possibility of fraud even though the company has a good reputation for being nice
Collect information	Auditors are required to perform procedures to assess the risk of fraud in the company, identify and assess any risk related to material misstatement due to fraud, and evaluate risks that may result in material misstatements
Risk of material misstatement	If there is a risk of material misstatement due to fraud in the financial statements, the audit should determine an overall response to address these risks, and additionally, design and perform more audit procedures that responds well to the identified risk
Occurrence of fraud	The auditor does not determine if fraud has occurred. However, they are responsible for correcting any identified fraud that relates to material misstatements in the financial statements
Prevention and detection of fraud	Those charged with governance and the management are responsible for preventing and detecting fraud. Those charged with governance have the responsibility of establishing and maintaining the internal control
Reasonable assurance	The auditor is required to obtain reasonable assurance so that the financial statements are free of any material misstatements. It is important to assess the reliability of the information given. If the auditor has any suspicion about the documents, e.g., not being authentic or have been modified, the auditor must investigate this further by, for example, confirming with a third party

We must distinguish fraud from error. Fraud is an intentional act, while error is an unintentional act (IFAC, 2004). Fraud was defined over. An error can be an incorrect accounting estimate, a mistake when gathering or processing data, or applying the incorrect accounting principles related to classification, disclosure, measurement, recognition, or presentation (IFAC, 2004).

ACFE has identified three primary categories of fraud which are 1) asset misappropriations, 2) corruption schemes, and 3) financial statement fraud schemes (Zager et al., 2016). ISA 240 differentiates between two intentional misstatements types, and these are "*misstatements resulting from fraudulent financial reporting and misstatements resulting from misappropriation of assets*" (IFAC, 2004, p. 271). Asset misappropriation is stealing or misuse of an entity's resources which often happens in small amounts, embezzling receipts, and making the entity pay for goods or services that have not been received (IFAC, 2004; Zager et al., 2016). Asset misappropriation is often accompanied by records and documents which are false or misleading (IFAC, 2004). Fraudulent financial reporting often involves override of some of the controls by the management. Techniques that may be used are recording fictitious journal entries, advancing or delaying recognition, not disclosing facts that would have impacted the amounts recorded, and altering records (IFAC, 2004). Earnings management is another example of fraudulent financial reporting where the goal is to deceive its users. However, this topic has mixed views where some believe it is allowed and others see it as fraud (Kassem, 2012). Additionally, Kassem (2017) found that external auditors spend more time on financial report fraud than any other type of fraud.

2.3 Fraud psychology

Fraud, like any crime, can be explained by three factors: motivated offenders, suitable targets, and absence of capable guardians against a violation (Cohen & Felson, 1979; Duffield & Grabosky, 2001). Further, fraud involves an incentive to commit fraud, a perceived opportunity, and rationalization of the act (IFAC, 2004). The fraud triangle is a model used to explain why someone is willing to commit fraud. The triangle consists of three components where all three must be present for fraud to occur (Cressey, 1953). The three elements are perceived opportunity, perceived pressure, and rationalization. For a person to undergo

fraud, he/she must see an opportunity to gain something, there must be an incentive/pressure to do so, and the person must either be able to neutralize his/her moral values or possess an attitude, characters, or ethical values that allow this individual to commit a dishonest act (IFAC, 2004). Appendix 1 in ISA 240 shows a comprehensive list of examples regarding the fraud triangle's three elements related to fraudulent financial reporting and misappropriation of assets.

The fraud triangle is just one of many theories/models on why people commit crimes. Sutherland's (1947) theory of differential association explains the drivers of why a person commits crimes. The theory argues that criminal behavior is learned via interaction, and most of this learning happens via close and personal groups. Further, the theory explains that an individual will engage in criminal activity if the perceived rewards for breaking the law exceed the reward for following the law (Sutherland, 1947). Sykes & Matza's (1957) neutralization theory suggests that people must find a way to neutralize their shame if they are to undergo a criminal act. An individual must be able to find excuses and justify his/her dishonest acts (Kvalnes, 2019). Albrecth et al., (1984) found ten personal characteristics that were common among fraudsters. Among them, we have: Living beyond one's means, an overwhelming desire for personal gain, high personal debt, excessive gambling habits, pressure from family and peers, lack of recognition for his/her job performance, and an urge to beat the system. Albrecth et al., (1984) study concluded that perceived opportunity, situational pressure, and the person's level of integrity are the main elements of fraud. Individuals who commit fraud are often affected by their personality, environment, and situational variables (Duffield & Grabosky, 2001). Every individual will react and behave differently in the same environment. Further, disliking and having little respect for your victim will make it easier to treat and act dishonestly towards them (Duffield & Grabosky, 2001).

To this day, behavioral scientists have not managed to create a set of characteristics that defines a fraud perpetrator (Ramamoorti, 2008). However, two characteristics that are often used in the literature to describe those who commit fraud are greed and dishonesty. Ramamoorti (2008) suggests solutions to reduce the risk of fraud. Among these solutions, we find: having a sound tone at the top level, a culture with integrity and ethics, background checks on new employees,

swift and decisive handling of incidents of fraud to set an example, and fraud awareness training.

2.4 Previous results

There is little research on external auditors and fraud in Norway. Therefore, we need to look globally and see if there are any important findings and results that can add further knowledge to our paper. From the literature, it is agreed that the more experience an auditor has, the more likely it is for this person to detect fraud (Moyes & Hasan, 1996; Owusu-Ansah et al., 2002). Additionally, the likelihood of detecting fraud increases when an audit firm employs more staff (Owusu-Ansah et al., 2002) and as the audit organization gains more experience with detecting fraud (Moyes & Hasan, 1996). Further, Mahami & Mouloudj (2020) study confirmed that external auditors specialized within an industry and with an ethical commitment are more likely to detect manipulation in financial statements.

Auditors in Barbados gave suggestions from their own experience on why people commit fraud (Alleyne & Howard, 2005). Among them, we find the moral values of individuals, maintaining an increasing social status, unhappy with their job, increasing debt, and the thought of not being caught. On the other hand, auditors in Egypt suggested that bonuses, securing financing, concealing financial distress, and avoiding bankruptcy were the main reasons for committing fraud (Kassem, 2018). Additionally, Kassem (2018) found that fraud related to bonuses and remuneration that were linked to financial targets was most likely to happen in large and listed companies. Further, tax avoidance is more likely to happen in family-owned and small businesses (Kassem, 2018).

There exist several ways and tools to make auditors and people pay attention to fraud. A common way to identify fraud is to look at red flags (Kassem, 2014; Smith et al., 2005). Kassem (2014) created a framework consisting of several red flags that relates to asset misappropriation and what appropriate audit procedures should be conducted. A red flag from her paper is if the cost of goods sold has increased more relative to the sales. An appropriate procedure to perform would be to review the purchase levels and compare them with previous years and

industry (Kassem, 2014). Smith et al., (2005) tested 25 different red flags based on their perceived importance by auditors. 7 of the 25 were deemed important. Among them, we find: management fails to display a good attitude towards internal controls, high dependence on debt, pressure to obtain capital, positive earnings but negative earnings, and threat of bankruptcy. Gonzales & Hoffman (2018) suggest that implementing a strong internal control reduces the perceived opportunity of committing fraud and continuous auditing as a tool to reduce fraud. Dimitrijevic et al., (2020) say that in-depth tests and sampling tests of transactions are the most effective tests for detecting distortions in the financial statements.

An interesting topic is the difference between small and large audit firms. Large audit firms invest heavily in their employees through learning courses, auditing quality and technology, robots, and AI (Deloitte, 2017; EY, n.d.; PWC, 2019; Walters, 2019). One of the reasons for the heavy investment is to be an attractive and innovative firm, and give proper guidance on how to find fraud so they can avoid reputational costs if one of their auditors has failed to discover fraud. Previous research has found that clients of the big six (now the big four) audit firms are less likely to commit fraudulent activities (Carcello & Nagy, 2004). Additionally, Carcello & Nagy (2004) found that firms who commit fraud are more likely to be audited by a non-big four auditor. The same auditors concluded that the big four do an overall better job when it comes to fraud.

2.5 Hypothesis

Based on what we have found and written over, we have come to the three following hypotheses which we want to test in this research paper:

Based on the paper from Carcello & Nagy (2004) and their findings of the big four auditing firms, we want to test if large audit firms in Norway do a better job auditing their clients than smaller firms. Therefore, we have the following hypothesis:

> **H1:** *There are more cases of fraud in businesses audited by smaller auditing companies versus large auditing companies*

There exist both private and public auditing firms in Norway. Public auditing firms are dedicated to auditing communal businesses, while private audit firms audit mainly private companies but also audits communal businesses. Therefore, it would be interesting to look into the differences between these two types of auditing firms, and we want to test the following hypothesis:

> **H2:** *There is a difference in the fraud detection rate between private and public auditing firms, and there are more fraud cases in private than communal businesses.*

The main purpose of this paper is to test whether Norwegian auditors help Norwegian firms to detect and prevent fraud. We have the following hypothesis to answer this question.

H3: *Norwegian auditors do help Norwegian businesses with detecting and preventing fraud*

3. Methodology

In this section, we are going to elaborate on our research methodology. Methodology can be defined as "*the theory of how research should be undertaken*" (Saunders et al., 2019, p. 4). In other words, we are going to elaborate on how we are going to answer our research question. To do this, we are going to propose a research design we believe is the most relevant for our research. Further, we will elaborate on how we can test and control our research for biases, validity, and reliability.

3.1 Research design

Research design is a plan that sets forth how the research question will be answered (Saunders et al., 2019). Saunders et al., define research design as a "*Framework for the collection and analysis of data to answer research questions and meet research objectives providing reasoned justification for choice of data sources, collection methods and analysis techniques*" (2019, p. 815).

Our research question will be answered with a combination of quantitative and qualitative research. Quantitative research can be referred to as a set of assumptions, techniques, and strategies that are used to study economic, psychological, and social processes through the use of numeric patterns (Coghlan & Brydon-Miller, 2014). Qualitative research is a process that seeks to gain an in-depth understanding of different social phenomena within their respective natural settings. Qualitative research uses experiences from human beings to understand why something happens in different social phenomena. (University of Utah College of Nursing, n.d.). The reason we want to answer our research question by using both qualitative and quantitative research is to be able to get the aspects from both interviews and questionnaires. The aspect we want to achieve is to use qualitative research to gain an understanding of underlying reasons and motivation while using quantitative research to quantify behavior (DeFranzo, 2011).

Our study aims to investigate to what extent external audit firms assist Norwegian organizations which they audit, to identify and reduce the costs originated from fraud. When answering this research question, we will focus on both large and small audit firms and the organizations they audit.

We found that there is a knowledge gap in Norwegian literature, as there is no research on our subject in Norway. To try to fill this gap, we are going to use research interviews and questionnaires to answer our research question. The most used methods in previous research are questionnaires (the most dominant research type in this field of research) and face-to-face interviews (Alleyne & Howard, 2005; Kassem, 2017; Mahami & Mouloudj, 2020; Owusu-Ansah et al., 2002; Smith et al., 2005). The advantage of questionnaires is that we can collect and standardize quantitative data. It is also inexpensive and takes little time to complete (Roopa & Menta Satya, 2012)**.** The advantages of face-to-face interviews are that it allows us to collect more in-depth data, gives us a comprehensive understanding of a social phenomenon, and we can ask follow up questions to the participants (Marshall, 2016).

3.1.1 Research interviews

A research interview is defined as "*a purposeful conversation between two or more people, during which the interviewer asks concise and unambiguous questions and listens attentively to the interviewee talking*" (Saunders et al., 2019, p. 434). There are several different types of research interviews, but we have chosen to use semi-structured interviews. Semi-structured interviews consist of a sequence of open-ended questions that allow the interviewee and interviewer to discuss several topics in more detail (Mathers et al., 1998).

We have chosen to conduct semi-structured interviews because this type of interview is useful when we are doing explanatory research and because there is limited information about fraud in Norway (Mathers et al., 1998). Further, we also want to have the freedom to elaborate on the original response or follow a line of inquiry introduced by the interviewee.

3.1.2 Questionnaires

In addition to our interviews, we will use two different questionnaires. A questionnaire is defined as "*a list of mimeographed or printed questions that is completed by or for a respondent to give his opinion*" (Roopa & Menta Satya, 2012, p. 273). Further, according to Roopa and Menta Satya (2012), a questionnaire is the main tool used to collect quantitative primary data. As with interviews, there are several types of questionnaires. We have chosen to use a combination of open and closed questions. Open questions allow the respondent to reply in their own words without any constraints by fixed answers (Roopa & Menta Satya, 2012). In contrast, closed questions are quicker and easier to both answer and compare, as the answers are predetermined (Saunders et al., 2019). We have chosen to use a combination of open and closed questions, because of the extra data we can get by the open questions and being able to compare the key questions by using closed questions.

One of the questionnaires will be addressed to public and private auditors, while the second questionnaire will be addressed to public and private organizations.

With this, we want to capture both the auditors' and the organization's perspectives of our research question.

3.2 How to test for validity and reliability

We need to keep in mind several criteria when assessing the quality of the research design. These include transferability, credibility, validity, and reliability (Saunders et al., 2019). Two central criteria which are important to consider in qualitative research are reliability and validity.

We are in this paper going to use the validity and reliability definitions by Saunders et al., and validity is defined as the "*Extent to which data collection method or methods accurately measure what they were intended to measure*" (2019, p. 820)**.** While reliability is the "*Extent to which data collection technique or techniques will yield consistent findings, similar observations would be or conclusions reached by other researchers or there is transparency in how sense was made from the raw data"* (2019, p. 815). Using these definitions, validity, and reliability can be observed as dependent on each other when considering how well a method measures something that is investigated (Middleton, Fiona, 2019b, 2019a).

According to Chung (2019), when collecting data by using a survey, unreliable survey feedback is mainly caused by biased survey questions. Last (2001) defines bias as a "*deviation of results or inferences from the truth, or processes leading to such a deviation.*" Survey questions are biased when the questions lead the responders toward a certain answer. Examples of biased questions are leading and assumptive questions (Chung, 2019). Other ways that can bias our research is how we design, administer and complete our questionnaire as a whole (Choi & Pak, 2004). When we are creating our questionnaire, we have to consider how these biases will affect the reliability of our research.

Interviewer bias is defined as "*a distortion of response related to the person questioning informants in research. The interviewer's expectations or opinions may interfere with their objectivity or interviewees may react differently to their personality or social background. Both mistrust and over-rapport can affect*

outcomes" (Oxford Reference Database, n.d.). We can split the biases that affect interviews to collect data into two groups. First are actions and behavior made by the interviewer, which could be using certain language, phrases, or leading questions. Second, a prejudiced perspective on data from interviews could be dismissing a person or data from interviews (Interviewerr, 2019). As we can see, it is crucial for good research to control biases so they do not affect the validity and reliability of the research.

4. Plan for data collection and analysis (That also complies with legal and ethical regulations - NSD)

January	Get the questionnaire and interview questions approved
February	Send out the questionnaires Contact those who have agreed to be interviewed and make arrangements for when the interviews can be completed
Mars	Finish the rest of the interviews if any is remaining Start to analyze the data collected from the interviews and questionnaires
April	Continue to analyze the data, sort it, and start a draft of the analysis and findings section in our master thesis rapport
May	Continue the writing and possible finish these sections
June	Finish the master thesis

In our research, the target groups for our surveys will be auditors and the organizations they audit. This is because we want to see how familiar auditors are with ISA 240 and their responsibilities of preventing and detecting fraud while auditing. To get an additional view on our research question we also want to see the organizational perspective of how they feel the auditors help to detect fraud while auditing.

As mentioned earlier we want to conduct semi-structured interviews. We have been in contact with several auditors, fraud experts, Revisorforeningen and Norges Kommunerevisorforbund. Here we want to conduct interviews to be able

to do explanatory research. Additionally, we believe that these people and groups can give us valuable information about auditors and fraud in Norway.

For our questionnaires we are going to use a combination of open and closed questions so we are able to compare the key questions and the extra data open questions will give. We are making one online questionnaire for auditors and one for the organizations.

To analyze our data we are in our questionnaire trying to ask the auditors questions that will reveal how much knowledge they have about ISA 240. Our method of analysis will consist of linear regression and, if possible, we are also going to conduct logistic regression analysis. We will use STATA and/or R to analyze this data. To analyze the data from our interviews we will use either thematic analysis and/or template analysis (We would like your opinion on this).

Bibliography

ACFE. (2021a). *Report to the Nations | 2020 Global study on occupational fraud and abuse* (No. 11; p. 88). https://acfepublic.s3-us-west-2.amazonaws.com/2020-Report-to-the-Nations.pdf

ACFE. (2021b). *Report to the Nations | 2020 Global study on occupational fraud and abuse | Western Europe Edition* (p. 21). https://www.acfe.com/report-to-the-nations/2020/docs/RTTN-Western%20Europe-final.pdf

Albrecht, S. W., Howe, K. R., & Romney, M. B. (1984). *Deterring fraud: The internal auditor`s perspective.* Inst of Internal Auditors.

Alleyne, P., & Howard, M. (2005). An exploratory study of auditors' responsibility for fraud detection in Barbados. *Managerial Auditing Journal*.

Amundsen, B. (2021). *Politiet overlater etterforskningen av økonomisk kriminalitet til de mistenkte*. https://forskning.no/a/1841798

Australian Government. (2017). *Commonwealth Fraud Control Framework 2017*. Attorney-General`s Department.

BDO. (n.d.). *Risikostyring*. https://www.bdo.no/nb-no/tjenester/risikostyring

Bjørnestad, S., & Torset, N. S. (2020). *Økokrim fikk 11.500 varsler om hvitvasking. Det førte bare til 12 anmeldelser.* Aftenposten. https://www.aftenposten.no/okonomi/i/nAgPwm/2020-blir-et-rekordaar-for-varsling-til-oekokrim

Bugge, W. (2020, June 26). *Wirecard-revisor i trøbbel for å ikke ha avdekket milliardsvindelen*. Www.Dn.No. https://www.dn.no/wirecard/kpmg/apas/wirecard-revisor-i-trobbel-for-a-ikke-ha-avdekket-milliardsvindelen/2-1-833966

Cabinet Office. (2020b). *International Public Sector Fraud Forum guidance*. GOV.UK. https://www.gov.uk/government/publications/international-public-sector-fraud-forum-guidance

Carcello, J. V., & Nagy, A. L. (2004). Client size, auditor specialization and fraudulent financial reporting. *Managerial Auditing Journal*.

Choi, B. C. K., & Pak, A. W. P. (2004). A Catalog of Biases in Questionnaires. *Preventing Chronic Disease*, *2*(1), A13.

Chung, L. (2019). Avoiding biased questions: 7 examples of bad survey questions. *Delighted*. https://delighted.com/blog/biased-questions-examples-bad-survey-questions

Coghlan, D., & Brydon-Miller, M. (2014). *The SAGE encyclopedia of action research (Vols. 1-2)*. https://doi.org/10.4135/9781446294406

Cohen, L. E., & Felson, M. (1979). Social Change and Crime Rate Trends: A Routine Activity Approach. *American Sociological Review*, *44*(4), 588–608. https://doi.org/10.2307/2094589

Comer, M. J. (1998). *Corporate fraud*. Gower Publishing, Ltd.

Cressey, D. R. (1953). *Other people's money; a study of the social psychology of embezzlement.* (p. 191). Free Press.

DeFranzo, S. E. (2011). Difference between qualitative and quantitative research. *Snap Surveys Blog*. https://www.snapsurveys.com/blog/qualitative-vs-quantitative-research/

Deloitte. (2017). *Deloitte announces US$200 million strategic investment in China | Deloitte China | Press release*. Deloitte China. https://www2.deloitte.com/cn/en/pages/about-deloitte/articles/pr-deloitte-announces-us200-million-strategic-investment-in-china.html

Dimitrijevic, D., Jovkovic, B., & Milutinovic, S. (2020). The scope and limitations of external audit in detecting frauds in company's operations. *Journal of Financial Crime*.

DNB. (n.d.). *Anti-hvitvasking arbeid og bekjempelse av terrorfinansiering—DNB*. https://www.dnb.no/om-oss/samfunnsansvar/Okonomisk-kriminalitet/anti-hvitvasking-og-terrorfinansiering.html?

Duffield, G., & Grabosky, P. (2001). The psychology of fraud. *Trends and Issues in Crime and Criminal Justice*, *199*, 1–6.

EY. (n.d.). *Teknologikarriere i EY*. https://www.ey.com/no_no/careers/technology

Gay, G., Schelluch, P., & Baines, A. (1998). Perceptions of messages conveyed by review and audit reports. *Accounting, Auditing & Accountability Journal*.

Gee, J., & Button, P. M. (2019). The Financial Cost of Fraud 2019. *Crowe*, 28.

Geiger, M. A. (1994). Investor views of audit assurance: Recent evidence of the expectation gap. *Journal of Accountancy*, 60.

Gonzalez, G. C., & Hoffman, V. B. (2018). Continuous auditing's effectiveness as a fraud deterrent. *Auditing: A Journal of Practice & Theory*, *37*(2), 225–247.

Henriksen, Ø. (2009). *Ernst & Young får bot fra Økokrim*. https://e24.no/i/4d4nn9

Hodgkinson, A. (2019). Why Auditors Rarely Find Fraud. *The Protiviti View*. https://blog.protiviti.com/2019/04/04/why-auditors-rarely-find-fraud/

Hribar, P., Kravet, T., & Wilson, R. (2014). A new measure of accounting quality. *Review of Accounting Studies*, *19*(1), 506–538.

Humphrey, C., Moizer, P., & Turley, S. (1993). The audit expectations gap in Britain: An empirical investigation. *Accounting and Business Research*, *23*(sup1), 395–411.

IFAC. (2004). International Standard on Auditing (ISA) 240 (Revised). *The Auditor's Responsibility to Consider Fraud in an Audit of Financial Statements*.

Interviewerr. (2019). *Interviewer Bias In User Research & Steps To Conquer It*. Interviewerr. https://www.interviewerr.com/interviewer-bias/

Jones, P. C., & Tickner, P. (2004). *Fraud and corruption in public services: A guide to risk and prevention*. Gower Publishing, Ltd.

Kagge, G. (2013). *Revisor hjalp med korrupsjon*. https://www.aftenposten.no/norge/i/ngzPa/revisor-hjalp-med-korrupsjon

Kassem, R. (2012). Earnings management and financial reporting fraud: Can external auditors spot the difference? *American Journal of Business and Management*, *1*(1), 30–33.

Kassem, R. (2014). Detecting asset misappropriation: A framework for external auditors. *International Journal of Accounting, Auditing and Performance Evaluation*, *10*(1), 1–42.

Kassem, R. (2017). Exploring external auditors' perceptions of the motivations behind management fraud in Egypt–a mixed methods approach. *Managerial Auditing Journal*.

Kassem, R. (2018). Exploring external auditors' perceptions of the motivations behind management fraud in Egypt–a mixed methods approach. *Managerial Auditing Journal*.

Kassem, R., & Higson, A. (2012). Financial reporting fraud: Are standards' setters and external auditors doing enough? *International Journal of Business and Social Science*, *3*(19), 283–290.

Koh, H. C., & Woo, E. (1998). The expectation gap in auditing. *Managerial Auditing Journal*.

KPMG. (2013). *Global profiles of the fraudster*. 28.

KPMG. (2016). *Global profiles of the fraudster*. 28.

KPMG. (n.d.). *Gransking og forebyggende tjenester—KPMG Norge*. KPMG. https://home.kpmg/no/nb/home/tjenester/radgivning/gransking-og-forebyggende-tjenester.html

Kvalnes, Ø. (2019). *Moral Reasoning at Work: Rethinking Ethics in Organizations*. Cham: Springer International Publishing AG.

Langved, Å., Klevstrand, A., & Trumpy, J. (2020). *Tidligere antihvitvaskingssjef i DNB: – Det er ikke noen vits i å ringe Økokrim*. Www.Dn.No. https://www.dn.no/kriminalitet/hvitvasking/okokrim/dnb/tidligere-antihvitvaskingssjef-i-dnb-det-er-ikke-noen-vits-i-a-ringe-okokrim/2-1-737499

Last, J. M. (2001). RE:"A dictionary of epidemiology, edited by john m. Last, robert a. Spasoff, and susan g. Harris". *American Journal of Epidemiology*, *154*(4), 389–389.

Lewis, K. (2017). Chapter 38—Security Certification and Standards Implementation. In J. R. Vacca (Ed.), *Computer and Information Security Handbook (Third Edition)* (pp. 557–563). Morgan Kaufmann. https://doi.org/10.1016/B978-0-12-803843-7.00038-7

Lu, J. (2021, November 11). How $6 billion from Elon Musk could feed millions on the brink of famine. *NPR*. https://www.npr.org/sections/goatsandsoda/2021/11/11/1052719247/how-6-billion-from-elon-musk-could-feed-millions-on-the-brink-of-famine

Mahami, Z., & Mouloudj, K. (2020). *Factors affecting detection of manipulation in financial statements: An empirical study from auditors' perspective*.

MarketWatch. (2015). *Countries with the most and least online fraud*. MarketWatch. https://www.marketwatch.com/story/countries-with-the-most-and-least-internet-fraud-2015-06-03

Marshall, C. (2016). *Face-to-Face Interviews—Advantages and Disadvantages*. https://www.linkedin.com/pulse/face-to-face-interviews-advantages-disadvantages-charlie-marshall/

Mathers, N., Fox, N., & Hunn, A. (1998). *Using Interviews in a Research Project*. 34.

Middleton, Fiona. (2019a). *The four Types of Validity*. Scribbr. https://www.scribbr.com/methodology/types-of-validity/

Middleton, Fiona. (2019b). *Types of reliability and how to measure them*. Scribbr. https://www.scribbr.com/methodology/types-of-reliability/

Monroe, G. S., & Woodliff, D. R. (1993). The effect of education on the audit expectation gap. *Accounting & Finance*, *33*(1), 61–78.

Moyes, G. D., & Hasan, I. (1996). An empirical analysis of fraud detection likelihood. *Managerial Auditing Journal*.

Olya, G. (2021). *Enron and the 24 Other Most Epic Corporate Downfalls of All Time*. GOBankingRates. https://www.gobankingrates.com/money/business/most-epic-corporate-downfalls/

Owusu-Ansah, S., Moyes, G. D., Oyelere, P. B., & Hay, D. (2002). An empirical analysis of the likelihood of detecting fraud in New Zealand. *Managerial Auditing Journal*.

Oxford Reference Database. (n.d.). *Interviewer bias*. Oxford Reference. https://doi.org/10.1093/oi/authority.20110803100008737

Porter, B. (1993). An empirical study of the audit expectation-performance gap. *Accounting and Business Research*, *24*(93), 49–68.

PWC. (2014). *Global economic crime survey 2014*. https://www.pwc.com/cz/en/hospodarska-kriminalita/assets/pdf/global-economic-crime-survey-2014-en.pdf

PWC. (2016). *Global Economic Crime Survey 2016: UK report*. 11.

PWC. (2019). *PwC network invests $3bn globally in digital training and technology to support clients and communities*. 2.

PWC. (2020). *Fighting fraud: A never-ending battle*. 14.

Ramamoorti, S. (2008). *The Psychology and Sociology of Fraud: Integrating the Behavioral Sciences Component Into Fraud and Forensic Accounting Curricula* (Vol. 23, pp. 521–533).

Roopa, S., & Menta Satya, R. (2012). Questionnaire Designing for a Survey. *The Journal of Indian Orthodontic Society*, *46*, 37–41. https://doi.org/10.5005/jp-journals-10021-1104

Samociuk, M., & Iyer, N. (2003). *Fraud resistance; A Practical Guide*. Standards Australia International Limited.

Samociuk, M., & Iyer, N. K. (2010). *A short guide to fraud risk: Fraud resistance and detection*. Gower Publishing, Ltd.

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (Eighth Edition). Pearson.

Smith, M., Omar, N. H., Idris, S. I. Z. S., & Baharuddin, I. (2005). Auditors' perception of fraud risk indicators: Malaysian evidence. *Managerial Auditing Journal*.

Solgård, J., & Helle, B. T. (2021, March 22). *Revisorgigantene PwC og BDO får milliongebyr for brudd på hvitvaskingsregelverket*. Www.Dn.No. https://www.dn.no/marked/revisorgigantene-pwc-og-bdo-far-milliongebyr-for-brudd-pa-hvitvaskingsregelverket/2-1-984566

SSB. (2022). *Virksomheter*. SSB. https://www.ssb.no/virksomheter-foretak-og-regnskap/virksomheter-og-foretak/statistikk/virksomheter

Sutherland, E. (1947). *Principles of Criminology*. PA: J.B. Lippincott Company.

Sykes, G. M., & Matza, D. (1957). Techniques of Neutralization: A Theory of Delinquency. *American Sociological Review*, *22*(6), 664–670. https://doi.org/10.2307/2089195

University of Utah College of Nursing. (n.d.). *What is qualitative research? [Guide]*. https://libguides.uta.edu/quantitative_and_qualitative_research/qual

Utenriksdepartementet. (2021, September 30). *Rapporter om økonomiske mislighetssaker* [Rapport]. Regjeringen.no; regjeringen.no. https://www.regjeringen.no/no/dokumenter/rapporter_oversikt/id2395346/

Walters, M. (2019). *KPMG expects to invest US$5 billion on digital leadership in professional services—KPMG Global*. KPMG. https://home.kpmg/xx/en/home/media/press-releases/2019/12/kpmg-expects-to-invest-5-billion-on-digital-leadership-in-professional-services.html

Zager, L., Malis, S. S., & Novak, A. (2016). The role and responsibility of auditors in prevention and detection of fraudulent financial reporting. *Procedia Economics and Finance, 39*, 693–700.