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Do Individual Audit Partner Attributes Affect the Quality of Key Audit Matter Disclosures?

An empirical study of the relationship between the individual auditor and key audit matter disclosures.

Masteroppgave i Regnskap og Revisjon
Veileder: Anders Berg Olsen
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Norges teknisk-naturvitenskapelige universitet
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Kunnskap for en bedre verden

Preface

This master thesis was prepared in the final semester of the master's program in Accounting and Auditing at the Norwegian University of Science and Technology, School of Business. We are proud to submit this thesis as a completion of a five-year academic journey.

The process has been exciting, informative, and challenging. We have had the opportunity to explore a specific aspect of auditing that has provided valuable insights. As a result, we have gained a solid understanding of the role of auditors, which will be beneficial as we enter our future professional careers.

We would like to express our sincere gratitude to our advisors, Anders Berg Olsen and Seyed Mahmoud Hosseiniakani, for their valuable input, support, and guidance throughout the process.

Abstract

This study examines whether individual auditors' attributes affect the disclosure quality of key audit matters (KAM). We argue that increased informative value in the disclosures could contribute to reducing the information asymmetry between management and users of the financial statement. We employ a sample of the audit reports of Norwegian listed firms (2018-2021) and, respectively, the signing partners. We measure the effect of disclosure quality by including the number of KAM items, the length of the disclosure, specificity, readability, and the amount of risk-related words associated with auditors' attributes, such as experience, expertise, busyness, and gender. Our findings reveal a significant relationship between the individual auditors' attributes and disclosure quality. These results indicate that the individual auditor affects the level of informational value disclosed in the KAM paragraph.

Sammendrag

Dette studiet undersøker om den individuelle revisors attributter har en effekt på kvaliteten av rapporteringen av sentrale forhold i revisjonen. Vi argumenterer for at en økt informasjonsverdi i revisjonsberetningen kan bidra til å redusere informasjonsasymmetri mellom ledelsen og brukere av finansregnskapet. Studien analyserer et utvalg av norske børsnoterte selskapers revisjonsberetning (2018-2021), og henholdsvis den signerende partner. Vi måler effekten av rapporteringskvalitet ved å analysere antall sentrale forhold, lengden på avsnittet, spesifisitet, lesbarhet, og antall risiko relaterte ord, i sammenheng med revisors attributter som erfaring, ekspertise, travelhet, og kjønn. Funnene avslører et signifikant forhold mellom den individuelle revisors attributter og rapporteringskvalitet. Disse resultatene indikerer at den individuelle revisor påvirker nivået av informasjonsverdi i avsnittet om sentrale forhold.

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1.0 Introduction

This study examines the individual auditors' effect on the quality of key audit matters (KAM) disclosures. Our work is a response to the aftermath of the ISA (International Standard of Auditing) 701 implementation and whether the intended objective was achieved¹. The standard setters' ambition was to enhance transparency and that KAM would increase the informative value of the audit report (IAASB, 2015). The aspiration for increased transparency and informative value stems from the critique of researchers and users of financial statements. They claimed that the audit report was highly standardized (Turner et al., 2010; Carcello, 2012; Svanström et al., 2020) and there was a lack of insights into future financial uncertainties (Geiger et al., 2014). According to the agency theory, the information gap between management and the users occurs because of different incentives (Colbert & Jahera, 2011), and the management possesses information that is not accessible to the users. To improve the informational value, the auditor should disclose specific information and communicate in an understandable manner for the intended user (IAASB, 2015). KAM reporting could decrease information asymmetry if a higher informative value is accomplished.

ISA 701 was effective for audits of listed firms from December 2016 (IAASB, 2015). The standard requires the auditor to report on matters of most significance in the audit. The auditor is required to exert a high level of professional judgment, as it does not contain any specifications on the level of disclosure (IAASB, 2015). This flexibility allows the auditor to report on the significant risks associated with the specific entity, which is supposed to enhance the informative value. As a result, the disclosure quality could vary across the individual auditors' exertion of professional judgment. Nelson and Tan (2005) suggest that if the audit context involves professional judgment, studying the effect of the individual auditor's attributes is interesting. In similar arguments, Sierra-García et al. (2019) state that KAM disclosure has an informative value for most of the users, and it is helpful to understand how the auditor affects the quality of the KAM disclosure. These implications make studying the effect of the individual auditor on KAM disclosures relevant. Further, this could enhance understanding of the individual auditor's impact on the agency problem.

Initially, we hand-collect KAM data from the audit reports. We conduct multiple textual analyses to examine the informative value by measuring the number of KAM items, the length,

¹ The implementation of ISA 701 is further explained in Chapter 2.0.

specificity, and readability of the disclosure, and the amount of risk-related words. Further, we hand-collect data on the individual auditors' attributes from LinkedIn. Our attributes of interest include experience, expertise, gender, and busyness following prior archival studies (e.g., Ittonen et al., 2013; Sundgren & Svanström, 2014; Cahan & Sun, 2015; Goodwin & Wu, 2016; Gul et al., 2017; Che et al., 2018). Our sample consists of 514 firm-year observations from Norwegian listed companies from 2018-2021.

We conduct multiple regression analyses to capture the association between the attributes and the disclosure quality. Overall, we find evidence that the auditor's attributes affect KAM disclosure quality. For the number of KAM items and length of the disclosure, we find that experience, expertise, and busyness have a negative and significant relationship. These results suggest that more experienced auditors report fewer and shorter disclosures, potentially decreasing the risk of information overload and boilerplate language (Hosseinniakani et al., 2022). The findings can illustrate that more experienced auditors can better assert the critical risk areas.

We find significant relationships between auditors' attributes and the informative value of KAM disclosures. For specificity, our results suggest that experienced auditors report less specific. That contradicts the literature and our assumptions that experience increases audit performance. The results for readability suggest that the disclosure is more readable when the auditor has industry expertise and that male auditors provide more readable KAM paragraphs. As for the amount of risk-related words, it decreases when the auditor is busier. According to the literature, this could have multiple explanations. The quality decreases when the auditor has multiple assignments (e.g., Gul et al., 2017). Conversely, that busyness serves as a measure of expertise (Craswell et al., 1995), and consequently, risk-related words decrease in parallel with our findings in hypothesis one. This suggests that shorter reports provide less room for including of risk-related words.

To our knowledge, no studies examine the effect of individual auditor attributes on KAM disclosures. We contribute to strengthening the insights on key audit matters and individual auditor literature and document an effect between the two research areas. Further, our study could be helpful for existing and future research, standard setters, and audit firms.

The rest of this paper is structured as follows: Section 2 describes the background of the implementation of ISA 701 and its requirements. In section 3, we introduce the theory and

review prior literature on the subject. Section 4 presents the hypothesis development. Section 5 provides the research design, explaining the data and variables. Section 6 explains our main results from the regression analysis. In section 7, we discuss and conclude our findings. Finally, in section 8, we present our limitations and contributions.

2.0 Background

After the financial crisis in 2007-2008, users of the financial statements requested increased informative value of the reports (EC, 2011). The criticism arises from the need for more insights into future financial uncertainties disclosed in the audit reports (Geiger et al., 2014). Studies post the financial crisis report that users of financial statements valued the auditor's opinion but that a high level of standardized information characterizes the overall report (Turner et al., 2010; Carcello, 2012; Svanström et al., 2020). Other studies from this period document that users find the audit report uninformative (e.g., Church et al., 2008; Gray et al., 2011). IAASB developed a proposal for a new ISA in 2013 as a reaction. Respondents, such as investors and analysts, expressed that key audit risk disclosures significantly increased the auditor report's informative value (IAASB, 2013).

As a result of the users' experience of low informational value (Church et al., 2008; Turner et al., 2010; Gray et al., 2011; Carcello, 2012; IAASB, 2015), ISA 701 Communicating Key Audit Matters in the independent auditor's report, was implemented. The implementation of the expanded auditor report is intended to increase transparency and make users more confident in the information presented in the financial statements. IAASB believed that *“KAMs in the audit reports will increase transparency, focus investors on areas of higher risks, provide users a basis to further engage with management and those charged with governance, enhance communication between auditor and audit committee and renew auditor focus on communication, which may indirectly increase auditors' professional skepticism”* (IAASB, 2015).

The expanded audit report was implemented internationally. This was an initiative of standard setters and regulators such as the International Auditing and Assurance Standards Board (IAASB), the Public Company Accounting Oversight Board (PCAOB), the Financial Reporting Council (FRC) in the UK, and the European Commission (Gambetta et al., 2023). The expanded audit report is mandatory internationally, although the regulation is modified to the specific capital market. The Norwegian audit standards are based on ISA. The Norwegian audit act requires audits to apply *“god revisjonsskikk”* (Revisorloven, 2007, §9-4). *“God revisjonsskikk”*

implies following the ISA (NOU 2017:15). Hence, the audits of Norwegian public listed firms are required to report according to the expanded audit report, thereby ISA 700 series.

ISA 701.11 defines key audit matters: “*Key audit matters are those matters that, in the auditor’s professional judgment, were of most significance in the audit of the financial statements of the current period.*” According to the standard, the auditor must provide information about the risk of material misstatements or significant risks following ISA 315, significant audit judgments of complex accounting estimates and the effect certain transactions or events had on the audit. The wanted transparency is achieved by including information about uncertainty and risks in the accounting estimates, and how the auditor has responded to these risks (Hosseinniakani et al., 2022). This enhances confidence in the audit for the users, but the level of assurance can vary depending on the disclosure content.

The information should be understandable for the intended users of the audit report, but the details and amount of information will vary due to the auditor's professional judgment (IAASB, 2015). The flexibility of the auditor should result in more entity-specific and audit-specific information rather than standardized or boilerplate² communication, which was a concern for the standard setters and regulators in developing ISA 701 (IAASB, 2015).

3.0 Literature review

The agency theory frames our study. The auditor is responsible for the best interests of shareholders and other users of financial statements and acts as a control mechanism disregarding the self-interest of any party (Hegazy & Kamareldawla, 2021). ISA 701’s objective is to increase trust and transparency (IAASB, 2015), which could decrease the information asymmetry between the management and the users of the audit report (Hegazy & Kamareldawla, 2021; Gambetta et al., 2023). Hence, the agency problem will only be solved if the KAM disclosures are informative to the users. In this regard, IAASB conducted a “Feedback Statement” from the view of stakeholders in June 2021. The feedback reveals that KAM enhances transparency. However, the challenge is to provide more concise and informative disclosures and avoid boilerplate descriptions (IAASB, 2021).

² Boilerplate is defined as generic and standardized information such as prevalent phrases (Hosseinniakani et al., 2022)

Recent findings about the informative value of ISA 701 after its implementation are mixed. Seeback and Kaya (2022) find that higher specificity³ in the KAM paragraph is positively and significantly associated with the capital market reaction, providing evidence that specific KAM disclosures are informative to investors. Botes et al. (2020, cited in Gambetta et al., 2023) indicate that the expanded audit report provides stakeholders with improved and increased knowledge of the auditor's role, which results in a decrease in the audit expectation gap, indicating that the expanded audit report enhances the trust in the audit outcome. Zeng et al. (2021) found that the mandatory KAM rule improved audit quality in China and that disclosure characteristics such as the number of KAM items, length, readability, and similarity could signal the auditor's concerns about the client's earnings quality. Overall, these results indicate that the KAM disclosure has informative value to the investors.

Contrary, Lennox et al. (2022) provide evidence that shows no significant changes after the implementation of the expanded audit report. Their results suggest that the expanded audit report needs to include more informational value because the financial risks were already known to the investors before the auditor disclosed the audit report. Gutierrez et al. (2018) find no evidence that the expanded audit report provides incremental information to investors, and Bédard et al. (2019) indicate that the French expanded audit report did not affect investors. Carver and Trinkle (2017) argue that the disclosure of KAM might make the report less readable but not directly affect the informational value. Gambetta et al. (2023) suggest that the literature findings on the informative value of KAM may indicate that the users of audit reports do not fully understand the information being disclosed and/or that the auditor needs to communicate the information sufficiently. The auditor must provide meaningful information that the investor understands to reduce information asymmetry.

Bozzolan and Miihkinen (2021) argue that the audit of non-financial text is more complex and challenging than financial statements because even in mandatory regimes, there is a lack of a clear framework and expectation of the level of disclosures. The reason for the shortage of "rules" in the disclosure is that KAM may differ depending on audit-specific and entity-specific factors that influence the auditor's judgment (IAASB, 2015). This is a way to ensure that the information provided is relevant to the client company's specific financial situation. The importance of exercising good professional judgment increases as financial reporting moves

³ Seeback and Kaya (2022) measure specify as specific names, numbers, percentages, times, and dates mentioned in the disclosure, following Hope et al. (2016)

towards principle-based standards and the measurements become more fair-value-based (Glover et al., 2011). ISA 200-A26 defines professional judgment as follows: “*The distinguishing feature of the professional judgment expected of an auditor that is exercised by an auditor whose training, knowledge, and experience have assisted in developing the necessary competencies to achieve reasonable judgments.*” Judgment occurs when uncertainty and risk are present (Glover et al., 2011). Therefore, the attributes of the individual auditor could affect the outcome of KAM disclosure and, with that, affect the information gap between the management and the investors.

Nelson and Tan (2005) emphasize that there are theoretical and practical interests in investigating the effects of auditor attributes if the audit context involves professional judgment. They argue that multiple personal attributes could influence the audit outcome, considering that the auditor performs numerous tasks to ensure overall assurance. Prior studies document significant variation in audit outcomes across individual auditors (e.g., Gul et al., 2013; Sundgren & Svanström, 2014; Che et al., 2018). For example, Cahan and Sun (2015) suggest that the personal characteristics of the lead auditor can serve as a proxy for the level of care taken during the audit process.

3.1 Experience

Bonner (1990) expressed that experienced auditors have knowledge that leads them to identify information that assists them in forming their judgments. To mitigate the likelihood of information asymmetry between management and users, the informative value is crucial. The agency problem arises due to divergent incentives (Colbert & Jahera, 2011); thus, the importance of auditors' critical and selective judgment regarding the information the management communicates increases. Farmer et al. (1987, cited in Cahan & Sun, 2015) find evidence suggesting that more experienced auditors are less likely to agree with the client's preferred accounting estimates. Auditor experience is considered one of the principal drivers of audit quality (FRC, 2006, 2008), and experience might enhance communication and a critical perspective. Similarly, Bonner and Lewis (1990) find that more experienced auditors perform better. These previous studies indicate that more experienced auditors have a higher degree of knowledge and are better capable of identifying and considering risks.

On the other hand, Sundgren and Svanström (2014) find a negative association between the auditor's age and their propensity to issue a going concern opinion. The going concern opinion was a relatively new standard in Sweden at this time, and they suggest that their findings could

be explained by the fact that the older auditors spent less time understanding and applying the going concern standard. This might be relevant in researching KAM disclosure because this is a relatively new standard, and the auditor's experience is naturally associated with age.

3.2 Expertise

Early studies considering auditor's attributes found that auditors with specific experience in an industry or audit field are better at identifying errors related to this area (Bedard & Biggs, 1991). Expertise is explained as experience leading to an opening to get more knowledge, and this knowledge, including ability, affects the performance of the auditor (Libby & Luft, 1993). There has been documented higher earnings quality for those clients of industry specialist auditors (Balsam et al., 2003; Ittonen et al., 2013), supported by Jenkins et al. (2006). Industry expertise is associated with audit quality (Chi & Chin, 2011; Goodwin & Wu, 2014; Che et al., 2018), and industry-specific experience might contribute to discovering the areas of risk more efficiently. There has been documented that auditors with less industry specialization spend more time auditing, unlike auditors with more industry specialization (Che et al., 2018). However, there may be a potential risk of biases inherent in the judgment tendencies (Glover et al., 2011). While specialization in a specific industry may enhance an auditor's knowledge and expertise, it can also increase the risk of overestimating one's abilities and overlooking material misstatements due to an undue reliance on prior audit procedures (Glover et al., 2011).

3.3 Gender

Liu (2017) observes that cognitive psychology and marketing theory consider gender to might affect individual judgment. Several studies document behavioral gender differences and their effect on the audit process and decision judgment. For example, Ittonen et al. (2013) find evidence that female auditors contribute to higher earnings quality and document lower abnormal accruals. Chung and Monroe (2001) find that females tend to report more accurately in more complex tasks, while men report more accurately in more manageable tasks. Females are more risk-averse and conservative than males in a financial setting (Watson & McNaughton, 2007). These prior findings may constitute gender differences in KAM disclosures.

3.4 Busyness

Busyness and lack of time are positively related to the number of assignments held by audit partners (Sundgren & Svanström, 2014). This indicates that lack of time for the audit partner can affect their ability to handle complex tasks. Previous studies find evidence supporting this

argument that the auditor's busyness might impair audit quality (Sundgren & Svanström, 2014; Gul et al., 2017). Similarly, Goodwin and Wu (2016) examine whether there is a relationship between auditors' busyness and audit quality. Their evidence suggests no association between the audit partner's busyness and audit quality when the auditor independently chooses the number of clients to audit. Busyness may be an alternative measure for expertise. Auditor specialization literature suggests that by performing more audits, the auditor will gain knowledge and thus improve their expertise (Craswell et al., 1995). This can indicate that more busy auditors represent a higher level of expertise, which might result in higher audit quality (Goodwin & Wu, 2016). ISA 701 does not require the auditor to report on any particular risk areas. Therefore, the auditor is expected to devote time to achieve the informative value that contributes to increased transparency of the audit report, but also devote the time efficiently, which requires a higher level of expertise (Craswell et al., 1995). Regarding these studies, it is difficult to interpret how busyness could influence KAM disclosure.

3.5 Summary of literature review

In summary, prior studies indicate that the incorporation of KAM has the potential to enhance the informative value of audit reports. Some researchers posit that the informative value diminishes due to extensive advanced communication, while others suggest that the lack of specific information is the underlying cause. These findings emphasize a gap between the intended purpose of KAM disclosures and how they are perceived. Scholars propose that the attributes of auditors can influence the audit outcome, given the involvement of professional judgment in audit tasks. Therefore, the auditor's attributes serve as factors that may impact the quality of disclosures, thereby influencing the information asymmetry between management and users. Informative KAM paragraphs have the potential to mitigate information asymmetry by describing and addressing management's discretionary estimates and disclosing areas of risk that may not be accessible to users.

4.0 Hypothesis development

Gul et al. (2013) debate that although individual auditors, with their characteristics, may influence the audit outcomes, they are still constrained by quality control mechanisms within the audit firms. In contrast, Kachelemeier (2010) argues that studies on managerial effects show that it is not the business organization that makes decisions but the people with their personal attributes. In similar arguments, Nelson and Tan (2005) claim that auditor attributes affect audit quality.

Risk disclosure is a critical type of non-financial information valued by investors (Hope et al., 2016), and their accuracy and assurance are essential to prevent disclosures from becoming boilerplate (Bozzoland & Miihkinen, 2021). In this regard, Bozzalan and Miihkinen (2021) find evidence that the quality of risk disclosure is associated with the attributes of the audit partner, such as industry expertise, gender, and familiarity with different client risk disclosures. In addition, they do not find any significant relationship between audit firm characteristics and disclosure quality. Correspondingly, our research question is: “Do individual audit partner attributes affect the quality of KAM disclosures?”

Sierra-García et al. (2019) find that auditor and client characteristics affect the number of KAM items disclosed. They argue that reporting fewer (more) types of KAM items could be viewed as the auditor being less (more) specific and that disclosing more KAM items could mean increased information about the client characteristics served by the auditor. Contrary, Hosseinniakani et al. (2022) argue that a higher number of total words and KAM items could indicate quality disclosures, but they can also be an indicator of boilerplate language. With this in mind, we suggest that many KAM items could be interpreted as high disclosure quality, although it might result in low informational value. Literature shows that experience and expertise could enhance audit performance (e.g., Bonner & Lewis, 1990; Libby & Luft, 1993). We hypothesize that this could contribute to the auditor managing to assess the critical areas of risk more efficiently. This is supported by Bedard and Biggs (1991), who found that auditors with specific experience in one industry are better at identifying errors related to this area. Hence, it could result in better disclosure quality and fewer but more informative KAM items. The client’s characteristics, such as size, will also affect the number of KAM items because the risk will typically increase with client complexity (Sierra-García et al., 2019).

Lang and Stice-Lawrence (2015) argue that longer reports tend to be regarded as having more informative value. At the same time, lengthy disclosures that are less readable are often referred to as information overload, affecting informativeness negatively (Dyer et al., 2017). Li (2008) finds that companies with low-quality earnings often use longer annual reports, which can be seen as a way to hide poor performance by providing information overload. If that is true, auditors who perform better professional judgment should be able to recognize this and provide more reader-friendly reports. Therefore, we want to examine which auditor attributes could mediate this effect on the disclosure.

Based on the discussion above, we hypothesize that:

H1: Individual auditor attributes affect the length and the number of KAM items disclosed.

As emphasized in Seeback and Kaya (2022), a significant motivation to examine textual characteristics in KAM disclosures is that standard setters and regulators have pointed out how important the language used is. For example, IAASB (2015) highlights the importance of entity-specific information and avoidance of technical language to help the intended users of the financial statements to understand the disclosure. This examination of language will contribute to recognizing if the intended objective of KAM disclosure has been achieved (Seeback & Kaya, 2022).

Seeback and Kaya (2022) find evidence suggesting that investors find precise information valuable because specific descriptions of KAM are significantly and positively associated with capital market reactions. If the disclosure does not contain specific information, the information gap will not decrease, and the objective of KAM will not be achieved. Correspondingly, one concern of the standard setters before the implementation was the occurrence of boilerplate language and unspecific information (IAASB, 2015). Moreover, concerns were expressed about the users' ability to understand the language used in the audit report. Some studies find that low readability can be used to disguise information. For example, Li (2008) finds that firms with lower earnings quality have annual reports that are more difficult to read. Zeng et al. (2021) find evidence suggesting that when the client firm has lower earnings quality, the auditor uses more complex language. They claim that this signal concerns from the auditors to investors about the client's financial reporting quality.

If the implementation of ISA 701 would function for the intended purpose, the informational value is crucial. The disclosure should be specific to the client company's explicit risks, avoiding language too complicated for the users. The literature is inconclusive about the aftermath of the implementation of KAM and if the informative value has increased. However, Gambetta et al. (2023) find evidence that specific audit firms have different outcomes on the informative value of KAM disclosure. Their study does not distinguish between the signing auditor and the audit firm, although we know that the signing auditor affects the audit outcome (e.g., Gul et al., 2013; Sundgren & Svanström, 2014; Che et al., 2018). This leads us to our last hypothesis,

H2: Individual auditor attributes affect the informative value of KAM disclosures.

5.0 Research design

5.1 Data and Sample

The sample in this paper consists of companies listed on Oslo Stock Exchange and covers fiscal years 2018-2021. The original sample consists of 844 firm-year observations representing 211 listed companies. After excluding financial institutions and observations with insufficient data, our final sample consists of 514 firm-year observations (see Table 1).

Table 1
Sample reduction

Panel A: Sample selection 2018-2021	Firm-year obs.
Norwegian listed companies on the Oslo Stock Exchange	844
(-) Financial institutions	(52)
(-) Missing observations given missing annual reports or lack of English versions of annual reports	(136)
(-) Missing observations given the lack of information on the auditor's characteristics	(19)
(-) Missing observations from Refinitiv Eikon	(123)
Total firm-year observations	514

For the observations, we manually collected the signing audit partner from each audit report anonymously, where each auditor is assigned a number in the dataset. All the information collected for this study is public and published by the companies and auditors. However, the data we have collected is not associated with personally identifiable information. Listed companies in Norway are required to have at least one signing partner on the audit report (Revisorloven, 2007, §9-7). By collecting the signing partner from the audit report, we were able to determine if the company is located in a big city (*OfficeSize*) and the gender (*Gender*) of the auditor (see Appendix A for variable definitions). A sample of the reports is co-signed by two partners, leading to a high correlation between the observations. To mitigate problems with multicollinearity, we exclude one of the partners. We identified a total of 172 signing audit partners.

Our primary source of information on the signing partners is LinkedIn, where we collected work-relevant information. This source has been used in previous studies (e.g., Bozzoland & Miihkinen, 2021). We used LinkedIn to determine the auditor's years of experience in audit (*Experience_1*), if they worked in more than one audit firm (*Expertise_2*), and if they have experience from other professions in finance (*Expertise_3*) (see Appendix A for variables definitions). Considering the limitations of the data available on LinkedIn, it is difficult to

establish a high degree of trust in the completeness and reliability of the information obtained from this platform. However, LinkedIn is the only source where this type of data is accessible, making it a functional source for our study. Due to time limitations, collecting this type of data through requests to the audit partners was impossible. This is a limitation of this study. Furthermore, we manually collected all KAM disclosures from the audit reports. We conducted an Excel spreadsheet with the number of KAM items, descriptions, and responses for further textual analyses in Python. The financial data is collected from the Refinitiv EIKON database.

To improve our models for the analyses, we check our data for extreme outliers. We winsorize some of our continuous variables at the 1 to 99th percentile to ensure they do not disproportionately affect our analyses and models.

5.2 Study model

To test our hypotheses, we estimate the following model:

$$KAM\ disclosure = \beta_0 + \beta_1 Experience_1 + \beta_2 Experience_2 + \beta_3 Expertise_1 + \beta_4 Expertise_2 + \beta_5 Expertise_3 + \beta_6 Busyness + \beta_7 Gender + \sum control\ variables + \varepsilon$$

“KAM disclosure” is measured by five different proxies of the disclosure: the number of KAM items (1), the length of the KAM disclosure (2), the specificity of the disclosure (3), the readability of the disclosure (4) and the level of risk-related words in the disclosure (5), (Zeng et al., 2021; Hosseinniakani et al., 2022). We check our models for endogeneity and find no endogenous regressors in the models. We examine our models for heteroscedasticity using the White test. Some of the models exhibit heteroscedasticity, and to make our models more robust, we use the “robust standard errors” method in the regression analyses.

5.3 Disclosure variables

Appendix A, Panel A presents the variable definitions for the disclosure variables. For the number of KAM items, we hand-collect the number of items in each audit report (*KamNumber*). Further, we examine the number of words used in the KAM disclosure as length and scale using the natural logarithm (*Length*). To examine the informational value of KAM disclosures, we conduct textual analyses in Python to determine specificity, readability, and the amount of risk-related words. The *specificity* is captured by the total words relating to a specific date, number, or percentage in the disclosure, following Zeng et al. (2021). For *readability*, we use the FOG

index, which is used to capture the readability of English text (e.g., Li, 2008; Lang & Stice-Lawrence, 2015; Zeng et al., 2021). The FOG index is calculated by a weighted average of the number of words per sentence, and the percentage of complex words in total words, where complex words consist of three or more syllables⁴ (Zeng et al., 2021). Furthermore, we measure the amount risk-related words (*RR_words*) in the disclosure, following the list of risk-related words by Hosseinnikani et al. (2022). They suggest that fewer risk-related words could indicate boilerplate language in the disclosure.

5.4 Main variable of interests

Appendix A, Panel B presents the definitions of the main variables of interest. We measure the individual auditor's experience as the years in auditing (*Experience_1*). To better capture the relationship between experience and other variables, we include a dummy variable that demonstrates if the auditor is highly experienced (*Experience_2*). The variable equals 1 if the auditor has worked in audit for 22 years or more and 0 otherwise. To measure expertise, we include three different variables. We follow Che et al. (2018) to estimate the overall industry expertise. It is estimated as the aggregated sales across all the clients of each partner in each two-digit SIC industry divided by the aggregated sales in the same industry (*Expertise_1*). Furthermore, we include a dummy variable that is equal to 1 if the audit partner worked in more than one audit firm and 0 otherwise (*Expertise_2*). Gul et al. (2013) examine the effects of audit partners who switched audit firms and find that job-hoppers positively affect audit quality. Finally, we include a dummy variable equal to 1 if the auditor has experience from other professions in finance and 0 otherwise (*Expertise_3*). For gender, we include a dummy variable equal to 1 for male audit partners and 0 for females (*Gender*). To estimate the busyness of the individual audit partner, we use the total number of assignments for each audit partner in year *t* (*Busyness*).

5.5 Control variables

Appendix A, Panel C presents the definitions of the control variables. We include *Office_size* to control for potential office culture differences in big and smaller cities (DeAngelo, 1981). We follow prior literature to control for client complexity (Gambetta et al., 2023; Hosseinnikani et al., 2022). We include ROA to control for profitability. Total assets (*Size*) are included to control for the client firm's size and we use the natural logarithm to avoid scaling

⁴ A higher FOG-index score (readability score) equals lower disclosure readability.

problems. We include *Leverage* to capture the effect of potential financial problems (Sierra-García et al., 2019). Market to book (*M/B*) is included to control for growth opportunities (Hosseinnikani et al., 2022). We use *Loss* as a dummy variable to control for the firms that have occurred a loss. Finally, we control for industry-fixed effects (*Ind_fixed_effects*).

6.0 Empirical results

6.1 Descriptive statistics

Table 2 represents the descriptive statistics for all the variables included in our study. Panel A represents descriptives for the dependent variables. On average, the auditors report about 1.45 KAM items in each audit report. The minimum of KAM items disclosed is 0 and, the maximum is 4. The average length (natural logarithm of words) is 5.39, which equals 219 words. Specific words disclosed on average is 11. On average, the auditors disclose 157.48 risk-related words. Regarding how readable the KAM disclosure is, the average FOG-index score is 20, indicating that it will be difficult for the average user to understand (Zeng et al., 2021). Panel B, Table 2 represents the descriptives of the independent variables, which are the auditors' attributes. On average, the auditors' experience is 23,36 years, and approximately 67.9% of the auditors in our sample have worked 22 years and more in the audit industry. Industry-specific experience is, on average, 6.4%, and the maximum value is 100%. 40.3% of the auditors have worked in more than one audit firm, and 22.6% have experience from other professions in finance. On average, auditors have 2.23 assignments each year. In our sample, male auditors represent 92.4% of the selection.

Table 2**Summary statistics of all variables****Panel A: Dependent Variables**

Variables	N	Mean	SD	Q1	Median	Q3	Min	Max
<i>KamNumber</i>	514	1.447	0.895	1.000	1.000	2.000	0.000	4.000
<i>Length</i>	514	5.394	2.060	5.517	6.022	6.465	0.000	7.387
<i>Specificity</i>	514	11.014	9.124	4.198	8.644	16.704	0.000	38.03
<i>Readability</i>	514	20.066	15.105	14.451	16.400	21.055	0.000	77.03
<i>RR_words</i>	514	157.475	108.555	85.999	141.886	221.291	0.000	585.668

Panel B: Independent Variables

	N	Mean	SD	Q1	Median	Q3	Min	Max
<i>Experience_1</i>	514	23.363	5.858	19.000	23.000	27.000	7.000	41
<i>Experience_2</i>	514	0.679	0.467	0.000	1.000	1.000	0.000	1.000
<i>Expertise_1</i>	514	0.064	0.168	0.0004	0.004	0.039	0.000	1.000
<i>Expertise_2</i>	514	0.403	0.491	0.000	0.000	1.000	0.000	1.000
<i>Expertise_3</i>	514	0.226	0.418	0.000	0.000	0.000	0.000	1.000
<i>Gender</i>	514	0.924	0.265	1.000	1.000	1.000	0.000	1.000
<i>Busyness</i>	514	2.232	1.244	1.000	2.000	3.000	1.000	5.000

Panel C: Control Variables

	N	Mean	SD	Q1	Median	Q3	Min	Max
<i>ROA</i>	514	-0.055	0.276	-0.072	0.008	0.060	-1.488	0.356
<i>Size</i>	514	21.025	2.172	19.550	20.797	22.708	15.860	26.270
<i>Leverage</i>	514	3.074	14.197	0.050	0.436	1.102	-12.353	108.015
<i>M/B</i>	514	2.308	3.115	0.549	1.158	2.626	-0.084	17.224
<i>Loss</i>	514	0.463	0.499	0.000	0.000	1.000	0.000	1.000
<i>OfficeSize</i>	514	0.693	0.462	0.000	1.000	1.000	0.000	1.000

Table 3 represents the Pearson correlation for all variables. The bold numbers represent the statistically significant coefficients at the 1% or 5% level ($p \leq 0.05$). The disclosure variables are correlated positively and significantly. It also reveals that *Size*, *ROA*, *LEV*, and *M/B* correlate positively and significantly with the disclosure variables. *Loss* is negatively and significantly correlated with all the disclosure variables except *Readability*. Furthermore, *Expertise_1* is significantly and positively correlated with the disclosure variables. Overall, we can conclude no significant multicollinearity among the dependent and independent variables.

Table 3
Parson correlation matrix

Variables	1	2	3	4	5	6	7	8	9
1 <i>KamNumber</i>	1.000								
2 <i>Length</i>	0.724	1.000							
3 <i>Specificity</i>	0.643	0.588	1.000						
4 <i>Readability</i>	0.404	0.509	0.198	1.000					
5 <i>RRwords</i>	0.843	0.707	0.722	0.394	1.000				
6 <i>Experience_1</i>	-0.033	-0.007	-0.084	0.022	0.039	1.000			
7 <i>Experience_2</i>	-0.066	-0.035	-0.059	-0.021	-0.005	0.777	1.000		
8 <i>Expertise_1</i>	0.143	0.1405	0.112	0.152	0.186	0.021	-0.007	1.000	
9 <i>Expertise_2</i>	0.064	-0.121	0.029	-0.170	0.023	0.155	0.114	-0.066	1.000
10 <i>Expertise_3</i>	0.053	-0.012	0.032	0.033	0.040	-0.167	-0.087	0.102	0.192
11 <i>Busyness</i>	-0.184	-0.067	-0.025	-0.185	-0.166	0.064	0.128	-0.061	-0.070
12 <i>Gender</i>	-0.021	-0.029	0.044	-0.159	-0.038	-0.194	-0.071	-0.045	0.115
13 <i>Size</i>	0.391	0.334	0.287	0.186	0.448	0.080	0.056	0.432	0.083
14 <i>Loss</i>	-0.141	-0.266	-0.089	-0.073	-0.141	0.004	0.011	-0.204	0.017
15 <i>ROA</i>	0.180	0.309	0.124	0.104	0.176	-0.034	-0.050	0.122	-0.053
16 <i>LEV</i>	0.125	0.105	0.144	0.131	0.144	-0.016	-0.018	0.190	0.019
17 <i>M/B</i>	-0.241	-0.294	-0.249	-0.146	-0.302	-0.022	-0.046	-0.103	-0.041
18 <i>OfficeSize</i>	0.0316	0.077	-0.186	0.180	-0.033	0.162	0.1019	0.094	-0.183
	10	11	12	13	14	15	16	17	18
10 <i>Expertise_3</i>	1.000								
11 <i>Busyness</i>	-0.164	1.000							
12 <i>Gender</i>	0.049	0.142	1.000						
13 <i>Size</i>	0.116	0.022	0.001	1.000					
14 <i>Loss</i>	-0.053	0.075	-0.028	-0.336	1.000				
15 <i>ROA</i>	0.039	0.046	0.086	0.222	-0.530	1.000			
16 <i>LEV</i>	0.069	-0.050	0.011	0.364	-0.031	0.004	1.000		
17 <i>M/B</i>	-0.039	-0.013	0.045	-0.295	0.066	-0.116	-0.091	1.000	
18 <i>OfficeSize</i>	0.057	0.107	-0.190	0.001	0.0436	-0.026	0.007	0.081	1.000

6.2 Results

Table 4, Panel A, and Panel B represent the regression results for hypothesis one. Panel A shows the results for the number of KAM items, and Panel B represents the results for length. The results in Panel A show a negative and significant association between the number of KAM items and the independent variables *Experience_1* (-0.012), *Experience_2* (-0.147), and *Busyness* (-0.127). Panel B shows that the independent variables *Expertise_2* (-0.612) and *Expertise_3* (-0.353) have a negative and significant relationship with the length of the KAM disclosure. The results illustrate that the more experienced and specialized the auditor is, the fewer KAM items are disclosed, and the length of the disclosure decreases. This suggests that

experienced auditors can better capture and communicate the critical risk areas. The control variable *Size* is significant at the 1% level for both regressions, indicating that more substantial clients have more KAM items and longer disclosures in the auditor report. *M/B* is negatively significant at the 1 % level in both regressions for all the variables of interest. This indicates that more KAM items and longer reports affect the market price negatively. The regression results for *Length* demonstrate that *Loss*, *ROA*, *LEV*, and *OfficeSize* are statistically significant. This is consistent with assumptions that auditor attributes and client firm characteristics matter for the number and length of the KAM disclosure. When the auditor's *Busyness* increases, the number of KAM items and length decreases. This suggests that busyness might be a measure of expertise, considering it has the same effect on the KAM disclosure as the other measures for expertise and experience.

Table 4

Panel A: Regression results

Dependent variable: KamNumber

KamNumber	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
<i>Experience_1</i>	-0.012* (-1.83)						
<i>Experience_2</i>		-0.147* (-1.76)					
<i>Expertise_1</i>			0.187 (0.86)				
<i>Expertise_2</i>				0.013 (0.17)			
<i>Expertise_3</i>					-0.012 (-0.14)		
<i>Busyness</i>						-0.127*** (-4.48)	
<i>Gender</i>							0.079 (0.48)
<i>Size</i>	0.168*** (8.08)	0.167*** (8.00)	0.159*** (7.24)	0.163*** (7.82)	0.164*** (7.88)	0.169*** (8.44)	0.164*** (7.92)
<i>Loss</i>	0.045 (0.52)	0.045 (0.61)	0.054 (0.62)	0.048 (0.55)	0.048 (0.55)	0.079 (0.90)	0.047 (0.59)
<i>ROA</i>	0.170 (1.11)	0.166 (1.08)	0.193 (1.24)	0.189 (1.20)	0.186 (1.20)	0.210 (1.37)	0.179 (1.16)
<i>LEV</i>	0.003 (1.50)	0.003 (1.49)	0.003 (1.37)	0.003 (1.50)	0.003 (1.50)	0.002 (1.05)	0.003 (1.49)
<i>M/B</i>	-0.032*** (-2.81)	-0.031*** (-2.70)	-0.033*** (-2.88)	-0.032*** (-2.86)	-0.032*** (-2.86)	-0.030*** (-0.30)	-0.033*** (-2.89)
<i>OfficeSize</i>	0.085 (1.01)	0.075 (0.90)	0.057 (0.69)	0.063 (0.74)	0.061 (0.74)	0.096 (1.15)	0.070 (0.82)
<i>Ind_fixed_eff</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>R-Squared</i>	0.258	0.257	0.252	0.252	0.252	0.279	0.252
<i>N</i>	514	514	514	514	514	514	514

***, **, * show significance at the 0.01, 0.05, and 0.10 levels, respectively. The t-stats for the regressions are presented in the parenthesis below the coefficients. The variable definitions are presented in Appendix A.

Panel B: Regression results

Dependent variable: Length

Length	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
<i>Experience_1</i>	-0.015 (-1.09)						
<i>Experience_2</i>		-0.133 (-0.77)					
<i>Expertise_1</i>			-0.343 (-0.74)				
<i>Expertise_2</i>				-0.612*** (-3.32)			
<i>Expertise_3</i>					-0.353* (-1.72)		
<i>Busyness</i>						-0.116 (-1.58)	
<i>Gender</i>							-0.023 (-0.09)
<i>Size</i>	0.213*** (5.28)	0.211*** (5.17)	0.215*** (4.83)	0.230*** (5.54)	0.215*** (5.29)	0.213*** (5.18)	0.208*** (5.07)
<i>Loss</i>	-0.421** (-2.05)	-0.420** (-2.05)	-0.430** (-2.07)	-0.404* (-2.00)	-0.425** (-2.07)	-0.390* (-1.87)	-0.417** (-2.03)
<i>ROA</i>	1.203** (2.24)	1.205** (2.25)	1.210*** (2.25)	1.144** (2.22)	1.211** (2.25)	1.245** (2.32)	1.225** (2.26)
<i>LEV</i>	0.007** (2.24)	0.007** (2.16)	0.008** (2.32)	0.007** (2.25)	0.008** (2.30)	0.006* (1.81)	0.007** (2.14)
<i>M/B</i>	-0.126*** (-3.15)	-0.125*** (-3.12)	-0.126*** (-3.16)	-0.128*** (-3.17)	-0.126*** (-3.20)	-0.124*** (-3.10)	-0.126*** (-3.16)
<i>OfficeSize</i>	0.445** (2.13)	0.425** (2.09)	0.419** (2.06)	0.287 (1.36)	0.423** (2.10)	0.443** (2.19)	0.401** (1.99)
<i>Ind_fixed_eff</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>R-Squared</i>	0.250	0.249	0.248	0.267	0.253	0.252	0.248
<i>N</i>	514	514	514	514	514	514	514

***, **, * show significance at the 0.01, 0.05, and 0.10 levels, respectively. The t-stats for the regressions are presented in the parenthesis below the coefficients. The variable definitions are presented in Appendix A.

Table 5, Panel A, B, and C represent the regression results for hypothesis two. Panel A represents the results for *Specificity*. The results show that *Experience_1* is negative and significant at 10% (-0.177). This is surprising considering that our previous analysis shows that experience has a negative and significant effect on the number and length of the KAM. This combined suggests that experienced auditors report less, but not more specifically. The control variable *Size* is positively significant, and *M/B* is negatively significant. *OfficeSize* is negatively significant, suggesting auditors in big cities report less specifically than auditors in smaller cities.

Table 5

Panel A: Regression results

Dependent variable: Specificity

Specificity	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
<i>Experience_1</i>	-0.116* (-1.67)						
<i>Experience_2</i>		-0.482 (-0.60)					
<i>Expertise_1</i>			-2.523 (-0.95)				
<i>Expertise_2</i>				-0.924 (-1.22)			
<i>Expertise_3</i>					-0.394 (-0.40)		
<i>Busyness</i>						0.108 (0.35)	
<i>Gender</i>							1.108 (0.88)
<i>Size</i>	1.138*** (5.26)	1.108*** (5.08)	1.149*** (5.15)	1.283*** (5.15)	1.103*** (5.09)	1.083*** (5.00)	1.000*** (5.06)
<i>Loss</i>	0.581 (0.63)	0.595 (0.64)	0.518 (0.55)	0.625 (0.68)	0.597 (0.65)	0.579 (0.63)	0.598 (0.65)
<i>ROA</i>	0.989 (0.50)	1.078 (0.54)	1.046 (0.52)	1.025 (0.52)	1.130 (0.56)	1.122 (0.56)	1.037 (0.51)
<i>LEV</i>	0.054 (1.52)	0.055 (1.49)	0.059 (1.56)	0.055 (1.48)	0.056 (1.49)	0.056 (1.51)	0.055 (1.47)
<i>M/B</i>	-0.378*** (-3.07)	-0.375*** (-3.06)	-0.375*** (-3.06)	-0.382*** (-3.10)	-0.379*** (-3.09)	-0.382*** (-3.12)	-0.385*** (-3.13)
<i>OfficeSize</i>	-3.464*** (-3.71)	-3.675*** (-3.92)	-3.654*** (-3.93)	-3.892*** (-4.20)	-3.689*** (-3.95)	-3.732*** (-3.97)	-3.576*** (-3.79)
<i>Ind_fixed_eff</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>R-Squared</i>	0.209	0.218	0.218	0.220	0.218	0.218	0.218
<i>N</i>	514	514	514	514	514	514	514

***, **, * show significance at the 0.01, 0.05, and 0.10 levels, respectively. The t-stats for the regressions are presented in the parenthesis below the coefficients. The variable definitions are presented in Appendix A.

Panel B documents the regression results for *Readability*. *Expertise_2* (-5.106), *Busyness* (-2.029), and *Gender* (-6.801) are negative and significantly associated with readability. *Expertise_2* is significant at the 1% level. This indicates that auditors that have worked in more than one audit firm disclose more readable information in the KAM paragraph. *Busyness* is negatively significant at the 1% level, suggesting that busy auditors have a lower readability score than auditors with fewer clients. Again, this suggests that busyness is a measure of expertise. The regression analysis shows a negative and significant association with *Gender*. The results suggest that male auditors disclose more readable KAM paragraphs than female auditors. The control variables *Size*, *LEV*, *M/B*, and *OfficeSize* are significantly associated with readability.

Panel B: Regression results

Dependent variable: Readability

Readability	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
<i>Experience_1</i>	-0.037 (-0.34)						
<i>Experience_2</i>		-0.887 (-0.64)					
<i>Expertise_1</i>			-3.194 (-0.72)				
<i>Expertise_2</i>				-5.106*** (-4.11)			
<i>Expertise_3</i>					-0.954 (-0.69)		
<i>Busyness</i>						-2.029*** (-4.40)	
<i>Gender</i>							-6.801** (-2.00)
<i>Size</i>	0.687* (1.91)	0.697** (1.97)	0.741** (2.09)	0.858** (2.47)	0.693** (2.00)	0.766** (2.20)	0.641* (1.80)
<i>Loss</i>	0.450 (0.29)	0.438 (0.28)	0.347 (0.22)	0.566 (0.37)	0.438 (0.28)	0.945 (0.61)	0.503 (0.33)
<i>ROA</i>	5.575 (1.60)	5.504 (1.58)	5.500 (1.58)	4.969 (1.47)	5.593 (1.61)	6.012* (1.77)	6.277* (1.75)
<i>LEV</i>	0.128** (2.17)	0.128** (2.15)	0.134** (2.29)	0.129** (2.05)	0.130** (2.20)	0.113* (1.94)	0.130** (2.19)
<i>M/B</i>	-0.573*** (-3.18)	-0.564*** (-3.10)	-0.568*** (-3.16)	-0.587*** (-3.26)	-0.573*** (-3.23)	-0.534*** (-3.04)	-0.542*** (-2.93)
<i>OfficeSize</i>	6.328*** (4.83)	6.339*** (4.86)	6.314*** (4.89)	5.208*** (3.91)	6.283*** (4.80)	6.809*** (5.30)	5.473*** (4.17)
<i>Ind_fixed_eff</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>R-Squared</i>	0.160	0.161	0.160	0.185	0.161	0.184	0.173
<i>N</i>	514	514	514	514	514	514	514

***, **, * show significance at the 0.01, 0.05, and 0.10 levels, respectively. The t-stats for the regressions are presented in the parenthesis below the coefficients. The variable definitions are presented in Appendix A.

The regression results for risk-related words are presented in Panel C. *Busyness* is negatively and significantly associated with risk-related words (-13.712). This suggests a higher risk of boilerplate language for busy auditors. This does not support the argument that busyness is a measure of expertise but confirms the literature suggesting that busyness affects audit performance negatively (Sundgren & Svanström, 2014; Gul et al., 2017). The control variables *Size* and *M/B* are significantly associated with risk-related words.

Panel C: Regression results

Dependent variable: RR_words

RR_words	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
<i>Experience</i> ₁	0.017 (0.02)						
<i>Experience</i> ₂		-2.233 (-0.25)					
<i>Expertise</i> ₁			-2.635 (-0.10)				
<i>Expertise</i> ₂				-12.347 (-1.39)			
<i>Expertise</i> ₃					-9.057 (-0.96)		
<i>Busyness</i>						-13.712*** (-4.03)	
<i>Gender</i>							-5.409 (-0.39)
<i>Size</i>	22.147*** (9.04)	22.215*** (9.05)	22.211*** (8.57)	22.602*** (9.32)	22.343*** (9.15)	22.781*** (9.44)	22.128*** (8.99)
<i>Loss</i>	6.215 (0.60)	6.163 (0.59)	6.120 (0.58)	6.473 (0.62)	6.025 (0.58)	9.510 (0.91)	6.248 (0.60)
<i>ROA</i>	11.558 (0.68)	11.234 (0.66)	11.434 (0.67)	9.954 (0.60)	11.240 (0.66)	14.163 (0.84)	12.055 (0.70)
<i>LEV</i>	0.493 (1.61)	0.491 (1.61)	0.497 (1.61)	0.492 (1.65)	0.508* (1.65)	0.387 (1.23)	0.494 (1.62)
<i>M/B</i>	-4.726*** (-4.09)	-4.702*** (-4.07)	-4.721*** (-4.07)	-4.758*** (-4.11)	-4.719*** (-4.13)	-4.455*** (-3.84)	-4.701*** (-4.06)
<i>OfficeSize</i>	-10.879 (-1.11)	-10.626 (-1.09)	-10.794 (-1.11)	-13.368 (-1.33)	-10.545 (-1.09)	-7.081 (-0.73)	-11.465 (-1.16)
<i>Ind_fixed_eff</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>R-Squared</i>	0.318	0.318	0.318	0.321	0.319	0.340	0.318
<i>N</i>	514	514	514	514	514	514	514

***, **, * show significance at the 0.01, 0.05, and 0.10 levels, respectively. The t-stats for the regressions are presented in the parenthesis below the coefficients. The variable definitions are presented in Appendix A.

7.0 Discussion and Conclusion

We examine if the individual auditor's attributes affect KAM disclosure quality. The study is framed by agency theory, and we argue that higher disclosure quality reduces the information asymmetry. Our research is motivated by existing literature on KAM disclosure and auditor attributes. Literature suggests that if the audit context involves professional judgment, the individual auditor's attributes will be of importance (Nelson & Tan, 2005). Before the implementation of ISA 701, studies provided evidence that users of the audit report expressed a need for more informational value (e.g., Geiger et al., 2014; Svanström et al., 2020). If the KAM disclosure provide informative value for the users, the auditor may contribute as a control mechanism to reduce the agency problem.

Our analysis concerning hypothesis one finds evidence that auditor attributes affect the length and the number of KAM items disclosed. Experience and expertise negatively influence the number and length, suggesting that more experienced auditors disclose less. Prior literature suggests that longer reports indicate boilerplate language or information overload (Hosseinnikani et al., 2022). Our findings could support this argument, illustrating that experience and expertise can enhance performance and prevent information overload and boilerplate language. Similarly, Bonner (1990) emphasized that experience leads auditors to assess better information to form an opinion. If this is the case, the informational value might increase for the users.

On the other hand, we do not examine the content of the disclosure in the first analysis. This makes it challenging to conclude if the informational value increases with shorter disclosures. Other studies show that lengthier disclosures could offer more information value because it could indicate that the auditor has provided a more comprehensive and detailed disclosure (Sierra-García et al., 2019). Although we are uncertain about the effect the length and number of KAM items have on the informational value, our analysis demonstrates that the individual auditor affects what is being disclosed, consistent with hypothesis one and the overall research question. Therefore, we reject the null hypothesis.

In our second hypothesis, we examine the individual auditor's effect on the content in the KAM paragraph by studying the specificity, readability, and the amount of risk-related words. We find a negative association between specificity and experience. Surprisingly, these findings suggest that experienced auditors report less specifically.

The literature on the effect of experience is mixed. Literature shows that experienced auditors perform better (Bonner & Lewis, 1990) and that experience is one of the main drivers of audit quality (FRC, 2006, 2008). The main objective of implementing the expanded audit report was to provide more specific information to enhance transparency (IAASB, 2015). With this in mind, our results are concerning, suggesting that experience affects specificity negatively. Thus, this does not contribute to reducing the information asymmetry. A potential explanation could be that more experienced auditors have more extensive client portfolios and are busier. Literature also suggests that older auditors spend less time understanding new standards (Sundgren & Svanström, 2014), which can be an alternative explanation for the findings that more experienced auditors report less specific, considering the relatively new KAM requirement.

Our subsequent analysis examines the individual auditors' influence on the readability of the disclosure. Researchers suggest that the audit report consists of complex language, which makes it difficult for the intended user to understand (Gambetta et al., 2023). The audit reports in our sample have, on average, a high readability score, which is consistent with literature findings. We find that expertise and gender have a negative association with readability. These results indicate that higher expertise contributes to more readable disclosures and supports our assumptions that higher expertise could reduce the problem of information asymmetry. This supports IAASB's statement claiming that to achieve the objective of KAM the auditor should avoid technical language (IAASB, 2015). Further, male auditors seem to provide more readable disclosures than female auditors. Our sample consists of 92,4% male auditors and is therefore unbalanced. We acknowledge that the Norwegian setting is limited when researching gender differences and interpret our results cautiously.

Our final analysis examines the individual auditors' effect on the amount of risk-related words in the disclosure. More risk-related words can indicate the less boilerplate language (Hosseinnikani et al., 2022) and the presence of more specific information. ISA 701 requires the auditor to report on existing risk areas. Therefore, the presence of more risk-related words may indicate better disclosure quality, which enables the users of the audit report to make more informed decisions. Our findings show that risk-related words are negatively associated with busyness. Again, the literature is contrary to the effect of busyness. If we rely on one side of the literature, busyness could be a measure of expertise (Craswell et al., 1995). This considered, our results indicate that auditors with higher expertise disclose fewer risk-related words, implying a higher probability of boilerplate language and lower disclosure quality. As mentioned regarding hypothesis one, shorter reports may indicate better-quality disclosures. Considering that busyness is a measure of expertise, a natural explanation can be that it will also affect the number of risk-related words when the length decreases. The other side of the literature considers busyness as being too busy, affecting the quality of the audit negatively (Sundgren & Svanström, 2014; Gul et al., 2017). This argument could explain our results more plausibly, indicating that busy auditors report fewer risk-related words. We interpret this as lower-quality disclosures.

Based on the discussion above, considering hypothesis two, we find that the individual auditor affects the informative value of KAM disclosures. Therefore, we reject the null hypothesis.

Overall, our results demonstrate that individual auditor attributes affect the KAM disclosure quality. This validates that different attributes influence the exercise of professional judgment and yield different outcomes. These findings offer additional insights into structuring the audit process to enhance disclosure quality, thereby contributing to resolving the agency problem.

8.0 Limitations and Contributions

This study examines the Norwegian setting, which could be a limitation due to its relatively small size. This has also affected our sample size, and due to missing data, our results might not be representative. Males represent most of the audit partners, making studying gender effects in a Norwegian setting problematic. Therefore, our results regarding gender differences have low reliability. Using LinkedIn as a source is a limitation because the information disclosed is voluntary, which might impact our results. Further, our research setting does not capture the effect of audit firm characteristics on KAM disclosure. Therefore, we suggest that future studies cover the mediating effect between individual auditors and audit firm characteristics in KAM disclosure quality. We find a varying association between busyness and the disclosure variables. This makes it difficult to interpret the actual effect of busyness and could be a potential study for the future.

Our findings contribute to previous literature regarding the KAM implementation, disclosure quality, and the effects of individual auditors. Further, to our knowledge, we contribute with new research. While previous studies examined the audit firm and client company's effect on KAM disclosure, we explored the individual auditor's effect. The results of our study might be interesting for policymakers because our study confirms that individual auditor attributes influence the variation of information disclosed. This observation aligns with the assumption that KAM disclosures are influenced by the auditor's professional judgment, potentially resulting in a less standardized approach. This study could be of significant interest to audit firms as it provides valuable insights into factors that can enhance audit and disclosure quality.

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Appendix

Appendix A Variable definitions

Variable	Definition
Panel A:	
Dependent variables	
<i>KamNumber</i>	The number of KAM reported in the audit report
<i>Length</i>	The number of words in the KAM disclosures
<i>Specificity</i>	The number of words relating to a specific date, number, or percentage.
<i>Readability</i>	FOG index. Weighted average of the number of words per sentence and the percentage of complex words in total words. Defines complex words as those consisting of three or more syllables
<i>RR_words</i>	The number of risk-related words in the disclosure.
Panel B:	
Independent variables	
<i>Experience_1</i>	Number of years in audit in year t
<i>Experience_2</i>	Dummy that is equal to 1 if the auditor is highly experienced (22 years or more), 0 otherwise
<i>Expertise_1</i>	Aggregated sales across clients in the industry divided by the total sales in the industry (two-digit SIC code)
<i>Expertise_2</i>	Dummy that equals 1 if the auditor worked in more than one audit firm, 0 otherwise
<i>Expertise_3</i>	Dummy that equals 1 if the auditor has experience from other professions in finance, 0 otherwise
<i>Gender</i>	Dummy that equals 1 for men, 0 for women
<i>Busyness</i>	The total number of audit reports signed in the period 2018-2021
Panel C:	
Control variables	
<i>OfficeSize</i>	Dummy that equals 1 if the audit report is signed in a big city, 0 otherwise
<i>ROA</i>	Net income divided by total assets
<i>Size</i>	The natural logarithm of total assets
<i>LEV</i>	Total debt at the end of year t divided by total equity at the end of year t
<i>M/B</i>	Market-to-book ratio
<i>Loss</i>	Dummy that equals 1 if the client company incurred an accounting loss in year t
<i>Ind_fixed_effects</i>	Industry fixed effects

