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# Corporate Risk Disclosure Dynamics in Light of Key Audit Matters Reporting

Annisa Qurrota A'yun<sup>a</sup> , Wahyu adi wibowo<sup>b</sup>

<sup>a</sup>. Department of Management, Vocational School, Diponegoro University, Semarang, Indonesia

<sup>b</sup>. Department of Accounting, Faculty of Economics and Business, Universitas Selamat Sri, Kendal, Indonesia

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### Correspondence to Author;

Annisa Qurrota A'yun

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## ABSTRACT

**Purpose:** This paper investigates the association between Key Audit Matters (KAM) disclosures and the level of corporate risk narratives provided in annual reports and the characteristics of the firm, governance structure, and audit quality associated with disclosure practices.

**Method:** The study uses quantitative approach with multiple regression analysis to examine the effect of KAM reporting by its levels of risk disclosures. A content analysis of data extracted from reports was done to study Professional Judgement on the width and depth of risk disclosures based on publicly available corporate reports.

**Findings:** We document a strong positive association between capital market-oriented disclosures and the strength of narrative risk reporting. While firm size, operational complexity, leverage, and profitability significantly increased risk transparency, external auditors' reputation also increased the quality of disclosures.

**Novelty:** This study reveals a new function of KAMs where turning audit report transparency into an effectual mechanism in corporate governance. It builds upon the signaling and agency theory by showing how mandatory audit disclosures are reflective of voluntary narrative reporting behavior.

**Implications:** These findings suggest that, in addition to calls for more transparency in the audit process, there needs to be a greater focus on risk management strategies complementary to these processes. Enhanced disclosure can help companies build trust with the relevant stakeholders and align with global reporting frameworks, while providing regulators and policymakers the important contextual information to help develop appropriate disclosure regulations, including audit requirements. The study aids current deliberations on enhancing the quality of financial reporting and enabling investment decision-making by competitors and others in the market.

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## 1. Introduction

Corporate risk disclosure, especially reporting of Key Audit Matters (KAM) in the audit report, has received much attention in recent years in the accounting and auditing literature. KAM reporting developed internationally by the International

Auditing and Assurance Standards Board (IAASB) change the way companies report on risk in financial statements. KAM Reporting Part of the effort to provide improvement in transparency by giving investors and stakeholders more relevant

information about the risks and challenges faced by an organization. Previous research between 2019-2024 found that KAM adoption across different jurisdictions, in particular the KAM on reporting operational, financial, and going concern risks have an effect towards how companies disclose these risks (Ma et al., 2024; Rahaman & Bhuiyan, 2024). It is also observed that the extent of KAM disclosure depends on company characteristics like size, profitability and complexity— all of which influence how firms convey their risk landscape to their stakeholders (Bepari et al., 2024; Moubarak & Elamer, 2024). The Discussion Corporate reporting practice is not static as the factors influencing risk disclosure need to be constantly answered Hope et al. (2016) Kravet & Muslu (2013), especially in an emerging market such as Indonesia where KAM has only recently entered the corporate reporting landscape.

As much as KAM reporting improves the provisioning of benefit, challenges are covered in developing effectiveness of the same for maintaining greater level of transparency in corporate world. For example, the way KAM reporting has been adopted or implemented by companies in Indonesia and other emerging market countries is also different. Specifically, the complexity of the audit process and multiple pressures from various stakeholders may result in the ambiguity and inadequacy of risk disclosures (Arnold et al., 2001; Knechel, 2007). Furthermore, KAM applied is a type of process, and much research is still required on how the application of the four aspects of how KAM influences the reporting aspect of level of narrative risk disclosure by companies including company size, profitability, operational complexity and leverage (Hussin et al., 2023; Kong et al., 2022). Indeed, KAM disclosure may lead to more vigorous risk disclosures Liao et al. (2023), yet, other studies document a restricted or little significant impact (Chan & Marsh, 2022; Guan et al., 2021). This inconsistency leads to the gap of literature as the effect of KAM disclosure on narrative risk reporting have not been investigated rigorously, especially in the context of Indonesian companies. Policymakers, regulators and firms themselves need a better understanding of these dynamics and their implications for organisations seeking to make risk disclosures not

only high quality, but also high relevance (Bui & de Villiers, 2017; SOLOMON et al., 2000).

Agency Theory is the main theory of corporate risk transcription motives, which emphasizes the relationship between principals shareholders and agents management. Seeing agency theory Jensen & Meckling (1976), as a relevant lens, one would assume that hiding selected risks to avoid scrutiny (and possibly negative consequences) is quite an attractive incentive for managers. Nonetheless, KAM could serve as another way to mitigate information asymmetry and increase transparency by providing more information around audit (Fama & Jensen, 1983). Put it another way, in this perspective KAM reports are an input signal to stakeholders regarding a company's risk resistance capacity and risk management ability for a potential threat (Kim, 2006). Additionally, (Spence, 1973) signaling theory is also relevant because under higher levels of risk exposure, firms may increase the level of disclosure as a signal of being proactive with managing risk rather than allowing investors and stakeholders to perceive that risk is inadequately managed by the organization, thus leading to an improved market valuation of the assets, equating to a reduction in the perceived agency costs.

Given the trend towards corporate transparency and accountability on a global scale — and the shift of the regulatory landscape in Indonesia a timely understanding of the interaction between corporate risk disclosures, and the challenges they face with regard to KAM should be a priority. The KAM scale implements KAM reporting into the audit procedure to improve the quality of risk-related data provided to investors and other stakeholders. Yet, despite its significance, numerous empirical studies yield inconclusive results on the effectiveness of KAM to enhance risk disclosure completeness (van der Scheer et al., 2018). Other studies find that firms that are more complex in operational and have higher levels of leverage are more likely to disclose more detailed risk information (Barakat et al., 2014; Linsley & Shrivies, 2006; Oliveira et al., 2011). However, some studies have reported limited or no effect of KAM disclosure on the level of risk enlightenment (Abdelfattah et al., 2021; Cordoş et al., 2020). The varying results of existing studies accentuate a critical oversight in literature regarding

the influence of KAM disclosures in conjunction with other determinants, like size, profitability, and leverage, on narrative risk disclosure (SSES). In addition, the prior literature has primarily been centered around developed economies, but has overlooked emerging markets such as Indonesia where the quality of corporate governance and regulations are expected to diverge considerably. Such researches addressing the specific characteristics of the business environment and institutional context of Indonesia are still lacking and call for a thorough examination of how the adoption of KAM reporting affects risk disclosure in Indonesian firms.

Furthermore, the uniqueness of this study is its consideration of more than just a single factor likely to influence narrative risk disclosure: the study compares the reputation of public accounting firms (i.e. Big 4 vs non Big-4 firms) as well as whether going concern risks are disclosed. While past studies have largely focused on KAM disclosure impact on financial reporting, the effect of KAM disclosure on other narrative disclosures provided by management, which are integral to investors and stakeholders, has not been studied in much detail. Second, given the most recent evidence and characteristics of audit transparency in Indonesian corporate governance, for the types of ownership structure and economic environment, the findings of this study can provide new information in the debate that still needs to be proved in terms of global usefulness, which will also serve as a reference for the policymakers and regulators in Indonesia and other emerging economies.

This study intends to analyze the effect of Key Audit Matters (KAM) disclosure to narrative risk disclosure in Indonesian Companies. More precisely, it analyses the association between depth (of the narrative risk disclosures) in narrative risk disclosures and some company characteristics including size, profitability, operational complexity and leverage. In addition, it examines the influence of public accounting firm reputation and going concern risk on the level of KAM reporting and the effect of KAM on subsequent narrative risk disclosure. Finally, this study aims to provide an overview of KAM reporting in order to improve risk disclosures in corporate annual reports in Indonesia and to offer a

greater understanding of the interplay between audit and corporate governance in the context of developing country.

## 2. Critical review innovation

### 2.1 *The Effect of the Level of Audit Risk Disclosure (KAM) on the Narrative Risk Disclosure of the Company*

Essential Click should KAM Disclosures Has Reshaped The Transparency Landscape With ISA 701 now prompting auditors to report on significant audit risks, managements may need more tightly to align their narrative risk disclosures with where auditors have focused (Bédard et al., 2020). Previous studies dovetail that reports with specific KAM will encourage issues to be rectified by management resulting in improved risk communication (Sirois et al., 2019). Pursuing KAM disclosures and reassuring stakeholders of information asymmetry reduces and demonstrates the quality of information conveyed (Darmawan and Nurrahmawati, 2022 in Indonesia). This supported the idea that KAM disclosure levels drive narrative risk communication.

H1: Auditors' KAMs disclosure levels positively affect managers' narrative risk disclosure levels in Indonesia.

### 2.2 *The effect of firm size on the level of narrative risk disclosure*

That corporate disclosure practices are affected by company size. More significant firms have higher public scrutiny, which encourages full disclosure, and greater regulatory expectations (Ali, Nadeem, & Zhang, 2021). This strategy has been explained in accordance with the legitimacy theory that is developed to maintain social credibility (Hassan et al., 2020). Good empirical findings in Southeast Asia, including Indonesia, show that the larger the firm, the smaller the risk disclosure quality (Wardhani & Siregar, 2023) because the financial statements of larger firms can be considered more reliable because large firms are usually listed firms that are more tightly monitored than smaller firms, so that we are in compliance with the regulations. compliance with the operation of the firm. Such a relationship is consistent with global finding that large firms tend to disclose a more elaborative reporting in order to deal with multiple stakeholder expectations (Ghazali, 2007).

H2: Firm size has a positive effect on the level of narrative risk disclosure by firms in Indonesia.

### *2.3 The influence of operational complexity on the level of narrative risk disclosure*

Additional financial risk exposure due to complexities created in operations would require tailored strategies for disclosures by the company. Corporations that have diversified operations encounter different types of financial, regulatory and market risks (Chen et al., 2022). Hence, there is a need for risk communication to elucidate the details of how different challenges must be both addressed and serviced (Tibrewala & Mehta, 2021). Nugroho and Putra (2023) find the opposite, where high rich operations in Indonesia will guide firms to disclose more extensive risk disclosures, indicating a direct relationship between operational complexity and reporting depth. Such revelations highlight the importance of rich risk narratives reflecting business complexity.

H3: Complexity of business activities is beneficial for narrative risk disclosure of Indonesian companies.

### *2.4 The Influence of Leverage Level on Narrative Risk Disclosure*

Entropy and discursive power of categories of leanness, operationalisation or indicatively, and matching of adjustment driver of financial risk, directly impact realisation discursive practices. This is because when firms are carrying more debt, the creditors and investors will demand more transparency in order to ease their worry (Lim & Tan, 2020). Firms with large leverage often provide comprehensive disclosure of risk information indicating an active management of their funding risk (Barth et al., 2021). For instance, Indonesian based evidence affirms that when firms own a high leverage ratio, they improve their risk reporting in order for stakeholder to trust them (Yuliana & Wicaksono, 2022). This relationship highlights the ability of leverage to enhance narrative risk disclosure.

H4: The level of corporate leverage has a positive effect on the level of narrative risk disclosure of companies in Indonesia.

### *2.5 The influence between profitability on narrative risk disclosure*

Disclosure practices can be influenced by profitability, which affects the perception of financial sustainability. Entertaining positive market sentiment, profitable firms must report more extensive risk information (Sun et al., 2019). Previous research for providing evidence on the positive relation between profitability and risk reporting in emerging economies among them Indonesia (Rahman & Widjaja, 2023). Effective firms employ rich narratives to demonstrate resilience and strategic vision, thus supporting the predicted link between profitability and disclosure depth.

H5: Corporate profitability has a positive effect on the level of narrative risk disclosure of companies in Indonesia.

### *2.6 The influence between public accounting firm's reputation on KAM disclosure*

The quality of key audit matter (KAM) disclosures are greatly affected by the reputation of public accounting firms. Due to the superior resources and expertise, Big Four auditors are producing a relatively more comprehensive reporting (DeFond & Zhang, 2022). Further, Krishnan and Wang (2021) argue that KAM disclosures are of higher quality for firms whose auditors are one of these prestigious firms. Big Four-audited firms are also found to disclose a more extensive risk story (Santoso & Hartono, 2023) — evidence from Indonesian studies corresponded with this. It sustains the predicted positive relationship between auditor reputation and the quality of the disclosure.

H6: Audit firm's reputation (Big 4 or non-Big 4) positively affects KAMs disclosure in Indonesian firms' audit reports.

### *2.7 The effect of going concern risk on the level of narrative risk disclosure*

Risk of going concern has been massively motivated to more narrative disclosures as companies seek to better assure stakeholders that they will be able to operate in the future. Narrative risk communication pertaining to going concern has been demonstrated to reduce uncertainty among investors thereby conserving market confidence (Morris & Shapiro, 2020). Companies impacted by these risks typically expand on disruptions and mitigation strategies to be more transparent on business continuity (Anderson & Smith, 2021). Kusuma and Pratama (2022) provide empirical



evidence showing that increased going concern risk in the corporate setting in Indonesia can lead to an increase in narrative disclosures, hence demonstrating the importance of being transparent with investors. Consequently, going concern disclosures contribute to the overall credibility of financial statements and support informed decisions by the stakeholders."

H7: Going concern risk has a positive effect on the level of narrative risk disclosure by management in Indonesia.

### *2.8 The influence of KAM going concern disclosure on narrative going concern risk disclosure*

In short, the combination of disclosure about Key Audit Matters (KAM), more especially on going concern risks, adds a lot to the transparency of financial reporting. Previous research indicates that extensive disclosures of KAM about going concern matters induce management to provide a clearer and more consistent narrative disclosure, which improves risk communication (Lennox & Pittman, 2021). Regulatory developments in the last several years in Indonesia have endorsed this interplay by encouraging consistency and coherence between KAM statements made by auditors and management narrative disclosures on going concern (Widjaja & Suryana, 2023). The previously discussed relationship between KAM disclosure and the depth of narrative going concern risk reporting is also confirmed and aligns with the notion of a strengthened investor confidence due to reduced information asymmetry.

H8: Key audit matters (KAM) going concern disclosure has a positive effect on the level of narrative going concern risk disclosure by management.

## **3. Method Innovations**

### *3.1 Design research*

This study is a quantitative research with cross-sectional data using Indonesian companies in the period 2019-2024 as the subject of this study. We will adopt a survey design to study the extent to which certain characteristics of the company affect corporate risk disclosures, especially the Key Audit Matters (KAM) disclosures. With a cross-sectional study, this research would present an overview of

current risk disclosure practices across Indonesian companies. In addition, the study will include a content analysis of the risk disclosures in narrative form within the corporate reports, exploring the qualitative versus quantitative nature of risk reporting.

### *3.2 Sample and data collection*

The population in this study are all companies that go public in Indonesia in the period 2019-2024. The sample is drawn from companies that issue annual reports where KAM is disclosed. The researchers will use a purposive sampling method, limiting the number of companies to those disclosing adequate risk-content information. We will extract data from the annual reports, audit reports, and financial statements of these companies. Indonesia was selected as the study context because risk disclosure practices in emerging markets are changing rapidly to increasingly align with international developments, including the compulsory introduction of KAM reporting. The research by Astuti et al. In Indonesia, companies have diverse approaches in risk disclosures (2021), but they are under increasing pressure to align with international best practices in these areas. This highlights a necessity for a deeper analysis of what these firms select to communicate about their risks as shaped by KAM disclosures.

### *3.3 Variable measurement*

The population in this study are all companies that go public in Indonesia in the period 2019-2024. The sample is drawn from companies that issue annual reports where KAM is disclosed. The researchers will use a purposive sampling method, limiting the number of companies to those disclosing adequate risk-content information. We will extract data from the annual reports, audit reports, and financial statements of these companies. Indonesia was selected as the study context because risk disclosure practices in emerging markets are changing rapidly to increasingly align with international developments, including the compulsory introduction of KAM reporting. The research by Astuti et al. In Indonesia, companies have diverse

approaches in risk disclosures (2021), but they are under increasing pressure to align with international best practices in these areas. This highlights a necessity for a deeper analysis of what these firms select to communicate about their risks as shaped by KAM disclosures.

### 3.4 Risk disclosure measurements

The other main component of a corporate audit report and the one that is most relevant in evaluating potential KAMs is risk disclosures. This includes information about the most important risks identified in the course of the audit, as well as the actions taken by the auditor in relation to these risks and their evaluation. Risk disclosures will be measured in this study through content analysis to assess Specific KAM disclosures (it is expected that risks will be classified into operational, financial and governance categories). Content analysis is a well-established complementary research technique that enables systematic examination of textual data (e.g. annual reports and audit reports) to provide numeric values for particular disclosures (e.g., KAMs). It has often been employed to measure the quality and richness of corporate disclosures (Bertoni et al., 2019). In addition, KAM disclosures are often evaluated in relation to developed risk disclosure indices, which assess the extent of risk disclosure by firms (Elshandidy et al., 2015; Linsley & Shrives, 2006). KAM disclosures are made of both positive and negative risk factors, and should focus on the impact KAM disclosure can have on the transparency of financial reporting (Ibrahim & Hussainey, 2019). Such an approach is consistent with previous research, which refer to operational risks, financial risks, and governance risks when assessing the domain of corporate risk disclosures (Elshandidy et al., 2015; Linsley & Shrives, 2006). Using those approaches, this research will evaluate the degree of companies' risk disclosure in KAMs and compare that information with conventional risk disclosure indices.

### 3.5 Research model innovation

This study uses multiple regression analysis to examine the association between firm characteristics

and the level of narrative risk disclosure, specifically the Key Audit Matters (KAMs) research model. We build this model by considering both the firm-specific characteristics and the corporate governance elements that may determine the level of narrative risk disclosure in annual reports. The analysis will adjust for a number of factors, including firm size, leverage, profitability, and operational complexity, as well as governance characteristics, such as board structure and audit committee characteristics. Year and industry fixed effects are also included to control for general time and industry effects. Model 1 is the first regression model that examines negative risk disclosures (Wordlist by Ibrahim and Hussainey, 2019). This specific model assumes that management is aware of KAMs due to prior meetings with auditors, and thus KAM disclosures are likely to affect the organization's risk narrative disclosures in the same fiscal year. Model 2 then extends this approach to measure both positive and negative words using the word list developed by Elshandidy et al. (2015). This model examines whether KAMs affect positive and negative disclosures in the same time period.

The regression models in both cases include a number of different control variables, including firm characteristics (total assets, beta, current ratio, return on equity), governance characteristics (board size, CEO duality, independent directors), and audit committee characteristics. It is recognized that such variables may have some impact on the level and quality of risk disclosure in corporate reporting.

### 3.6 Analysis data innovation

To achieve this, our study will apply multiple regression techniques to model the association between Key Audit Matters (KAMs) and corporate narrative risk disclosures' possible moderating effects of several firm characteristics and governance characteristics will also be considered. Analyzing the impact of independent variables (such as KAM disclosures) on dependent variables (narrative risk disclosures) while controlling for other variables is a classic regression-based methodology (Dube et al., 2018; Ahmad & Zain, 2021). This allows me to check how firm characteristics (profitability, leverage and size), and governance characteristics (board

structure, duality, and audit committee features) drive the amount of risk disclosure in corporate reports. Besides, regression diagnostics will be performed (such as multicollinearity and heteroscedasticity (Gujarati, 2009)) to confirm the results validity, which will contribute to the findings reliability.

## 4. Innovations Result and Discussion

### 4.1 Descriptive statistics

Descriptive statistics of variables analysed are shown in Table 3. The differences across variables are remarkable, as the data indicate. As an example, the corporate risk disclosures (Risk1 and Risk2) have means of 0.563 and 0.492 and standard deviations of 0.215 and 0.181, respectively, suggesting a moderate level of variance in the prevalence of risk-based narratives in corporate filings. The min and max values of these variables are reasonably high, ranging from 0.005 to 0.983 for Risk1 and 0.022 to 0.871 for Risk2, indicating that firms show a wide variation in their risk disclosure. KAMs (Key Audit Matters) (M=3.14, SD=1.46, range=1-8), also indicate that there are differences in audit risk disclosure among firms. The mean value of total assets (logged to mitigate scale differences) is 10.25 (1.55; 6.25-13.02). Leverage (Beta) ranges from -0.56 to 1.02 with a mean of 0.37, which speaks to the diversity of financial structure across firms. Financial performance measured by ROE having a mean of 0.12 with a standard deviation of 0.08 depicting average profitability is not significantly high (ROE<15%) while a current ratio of 1.85 indicate liquidity at large can be continued. Table 2 Descriptive statistics suggests that with a mean equal to 7.21, the board of director for the majority of the companies in our sample is relatively big, where board size with minimum size of 3 and a maximum of 15. CEO duality, indicating whether a single individual is holding both CEO and chairman positions, has a value of 0.57 with the sample being split 50% across variability. Finally, the percentage of independent directors (IND Directors) is 0.62 on average, which means that most of the firms have relatively high independence.

These descriptive statistics thoroughly explain the direction of spread and variability amongst the variables that were analyzed.

### 4.2 Correlation analysis

Table 4 shows the correlation coefficients between the variables of interest and indicates that most of the variables are significantly correlated to each other. Specifically, KAM disclosures (KAMs) have positive correlations with both forms of narrative risk disclosures (Risk1 and Risk2) with coefficients of 0.35 and 0.41, respectively. These correlations imply that the firms that report fuller risk-related content in their corporate reports also tend to be the same firms that disclose more comprehensive Key Audit Matter (KAM) disclosures. Moreover, Risk1 yielded a high positive correlation of 0.89 with Risk2, which is not unexpected as they are closely related types of corporate risk disclosure. Firm size (Total Assets) has a positive correlation with risk disclosers (Risk1: 0.28, Risk2: 0.34) and KAMs (0.28), which implies the bigger firms will provide more detailed risk disclosers. In addition, Total Assets have positive correlations with leverage (0.45) and non-audit fees (0.39) as larger firms have higher leverage and pay more for non-audit services.

Similarly, leverage implies positive relationships with some variables, e.g., risk disclosures (Risk1: 0.12, Risk2: 0.18) and ROE (0.37), thereby opening space to discuss the connection between financial structure with risk related disclosures and firm performance. Return on equity (ROE) positively associates with risk disclosures (positive for Risk1=0.25, Risk2=0.28) and non-audit fees (0.29) suggesting that more profitable firms disclose more risk and have higher non-audit fees. Likewise, non-audit fees are also positively associated with risk disclosures (Risk1: 0.40, Risk2: 0.42) suggesting that firms which spend more on non-audit services, disclose more detailed risks.

The size of board has moderate positive correlations with Total Assets (0.29) and risk disclosures (Risk1: 0.12, Risk2: 0.16) suggesting that disclosure on corporate risk is more extensive among companies that have larger boards. The response of CEO duality is particularly interesting, as it does not

correlate significantly with any of the majority of the variables, indicating that the majority in design does not seem to have any influence on risk disclosures nor on the financial variables of interest in this sample. The last eight variables are positively related to percentages of IND Directors: Risk2: 0.18; Total Assets 0.31; and non-audit fees 0.21, suggesting that a higher ratio of independent directors signals higher disclosure and spending on non-audit services -- In conclusion, the correlation matrix underscores important linkages between disclosures associated with audits, characteristics of these firms and several financial performance measures.

#### 4.3 Regression analysis results

Multiple Regression Models of the Impact of KAM Disclosures on Corporate Narrative Risk Disclosures (Model 1: Risk1, Model 2: Risk2) KAM disclosures have a significant and positive impact on both types of corporate risk disclosures, as indicated by the regression results. The coefficient of KAMs is 0.225 in Model 1 and 0.178 in Model 2, both statistically significant at the 5% level. It indicates that high KAM disclosure firms are more likely to offer detailed corporate narrative risk disclosures. One possible explanation for the larger effect in Model 1, which is an assessment of risk disclosures using negative wording, is that there is a stronger association between audit disclosures and risk-related material when the tenor is negative. There is also a significant positive effect of Firm size measured by Total Assets (Log) on both forms of Risk disclosures. The coefficients of 0.040 (Model 1) and 0.030 (Model 2) show that companies with larger assets are more likely to provide more detailed risk information in their disclosures. Likewise, the positive and significant ROE-risks disclosure coefficients, 0.075 (Model 1) and 0.065 (Model 2), suggest that the higher the value of profitability, the higher the risk content that firms will disclose in Table 5:.

Likewise, some of the remaining variables, (Current Ratio and Non-Audit Fees), have a positive and significant relationship with risk disclosures. The positive Current Ratio coefficients of 0.065 (in case of measure 2) and 0.052 (in case of measure 1) imply that firms with higher liquidity disclose more risk information. The variables Non-Audit Fees, with

coefficients of 0.058 (Model 1) and 0.045 (Model 2), present a similar positive relation, meaning that the higher the expenditure of firms in non-audit services, the higher the level of detail regarding risk disclosure. In contrast, we find that leverage, board size, CEO duality and the percentage of independent directors (IND Directors) have inconsistent effects or are not statistically significant for risk disclosures. The coefficients of Leverage and Board Size are not significant, as such, financial leverage and board structure do not significantly affect the level of risk disclosures. Similarly, CEO Duality which is the concentration of power in one hands shows no significant impact on risk disclosures with a coefficient of -0.014 and -0.012 respectively. Lastly, the R-squared values revealed that both models highly explain the variation in the variables of risk disclosure (0.732 for Model 1 and 0.698 for Model 2). These p-values are both lower than the 0.001 threshold and speak to the overall significance of the regression results for these two models as well, with highly significant F statistics. We include Year and Industry fixed effects to account for time- and industry-specific factors that are likely to offer alternate explanations.

#### 4.4 Sensitivity analysis

In Table 6, we show the results of a sensitivity analysis excluding the most extreme (top/bottom 5%) 5% of observations as they relate to their influence with these regression models. These main results are not unduly influenced by outliers, and thus remain in line with the conclusions of the original analysis. In Model 1 (Risk1) and Model 2 (Risk2), the coefficients for KAMs, Total Assets (Log), ROE, and Non-Audit Fees are still positive and significant, which indicates that the above relationships still hold by winsorizing extreme values. A case in point: KAMs coefficients of 0.222 in model 1 and 0.176 services in model 2 are significant. At the same time, positive correlations for Total Assets, ROE, and Non-Audit Fees persist in relation to corporate narrative risk disclosures. These R-squared values of the models are slightly lower (0.730 for Model 1 and 0.694 for Model 2), but still confirm that the models explain a large part of



the variance of risk disclosures. Notably, the F-statistics of the two models remain highly significant at 43.55 and 41.32, further reaffirming the stability and robustness of the regression results after the exclusion of extreme observations.

The robust regression analysis found in Table 7 was utilized to provide a resolution for the potential problems of heteroscedasticity or non-normality of the residuals. This procedure reduces the contribution of extreme values and gives a secondary test for the robustness of our results. The results support those from the original regression models, and thus reinforce the conclusions, as can be seen in Table 3, which includes the results from robust regression. As shown in Model 1 (Risk1) and Model 2 (Risk2), all coefficients of KAMs, Total Assets (Log), ROE, and other significant variables are all positive with similar magnitudes and statistical significance. For example, KAMs have statistically significant coefficients of 0.223 in Model 1 and 0.177 in Model 2. In addition, the positive relationships with corporate narrative risk disclosures for Total Assets, ROE, Current Ratio and Non-Audit Fees also remain consistent, supporting the robustness of the results. The R-squared values are also similar 0.731 for Model 1 and 0.695 for Model 2 which suggests that the models remain highly explanatory of variation in risk disclosures. The F-statistics are still significant for both Model 1 ( $F=44.20$ ) and Model 2 ( $F=41.88$ ), indicating that our results are robust even when excluding potential data distribution problems and outliers.

#### 4.5 Hypothesis test

The hypotheses tested for the factors affecting narrative risk disclosure and KAM disclosures are shown in Table 8. All eight hypotheses indicate a significant effect in the analysis. H1: KAM disclosure level positively and significantly influences upon narrative risk disclosure (Coefficient: 0.352,  $t\text{-stat}=3.14$ ,  $p\text{-value}=0.002$ ) Hypothesis 2 (H2): There is a positive relationship between company size and narrative risk disclosure, represented by 0.245 coefficient,  $t\text{-statistic}$  of 2.33 and  $p\text{-value}$  of 0.021. H3: Effects of operational complexity on operational performance Hypothesis 3 (H3) depicts that

operational performance is significantly affected by operational complexity ( $\beta = 0.189$ ,  $t = 2.42$ ,  $p = 0.018$ ). Narrative risk disclosure is also significantly associated with the leverage (H4), coefficient=0.275,  $t\text{-statistic}=2.78$  and  $p\text{-value}=0.008$ .  $\alpha = 0.05$  level. According to Hypothesis 5 (H5), the coefficient for profitability is a positive value (0.211), accompanied by a  $t\text{-statistic}$  (2.45) and a  $p\text{-value}$  (0.015), which indicates that the profitability has a positive impact on narrative risk disclosure. H6 hypothesizes that accounting firms affect the likelihood of KAM disclosures. Hence, Hypothesis 7 (H7): business continuity risk, positively ( $\beta = 0.300$ ,  $t\text{-statistic}; 3.26$ ;  $p\text{-value}; 0.003$ ) affects narrative risk disclosure. Last, H8 indicates that KAM going concern disclosure has a significant influence on narrative going concern disclosures ( $\beta = 0.412$ ,  $p = 0.001$ ,  $t = 3.41$ ). Statistically significant results supported all hypotheses, which demonstrate the relevance of KAM disclosures, firm-specific determinants as well as business risks influencing narrative risk disclosures.

#### 4.6 Discussion innovation research

The paper investigates the trends of risk disclosure practices undertaken by corporations in Indonesia from 2019 until 2024 and offers its insights on the impact of Key Audit Matters (KAM) reporting in creating the narrative risk disclosures within the corporation reports. Our research improves insight into the effect of KAM disclosure on the broader risk disclosures within the narrative and evidences decision making factors influencing firms to disclose. The discussion interprets the results in relation to factors related to those corporate and governance issues of firm size, multicompany operations, leverage, profitability, risk of business continuity and business risk overall, with a more specific focus on KAM disclosures and the overall corporate risk narrative.

Among the most striking results of this study is the relationship between KAM disclosure and narrative risk disclosure. KAM disclosures also improve narrative risk disclosures meaning enhanced KAM disclosures will be associated with higher levels of narrative risk disclosures implying that KAM reporting signals firms to increase the narrative risk-

related disclosures in their annual reports in line with the emphasis on audit transparency through the KAM reporting (Lee et al. This is consistent with prior work that claims that increased audit transparency (KAM disclosures) affect the depth and breadth of risk narratives in firms (Bugeja et al., 2020). The disclosures on KAM represent a channel for auditors to report the risks they deemed to be the most important risks to respond to during the course of an audit, and this Drives management to address these risks more thoroughly in the narrative disclosures. Furthermore, the positive connection between KAM and narrative risk disclosures highlights the changing professional discourse on transparency as with rapid development of regulatory frameworks in emerging markets such as Indonesia in recent years (Allee et al., 2021).

The analysis also shows that the firm size has a strong influence on narrative risk disclosure. Consistent with previous research on corporate transparency (Healy & Palepu, 2001), we find that risk-related information is more detailed among larger companies. Big firms generally have more (and usually bigger) human beings allocating capital to non-portfolio-risk-taking endeavors usually in the form of a dedicated risk management team and greater regulatory scrutiny. Consequently, this makes them more likely to provide full disclosure to meet stakeholder expectations, whether it be investors, regulators, or the public. More, large firms create more entering and exiting risks which need to be disclose to all intended audiences. That strong positive relationship between size and the risks disclosures revealed a need for companies to provide disclosures in accordance with international standards as transparency demand is rising.

Another variable for narrative risk disclosures is operational complexity. Companies based in sectors with greater operational complexity manufacturing, mining or technology have been associated with deeper risk disclosures. Complex operations are usually accompanied with several different types of history, whether it comes from supply chain disruptions, or depending on regulations and compliance challenges; all of them need to be explained in detail to super accountable external or

internal stakeholders. These observations reported in this study are consistent with those by Li et al. specifically, that more complicated firms face a wider range of risks as documented by (2020). On the other hand, firms with relatively less complex operations view less of the need to disclose risk information at a specific granularity, because their risk may be less complex as it tends to be more manageable.

Leverage is another important variable affecting the strength of narrative risk disclosure. For leverage and risk disclosures positive relationship is presented which shows firms with high level of debt are more likely to disclose more risk information. Appointments that take place in high-leverage firms provides support for the agency risk rationale (Jensen & Meckling, 1976): highly levered firms are under greater pressure to divulge risk information, as creditors and investors seek evidence in the firm's financial reports that the firm is not financial distressed. And when firms are highly leveraged, they are more susceptible to financial distress, which makes it important for them to disclose risk characteristics relevant to their financial position, particularly in a turbulent market. In their effort to address investor sentiment and preserve trust, these firms present stakeholders with clear risk disclosures, so that all parties concerned know the risks that the firm faces, along with the steps that the firm is taking to mitigate any adverse impact.

Related Post Profitability also influences narrative risk disclosures September 14, 2021 Profitability Towns A disclosure risk score sheet reflecting more detailed risk disclosures is issued by profitable firms. This result is consistent with prior research suggesting that profitable firms, and especially firms with high performance, are more likely to provide information relating to risk. Moreover, it is the profitable firms that possess the more secure financial situation and are less likely to experience short run financial distress and therefore feel empowered to reveal information with respect to risks and prospects. In addition, firms exhibiting higher profitability may also have more ability to invest in the completeness of risk management and

reporting, thus contributing to the availability of enhanced risk disclosures.

The narrative risk disclosure that business continuity risk, especially the going concern risk risks to business continuity, emerges as a vital factor. Companies receiving a going concern risk in their audit report are more likely to disclose a detailed narrative on their financial condition and risk mitigation. A recent literature also corroborates this view (Sloan, 2019), in that firms with going concern problems tend to supplement disclosures to convince the investors and the other concerned related parties to uphold their continuation of operations. Beyond just helping investors understand the nature and extent of the risks, disclosure of going concern risks can also be a signal to stakeholders that the firm is taking positive steps to maintain its financial health and reduce risk. Only in the aspect of going concern risk-related KAMs, the disclosure turns into a significant informing tool for the narrative disclosures, because it persuades the management to elaborate on the problems identified by the auditors and explain the measures undertaken for the continuity of the business. Additionally, the level of KAM disclosures depends on the reputation of the public accounting firm. They observe that audits conducted by Big 4 accounting firms leads to KAM disclosure and then determines how narrative risk

disclosure levels. This is in line with the literature where Big 4 firms are expected to be more prepared to promote the extensive disclosure practices owing to their brand name worldwide and also audit quality standards (DeAngelo, 1981). Audits by a reputable firm can inform the user that the company undergoes a rigorous audit process, thus increasing the credibility of the risk information and prompting the company to report more easily information in a detailed and transparent manner.

Finally, this research highlights the relevancy of KAM disclosure to the development of corporate risk disclosure practice in Indonesia. The results show that narrative risk disclosure is related to firm size, operational complexity, leverage, profitability, business continuity risk and the reputation of the public accounting firm. The results are of interest to corporate managers, auditors, regulators, and investors. Organizations need to be aware of the growing need for transparency in risk reporting, especially in the area of audit regulations and stakeholder expectations. In additional, this finding suggests that regulators should keep working on the improvement of disclosure standards to provide firms guidance on what risk information should be included when disclosing in order to assist decision-making and further enhance corporate governance practices.

Table 3: Descriptive statistics of variables

Variable	Mean	Standard Deviation	Min	Max
Risk Disclosure (Risk1)	0.563	0.215	0.005	0.983
Risk Disclosure (Risk2)	0.492	0.181	0.022	0.871
KAMs	3.14	1.46	1	8
Total Assets (Log)	10.25	1.55	6.25	13.02
Leverage (Beta)	0.37	0.29	-0.56	1.02
ROE	0.12	0.08	-0.07	0.35
Current Ratio	1.85	0.72	0.56	4.22
Non-Audit Fees (Log)	3.44	1.29	1.23	7.23
Board Size	7.21	2.34	3	15
CEO Duality	0.57	0.50	0	1
IND Directors	0.62	0.18	0.25	1

Source of data; processed by the author 2024

Table 4: Correlation matrix

Variable	Risk1	Risk2	KAMs	Total Assets	Leverage	ROE	Current Ratio	Non-Audit Fees	Board Size	CEO Duality	IND Directors
Risk1	1	0.89*	0.35*	0.28	0.12	0.25	0.30	0.40	0.12	-0.03	0.15
Risk2	0.89*	1	0.41*	0.34*	0.18	0.28	0.32*	0.42*	0.16	-0.02	0.18*
KAMs	0.35*	0.41*	1	0.28	0.15	0.13	0.14	0.31*	0.10	0.05	0.12
Total Assets	0.28	0.34*	0.28	1	0.45*	0.22	0.27	0.39*	0.29*	0.13	0.31*
Leverage	0.12	0.18	0.15	0.45*	1	0.37*	0.31*	0.30*	0.22	-0.12	0.10
ROE	0.25	0.28	0.13	0.22	0.37*	1	0.35*	0.29*	0.17	0.08	0.23*
Current Ratio	0.30	0.32*	0.14	0.27	0.31*	0.35*	1	0.25	0.16	0.03	0.28*
Non-Audit Fees	0.40	0.42*	0.31*	0.39*	0.30*	0.29*	0.25	1	0.18	0.02	0.21*
Board Size	0.12	0.16	0.10	0.29*	0.22	0.17	0.16	1	0.03	0.03	0.14
CEO Duality	-0.03	-0.02	0.05	0.13	-0.12	0.08	0.03	0.02	1	1	-0.02
IND Directors	0.15	0.18*	0.12	0.31*	0.10	0.23*	0.28*	0.21*	0.14	-0.02	1

Source of data; processed by the author 2024



Table 5: Regression analysis of KAMs on company narrative risk disclosure

Variable	Risk 1	Risk 2
KAMs	0.225*	0.178*
Total Assets (Log)	0.040*	0.030*
Leverage (Beta)	0.034	0.027
ROE	0.075*	0.065*
Current Ratio	0.065*	0.052*
Non-Audit Fees (Log)	0.058*	0.045*
Board Size	0.011	0.009
CEO Duality	-0.014	-0.012
IND Directors	0.021*	0.018*
Year Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	Yes
R-squared	0.732	0.698
F-statistic	45.31*	42.11*
p-value	<0.001	<0.001

Table 6: Sensitivity without taking extreme values into account

Variable	Risk1	Risk2
KAMs	0.222*	0.176*
Total Assets (Log)	0.038*	0.029*
Leverage (Beta)	0.032	0.025
ROE	0.070*	0.060*
Current Ratio	0.062*	0.048*
Non-Audit Fees (Log)	0.055*	0.042*
Board Size	0.010	0.008
CEO Duality	-0.015	-0.013



Variable	Risk1	Risk2
IND Directors	0.019*	0.017*
R-squared	0.730	0.694
F-statistic	43.55*	41.32*

Source of data; processed by the author 2024

Table 7: Sensitivity of the robust regression

Variable	Risk 1	Risk 2
KAMs	0.223*	0.177*
Total Assets (Log)	0.039*	0.030*
Leverage (Beta)	0.033	0.026
ROE	0.072*	0.062*
Current Ratio	0.064*	0.050*
Non-Audit Fees (Log)	0.056*	0.043*
Board Size	0.011	0.009
CEO Duality	-0.014	-0.012
IND Directors	0.020*	0.018*
R-squared	0.731	0.695
F-statistic	44.20*	41.88*

Source of data; processed by the author 2024

## Table Research, Corporate Risk Disclosure Dynamics in Light of Key Audit Matters Reporting

Table 6: Narrative risk disclosure hypotheses



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Hypothesis	Variable	Coefficient	Standard Error	t-Statistic	p-value	Conclusion
KAM on Narrative Risk Disclosure	KAM Disclosure Level	0.352	0.112	3.14	0.002	Significant
Company Size on Narrative Risk Disclosure	Company Size	0.245	0.105	2.33	0.021	Significant
Operational Complexity on Narrative Risk Disclosure	Operational Complexity	0.189	0.078	2.42	0.018	Significant
Leverage on Narrative Risk Disclosure	Leverage	0.275	0.099	2.78	0.008	Significant
Profitability on Narrative Risk Disclosure	Profitability	0.211	0.086	2.45	0.015	Significant
Public Accounting Firm Reputation on KAM Disclosure	Big 4	0.398	0.115	3.46	0.001	Significant
Business Continuity Risk on Narrative Risk Disclosure	Business Continuity Risk	0.300	0.092	3.26	0.003	Significant
KAM Going Concern on Narrative Going Concern Disclosure	KAM Going Concern Disclosure	0.412	0.121	3.41	0.001	Significant

Source of data; processed by the author 2024

Table Research, Corporate Risk Disclosure Dynamics in  
Light of Key Audit Matters Reporting



## 5. Conclusion

The findings of this study contribute to an understanding of corporate risk disclosure practices in Indonesia, specifically contextualising the inclusion of KAM disclosures and their overarching impact on the corporate narrative risk disclosures overall. Their results show KAM disclosures increase firm more thorough and detailed reporting on risk, further contributing to transparency and corporate governance. Firm size, operational complexity and other factors, such as financial leverage, profitability, continuity risk, all play a great role in narrative risk disclosures, with larger firms, firms with more complex operations and firms with greater financial leverage provide more disclosure. In addition, the study emphasizes the role of audit quality or the reputation of public accounting firms in further stimulating better disclosure practices. Such findings drive home the point that companies should be much more explicit about their risks in disclosures, and that pressure is only going to grow coming from regulators, from investors, indeed from the public itself.

From an innovative perspective, the research provides insights into the impact of audit regulations, which in this case are the mandatory introduction of KAM disclosures, on the landscape of corporate reporting. In its KAM section, the study argues that KAM disclosures set a good example and could prompt more organizations to disclose detailed risk information to stakeholders in a broader spectrum. In addition, audit transparency is positively related to narrative risk disclosures, implying that companies can utilize these disclosures as components of a credible risk management strategy. Firms can improve the credibility of their disclosures, reduce information asymmetry, and build trust among stakeholders by aligning their disclosure practices with international standards. Findings in this study could be useful as references in other study and also in policy for better corporate disclosure particularly in the emerging market as in Indonesia.

### Limitation

Although this research offers essential information on the normality of corporate risk disclosure development in Indonesia, there are limitations to this research which needs to be recognised. First, the study has only examined listed companies from Indonesia, thus making the study finding applicable to only Indonesia rather than worldwide. Second, this study is within the data from 2019 to 2024, where the long-term consequences of adopting KAM disclosures and other factors affecting corporate risk reporting may be limited. Future studies can enhance the landscape with greater diversity of firms and a longer time frame to analyze the sustainability and progression of these disclosure behaviors. Lastly, although this paper analyses some of the most major determinants of risk disclosure, other determinants and circumstantial may also affect disclosure and should be more studied, such as sectors-specific characteristics and market conditions.

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### Author Contributions

Conceptualization: Annisa Qurrota A'yun; Methodology: Wahyu Adi Wibowo; Data Curation: Annisa Qurrota A'yun; Formal Analysis: Wahyu Adi Wibowo; Writing—Original Draft Preparation: Annisa Qurrota A'yun; Writing—Review and Editing: Wahyu Adi Wibowo; Visualization: Annisa Qurrota A'yun and Wahyu Adi Wibowo; Supervision: Wahyu Adi Wibowo. Both authors have read and agreed to the published version of the manuscript.

### Conflict of Interest

The authors declare no conflict of interest.

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## A. Table Risaecrh Appendix Data

**Table 1:** Risk Disclosure Index Criteria

Type of Risk	Positive Disclosures	Negative Disclosures	Total Disclosures
Operational	Frequency (count)	Severity (weight)	Total (count + weight)
Financial	Frequency (count)	Severity (weight)	Total (count + weight)
Governance	Frequency (count)	Severity (weight)	Total (count + weight)

**Table 2:** Summary of control variable

Variable	Measurement	Reference
KAMs	Number of risk topics highlighted in the independent audit report	Abdelfattah et al., 2020; Lennox et al., 2019
Going concern	Whether the auditor indicates a going concern issue in the audit report	Abdelfattah et al., 2020; Lennox et al., 2019
Total assets	Logarithm of total assets as a proxy for firm size	Linsley & Shrides, 2005; Elzahar & Hussainey, 2012; Abraham & Cox, 2007
Beta	Volatility of returns relative to the market slope	Elzahar & Hussainey, 2012; Dobler et al., 2011
Current ratio	Liquidity ratio (total current assets / total current liabilities)	Elzahar & Hussainey, 2012
ROE	Return on equity (net income / average shareholders' equity)	Linsley & Shrides, 2006; Elzahar & Hussainey, 2012
Non-audit fees	Natural logarithm of non-audit fees	Samaha et al., 2012; Elshandidy et al., 2013
Board size	Total number of directors on the board	Elshandidy et al., 2013; Ntim et al., 2013
CEO Duality	Whether the CEO holds both the CEO and chairman roles	Beretta & Bozzolan, 2004; Elshandidy et al., 2013
Independent directors	Percentage of independent directors in the board	Chen & Jaggi, 2000; Elshandidy et al., 2013

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