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The institutional ownership, auditor characteristics and KAM disclosure: Evidence from emerging markets

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Abstract

This study aims to explore the relationship between Institutional Ownership (IO), auditor characteristics (Big 4), and Key Audit Matter (KAM) disclosure. It also analyzes IO and KAM disclosure by dividing the sample into subgroups based on the percentage of IO amount above or below the average institutional ownership of the firms. Data was obtained from annual reports collected from companies listed on the Indonesia Stock Exchange (IDX) in 2022 through the idx.co.id website using 649 observations, and analyzed using regression while content analysis was used to measure KAM disclosure. The research findings show that Big 4 has a positive relationship with KAM disclosure. However, no significant evidence was found to suggest that IO has a significant relationship with KAM disclosure during the observation period. This study underscores that the adoption of Auditing Standard (SA) 701 as part of an international initiative may improve financial reporting transparency, especially in firms audited by the Big 4 which tend to provide more comprehensive KAM disclosures. This research provides an important contribution for regulators, auditors, and policymakers to refine the corporate governance framework and auditing standards, ultimately leading to improved transparency and audit quality in emerging markets such as Indonesia. This study recommends refining KAM communication guidelines to further enhance transparency and reduce information asymmetry, especially for non-Big 4 firms and suggests that policymakers need to strengthen corporate governance mechanisms to improve audit quality.

Keywords: Auditing standard (SA) 701, Auditor characteristics, Big-4, Emerging market, Indonesia, Institutional ownership, KAM.

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1. Introduction

Key Audit Matters (KAM) are a key regulatory measure designed to improve the transparency and relevance of audit reports [1]. This regulatory framework has been adopted in many nations encompassing the Malaysia, United Kingdom, Thailand, Australia, Singapore and New Zealand. In Indonesia, the regulation came into effect in 2022 following the 2021 release of an exposure draft by the Indonesia Institute of Certified Public Accountants (IICPA) which subsequently led to revisions and updates to the Audit Standards (AS). These standards address the communication of KAM in the Independent Auditor's Report. KAM pertains to the most critical audit matters identified by the auditor's expert evaluation in assessing the financial statements for the current reporting period. Kitiwong and Sarapaivanich [2] state the implementation of KAM reporting within the new audit framework enhances communication, improves the quality of disclosed information and elevates overall audit quality. High-quality audits provide shareholders with more reliable profit information [3].

In Indonesia, AS 701, governing the communication KAM has been effective for public companies since January 1, 2022 [1]. After nearly two years of implementation, it is essential to evaluate compliance with the standard's requirements and identify other key factors influencing KAM disclosures in financial statements. Standard setters anticipate that these new requirements will reduce information asymmetry between investors and management enhancing transparency.

Institutional ownership (IO) has been widely recognized as a significant determinant of corporate governance and decision-making processes [3]. This influence stems from institutional shareholders' tendency to adopt a long-term perspective which can shape corporate practices related to transparency, financial reporting and governance. A common perspective suggests that institutional investors seek high-caliber financial data which promotes a favorable relationship with the degree of IO regarding the quality of audit services provided [3].

Fera, et al. [4] identified an inverse relationship between the number of KAM and strong corporate governance and disclosed during the audit process. This suggests that robust corporate governance practices by mitigating risks and enhancing transparency can lead to fewer critical audit matters. Velte [5] additionally highlighted how governance frameworks unique to each country may influence the connection between KAM disclosures and corporate governance practices. However, the literature also highlights inconsistencies in KAM disclosure practices. For example, company size has been recognized as a determinant affecting the scope of KAM disclosures Casterella, et al. [6] and Huang, et al. [7]. Pinto and Morais [8] found that auditors of larger, more complex companies tend to reveal more KAM to reflect the increased audit risks associated with such firms.

Several studies have examined the relationship between certain elements of KAM and corporate governance [4, 9-12]. However, existing research has not delved into the specific role of corporate ownership structure in influencing KAM disclosure. For instance, Zhang and Shailer [9] examined the influence of audit committee proficiency on Significant Issue (SI) disclosures and KAM in the UK. Their findings suggest that a more experienced audit committee, particularly in accounting terminology and industry proficiency can lead to fewer KAM disclosures that are more aligned with the disclosure of significant issues. Additionally, changes in the capability of the audit committee may significantly influence the selection of KAM. Wuttichindanon and Issarawornrawanich [10] examined the determinants affecting KAM disclosure in Thailand. The study analyzed two main factors: corporate governance processes and auditor qualities using firm characteristics as control variables. Their results revealed a substantial positive correlation between the existence of independent board directors and the number of reported KAM. Velte [12] examined the correlation between audit committee characteristics and KAM disclosures in the UK demonstrating a favorable correlation between the transparency of KAM, the committee's financial and industry proficiency and the percentage of female members on the audit committee. Fera, et al. [4] analyzed the correlation between KAM disclosures and the quality of corporate governance (assessed by CG score) for non-financial firms listed on the Italian stock market. Their findings highlighted that companies with robust, sustainable governance frameworks often disclose fewer KAM in their audit reports suggesting that effective governance reduces the number of complex audit issues requiring disclosure.

Based on a review of previous studies, none have specifically examined ownership structure, a critical component of corporate governance about KAM. Therefore, this research seeks to address the deficiency in the current literature by analyzing the influence of ownership structure, particularly IO in KAM disclosures. This study explores how IO influences management's decisions regarding KAM disclosures in financial reports and how litigation risk faced by external auditors working in Big 4 audit firms may impact their decisions on KAM disclosures in audit reports in emerging markets using the agency theory framework. Emerging markets are characterized by heightened concerns stemming from inefficient capital markets, unsophisticated investors and weak legal systems [13]. This research provides practical contributions and several theoretical to the auditing domain in Indonesia. Theoretically, the study employs "agency theory and communication theory to explain the initial implementation of KAM reporting in audit reports for IDX-listed companies". Practically, the study provides valuable insights for various stakeholders including shareholders and investors who rely on audit reports to assess investment risks in IDX-listed companies. These stakeholders can better use the data included in audit reports by understanding the initial implementation of KAM reporting. Additionally, standard setters and regulators may use the outcomes of this research for evaluation, revise and enhance auditing and reporting requirements.

Furthermore, the results of this research may be used to assess the influence of KAM reporting on the accountability and transparency of audit risk data in audit reports and further broadly on auditor practices in Indonesia. This research enriches the existing body of literature in three pivotal dimensions. Initially, it deepens insights into the linkage between caliber of audit practices and IO, specifically KAM of Indonesian corporate governance. This area remains relatively unexplored in developing countries with previous studies primarily focusing on aspects such as audit committees and independent directors [11, 14]. Second, consistent with the expectations of the International Auditing and Assurance

Standards Board (IAASB), the study examines the potential of KAM to enhance the communicative value of the auditor's report in compliance with Audit Standard (AS) 701.

The Big 4 accounting firms have been instrumental in defining both the scope and standard of KAM disclosures across Southeast Asia [11]. This study finds that Indonesian audited corporations by Big Four firms often provide more comprehensive and informative KAM disclosures in comparison to individuals subjected to an audit by non-Big Four firms. These findings offer valuable insights for auditors, particularly those working in Big Four firms as well as policymakers. This study can contribute to improving audit practices and corporate oversight by highlighting the positive impact of greater transparency in KAM disclosures. Additionally, the findings can inform regulators and lawmakers in developing and refining audit and governance policies, particularly with regard to the influence of IO and auditor characteristics on KAM disclosures. Ultimately, this can lead to a stronger corporate governance framework.

The structure of this document is as follows: (1) introduces the research theme and establishes the foundational context. (2) Delves into pertinent literature leading to the formulation of hypotheses. (3) Elaborates on the methodology, describing the population and sample, defining research variables, and outlining the empirical model. (4) Showcases the empirical results supplemented by further analyses. (5) Concludes with a discussion on the findings' implications emphasize the study's scholarly contributions and proposes avenues for further study.

2. Literature Review

Existing agency theory literature suggests that companies with strong governance frameworks are more inclined to commit to disclosing additional information that benefits stakeholders [15-18]. Agency theory is a widely used theoretical framework for understanding and addressing conflicts of interest between stakeholders and management [19, 20].

Agency theory provides a framework for comprehending the intricate interactions among an entity, its management, and its external auditors [21]. This theory suggests that conflicts of interest may arise between the entity (principal) and management (agent) with the external auditor acting as a mediator, particularly in financial reporting matters [22]. As impartial intermediaries, external auditors play crucial role a providing assurance to shareholders and mitigating these conflicts, especially institutional investors regarding the accuracy and compliance of financial reports [23]. According to agency theory, strong relationships between entities and their external auditors are essential for minimizing agency costs, reducing information asymmetry and improving corporate disclosures, including KAM. These factors contribute to enhancing transparency and facilitating informed decision-making by institutional shareholders.

Communication theory provides a framework for understanding how communication systems function encompassing definitions, processes, methods, elements, outcomes and the dynamics between senders and receivers [24]. Effective communication hinges on the recipient's ability to comprehend the message fully [25]. Audit reports, including those containing KAM serve as messages transmitted by auditors to various recipients such as stakeholders and companies. To evaluate the caliber of communication within audit reports, researchers often assess two key dimensions: readability which measures the ease of understanding the message and tone which reflects the sentiment conveyed whether positive, negative or neutral [26].

The reporting of KAM differs significantly from conventional audit reports which are often difficult to read, understand, and tend to provide primarily positive information leading to poor communication quality [25]. Previous research has applied communication theory to these issues. For instance, Smith and Smith [23]; Datejarutsri, et al. [24]; Li [26] and Velury and Jenkins [27] discovered that conventional audit reports, including footnotes are challenging for users to comprehend, limiting their usefulness and communication value. However, Datejarutsri, et al. [24] and Loughran and McDonald [25] discovered that KAM reports are more readable and easier to understand as evaluated using communication theory. Furthermore, KAM reports have the capacity to convey both positive and negative information, thereby assisting stakeholders in making more informed decisions. Therefore, this study integrates agency theory with communication hypothesis to analyze the correlation between auditor attributes (Big 4 involvement) and IO in relation to KAM disclosures for corporations registered on the Indonesia Stock Exchange (IDX) during the 2022 fiscal year.

2.1. Literature Review and Hypothesis Development

2.1.1. Institutional Ownership and KAM Disclosure

Institutional investors are pivotal within corporate governance frameworks [17]. Agency theory posits that IO is a central element in establishing control over corporate actions. Acting as agents, management is compelled to provide more comprehensive information to satisfy the expectations of institutional stakeholders. Additionally, institutional investors actively monitor managerial policies and oversee the reporting process aligning with the objectives of information disclosure and corporate governance to improve the quality of financial reporting [28].

Institutional investors play a key role in actively monitoring managerial policies and overseeing the reporting process [29]. Additionally, a strong correlation exists between IO and audit quality, particularly in the selection of larger audit firms to review a company's financial statements [30]. These findings highlight the significant influence of institutional investors on a company's audit choices favoring reputable firms that conduct thorough and reliable audits [3, 31].

Empirical evidence from Ebrahim and Fattah [31] and Francis and Yu [32] indicates a favorable correlation between institutional investors and the degree of voluntary disclosures. This implies businesses with higher IO tend to share supplementary information. Such findings align with research by Wuttichindanon and Issarawornrawanich [10] and Velte and Issa [11] which reveal a positive correlation among corporate governance frameworks and the disclosure of KAM. Based on this evidence, the hypothesis is as follows:

H₁: "Institutional ownership positively affects the disclosure of Key Audit Matters (KAM) in audit reports."

2.1.2. Auditor Characteristics and KAM Disclosure

Several studies suggest that Big 4 accounting firms provide higher-quality audits due to their superior allocation of human and financial resources enabling them to utilize advanced technology and improved audit procedures [33, 34]. Additionally, these firms are generally perceived as more independent in their interactions with clients [35]. However, engaging a Big 4 auditor while often associated with higher audit quality can also result in higher costs [36].

Empirical studies have shown substantial disparities in audit quality across Big 4 and non-Big 4 organizations with large firm investors often demanding higher audit quality [37]. These differences can be attributed to the technical expertise and extensive training of auditors in larger firms as well as concerns related to brand equity, company reputation, and strategies aimed at protecting that reputation [38, 39]. Big 4 auditors are highly motivated to maintain their reputation and are likely to apply strict and thorough disclosure criteria to mitigate the potential consequences of reputational damage [40-42].

This study focuses on auditor litigation risk as highlighted by Wuttichindanon and Issarawornrawanich [10] and Velte and Issa [11]. Dye [42] and Rahaman and Karim [43] suggests that higher-income auditors are more vulnerable to legal actions and regulatory sanctions. Big 4 audit firms which are more exposed to litigation risks may disclose more KAM and exercise greater caution in their audit practices. Rahaman and Karim [43] and La Porta, et al. [44] discovered that Big 4 auditors may not necessarily disclose more KAM, they tend to provide more comprehensive explanations compared to non-Big 4 auditors. However, weak regulations and ownership structures in some Southeast Asian countries, including Indonesia can contribute to suboptimal audit functions and quality [45, 46]. Nevertheless, local auditors in this region are working to improve audit quality by partnering with multinational Big 4 firms [47]. Consequently, we propose that the involvement of Big 4 auditors is positively associated with KAM disclosure.

H₂: "The role of Big 4 auditors' assignments has a positive relationship with the disclosure of Key Audit Matters (KAM)."

3. Research Methods

3.1. Sample Selection

This research utilizes data from the annual reports of publicly traded companies IDX for the fiscal year 2022. The sample includes all publicly listed firms the IDX in that year. Data was acquired from the official website of the IDX (<https://www.idx.co.id/id>). Notably, 2022 marks the inaugural year of implementation for Financial Accounting Standard (SAK) 701 which mandates the disclosure of KAM within audit reports.

Table 1 outlines the procedure for sample selection. A total of 824 firm-year observations were initially obtained from the IDX database for the year 2022. However, 34 observations were excluded due to the absence of annual reports published by these firms for the specified year. Additionally, 141 observations were eliminated owing to missing data. Consequently, the total sample consisted of 649 firm-year observations.

Table 1.
Sample selection.

Firms	Total
Entities registered on the Indonesia stock exchange (IDX) in 2022.	824
<i>Excluded:</i>	
Does not publish an annual report.	34
Firm with missing data.	141
Total observations	649

3.2. The Measurement of Dependent and Independent Variables

This study utilizes audit reports from entities registered on the IDX for the fiscal year ending in 2022. As this was the inaugural year for the execution of KAM in Indonesian public companies, auditors may have experienced heightened scrutiny, potentially leading to either excessive or insufficient KAM disclosure. The dependent variable, KAM disclosure, was assessed using content analysis by quantifying the word count of the KAM section within the audit reports [10, 48]. The independent variables comprise IO calculated as the proportion of common shares owned by institutional investors at the fiscal year-end [28] and Big 4 which primarily focuses on the lawsuit risks encountered by auditors [11]. A dummy variable was employed to differentiate between Big 4 and non-Big 4 auditors with a value of 1 assigned to Big 4 firms and 0 to others. This distinction is crucial as Big 4 auditors have significant influence on perceptions of financial reporting quality in the East and Southeast Asian region [47].

3.3. The Measurement of the Control Variable

To enhance the robustness of the regression model, several company characteristics were incorporated as control variables. These include Company Size (SIZE) as examined in studies by Suttipun [48] and Fera, et al. [4] others; Company Profitability (PROFIT) drawing from studies by Suttipun [48] and Pinto and Morais [8] company risk (RISK), as discussed by Suttipun [48]; Wuttichindanon and Issarawornrawanich [10] and Velte and Issa [11] company age (AGE) [27, 49]. It is hypothesized that a positive correlation exists between the extents of KAM disclosure firm size and measured by the natural logarithm of total assets as larger companies typically require more extensive audit procedures. Additionally, company profitability measured by ROA, and company risk assessed using the debt-to-equity ratio are included as control variables. It is expected that higher levels of debt-to-equity ratio indicating greater overall firm risk will be associated with

an increased quantity of KAM disclosures. Finally, company age measured in years is included as older firms with their presumed experience in managing risks may exhibit fewer KAM disclosures. Table 2 presents the detailed variable measurements of all variables.

Table 2.
Variable measurement.

Variables	Note	Measurement
1. Key audit matters (KAM) disclosure : Dependent variable	KAM	1.Content analysis with word count [48].
2. Auditor characteristics (Big-4): Independent variable	Big 4	2. Referring to Big 4 audit firms, with code 1 for companies using Big 4 audit firms and 0 if not [11].
3. Institutional ownership (IO): Independent variable	IO	3.Percentage of common shares owned by institutions at the end of the calendar year [50].
Control variables		
Company size (SIZE)	SIZE	The natural logarithm of total assets.
Company profitability (PROFIT)	PROFIT	The ratio of return on asset (ROA).
Company risk (RISK)	RISK	The ratio of debt to equity.
Company age (AGE)	AGE	Years of listing.

3.4. Data Analysis

To evaluate our hypotheses, we employed a cross-sectional regression model focusing on two specific models. The first model investigates the correlation between IO and KAM disclosure (IO_KAM) while the second model explores the correlation between auditor characteristics (Big 4) and KAM disclosure (Big 4_KAM). Both models incorporate the same control variables to ensure consistency and minimize estimation bias within the analysis.

Model 1:

$$KAM = \beta_0 + \beta_1 IO + \beta_2 SIZE + \beta_3 PROFIT + \beta_4 RISK + \beta_5 AGE + \varepsilon \quad (1)$$

Model 2:

$$KAM = \beta_0 + \beta_1 Big4_4 + \beta_3 SIZE + \beta_4 PROFIT + \beta_5 RISK + \beta_6 AGE + \varepsilon \quad (2)$$

Where

KAM = Content analysis based on word count.

Big-4 = Indicator for Big 4 audit firms, coded as 1 for companies audited by Big 4 firms and 0 otherwise.

IO = Percentage of common shares owned by institutions at the end of the calendar year.

SIZE = The natural logarithm of total assets.

PROFIT = The ratio of return on assets (ROA).

RISK = The debt-to-equity ratio.

AGE = Company age (years since listing).

4. Result and Analysis

4.1. Descriptive Statistics

Table 3 delineates the variables used in the investigation accompanied by descriptive data including max, mean, min, and std. KAM disclosures have an average of 451.044 words with a max. of 1,421 and a min. of 14 indicating significant variability among companies. The average score for Big 4 auditors is 0.268 indicating that approximately 26% of the sampled organizations were audited by Big 4 firms. IO averages 58.5% reflecting that most company shares during the observation period were held by institutional investors. Firm Size (SIZE) measured in natural logarithm is 28.5 on average, while profitability (PROFIT) averages 5.5, company risk (RISK) averages 1.2 and the average company age (AGE) is 31.8 years.

Table 3.
Descriptive statistics.

Variables	Obs.	Mean	Std. dev	Min.	Max.
Key audit matters (KAM)	649	451.044	217.446	14	1421
Auditor characteristics (Big 4)	649	0.268	0.443	0	1
Institutional ownership (IO)	649	58.501	28.156	0	99.957
Company size (SIZE)	649	28.523	2.047	17.982	35.228
Company profitability (PROFIT)	649	5.589	141.800	-7.592	3612.443
Company risk (RISK)	649	1.292	5.225	-76.751	41.647
Company age (AGE)	649	31.810	16.976	3	111

Note: "This table presents descriptive statistics for the variables in our model (Mean, STD, minimum, and maximum)."

4.2. Correlation Matrix

Table 4 provides the correlation matrix for the independent and dependent variables allowing for the analysis of statistical relationships among them. The findings indicate a substantial positive correlation between KAM disclosure and Big 4, SIZE, RISK, and AGE. However, the correlation between KAM disclosure and IO as well as profit is not significant. While the lack of a significant correlation with IO was unexpected, the findings are consistent with existing literature, which highlights a strong positive relationship between auditor characteristics, particularly affiliation with Big 4 firms, and KAM disclosure. Therefore, higher levels of KAM disclosure are linked to audits conducted by Big 4 auditors.

Table 4.

Correlation matrix.

Variables	KAM	Big-4	IO	Size	Profit	Risk	Age
Key audit matters (KAM)	1.00						
Auditor characteristics (Big 4)	0.26*	1.00					
Institutional ownership (IO)	0.02	0.09*	1.00				
Company size (SIZE)	0.31*	0.40*	0.04	1.00			
Company profitability (PROFIT)	-0.01	-0.02	0.00	-0.20*	1.00		
Company risk (RISK)	0.12*	0.02	-0.04	0.08*	-0.01	1.00	
Company age (AGE)	0.11*	0.15*	-0.07*	0.29*	0.00	0.07	1.00

Note: *** $p < 0.05$.

Table 5 presents the Variance Inflation Factor (VIF), a statistical metric used to assess the impact of multicollinearity on regression coefficients. VIF measures the extent to which the variance of a regression coefficient is amplified due to multicollinearity among independent variables [51]. The results reveal that all independent variables have VIF values below 10 indicating no significant multicollinearity and suggesting that the regression outcomes are not adversely affected [52].

Table 5.

Variance inflation factor.

Variables	VIF
Auditor characteristics (Big 4)	1.22
Institutional ownership (IO)	1.02
Company size (SIZE)	1.36
Company profitability (PROFIT)	1.05
Company risk (RISK)	1.01
Company age (AGE)	1.12
Average VIF	1.13

4.3. Multivariate Regression Analysis Results

Table 6 displays the regression analysis outcomes assessing the impact of IO and auditor characteristics (Big 4) on KAM disclosure. The results reveal an absence of a sig. association between IO and KAM disclosure. The IO coefficient is statistically insignificant ($p:0.925 > 0.05$), thus failing to support hypothesis 1 (H1). This discovery indicates that the proportion of IO does not significantly influence KAM disclosure. Modern audit reporting provides enhanced communication quality and informational value relative to conventional ways leading to enhanced audit quality [53] the impact of IO on mandatory KAM disclosure appears to be limited. This contrasts with the findings of Francis and Yu [32] who identified a favorable relationship between the degree of voluntary disclosure and institutional investor ownership. Unlike mandatory KAM disclosure, voluntary disclosure allows companies greater discretion in determining the information to be disclosed, thereby enabling IO to exert a more significant influence. However, in the context of mandatory KAM disclosure, the role of the auditor, particularly in the execution of new audit reporting policies appears to be the primary factor influencing disclosure levels [54]. Therefore, institutional investors generally place trust in auditors as argued by Nguyen and Kend [55]. However, institutional investors' limited familiarity with key audit terminology and broader misunderstandings about the auditor's role may hinder their ability to fully comprehend auditor communications [56]. This challenge is particularly relevant for institutional shareholders, as KAM disclosures are relatively new, and they may struggle to grasp their significance. Consequently, institutional shareholders may require time to adapt and fully understand the relevance of KAM presented in audit reports. As a result, these shareholders may find it difficult to assess the added value of KAM information in audit reports due to their restricted comprehension.

Ferreira and Morais [56] further reveal that there is limited consensus among stakeholder groups, including institutional investors whether financial reporting reforms such as the inclusion of KAM disclosures in audit reports actually enhance audit quality. This lack of consensus underscores the ongoing uncertainty and evolving perspectives within the institutional investor community regarding the prospective influence of these measures on audit quality.

Table 6.

Regression analysis on the influence of institutional ownership (IO), and auditor characteristics (BIG-4) on KAM.

Variables	Coef.	p-value
Institutional ownership (IO)	0.027	0.925
Auditor characteristics (Big 4)	76.803	0.000***
Company size (SIZE)	27.060	0.000***
Company profitability (PROFIT)	0.067	0.243
Enterprise risk (RISK)	4.286	0.005***
Company age (AGE)	0.043	0.931
Adjusted R	0.127	-
F value	16.79	-
N	649	-

Note: = "**** p < 0.01".

Table 6 indicates that KAM disclosure is positively connected with the responsibilities of Big 4 auditors. The results align with the t-test conducted where the analysis shows a statistically positive sig. correlation ($p: 0.000 < 0.05$) and supports hypothesis 2 (H2). Empirical evidence shows that the involvement of Big 4 auditors augments the level of KAM disclosure communicated through their audit reports. Thus, through our sample of observations, audited corporations by Big-4 audit firms have more detailed KAM disclosures. This discovery aligns with the research of Rahaman, et al. [57] and Velte and Issa [11] which also show a beneficial correlation between the amount of KAM disclosure and Big 4 auditors. Furthermore, although Big 4 auditors do not disclose significantly more KAM, they tend to provide more detailed and comprehensive information when explaining KAM in their audit reports in comparison to non-Big 4 auditors [33]. This may be attributed to the motivation of Big 4 auditors to maintain their independence and protect their reputation, which drives them to apply stricter and more comprehensive disclosure criteria [42]. Furthermore, Big 4 auditors possess demonstrated a greater tendency to provide KAM reporting compared to their non-Big 4 counterparts [58, 59] potentially due to their global presence and the need to maintain a consistent level of quality across different jurisdictions [59]. Furthermore, companies with strong corporate governance frameworks such as those employing Big 4 audit firms have a propensity to exhibit higher levels of KAM disclosure in their audit reports. This suggests that corporate governance boards, particularly audit committees are more inclined to be transparent about the risks faced by the company [5, 9, 13].

4.4. Additional Analysis

Table 7 displays the findings of additional tests conducted using the sub-sampling technique. The objective of this test was to mitigate potential biases in the ordinary least squares (OLS) results and to guarantee the dependability of the analyses, thus supporting the model's validity [60, 61]. In this analysis, we examined how IO affects the disclosure of KAM by dividing companies into two groups: those with IO below or equal to the average (58%) and those with IO above the average (>58%). The regression results indicate that for companies with IO above 58%, There exists no substantial positive correlation between IO and extensive KAM disclosures with a sig. 0.082 ($p < 0.1$). However, for companies with IO below or equal to 58%, a substantial correlation exists between IO and KAM disclosure with a p-value of 0.064 ($p < 0.1$) and a negative coefficient. This suggests that KAM are not reported in a detailed and comprehensive manner in companies with lower IO. Companies with lower IO face less pressure from institutional investors who typically demand good corporate governance and transparency. Additionally, auditors working with companies that have lower IO may only provide the minimum legally required disclosure without offering more detailed or comprehensive explanations.

Table 7.

Institutional ownership by sub-sample group.

Variables	Institutional ownership >58 KAM	Institutional ownership ≤58 KAM
	Coef.	Coef.
	p-value	p-value
Institutional ownership (IO)	1.389 0.136	-1.133 0.064*
Auditor characteristics (Big 4)	50.294 0.048**	109.199 0.001***
Company size (SIZE)	37.943 0.000***	16.074 0.012***
Company profitability (PROFIT)	0.101 0.089 *	3.977 0.971
Enterprise risk (RISK)	3.446 0.046**	8.053 0.019***
Company age (AGE)	-0.277 0.698	0.225 0.974
Adjusted R	0.142	0.124
F-value	11.77	7.12

Note: " = *** p < 0.01, **p < 0.05, *p < 0.1".

5. Conclusion

This research examines the revelation of KAM under Indonesia's recently implemented audit regulation, SA 701, which governs the communication of KAM in independent auditor reports. Focusing on emerging markets, the research explores the relationship between IO, Big-4, and various control variables (age, company size, risk, and profitability) and their impact on KAM disclosure. The primary objective is to examine how ownership structure, particularly IO, and auditor characteristics (Big 4) affect KAM disclosures within the audit reports of firms enumerated on the Indonesia Stock Exchange (IDX). To explore the relationship between IO and KAM disclosure more thoroughly, the sample was segmented into subgroups according to the average IO percentage.

The findings indicate that IO is not substantially correlated with KAM disclosure. However, further analysis suggests that low levels of IO may negatively impact KAM disclosure. Additionally, the study demonstrates a favorable correlation between the attributes of Big 4 auditors and the disclosure of KAM. This suggests that while Big 4 auditors may not report significantly more KAM, they tend to provide more detailed and comprehensive explanations in their reports compared to non-Big 4 auditors. This emphasis on the quality of information rather than quantity helps stakeholders better understand significant risks and audit considerations, thereby enhancing the transparency and accountability of financial reports. In contrast, non-Big 4 auditors may lack the resources or expertise to provide equally detailed explanations, even when reporting a comparable number of KAM.

This study enhances the current body of knowledge about KAM disclosure in developing countries, particularly Indonesia. However, the study has several limitations, including its focus on a single country, the potential bias inherent in relying solely on company financial reports, and the relatively short observation period. Future research should consider adopting a cross-country approach, extending the observation period and exploring additional factors such as the implementation of corporate governance standards, ownership structures and other auditor characteristics to get a more profound comprehension of their influence on KAM disclosure.

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