The Impact of Key Audit Matters Disclosure on Debt Cost: An Applied Study

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Abstract

The purpose of the research: This study aims to investigate whether the disclosure of key audit matters (KAMs) in the expanded audit report impacts debt cost in Saudi environment. Data and methodology: The researchers conduct an applied study using a sample of 125 firm-year observations of listed firms within the main market on the Saudia Exchanges from 2021 to 2022. The disclosure of KAMs is indicated by three characteristics: number, length, and readability. The researchers use content analysis to measure disclosure of KAMs from annual reports and examines how it impacts the debt cost in companies. Findings: results demonstrated that readability of KAM disclosed is significantly and negatively associated with cost of debt, implying that the easier the KAM paragraph to read, the lower cost of debt. Furthermore, Clarity and simplicity of KAM disclosure enhance lenders' ability to read and process the intended message, thus improving the communicative value and relieving lenders' fears about the firm, hence, reducing the cost of debt. However, the number and the length of KAMs disclosed is not significantly associated with debt cost. Overall, this study suggests that there should be consideration of the auditors' writing skills when hiring auditors, which play an important role in the readability of KAMs and debt cost.

Keywords: expanded audit report, key audit matters, readability, debt cost.

الملخص

الغرض من البحث: تهدف هذه الدراسة إلى التحقق مما إذا كان الإفصاح عن أمور المراجعة الرئيسية (KAMs) في تقرير المراجعة الموسع يؤثر على تكلفة الدين في البيئة السعودية. البيانات والمنهجية: أجرى الباحثون دراسة تطبيقية باستخدام عينة مكونة من ١٢٥ مشاهدة للشركات المدرجة في السوق

الرئيسية في البورصة السعودية من عام ٢٠٢١ إلى عام ٢٠٢٢. ويتم التعبير عن الإفصاح عن أمور المراجعة الرئيسية من خلال ثلاث خصائص: العدد، طول الفقرة، والقابلية للقراءة. وقد استخدم الباحثون تحليل المحتوى لقياس الإفصاح عن أمور المراجعة الرئيسية في التقارير السنوية وفحص مدى تأثيرها على تكلفة الدين في الشركات. النتائج: أظهرت النتائج أن قابلية أمور المراجعة الرئيسية للقراءة ترتبط بشكل معنوي وسلبي بتكلفة الدين، مما يعني أنه كلما كانت قابلية القراءة لفقرة أمور المراجعة الرئيسية أسهل كلما انخفضت تكلفة الدين. علاوة على ذلك، فإن الوضوح والبساطة في الإفصاح عن الأمور الرئيسية للمراجعة يعزز قدرة المقرضين على قراءة ومعالجة الرسالة المقصودة منها، وبالتالي تحسين القيمة التواصلية وتخفيف مخاوف المقرضين بشأن الشركة، وبالتالي تقليل تكلفة الدين. ومع ذلك، فإن عدد وطول فقرة أمور المراجعة الرئيسية التي تم الإفصاح عنها لا ترتبط بشكل كبير بتكلفة الدين. بشكل عام، تقترح هذه الدراسة أنه يجب أن يكون هناك اعتبار لمهارات الكتابة لدى المراجعين عند توظيف المراجعين، والتي تلعب دورًا مهمًا في قابلية أمور المراجعة الرئيسية للقراءة وتكلفة الدين.

الكلمات المفتاحية: تقرير المراجعة الموسع، أمور المراجعة الرئيسية، القابلية للقراءة، تكلفة الدين.

1. Introduction

The audit report in its traditional form has failed to provide informative Value and communicative quality (suttipun,2021; Li,2017). Gray et al. (2011) and Vanstraelen et al. (2012) indicated that the traditional audit report is ineffective to communicate significant information about the audit to the users of the financial statements, this because the audit report contains standardized language and form. Thus, the audit report in its traditional form has a low communicative value (Church et al. 2008; Mock et al.,2013). therefore, users of financial statements have expressed dissatisfaction with traditional audit report, which is hard to read and understand, also provides only neutral information instead of positive or negative contents (Suttipun,2021; Detajarutsri et al.,2019).

Despite developments in financial reporting frameworks, the growing use of estimates such as measurements of fair value, and the complexity and globalization of corporate operations, the audit report's format hasn't changed since the 1940s (Noureldeen et al., 2024). The current form of the audit report is nothing more than a pass/fail document (a binary audit report form) in which the auditor either issues a standard unqualified opinion (pass) or qualified opinion (fail) which is in most cases an unqualified opinion (Mock et al., 2013). Therefore, the audit report should be expanded in both form and content to enhance its communicative value (Vanstraelen et al., 2012). So, in response to growing criticisms to the traditional audit report and continuous calls to enhance its informative content, most vocational institutions, such as Financial Reporting Council (FRC), the International Auditing and Assurance Standards

Board (IAASB) and the Public Companies Accounting Oversight Board (PCAOB), have revised the audit report content recently to extend the audit report by requiring auditor to communicate more detailed information not revealed before about their auditing process and significant matters about potential material misstatement.

Moreover, the regulators' most material and influential amendments to the extended audit report is adding a new paragraph, entitled Key audit matters. It is widely recognized that there is an increasing adoption of this new standard by various foreign countries. In line with this increased adoption, research on key audit matters disclosures is growing, with heterogeneous results regarding the consequences of key audit matters disclosure, however, it is still ambiguous how the newly added KAM paragraph will impact businesses operations.

Furthermore, disclosure of KAMs have received the most researchers' interest in developed countries in areas such as auditor's liability, audit quality and market reactions to investigate whether it achieve its objectives about increasing transparency and reducing information asymmetry of the financial statements. While it is notable that prior research has a primary focus on the market reactions to disclosure of KAMs represented on investors reactions, neglecting the lenders reactions. However, the primary users of financial statements are both investors and lenders. There is a lack of empirical research on KAMs disclosure's impact on creditors. However, equity investors and creditors expect different returns on their investments, as well as having different risk preferences (Chiu et al., 2018). Additionally, private creditors assign more attention than investors to the audit report when making decisions and estimating future viability of the firm (Asare and Wright, 2012). Additionally, there is a noise when evaluating the informative value of KAMs from investors viewpoints due to professional investors perceive information differently from nonprofessional investors (Köhler et al., 2020; Christensen et al., 2014). However, creditors are professional users of financial information. Also, the structure of debt contracting is based directly on accounting information as well as creditors rely on auditor's report to evaluate financial risk of borrowers (Liu et al., 2022). Furthermore, KAMs communicate additional information about auditor's judgments on risk of material misstatements, significant accounting estimations and significant transactions or events. Hence, when creditors assess uncertainty of the borrowers, they may perceive risk information in KAMs paragraph for pricing debt (Chen et al., 2016).

Accordingly, there is a lack of empirical research on KAMs disclosure's impact on creditors in foreign countries. However, with regard to

Arab world, there is a few studies on the consequences of key audit matter disclosure, also no study analyses the impact of key audit matters disclosure on debt cost on the Arab world. Therefore, this study aims to extend the knowledge of key audit matters disclosure, mainly the Arab world experience with this new standard.

2. Theoretical Foundation

This research is based on agency theory in formulating hypotheses. Agency theory explains the Agency's relationship between managers and shareholders and the primary concern of the Agency's theory is the conflict of interest between management and shareholders where each has different interests resulting in information asymmetry , As managers have more information about various corporate activities ", they tend to engage in opportunistic behavior such as earning management, In this case, shareholders experience higher monitoring and supervision costs to prevent managers' opportunistic behavior and ensure managers act according to the best interests of shareholders and managers have an incentive to engage in earnings management such as compensation or debt violation (Simamora., 2021). The asymmetry of information between management and shareholders can significantly reduce the operational efficiency of the entity, external audit can reduce agency problems in emerging markets, noting that audit deficiencies may result in severe agency conflicts in a weak legal environment (Özcan,2021).

According to agency theory, it is expected that disclosure of key audit matters contribute to reduce the information gap (information asymmetry) between auditors and financial statements users, thus, enhances the informational value of the audit report. As including key audit matters disclosures in the audit report should guarantee proper audit quality and financial reporting quality that comply with the interests of stakeholders (Velte and Issa,2019; Ittonen, 2012). Besides, empirical audit literature has provided evidence that audit reports can significantly affect capital market reactions (Gimbar et al., 2016; Bédard et al., 2016).

3. Literature Review and Hypotheses Development

In terms of literature of KAMs disclosure, most of the prior research findings indicate the increase of investors and lenders perception of usefulness of KAMs disclosures. Köhler et al., (2020), using a sample of 89 professional investors and 69 non- professional investors in Germany, indicated that the effect of KAMs on investor reactions differs among various types of investors, as their results indicated that disclosure of KAMs enhances the communicative value for professional investors, while disclosure of KAMs have no communicative value for non-professional investors, as non-professional investors have difficulties in processing the information provided by KAM. However, Christensen et al., (2014), using a sample of 141 non-professional investors, indicated that investors are more likely to reverse their investment decision after receiving a CAM paragraph. Besides, Moroney et al., (2020), using a sample of 198 master student over the period of 2020, indicated that disclosure of KAMs increases perceived value and credibility of the audit only when the audit is conducted by a non-big 4 firm. Also, Trpeska et al. (2017) finds that disclosure of KAMs were of high importance to lenders on lending decisions of commercial banks.

Additionally, (Li and Luo, 2023; Goh et al., 2023; Smith., 2023; Altawalbeh and Alhajaya, 2019; Júnior and Galdi, 2019) found that Disclosure of KAMs has significant effect on investors' decisions, as it has informational value for investors and provides new informative content. Also, Sneller et al. (2016) emphasizes usefulness of information provided by IT-related key audit matters to investors.

Besides, Besides, a large portion of prior literature Gold et al., (2020), Reid et al. (2019) and Siriois et al. (2017) focus on investigating benefits and costs associated with KAMs disclosures, their findings show that additional information provided by disclosure of KAMs has a significant effect on investors' decisions, as well as has a significant enhancement in financial reporting quality. as this additional information of KAMs reduces the information asymmetries between auditors and the users of the audit report (Boolaky and Quick,2016). Li et al. (2019) supports these results, indicating that KAMs disclosures enhance audit quality by reducing absolute abnormal accruals, in turn, enhancing financial reporting quality.

Furthermore, auditor's disclosures were of more value relevant information to users than voluntary disclosure of same information by managers, as well as the mangers can reduce potential negative valuation effects resulting from auditor's disclosures by increasing disclosure transparency (dennis et al., 2019). In other words, additional information provided by auditor's KAMs disclosures will prompt managers to disclose this information themselves or maybe more, as managers want to drive stakeholders' decision themselves. thus, it is expected that KAMs disclosures result in increasing informational content and transparency of financial statements, which enhances financial reporting quality, reporting transparency leading to reduce information asymmetry. accordingly, Min and Kee (2019), using a sample of 150 listed companies in Malysia of 2017, showed that disclosure of KAMs provides additional information and reveal risks that enhances the communicative value of the independent auditor's report by reducing information asymmetry arising from the agency problem between managers and stakeholders.

Additionally, Zeng et al. (2021) and Bepari et al. (2023) placing emphasis that KAMs disclosures characteristics (number, Length, and readability) improve audit quality, as there is a significantly positive association between disclosure characteristics of KAMs and audit quality.

In contrast, disclosure of JOAs does not have a significant effect on the financial market, as it has no informational value to investors (Bédard et al.,2019). Also, there were no significant effects of RMMs disclosures on investors in UK, as it were not informative (Lennox et al.,2023, Gutierrez,2018).As Lennox et al. (2023) find that most of the information auditors provide would have already been known by investors through other media, such as conference calls and prior interim reports, making additional information provided by KAMs not incrementally crucial to the market, indicating that KAMs disclosures are almost boilerplate. Although KAMs do not provide investors with more information, they do capture risk information that is pertinent and negatively reflected on the company. Additionally, Boonyanet and promsen (2018) finds that KAMs have a low informational value to investors. As well as there was no significant effect of KAMs disclosures on audit effort (audit fees and audit delay) and audit quality, in turn financial reporting quality (Al-mulla and Bradbury, 2022; Li, 2017).

In terms of debt cost literature, starting with studies that have examined the impact of financial reporting quality on debt cost, Ding et al. (2016) and Muttakin et al. (2020) reported that there is a negative association between financial reporting quality and debt cost, as higher financial reporting quality enable companies to obtain loans easily at less interest rates, placing emphasis on the role of the external auditors on signaling the quality of the financial statement by mitigating agency conflict through reducing information asymmetry between debt providers and borrowers. For studies that have examined the impact of financial reporting quality on debt cost, their results place emphasis on the importance of audit quality to capital market, as audit quality is negatively associated with debt cost, thus companies audited by audit partners of higher quality had a greater chance of receiving low interest rates, better credit availability, and a decreased risk of having to provide high-value collateral to secure loans (Karjalainen,2011; Thu et al., 2018; Gandia and Huguet, 2021; Aobdia et al., 2015).

In terms of the studies that have examined the impact of KAMs on debt cost, to the author’s knowledge, there are a few studies regarding KAMs and debt cost. Starting with the archival studies, Du and Lv (2022) and Liu, et al. (2022) find that the disclosure of KAMs reduces the interest rate and increase the long-term debt ratio. Also, reported that a greater number of KAMs disclosed, reduces information asymmetry which reduces creditors perception of risk, thus reduce debt cost. On the other hand, Elamer, et al. (2020) argue that KAMs provides more credible information to lenders about the actual level of risks of the firm and find that there is a positive relationship between the number and length of the risks of material misstatement that were disclosed as the key audit matters and the cost of debt, since disclosing more KAMs in the auditor’s report implies greater risk. Moreover, Wuttichind and issarawornrawanich, (2022) finds no significant impact of the number of issues and the words of the key audit matters on the cost of debt, while readability of KAMs significantly and negatively impact the cost of debt. also, Šušak. (2020) finds no statically significant effect of KAMs on interest rate.

In terms of Experimental studies, while Bookaly and Quick (2016) find no significant impact of KAMs on the perceptions of bank managers regarding credit approval decisions, Porumb, et al.(2021) concluded that the number of unique risks of material misstatement (unique RMMs) that were disclosed in the report of the independent auditor and not the report of the audit committee has a positive relationship with the loan spread, the findings also show that entities of less risk are more likely to acquire better debt contracting, suggesting that number of KAMs significantly influence debt cost. On the other hand, Zhou (2019) finds that KAMs disclosure increase capital cost, as disclosing key audit matters in the auditor’s report attracts investors’ attention to the risks of the company and it reduces their willingness to invest in the company which may increase capital cost (Christensen, et al., 2014).

to the author’s knowledge, the only survey study that have examined the impact of KAMs on the debt cost, finds that disclosure of KAMs have no effect on the perceptions and decisions of bank managers regarding lending decisions (Trpeska et al.,2017).

Based on the evidence demonstrated from previous studies, we conclude that disclosure of KAMs could play an important role in reducing agency problems, since disclosing KAMs can enhance financial transparency through improving both audit quality and financial reporting quality, reduce information asymmetry, and mitigate information risk, hence, KAMs disclosure may result in lowering debt cost, as disclosure literature support the negative association between financial reporting quality, and debt capital cost, which consist with, exogenous regulation induced enhancements in disclosure quality lead to enhance bond rating, lower disagreement between rating agencies, and reduce debt cost (Bonsall and Miller, 2017). Furthermore, higher financial reporting quality helps debt holders assess borrower's ability to generate future cash flows to repay the loan, thus debtholders can determine the appropriate interest rate (Ding et al., 2016). Besides, higher audit quality results in a lower debt capital cost as well as facilitating debt contracting (Eskandari et al.,2014). Also, debt cost literature support that there is negative association between audit quality and cost of debt and suggest that audit outcomes and perceived audit quality are pertinent to debt capital pricing. Despite this, prior research provides mixed evidence on the impact of KAMs, thus, it is predicted to find support for the research hypothesis. To test the impact of disclosure of KAMs on debt cost, we employ three indicators for disclosure of KAMs, representing the number, length, and readability of KAMs disclosure. the following hypothesis is posited in non-directional format:

H1: There is an association between the number of KAMs disclosed and cost of debt.

H2: There is an association between length of KAMs disclosed and cost of debt.

H3: There is an association between readability of KAMs disclosed and Cost of debt.

4. Theoretical Framework

4.1 Disclosure of KAMs

KAMs are identified as those matters that, based on the professional judgment of the auditor, were of great significance in the audit of the current period's financial statements, also considered from matters that being communicated with those in charge of governance.

We conclude from the definition that key audit matters are determined in two-step process ;(1) auditor should identify matters he communicated with those charged with governance that require significant auditor's attention, (2) according to his judgement, determine which matters were of most significance in the audit of current period's financial statements, otherwise, it is not consider a KAMs.

Hence, the auditor set preliminary assessment about KAMs, then discuss it with those charged with governance according to ISA 260, then based on his judgement, he determines which matters were of most significance in the audit of current period's financial statements, placing emphasis on" the great significance of the matter" in determining KAMs, so the auditor does not disclose a lengthy list of KAMs, because the more the KAMs , the less significance KAMs are, therefore for only matters of great significance, the auditor considers KAMs, and the auditor disclose these matters in auditor's report unless circumstances in paragraphs 14 or 15 exit.

Moreover, The ISA 701 identifies the content characteristics, communicating requirements, and description of key audit matters, placing emphasis on complying with other applicable international auditing standards and how they are related, in particular,(a) ISA 260 (revised) regarding the matters which auditor should communicate with those charged with governance, (b) ISA 315 regarding significant risks as higher identified and assessed material misstatements risks, it is notable that ISA 260, ISA 315 are related to the content of KAMs paragraph.

Besides, ISA 701 state the intended goals of KAMs disclosure are to: (a) provide greater transparency about the audit that was delivered, (b) alert stakeholders attention to matters, that based on the professional judgment of the auditor, were of great significance in the forming opinion on the current period's financial statements, which is related to matters regarding entity and also areas of significant judgment of the management regarding the financial statements, which helping the users of the audit report in better understanding the entity, the financial statements, and the auditor's opinion, (c) improve communication about such matters between the auditor and those in charge of governance, as well as alert management and those in charge of governance to disclose these matters in the financial statements.(d) alert auditors attention to matters communicated with those charged with governance that were of great significance.

4.2 Capital Cost of Debt

Capital cost is crucial factor while deciding the appropriate business activities. Capital cost definition has various explanations from various viewpoints. From firm viewpoint, capital cost is the lowest rate of return that a firm must obtain before it generates value. From investors viewpoint, capital cost definition is an evaluation of the equity risk of the company. From an economic viewpoint, capital cost is an opportunity of investing in a business. Capital cost is a mixture of debt cost and equity cost (Liu, 2020). Debt cost is the interest rate company pays its creditors on liabilities such as loans and bonds (Karjalainen, 2011), while equity cost definition is the lowest rate of return investors require to provide capital to the company (Ismail and Obiedallah, 2022). Our study is limited to debt cost.

5. Methodology

5.1 Data Collection and Research sample

The research sample comprises of judgmentally selected Saudi listed firms with final sample consisting of 125 observations across 16 different industries sectors within the main market on the Saudia Exchanges from 2021 to 2022. the data are retrieved from the annual financial reports of the companies, that are obtained from Saudia Mubasher Information website (https://www.mubasher.info/countries/sa/stock-prices), and Saudia Exchange (Tadawul) website (https://www.saudiexchange.sa).

Table (1) industry distribution of the sample:

Industry	**N**	**%**
Energy	5	4
Materials	25	20
Capital Goods	15	12
Transportation	4	3.2
Consumer Durables & Apparel	3	2.4
Consumer Services	12	9.6
Media and Entertainment	5	4
Consumer Discretionary Distribution & Retail	4	3.2
Consumer Staples Distribution & Retail	5	4
Food & Beverages	8	6.4
Health Care Equipment & Svc	8	6.4
Pharma, Biotech & Life Science	2	1.6
Software & Services	5	4
Telecommunication Services	6	4.8
Utilities	3	2.4
Real Estate Management	15	12
Total	**125**	**100**

5.2 Research models

To test the KAMs disclosure impact on debt cost, we employ three indicators for the disclosure of KAMs, representing the number, length and readability of KAMs disclosed. In our model, we follow prior research models (wuttichindanon and issarawornrawanich, 2022; Liu, et al.,2022; Elamer, et al.,2020)

$$COD_{i,t} = \beta_0 + \beta_1 KAM_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 LEV_{i,t} + \beta_4 GROW_{i,t} + \beta_5 ROA_{i,t} + \beta_6 CR_{i,t} + \beta_7 INTCOVER_{i,t} + \beta_8 LIQUID_{i,t} + \beta_9 BIG4_{i,t} + \beta_{10} LOSS_{i,t} + IND + \mathrm{YEAR} + \varepsilon_{i,t}$$

Subscript i denote firm and subscript t denote year. COD is our dependent variable in Models, which is cost of debt. It is measured by ratio of interest expenses (involving interest expenses, commission expenses, other financial expenses) to the average of total liabilities, following prior studies (liu and yu, 2024; liu et al, 2022; Elamer, et al.,2020; Karjalainen, 2011).

KAM is our independent variable is the disclosure of KAMs, our variables of interest in Model (1), Model (2) and Model (3) is KAMN, KAML and FOG, respectively. KAMN is the total number of KAMs issues disclosed in KAMs section of the audit report. In line with the previous expanded audit report literature; (Zeng et al., 2020; liu and yu, 2024; Du and Lv, 2022). KAML is the length of KAMs disclosed in KAMs section of the audit report. It is measured by natural logarithm of the total number of sentences in KAMs section of the audit report. In line with the previous expanded audit report literature; (Bepari, 2023). FOG is the readability of KAMs disclosed in KAMs section of the audit report. It is measured by the widely used Gunning-Fog Index which is computed using the following formula: Fog= 0.4 × (average sentence length + percentage of complex words). The lower values of Fog indicate better readability. It is automatically generated using (https://www.webfx.com/). In line with the previous expanded audit report literature; (Abdelfattah et al.,2021; seebeck and Kaya, 2023).

We include a set of control variables that have previously been shown to be determinants of the cost of debt. Among them, firm size (SIZE), Leverage (LEV), growth (GROW), profitability (ROA), current ratio (CR), interest coverage (INTCOVER), liquidation value ratio (LIQUID), audit firm (BIG4), negative income (LOSS), industry fixed effects (IND).

6. Research findings

6.1 Descriptive Statistics

Table (2) shows the descriptive statistics for all study variables where The COD ranges from 0.004 as a minimum to a maximum value of 0.051, with a mean (median) of 0.023 (0.023). number of KAMs ranges from 1 as a minimum to a maximum value of 4, with a mean (median) of 2.04 (2), which are lower than prior research (Abdelfattah et al., 2021; Pinto and Morais, 2019). The mean, minimum, median, and maximum of length of KAMs are 3.079, 2.197, 3.091, and 3.97, (equivalent to unlogged values of 21.26, 9, 22, and 53 sentences, in a row), respectively. readability of KAMs by FOG ranges from 16.9 as a minimum to a maximum value of 28.1, with a mean (median) of 21.043 (20.4) is largely consist with (Abdelfattah et al., 2021) with mean value of (21.1).

Table 2: Descriptive statistics

	N	Mean	SD	Min	Median	Max
COD	125	0.023	0.010	0.004	0.023	0.051
KAMN	125	2.040	0.827	1	2	4
KAML	125	3.079	0.435	2.197	3.091	3.970
FOG	125	21.043	2.485	16.900	20.4	28.100
SIZE	125	21.847	1.490	19.072	21.549	26.470
LEV	125	0.530	0.197	0.143	0.540	0.970
GROW	125	0.220	0.327	-0.362	0.140	1.737
ROA	125	0.037	0.066	-0.179	0.033	0.196
CR	125	1.539	0.869	0.367	1.314	4.375
INTCOVER	125	14.737	29.262	-33.199	5.420	160.556
LIQUID	125	0.595	0.226	0.109	0.623	0.935
BIG4	125	0.544	0.500	0	1	1
LOSS	125	0.192	0.395	0	0	1

Notes: variables are defined as follows: cost of debt (COD), total number of KAMs (KAMN), length of KAMs (KAML), readability of KAMs by fog index (FOG), firm size (SIZE), Leverage (LEV), sales growth (GROW), profitability (ROA), current ratio (CR), interest coverage (INTCOVER), liquidation value ratio (LIQUID), audit firm (BIG4), negative income (LOSS). All continuous variables are winsorized at the 1st and 99th percentile.

6.2 Correlation Analysis

Table (3) shows Pearson correlations for all study variables. It revealed a significant positive relationship between readability fog index and cost of debt, indicating that readability of KAMs is significantly and negatively correlated with debt cost, as higher value of Fog index means lower readability. while the number of KAMs and the length of KAMs are not correlated with debt cost.

Table 3: Pearson correlation matrix

Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**
(1) COD	1.000												
(2) KAMN	-0.021	1.000											
(3) KAML	-0.063	0.765***	1.000										
(4) FOG	0.168*	-0.064	-0.451***	1.000									
(5) SIZE	0.005	0.009	0.033	0.122	1.000								
(6) LEV	0.157*	0.042	0.062	-0.039	0.124	1.000							
(7) GROW	0.189**	0.016	0.028	0.096	0.173*	-0.014	1.000						
(8) ROA	-0.146*	-0.197**	-0.106	-0.068	0.156*	-0.373***	-0.017	1.000					
(9) CR	-0.111	-0.085	-0.074	0.034	-0.246***	-0.651***	-0.096	0.259***	1.000				
(10) INTCOVER	-0.399***	-0.027	0.020	-0.037	-0.010	-0.408***	0.011	0.614***	0.198**	1.000			
(11) LIQUID	0.209**	-0.063	-0.039	0.066	0.359***	-0.043	0.203**	0.015	-0.339***	0.026	1.000		
(12) BIG4	-0.140	-0.073	0.144*	-0.105	0.432***	0.157*	0.022	0.207**	-0.038	0.084	0.011	1.000	
(13) LOSS	-0.083	0.100	0.090	0.014	-0.094	0.142	0.142	-0.693***	-0.058	-0.365***	-0.097	-0.002	1.000

Significant level is donated as follows: *** p<0.01, ** p<0.05, * p<0.1.

6.3 Regression Results

Table 4: Regression analysis results

	(1) Model1	(2) Model2	(3) Model3
KAMN	-0.000		
	(-0.453)		
KAML		-0.000	
		(-0.303)	
FOG			0.001**
			(2.295)
SIZE	-0.000	-0.000	-0.000
	(-0.091)	(-0.088)	(-0.345)
LEV	0.006	0.007	0.007
	(1.166)	(1.241)	(1.286)
GROW	0.008***	0.008***	0.007***
	(3.804)	(3.790)	(3.800)
ROA	-0.009	-0.008	-0.005
	(-0.328)	(-0.281)	(-0.206)
CR	0.002	0.002	0.002
	(1.414)	(1.433)	(1.282)
INTCOVER	-0.000***	-0.000***	-0.000***
	(-5.347)	(-5.369)	(-5.691)
LIQUID_	0.001	0.001	0.002
	(0.126)	(0.158)	(0.318)
BIG4	-0.001	-0.001	-0.001
	(-0.615)	(-0.612)	(-0.501)
LOSS	-0.012***	-0.012***	-0.011***
	(-4.035)	(-3.978)	(-4.130)
_cons	0.023	0.023	0.009
	(1.150)	(1.138)	(0.501)
IND	Included	Included	Included
YEAR	Included	Included	Included
Observations	125	125	125
R-squared	0.594	0.594	0.615
Adj R^2	0.486	0.486	0.512

Significant level is donated as follows: *** p<0.01, ** p<0.05, * p<0.1.

Regarding the first regression (Model 1), which investigates the relationship between number of KAMs disclosed (KAMN) and debt cost, the coefficient on KAMN is negative, but is insignificant. In addition to, in the second regression (Model 2) which investigates the relationship between length of KAMs disclosed (KAML) and debt cost. The coefficient on KAML is negative but is insignificant.

Considering third regression (Model 3), which investigates the relationship between Fog readability of KAMs disclosed (FOG) and cost debt cost. The coefficient on FOG is positive and significant ($t = 2.295$, $P < 0.05$), implying that readability of KAM disclosed is significantly and negatively associated with debt cost, indicating that the easier the KAM paragraph to comprehend, the lower cost of debt, as lower values of Fog readability index imply better readability. The result show that clarity and simplicity of KAM disclosure enhance lenders ability to read and process the intended message, thus improving the communicative value and relieve lenders' fears about the firm, thus reduce the cost of debt. This result is consistent with (Wuttichindanon and Issarawornrawanich, 2022). Also, this result is consistent with (Chen and Tseng, 2021; Luo et al., 2018), who investigated the consequences of annual reports readability on debt cost and agency cost, respectively. Chen and Tseng (2021) reported that readability of annual audit report, in addition to readability of narrative disclosure of notes to financial statements is significantly and negatively associated with debt cost. Luo et al. (2018) reported that better readability helps to monitor opportunistic behavior of corporate insiders and thus lead to reduce agency costs.

7. Conclusion

This study sought to provide evidence of whether disclosure of KAMs impacts cost of debt. Using three aspects of disclosure of KAMs (number, length and readability), the results showed that readability of KAM disclosed is significantly and negatively associated with cost of debt, implying that the easier the KAM paragraph to read, the lower cost of debt. Clarity and simplicity of KAM disclosure enhance lenders' ability to read and process the intended message, thus improving the communicative value and relieving lenders' fears about the firm, thus reducing the cost of debt. However, the number and the length of KAMs disclosed is not significantly associated with debt cost. Furthermore, this study extends researchers' and regulators' understanding of costs and benefits of the newly adopted KAMs paragraph.

Also, this study suggests that there should be consideration of the auditors' writing skills when hiring auditors, which play an important role in the readability of KAMs and debt cost. Furthermore, Standard setters should develop regulations to provide stakeholders with additionally useful risk information they currently do not access through better understanding of the relationship between disclosure of KAMs and cost of debt, especially countries that have not adopted the new standard yet such as Egypt.

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